



# Re-Taking Stock:

Understanding How Trends in the Housing Stock and Gentrification are connected in Houston and Harris County

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# Executive Summary

**T**his report connects housing stock changes with gentrification patterns in Harris County. Changes in the housing stock can remake communities demographically and have lasting impacts on where people are able to live within a growing city. Through seven case studies, this report highlights the different types of housing development that occur when a neighborhood gentrifies. While new development can mean improved housing conditions, increased supply and shifting home prices, it can also acutely affect communities with older homes and long-term residents with low or fixed incomes.

Understanding how housing development reshapes communities is essential to discussions about redevelopment and providing residents with access to safe and affordable homes. This work builds on prior Kinder Institute for Urban Research studies of neighborhood-level gentrification and development activity in the county.<sup>1</sup>

Analyzing patterns in the housing stock can also confirm anecdotal observations about gentrification and neighborhood change. In Houston, a great deal of the local conversation about gentrification focuses on the aesthetic clash wrought by relaxed land-use regulations that allow development that places distinct land uses and housing types next to each other. This mainly stems from Houston's long-standing lack of use-based zoning, but, more recently, has gained momentum following the city's reduction in minimum lot-size requirements for single-family housing before the turn of the century.<sup>2</sup> The existing framework allows developers and builders to make a profit from developing on pricier urban land, that is, subdividing large lots and building small-lot townhomes or large multi-family apartments. Critics say these reforms (particularly townhomes) are harbingers of gentrification that threaten

neighborhood character and affordability. Proponents, on the other hand, laud the impact of greater residential density on the housing supply, as a way to stabilize increases in home prices in the long term, in addition to being a more climate-friendly housing model compared to the prevailing large-lot single-family home, which consumes more land. The findings here suggest that both critics and proponents may be correct, though, broader investment patterns are an important link to gentrification. The townhome, in particular, is most dominant in gentrified areas or wealthier neighborhoods unable to gentrify. In effect, they absorb middle-income households that would either gentrify lower-income communities in greater numbers or locate in far-flung suburban communities. These homes have provided both middle- and high-income housing opportunities in neighborhoods near Downtown and other regional job centers. Yet, combined with intense demolition activity in *gentrifying* neighborhoods, the proportion of townhomes built in low-income neighborhoods confirms that this housing type increasingly is preferred by developers building in communities that are vulnerable to both rapid increase in housing stock and sociodemographic changes.





## Findings:

- **Affluent areas that have gentrified or have faced no risk of gentrification saw more construction [and demolitions] than gentrifying areas, likely steering higher-income housing growth away from gentrifying neighborhoods.** Townhomes and large multi-family dwelling units were the predominant housing types built in already gentrified and invulnerable neighborhoods. These affluent census tracts predominantly are located west of Downtown and have experienced high volumes of construction and demolition. Houston's experience is an example for cities throughout the nation struggling to direct redevelopment pressure away from vulnerable neighborhoods—often with land use, zoning and entrenched NIMBYism acting as barriers to the development of more housing in high-demand neighborhoods. These environments ultimately intensify gentrification pressure in vulnerable neighborhoods populated by people of color and those with lower economic means.
- **Townhomes are a popular form of construction, especially in high-demand neighborhoods with proximity to job centers and quality of life amenities. However,**

**the expansion of this housing type into gentrifying areas appears to be speeding sociodemographic shifts and threatening housing affordability in at-risk communities.**

Townhomes are much more visible in already gentrified neighborhoods (Montrose and Lazybrook/Timbergrove) than they are in gentrifying neighborhoods (Fifth Ward, Independence Heights, Sunnyside, and Third Ward). This housing type is attracting high-income households and young families to already gentrified neighborhoods. Nevertheless, they are also becoming a much more common housing product in gentrifying neighborhoods, particularly Fifth Ward, Independence Heights, and Third Ward (Sunnyside is the only exception), attracting high-income households of young adults to neighborhoods with lower income people of color, which poses a threat to the housing stability of the latter.

- **Gentrifying neighborhoods face an elevated risk of quick turnover due to demolition patterns and townhome development near the boundaries of high-demand neighborhoods.** Gentrifying or at-risk neighborhoods (Fifth Ward, Independence Heights and Third Ward) had levels of demolition comparable to already gentrified areas, but saw less new construction, a sign that housing is



slowly transitioning. Intensive demolition patterns combined with the proportion of townhomes in newly built units (which attract high-income households) foreshadow continued sociodemographic shifts that could lead to more drastic housing stock changes in the future, and contribute to the displacement of long-term residents on fixed incomes. These neighborhoods also illustrate how gentrification is much more than what is being built or who is moving in, it is also about what is being torn down and where.

- **Spring-Southwest, an inner-suburban community, is absorbing the suburbanization of working-class people of color into a mix of older and newer housing adjacent to environmental hazards. This complicates how we typically understand gentrification, that is, investors injecting capital into poorer neighborhoods in order to provide housing for wealthier residents (at the expense of displaced older residents).** The Spring-Southwest area has a mix of aging multi-family housing stock, as well as newly built large, multi-family units and affordable single-family homes. This mix of housing types increases the affordable housing options for county residents earning between 80 and 100% of the area's median income, but is located near areas at high risk of being

flooded by the Greens Bayou Watershed. The trends here suggest that investment patterns—and not necessarily housing type—are a more prominent link between gentrification and displacement.

- **Housing development in Houston's urban core (i.e. Inner Loop) is a remarkable case of urban infill for a major American city, surpassing the total annual housing production of other major cities.** Housing production in the urban core of American cities has been a growing challenge due to restrictive land-use policies. Housing production inside Houston's Loop 610, which accounts for only about 15% of the city's total land area, surpasses the entire housing production of Atlanta, San Diego and San Francisco/Oakland, and almost exceeds that of Seattle. Redevelopment trends in Houston validate the argument that relaxed land-use regulations (i.e. lack of use-based zoning and reduced requirements for minimum lot size) can lead to the development of more housing units near major job centers, services and transportation choices. Conversely, there are land-use tools in Houston that neighborhoods can tap into, including restrictive covenants and minimum-lot-size restrictions that can prohibit dense housing production; however, more data is needed to understand the effects of these tools in shaping local housing dynamics.<sup>3</sup>



# Introduction

**M**any neighborhoods across the city of Houston and Harris County are experiencing extensive development and redevelopment. Continuous population growth and sustained demand for city living in the Houston area have brought drastic changes to housing markets throughout the region over the past two decades.<sup>4</sup> This report captures this re-sorting by combining a high-level analysis of residential housing trends with a closer look at the housing stock changes in seven area neighborhoods. It also examines how changes in housing stock are linked to demographic shifts and vulnerabilities to gentrification.

It is especially critical to document the gentrification of neighborhoods because of its potential impact on housing affordability. The Kinder Institute's 2020 State of Housing shows that housing affordability increasingly is a growing challenge.<sup>5</sup> In fact, the report shows that nearly half of renters in Harris County were cost-burdened (spent more than 30% of income on housing), a growing trend since 2010.<sup>6</sup> In addition, the housing affordability gap for renters—the difference between the median sales price and the housing price that a renter earning the median wage could afford—widened threefold during that time.<sup>7</sup>

Though many new units were built, there has been a significant reduction in the availability of low-cost housing units for rent (i.e., a significant drop in the share of rental units priced under \$800 in the years from 2010–2018). This indicates that a significant number of low-income renters face a major obstacle in finding inexpensive and affordable housing stock in the county.<sup>8</sup> As more and more once-affordable neighborhoods undergo redevelopment, affordability can be lost and longtime residents can be displaced.





# Data and Methodology

**O**ur analyses mainly rely on the Harris County Appraisal District (HCAD) public datasets. The methods utilized in this report are a continuation of the Kinder Institute’s work using HCAD datasets to understand urban development and gentrification patterns in Harris County.<sup>9</sup> This section outlines our approach to defining housing structures and the gentrification criteria used to interpret housing stock change.

Housing units were sourced from HCAD’s 2019 certified residential records and were included if the unit is spatially identifiable with HCAD’s 2019 ArcGIS parcel layer.<sup>10</sup> The 2019 HCAD datasets have a “permit” file, which contains all permit information from 2005 to 2019, such as HCAD property ID, permit status, permit type, issue date and inspection year. The 2019 HCAD certified dataset contains information on all housing units that are present in the year 2019. Units built between 2005 and 2018 were calculated based on the “built year” included in each housing record.<sup>11</sup> Residential datasets contain property characteristics that include built year, state use code, improvement type, building style, assessed property values and improvement area, among others. The parcel records and a parcel polygon layer for spatial analyses were also obtained from the HCAD public data website as of the year 2019. The parcel polygon layer was used to identify the spatial information of each parcel record. Parcel datasets include parcel size, address, owner and location.<sup>12</sup> We connected individual permit and housing unit records to the parcel layer to obtain the spatial information of each permit and housing unit.

Neighborhood sociodemographic characteristics were acquired from the Census Bureau’s American Community Survey (ACS). We assessed demographic changes in the case study neighborhoods using data from the years 2000, 2010 and 2018. The case study neighborhoods were assessed at the Community Tabulation Area (CTA) level, a collection of census tracts.<sup>13</sup> Each CTA consists of several census tracts that collectively represent an individual

neighborhood. Lastly, this report includes gentrification typology from previous Kinder Institute research.<sup>14</sup> The gentrification typology of census tracts in each case study CTA was used to interpret the implications of changes in sociodemographic, permit and housing stock information.

## Housing Structures

In order to create a more fine-grained look at building stock patterns, housing types in this report are categorized into three groups discernable from HCAD’s records. These categories depart from HCAD’s categories in a few ways to more accurately account for the types of housing being built. The most significant departure from existing HCAD categories is the creation of a new subcategory for detached—or freestanding—townhomes. The homes in this category are classified by HCAD simply as single-family homes, which overestimates conventional single-family units, given that HCAD’s definition does not distinguish between large-lot and small-lot single-family homes.<sup>15</sup> To identify these small lot single-family homes (i.e. less than 5,000 square feet per Houston’s minimum lot size reform<sup>16</sup>) they were subtracted from the broader single-family detached category. The distinction used in this report is drawn because small lot single-family are designed as multi-story homes (up to 3 or even 4 floors) and marketed as townhomes, not as conventional single-family, and despite being freestanding, these units are more commonly thought of as “townhomes” in Houston’s vernacular.

## Housing Type Classification

### Single-family Housing



**1. Single-family Detached** houses are conventional freestanding residences designed for one household. This housing structure typically sits on lots that are 5,000 square feet or larger—the by-right minimum lot size in most jurisdictions in the county (except the cities of Houston, Pasadena and Baytown, which allow single-family detached on sub-5,000-square-foot lots, see **4 Detached Townhomes**).



**2. Single-family Attached** structures include a variety of homes designed for one household that share a common wall with the homes of adjoining units. These typically involve multiple-unit dwellings that are physically attached to neighboring units, but each unit is individually owned. These houses are single-family homes but are not classified as **1**, **3** or **4**, and such housing types include attached single-family condominiums structures, duplexes with each dwelling unit on its own parcel, individually owned row houses and single-family units attached to commercial uses.

### Townhome Housing



**3. Attached Townhomes** are structures classified by HCAD as “townhomes.” They are designed for individual ownership of each dwelling unit in a shared structure. Attached townhomes are also multi-floor dwelling units. We include “attached” both as a fact of the structure’s physical characteristic and to differentiate this type of home from “detached townhomes.”



**4. Detached Townhomes** are freestanding, multi-story homes on lots smaller than 5,000 square feet. This housing type was enabled by Houston’s subdivision reforms of 1998, which reduced the minimum lot size for single-family detached structures to below 5,000 square feet and is similarly permitted in Baytown and Pasadena—though most of the existing stock and gentrification pressure is located in Houston.<sup>17</sup>



## Multi-family Housing



**5. Small Multi-family** (2–4 units) include multiplexes such as duplex, triplex and fourplex dwelling units, or apartments and condominiums with 2 to 4 units.



**6. Large Multi-family** (5+ units) contain large multi-family structures that have more than 5 units.

## Gentrification Typology

In 2018, Kinder Institute research defined gentrification from 1990–2016 according to three predominant typologies at the census tract level (established, gentrifying and continual).<sup>18</sup> A census tract first has to be considered gentrifiable or vulnerable, meaning the neighborhood must be specified as vulnerable to gentrification in the first year of the time period (base years of 1990, 2000 and post 2010) based on the share of low-income households, education level of individuals, renters and/or non-white individuals. The classification of tracts from this prior research describes gentrification activity in case study CTAs for the three decades, an analysis we are leaning on to interpret housing and sociodemographic shifts occurring in connection with housing stock changes identified in this report.

The gentrification process can take on different forms because not all neighborhoods evolve or respond to change in the same way. One study found four dominant gentrification processes in Houston: locally driven urban renewal, private sector block-busting, refurbishment of existing structures, and teardowns.<sup>19</sup> Although there is variation in the process of gentrification, key elements include the following:

- Disinvestment and reinvestment
- Loss of affordable housing
- Physical upgrading of residential neighborhood
- Upward movement of residents' socioeconomic status

### Gentrification-Established

A tract is considered “established” in its gentrification if it has displayed patterns of gentrification in the past, but has shown little to no signs of current or ongoing neighborhood change. Such a neighborhood has already gentrified and exhibits a fixed neighborhood makeup with little room for reversal—at least not for several more decades. In classifying established tracts, we included tracts that gentrified in both the 1990–2000 and 2000–2010 periods. Gentrification can take place over more than a 10-year period, so changes from both 1990–2000 and 2000–2010 may imply change at a slower rate, which is consistent with previous studies on former gentrification.<sup>20</sup>

### Gentrifying

We classify “gentrifying” tracts as those that were gentrifying from 2000–2010, 2010–2016 or during both periods. Our definition of “gentrifying” suggests these tracts have recently or are currently experiencing gentrification processes, and details its effects on the neighborhood. For example, Third Ward is considered a gentrifying neighborhood with gentrification patterns from both the 2000–2010 and 2010–2016 periods.

### Continually Gentrifying

Because of continued gentrification, six tracts (less than 1%) experienced ongoing gentrification from 1990 to 2016. We defined a “continual” tract as gentrifying during all three time periods—from 1990–2000, 2000–2010 and 2010–2016. Similar to gentrifying tracts, continually gentrifying tracts may still be experiencing ongoing patterns of gentrification.

## Gentrification Criteria

Three underlying criteria define gentrification in a census tract within a given time period: vulnerability, sociodemographic change and investment change.

### Vulnerability in Base Year (3 out of 4)

- % Low-Income Households > County Median
- % Population 25+ without Bachelor's Degree or Higher > County Median
- % Non-White population > County Median
- % Renter Households > County Median

### Sociodemographic Change

- Change in % Population 25+ with Bachelor's Degree or Higher > County Change
- OR
- Change in Median Household Income > County Change
- AND
- Change in % Non-Hispanic White Population > County Change

### Investment Change

- Change in Median Monthly Gross Rent > County Change
- OR
- Change in Median Home Value > County Change

### Vulnerability

A tract is considered vulnerable to gentrification if it exhibits three of the following four characteristics, compared to the county median<sup>21</sup> in the base year: 1) a higher percentage of low-income households, 2) a higher percentage of individuals 25 years and older without at least a bachelor's degree, 3) a higher percentage of non-white population and/or 4) a higher percentage of renter households.

Low-income households are defined as households with an income less than 80% of the county median, which is the standard definition used by the U.S. Department of Housing and Urban Development. Low-income neighborhoods are vulnerable because of potential rent gaps.

Educational attainment is a key indicator of socioeconomic status and highly correlates with personal income. Census tracts with fewer college-educated individuals are more vulnerable and at risk of gentrification. Percent non-white is included in the vulnerability criteria because gentrification is linked with changes in racial composition of a neighborhood, particularly a dominant social group

moving into an area where people of color reside. In Houston, the dominant social group in terms of political power and socioeconomic status is non-Hispanic whites.

Generally, renters have less capacity to challenge unwanted neighborhood change. Increases in property value leads to higher property taxes, which property owners make up for in the rent. Thus, neighborhoods with more rental units are less stable and more susceptible to gentrification.<sup>22</sup>

### Sociodemographic Change

Gentrification is predominantly described as a neighborhood's transformation over time. A component that accounts for socioeconomic change is required because the process of gentrification includes an influx of relatively affluent households. Therefore, we examined whether the tract's sociodemographic change was greater than the county's change from the base year to the end of a given period. Both household income and education are measures of socioeconomic status. Educational attainment is relatively stable compared to median incomes.<sup>23</sup> However, depending on occupation and family circumstances, college-educated individuals may not see increases in income. Thus, we allowed the sociodemographic change component to be either change in percent population 25 and over with a bachelor's degree or higher, or change in median household income higher than the county change.<sup>24</sup> Furthermore, change in racial and ethnic composition is also included because, historically, gentrification includes demographic changes, particularly a dominant social group moving into an area with a predominantly non-white population.<sup>25</sup>

### Investment Change

Finally, we included a component on investment change. We used median home value and median gross rent to reflect investment in communities, including the quality of various neighborhood amenities. High rents are indicative of market demand and home values in the area, but may not occur in step with each other. Therefore, we allowed the investment change component to be either change in rent or change in home value greater than the county's overall change.



# Housing Trends in Harris County

**M**ore than 1.7 million dwelling units housed people in Harris County as of the year 2018.<sup>26</sup> This section, showing the county-level statistics, is important because the numbers in the county and each subarea exhibit how trends, which are explored in greater depth in the case studies, are found throughout the county. The two dominant housing structures in the county are single-family detached dwelling units (57.4%) and large multi-family dwelling units (35.3%). While other types of housing make up only a small portion of the housing stock, we continue to see a larger variety of housing types throughout the county. Townhomes, both attached and detached, represent the next largest category, at 4.7% of total units; however, they account for 9.7% of newly built units in the county since 2005, with 20,000 units built during this period (Table 1). This trend is more pronounced in Houston's Inner Loop, near Downtown, where almost one out of every three newly built housing units is a townhome. Multi-family structures with 2 to 4 units—multiplexes commonly referred to as “missing middle” housing—make up just 1.5% of units (See Figure 1), a proportion that has held relatively steady over the past 10 years, though are on the rise in the Sunnyside case study CTA.<sup>27</sup>

## Housing by Subareas

We subdivided the county into three areas to gain a more nuanced snapshot of housing activity throughout. The three major concentric highways that encircle Houston define the subareas. Given how closely residential development mirrors highway infrastructure, the three subareas mirror different stages of the county's growth, loosely demarcating urban, urban/suburban and suburban communities. Figure 2 shows these three subareas that are inside Loop 610, from Loop 610 to Beltway 8 and beyond Beltway 8. Since 2005, housing development

in Harris County has been highly bifurcated in portions of the Inner Loop and the northwestern suburban communities along the Grand Parkway (Highway 99). Single-family detached housing development is mainly concentrated beyond Beltway 8—most notably along the Grand Parkway—pushing much of the new single-family housing farther from major job centers into greenfield development areas. On the other hand, large multi-family development is clustered in the inner city and suburban areas along the county's major highways.

TABLE 1

## Newly built units by subarea and housing type

Housing type	Newly built units (2005–2018)	Subareas			Total
		Inner Loop	Inner Loop to Beltway 8	Beyond Beltway 8	
SF Detached	# Units	7,294	31,743	162,008	201,045
	% by Subarea	3.6%	15.8%	80.6%	100.0%
	% by Housing type	9.7%	40.3%	66.2%	50.5%
SF Attached	# Units	38	264	470	772
	% by Subarea	4.9%	34.2%	60.9%	100.0%
	% by Housing type	0.1%	0.3%	0.2%	0.2%
Attached Townhomes	# Units	2,791	772	1,288	4,851
	% by Subarea	57.5%	15.9%	26.6%	100.0%
	% by Housing type	3.7%	1.0%	0.5%	1.2%
Detached Townhomes	# Units	17,875	12,010	3,894	33,779
	% by Subarea	52.9%	35.6%	11.5%	100.0%
	% by Housing type	23.9%	15.3%	1.6%	8.5%
MF 2–4 Units	# Units	310	1,071	503	1,884
	% by Subarea	16.5%	56.8%	26.7%	100.0%
	% by Housing type	0.4%	1.4%	0.2%	0.5%
MF 5+ Units	# Units	46,518	32,410	75,694	154,622
	% by Subarea	30.1%	21.0%	49.0%	100.0%
	% by Housing type	62.2%	41.2%	30.9%	38.8%
Mobile Homes	# Units	1	432	740	1,173
	% by Subarea	0.1%	36.8%	63.1%	100.0%
	% by Housing type	0.0%	0.5%	0.3%	0.3%
Total	# Units	74,827	78,702	244,597	398,126
	% by Subarea	18.8%	19.8%	61.4%	100.0%

FIGURE 1

## The Number of Housing Units by Building Type in Harris County in 2018

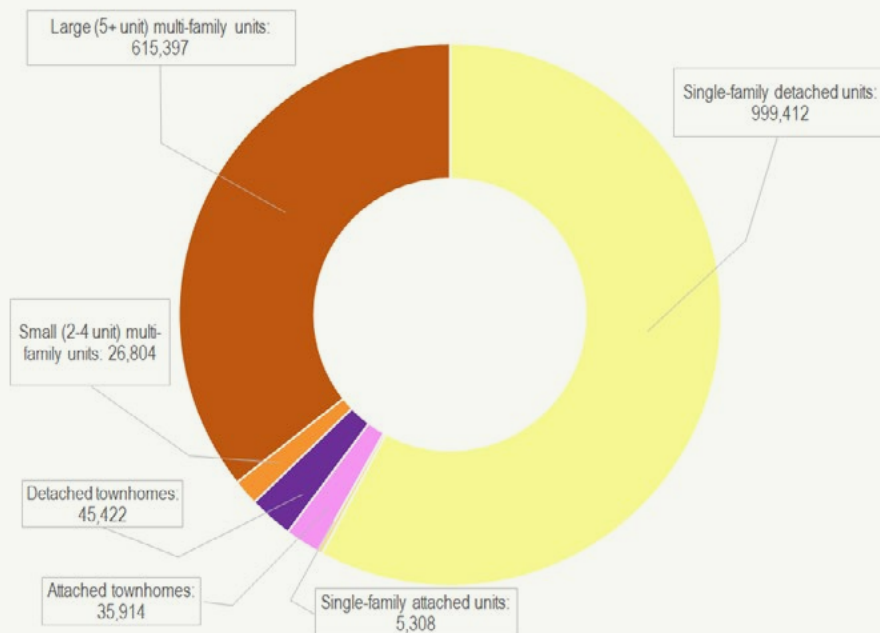
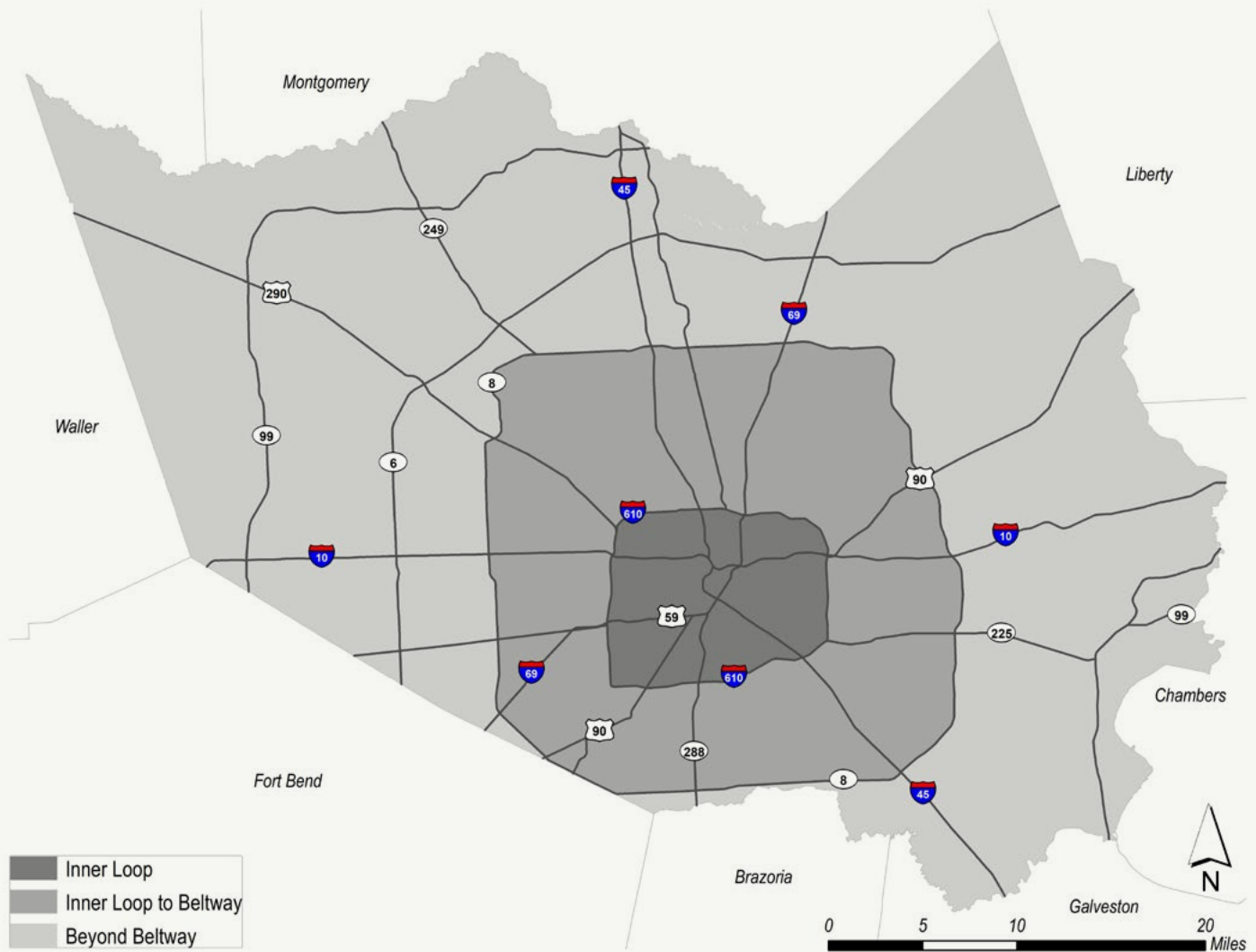




FIGURE 2 Three Subareas of Harris County



### Inner Loop Subarea

The area inside Loop 610 contains 14% of the total housing units, 11% of the population and 5% of the land area in Harris County. The Inner Loop also absorbed 19% of all newly built units since 2005, averaging 5,345 housing units built per year. That's twice as much as all of the housing units built each year in San Francisco and Oakland combined—2,913 units per year—during the same period, and confirms the high demand for homes in Houston's urban core.<sup>28</sup> (The comparison to San Francisco and Oakland is made because the land area of those cities combined is comparable to Houston's Inner Loop.) Housing production in Houston's Inner Loop also surpassed annual housing production since 2010 for the cities of San Diego (4,100 units per year) and Atlanta (1,945 units per year), and nearly as much as Seattle (6,200 units per year).<sup>29</sup> This level of housing production is quite an

accomplishment for an American city, and is significant progress toward the region's goals of sustainable development by building plentiful housing near major job centers, services and transportation options.<sup>30</sup> Houston's urban redevelopment mainly can be attributed to its distinctly liberal approach to land use, a stark departure from cities with single-use zoning and large lot requirements, which constrain development of higher density housing types and act as barriers to housing supply.<sup>31</sup>

The diversity of the housing stock in the Inner Loop is also evolving through this period as developers adapt to land prices and consumer demand with denser residential development. The area now accounts for 34% of the non-single-family detached housing built in the county—that includes single-family attached, townhomes and multi-family homes.

### Inner Loop to Beltway 8

The area between the Inner Loop and Beltway 8 accounts for 35% of all housing units, 38% of the population and 24% of the land area in Harris County. However, only 20% of the county's newly built units were built in the area since 2005, showing it is not experiencing the same level of new housing starts compared to the Inner Loop or beyond the Beltway. This subarea houses a significant number of naturally occurring affordable housing stock (i.e., housing that's affordable to a moderate-income family of four in Houston in 2019, which could not afford to spend more than \$1,907 per month on housing plus utilities) that overlaps with affordable transportation access in the western zones.<sup>32</sup> Housing units in the Inner Loop to Beltway 8 became more diverse between 2005 and 2018 with the addition of more non-single-family units (46,959 units) than single-family detached homes (31,743 units). Many multi-family housing units are aging and filtering down in the housing market, providing homes for many low- to mid-wage workers who prefer less expensive neighborhoods to high-amenity areas or move out of gentrifying neighborhoods inside Loop 610. Overall, the housing supply in the Inner Loop to Beltway subarea is diverse. However, this housing is mostly older and has been in place for a number of years.

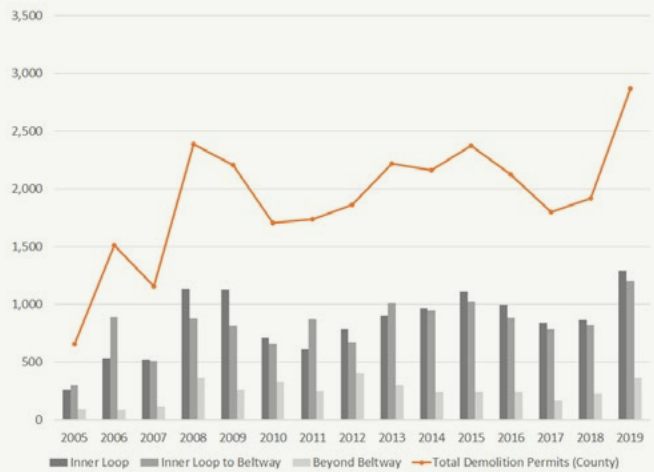
### Beyond Beltway 8

Half of Harris County's housing units and population are located beyond Beltway 8, an area that contains nearly 70% of the county's land area. Over 61% of the units built between 2005 and 2018 were in this subarea, most of which can be attributed to greenfield development, and is a sign of a strong suburban market. The county's single-family housing stock is now mainly built in this subarea. Approximately eight in 10 of all the single-family detached homes built during the period were Beyond the Beltway, confirming that communities inside the Beltway no longer are accommodating much single-family housing. On the other hand, one-third of the housing stock built beyond the Beltway included single-family attached, townhomes and multi-family housing types, indicating that developers are diversifying housing types in many new master-planned communities (Figure 2).

### Demolition Permits, 2005–2019

Figure 3 demonstrates the number of annual demolition permits processed in Harris County since 2005. This chart shows that 1,500–3,000 demolition permits were processed every year from 2008–2019. The annual figures in the chart are based on the years when demolition permits

**FIGURE 3 The number of demolition permits by year**



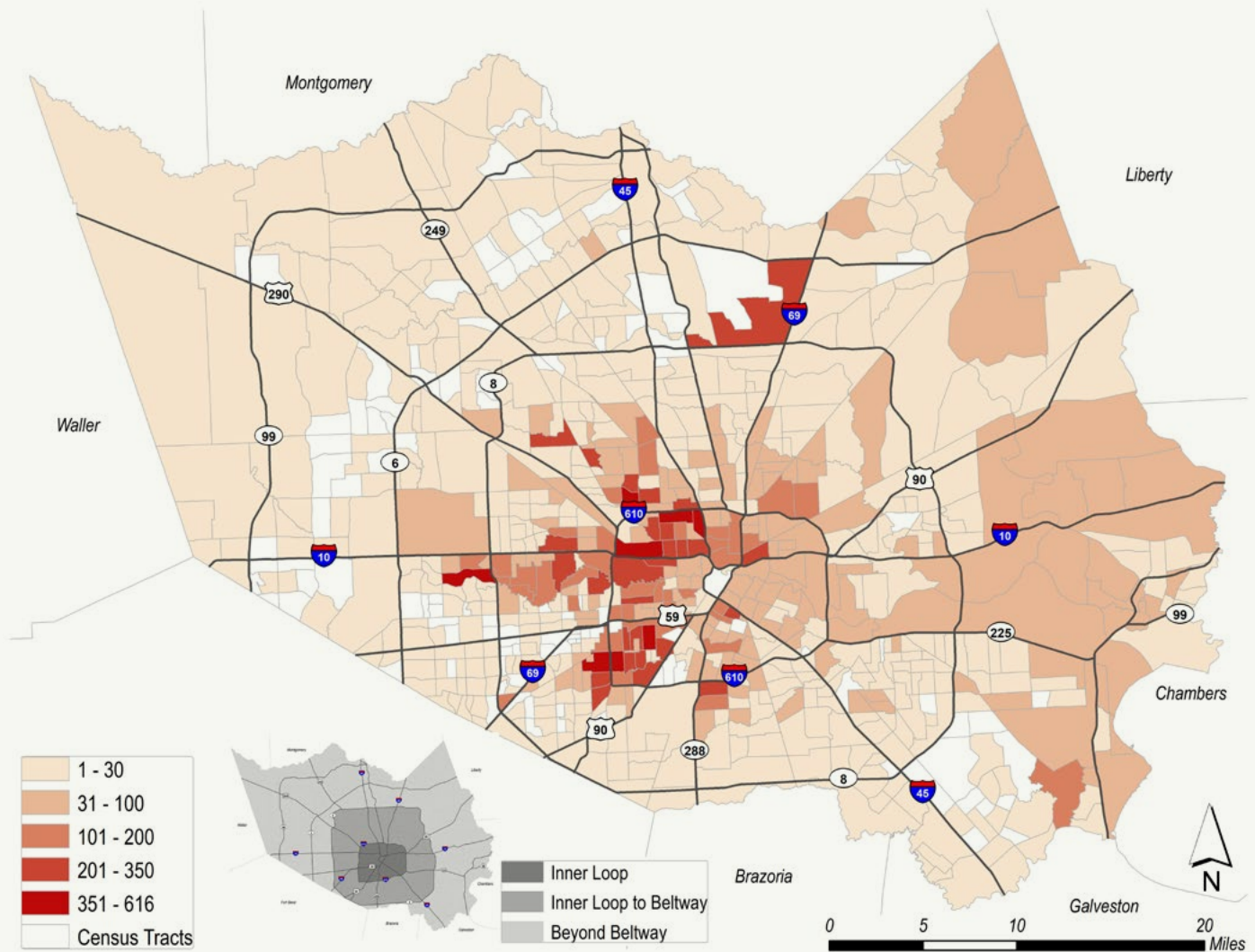
were processed. The issuance years are usually earlier than the actual demolition. Due to the limitations in the data, this demolition analysis does not specifically show how many residential units were demolished and whether reconstruction ensued after demolition. However, this data does illustrate spatial patterns of demolition permitting, which can be paired with other socioeconomic factors to document redevelopment trends.

Until this year, 2008 was the year with the highest number of demolition permits processed in Harris County. That year, a total of 2,387 permits were processed for demolition. During the Great Recession, the number of demolition permits fell, reflecting the slowdown in the housing market. The number of permits processed steadily increased between 2011 and 2015, at which time Houston's economy again slowed due to an energy crunch. However, 2019 signaled a major restart in redevelopment, with the largest number of demolition permits processed in the past decade, including notable jumps in the Inner Loop to Beltway subarea, a geographic area with substantial naturally occurring affordable housing.

Figure 4 shows demolition permits across Harris County. Most demolition permits were drawn inside Loop 610, particularly on the westside of the Inner Loop, where housing demand has been consistently high and where many in-demand areas have seen significant teardown and rebuild activity. Many neighborhoods on the east side of the Inner Loop have been gentrifying or are vulnerable to gentrification, and the demolitions in these areas can be seen either as evidence of their transformation or a pre-



FIGURE 4

**Demolition Permitting by Census Tract between 2005 and 2019**

cursor to it. The Inner Loop to Beltway 8, an area where most homes were built in the 1960s, 70s and 80s, also saw a large number of demolitions, which outpaced the Inner Loop in several years (including 2005, 2006, 2011 and 2013). Demolitions were most concentrated just west of Loop 610 in high-demand neighborhoods, as was the case inside Loop 610. Beyond the Beltway consistently had the fewest demolition permits because the vast majority of units are new builds. Some neighborhoods near George Bush Intercontinental Airport and others (e.g., Taylor Lake Village) on the east side drew demolition activities at a modest level.

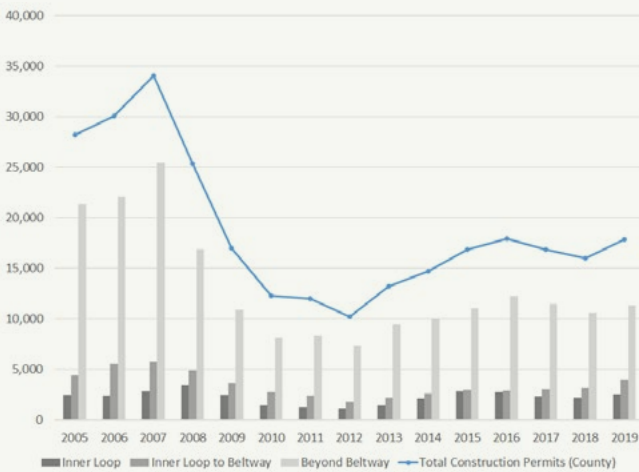
### Construction Permits, 2005–2019

Figure 5 illustrates the number of construction permits each year from 2005 to 2019. Construction permitting has

not yet reached its pre-Great Recession levels, but permits in Harris County have slowly grown since 2012. The peak year for construction permits was 2007, when 34,063 permits were processed. By 2019, 17,868 permits were processed for construction, approximately half of the peaked construction permitting activity in 2007.

The Inner Loop has shown the lowest permitting activity among the three subareas, in part because it is already heavily developed, and because construction permitting does not entirely reflect the density of new development, such as multi-family buildings that have dozens of units but are located on a single parcel (see Newly Built Units below). More construction permitting activity was found in the Inner Loop to Beltway than in the Inner Loop, but the gap in the number of construction permits between the two subareas narrowed

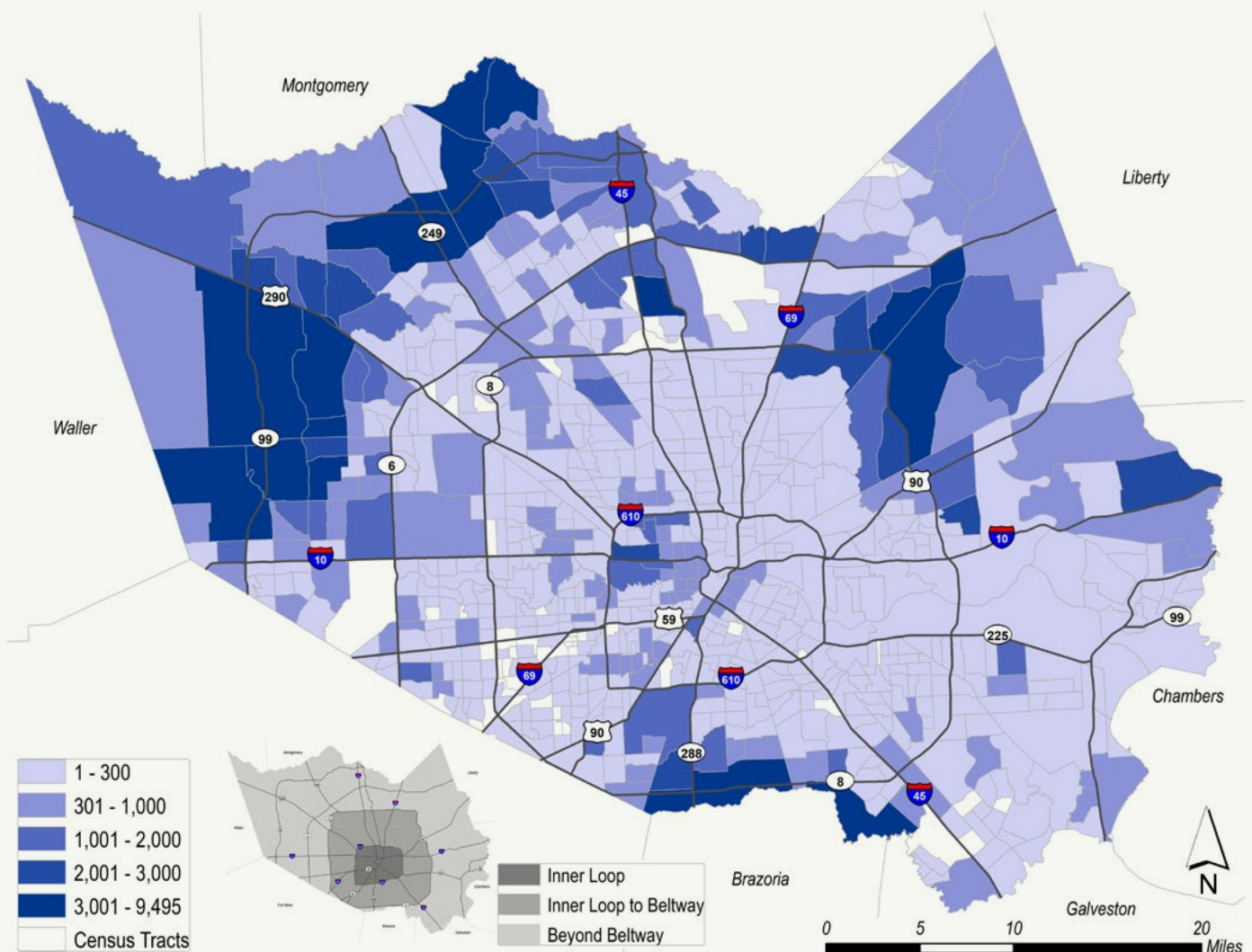
**FIGURE 5 The number of construction permits by year**



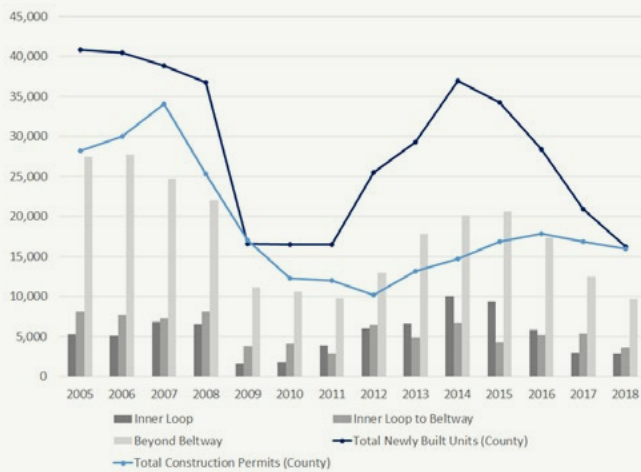
in the mid-2010s. Beyond the Beltway, which covers the most land area and has the most undeveloped land, has contained the largest number of construction permits across the whole period.

Figure 6 spatially depicts construction permitting between 2005 and 2019. The map makes it clear just how much of the new construction is focused outside the Beltway, especially to the northwest and proximate to major freeways. Most construction permits in the Inner Loop have been in high-demand housing markets that also have a high number of demolitions, such as Lazybrook/Timbergrove, the Heights, Washington/Memorial Park, Washington East and the Heights. Between the Inner Loop and the Beltway, new construction is more limited, except around major infrastructure such as State Highway 288 and Beltway 8.

**FIGURE 6 Construction Permitting by Census Tract between 2005 and 2019**

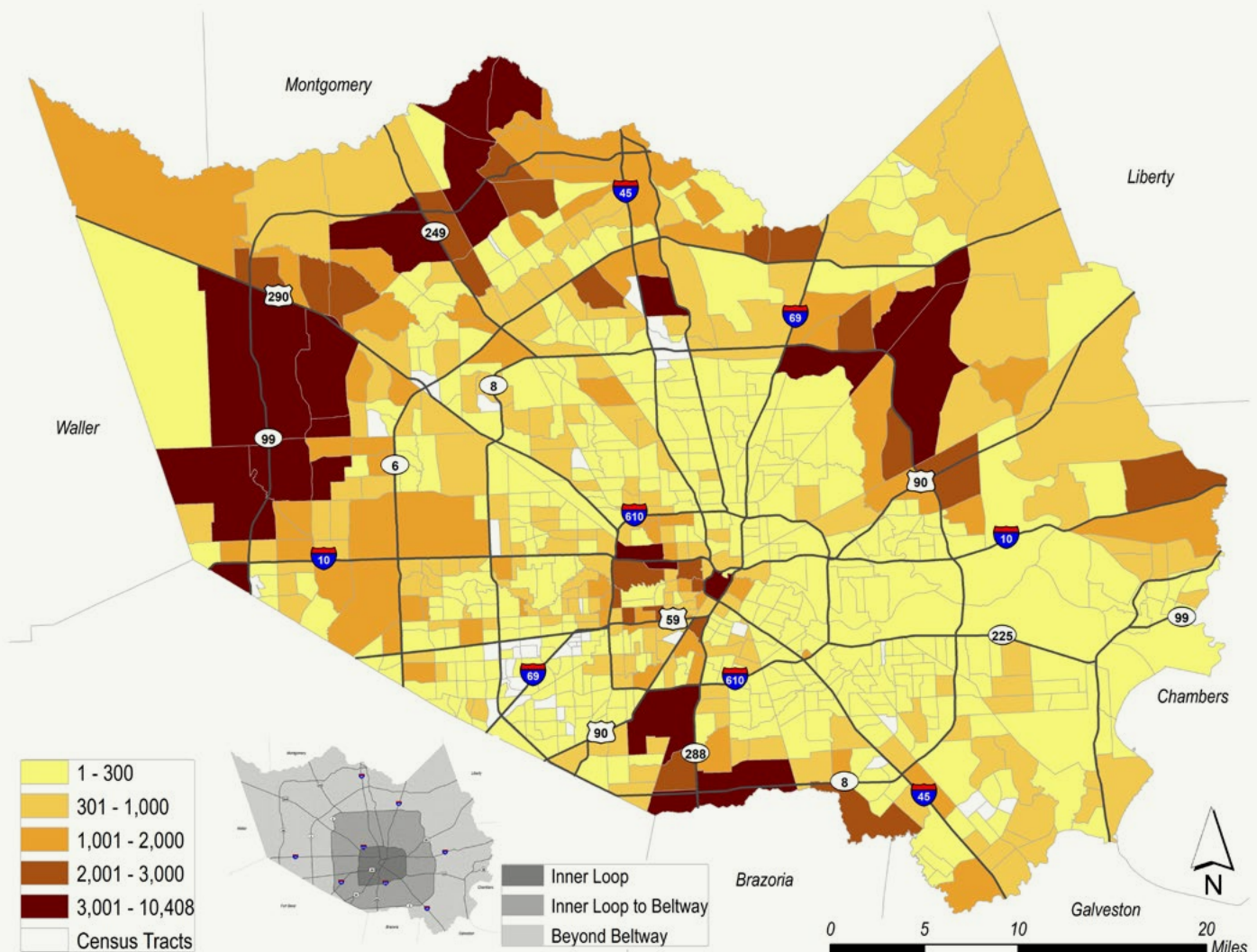




**FIGURE 7 Newly built units by year**

## Newly Built Units, 2005–2018

Figure 7 compares construction permits to the number of newly built housing units. This allows for a more nuanced view of development trends by capturing density of units. In situations where a construction permit is pulled for a multi-family project, the permit marks only one parcel as under construction. This limitation means permit data does not reflect density of development. When the number of units is far above the total number of construction permits, it marks a surge of multi-unit construction. When the gap between permits and units is small, it denotes that most buildings are single-family or lower density. The comparison shows major investments in multi-family development in the years leading up to the Great Recession, then a significant ebb before growing again to a peak in 2014. The 2014 uptick resulted from

**FIGURE 8 Newly Built Units by Census Tract between 2005 and 2018**





the economic growth after the recession and a number of multi-family construction projects through economic incentives such as the Downtown Living Initiative.

Comparing the Figure 5 permit numbers to the Figure 7 unit numbers by subarea shows what type of density is coming into each area. Taking this approach, it is again clear that in many years, the Inner Loop saw high-density development on a limited number of permits.<sup>33</sup> Growth of new units in the Inner Loop was particularly pronounced between 2013 and 2016 when it surpassed the number of units in the much larger area from the Inner Loop to the Beltway. This is again an outcome of major multi-family development.

In general, both areas within the Beltway have had comparable unit development across the study period. Areas beyond the Beltway led in construction of new units across the entire period (the lightest grey bars in Figure 7). A substantial number of the units were new single-family homes, but, like the Inner Loop to Beltway, there was also an increase in multi-family units. This trend, again, is visible by comparing the number of permits in Figure 5 to the number of units in Figure 7.

Figure 8 shows the concentration of new units. Numerous communities on the west side of the Inner Loop added a large number of newly built units—both detached town-

homes and multi-family housing units. Again, the collection of amenities and proximity to job centers has kept these areas in high-demand for years. The difference in concentration between permitted construction (see Figure 6) and the newly built units (Figure 8) show just how much of the Inner Loop development was multi-family development. For example, on the west side of the Inner Loop, the number of newly built units is much greater than the number of construction permits.<sup>34</sup>

Areas between the Inner Loop and the Beltway had less intensive concentrations of new units than the Inner Loop. Two exceptions to this trend were Five Corners and Minnetex in south central Harris County, where a significant number of new large multi-family units were built. Beyond the Beltway's most intensive concentrations are in areas that saw the development of major master-planned communities, such as to the northwest, along the Grand Parkway, or south, near State Highway 288. Older suburban areas to the southeast saw far less new construction. Figures A2-1 and A2-2 in the appendix further break down the location of new single-family detached units and new large multi-family units.

# Neighborhood Case Studies

**T**his section highlights seven communities in order to explore how larger patterns of housing stock change in Harris County over the course of the past 20 years have interconnected with gentrification trends. Neighborhood-level analysis allows us to examine how changes in the residential built environment—construction and demolition trends, in particular—relate to demographic changes and gentrification vulnerability. Figure 9 illustrates the seven case study neighborhoods at the CTA level overlaid with census tracts shown with their gentrification typology.<sup>35</sup>

Beyond geographic location, the case study communities were selected because they reflect different forms of neighborhood change. Fifth Ward, Independence Heights, Sunnyside and Third Ward include census tracts that are actively gentrifying or vulnerable to gentrification.

Lazybrook/Timbergrove and Montrose include census tracts that have significantly changed in the past couple of decades and are now mostly white inner-city communities, attracting higher-income residents. Finally, Spring Southwest is a mix of gentrifying and non-gentrifying census tracts, uniquely showing how an inner-suburban community populated predominantly by people of color has experienced changes in housing stock.

In addition to gentrification typology, location in relation to the subareas of this study and trends in demolition and construction permitting activity were considered in the selection of the case study neighborhoods. Four communities were selected from the Inner Loop (Lazybrook/Timbergrove, Montrose, Third Ward and Fifth Ward); two from the Inner Loop to the Beltway (Sunnyside and Independence Heights); and one Beyond the Beltway (Spring Southwest).

The seven case studies also reflect different types of demolition and construction trends. For instance, Fifth Ward, Independence Heights, Sunnyside and Third Ward all were demolition-intensive, with a new construction per number of homes demolished ratio well below the county average (See Table 3 for new construction to demolition permit ratios). Lazybrook/Timbergrove and Montrose, on the other hand, witnessed both intense demolition and construction, signaling significant redevelopment. Spring Southwest saw almost entirely new construction. Table 2 provides a summary for each neighborhood.





FIGURE 9

## Case Study CTAs and Gentrification Typology

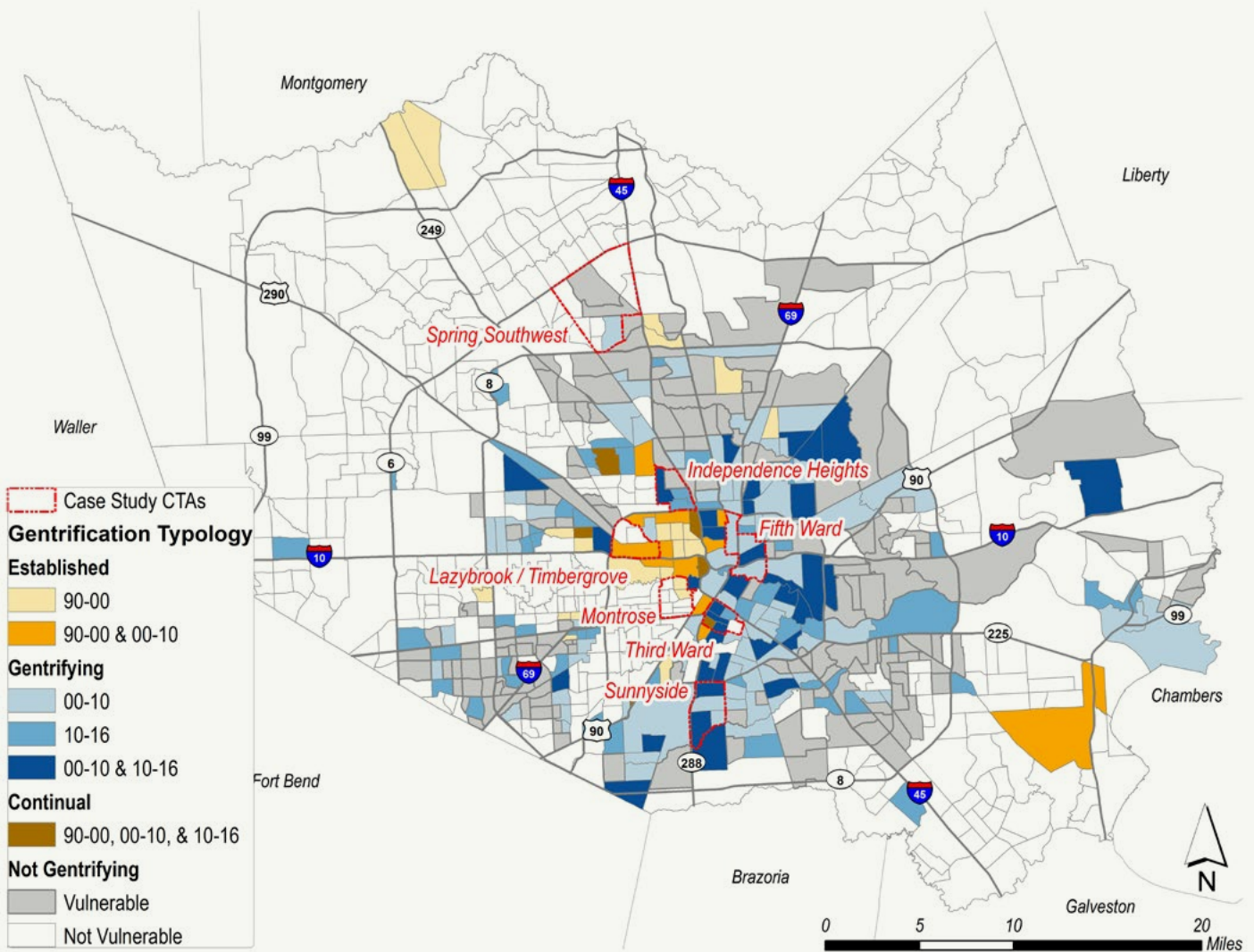


TABLE 2

## Summary of the seven case study CTAs

Neighborhood	Housing Permit Activity	Gentrification Typology
Fifth Ward	Demolition-intensive	Gentrifying
Independence Heights	Demolition-intensive	Gentrifying and vulnerable to gentrification
Lazybrook/ Timbergrove	Construction-and demolition-intensive	Gentrification-established (1990-2000 and 2000-2010) and invulnerable to gentrification
Montrose	Construction-and demolition-intensive	Gentrification-established (1990-2000) and invulnerable to gentrification
Spring Southwest	Construction-intensive	Gentrifying and non-gentrifying (combination of vulnerable and invulnerable to gentrification)
Sunnyside	Demolition-intensive	Gentrifying
Third Ward	Demolition-intensive	Gentrifying and continual (gentrification)



## Case Study Trends

### Gentrifying communities are witnessing low construction activity, but consistent demolition patterns, suggesting more rampant redevelopment may be forthcoming.

Analyzing the intensity of permit activities, demographic changes and gentrification typology for each case study helps illustrate how the housing stock responded. For instance, Fifth Ward, Independence Heights and Third Ward both are gentrifying, but are at different stages of the gentrification cycle. Demolitions in these neighborhoods are on par with most other case study neighborhoods, however, much less construction permitting occurred in these neighborhoods from 2005 to 2019. In fact, we find ratios of 1.4, 1.5 and 0.9 construction permits per every demolition permit in these three neighborhoods, well below the other case studies and the county CTA average of 9.8 to 1 (See Table 3). Only a modest number of units have been built since 2000 in gentrifying areas (Table 3 and Figure 10). The three gentrifying CTAs closer to Downtown also experienced different residential development than those farther out (Figure 11). Fifth Ward, Independence Heights and Third Ward CTAs, for instance, primarily added detached townhomes and large multi-family units in a strikingly similar capacity. In contrast, the Sunnyside CTA added a wide range of housing types, including single-family detached homes and small multi-family homes, in addition to large multi-family

units, and the its demographics did not shift as dramatically as the three CTAs closer in.

### Gentrification-established communities are seeing the most growth, specifically in detached townhomes and multi-family, adding significant density.<sup>36</sup> This also validates the argument that housing growth in middle-income areas is staving off more rampant gentrification in low-income areas.

The *gentrified* Lazybrook/Timbergrove and Montrose case studies—CTAs with census tracts classified as invulnerable to gentrification or places where gentrification has already occurred—accounted for those with both the highest construction and demolition figures from 2005 to 2019 (Table 3 and Figure 10), far outpacing the four *gentrifying* CTAs (Fifth Ward, Independence Heights, Sunnyside and Third Ward). A closer examination of the figures indicates that in Lazybrook/Timbergrove and Montrose, there were 6.3 and 3.5 construction permits for every demolition permit, respectively. These ratios are high considering the county CTA average of 9.8 is skewed by abundant green-field development that often does not replace existing stock (See Table 3). Montrose, in particular, experienced the densest form of redevelopment, seeing 2.9 newly built units per every construction permit, an entire point higher than the second-highest CTA on the list and more than double the county's average of 1.4 (Table 3). The Montrose CTA also accounted for over 7,100 units built since 2005,

TABLE

3

## Construction to Demolition Permitting Ratio by CTA

	Newly Built Units, 2005-2018 (#)	Construction Permits, 2005-2019 (#)	Demolition Permits, 2005-2019 (#)	Newly Built Units per Construction Permit Ratio	Construction Permit per Demolition Permit Ratio
Fifth Ward	919	914	<b>661</b>	1.0	1.4
Independence Heights	893	598	<b>407</b>	1.5	1.5
Lazybrook/Timbergrove	<b>3,638</b>	<b>2,799</b>	<b>445</b>	1.3	6.3
Montrose	<b>7,152</b>	<b>2,483</b>	<b>700</b>	2.9	3.5
Spring Southwest	<b>5,192</b>	<b>3,799</b>	13	1.4	292.2
Sunnyside	1,636	927	<b>395</b>	1.8	2.3
Third Ward	810	613	<b>625</b>	1.3	0.9
County CTA Average	2,784	1,976	201	1.4	9.8
County Total	398,126	282,529	28,686	1.4	9.8

\*Values in bold are greater than the county average values. Construction-intensive CTAs are determined when the value of either newly built units or construction permits in each CTA is greater than the average value of the county. Demolition-intensive CTAs are defined when the value of demolition permits in each CTA is greater than the average value of the county. Both construction- and demolition-intensive CTAs are identified when a CTA holds true for the two cases.

FIGURE 10

## Housing Stock by Built Year in the Case Study CTAs

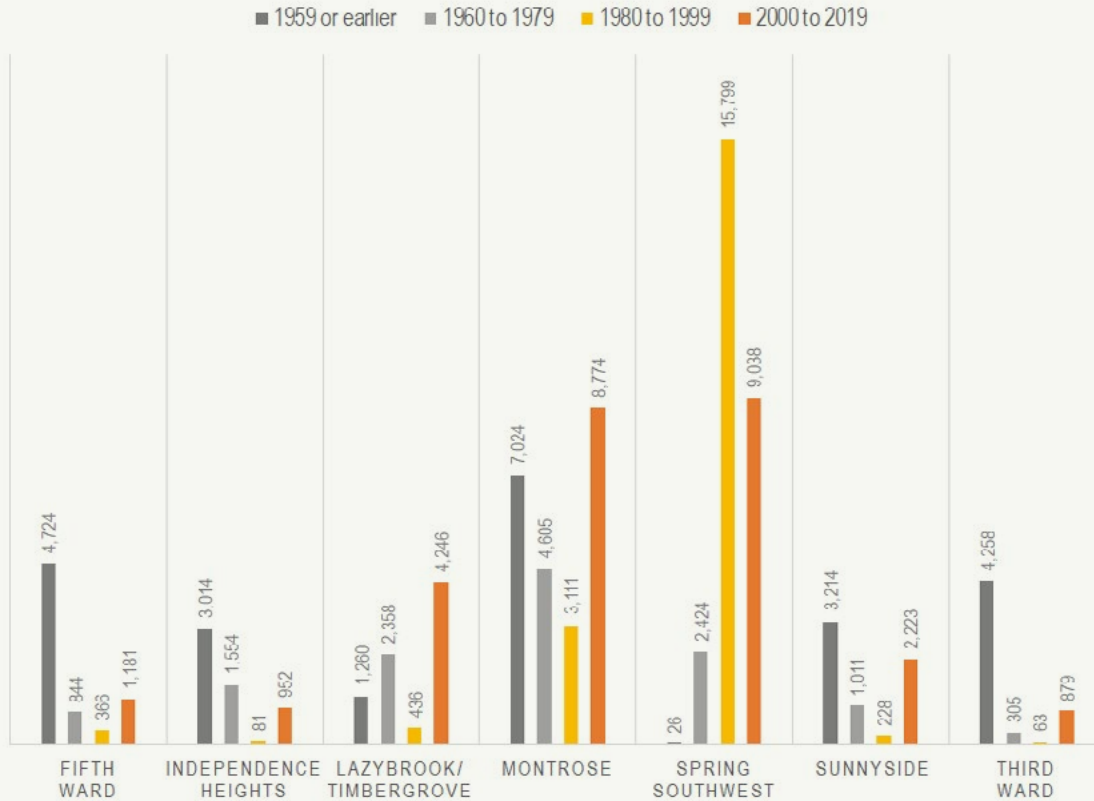


FIGURE 11

## Building Stock Built by Building Type in the Case Study CTAs

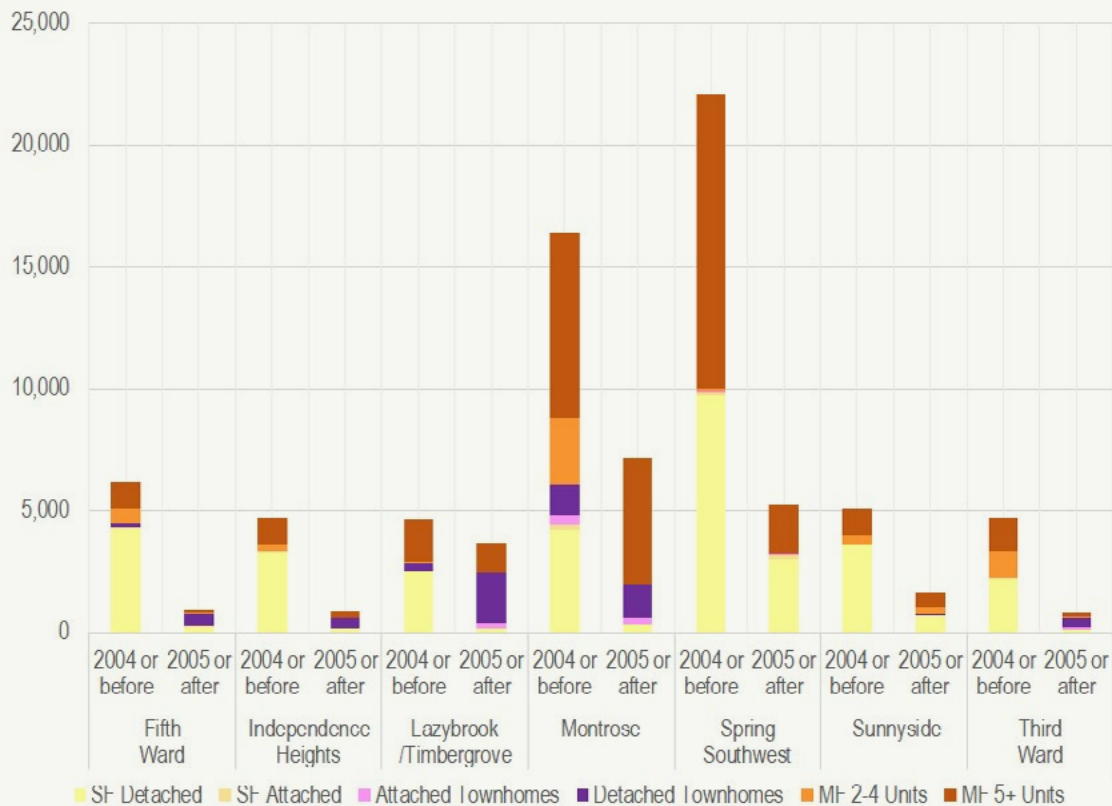


FIGURE 12

## Examples of Detached Townhomes



the highest of all seven case studies and evidence of the sizable housing production in Houston's high-demand neighborhoods. Since 2005, detached townhomes and large multi-family housing structures made up the overwhelming share of the newly built units in the two gentrified CTAs—Lazybrook/Timbergrove and Montrose (Figure 11 and Table 4).

**Detached townhomes are one of the most critical forms of new housing construction in gentrification-established communities and growing in gentrifying areas.**

Approximately 8% of the total housing units (83,958 units) in the seven case study CTAs are detached townhome units (6,641 units) though they represent 24% of all newly built units since 2005. Detached townhome development is mainly concentrated around Downtown and in the

western portions of the Inner Loop (Figure 13), mainly in gentrification-established or invulnerable areas, consistent with both Wegmann and Gray and Millsap's findings that most townhomes are being built in middle-income neighborhoods (Figure 11 and Table 4).<sup>3738</sup> This housing type is also growing in the Inner Loop to Beltway subarea, particularly on the west and south sides of the city. Some CTAs like the Heights and Five Corners have a significant number of these detached townhomes (more than 3,000 units), and Lazybrook/Timbergrove and Washington/Memorial Park also have more than 1,500 units that have been constructed since 1998.

Upon closer inspection, however, we find that detached townhomes also represent around half of newly built units in *gentrifying* neighborhoods, despite low construction activity overall in these tracts (Figure 11 and Table 4). This represents a redevelopment threat in *gentrifying* communities, where demolition currently is the main driver of gentrification and townhomes signal the next phase in a community's gentrification cycle. For instance, detached townhomes made up more than half of all newly built units from 2005 to 2018 in CTAs closest to the city center, including Fifth Ward, Independence Heights, Lazybrook/Timbergrove and Third Ward (four of which are *gentrifying* CTAs) where land is more expensive and builders will try to fit as many units as possible on a single subdividable parcel. This trend did not hold in Spring Southwest and Sunnyside, where single-family detached and multi-family housing structures were more common. There is also a substantial number of detached townhomes built in Montrose since 2005 (1,401), an affluent case study reviewed below.<sup>39</sup>





FIGURE 13

## Newly Built Detached Townhomes by CTA between 2005 and 2018<sup>39</sup>

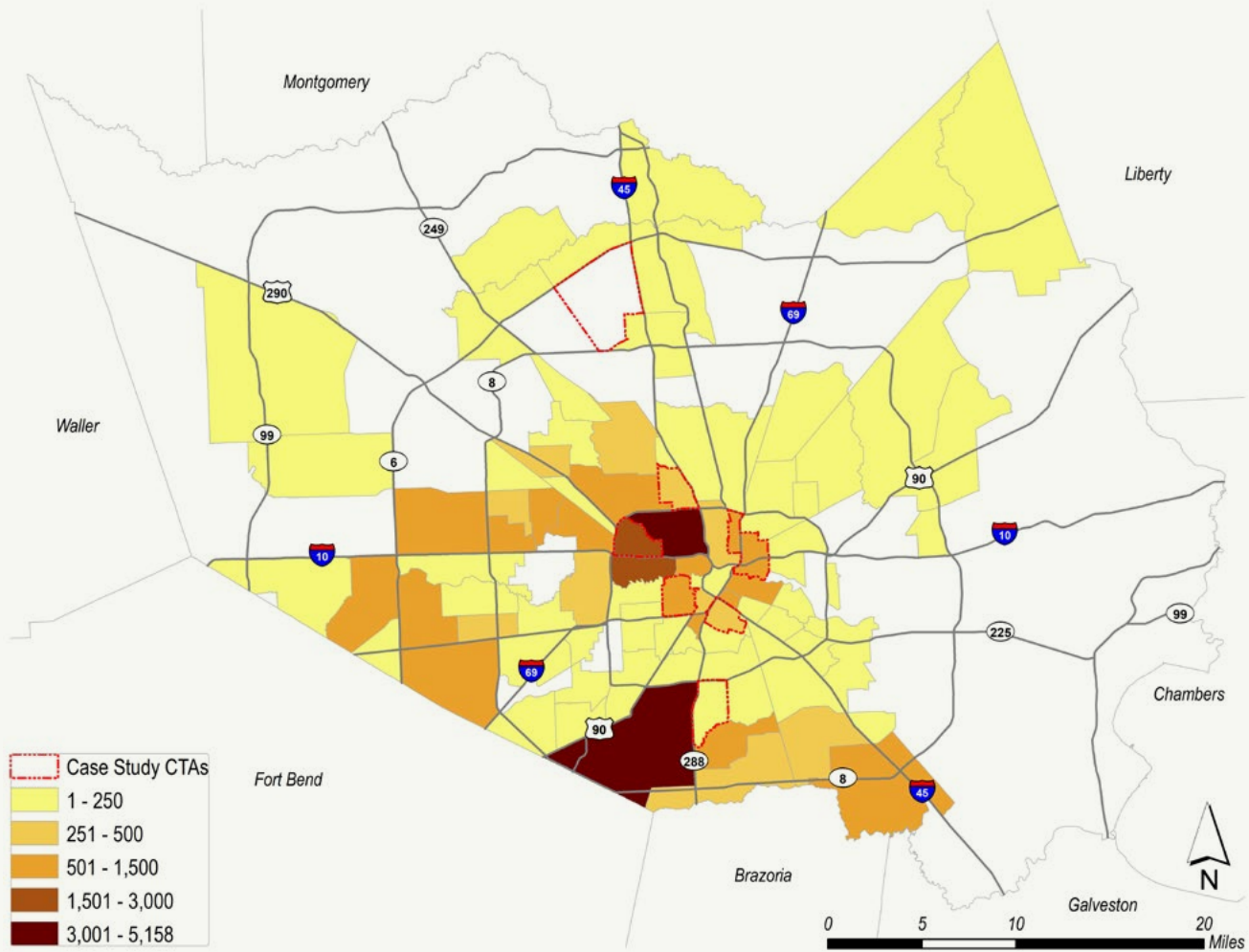


TABLE 4

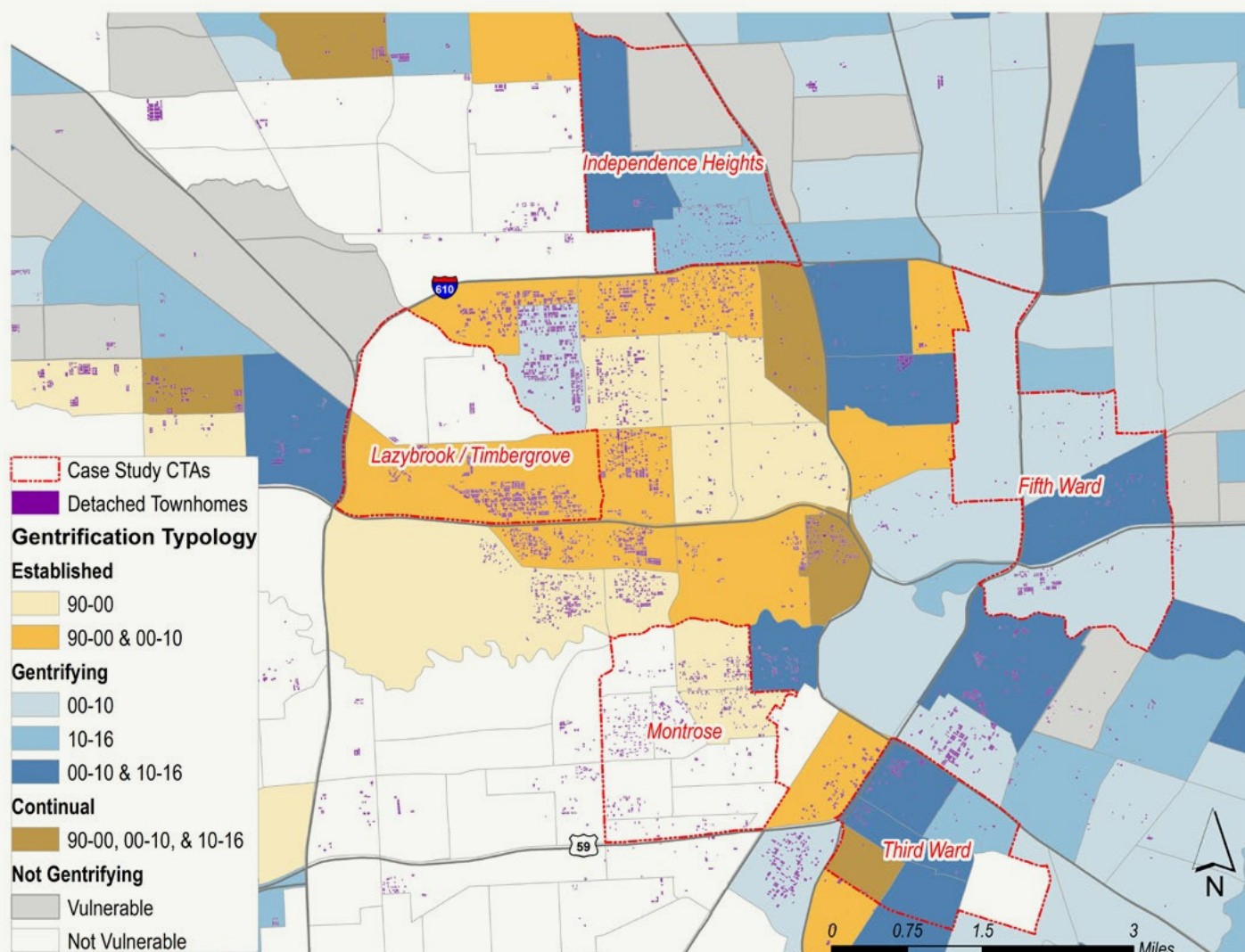
## Detached townhomes and other types of housing units in the Case Study CTAs

CTAs	Years	SF Detached	SF Attached	Attached Townhomes	Detached Townhomes	MF 2-4 Units	MF 5+ Units	Total	Detached Townhomes/ Total (%)
Fifth Ward	2004 or before	4,245	40	0	<b>153</b>	608	1,150	6,196	<b>2.5%</b>
	2005 or after	232	1	20	<b>528</b>	30	108	919	<b>57.5%</b>
Independence Heights	2004 or before	3,273	35	0	<b>21</b>	222	1,156	4,707	<b>0.4%</b>
	2005 or after	135	0	28	<b>414</b>	12	304	893	<b>46.4%</b>
Lazybrook/ Timbergrove	2004 or before	2,490	3	0	<b>327</b>	41	1,800	4,661	<b>7.0%</b>
	2005 or after	137	0	224	<b>2,071</b>	0	1,206	3,638	<b>56.9%</b>
Montrose	2004 or before	4,200	199	418	<b>1,247</b>	2,735	7,563	16,362	<b>7.6%</b>
	2005 or after	325	3	236	<b>1,401</b>	2	5,185	7,152	<b>19.6%</b>
Spring Southwest	2004 or before	9,680	177	27	<b>0</b>	98	12,085	22,067	<b>0.0%</b>
	2005 or after	3,019	143	33	<b>0</b>	0	1,993	5,188	<b>0.0%</b>
Sunnyside	2004 or before	3,561	15	0	<b>4</b>	393	1,063	5,036	<b>0.1%</b>
	2005 or after	730	10	1	<b>36</b>	226	632	1,635	<b>2.2%</b>
Third Ward	2004 or before	2,216	30	0	<b>27</b>	1,044	1,378	4,695	<b>0.6%</b>
	2005 or after	98	0	106	<b>412</b>	32	161	809	<b>50.9%</b>
Total		34,341	656	1,093	<b>6,641</b>	5,443	35,784	83,958	<b>7.91%</b>

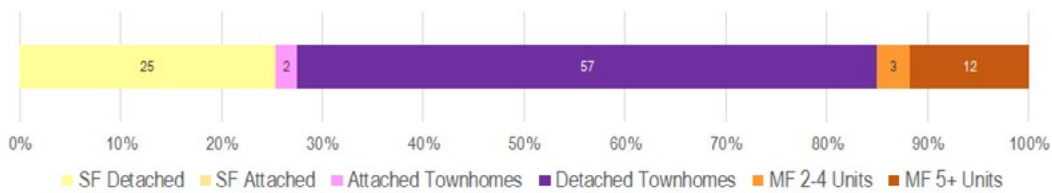
Figure 14 illustrates the prevalence of detached townhome units in the west area of the Inner Loop, where this housing type is most common. The western Heights, southern Lazybrook/Timbergrove, Washington avenue corridors in Washington/Memorial Park and Washington East, Montrose, East Downtown and Midtown have clusters of post-reform sub-5,000-square-foot units in their CTAs. This type of residential development is visible in middle- and higher-income Inner Loop neighborhoods, but is also beginning to emerge as the prevailing housing type in lower-income communities undergoing gentrification, as identified in this report's case studies.



**FIGURE 14** Newly Built Detached Townhome Units at the Parcel Level between 2005 and 2018



# Fifth Ward

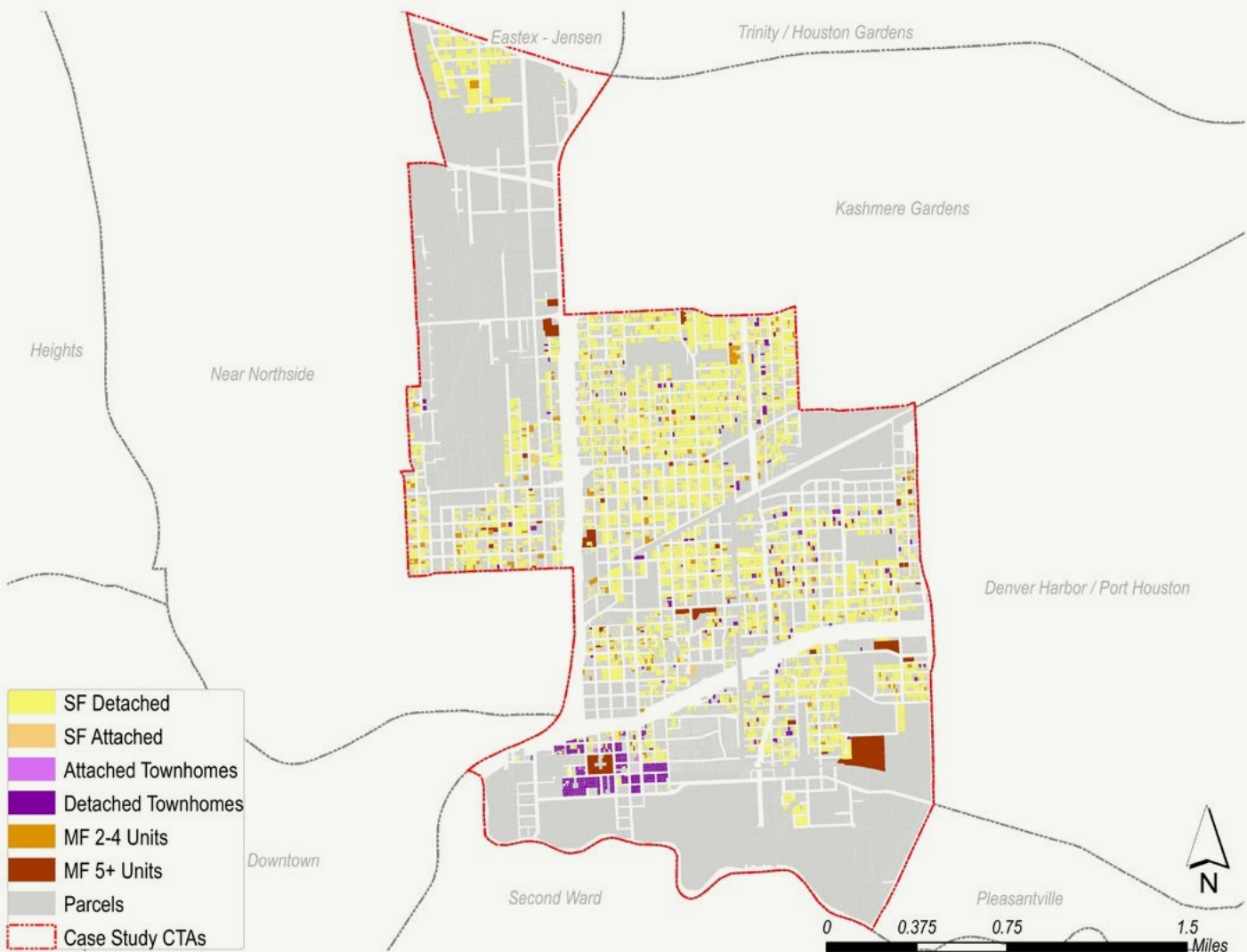


Percent of units built after 2005 by housing type, Fifth Ward

Built Years	SF Detached	SF Attached	Attached Townhomes	Detached Townhomes	MF 2-4 Units	MF 5+ Units	Total
2005 or after	232	1	20	528	30	108	919
2004 or before	4,245	40	0	153	608	1,150	6,196

Units built before and after 2005 by housing type, Fifth Ward

**FIGURE 15 Housing Structures, Fifth Ward**





## Background and Context

The Fifth Ward CTA covers much of Houston's Fifth Ward community, an iconic and historically Black neighborhood situated northeast of Downtown Houston. According to prior Kinder Institute research, the entire CTA has been gentrifying since the 2000s, with the central Lyons corridor census tract experiencing gentrification during the first two decades of this century (Figure 18).

## Changes in Building Stock

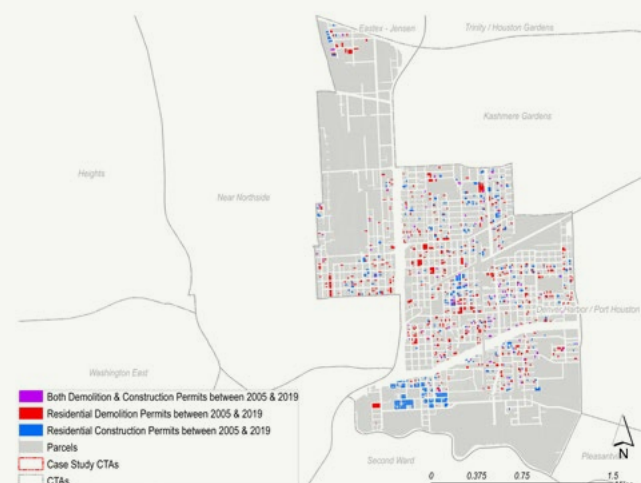
Single-family detached units make up the majority of housing in the Fifth Ward CTA (63%). Detached townhomes, however, account for 57% of newly built units since 2005. Much of this construction was concentrated south of I-10, adjacent to Buffalo Bayou, Downtown and East Downtown (Figure 15). Demolition in the Fifth Ward CTA is high

compared to the other case study neighborhoods. Since 2005, a total of 661 demolition permits, and widespread throughout the CTA's existing residential areas (Figure 16). Construction is spotty throughout the CTA, however, new townhome construction is concentrated in the southwest part (Figure 17 and 19). On the western side of the CTA, an area dominated by railroads, warehouses and other industrial-use facilities, demolitions are visible in residential areas at the north and south ends of the CTA, indicating a gradual pace of redevelopment adjacent to gentrification-established census tracts of the Near Northside.

## Demographic Changes

Widespread demolition patterns, coupled with distinctive townhome redevelopment, are likely contributing to the CTA's gentrification processes, despite sparse con-

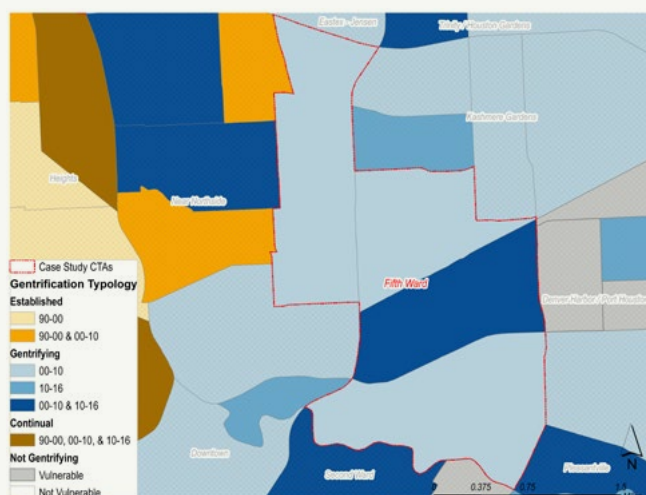
**FIGURE 16 Permit Changes (2005–2019)**



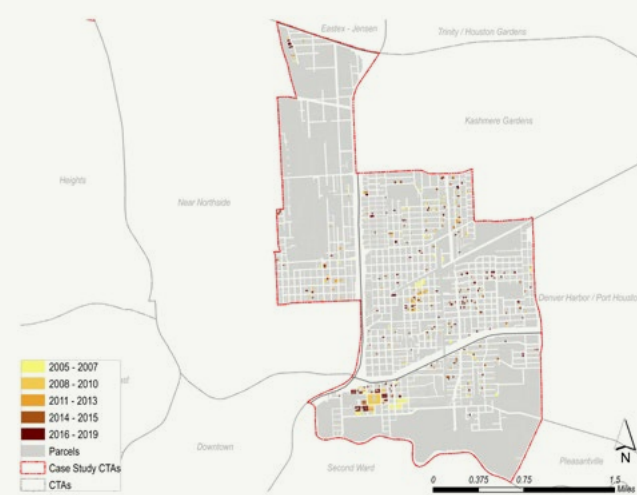
**FIGURE 17 New Constructions (2005–2018)**



**FIGURE 18 Gentrification Typology**



**FIGURE 19 Year Built (2005–2019)**





struction. The ongoing gentrification is evidenced by the rise in educational attainment and the change in populations, particularly the loss of Black residents (Table 5). The CTA experienced a net loss of nearly 1,600 residents since 2000, but total numbers mask the loss of nearly 4,000 Black residents. Two-thirds of this population loss was offset by an increase of about 2,000 Hispanic residents and 400 white residents, mostly middle-aged and without children. A sharp increase in the median home sales price (rising 94% between 2011 and 2018), along with a relatively slight increase in median household income (a 17% increase between 2010 and 2018), indicate that the Fifth Ward CTA has gone through a period of continuous gentrification, reflecting the shift in

the make-up of the demographic profile and the general trend of the housing market.

### Summary

The area's widespread demolition activity has driven gentrification patterns in the Fifth Ward CTA. An uptick in market-rate housing, particularly detached townhomes, is likely to accelerate sociodemographic trends seen since 2000. It is difficult to know when rampant development may occur on many demolished lots across the CTA and vacant lots between I-10 and Buffalo Bayou, on the south side. These properties could be opportunities for affordable housing interventions, coupled with flood-protection strategies.

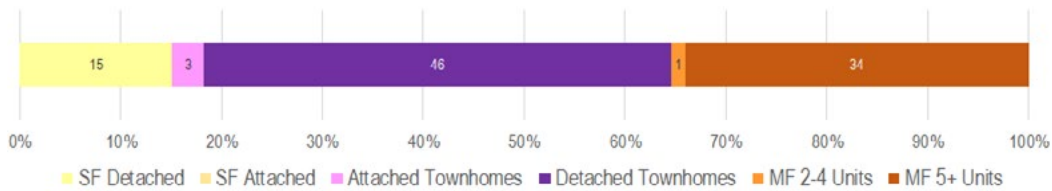



**TABLE 5 Neighborhood Indicators, Fifth Ward**

Indicators	Fifth Ward CTA		
	2000	2010	2018
<b>Demographics</b>			
Population	19,378	18,781	17,802
% Population under 5 years old	9	11	7
% Population 5-17 years old	24	21	19
% Population 18-34 years old	24	24	25
% Population 35-64 years old	31	34	39
% Population over 65 years old	12	11	10
% Non-Hispanic White population	2	3	4
% Non-Hispanic African American population	63	60	47
% Non-Hispanic Asian population	0	1	0
% Hispanic or Latino population	35	37	48
<b>Economic Vitality</b>			
% Owner-occupied units	33	34	36
% Renter-occupied units	67	66	64
% of Persons in poverty	47	45	38
% Renters paying more than 30% of household income on housing	44	57	57
Median household income (in 2018 inflation-adjusted dollars)	22,517	23,126	27,046
Median sales price of houses (in 2018 dollars) <sup>40</sup>	N/A	143,955	279,900
<b>Education</b>			
% Population 25+ without high school diploma	59	49	31
% Population 25+ with high school diploma or GED	23	28	34
% Population 25+ with some college	14	12	22
% Population 25+ with bachelor's degree or higher	4	10	13



# Independence Heights

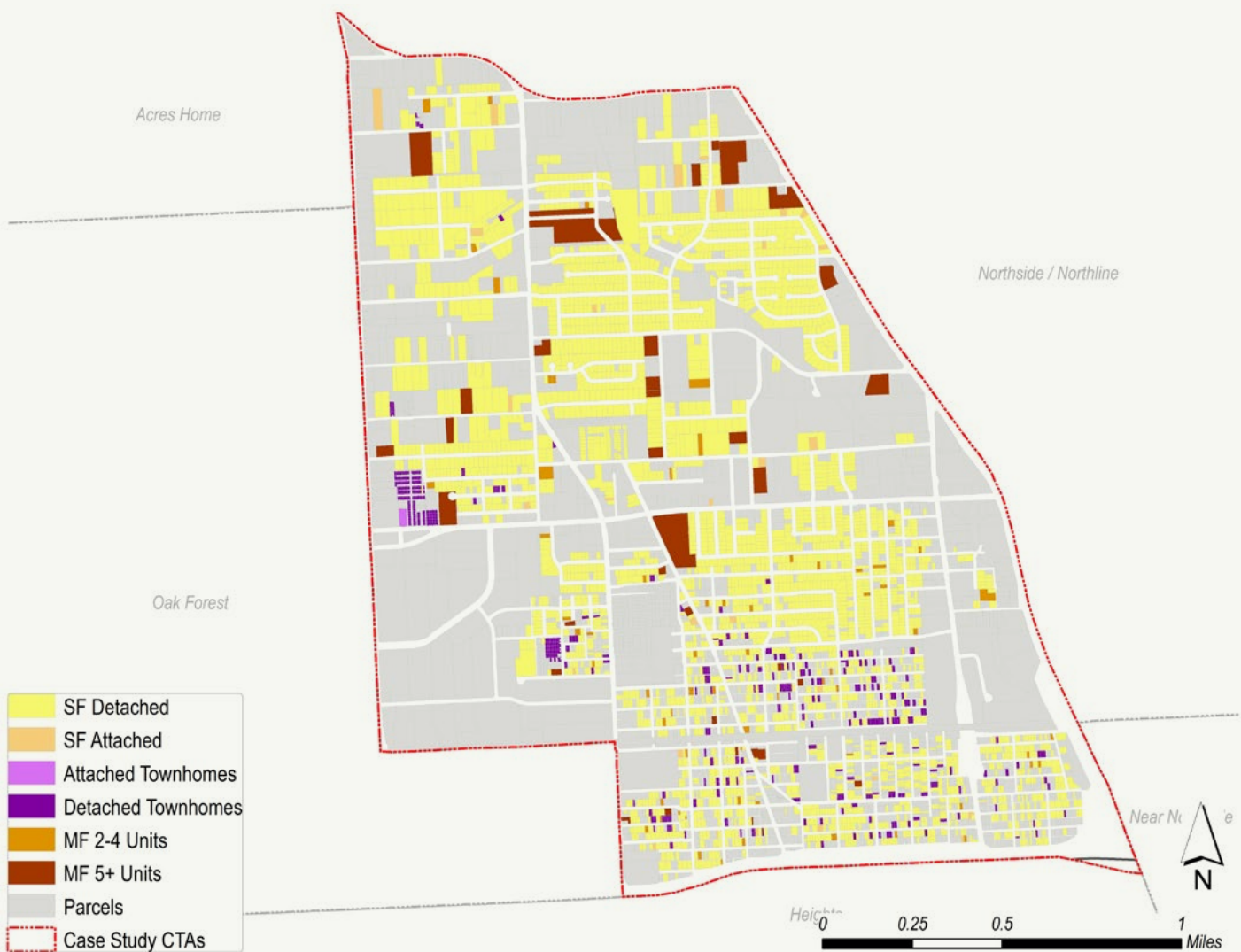


Percent of units built after 2005 by housing type, Independence Heights

Built Years	SF Detached	SF Attached	Attached Townhomes	Detached Townhomes	MF 2-4 Units	MF 5+ Units	Total
2005 or after	135	0	28	414	12	304	893
2004 or before	3,273	35	0	21	222	1,156	4,707

Units built before and after 2005 by housing type, Independence Heights

**FIGURE 20 Housing Structures, Independence Heights**



## Background and Context

Situated on the northwest side of the Loop 610 and I-45 interchange, Independence Heights is a few miles north of Downtown and borders high-income neighborhoods like the Heights (gentrification-established) and Oak Forest (invulnerable to gentrification). Independence Heights was historically a mostly African American neighborhood of single-family homes. It was incorporated as the first Black municipality in the State of Texas in 1915 and annexed by the City of Houston in 1929.<sup>41</sup> This case study CTA covers the historic township plus areas farther north and west.

Previous Kinder Institute gentrification research identified the entire Independence Heights CTA as gentrifying or vulnerable to future gentrification (Figure 23).<sup>42</sup> The

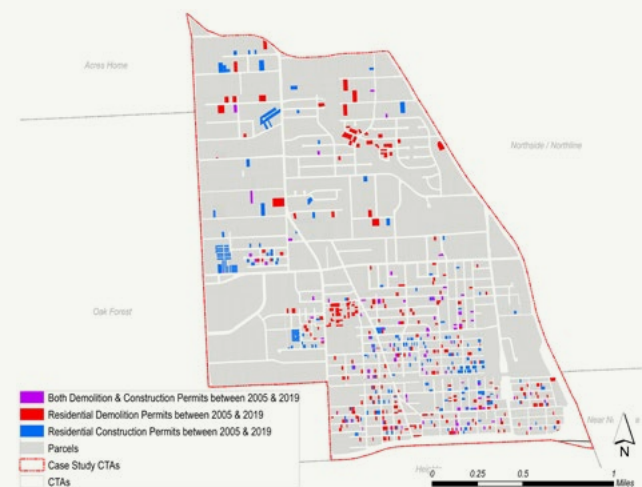
western part of the census tract that borders Oak Forest began gentrifying earlier than other parts of the community, with shifts beginning in 2000 and continuing to today. The southern part of the census tract, which borders the Heights, began gentrifying later, with shifts becoming visible after 2010.

## Changes in Building Stock

The CTA still contains mostly single-family detached housing structures (Figure 20). However, since 2005, the housing stock in Independence Heights also experienced considerable demolition (twice as much as the average CTA) and sparse new construction.<sup>43</sup>

Despite low construction, detached townhomes made up 46% of all newly built homes in the CTA since 2005 (Table 4).

**FIGURE 21 Permit Changes (2005–2019)**



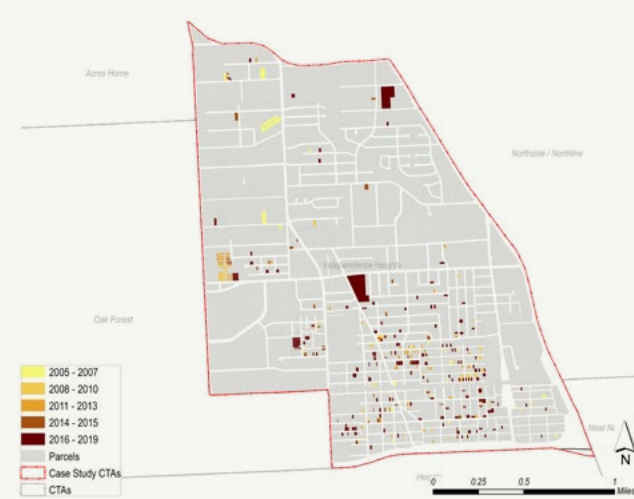
**FIGURE 22 New Constructions (2005–2018)**



**FIGURE 23 Gentrification Typology**



**FIGURE 24 Year Built (2005–2019)**





Construction of new detached townhomes has mostly occurred after 2014 (Figure 24) and has been concentrated in the gentrifying southern and western tracts adjacent to Oak Forest and the Heights (Figure 21 and 22). The entirety of the neighborhood's multi-family development, on the other hand, was limited to two large development parcels in both gentrifying and non-gentrifying census tracts, and accounted for 35% of new housing dwelling units built since 2005 (Figure 22).

The northern census tract, where large single-family parcels still dominate, has experienced demolition activity since 2005, despite scarce construction (Figure 21)—a sign of ongoing speculation activity likely foretelling the subdividing of more lots for future townhome development.

### Demographic Changes

Housing stock changes appear to have had a modest impact on the neighborhoods' demographic shifts. Since 2000, the CTA has experienced a sharp decline in its Black population (from 60% to 33%) and an equally sharp increase in the share of Hispanic residents (from 32% to 60%). The two populations have similar economic means.<sup>44</sup> The decrease in the Black population from 2000 to 2010 coincided with a precipitous drop in median in-

comes and a slight decrease in homeownership, signaling a loss of moderate-income Black homeowners. This also suggests that the lower-income Hispanics moving in were predominantly renters coming into the existing housing stock. During this period, the median home sales price skyrocketed from \$52,117 in 2011 to \$269,990 in 2018, which is on par with the city's median sales price (\$269,900). The median price was driven up by the addition of more expensive townhomes in the \$300,000 to \$400,000 range, and underscores the shifting dynamics in the area's housing market. The growth of townhomes since 2010 (Figure 24) also corresponds with an uptick in median household incomes, educational attainment, and more Hispanics and affluent whites moving in (Table 6)—likely a result of newly built townhomes.

### Summary

In sum, the scale of redevelopment has been gradual in Independence Heights, and the shift in housing type has ushered in minor sociodemographic and investment changes, particularly in gentrifying tracts. These trends are likely to continue in the future if the geographic tendencies of demolition and townhome development moves north into vulnerable areas.

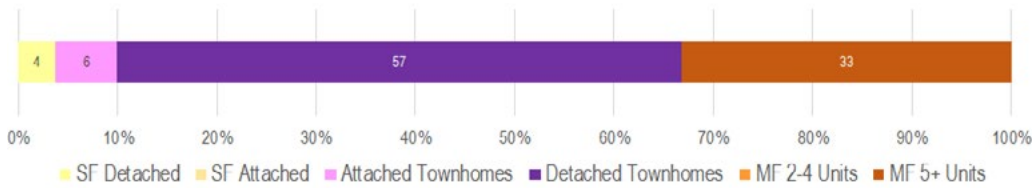




TABLE 6 Neighborhood Indicators, Independence Heights

Independence Heights CTA			
Indicators	2000	2010	2018
<b>Demographics</b>			
Population	14,209	12,845	14,314
% Population-Under 5 years	8	6	8
% Population-5-17 years	19	19	19
% Population-18-34 years	25	25	22
% Population-35-64 years	34	37	39
% Population-Over 65 years	13	13	12
% Non-Hispanic White Population	6	5	7
% Non-Hispanic African American Population	60	52	33
% Non-Hispanic Asian Population	0	1	0
% Hispanic or Latino	32	42	60
<b>Economic Vitality</b>			
% Owner Occupied Units	49	45	44
% Renter Occupied Units	51	55	56
% of Persons in Poverty	31	38	37
% Renters Paying more than 30% of Household Income on Housing	45	51	50
Median Household Income (In 2018 Inflation-Adjusted Dollars)	34,044	26,448	30,269
Median Sales Price of Houses (In 2018 Dollars) <sup>45</sup>	N/A	52,117	269,990
<b>Education</b>			
% Population 25+ without High School Diploma	44	41	38
% Population 25+ with High School Diploma or GED	30	32	31
% Population 25+ with Some College	18	19	21
% Population 25+ with Bachelor's Degree or Higher	9	7	11

# Lazybrook/Timbergrove

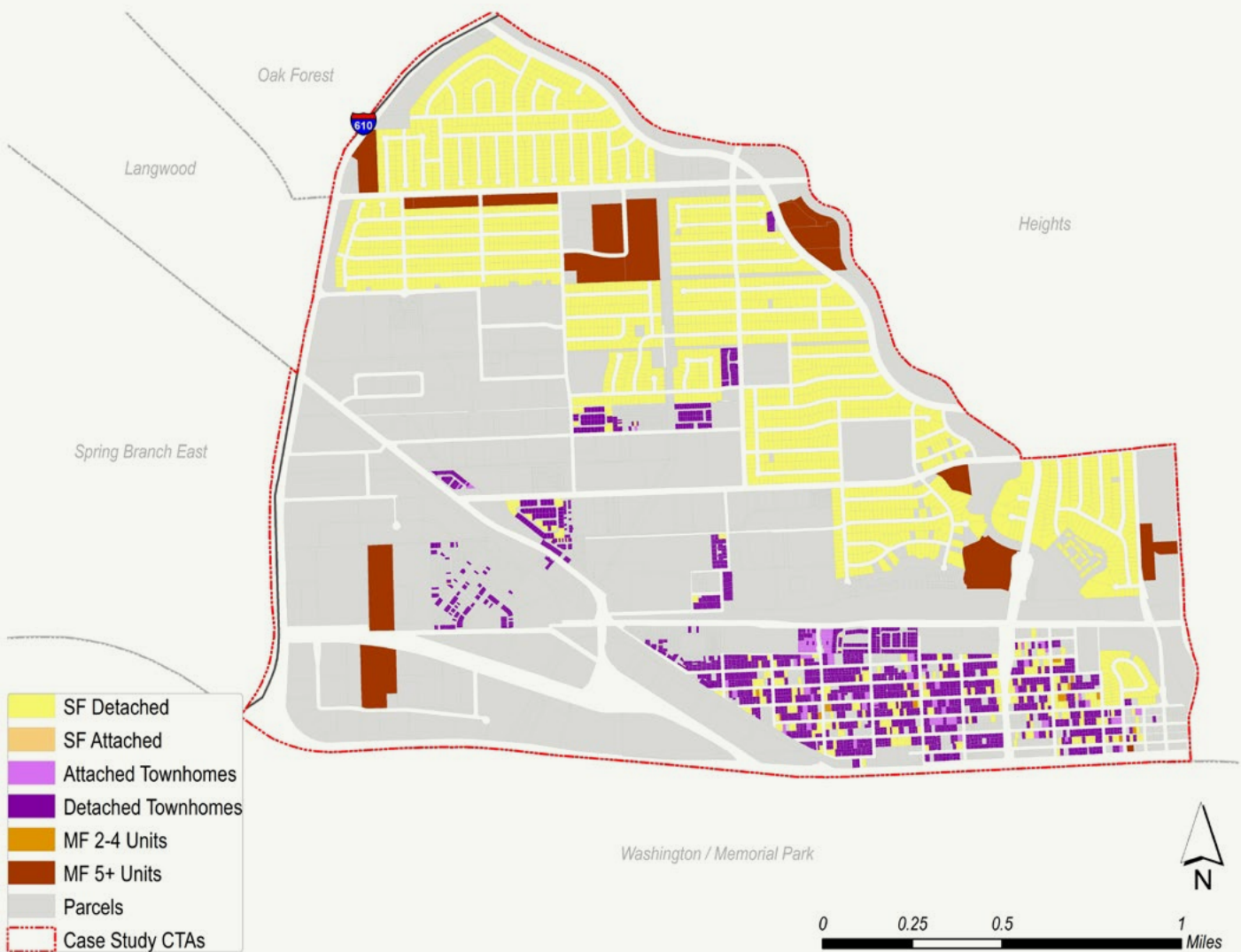


Percent of units built after 2005 by housing type, Lazybrook/Timbergrove

Built Years	SF Detached	SF Attached	Attached Townhomes	Detached Townhomes	MF 2-4 Units	MF 5+ Units	Total
2005 or after	137	0	224	<b>2,071</b>	0	1,206	3,638
2004 or before	2,490	3	0	<b>327</b>	41	1,800	4,661

Units built before and after 2005 by housing type, Lazybrook/Timbergrove

**FIGURE 25 Housing Structures, Lazybrook/Timbergrove**



## Background and Context

Lazybrook/Timbergrove is located at the northwest corner of the Inner Loop. The case study area includes a collection of single-family subdivisions surrounded by light industrial and undeveloped parcels on the west, and White Oak Bayou on the east. The CTA is adjacent to areas that have already transitioned into gentrification-established CTAs, including the Heights and Washington / Memorial Park, but it also shares a boundary with vulnerable census tracts located along US 290 and Loop 610 (i.e. in Spring Branch East, Langwood and Oak Forest). The Kinder Institute's previous gentrification research classified the northern census tract as invulnerable to gentrification and the southern tract as gentrification-established (Figure 28), meaning it gentrified over the span

of two decades, in both 1990–2000 and 2000–2010, and is no longer gentrifying.<sup>46</sup> The southern census tract is known as Cottage Grove, which has a documented history of redevelopment since the early 2000s, during which time single-family bungalows were replaced by more-dense townhomes built on subdivided lots.<sup>47</sup>

## Changes in the Building Stock

Detached single-family is the predominant housing type in Lazybrook/Timbergrove (Figure 25). The CTA, however, has experienced substantial construction of detached townhomes since 2005 in the southern census tract (Figure 25 and 27), which gentrified from 1990 to 2010.<sup>48</sup> Townhome development not only has replaced conventional single-family on the southern tract, it has crept up to the central portions of the CTA dominated by light

FIGURE 26 Permit Changes (2005–2019)

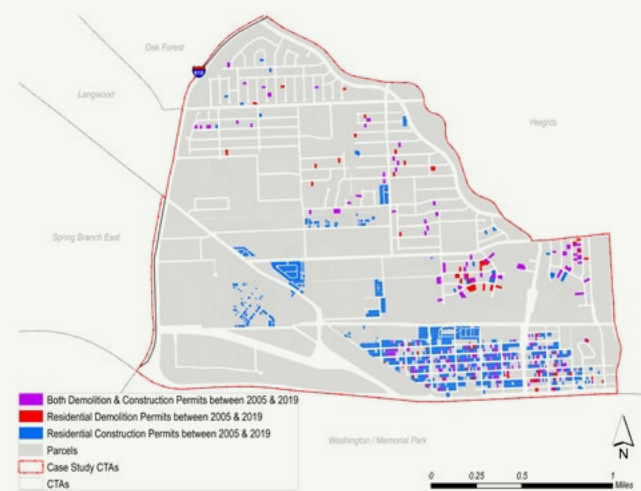


FIGURE 27 New Constructions (2005–2018)



FIGURE 28 Gentrification Typology

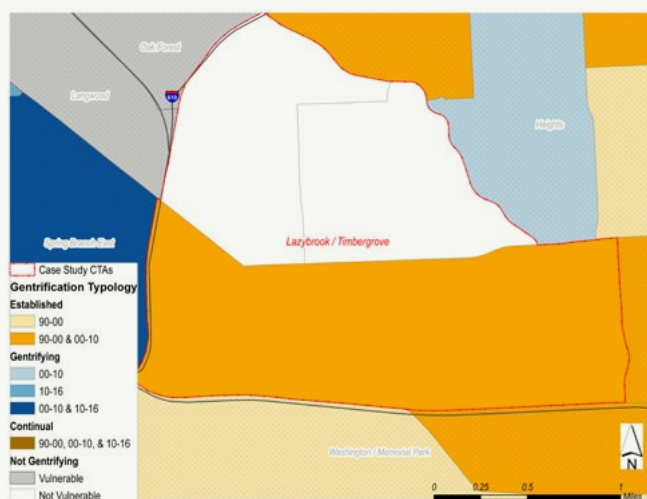
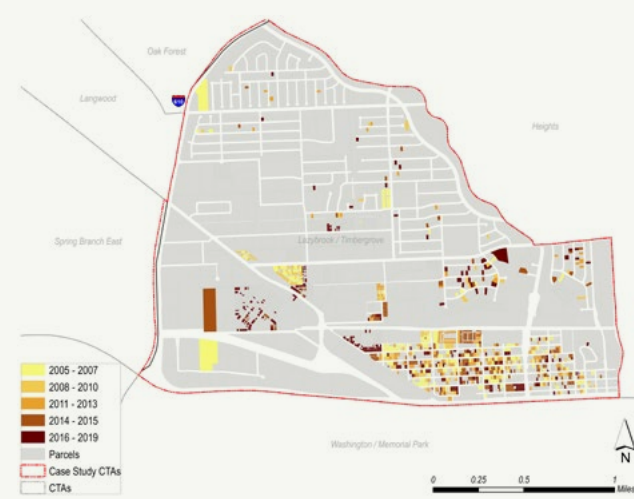


FIGURE 29 Year Built (2005–2019)







industrial uses and warehouses. Construction activity has been steady since 2005, with more recent townhome and multi-family development on the southwest and eastern boundaries of the CTA (Figure 29). Demolition activity, though spotty, was comparable to the other case study CTAs and quite common in occurrence with construction (Table 3 and Figure 26). Activity in the CTA also suggests more widespread demolition and speculation may have occurred prior to 2005, during the early stages of the neighborhood's gentrification cycle in the 1990s, and abetting the displacement of Hispanic and elderly residents. Large multi-family development was the only other housing type with activity since 2005, though it was limited to four scattered sites. These sites were not associated with demolition of any existing housing (Figure 26, 27 and 29).

FIGURE 30

### Detached Townhomes in Cottage Grove in Lazybrook/Timbergrove (Google Maps)



### Demographic Changes

The changes in Lazybrook/Timbergrove's housing stock coincided with rapid population growth and considerable sociodemographic changes, beginning in 2000. The CTA is now a majority-white, affluent area that gentrified in the southern Cottage Grove census tract between 1990 and 2010. It is evident that new townhome development built since 2005 drove these racial and economic composition trends. Since 2000, the white population rose by 9%, while there was a dramatic decrease in the share [and net number] of Hispanic and elderly residents, dropping from 45% to 25% and 15% to 8%, respectively—an indication that housing turnover displaced members of both groups. There were also noticeable increases in young professional age categories and a net increase of children under 5 years of age, signaling that young families were moving in during the townhome boom in Cottage Grove. Moreover, median incomes rose from \$62,000 to \$102,000 (a 63% growth, adjusted for inflation) and the median housing sales price skyrocketed to \$409,000. Educational attainment also grew exponentially, with the share of residents with a bachelor's degree growing from 29% in 2000 to an astounding 65% in 2018.

### Summary

The Lazybrook/Timbergrove case study has undergone a period of residential reinvestment, loss of affordable housing and upward movement of residents' sociodemographic status, a period marked by plentiful townhome development. The pace of change has been dramatic in the Lazybrook/Timbergrove CTA, but contained to the southern census tract in Cottage Grove during a two-decade gentrification period. Turnover of townhomes

replacing single-family bungalows has brought more affluent, white and educated young professionals, as well as young families with children closer to the city's core—with notable displacement of Hispanic and elderly residents. The growth of townhomes since 2005 illustrates how the pace of turnover can accelerate in vulnerable areas when conditions are ripe, first primed by demolition and speculation in the preceding decade as a gentrifying CTA. It's also a cautionary tale for other gentrifying neighborhoods where speculation activity is occurring and housing turnover could accelerate. On the other hand, residential development, particularly of townhomes, is replacing industrial uses and underutilized land. This demonstrates a versatility of the townhome as an infill-housing product that appeals to young families that want to live near regional job centers (i.e. Downtown, Uptown and Greenway Plaza).



TABLE

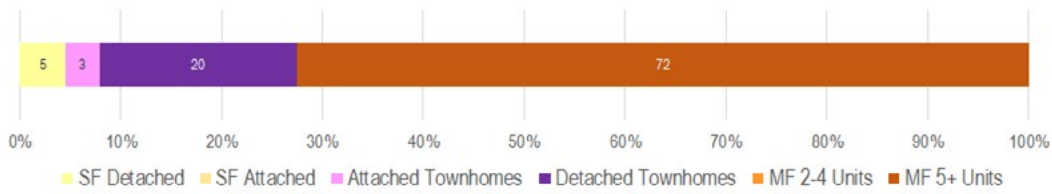
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### Neighborhood Indicators, Lazybrook/Timbergrove

Lazybrook/Timbergrove CTA			
Indicators	2000	2010	2018
<b>Demographics</b>			
Population	10,998	12,870	14,582
% Population-Under 5 years	6	8	8
% Population-5-17 years	14	9	8
% Population-18-34 years	27	35	39
% Population-35-64 years	37	37	36
% Population-Over 65 years	15	10	8
% Non-Hispanic White Population	49	50	58
% Non-Hispanic African American Population	3	3	6
% Non-Hispanic Asian Population	2	3	9
% Hispanic or Latino	45	44	25
<b>Economic Vitality</b>			
% Owner Occupied Units	52	48	55
% Renter Occupied Units	48	52	45
% of Persons in Poverty	17	8	5
% Renters Paying more than 30% of Household Income on Housing	32	28	37
Median Household Income (In 2018 Inflation-Adjusted Dollars)	62,828	73,104	102,162
Median Sales Price of Houses (In 2018 Dollars) <sup>49</sup>	N/A	300,304	409,900
<b>Education</b>			
% Population 25+ without High School Diploma	30	16	6
% Population 25+ with High School Diploma or GED	21	20	10
% Population 25+ with Some College	21	24	19
% Population 25+ with Bachelor's Degree or Higher	29	41	65



# Montrose

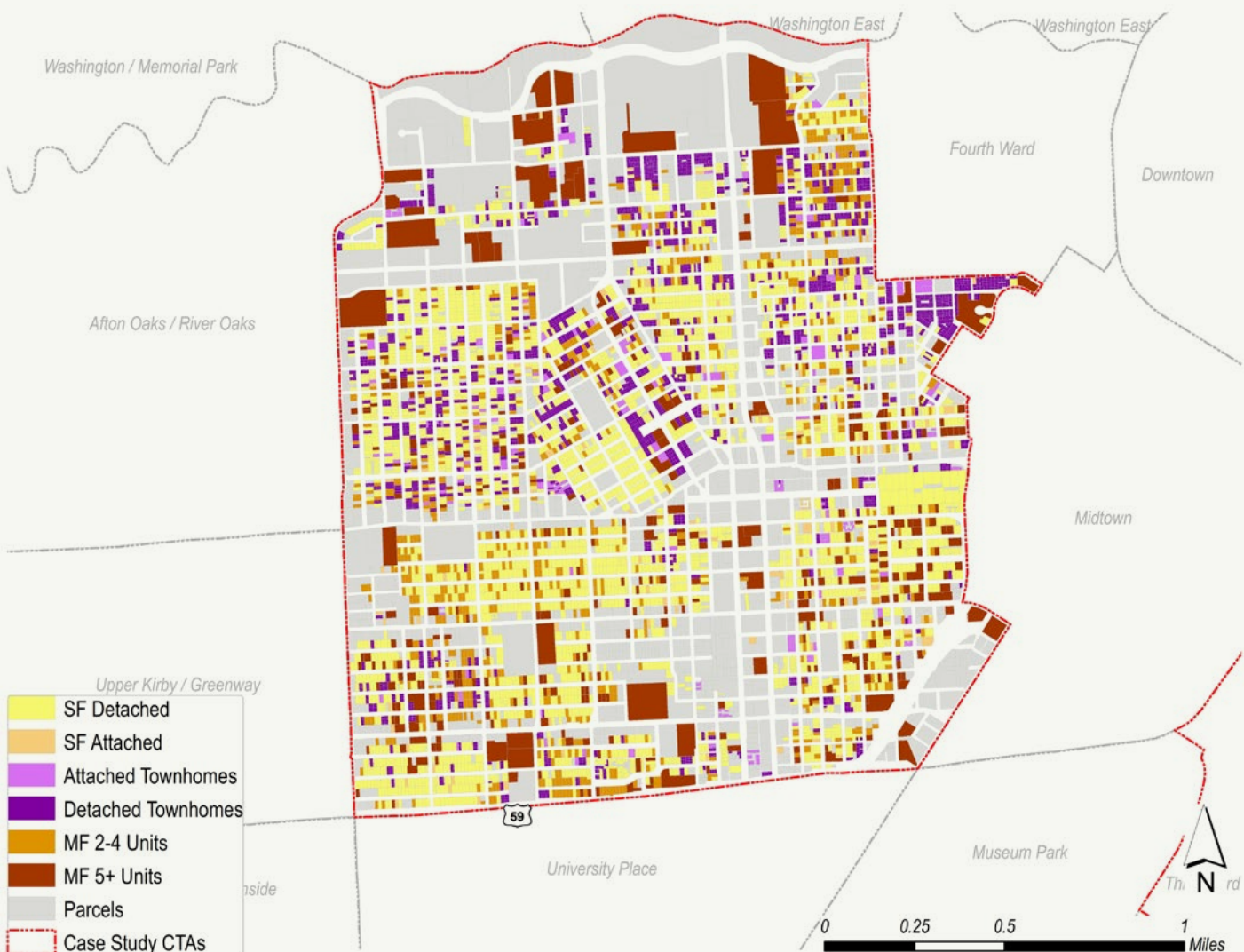


Percent of units built after 2005 by housing type, Montrose

Built Years	SF Detached	SF Attached	Attached Townhomes	Detached Townhomes	MF 2-4 Units	MF 5+ Units	Total
2005 or after	325	3	236	1,401	2	5,185	7,152
2004 or before	4,200	199	418	1,247	2,735	7,563	16,362

Units built before and after 2005 by housing type, Montrose

**FIGURE 31 Housing Structures, Montrose**





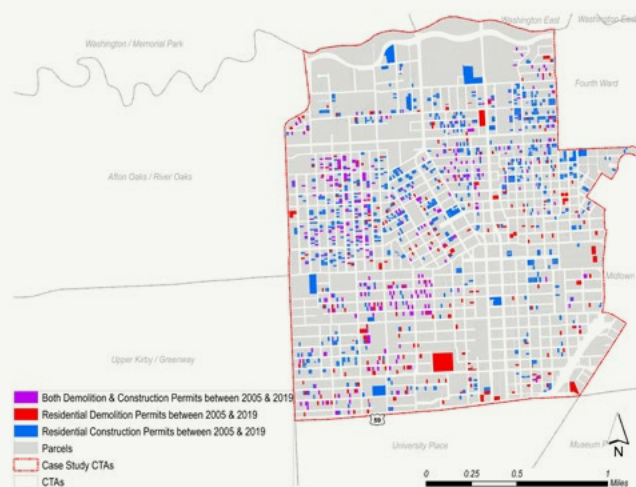
## Background and Context

Situated just southwest of Downtown, Montrose is an eclectic neighborhood that would emerge as the center of the city's LGBTQ community in the 1970s. The CTA borders affluent communities invulnerable to gentrification, such as Upper Kirby, River Oaks and University Place, all of which are situated west or south of Montrose. To the east, there are census tracts gentrifying from 2000 to the present in Fourth Ward and Museum Park, with gentrification-established tracts in Midtown that transitioned in the 1990s and 2000s. Though most of the Montrose CTA has been invulnerable to gentrification, the northeastern census tract adjacent to Fourth Ward did gentrify between 1990 and 2000.<sup>50</sup>

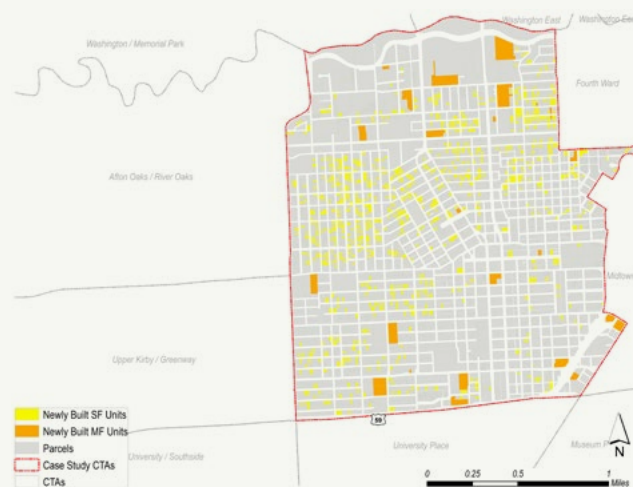
## Changes in the Building Stock

Montrose has one of the city's most diverse mix of housing types, including pre-WWII era multiplexes (i.e. small multi-family), large multi-family, both attached and detached townhomes, and conventional single-family. The area is also characterized by much smaller parcels than other parts of the city. While Montrose led all case study neighborhoods in demolitions (700), there were 3.5 times more construction permits than demolition permits, making this intensive on both fronts. Housing turnover was mainly concentrated in the central portions of the CTA, between Westheimer Road and Gray Street (Figure 32), with parcels on the west side of the CTA undergoing both demolition and construction, a sign of both rapid redevelopment and luxury teardown activity. The northeast-

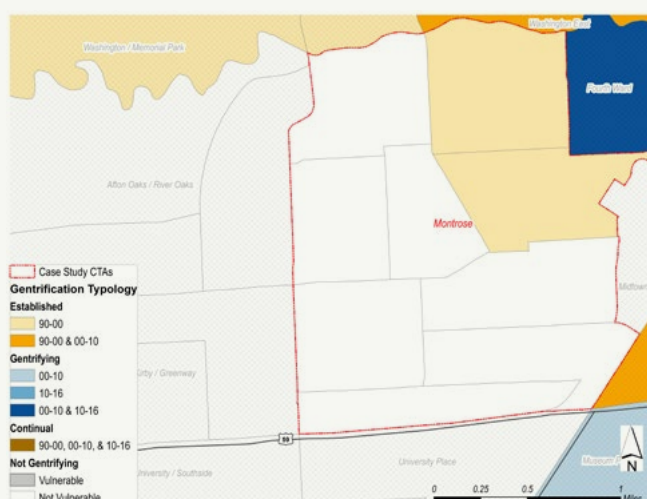
**FIGURE 32 Permit Changes (2005–2019)**



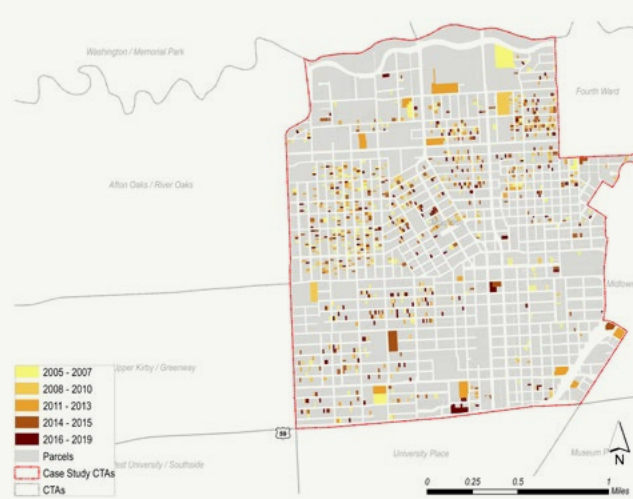
**FIGURE 33 New Constructions (2005–2018)**



**FIGURE 34 Gentrification Typology**



**FIGURE 35 Year Built (2005–2019)**



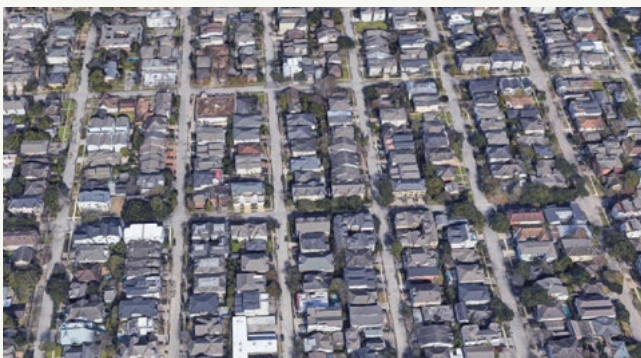


ern census tract had significant construction permitting absent demolition (Figure 34), indicating that demolition predated 2005, likely during the 1990–2000 gentrification period as identified in previous Kinder Institute research.<sup>51</sup>

Montrose also had the highest volume of newly built units of any case study neighborhood (7,152), due to the growth of large multi-family development since 2005 in the northern zone, near Buffalo Bayou, and the southern area, near Richmond Avenue (Figure 33). In fact, over 72% of all newly built units were multi-family during this period. More than 1,400 detached townhomes were also built since 2005—the second highest number among the case studies and equaling 20% of the newly built units in the CTA (Table 4).

FIGURE 36

### Detached Townhomes with Other Single-Family Homes in Montrose (Google Maps)



### Demographic Changes

Though the gentrification cycle suggests that most parts of the CTA are invulnerable to gentrification or gentrified in the 1990s (Figure 34), the picture that emerges in Montrose is one of more acute sociodemographic changes since 2005—a “gentrifiers being gentrified” scenario. This includes whiter, more educated and affluent empty-nesters and diverse young professionals moving in and replacing young white gentrifiers and Hispanics who were more likely to rent. For example, the CTA is now 70% white and has seen its population of residents over 65 nearly quadruple since 2000 (Table 8). During this time, homeownership rates have risen from 29% in 2000 to 40% in 2018—an increase driven by the influx of wealthier empty-nesters and young professionals (Table 8). The CTA’s economic indicators show increases that are more significant after 2010. Since then, both median household incomes and median home sales prices have climbed 32%, far outpacing the modest shifts from 2000–2010. Furthermore, the growth in large multi-family after 2010, coupled with these sharp increases in income, indicate that the new multi-family stock leans toward luxury mid- and high-rise development and is drastically influencing neighborhood composition.

### Summary

Widespread redevelopment in Montrose is both a strength and a threat. On the one hand, continued construction in a high-demand neighborhood is a welcome sign that it can continue to absorb population, growth that would otherwise threaten vulnerable communities



to the east. On the other hand, the luxury housing being built is ushering in what appears to be a second wave of gentrification that is not included in Kinder's gentrification criteria, though it's manifested in the CTA's evolving sociodemographics since 2010. That could mean those unable to afford to live in Montrose may now be locating in nearby vulnerable or gentrifying communities.

Montrose also accounts for over 10% of the city's multi-plex housing stock (e.g. small multi-family) and will need to grapple with preserving this affordable housing stock, which is quite dated and at risk of turnover, in light of the redevelopment trends in recent years. Moreover, demographically, Montrose is homogenizing at a significant rate into a wealthy, white enclave. That change is out of step with the demographics of one of the most diverse metropolitan areas in the United States.

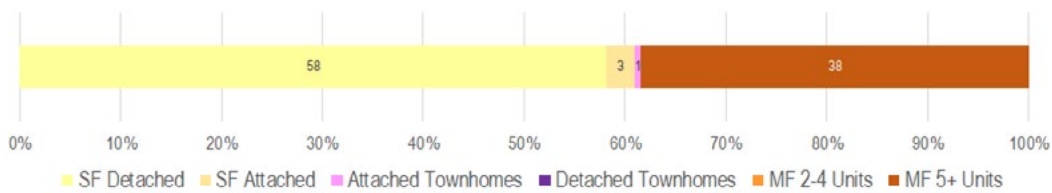


TABLE 8 Neighborhood Indicators, Montrose

Montrose CTA			
Indicators	2000	2010	2018
<b>Demographics</b>			
Population	28,601	29,260	33,190
% Population-Under 5 years	3	4	3
% Population-5-17 years	7	5	5
% Population-18-34 years	42	38	41
% Population-35-64 years	42	47	41
% Population-Over 65 years	5	7	11
% Non-Hispanic White Population	67	71	70
% Non-Hispanic African American Population	4	4	3
% Non-Hispanic Asian Population	3	5	9
% Hispanic or Latino	23	18	14
<b>Economic Vitality</b>			
% Owner Occupied Units	29	39	40
% Renter Occupied Units	71	61	60
% of Persons in Poverty	14	12	8
% Renters Paying more than 30% of Household Income on Housing	33	41	34
Median Household Income (In 2018 Inflation-Adjusted Dollars)	63,007	68,902	91,268
Median Sales Price of Houses (In 2018 Dollars) <sup>52</sup>	N/A	383,409	506,975
<b>Education</b>			
% Population 25+ without High School Diploma	13	8	3
% Population 25+ with High School Diploma or GED	11	10	7
% Population 25+ with Some College	24	21	17
% Population 25+ with Bachelor's Degree or Higher	52	60	73



# Spring Southwest

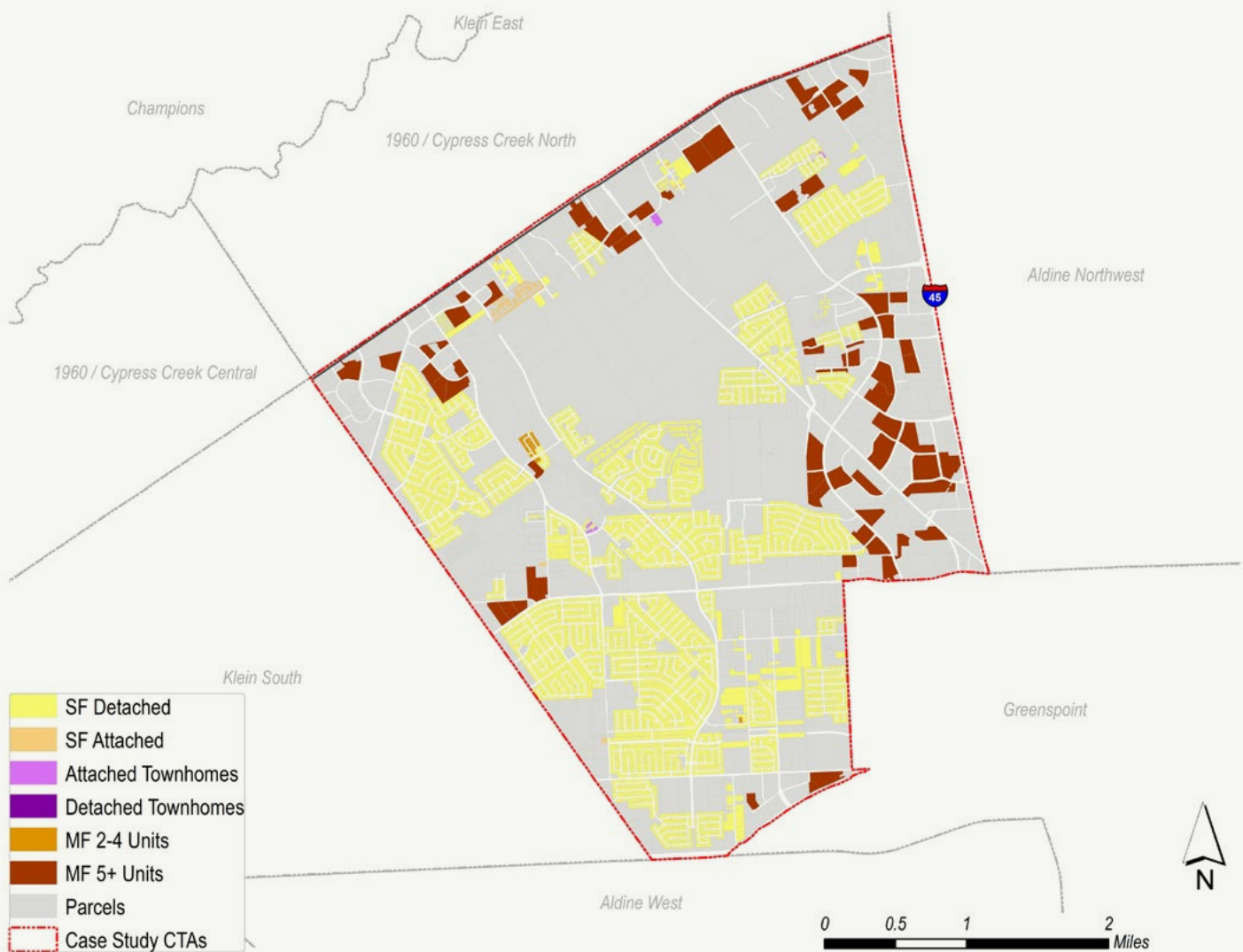


Percent of units built after 2005 by housing type, Spring Southwest

Built Years	SF Detached	SF Attached	Attached Townhomes	Detached Townhomes	MF 2-4 Units	MF 5+ Units	Total
2005 or after	3,019	143	33	0	0	1,993	5,188
2004 or before	9,680	177	27	0	98	12,085	22,067

Units built before and after 2005 by housing type, Spring Southwest

**FIGURE 37 Housing Structures, Spring Southwest**



## Background and Context

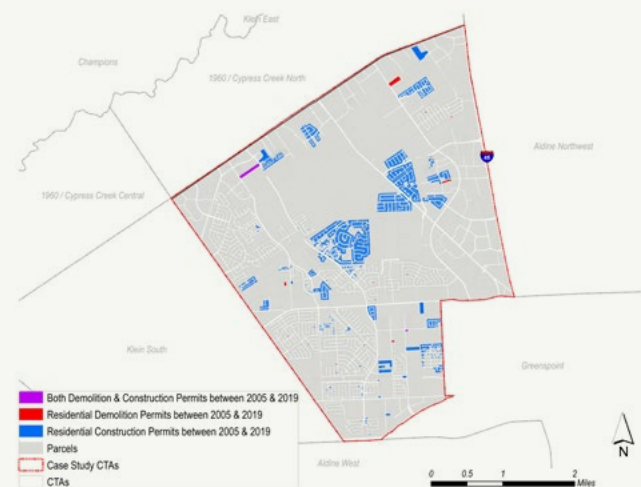
Spring Southwest is located on the north side of Harris County, in the outermost subarea, beyond Beltway 8. The development character is representative of an inner-suburban community and contains a mix of vulnerable, gentrifying and invulnerable census tracts. The CTA borders mainly invulnerable areas, except to the south, where various vulnerable census tracts in Aldine West and Greenspoint are located.

## Changes in the Building Stock

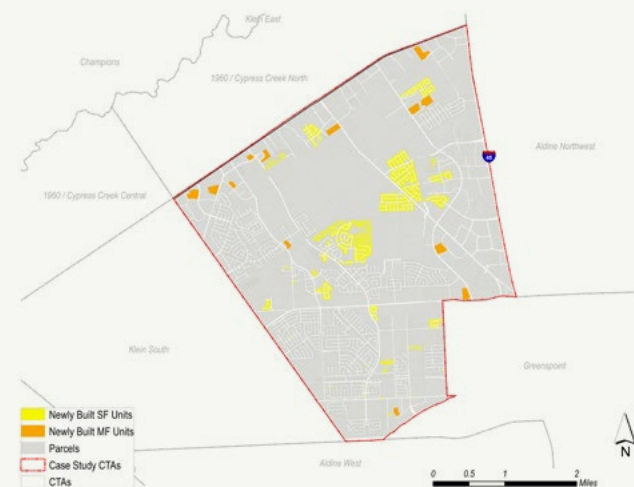
Large-lot, single-family detached units and large multi-family buildings dominate the housing stock in Spring Southwest. Most of the single-family housing stock is located on the southwest side of the CTA, while the large multi-family units are found along major trans-

portation corridors, such as I-45 on the east side and the FM 1960 corridor on the northern boundary. The neighborhood experienced a surge in multi-family development before 2000 (Figure 10), during a period of rapid national growth in project-based Section 8 housing in the 1980s and Low Income Housing Tax Credit (LIHTC) properties in the 1990s.<sup>53</sup> Prior to 2005, over 55% of the housing stock built in Spring Southwest was large multi-family, while only 44% was single-family units. Single-family has since become more commonplace, accounting for 58% of newly built units since 2005. That increase was driven by two large subdivisions built near the center of the CTA (Figure 39). A search on HAR shows most homes for sale are priced between \$160,000 and \$240,000. A deeper dive into HAR records shows the median sales price in 2018 was \$158,000

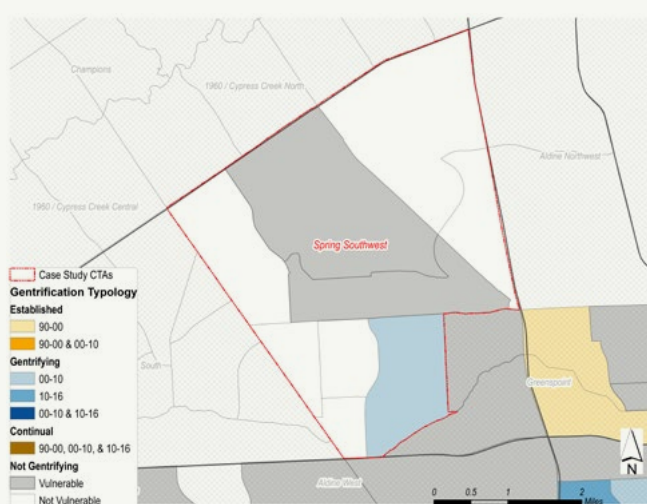
**FIGURE 38 Permit Changes (2005–2019)**



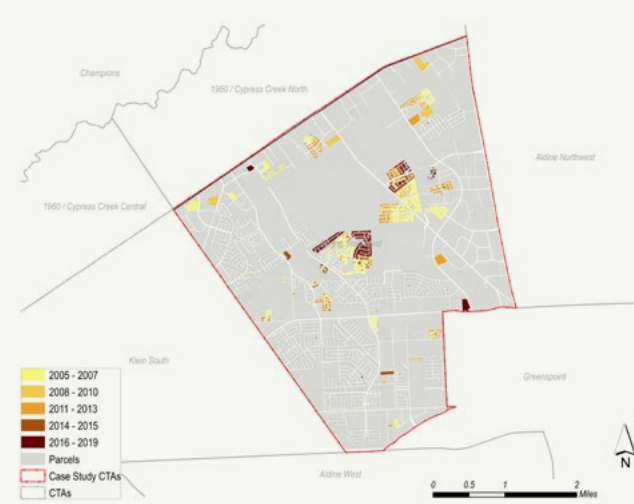
**FIGURE 39 New Constructions (2005–2018)**



**FIGURE 40 Gentrification Typology**



**FIGURE 41 Year Built (2005–2019)**





(Table 9)—well within range of what would be considered an affordable housing price (\$186,256) for those earning at or below the county’s median income of \$60,000.<sup>54</sup>

Unlike the other case studies, most of the housing stock in Spring Southwest was built after 1980 (Figure 10), with 92% of all dwelling units built since. Consequently, the CTA is not encountering comparable redevelopment pressure, as evidenced in low demolition permitting (Figure 38). Construction activity since 2005 has been concentrated in the central, previously undeveloped, portions of Spring Southwest (Figure 38 and 39). These areas are vulnerable to gentrification but have yet to gentrify, while new multi-family construction is clustering along the FM1960 corridor on the north side of the CTA, in areas that are vulnerable and invulnerable to gentrification. Furthermore, the southernmost census tract that gentrified between 2000 and 2010 experienced limited growth in newly built units (Figure 39) but has seen an uptick in construction permitting, particularly on the eastern boundary abutting Greenspoint (Figure 38).

### Demographic Changes

Since 2000, the population in Spring Southwest has nearly doubled, with exponential growth of lower-income residents of color. These sociodemographic changes in the CTA reflect the spatial sorting that is taking place in across Metropolitan Houston. That is, inner-suburban communities with affordably priced housing stock

absorbing working-class people of color who likely were displaced by gentrification elsewhere [particularly in rapidly gentrifying neighborhoods]. Since 2000, there has been a substantial increase in Black and Hispanic households, nearly tripling the size of both population groups, and a 27% drop in median incomes. This has also coincided with an exodus in both the proportion and total number of white residents, and a slight drop in the area’s educational attainment.

### Summary

Spring Southwest is undergoing tremendous growth as an inner-suburban community. This CTA captures some of the spatial sorting dynamics at play in Houston and Harris County, as working-class people of color suburbanize into the affordably priced housing being built in the CTA. Spring Southwest is able to absorb these demographic shifts because of its extensive stock of multi-family housing built before 2000 and newly built single-family detached units that are affordable to households earning the median income in Harris County (\$60,000). This case study echoes Melissa Anne Currie and Janni Sorensen’s reference to a “repackaged urban renewal.”<sup>55</sup> That is, a development model that produces islands of suburban-style development for low-income working families that are surrounded by decline and environmental hazards, as is the case for Spring Southwest, which is located near flood-prone areas of the Greens Bayou Watershed.<sup>56</sup>

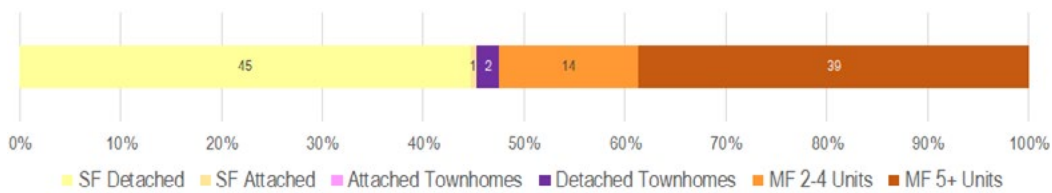




TABLE 9 Neighborhood Indicators, Spring Southwest

Spring Southwest CTA			
Indicators	2000	2010	2018
<b>Demographics</b>			
Population	47,222	64,499	80,522
% Population-Over 65 years	3	4	6
% Non-Hispanic White Population	25	9	6
% Non-Hispanic African American Population	35	43	45
% Non-Hispanic Asian Population	9	8	7
% Hispanic or Latino	29	38	40
<b>Economic Vitality</b>			
% Owner Occupied Units	40	46	38
% Renter Occupied Units	60	54	62
% of Persons in Poverty	10	21	19
% Renters Paying more than 30% of Household Income on Housing	32	55	55
Median Household Income (In 2018 Inflation-Adjusted Dollars)	62,474	50,500	45,553
Median Sales Price of Houses (In 2018 Dollars) <sup>57</sup>	N/A	87,894	158,000
<b>Education</b>			
% Population 25+ without High School Diploma	21	24	23
% Population 25+ with High School Diploma or GED	23	27	27
% Population 25+ with Some College	35	31	33
% Population 25+ with Bachelor's Degree or Higher	22	17	17

# Sunnyside

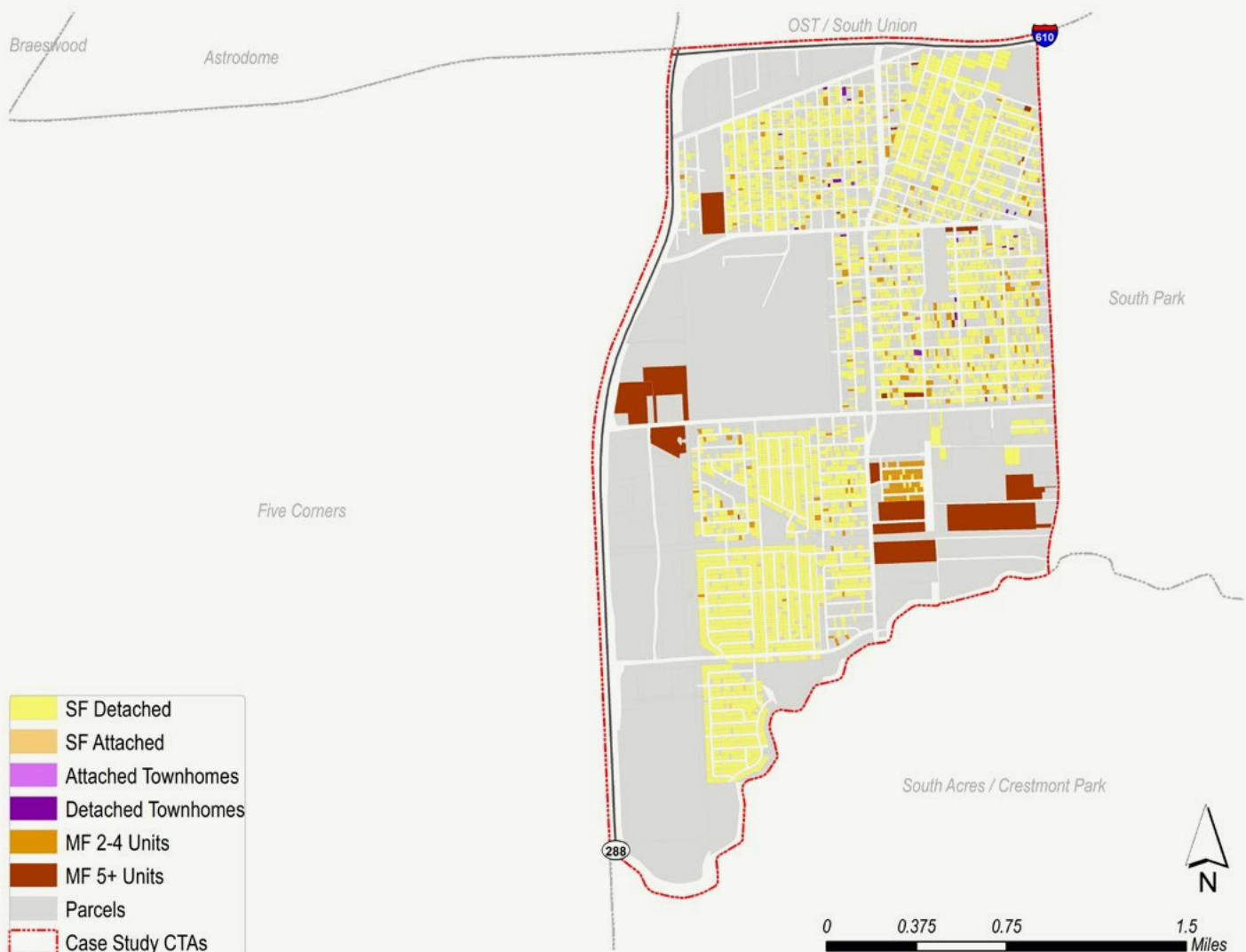


Percent of units built after 2005 by housing type, Sunnyside

Built Years	SF Detached	SF Attached	Attached Townhomes	Detached Townhomes	MF 2-4 Units	MF 5+ Units	Total
2005 or after	730	10	1	36	226	632	1,635
2004 or before	3,561	15	0	4	393	1,063	5,036

Units built before and after 2005 by housing type, Sunnyside

**FIGURE 42 Housing Structures, Sunnyside**



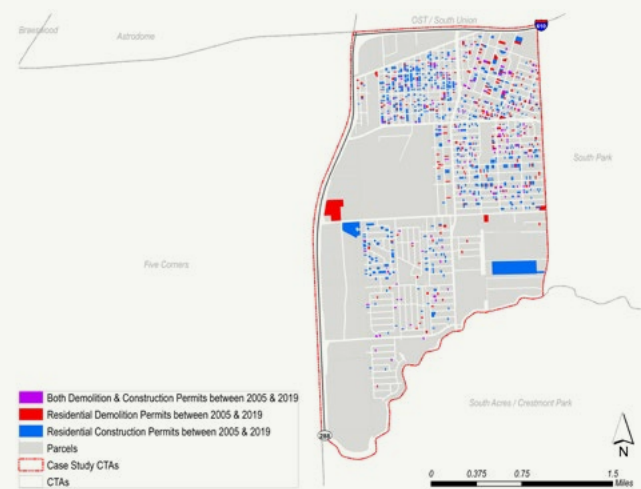
## Background and Context

Sunnyside is a predominantly Black community located on Houston's southside, near the intersection of Loop 610 and Highway 288, just outside the Inner Loop. Previous Kinder Institute research identified the entire Sunnyside CTA as gentrifying, with the northern and southern census tracts gentrifying from 2000–2016 and the central census tracts transitioning from 2000–2010 (Figure 45).<sup>58</sup> The CTA borders other CTAs that have been actively gentrifying since 2000, such as OST/South Union, South Park and South Acres/Crestmont Park. The Five Corners CTA—just west of Highway 288—is classified as gentrifying from 2000–2010.

## Changes in Building Stock

Sunnyside contains mostly single-family detached housing structures throughout the neighborhood, and a series of large multi-family developments near its major arterials: Reed Road, Scott Street and Cullen Boulevard (Figure 42). However, the area has seen considerable growth in multi-family units since 2005, during which time 52% of all newly built units were multi-family.<sup>59</sup> Since 2005, the average number of demolition permits processed in Sunnyside each year have exceeded the county average (Table 3). At the same time, the number of construction permits was greater than other gentrifying case study neighborhoods, with more than 1,636 newly built units constructed—approximately twice as many as Fifth Ward, Third Ward and Independence Heights. Construction

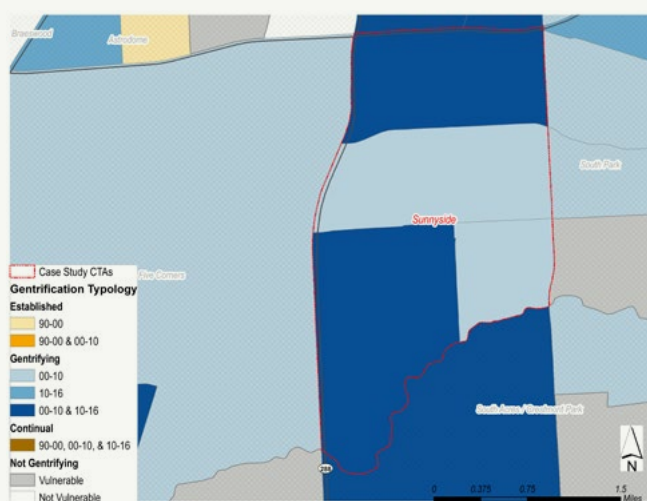
**FIGURE 43 Permit Changes (2005–2019)**



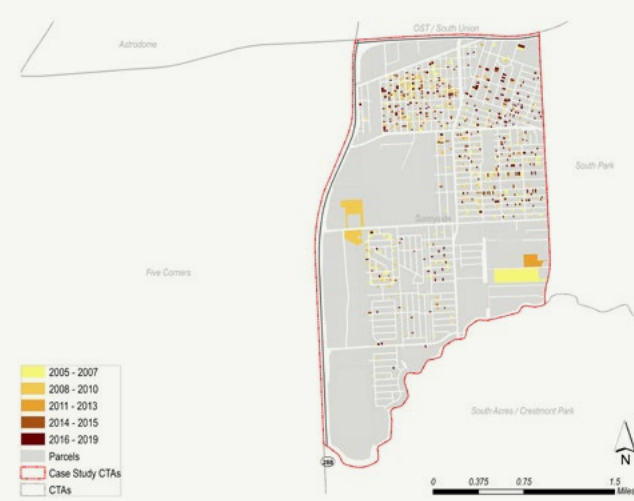
**FIGURE 44 New Constructions (2005–2018)**



**FIGURE 45 Gentrification Typology**



**FIGURE 46 Year Built (2005–2019)**







was concentrated in the gentrifying census tract on the neighborhood's northwest side, while the northeastern area experienced much more demolition without redevelopment (Figure 43, 44, and 46). The southern gentrifying census tract had considerably less construction activity, limited to a small number of parcels.

Townhomes were noticeably absent as a built housing type during this period, and while single-family detached housing decreased, it continued to account for a number of newly built units—a stark difference compared to other gentrifying case studies. Most surprising, one-third of all new multi-family development were *small* multi-family units (2 to 4 units), also referred to as multiplex or “missing middle” housing types. This housing type predominantly was built in Sunnyside's central census tract, where gentrification occurred between 2000 and 2010, and much of those units were built after 2005 (Figure 44). Sunnyside is the only case study neighborhood where this housing type increased (Table 4).

### Demographic Changes

Housing redevelopment appears to have generated minor sociodemographic changes in Sunnyside, despite being classified as a gentrifying community that underwent modest construction and rapid population growth. Since 2000, Sunnyside's population increased by 15%, with a five-fold increase in the total number of Hispanic

residents. During that time, the Hispanic share of the Sunnyside population quadrupled, from 4% in 2000 to 16% in 2018. (Table 10). Population growth may be attributed to an expanding affordable-housing stock that has attracted low-income families. While median home prices (Table 10) have risen, they remain affordable to households earning 80% of the county's median income (i.e., a \$158,000 median sales price). According to HAR data, prices range from \$140,000 to \$220,000, and records from 2018 show a median price of \$148,950.<sup>60</sup>

### Summary

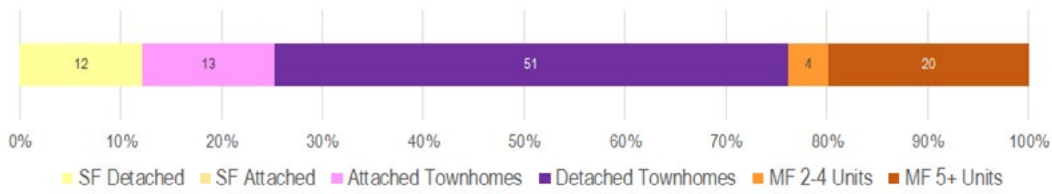
The growth of small multi-family housing in Sunnyside is noteworthy, and a minor but revealing part of the affordability equation occurring in the CTA. The largest changes in housing stock were the redevelopment of single-family homes and large multi-family complexes, which drove the sociodemographic shifts in the area. This new stock led to modest population growth that brought a surge of young, low-income Hispanic families into Sunnyside. Of note, residential reinvestment in Sunnyside does not appear to have generated the drastic socioeconomic shifts or loss of affordable housing that other gentrifying case studies experienced. Similar to Spring Southwest, it also seems Sunnyside may be absorbing lower-income household growth, as urban-core neighborhoods price out lower-income people of color.


**TABLE 10 Neighborhood Indicators, Sunnyside**

Sunnyside CTA			
Indicators	2000	2010	2018
<b>Demographics</b>			
Population	13,233	14,378	15,274
% Population-Under 5 years	7	8	8
% Population-5-17 years	23	20	19
% Population-18-34 years	19	19	22
% Population-35-64 years	32	37	37
% Population-Over 65 years	18	15	16
% Non-Hispanic White Population	1	1	2
% Non-Hispanic African American Population	94	91	80
% Non-Hispanic Asian Population	1	0	1
% Hispanic or Latino	4	6	16
<b>Economic Vitality</b>			
% Owner Occupied Units	55	44	42
% Renter Occupied Units	45	56	59
% of Persons in Poverty	36	34	37
% Renters Paying more than 30% of Household Income on Housing	46	57	54
Median Household Income (In 2018 Inflation-Adjusted Dollars)	26,839	27,424	25,240
Median Sales Price of Houses (In 2018 Dollars) <sup>61</sup>	N/A	38,611	148,950
<b>Education</b>			
% Population 25+ without High School Diploma	38	23	21
% Population 25+ with High School Diploma or GED	33	43	35
% Population 25+ with Some College	22	24	34
% Population 25+ with Bachelor's Degree or Higher	7	10	10



# Third Ward

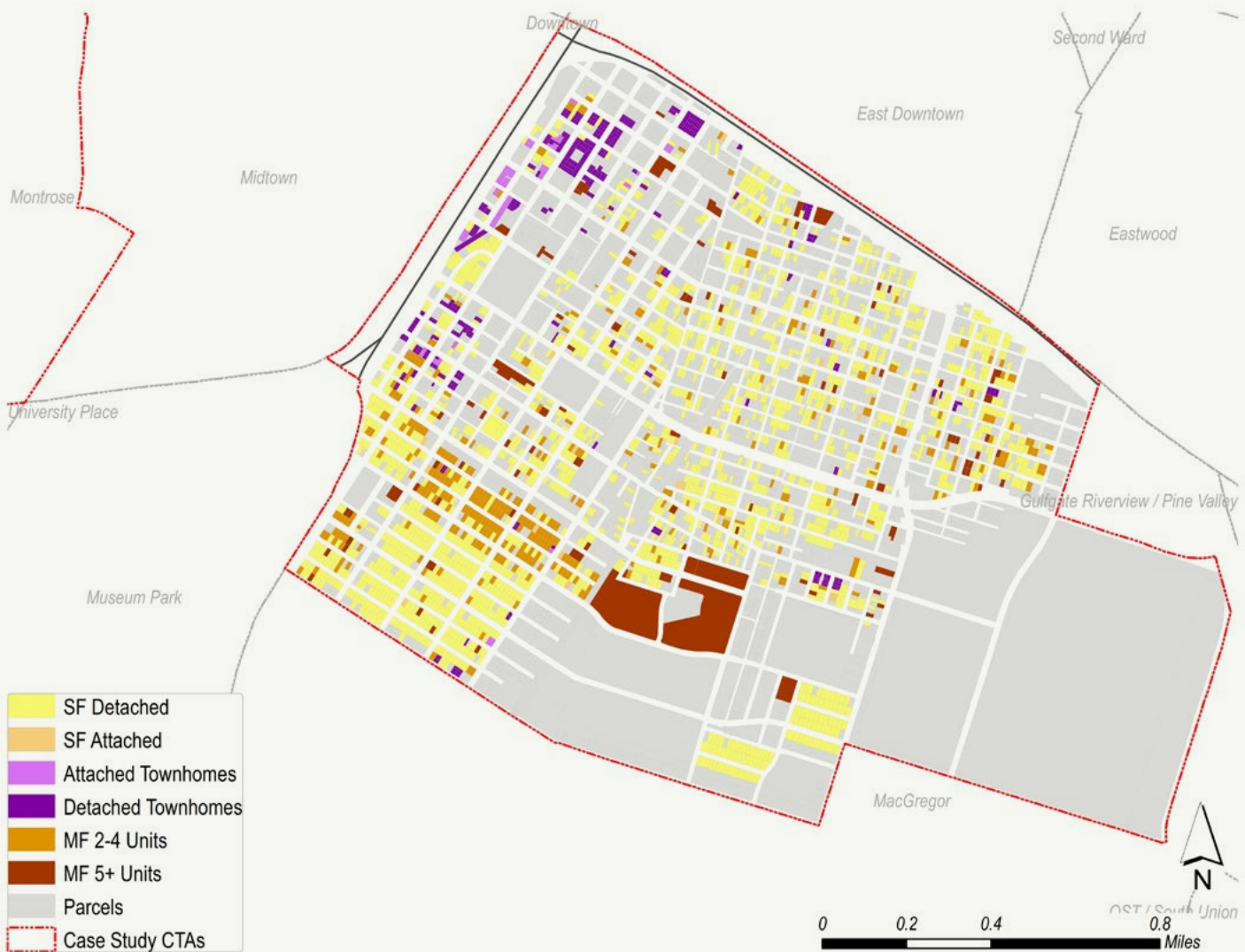


Percent of units built after 2005 by housing type, Third Ward

Built Years	SF Detached	SF Attached	Attached Townhomes	Detached Townhomes	MF 2-4 Units	MF 5+ Units	Total
2005 or after	98	0	106	412	32	161	809
2004 or before	2,216	30	0	27	1,044	1,378	4,695

Units built before and after 2005 by housing type, Third Ward

FIGURE 47 Housing Structures, Third Ward





## Background and Context

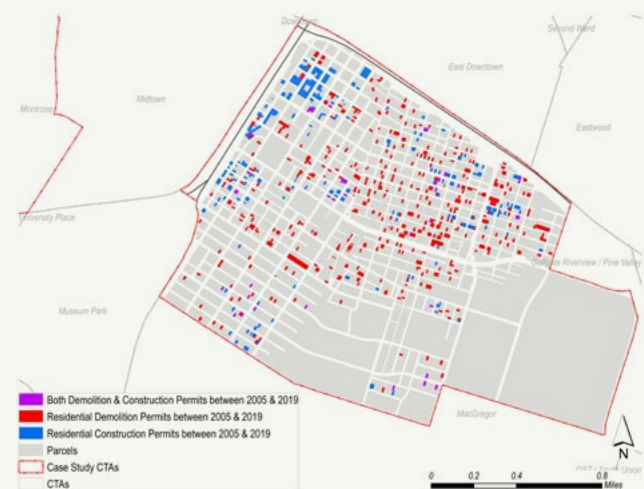
Third Ward is a historically Black community located inside Loop 610. The CTA is near two of the region's major job centers (Downtown and the Texas Medical Center) and is home to two public universities (Texas Southern University and the University of Houston), all of which adds significant development pressure. Much of Third Ward is actively gentrifying, according to previous Kinder Institute research, and the CTA is adjacent to various communities in transition.<sup>62</sup> For instance, Third Ward borders gentrification-established CTAs with census tracts that gentrified in the 1990s and 2000s (two examples are the Midtown and McGregor CTAs) and census tracts gentrifying from 2000–2010 in East Downtown

and Museum Park. Eastwood, slightly northeast of Third Ward, has been gentrifying since 2010.

## Changes in Building Stock

A mix of housing structures exist in Third Ward. Since 2005, more than 64% of the housing units built in Third Ward were townhomes (Table 4) and 50% were detached townhomes. Housing stock changes in Third Ward are transitioning the area from west to east, with many of these newly constructed townhomes spilling over the western boundary bordering gentrification-established census tracts in Midtown. Meanwhile, demolitions with sparse construction are taking place in the central and eastern areas, near the University of Houston (Figure 48 and 49).

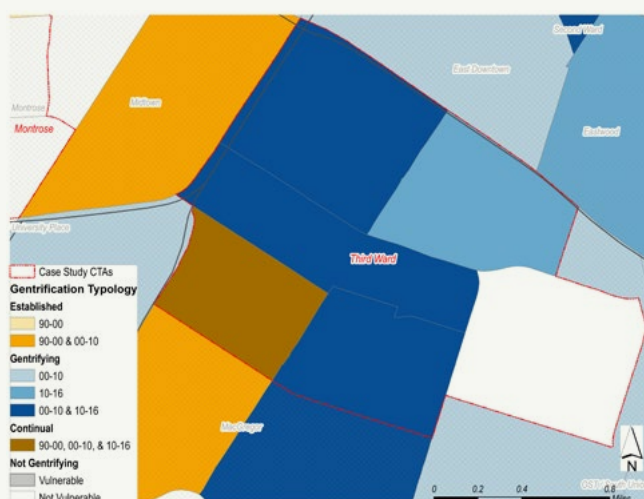
**FIGURE 48 Permit Changes (2005–2019)**



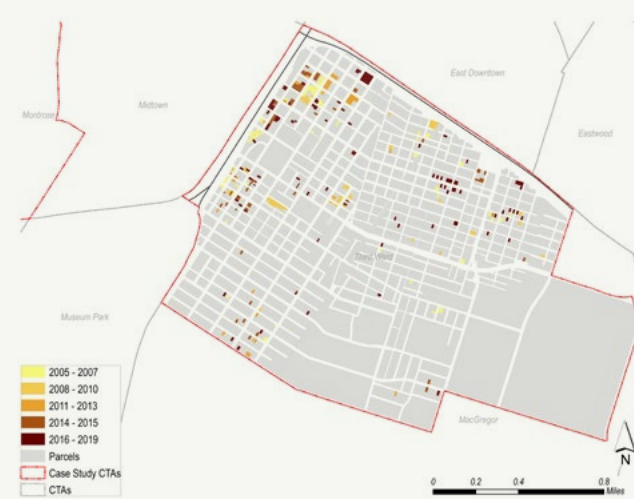
**FIGURE 49 New Constructions (2005–2018)**



**FIGURE 50 Gentrification Typology**



**FIGURE 51 Year Built (2005–2019)**





The neighborhood is a demolition-intensive CTA and is the only case study where demolition permitting outpaced construction from 2005–2018 (Table 3). The loss of older homes could mean the replacement of lower-quality or poorly maintained homes with better units, but it could also represent the replacement of older and more affordable homes with newer and more expensive units, as is the case with market-rate townhomes built on the west side of Third Ward. This latter transition is one that can cause displacement among lower-income or fixed-income residents if development is not coupled with preservation strategies.

### Demographic Changes

Ongoing gentrification activity and housing stock changes in Third Ward have led to a significant change in the population's demographic profile from 2000–2018. Most notably, there has been an uptick of white, young adults (the number of Hispanic and Asian residents has also risen slightly) and a net loss in the total Black population. The decrease in total population was quite steep from 2000–2010, with a net loss of over 3,000 residents—attributed mainly to decreases in Black residents during that decade. Simultaneously, our analysis shows that, since 2005, demolitions were widespread across Third Ward, though we hypothesize the displacement process started much earlier in the western gentrifying census tracts, where redevelopment happened after 2005 (Figure 48).

From 2010–2018, Third Ward would regain much of its lost total population. The sociodemographic composition, however, was drastically different from the population lost in the preceding decade. The total number of white residents more than tripled during this period, which concurs with a 60% increase in median household income and a slight uptick in homeownership. During this time, the number of residents holding college degrees increased by two and a half times and median home prices rose 48%.

### Summary

Demolition and townhome development trends in Third Ward are noticeably altering the sociodemographic composition of the neighborhood. Third Ward underwent a two-decade gentrification process, in which residential disinvestment led to population decreases, demolitions and the displacement of Black residents. The second decade would bring subtle residential investment in townhomes and lead to a recovery in population, albeit, one that comprised white, young adults with bachelor's degrees. Third Ward, nonetheless, remains a majority Black CTA with median incomes approaching 50% of the county's median income. It is also vulnerable to continued housing redevelopment trends, an acceleration of which could lead to an increased loss of affordability and further sociodemographic shifts, as low-income and fixed-income residents are displaced.





TABLE 11 Neighborhood Indicators, Third Ward

Third Ward CTA			
Indicators	2000	2010	2018
<b>Demographics</b>			
Population	14,916	11,648	14,887
% Population-Under 5 years	7	7	4
% Population-5-17 years	17	15	11
% Population-18-34 years	36	32	47
% Population-35-64 years	28	34	29
% Population-Over 65 years	11	11	7
% Non-Hispanic White Population	7	6	15
% Non-Hispanic African American Population	80	75	65
% Non-Hispanic Asian Population	2	2	7
% Hispanic or Latino	9	16	12
<b>Economic Vitality</b>			
% Owner Occupied Units	23	21	25
% Renter Occupied Units	77	79	75
% of Persons in Poverty	47	45	39
% Renters Paying more than 30% of Household Income on Housing	46	54	49
Median Household Income (In 2018 Inflation-Adjusted Dollars)	20,316	17,120	27,860
Median Sales Price of Houses (In 2018 Dollars) <sup>63</sup>	N/A	136,052	201,040
<b>Education</b>			
% Population 25+ without High School Diploma	45	35	19
% Population 25+ with High School Diploma or GED	27	30	28
% Population 25+ with Some College	17	22	27
% Population 25+ with Bachelor's Degree or Higher	11	13	25



# Conclusion

In Harris County, the conventional single-family detached home remains the most common housing type, though this is changing in some areas, especially in Houston's Inner Loop communities. Some affluent central neighborhoods are facing rapid redevelopment and changes in the type of housing stock—driven by the development of large multi-family and detached townhomes—which indicate transition in the neighborhoods. These housing types appear to be changing the economic and demographic makeup of both gentrification-established and gentrifying neighborhoods, although, in distinct ways. We see higher-income households increasing in middle-income, gentrification-established neighborhoods with extensive townhome construction, while modest spillover development of townhomes and demolition activity are taking place in gentrifying areas, along with steady sociodemographic changes. We also find growth of low-income Black and Hispanic residents in vulnerable and gentrifying inner-suburban neighborhoods with affordable single-family and large multi-family housing stock (Spring Southwest and Sunnyside are examples), which is indicative of broader spatial-sorting dynamics that result as core neighborhoods gentrify and become pricier.

Our findings also echo those from a recent paper that evaluated Houston's 1998 subdivision reforms, which confirm that middle-income neighborhoods are absorbing much more residential development—particularly detached townhomes and large multi-family—than lower-income, gentrifying areas.<sup>64</sup> The Independence Heights, Third Ward and Fifth Ward case studies, however, suggest that the story is still unfolding. In those neigh-

borhoods, detached townhomes are affecting the gentrification process by attracting newcomers who noticeably change the racial and ethnic composition, educational attainment and median household incomes of these areas. These housing trends pose significant threat to the displacement of racial minorities and low-income residents, especially if housing redevelopment accelerates.

# Appendix 1.

## Annual permitting and newly built units since 2005

Residential Demolition Permits				
Year	Inner Loop	Inner Loop to Beltway	Beyond the Beltway	Total
2005	264	302	90	656
2006	535	890	88	1,513
2007	523	511	120	1,154
2008	1,137	882	368	2,387
2009	1,129	815	263	2,207
2010	713	658	332	1,703
2011	618	871	250	1,739
2012	788	675	402	1,865
2013	902	1,009	307	2,218
2014	968	950	244	2,162
2015	1,107	1,024	244	2,375
2016	997	885	243	2,125
2017	842	788	170	1,800
2018	865	820	232	1,917
2019	1,293	1,205	367	2,865
Total	12,681	12,285	3,720	28,686

Residential Construction Permits				
Year	Inner Loop	Inner Loop to Beltway	Beyond the Beltway	Total
2005	2,461	4,381	21,331	28,173
2006	2,418	5,533	22,100	30,051
2007	2,862	5,771	25,430	34,063
2008	3,497	4,924	16,902	25,323
2009	2,481	3,640	10,913	17,034
2010	1,460	2,762	8,086	12,308
2011	1,302	2,422	8,304	12,028
2012	1,100	1,798	7,304	10,202
2013	1,516	2,222	9,479	13,217
2014	2,098	2,608	9,982	14,688
2015	2,814	3,004	11,044	16,862
2016	2,765	2,881	12,255	17,901
2017	2,315	3,088	11,438	16,841
2018	2,174	3,181	10,615	15,970
2019	2,527	3,985	11,356	17,868
Total	33,790	52,200	196,539	282,529

Newly Built Units				
Year	Inner Loop	Inner Loop to Beltway	Beyond the Beltway	Total
2005	5,314	8,106	27,415	40,835
2006	5,077	7,722	27,674	40,473
2007	6,788	7,310	24,761	38,859
2008	6,583	8,133	22,037	36,753
2009	1,586	3,797	11,178	16,561
2010	1,766	4,120	10,579	16,465
2011	3,865	2,848	9,811	16,524
2012	6,056	6,484	12,930	25,470
2013	6,639	4,832	17,842	29,313
2014	10,102	6,769	20,117	36,988
2015	9,325	4,351	20,602	34,278
2016	5,862	5,178	17,338	28,378
2017	2,955	5,429	12,542	20,926
2018	2,883	3,582	9,730	16,195
2019*	26	41	41	108
Total	74,827	78,702	244,597	398,126

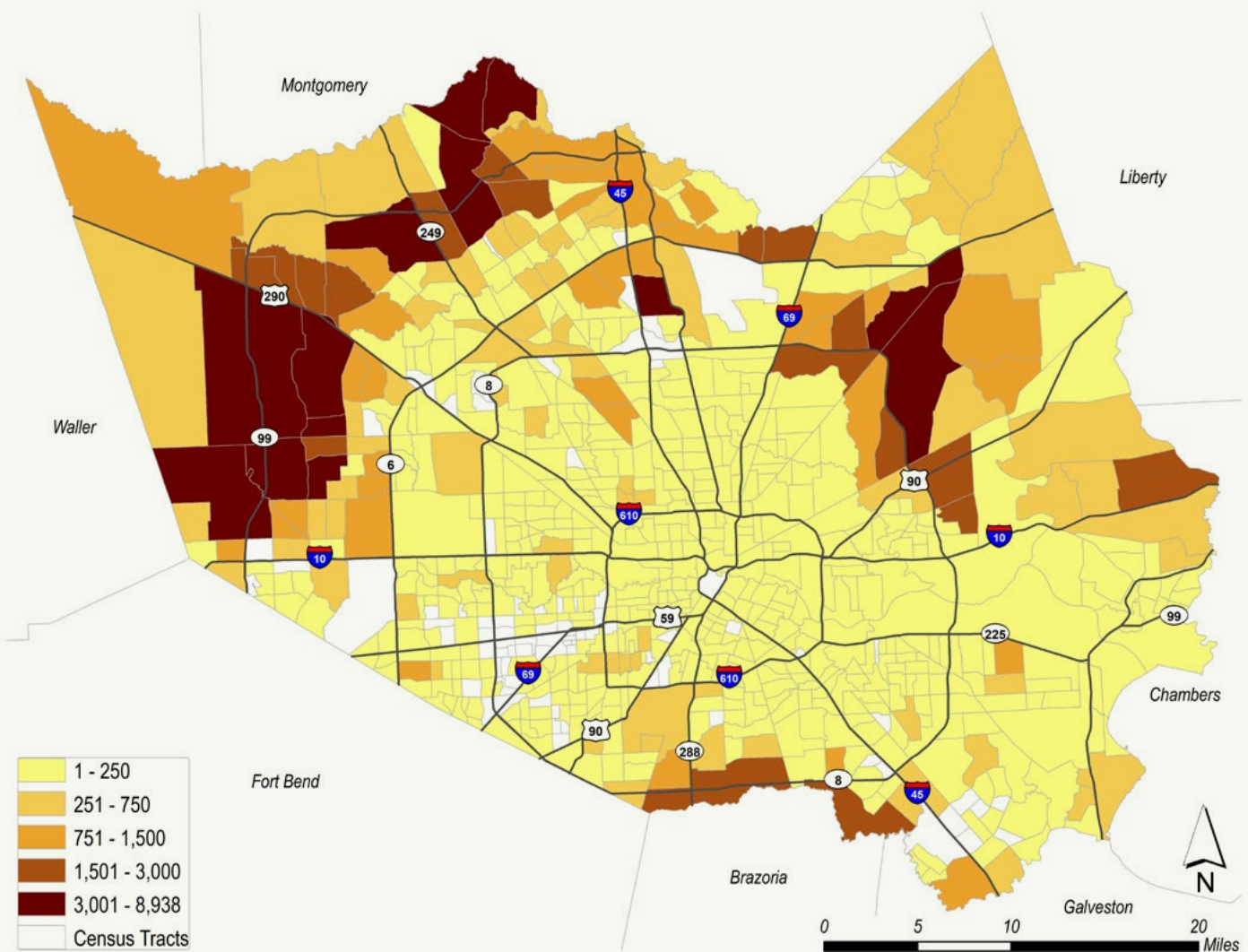
\* The newly built units shown in this table available from the 2019 HCAD dataset do not fully reflect all of the housing construction that was completed by the end of the year 2019.

# Appendix 2.

## Newly Built Units by Census Tract between 2005 and 2018

FIGURE A2-1

**Newly Built Single-family Detached Units by Census Tract between 2005 and 2018**





FIGURE

A2-2

### Newly Built Large Multi-family Units by Census Tract between 2005 and 2018

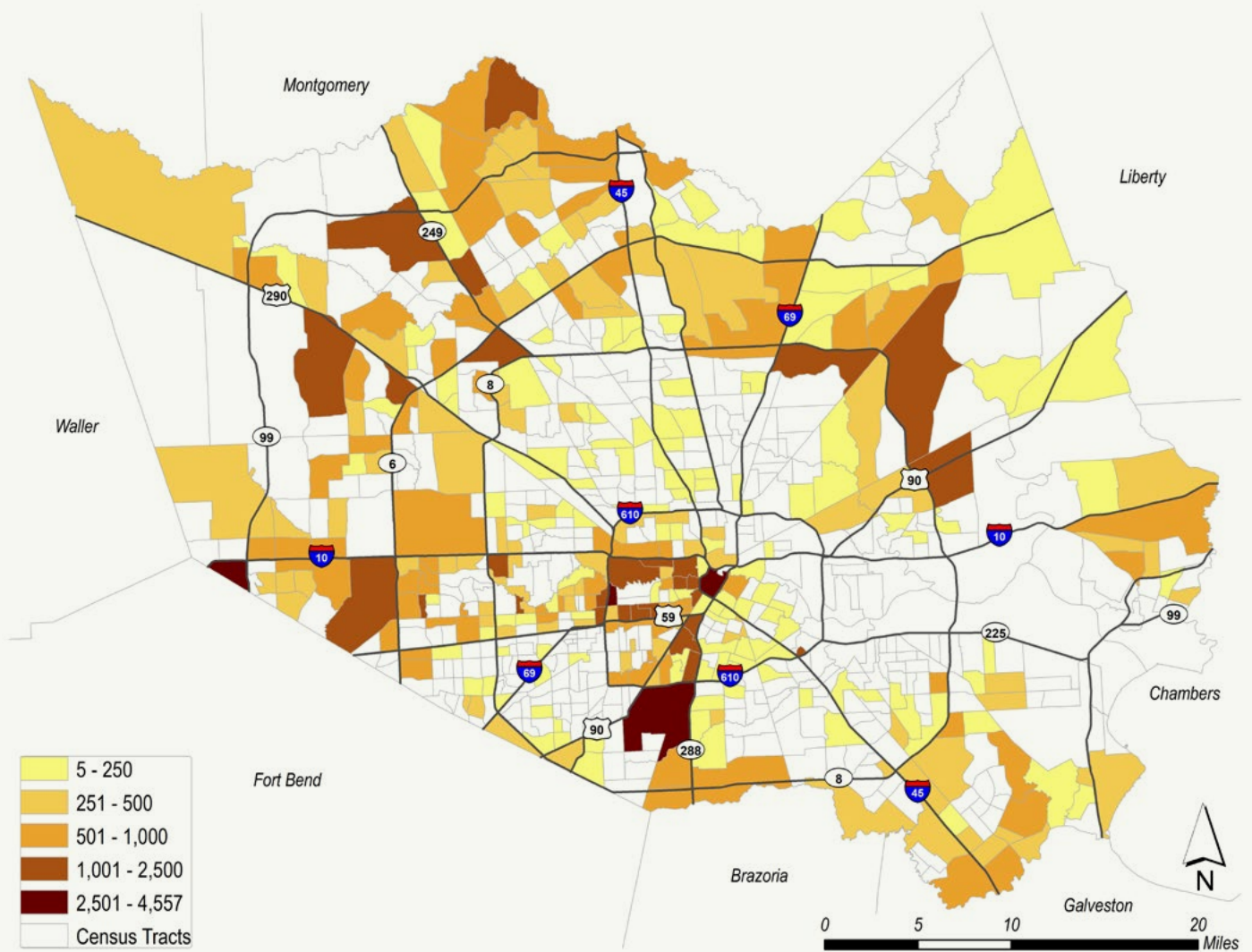
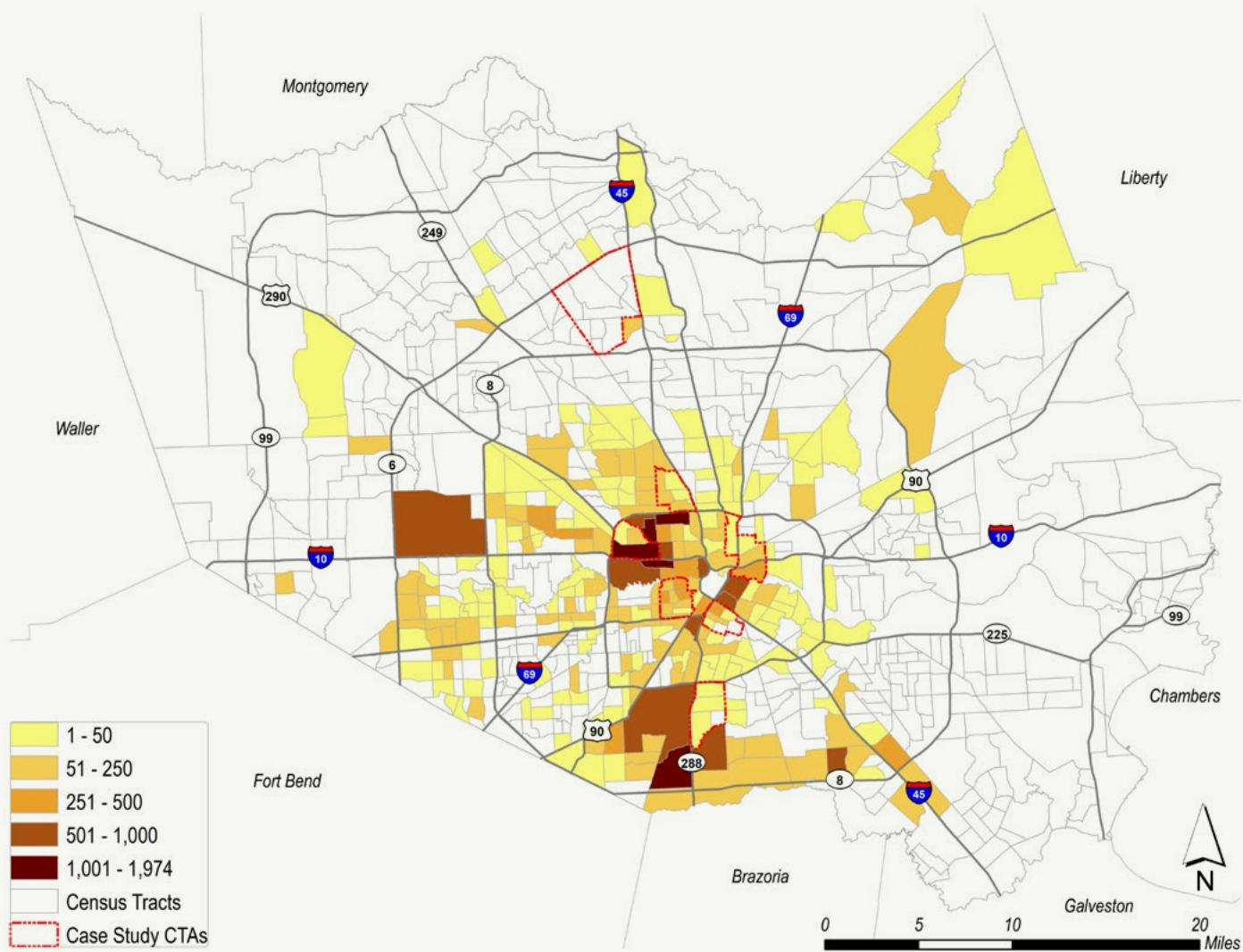


FIGURE A2-3

### Newly Built Detached Townhome Units by Census Tract between 2005 and 2018



# Appendix 3.

## Total Housing Stock by Housing Type

Building structure type		Number of units	Percent
Single-family	Total single-family units	1,004,720	57.7%
	Single-family detached units	999,412	57.4%
	Single-family attached units	5,308	0.3%
Townhomes	Total townhomes	81,336	4.7%
	Attached townhomes	35,914	2.1%
	Detached townhomes	45,422	2.6%
Multi-family	Total multi-family units	642,201	36.9%
	Small (2–4 unit) multi-family units	26,804	1.5%
	Large (5+ unit) multi-family units	615,397	35.3%
Total housing units <sup>65</sup>		1,741,344	100.0%



# Appendix 4.

## Total Housing Stock in Subareas by Housing Type

Housing type	Total housing stock	Subareas			Total
		Inner Loop	Inner Loop to Beltway	Beyond Beltway	
SF Detached	# Units	91,829	313,413	594,170	999,412
	% by Subarea	9.2%	31.4%	59.5%	100.0%
	% by Housing type	36.4%	50.7%	68.2%	57.4%
SF Attached	# Units	948	1,608	2,752	5,308
	% by Subarea	17.9%	30.3%	51.8%	100.0%
	% by Housing type	0.4%	0.3%	0.3%	0.3%
Attached Townhomes	# Units	5,738	15,995	14,181	35,914
	% by Subarea	16.0%	44.5%	39.5%	100.0%
	% by Housing type	2.3%	2.6%	1.6%	2.1%
Detached Townhomes	# Units	25,112	15,426	4,884	45,422
	% by Subarea	55.3%	34.0%	10.8%	100.0%
	% by Housing type	10.0%	2.5%	0.6%	2.6%
MF 2-4 Units	# Units	14,591	7,753	4,460	26,804
	% by Subarea	54.4%	28.9%	16.6%	100.0%
	% by Housing type	5.8%	1.3%	0.5%	1.5%
MF 5+ Units	# Units	114,074	258,538	242,785	615,397
	% by Subarea	18.5%	42.0%	39.5%	100.0%
	% by Housing type	45.2%	41.8%	27.9%	35.3%
Mobile Homes	# Units	28	5,313	7,746	13,087
	% by Subarea	0.2%	40.6%	59.2%	100.0%
	% by Housing type	0.0%	0.9%	0.9%	0.8%
Total	# Units	252,320	618,046	870,978	1,741,344
	% by Subarea	14.5%	35.5%	50.0%	100.0%

# Appendix 5.

## Newly Built Units, 2005–2018 by Subarea and Housing Type

Housing type	Newly built units (2005–2018)	Subareas			Total
		Inner Loop	Inner Loop to Beltway 8	Beyond Beltway 8	
SF Detached	# Units	7,294	31,743	162,008	201,045
	% by Subarea	3.6%	15.8%	80.6%	100.0%
	% by Housing type	9.7%	40.3%	66.2%	50.5%
SF Attached	# Units	38	264	470	772
	% by Subarea	4.9%	34.2%	60.9%	100.0%
	% by Housing type	0.1%	0.3%	0.2%	0.2%
Attached Townhomes	# Units	2,791	772	1,288	4,851
	% by Subarea	57.5%	15.9%	26.6%	100.0%
	% by Housing type	3.7%	1.0%	0.5%	1.2%
Detached Townhomes	# Units	17,875	12,010	3,894	33,779
	% by Subarea	52.9%	35.6%	11.5%	100.0%
	% by Housing type	23.9%	15.3%	1.6%	8.5%
MF 2-4 Units	# Units	310	1,071	503	1,884
	% by Subarea	16.5%	56.8%	26.7%	100.0%
	% by Housing type	0.4%	1.4%	0.2%	0.5%
MF 5+ Units	# Units	46,518	32,410	75,694	154,622
	% by Subarea	30.1%	21.0%	49.0%	100.0%
	% by Housing type	62.2%	41.2%	30.9%	38.8%
Mobile Homes	# Units	1	432	740	1,173
	% by Subarea	0.1%	36.8%	63.1%	100.0%
	% by Housing type	0.0%	0.5%	0.3%	0.3%
Total	# Units	74,827	78,702	244,597	398,126
	% by Subarea	18.8%	19.8%	61.4%	100.0%

# Appendix 6.

## Gentrification Typology

### Description<sup>66</sup>

Time Period	Definition
<b>Established / Gentrified</b>	
1990-2000	Vulnerable in 1990. Gentrified between 1990 and 2000, but was not gentrifying anytime between 2000 and 2016
1990-2000 & 2000-2010	Vulnerable in 1990 and 2000. Gentrified from 1990 to 2000 and 2000 to 2010, but did not gentrify from 2010 to 2016.
<b>Gentrifying</b>	
2000-2010	Vulnerable in 2000. Gentrified between 2000 and 2010, but did not gentrify between 1990 and 2000 or 2010 and 2016.
2010-2016	Vulnerable in 2010. Gentrified between 2010 and 2016, but did not gentrify from 1990 to 2000 or 2000 to 2010.
2000-2010 & 2010-2016	Vulnerable in 2000 or 2010. Gentrified anytime between 2000 and 2016, but did not gentrify from 1990 to 2000.
<b>Continual</b>	
1990–2000, 2000–2010 & 2010–2016	Vulnerable in 1990, 2000, or 2010. Gentrified from 1990 to 2000, 2000 to 2010 and from 2010 to 2016.
<b>Not Gentrifying</b>	
1990-2016	Vulnerable in base year, but did not gentrify anytime between 1990 and 2016.
<b>Not Vulnerable</b>	
1990-2016	Tract was not vulnerable in base year, and did not gentrify between 1990 and 2016.



# Endnotes

- 1 Choudary, W., Wu, J., & Zhang, M. (2018). *Neighborhood Gentrification across Harris County: 1990 to 2016*. Walker, K. & Shelton, K. (2016). *Houston in flux: Understanding a Decade of Bayou City Development*. Walker, K. (2017). *Taking Stock: Houston Trends in the Houston Area*.
- 2 5,000 square feet was the required minimum lot-size for single-family prior to 1998 and adjusted to 3,500 square feet that year. 1,400 square feet also allowed if certain performance measures are met. See City of Houston Code of Ordinances. Sec. 42-181., Single-family residential lot size.
- 3 Kapur estimates that nearly 25% of the city's subdivisions are deed restricted. <https://www.pszjlaw.com/newsroom-publications-land-use-regulation-in-houston.html>
- 4 Living preference question in the Kinder Houston Area Survey, 2008–2018. <https://www.datahouston.org/khas>
- 5 Shelton, K., Park, J., Villegas, C., Guajardo, L., Servidio, C., & Zhang, Z. (2020). *The 2020 State of Housing in Harris County and Houston*.
- 6 Ibid.
- 7 Ibid.
- 8 Ibid.
- 9 Walker, K. & Shelton, K. (2016). *Houston in flux: Understanding a Decade of Bayou City Development*. Walker, K. (2017). *Taking Stock: Houston Trends in the Houston Area*.
- 10 This report does not include residential records that are not identified by the HCAD GIS parcel layer. For example, more than 30,000 mobile homes are not spatially identified, which is not included in the analyses in this report.
- 11 The 2019 HCAD certified datasets include information of individual residential units that were built by 2018 and some of the single-family units that were built in 2019. Please see Appendix 1 for the annual number of permits and newly built units. In this report, we use the complete set of permitting information available from 2005 to 2019 and newly built units from 2005 to 2018 for brevity, despite the presence of 108 housing units built in 2019.
- 12 As of October 2019, Harris County contains 1,410,503 parcel records within its geographical boundary.
- 13 Community Tabulation Areas (CTAs) were developed by the Kinder Institute for Urban Research to serve as approximations of neighborhoods, based on census geographic boundaries. Harris County contains 143 CTAs. The CTA boundaries aggregate several census tracts, with a median of 4 census tracts, by considering super neighborhoods, market areas, and school districts. Retrieved from <https://www.arcgis.com/apps/MapSeries/index.html?appid=95320b06677c438d91027cb5feb241bf>
- 14 Choudary, W., Wu, J., & Zhang, M. (2018). *Neighborhood Gentrification across Harris County: 1990 to 2016*.
- 15 City of Houston Code of Ordinances. Sec. 42-181., Single-family residential lot size.
- 16 In 1998, the City of Houston reduced the minimum lot size required to build a single-family detached dwelling from 5,000 square feet to 3,500 square feet, and allows for lot sizes as small as 1,400 square feet if various performance measures are met, though neighborhoods can also opt out of these standards if a majority of property owners on a given block agree. This resulted in townhome-like structures or small-lot single family being built with a few feet of separation between each other, then marketed to buyers for “not sharing a wall.” Small-lot single-family units imitate townhomes in their function and aesthetic, and are a denser housing product than conventional single-family detached units, which typically sit on lots that are 5,000 square feet or larger. The cities of Houston, Pasadena, and Baytown all allow this housing product on lots smaller than 5,000 square feet, though most are found in Houston.
- 17 Detached townhomes are widely known to be prominent in inner-core neighborhoods during redevelopment and their use has evolved due to Houston's subdivision reforms, therefore, the reason we have sought granularity in this housing structure. Because these dwelling units are not classified under one HCAD housing type, we queried them by single-family detached units that were built within the city of Houston after 1998 on sub-5,000-square-foot lots, and spot-checked for accuracy.
- 18 Choudary, W., Wu, J., & Zhang, M. (2018). *Neighborhood Gentrification across Harris County: 1990 to 2016*.
- 19 Podgarosi, Angelo, Igor Vojnovic and Bruce Pigozzi. 2011. “The Diversity of Gentrification in Houston's Urban Renaissance: From Cleansing the Urban Poor to Super-gentrification,” *Environment and Planning* 43: 1910-29.
- 20 Ellen, Ingrid Gould and Lei Ding. 2016. “Guest Editors' Introduction: Advancing Our Understanding of Gentrification.” *Cityscape* 18(3):3-8.
- 21 County medians were selected opposed to county means because medians are less subject to outliers. Harris County has pockets with very high values that would skew the mean. The median would not be as affected by atypical high values.
- 22 Chapple, Karen. 2009. “Mapping Susceptibility to Gentrification: The Early Warning Toolkit.” Center for Community Innovation. University of California, Berkeley. Retrieved at [https://communityinnovation.berkeley.edu/sites/default/files/mapping\\_susceptibility\\_to\\_gentrification.pdf](https://communityinnovation.berkeley.edu/sites/default/files/mapping_susceptibility_to_gentrification.pdf)
- 23 Freeman, Lance. 2005. “Displacement or Succession?: Residential Mobility in Gentrifying Neighborhoods.” *Urban Affairs Review* 40(4):463-91.
- 24 Changes in median incomes higher than that of the county change does not imply gentrification is occurring, rather the growth could be attributed to income increases among original residents.

- 25 Chapple 2009.  
Chapple, Karen, Paul Waddell, Daniel Chatman, Anastasia Loukaitou-Sideris, and Paul Ong. 2017. "Developing a New Methodology for Analyzing Potential Displacement." University of California, Berkeley. Retrieved at [http://www.urbandisplacement.org/sites/default/files/images/arb\\_tod\\_report\\_13-310.pdf](http://www.urbandisplacement.org/sites/default/files/images/arb_tod_report_13-310.pdf).  
Ding, Lei, Jackelyn Hwang, and Eileen Divringi. 2015. "Gentrification and Residential Mobility in Philadelphia." Federal Reserve Bank of Philadelphia: Princeton University
- 26 The 2014–2018 ACS 5-year estimates show 1,740,973 housing units in Harris County, and our estimates based on the 2019 HCAD-certified datasets are 1,741,344 units.
- 27 Walker (2017) estimated more than 25,000 small multi-family units as of 2007, and identified hotspots within Loop 610 before 1944.
- 28 Vital Signs. 2021. *Housing Production by City and Unincorporated Area by Decade*. Metropolitan Transportation Commission and Association of Bay Area Governments. <https://www.vitalsigns.mtc.ca.gov/housing-production>
- 29 Atlanta City Design Housing.2020. <https://storymaps.arcgis.com/stories/e91c43ad299a4634add2bed4cf2eca9d>  
San Diego Housing Inventory Annual Report. 2018. <https://www.sandiego.gov/sites/default/files/housing-inventory-annual-report.pdf>  
Housing Underproduction in Washington State: Economic, Fiscal, and Environmental Impacts of Enabling Transit-Oriented Accessible Growth to Address Washington's Housing Affordability Challenge. 2020. <https://www.upforgrowth.org/sites/default/files/2020-01/HousingUnderproductionInWashingtonState2020-01-10.pdf>
- 30 Other Cities Total Annual Housing Production, post-2010: San Diego, 4,100; Seattle, 6,200; Atlanta, 1,945.
- 31 The White House. 2016. Housing Development Toolkit. [https://www.whitehouse.gov/sites/whitehouse.gov/files/images/Housing\\_Development\\_Toolkit%20f.2.pdf](https://www.whitehouse.gov/sites/whitehouse.gov/files/images/Housing_Development_Toolkit%20f.2.pdf)
- 32 LINK Houston and Rice University: Kinder Institute for Urban Research (2020). *Where Affordable Housing and Transportation Meet in Houston*. Rice University.
- 33 Shelton, K., Park, J., Villegas, C., Guajardo, L., Servidio, C., & Zhang, Z. (2020). *The 2020 State of Housing in Harris County and Houston*. The Kinder Institute's state of housing report also found that there had been a large addition of high-density units in so-called Houston's arrow running from downtown west along I-10 and Westpark tollway between 2010 and 2017, although the growth of high-density units had occurred across both the city and county.
- 34 There were 12,806 demolition permits, 33,212 construction permits, and 81,071 newly built units in the 111 affluent census tracts on the west of downtown (the so-called "arrow" area during the 2005–2019 period.
- 35 Choudary et al. (2018) defined Harris County's gentrification typology using sociodemographic and investment change indicators based upon vulnerability in base years (1990, 2000 and 2010). Appendix 6 explains the complete gentrification typology that describes types and time periods of gentrification that occurred in Harris County.
- 36 Our second case study finding reinforces the discussion of the clustering of the post-reform parcels in affluent neighborhoods (Gray & Millsap, 2020).
- 37 Wegmann, J. (2020). *Bayou City Townhouse Boom: Does Houston Have Something to Teach us About Pro-Climate Urban Transformation?* University of Texas, School of Architecture. Platform, 2020–2021 edition. Urban Agencies: Projections for the Contemporary City.
- 38 Gray, M. N., & Millsap, A. A. (2020). Subdividing the Unzoned City: An Analysis of the Causes and Effects of Houston's 1998 Subdivision Reform. *Journal of Planning Education and Research*.
- 39 Appendix A2-3 in Appendix 2 demonstrates the newly built detached townhomes at the census tract level.
- 40 Houston Association of Realtors. The 2010 value is originally the 2011 median sales price in the Independence Heights CTA that was adjusted to the value in 2018 dollars using the U.S. Bureau of Labor Statistics consumer price index for all urban consumers, not seasonally adjusted, in the Houston metropolitan area.
- 41 The City of Houston's Super Neighborhoods Website: Super Neighborhood 13 - Independence Heights
- 42 Choudary, W., Wu, J., & Zhang, M. (2018). *Neighborhood Gentrification across Harris County: 1990 to 2016*.
- 43 There was a relatively high number of demolitions (407) compared to a low amount of construction permits (598) compared to other case studies, representing a ratio of 1.5 construction permits for each demolition permit, much lower than the 9.8 county average (Table 3).
- 44 Independence Heights is the only case study CTA where Hispanic populations are the majority demographic group among the seven case study CTAs as of 2018.
- 45 Houston Association of Realtors. The 2010 value is originally the 2011 median sales price in the Independence Heights CTA that was adjusted to the value in 2018 dollars using the U.S. Bureau of Labor Statistics consumer price index for all urban consumers, not seasonally adjusted, in the Houston metropolitan area.
- 46 Choudary, W., Wu, J., & Zhang, M. (2018). *Neighborhood Gentrification across Harris County: 1990 to 2016*.
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- 55 Melissa Anne Currie and Janni Sorensen. 2018. Repackaged "urban renewal": Issues of spatial equity and environmental justice in new construction, suburban neighborhoods, and urban islands of infill. *Journal of Urban Affairs*, DOI: 10.1080/07352166.2018.1474081. <https://doi.org/10.1080/07352166.2018.1474081>
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- 58 Choudary, W., Wu, J., & Zhang, M. (2018). *Neighborhood Gentrification across Harris County: 1990 to 2016*.

- 59 Some multi-family construction examples are 180 units built by Reed Road Senior Residential L.P., 132 units by Cypress Creek at Reed Road L.P., 176 units by Lansborough Apartments L.P., and 144 Units by One Mag Partners, L.P.
- 60 Shelton, Kyle, John Park, Carlos Villegas, Luis Guajardo, Chris Servidio, and Zhiyan Zhang, "The 2020 State of Housing in Harris County and Houston," Report. Kinder Institute for Urban Research, Rice University. Houston, TX: Kinder Institute for Urban Research, 2020.
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The Kinder Institute for Urban Research builds better cities and improves people's lives by bringing together data, research, engagement and action.

