Assessing Blight in the City of Dallas

Abridged Report

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June 2023

Dallas Area Habitat for Humanity®

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COLLEGE OF HEALTH & PUBLIC SERVICE
Department of Public Administration

EXECUTIVE SUMMARY

In 2022, Dallas Area Habitat for Humanity commissioned the University of North Texas to identify the blighted areas of Dallas. The new study updated research performed a decade earlier. The goal of the 2022 study is to assess and map current patterns of blight as well as to reveal how patterns of blight in the city of Dallas have changed since 2011.

We developed a Composite Blight Index (CBI) for the original study and modified it for the new study to improve the validity of comparisons between 2011 and 2022. The CBI includes 14 equally weighted physical and socio-economic indicators of blight, such as tax-delinquent properties, demolitions and rates of single-parent households and renter-occupied housing.

To understand the prevalence, severity and location of blight, we superimposed the rates of all 14 CBI indicators on each associated census tract. We divided the CBI scores into quartiles: (1) very low blight, (2) low blight, (3) moderate blight, and (4) blighted. The study area included the 350 census tracts that are completely within Dallas County and contiguous with the city limits. The changes in the CBI can be viewed in the figure below.
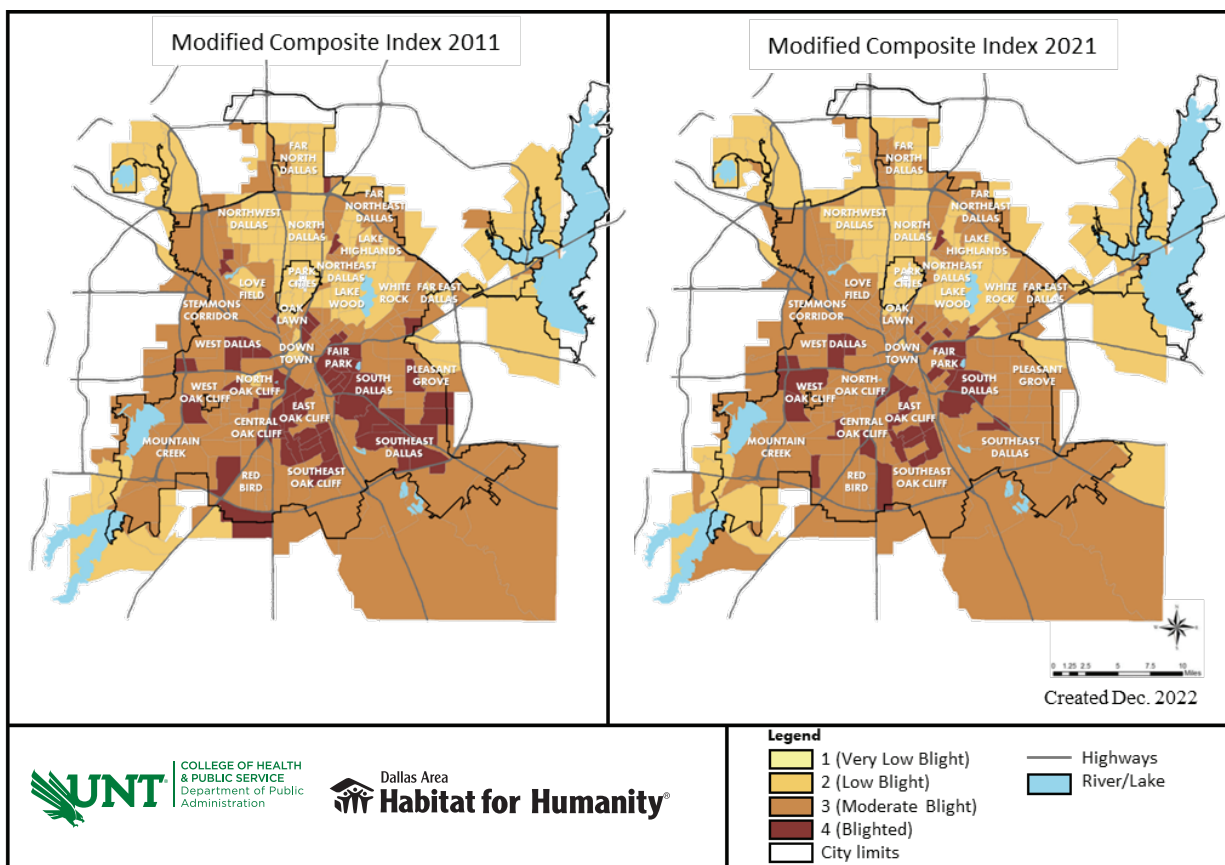

Figure 1*: Map showing levels of blight by census tract in Dallas, 2011 and 2021.*

The 2022 research showed that:

- Between 2011 and 2021, the number of census tracts considered *blighted* -- those with the highest composite blight scores -- declined from 51 to 31. These *blighted* tracts were concentrated in West Dallas, West, South Central and East Oak Cliff, Pleasant Grove and Fair Park/South Dallas.

- Fifty-two census tracts, representing 15% of the city's land area, became less blighted in the last 10 years. Most of these census tracts were in the city's southern half.

- In 2021, more than half of the city's 350 census tracts fell into the *moderate blight* category.

- Almost 29,000 residential properties were vacant in 2011 and 73.8% of them remained vacant in 2021. Researchers often use vacant property rates as a proxy or symptom of urban decline and disinvestment.

- The number of rental units increased 25.9% between 2011 and 2021. The increase results from new multifamily construction as well the conversion of owner-occupied single-family homes into rental homes and the construction of single-family homes for rental.

- There are strong linkages between some physical and socio-demographic risk factors for blight. For example, in Dallas, the rates of renter-occupied properties, single-parent households, poverty, and Hispanic and Black households all tend to be higher in areas of higher blight. This finding suggests that tackling blight may require addressing the four indicators simultaneously.

- Demolition patterns shifted between 2011 and 2021. In the first study, census tracts with more demolitions had higher poverty, unemployment and delinquent property tax rates. In 2021, the reverse was true. Census tracts with lower unemployment and poverty rates, and more white residents, had higher demolition rates.

- Dallas Area Habitat for Humanity focused its largest home-building projects in some of the city's largest expanses of blighted zip codes between 1995-2023. By 2021, several of those areas showed a decline in the number of *blighted* census tracts.

This report examines each indicator of blight and highlights a few important relationships among indicators. We hope these findings will be useful to city officials, nonprofit organizations, neighborhood associations and business and community leaders eager to help Dallas become socially cohesive and economically vibrant.

THE UNT BLIGHT STUDIES

Many scholars have investigated the phenomenon of urban blight, but there is no generally accepted theoretical framework used in the research literature about blight. Each affected community tends to define blighted properties and areas differently, and the definitions are often subjective. Differences in local housing stock, cultural values and even climate further complicate the situation. As a result, it is extremely difficult to objectively measure and compare neighborhoods' functional and social decline across different cities.

Local governments, rather than state or federal agencies, are most directly impacted by blight. It affects their property tax bases, their crime rates and the well-being of their residents. City and county offices also maintain many of the records, such as demolition permits and tax foreclosure notices, that serve as indicators of blight. For these reasons and others, local governments are the most likely entities to enact ordinances or codes to identify and ameliorate conditions associated with blight, such as abandoned or foreclosed properties, vacant structures and land, graffiti, unsafe or decrepit buildings, overgrown weeds, fire hazards and hotspots for criminal activity.

In 2011, Dallas Area Habitat for Humanity (DAHfH) commissioned University of North Texas (UNT) researchers to identify and measure levels of blight across Dallas. One goal of the study was to explore how blight affects the quality of life and economic vitality of neighborhoods and assess its costs in terms of public resources expended and tax revenue foregone.

Researchers used DAHfH's definition of blight to guide the study:

> *"Neighborhood blight consists of those conditions that threaten the health and safety of neighborhood residents, depress an area's quality of life, and jeopardize the social and economic viability of an area."*

Based on that definition, and a review of research literature, UNT developed a set of physical and socio-economic "blight indicators". Taken together, the indicators together formed a "Composite Blight Index" that could be used to study urban blight across cities and over time. In 2022, DAHfH commissioned UNT to perform a follow-up study to determine if urban blight had changed in Dallas since 2011.

METHODOLOGY

We focused significant attention on the physical and legal indicators of blight, such as vacant or foreclosed properties, because city policy and actions can directly affect these conditions. Municipal governments have less control over socio-economic factors, such as the poverty rate, which are the result of broad historical and social trends. However, those socio-economic conditions are significantly associated with quality of life. **Table 1** lists each of the 14 blight indicators, how it was measured at the census tract level, and the data source.

Table 1 *Indicators for Modified Composite Blight Index (CBI) for the City of Dallas*

	Physical Indicators	Census Tract Measures	Source
1	Vacant	Vacant properties (%)	DCAD
2	Abandoned residential	Mail undeliverable residential property (%) for over 90 days	USPS
3	Abandoned commercial	Mail undeliverable commercial property (%) for over 90 days	USPS
4	Mortgage foreclosed	Mortgage foreclosed properties (%)	NTREIS
5	Tax foreclosed	Tax foreclosed properties (%)	NTREIS
6	Tax delinquent	Tax delinquent properties (%)	Dallas County Tax Assessor
7	Demolished	Demolished properties (%)	Dallas (Sustainable Development)
	Socio-Economic Indicators		
1	Poverty rate	Poverty rate	US Census 2019
2	Unemployment rate	Unemployment rate	US Census 2019
3	Ethnicity	Hispanic individuals (%)	US Census 2019
4	Race	Nonwhite individuals (%)	US Census 2019
5	Renter-occupied	Renter households (%)	US Census 2019
6	Population density	Population density 2019	US Census 2019
7	Single parent household	Single parent households (%)	US Census 2019

We determined the rate of each indicator for each census tract. Then we calculated a Composite Blight Index (CBI) score by superimposing the rates of all 14 indicators over the associated census tract. The study area included the 350 census tracts contiguous with the city limits and contained within Dallas County, an approach consistent with the 2011 study.

To compare blight indicators from 2011 and 2021, we modified the original methods used to calculate the indices. This was necessary because some of the original 2011 data had been lost and methodologically, adjustments were necessary to make statistically reliable comparisons between the two study periods. As in the 2011 report, we divided the CBI scores into quartiles: (1) very low blight, (2) low blight, (3) moderate blight, and (4) blighted.

Results

The 2021 composite blight scores show a shift in the pattern of blight across the City of Dallas. The number of blighted census tracts – those suffering the highest level of blight – declined. The number of census tracts with "moderate blight" increased. In both 2011 and 2021, most blighted census tracts lie south of the Trinity River and south of Interstate 30.

Figure 2 (below) maps the different categories of blight across the City of Dallas. In general, the census tracts considered "blighted" are in West Dallas, West, South Central and East Oak Cliff, Pleasant Grove and Fair Park/South Dallas. Almost all the areas of "very low blight" and "low blight" are north of Interstate 30 and east of Interstate 35E.
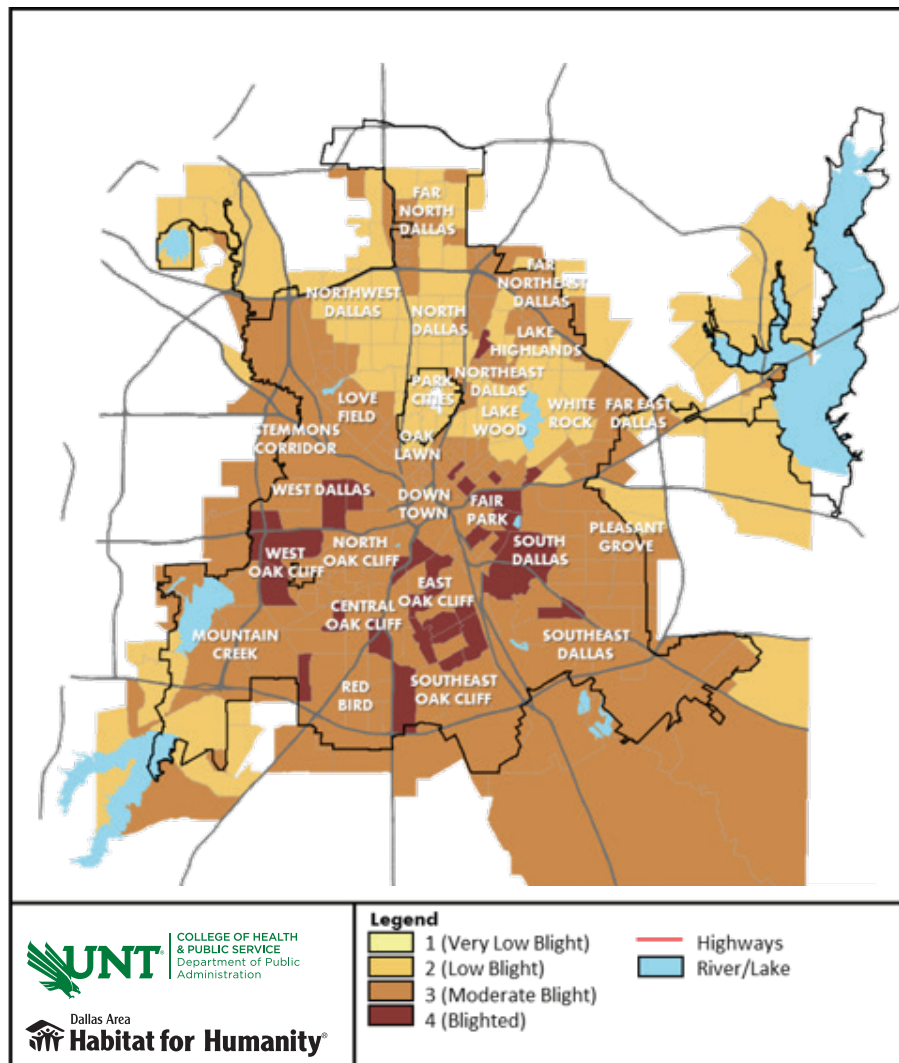
Figure 2 Composite Blight Index: Blight in the City of Dallas (2021)

Table 2 (below) shows the frequency distribution of blight by census tract in the City of Dallas in 2021. We calculated separate physical and socio-economic blight indices to emphasize that each census tract is affected by a different mixed of issues. When physical indicators are applied, 28 census tracts are blighted, but 58 are blighted according to socio-economic factors. **When both types of indicators are applied, 31 census tracts land in the blighted quartile. It is important to note that 6.76% of the city's total land area is in the blighted category, but more than half of all census tracts (211 census tracks) and more than half of the city's land area experiences moderate levels of blight.**

Table 2 Census Tracts and Area (in square miles) in each Blight Category, 2021

Categories	**Physical Index**		**Socio-economic Index**		**Composite Blight Index**	
	census tracts	Sq. Miles	census tracts	Sq. Miles	census tracts	Sq. Miles
Very low blight	0	0	2	3.42	0	0
Low blight	143	324.79	105	235.22	108	250.57
Moderate blight	179	262.14	185	287.12	211	329.03
Blighted	28	34.73	58	95.9	31	42.05
Total	**350**	**621.66**	**350**	**621.66**	**350**	**621.66**

When we compared the Composite Blight Index results of the 2011 and 2021 studies, we found a drop in the number of blighted census tracts, from 51 to 31. Based on the modified CBI methodology, the land area classified in the blighted category dropped from 75.99 square miles in 2011 to 42.05 square miles in 2021. **Figures 3 and 4** (below) summarize the differences between 2011 and 2021.

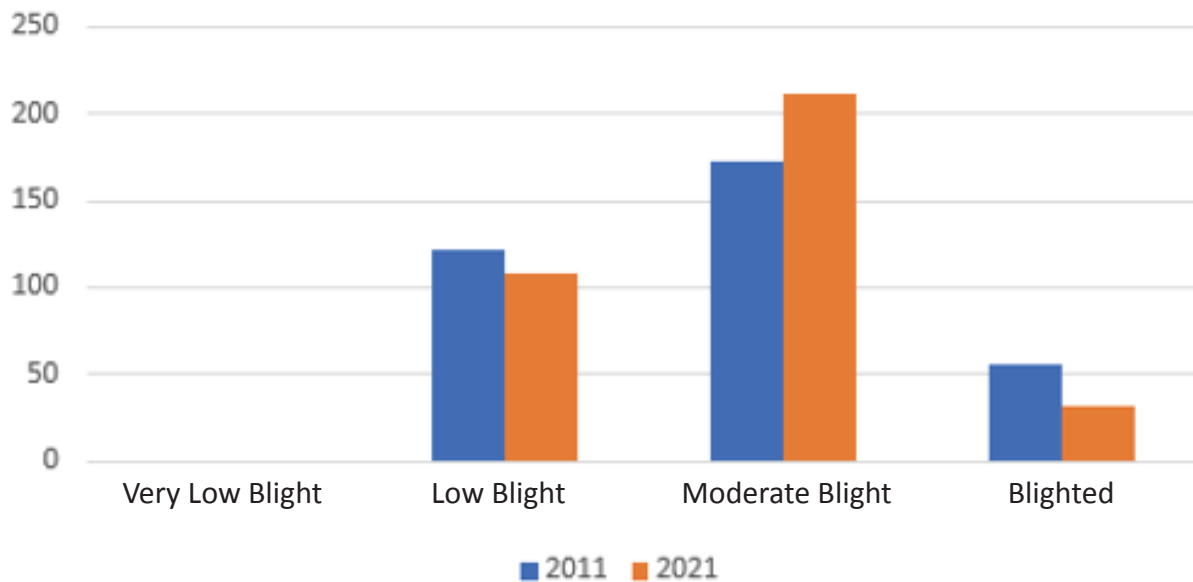## Composite Blight Index 2011 vs. 2021 (Freq.)
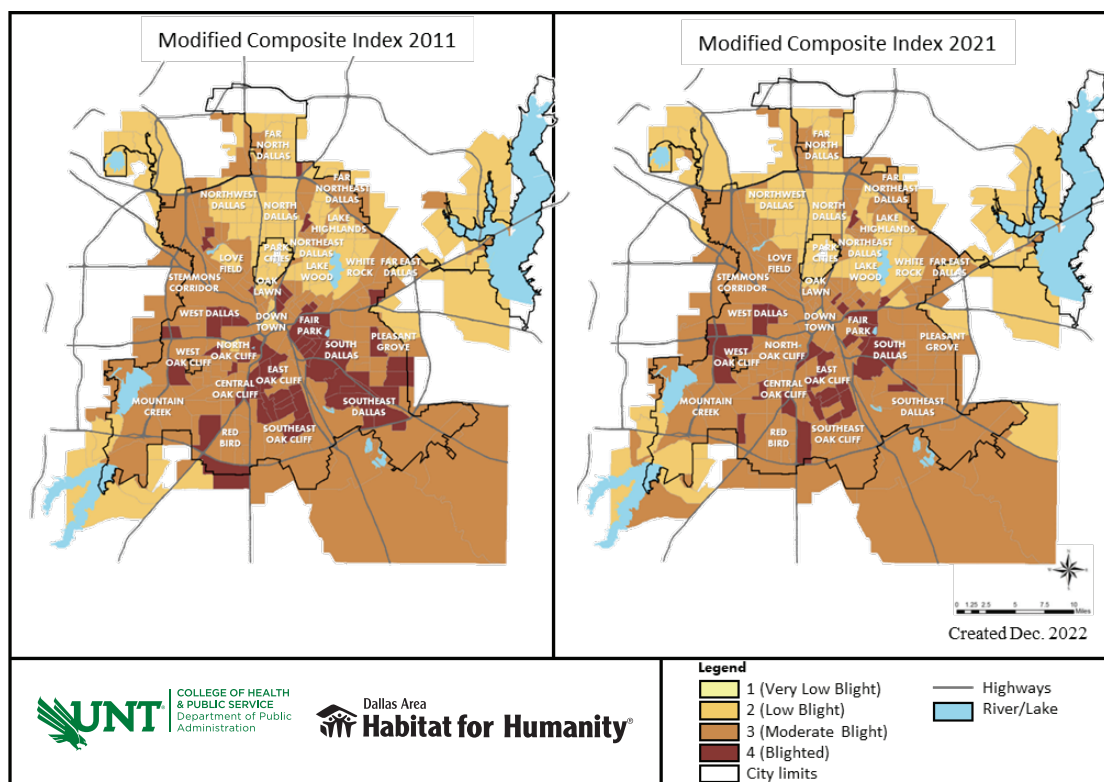

Figure 3 Composite Blight Index 2011 vs. 2021

Figure 4 Composite Blight Index: Changing Patterns of Blight in the City of Dallas (2011–2021)

The map in **Figure 5** (below) shows which census tracts improved and those areas that are in a worse condition compared to 2011. For example, the orange areas (*lagged behind*) depict census tracts that were originally classified as having low or moderate blight but had become more blighted by 2021. This map also shows areas that improved (in green), moving from blighted to the low or moderate blight category. The census tracts that remained the same categories over the decade are labelled as "no change." Most of the tracts that improved are in the southern half of the city, including Fair Park, South Dallas, Southeast Dallas, Pleasant Grove and parts of Oak Cliff. The northern half of the city has more of the tracts that declined or lagged.
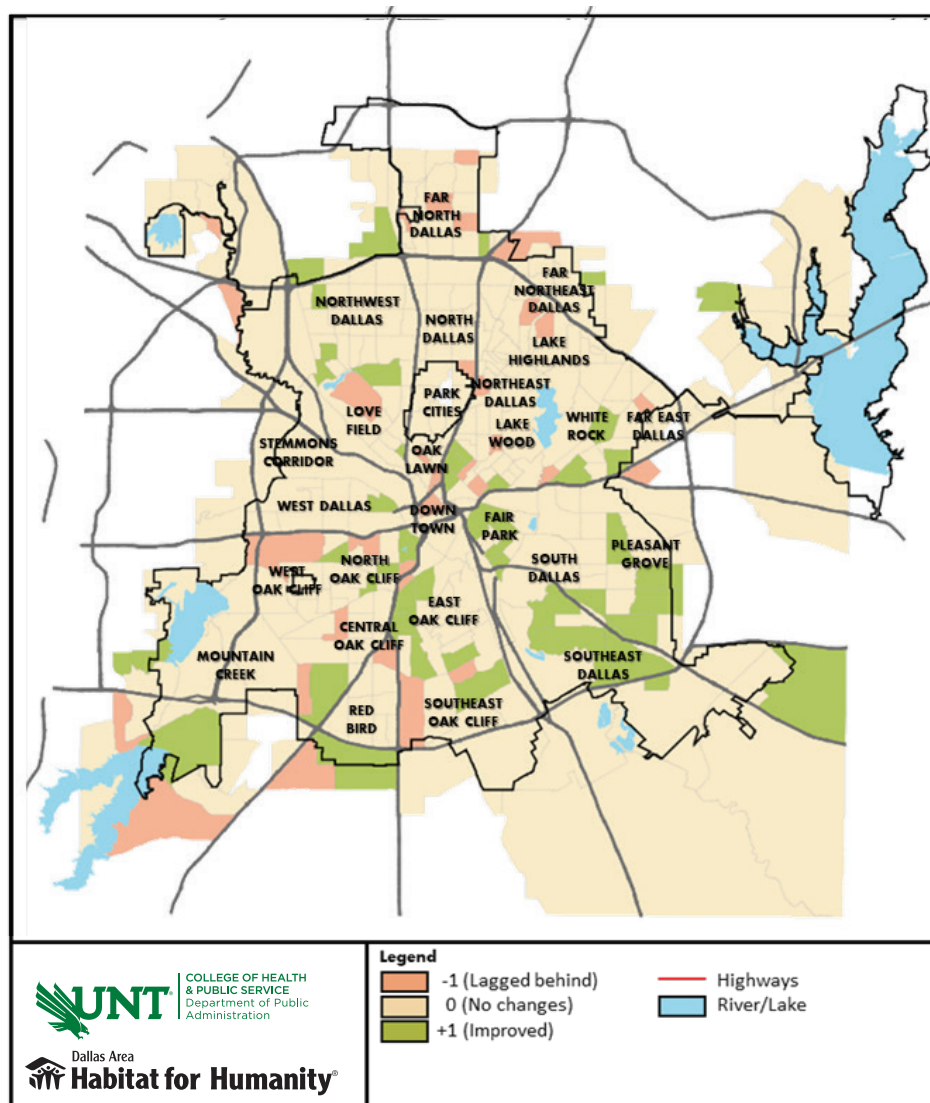

Figure 5 Changes in Composite Blight Index 2011 - 2021

Indicators of Blight

The research team identified 14 physical and socio-economic indicators of blight based on the research literature, the nature of the city's housing stock, its changing demographics and economic base, public records and other data sources. The data were gathered from multiple agencies and included online public databases such as the Office of the Dallas County Tax Assessor, the City of Dallas, and the U. S. Postal Service. We received the North Texas Real Estate Information Services (NTREIS) database from BGT Strategies, LLC. All data were merged at the census block/tract level. The data for the socio-economic indicators were retrieved from the American Community Survey 2019 – the latest available data at the time of the study.

Physical Indicators of Blight

Researchers, elected officials and neighborhood advocates would probably all agree that blight has a very visible, physical component. Vacant properties and abandoned buildings, for example, have been used as indicators of blight because a vacant property can quickly become an eyesore and a magnet for criminal activity. Properties with delinquent taxes are often used as proxies to predict the likelihood of tax foreclosure, leading to the property becoming vacant or abandoned.

Based on our literature review, we selected seven physical indicators of blight:

- Abandoned properties
- Vacant residential properties
- Vacant commercial properties
- Mortgage foreclosure properties
- Tax foreclosure properties
- Tax delinquent properties
- Demolished properties

Figure 6 (below) shows the census tracts according to their physical blight scores.
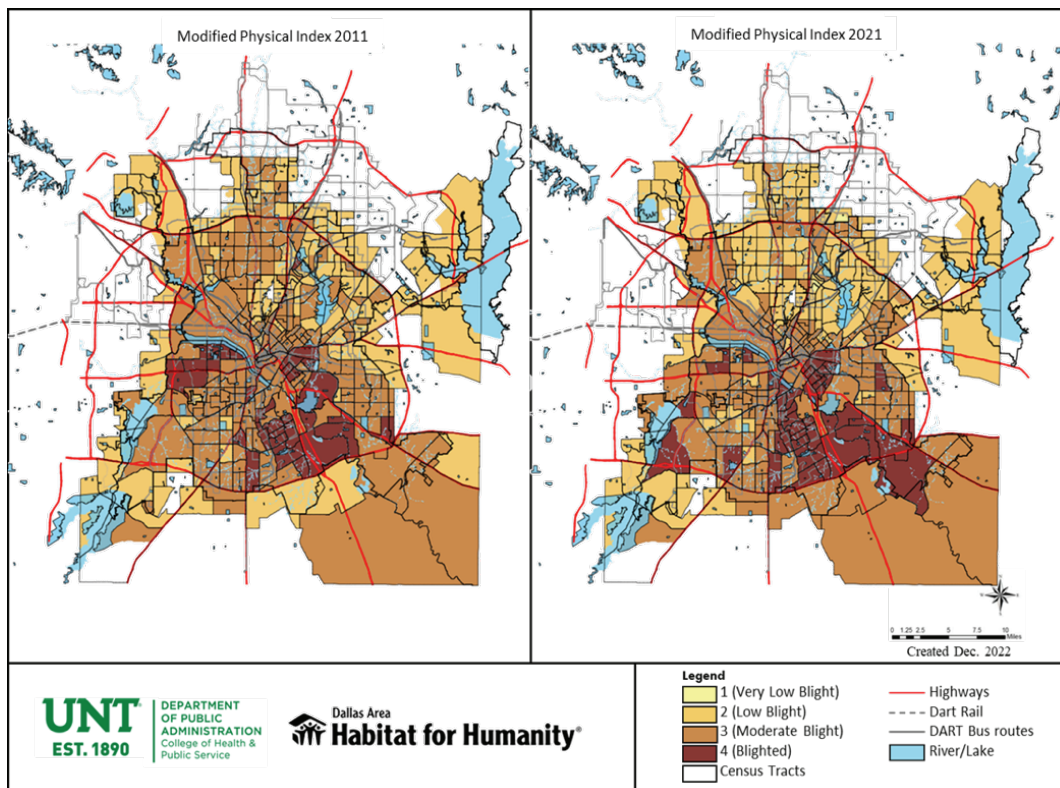

Figure 6 Modified Physical Blight Index - Changing Patterns of Blight in the City of Dallas (2011–2021)

Abandoned Properties

The popular image of an abandoned building is one that is boarded up, unsafe, possibly vandalized and probably dilapidated. But there is no universally accepted definition of "abandoned" in the research literature on urban blight. We collected U.S. Postal Service records of vacancy to identify abandoned properties by address. The assumption is that if mail has not been picked up from, or delivered to, certain addresses, those properties were considered abandoned.

Figures 7 and 8 illustrate the patterns of abandoned commercial and residential properties in Dallas. Based on the 2021 data, abandoned residential properties were concentrated in the downtown/uptown Dallas, far east Dallas, Southwest Dallas and East Oak Cliff. Rates of abandonment were higher among the commercial properties than residential ones.
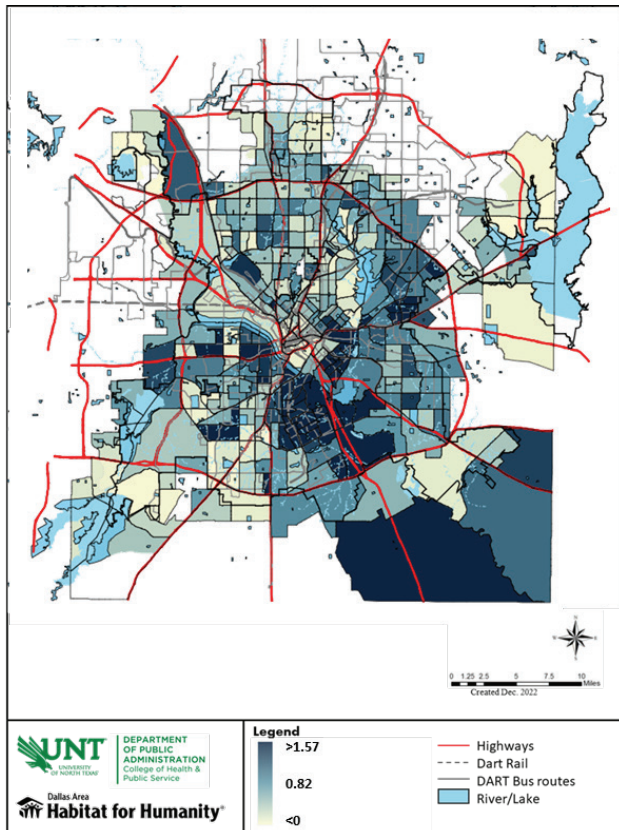

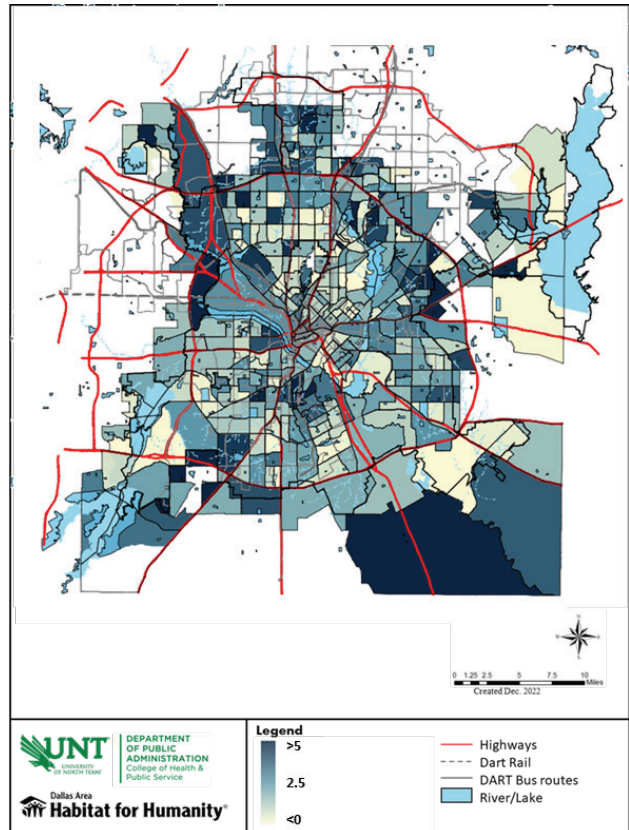*Figure 7* Abandoned Residential Properties

Figure 8 Abandoned Commercial Properties

Vacant Properties

Vacant properties impose a financial drain on municipal governments and have a negative effect on the surrounding community of private property owners. They are visual cues of one owner's neglect or disinterest, or of the overall decline in the neighborhood's fortunes. On the other hand, with appropriate leadership and policies, vacant properties can offer opportunities for revitalization and the redevelopment of multi-family and single-family housing units.

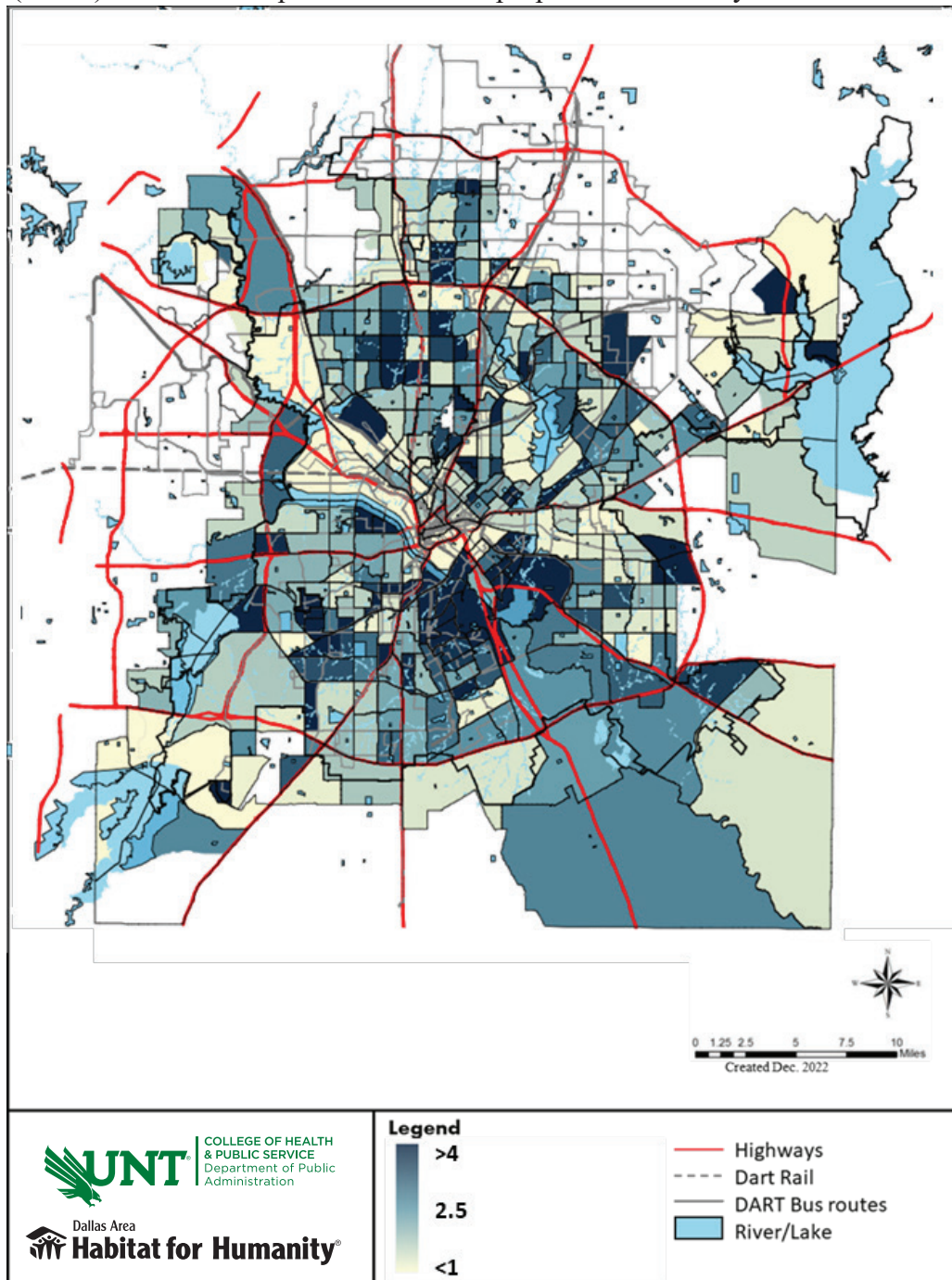**Figure 9** (below) illustrates the patterns of vacant properties in the City of Dallas.

Figure 9 Vacant Dallas Properties in 2021

Mortgage Foreclosure Properties

Mortgage foreclosure occurs when a homeowner fails to make mortgage payments for more than 60 days. After that period, the property is considered to be in default and the holder of the failed mortgage (e.g., a bank, lender) can foreclose on the property. Foreclosure is a process that lasts at least 60 days -- and often significantly longer. Foreclosures can have negative spillover effects, especially if there are multiple foreclosures in one neighborhood or subdivision. **Figure 10** (below) shows the distribution of mortgage foreclosed properties by census tract in 2021.
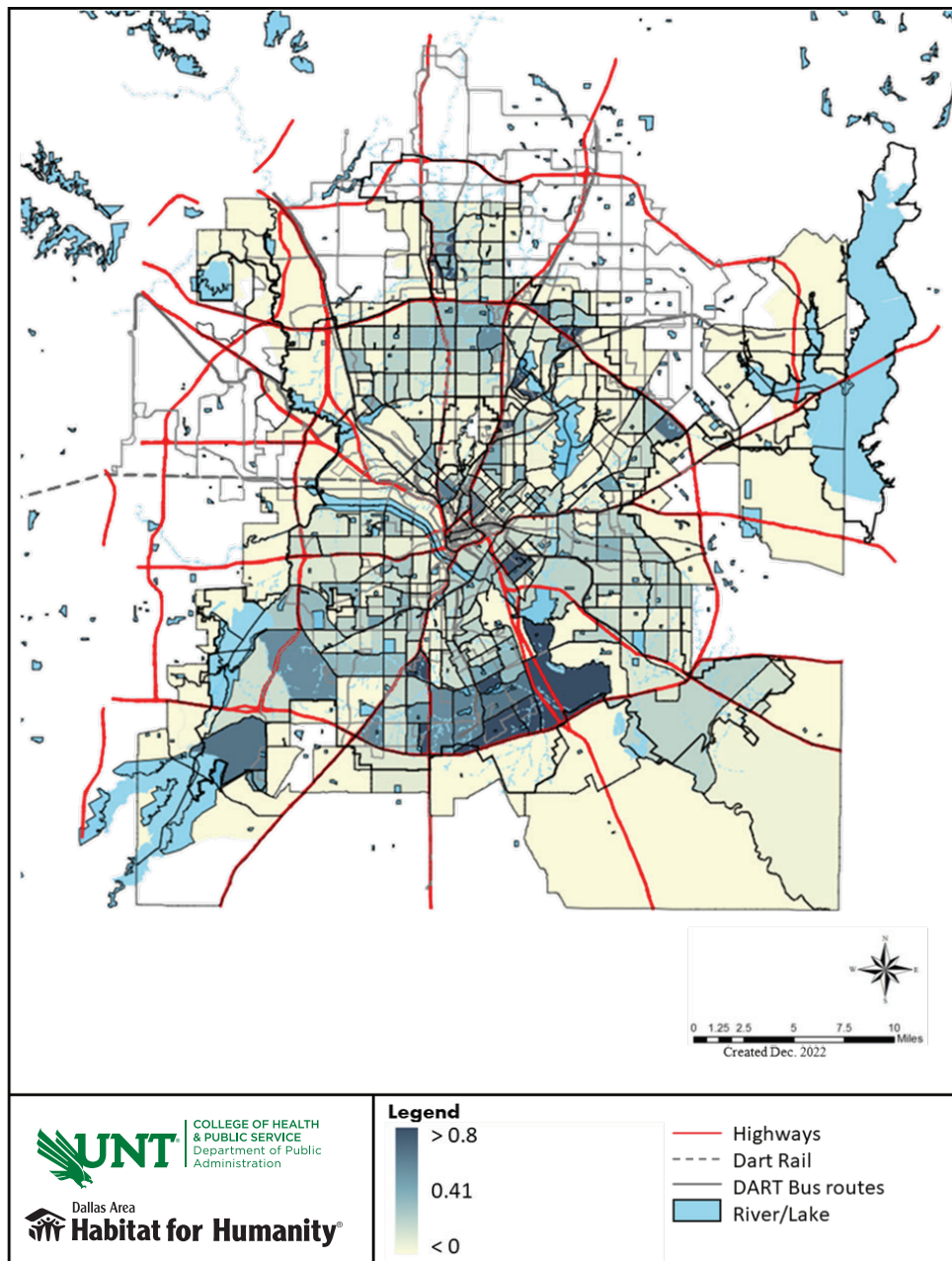

Figure 10 Mortgage Foreclosed Properties in 2021

Tax Foreclosure Properties

Texas homeowners pay some of the highest property tax rates in the nation. Local jurisdictions can foreclose on private properties when owners fail to pay their delinquent property taxes. Once a property is encumbered with a tax lien judgement, the local government can foreclose on the property and take ownership of it. The problem of vacant properties with unresolved tax liens is particularly acute in low-income neighborhoods with already depressed local housing markets. As seen from the map in **Figure 11**, most Dallas census tracts have less than one tax-foreclosed property. Census tracts with higher numbers of tax-foreclosed properties were in Fair Park/South Dallas, East Oak Cliff, Pleasant Grove, and parts of Southeast and South-Central Dallas.
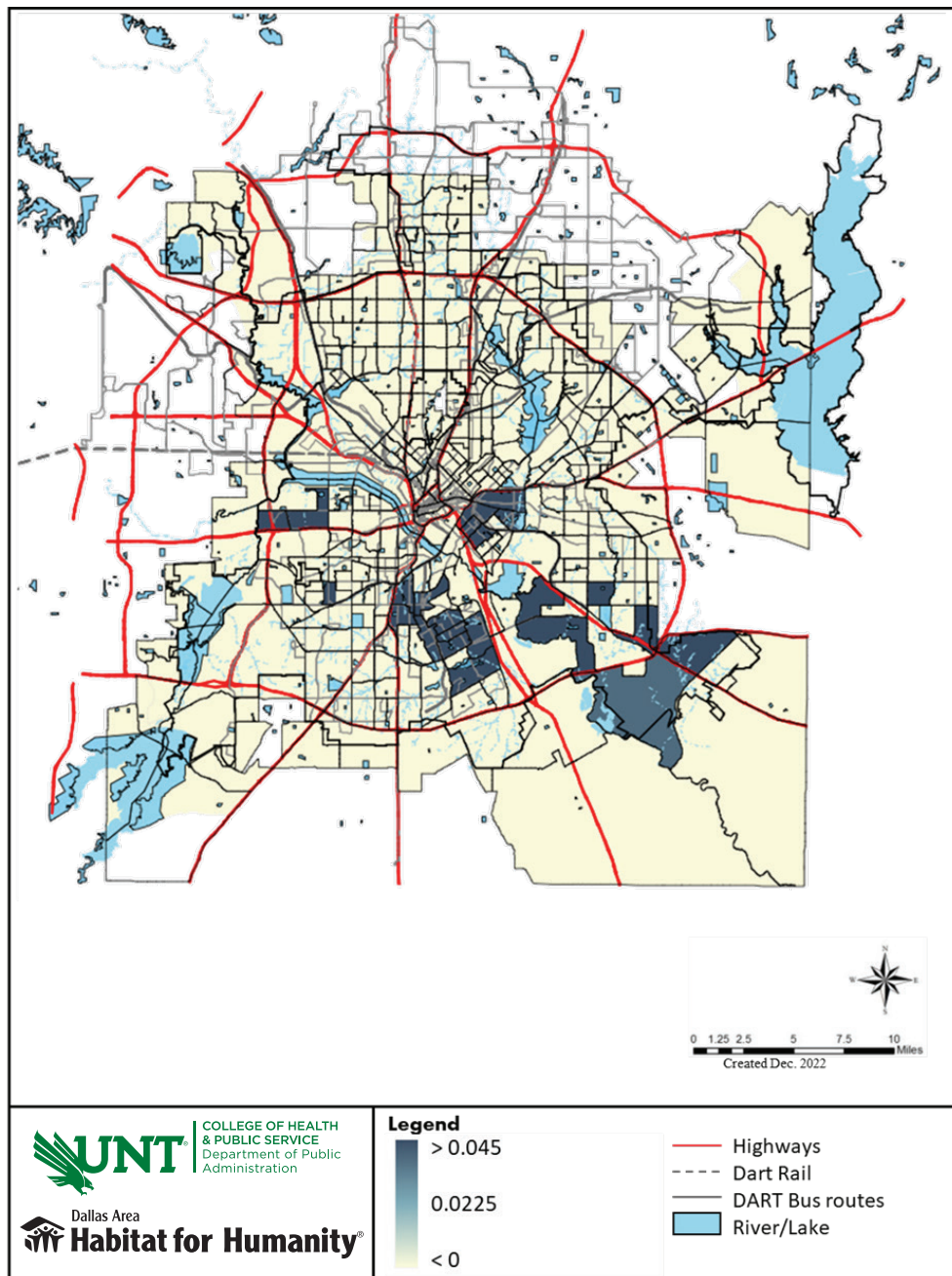

Figure 11 Tax Foreclosed Properties in 2021

Tax Delinquent Properties

A property is "tax-delinquent" when the owner of the property has not paid property taxes due by the specified deadline. While the effect of delinquent property tax on the value of nearby homes is not obvious, the assumption is that property owners who cannot pay their property tax have no capacity or incentive to maintain or invest in the up-keep of their properties. This behavior contributes neighborhood decline. **Figure 12** shows the residential and commercial tax-delinquent properties clustering in areas that tended to have high levels of blight. Tax delinquencies were concentrated in the following areas: the Stemmons Corridor, West Oak Cliff and West Dallas, East Oak Cliff, South Dallas and Fair Park. The high concentration of tax delinquent properties in these census tracts deserves further investigation.
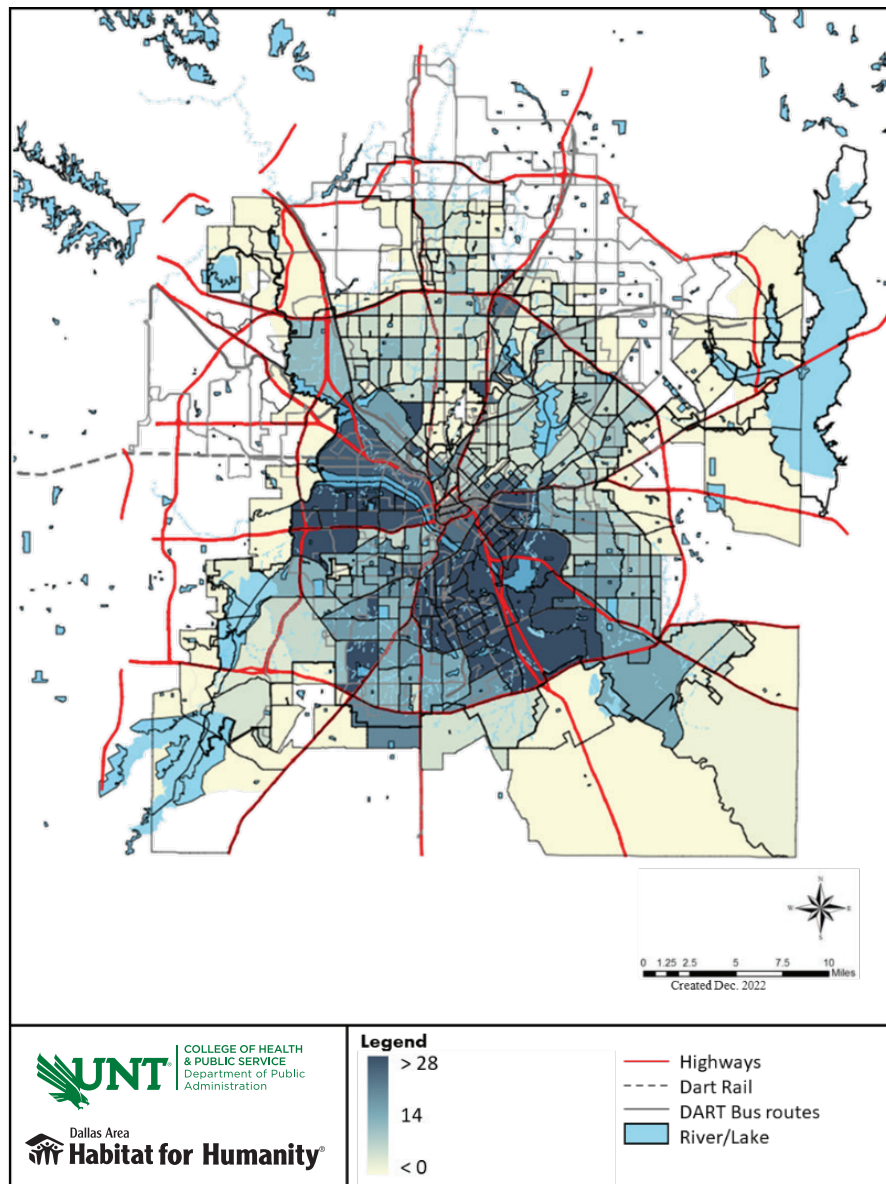

Figure 12 Tax Delinquent Properties

Demolished Properties

A demolition permit is a double-edged sword when used as a blight indicator. It can be a proxy for neglected properties and negligent owners. But demolishing decrepit, dangerous properties also can promote economic development by replacing blighted properties with better amenities and housing. Demolitions are costly and can also lead to gentrification and displacement of local residents.

Researchers gathered a list of about 1,900 building demolition permits issued between 2015 and 2021 by the City of Dallas. They were mapped using GIS and merged with appraisal district parcel data. **Figure 13** shows the distribution of demolished properties by census tract.
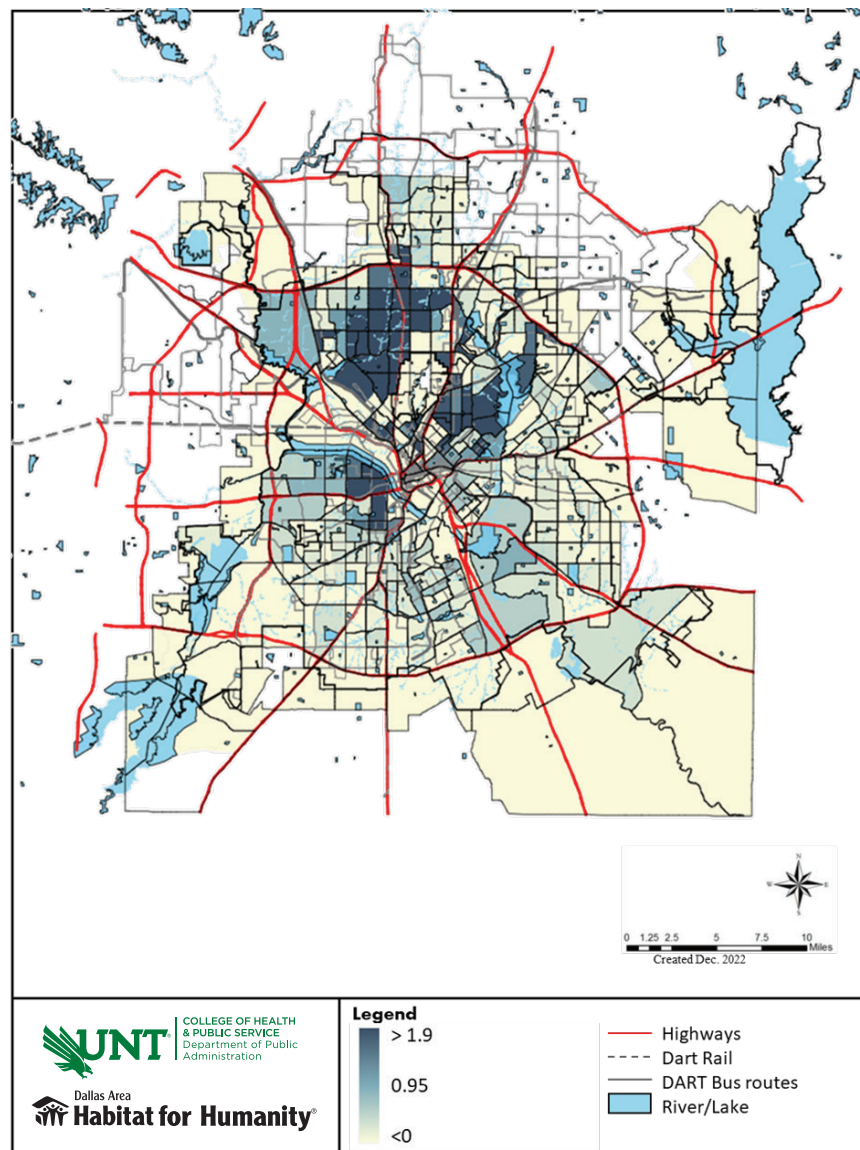

Figure 13 Demolished Properties 2015-2021

Socio-Economic Indicators of Blight

Dallas is the third-largest city in Texas with a population of about 1.3 million. A plurality of residents, 41.5%, are of Hispanic descent, about 28.8% of residents are Non-Hispanic Whites and 24.3% are non-Hispanic Blacks. About 10% of residents are Asian or multiracial. The city's per capita income 2016-2020 was $35,487, which is slightly greater than the Texas average of $32,177. The median household income in Dallas from 2016-2020 was $54,747, which is lower than the state average of $63,826. The percentage of people living below the poverty line in 2019 was 17.5%, which was higher than the state average of 14.2%.

Understanding how socio-economic risk factors of blight intertwine with each other and with physical indicators of blight can help communities devise multilayered strategies to improve neighborhoods' social and built environment. We selected seven relevant indicators to create a socio-economic blight index:

- Poverty
- Unemployment
- Ethnicity
- Race
- Renter household
- Population Density
- Single-Parent Households

As shown in **Figure 14** (below), we mapped the rates of each indicator in 2011 and 2021 at the census tract level, to show how the distribution of socio-economic risk factors had changed between those years.
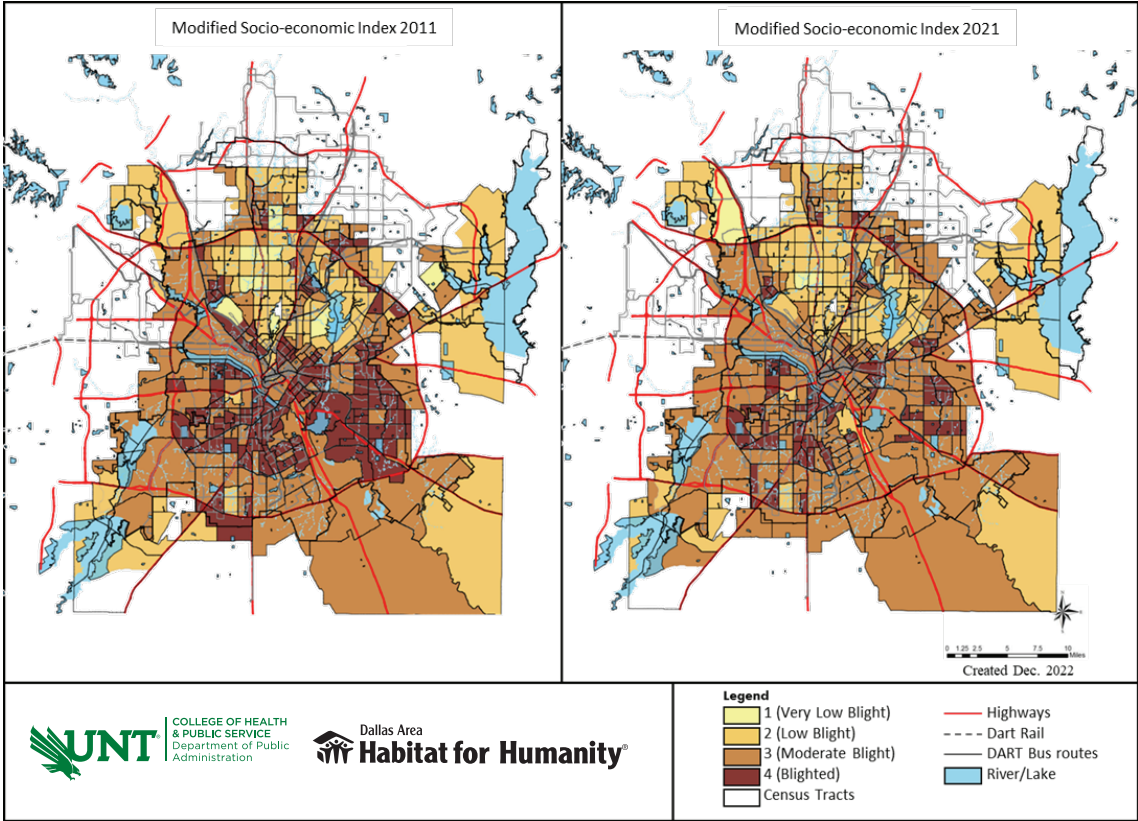

Figure 14 Modified Socio-economic Index: Changing Patterns of Blight in the City of Dallas (2011-2019)

Intertwined Risk Factors

As the research progressed, it became clear the conditions that contribute to urban blight were often intertwined. We studied the relationships among indicators to identify groups of indicators that were consistently closely connected. We detected patterns that could provide the basis for future intervention: problems related to single-parent households, vacant residential parcels, demolition, rental-occupied housing, and demolition activities and affluent communities – an issue linked to housing affordability.

Vacant Residential Properties

After performing a statistical analysis, we found that vacant properties were significantly associated with the renter-occupied properties and population density. We tracked changes in the number and location of vacant residential parcels between 2011 and 2021. If a vacant property's status had changed, we searched for information about its current use. Trends in the number and location of vacant properties can serve proxies for assessing the health of a community and its potential for revitalization. **Figures 15** and **16** show current uses for residential parcels that had been vacant in 2011.
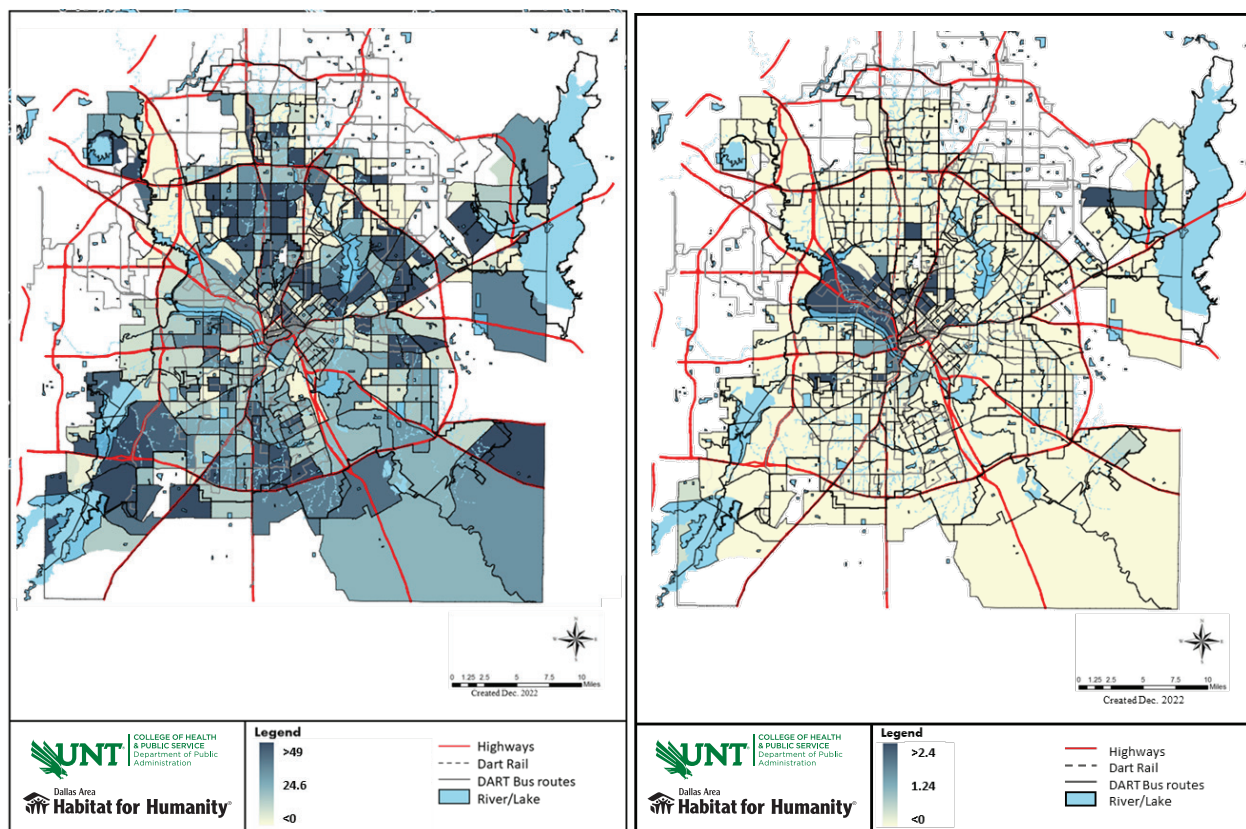

Figure 15 *Vacant residential parcels from 2011, redeveloped into single-family residential properties as of 2021*

Figure 16 *Vacant residential parcels from 2011, redeveloped into multi-family residential properties as of 2021*

In the original study, we found that Dallas had 28,819 vacant residential parcels in 2011, which was equal to 7.95% of all parcels that were zoned residential. Ten years later, 73.8% of these properties continued to remain vacant.

Single-Parent Households

The conditions contributing to urban blight are often linked to family structure and poverty. Single-parent families are economically disadvantaged; they have higher rates of unemployment and poverty and are most affected when social support and welfare programs are reduced. Because single-parent households tend to have lower incomes, they typically rent homes rather than own them, and the homes may be in older buildings in areas with lower rents. In the City of Dallas, we found four socio-economic risk factors for blight were closely correlated: the percentage of single-parent households, the poverty rate, the percentage of Black and Hispanic households, and the percentage of renter-occupied properties.

Renter-occupied Properties

Homeownership is often considered a key to financial security in the United States, and homeownership rates serve as an indicator of neighborhood stability and health. High concentrations of rental properties can be an indicator of blight. The city of Dallas has a relatively high ratio of renters to homeowners, especially when compared to its surrounding suburbs. According to census data, almost 60% of Dallas residents rent their homes. Our research found strong correlations among the following four indicators of blight: high rates of rental housing, vacant properties, population density, and poverty rates. These associations are statistically significant and consistent with studies performed elsewhere.

Also, between 2011 and 2019, data from the American Community Survey (2019) suggest that number of units of rental housing increased 25.9% in Dallas. **Figure 17** (below) shows the distribution of rental-occupied properties across the city. The darkest blue areas have the highest percentage of rental units.
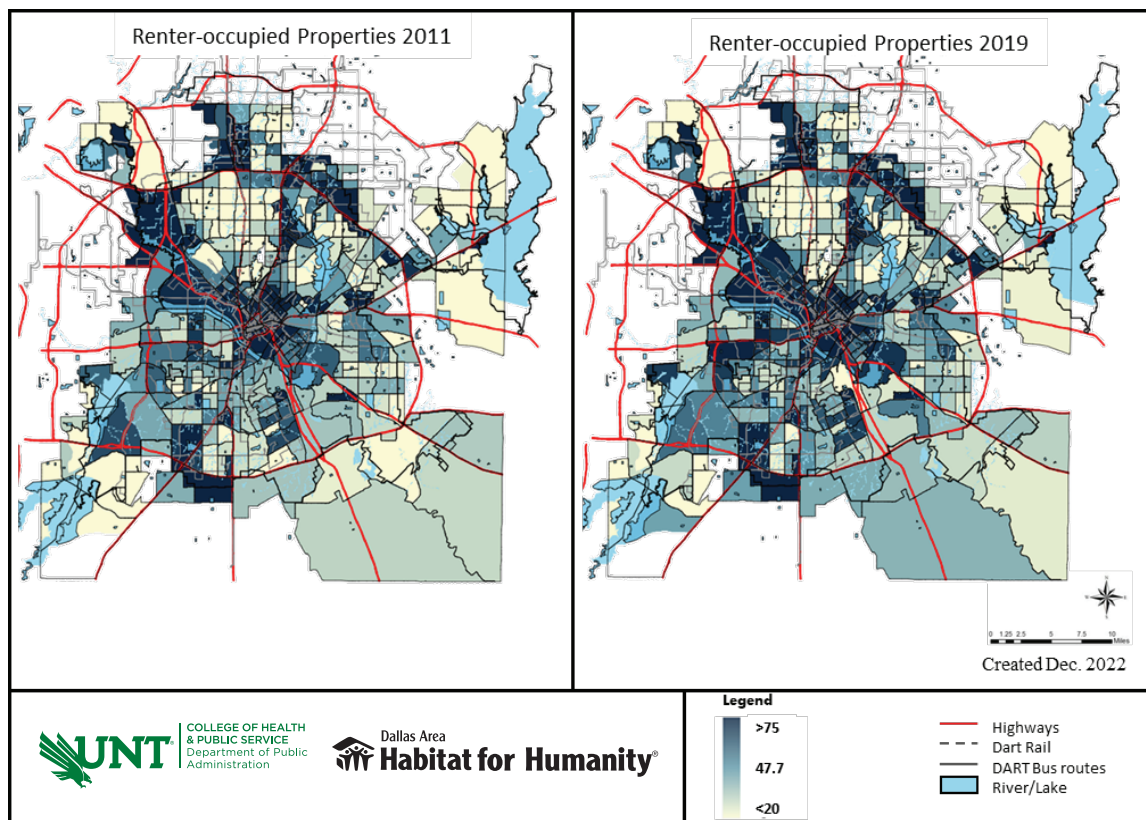

Figure 17 Changes in the patterns of Rental-occupied Properties 2011 and 2019

Demolition Activities and Affluent Communities

In Dallas, the 2021 data show that areas with lower unemployment rates, percentages of single-parent households and poverty rates, and with more white residents had *higher* rates of demolitions. Demolitions were mostly found in Northwest Dallas, North Dallas, West Dallas, Old East Dallas, Lakewood, and Lake Highlands.

That pattern is a shift from 2011. In 2011, the census tracts with higher rates of demolition also had higher unemployment and poverty rates and more tax-delinquent properties. **Figure 18** compares demolitions by census tract in 2011 and 2021.
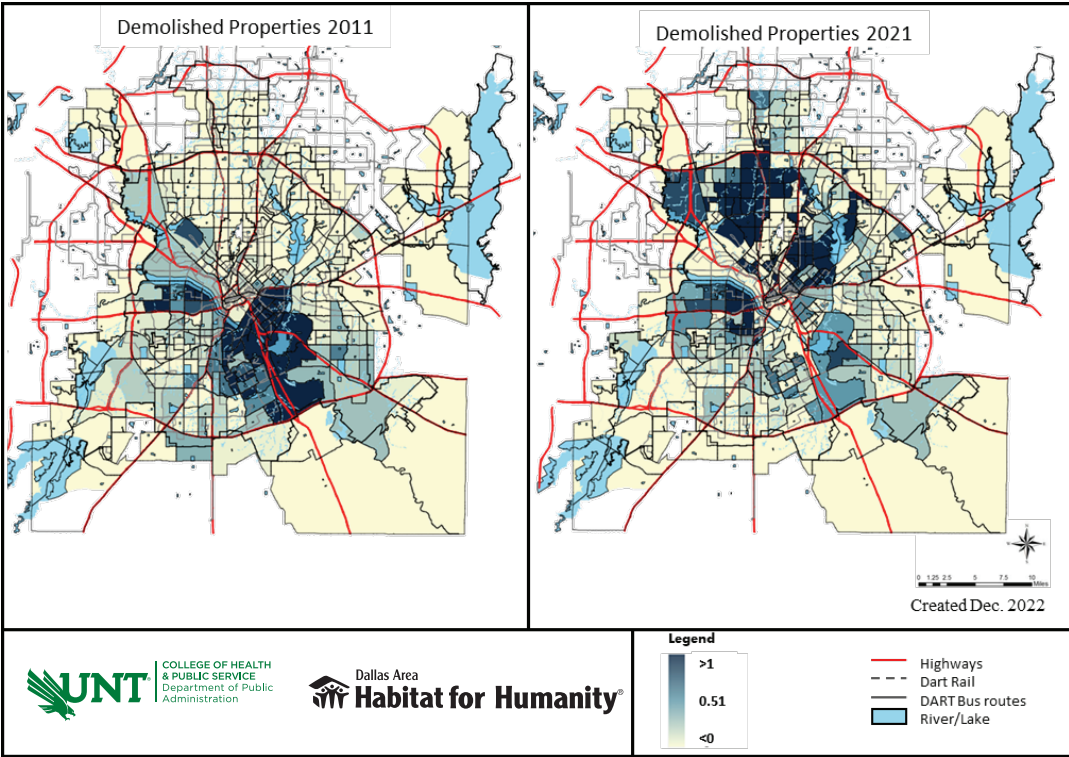

Figure 18 Changes in the Distribution of Demolished Properties 2011-2021

Dallas Area Habitat for Humanity's Redevelopment Efforts

Dallas Area Habitat for Humanity (DAHfH), a nonprofit organization, aims to revitalize neighborhoods and increase homeownership opportunities for families often labeled "the working poor." Dallas Habitat offers financial education and neighborhood empowerment programs. It is best known for its low-cost mortgages and its efforts to build new, affordable, single-family homes for local families who make between 25% and 60% of the area's median income. Volunteers, including prospective homebuyers, traditionally provide much of the lower-skill labor required to build each new home.

According to the DAHfH, 3,711 volunteers contributed 45,676 volunteer hours of construction labor and financial and homeownership education in 2019. Since 1995, the agency has built 1,134 houses in Dallas. Its most productive year was 2012, when it built 180 new homes in Dallas.
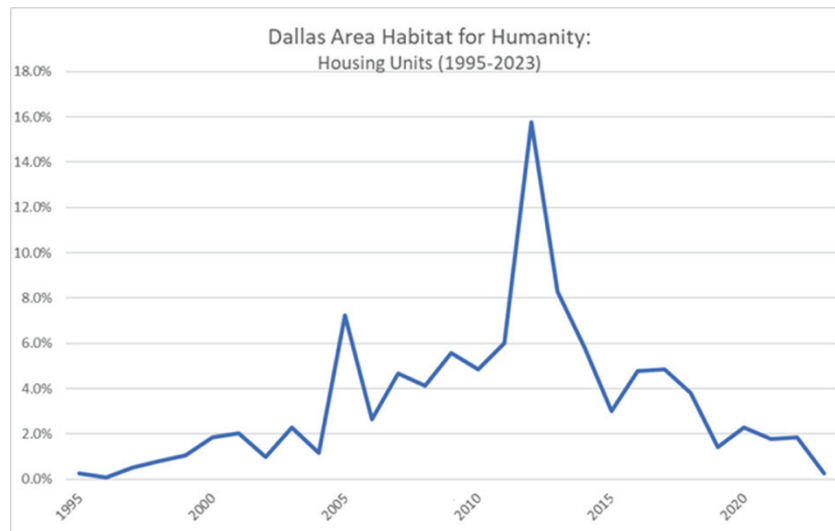
Figure 19 *Habitat homes built in Dallas 1995-2023*

Based on data supplied by DAHfH, the UNT research team mapped the nonprofit's 1,134 new homes to their appropriate zip codes, then laid that map over the modified composite blight index maps for 2011 and 2021. The housing markets in some of these zip code areas were extremely depressed. For example, the city's GrowSouth Initiative reported that the 2012 median home sales prices in two East Oak Cliff neighborhoods were $25,000 and $35,000. Private, for-profit homebuilders had forsaken these communities. DAHfH construction was sometimes the first significant residential investment in these areas in decades.

Researchers then compared the 2011 and 2021 blight maps with the Habitat overlay. In four of the five zip codes where DAHfH built the most homes, the number of blighted census tracts declined from 17 to 10 (see **Table 3**).

Top 5 Zipcod	Number of DAHfH	Census Tracts Within Zipcode	Number of Census Tracts (CT) in Blighted			
			2011		**2021**	
75212	259	5	2 CT	1.8 sq. mile	1 CT	1.1 sq. mile
75216	224	4	3 CT	2.0 sq. mile	3 CT	2.0 sq. mile
75215	151	5	5 CT	2.4 sq. mile	2 CT	1.1 sq. mile
75241	135	16	6 CT	10.8 sq. mile	4 CT	6.1 sq. mile
75253	79	8	1 CT	3.9 sq. mile	0 CT	0 sq. mile
Others	286					
Total	**1,134**	**350**		17		10

Table 3. *Blighted census tracts decrease in areas with Habitat homes (2011-2021)*

For example, the 75212 Zip code in West Dallas includes five census tracts and almost 23 percent of the houses DAHfH has built since 1995. In 2011, two of the five census tracts in 75212 were blighted according to the Composite Blight Index. Ten years later, only one census tract was still blighted. Translated from census tracts to a geographic measure, that means the land area considered blighted fell from 1.8 square miles in 2011 to 1.1 square miles in 2021.

The number of blighted census tracts also fell in zip codes 75215, 75241 and 75253, which include parts of East Oak Cliff, Southeast Oak Cliff and Southeast Dallas. In total, in the zip codes where Habitat was most active, the land area classified as blighted shrank by more than 50 square miles.

CONCLUSION

This report attempts to provide actionable data and analysis about urban blight in Dallas: the factors that contribute to it, where it exists, and how it has changed in the decade between 2011 and 2021. Our University of North Texas research team is grateful to Dallas Area Habitat for Humanity for giving us an opportunity to study blight in Dallas. We hope our data and findings will be useful to DAHfH and other nonprofits working to improve the city's housing and neighborhoods, and to elected officials, community advocates and scholars in Dallas and beyond.

To understand and measure blight in Dallas, the UNT research team developed a Composite Blight Index composed of 14 separate physical and socio-economic indicators of blight. Our indexing methodology, which could be replicated in other locations, allowed us to create and compare maps that showed how patterns of blight had change over time. We were able to map each indicator separately and to identify statistical relationships between variables.

Our research revealed that the number of census tracts categorized as "blighted," or the most severely impacted by blight, fell from 51 census tracts in 2011 to 31 tracts in 2021. This is a laudable achievement, but still leaves about 8% of Dallas residents – more than 100,000 people - living in blighted census tracts. Another 62% of the city's population lives in areas of moderate blight. On a more positive note, the city's strong focus on development in southern Dallas appears to be working. Most of the tracts where blight eased were in the southern half of the city.

The method we employed has limitations. This study uses only secondary data that focus on physical indicators, and socio-economic indicators using city, county, and federal data. It does not quantify blight block-by-block, which is how residents experience it, nor does it explain why blight has changed over time in Dallas. Proving causation was beyond the scope of our research.

A more comprehensive understanding of blight will require the involvement of those affected by it. In future research, our research team plans to develop a more holistic methodology that engages local organizations and residents. Their experiences and insights into neighborhood values are an important source of information for city leaders working to identify effective strategies to prevent and eradicate blight.