Market Study

July 2021

CONTENTS

1. POPULATION PROJECTIONS

TOTAL POPULATION

Cleveland's population has declined since the 1980s. Since 2010, the city's population decreased by 5.33% while the county's decreased by 3.09%. The population of the Cleveland-Elyria-Mentor Metropolitan Area has also decreased, by 1.19%, since 2010.[1]

In order to estimate the population of Cleveland, Cuyahoga County, and the Cleveland Metro Area in 2030, we use a projection method called the cohort-survival or cohort-component method. It works by "surviving forward" the members of each age and sex cohort of the population from a base year using that cohort's recent natality, mortality, and migration rates. As such, if the number of people of an age to have children declines in one period, there will be fewer children projected to be born in the next, and so on. More details on this method are included in the methods note on page 6.

As shown in Table 1 below, Cleveland's population is projected to decrease at a rate of 2,370 people per year between 2018 and 2030, which represents a decline of about 6% over the coming decade. The county population is projected to decrease by 6,220 per year, and the metropolitan population by 8,900, in the same time frame. Notably, the city's population decline will account for about 27% of the metropolitan decline, though Cleveland is home to less than 20% of the metro area's total population.

Table 1. Projected Population 2022-2030

	2014	2018	2022 (Forecast)	2026 (Forecast)	2030 (Forecast)
City of Cleveland	393,490	386,542	378,281	369,009	358,100
Younger than 20	27%	25%	24%	23%	22%
20 to 35	23%	25%	25%	25%	25%
36 to 63	37%	35%	34%	33%	33%
64 or older	13%	15%	17%	19%	20%
80 or older	4%	4%	3%	4%	4%
Cuyahoga County	1,268,200	1,245,694	1,223,382	1,198,481	1,171,084
Younger than 20	25%	23%	22%	21%	20%
20 to 35	20%	22%	22%	22%	22%
36 to 63	38%	37%	35%	34%	34%
64 or older	17%	19%	21%	23%	25%
80 or older	5%	5%	5%	5%	6%
Cleveland Metro Area	2,068,524	2,037,496	2,005,144	1,969,937	1,930,714
Younger than 20	25%	23%	21%	20%	19%
20 to 35	19%	20%	21%	21%	21%
36 to 63	39%	38%	37%	35%	35%
64 or older	17%	19%	21%	24%	26%
80 or older	11%	11%	11%	12%	14%

[1] The Cleveland-Mentor-Elyria Metropolitan Area includes Cuyahoga County (which is its densest and most populous county) as well as the four adjoining counties of Lorain, Medina, Geauga, and Lake.

Figure 1. Projected Percent Change in Four-Year Age Cohorts in Cleveland, 2018-2030
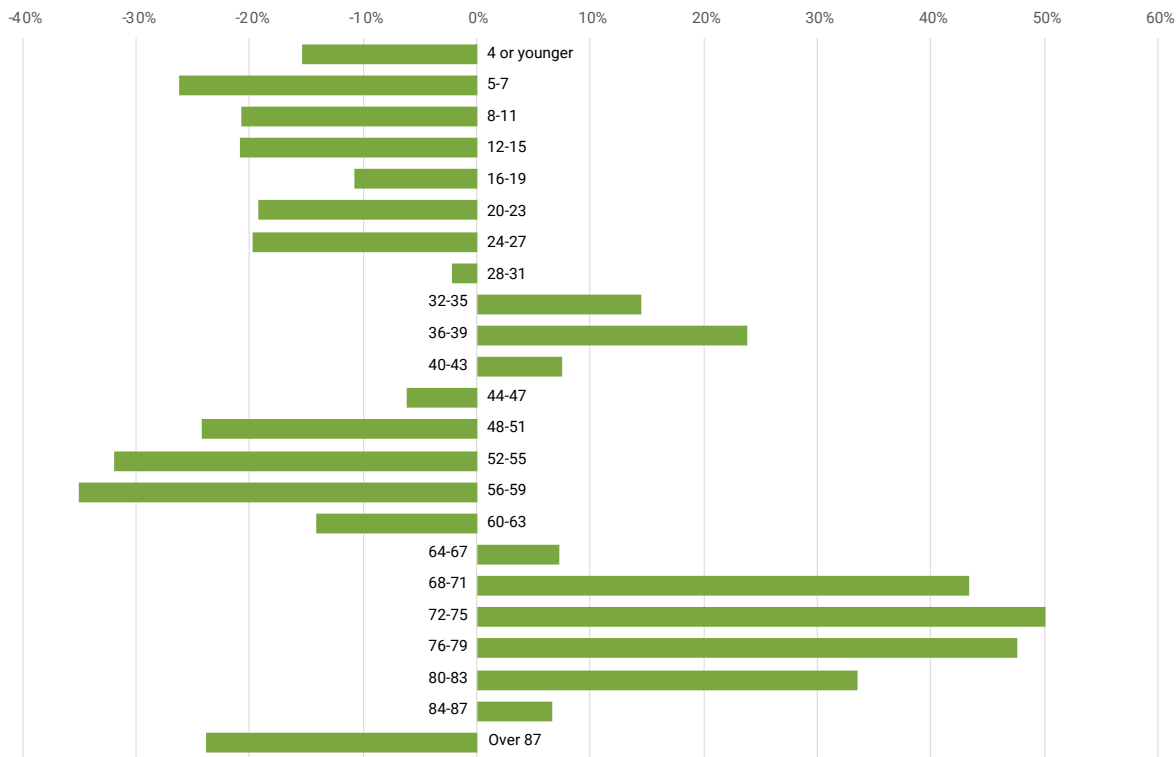
The age composition of the population will also shift, with persons 64 or older making up 20% of the city's population, compared to only 15% in 2018. The shares of Clevelanders aged younger than 20 and aged 36 to 63 are projected to decline. Figure 1 above shows the projected percent change in each age group in Cleveland by 2030:

- The total number of residents aged under 32 (currently about 172,000 people) is expected to decrease by 17%, to 143,400.
- Those aged 32 to 43, by contrast, will increase by 15%, from 55,400 to 64,000.
- The group of residents aged 44 to 63 will decrease by 23%, from 101,600 to 78,100.
- Those aged 64 to 87 will increase by 30%, from 53,200 to 69,300.
- Finally, the number of very old residents (aged 88 or older) will decrease by 24%. (It is important to note that this group is very small—less than 4,000 people in total—so the projected decrease is subject to large margins of error).

POPULATION PROJECTION METHOD

As described previously, the cohort-survival projection method "survives forward" the members of each age and sex cohort of the population from a base year using that cohort's recent natality, mortality, and migration rates. In order to project from a base period of 2014 to 2018 to a target year of 2030, we use four-year age cohorts which are "survived forward" three times (to 2022, 2026, and finally 2030).

Using 2014 to 2018 as a base period allows us to project forward based on a time when Cleveland had emerged from the depths of the Great Recession and population decline had slowed. If five-year age cohorts had been used, we would have to project from a base period of 2010 to 2015 (which falls squarely during the Recession recovery) in order to arrive at 2030 by multiples of five. Using four-year cohorts means, however, that we cannot use Census tabulations of American Community Survey (ACS) data, which break out age in five-year (not four-year) increments. Instead, we use the Public Use Microsample (PUMS) of the ACS, which provides household-level data for a sample of households in a PUMA, or Public Use Microsample Area.

We used the PUMS of 2014-2018 five-year ACS data to construct the base cohorts by age and sex. We use 2014 death rates by sex and age, and birth rates by sex and age of mother, to estimate natural population change. We then use population change between the 2010-2014 PUMS ACS and the 2014-2018 PUMS ACS to estimate migration rates.

To project the 2030 population of the Cleveland Metropolitan Area and of Cuyahoga County, we used PUMS data for all households in the county. To project population for the City of Cleveland, we used PUMS data for the PUMAs that fall within the city. Importantly, PUMA boundaries shifted slightly in 2012.

Since the CDC mortality data age cohorts were either five or ten years, they did not match our four-year age cohorts. To account for this, we weighted death rates based on the number of years that fell within the respective CDC age cohorts. For example, the weighted death rate for those aged 12 to 14 is calculated as 75% of the CDC's death rate for those aged 5-14 (since three of the four years fall within this category) plus 25% of the death rate for those aged 15 to 24 (since one of the four years is in this category).

Additionally, since the CDC natality and mortality data are not available at the city level, we used the rates reported for Cuyahoga County and adjusted them based on Cleveland's share of the overall county population. In 2014, Cleveland's population was estimated at 393,490, or 31% of Cuyahoga County's population (estimated at 1,268,200). Therefore, we took the natality and mortality numbers at the county level and multiplied them by 0.31 to get an estimate for Cleveland.

2. HOUSING PROJECTIONS

TENURE

In order to develop an estimate of future housing demand, we break out projected population by tenure (renter vs. homeowner) by applying ACS estimates for tenure for householders in each age cohort in the base year, 2018, to projected population by age cohort in 2030. Note that when we convert from total population to householder population in each cohort, we apply a headship rate that factors in the trend towards smaller household sizes in Cleveland.

Based on these results, the City of Cleveland would see a total decline of 4,029 occupied housing units between 2018 and 2030, or about 310 units per year. The demand for homeownership units would increase by 64 units per year, which represents a total increase of 640 units between 2020 and 2030, while the demand for rentals would decrease by 374 units per year.

Table 2. Projected Tenure 2030

	Population Aged 12+	Headship	Own (If Head)	Rent (If Head)
City of Cleveland	**313,913**	**178,814**	**70,702**	**108,112**
Younger than 20	34,208	2,475	16	2,459
20 to 35	87,921	44,684	7,033	37,651
36 to 63	119,055	76,453	31,230	45,223
64 or older	72,729	55,202	32,423	22,779
80 or older	7,499	5,876	3,459	2,417
Cuyahoga County	**1.03 million**	**559,824**	**314,264**	**245,560**
Younger than 20	99,495	6,081	153	5,928
20 to 35	252,877	115,395	33,552	81,843
36 to 63	394,131	236,908	141,734	95,174
64 or older	287,047	201,439	138,825	62,614
80 or older	36,437	28,399	16,539	11,860
Cleveland Metro Area	**1.73 million**	**914,683**	**569,079**	**345,604**
Younger than 20	242,541	27,967	1,705	26,262
20 to 35	404,119	175,896	60,698	115,198
36 to 63	673,360	394,527	261,427	133,100
64 or older	493,101	336,286	246,734	89,551
80 or older	117,326	88,146	58,373	29,772

It is important to note that these projections do not take into account changes in preferences. Projected changes in housing demand by tenure are based solely on changes in Cleveland's age profile. Since we project that Cleveland's population will age, and that older Clevelanders are more likely to own their homes, we project increased demand for homeownership. Those aged 64 or older, among whom we are projecting a large percent increase by 2030, own their own homes at a rate of nearly 60%, compared to those aged 20 to 35, a group projected to shrink, who are homeowners only 16% of the time.

In the recent past, renter-ship in Cleveland has in fact been rising while homeownership has seen a downward trend. This may not be the result of a preference for renting, however. The data also show that the share of Clevelanders of the age to have school-aged children (35 to 44) is declining from year to year (this group declined by 9,814 individuals, or 18%, between 2010 and 2018). In addition, the homeownership rate for this group of households is declining (from 43% in 2010 to 35% in 2018). This suggests that younger Clevelanders may be migrating to the County or elsewhere in order to buy homes. It may be useful to set a higher target for owner-occupant homes in the city in order to retain these families.

HOUSING TYPE

We also break out projected population by housing type (single-family units, 2-to-4-unit structures, and 5-plus unit multifamily structures), again applying ACS 2018 estimates to projected population by age cohort in 2030. The results suggest that the demand for single-family units will decline the least, at 70 fewer units per year, with demand for units in 2-4-unit buildings declining at a rate of 75 units per year, and demand for multifamily units declining at a rate of 98 units per year.

Again, these projections are based solely on anticipated shifts in age demographics. Also important to note is that these projections do not account for induced demand—the idea that adding new housing units in "hot" neighborhoods may stimulate additional demand. It is difficult to anticipate, though, what share of the demand stimulated in this way would come from other neighborhoods within the city—thus resulting in movement from one area to another, rather than a net increase in citywide demand.

Table 3. Projected Housing Type in 2030

	Single-Family	2-4-Unit Building	Multi-Family	Other
City of Cleveland	**95,288**	**34,837**	**35,669**	**12,701**
Younger than 20	164	84	149	2,078
20 to 35	17,216	10,502	13,134	3,832
36 to 63	45,596	14,976	12,365	3,516
64 or older	32,312	9,275	10,020	3,275
80 or older	3,307	799	537	914
Cuyahoga County	**359,387**	**54,510**	**113,171**	**30,133**
Younger than 20	417	225	510	4,930
20 to 35	53,251	17,716	38,207	6,222
36 to 63	169,874	22,400	38,571	6,062
64 or older	135,846	14,169	35,884	12,920
80 or older	15,807	1,497	4,244	4,228
Cleveland Metro Area	**637,723**	**70,711**	**149,652**	**52,753**
Younger than 20	4,477	3,174	8,832	11,483
20 to 35	92,142	22,470	50,458	10,826
36 to 63	301,653	29,231	51,359	12,284
64 or older	243,408	18,743	47,144	23,148
80 or older	56,784	4,445	12,280	10,793

HOUSING AFFORDABILITY

Another important step is to break out projected housing demand by income band (as a share of area median income) in order to determine how affordable additional units for Cleveland households must be. We do this by again applying the distribution of households across the income spectrum in 2018 to our 2030 projection. Table 4 shows that we would expect over 75% of Cleveland's households in 2030 to demand a unit affordable at 80% of area median income (AMI) or below; the majority of the demand in this category would be for rentals. Only 23% of households are anticipated to demand a market-rate unit, and the demand is evenly split between moderately priced units affordable to those between 80 and 120% of AMI and higher-cost units affordable to those with annual household incomes over $87,600.

Table 4. Projected Housing Demand by Tenure and Income in 2030

	Household Income Range	Share of Homeowners	Share of Renters	Share of All Households
City of Cleveland				
<30% AMI	$0 to $22,000	23%	52%	40%
30-50% AMI	$22,000 to $36,500	18%	19%	18%
50-80% AMI	$36,500 to $58,400	22%	15%	18%
80-120% AMI	$58,400 to $87,600	18%	8%	12%
>120% AMI	Over $87,600	19%	6%	11%
Cuyahoga County				
<30% AMI	$0 to $22,000	12%	41%	24%
30-50% AMI	$22,000 to $36,500	12%	19%	15%
50-80% AMI	$36,500 to $58,400	18%	20%	19%
80-120% AMI	$58,400 to $87,600	19%	12%	16%
>120% AMI	Over $87,600	38%	9%	26%
Cleveland Metro Area				
<30% AMI	$0 to $22,000	10%	38%	20%
30-50% AMI	$22,000 to $36,500	12%	19%	14%
50-80% AMI	$36,500 to $58,400	18%	20%	19%
80-120% AMI	$58,400 to $87,600	20%	13%	18%
>120% AMI	Over $87,600	40%	10%	29%

Currently, many Cleveland residents do not have access to housing units that meet their income-based demand for affordability. A unit is typically considered affordable if a household is paying no more than 30% of its income towards housing costs. By this definition, as of 2018, about 48,200 rental units (about half of all occupied rentals) and 18,400 ownership units (about a quarter of all occupied ownership units) are unaffordable to their occupants.

A household is severely cost-burdened when it devotes over half of its monthly income towards housing costs. In Table 5 below, we calculate the share of Cleveland households by income band who are severely cost-burdened, and most urgently require interventions in order to access affordable housing. <u>About 26,300 renter households and about 9,300 owner households are severely cost-burdened</u>. The large majority are extremely or very low-income households, especially among renters.

The share of households in Cleveland that are severely cost-burdened decreased between 2010 and 2018, even though incomes did not increase, because average housing costs fell—especially for homeowners. It is uncertain whether this trend will hold in the coming years. The COVID-19 pandemic has caused income losses for many households, yet rents have not yet adjusted significantly and home values and prices remain very strong in some neighborhoods. As a result, we would expect housing cost burdens to rise, at least in the short term.

Table 5. Share of Households that Are Severely Cost-Burdened by Income Band, 2018

	Household Income Range	Severely Cost-Burdened Homeowners	Severely Cost-Burdened Renters	Severely Cost-Burdened Households
City of Cleveland				
<30% AMI	$0 to $22,000	13%	26%	21%
30-50% AMI	$22,000 to $36,500	50%	49%	49%
50-80% AMI	$36,500 to $58,400	10%	2%	5%
80-120% AMI	$58,400 to $87,600	2%	1%	1%
>120% AMI	Over $87,600	0%	0%	0%
Cuyahoga County				
<30% AMI	$0 to $22,000	10%	23%	15%
30-50% AMI	$22,000 to $36,500	57%	54%	55%
50-80% AMI	$36,500 to $58,400	15%	4%	9%
80-120% AMI	$58,400 to $87,600	4%	2%	3%
>120% AMI	Over $87,600	1%	0%	1%
Cleveland Metro Area				
<30% AMI	$0 to $22,000	56%	52%	53%
30-50% AMI	$22,000 to $36,500	16%	4%	10%
50-80% AMI	$36,500 to $58,400	4%	2%	3%
80-120% AMI	$58,400 to $87,600	1%	0%	1%
>120% AMI	Over $87,600	0%	0%	0%

HOUSING CONDITIONS

Even though Cleveland's population is projected to continue to decline, the city will still need to add new units, either via new construction or gut rehabilitation of existing, uninhabitable units. Each year, both vacant and formerly occupied units drop out of the housing stock because they are demolished or because they have become uninhabitable. In addition, new units can contribute to affordability in a variety of ways, including by easing upward price pressure on existing low-cost units or adding directly to the affordable stock. Finally, some units are in poor condition but still habitable; for these, the demand is for substantial repairs rather than for a new unit.

Vacant Units

As of mid-January 2021, the Department of Building and Housing estimated there are about 7,700 "vacant and distressed" housing units in the city. These units are candidates for either extensive rehab work or demolition. Each year, hundreds of units are boarded up or demolished. In 2019 (the most recent year for which data are available), the City awarded 1,395 residential demolition permits and 1,804 permits to board up vacant residential buildings (some of these may be for the same unit). And each year, additional units become vacant and distressed. In the average year between 2010 and 2018, the number of vacant housing units neither for rent or sale increased by 690. For the purposes of targeting, we will assume that about 2,000 housing units drop out of the housing stock each year due to vacancy and distress and/or demolition.

Occupied Units

In 2015, the Western Reserve Land Conservancy found that about 1.4% of occupied structures in Cleveland were deteriorated, unsafe, or hazardous (rated D or F). Another 14% of occupied structures were rated C—still habitable but in need of substantial repairs. Assuming that these proportions still hold and are similar for residential structures, there may be approximately 3,000 severely deteriorated occupied homes, and about 29,700 occupied homes in need of substantial repairs, in Cleveland today.

In addition, a 2018 update of the Conservancy's property inventory found that, in the study neighborhoods, the share of C-rated structures had increased by 17.4% since 2015 (or about 5.8% per year). Projecting this trend into the future would suggest that a total of 55,600 units would become C-rated or worse by 2030.

3. CITYWIDE HOUSING TARGETS

TOTAL PROJECTED NEED IN CLEVELAND

Based on the calculations described above, we can derive three kinds of housing targets: a "production" target for newly constructed homes or existing vacant units that are fully rehabilitated; a "preservation" target for substantial repairs to existing homes; and a "protection" target for affordability interventions than can help severely burdened households stay in their homes.

Projected population decline suggests that the overall number of occupied homes in Cleveland will decrease by -3,100 between 2020 and 2030. We project demand for 640 additional homeownership units, however, based on trends in population age and household formation (i.e., as Cleveland households continue to age, and as household sizes continue to shrink, we project that they will demand a greater number of homeownership units). In addition, to replace units lost to severe deterioration and demolition, 20,000 units would need to be added between 2020 and 2030. Table 6 below shows how these new units would be distributed among projected households by income and tenure.

Table 6. Housing Production Targets

AMI Range		Owners by AMI	Added units		Owners by AMI	Renters by AMI	Added Own Units	Added Rental Units	Total New Units
Cleveland		100%	640		40%	60%	7,908	12,092	20,640
<30% AMI	+640 home-ownership units due to shifts in Cleveland's age make-up	23%	144	+20,000 units to replace those lost to severe deterioration and demolition	23%	52%	1,783	6,288	8,215
30-50% AMI		18%	115		18%	19%	1,426	2,298	3,840
50-80% AMI		22%	140		22%	15%	1,730	1,814	3,684
80-120% AMI		18%	117		18%	8%	1,442	967	2,525
>120% AMI		19%	124		19%	6%	1,527	726	2,376

In addition, we projected based on property inventories conducted in 2015 and 2018 that a total of 55,600 units would need substantial repairs by 2030. The fact that C-rated properties have historically been concentrated in lower-income neighborhoods suggests that all or most of the units requiring preservation going forward will be occupied by households with annual household incomes at or below 50% of area median income (AMI). Table 7 breaks out preservation targets among very low-income (30-50% AMI) and extremely low-income (<30% AMI) households based on the projected income and tenure split in 2030.

Table 7. Housing Preservation Targets

AMI Range		Low-Income Owners by AMI	Low-Income Renters by AMI	Preserved Ownership Units	Preserved Rental Units	Total Preserved Units
Cleveland	+55,600 units in need of substantial repairs	29%	71%	15,852	39,748	55,600
<30% AMI		56%	74%	8,806	29,369	38,174
30-50% AMI		44%	26%	7,046	10,379	17,426

About 9,300 homeowner households and 26,300 renter households, many of whom are extremely or very low-income, are currently severely cost-burdened, indicating a need for additional affordable units or interventions to improve affordability of existing units. If we assume that these households are each paying exactly 50% of their monthly income in gross rent or housing costs, it would take at least $875 million by 2030, or about $73 million annually, to make their housing affordable. Table 8 shows the distribution of protection targets by tenure and income.

Table 8. Housing Protection Targets

AMI Range		Severely Cost-Burdened Owners by AMI	Severely Cost-Burdened Owners by AMI	Protected Ownership Units	Protected Rental Units	Total Protected Units
City of Cleveland		13%	26%	9,342	26,268	35,610
<30% AMI	+35,610 households that are severely cost-burdened	50%	49%	7,833	25,716	33,549
30-50% AMI		10%	2%	1,239	414	1,653
50-80% AMI		2%	1%	256	110	366
80-120% AMI		0%	0%	14	28	42
>120% AMI		0%	0%	0	0	0

All of the targets detailed above are aggregated in Table 9 to derive a total 2030 target of 118,850 new, preserved, and protected units, with the bulk of these targets concentrated among low-income households (<80% AMI).

Table 9. Aggregate 2030 Housing Targets

AMI Range	Household Income Range	Ownership Units			Rental Units			Total Units in 2030
		Preserve	Protect	New	Preserve	Protect	New	
<30% AMI	$0 to $22,000	8,806	7,833	1,927	29,369	25,716	6,288	79,939
30-50% AMI	$22,000 to $36,500	7,046	1,239	1,542	10,379	414	2,298	22,918
50-80% AMI	$36,500 to $58,400		256	1,870		110	1,814	4,050
80-120% AMI	$58,400 to $87,600		14	1,558		28	967	2,567
>120% AMI	Over $87,600			1,650			726	2,376
Total	Total	15,852	9,342	8,547	39,748	26,268	12,093	111,850

4. NEIGHBORHOOD PROJECTIONS

NEIGHBORHOOD PROJECTIONS

Projections of housing demand at the neighborhood level are subject to several caveats. Firstly, many data that are available at the city, county, or metropolitan level are not available at the level of the neighborhood or tract, and those tract-level data that do exist are subject to higher margins of error because of their smaller sample sizes. Secondly, building a home in one Cleveland neighborhood, even if it is supported by local demand, may simply trigger a household to move from another neighborhood, whose level of demand therefore shrinks. A third caveat is that neighborhood demand projections are based on current conditions in that neighborhood, but if the Ten-Year Housing and Investment Plan makes new investments in infrastructure, housing, and people in disinvested neighborhoods, we would certainly expect demand to shift. With these three caveats in mind, the following section examines past construction and housing condition trends, as well as key demographics, to estimate how many new and substantially rehabilitated units Cleveland's neighborhoods can support.

TOTAL UNITS AND OCCUPANCY

Table 10 presents data from the 2011-2015 and 2015-2019 five-year American Community Survey (ACS) estimates for each of Cleveland's ten study neighborhoods. The data show that, between 2015 and 2019, the total number of occupied units increased most in the Detroit Shoreway-Ohio City-Tremont study neighborhood, Greater Downtown, and University Circle-Circle North-Buckeye-Shaker-Larchmere, while it decreased most in the Southeast, West Park, and Midtown-Opportunity Corridor-Fairfax area. The number of vacant units decreased in many neighborhoods but increased substantially in the Greater Downtown area.

If we project these trends forward into the 2020s, we would expect "strong-market" neighborhoods including Detroit Shoreway-Ohio City-Tremont, Greater Downtown, and University Circle and surrounding neighborhoods to collectively see the number of occupied units increase by about 14,150 units, while the number of vacant units would increase by 1,300. Middle-market neighborhoods including Glenville, Central, and Hough; Metro West; and Old Brooklyn would collectively see an increase in occupied units of 280, and a decrease in vacant units of -3,273. Finally, underinvested neighborhoods including West Park, Southeast, and Midtown-Opportunity Corridor-Fairfax would see a decline of 4,500 occupied units, but an even larger decline in the number of vacant units (-4,700).

Table 10. Housing Stock and Occupancy by Neighborhood

	Total Housing Units, 2019	Occupancy Rate, 2019	Percent Change in Occupied Units 2015-2019	Percent Change in Vacant Units 2015-2019
Collinwood	19,250	79%	-1%	-12%
Detroit Shoreway, Ohio City, and Tremont	24,561	84%	16%	-13%
Glenville, Central, and Hough	22,339	67%	1%	-15%
Greater Downtown	10,811	82%	18%	43%
Metro West	13,340	82%	0%	-11%
Midtown, Opportunity Corridor, Fairfax	13,666	78%	-3%	-8%
Old Brooklyn	16,830	90%	0%	3%
Southeast	34,733	76%	-4%	-12%
University Circle, Circle North, Buckeye, Shaker, Larchmere	21,404	75%	5%	3%
West Park	35,294	89%	-1%	-4%

NEW CONSTRUCTION

Because Cleveland's permit database only records residential units permitted in 1-3-unit structures, it is not a reliable indicator of the actual volume of construction in the city. A better, though still imperfect, indicator is the number of units receiving tax abatements. The tax abatement program eliminates property taxes on 100% of the dollar amount by which qualifying new construction or remodeling activities increased the assessed market value of the property, and is available for all newly constructed single- and two-family dwellings or multi-family investor properties, as well as for rehabilitations of $500,000 or more for multifamily projects and of $2,500 or more for one- and two-family dwellings. The abatement remains in effect for a period of 15 years. Table 11 below shows the average annual per-unit abatements aggregated by neighborhood, based on abatement tallies for 2010-2019. The tax abatement is not automatic; in order to claim the tax abatement, an application must be submitted by November 1st of the year following the issuance of the building permit. This suggests that the number of abatements may be an underestimate of total construction, particularly for single-family homes. Since the eligible single-family rehabs can be very small, we do not include them in the counts below.

Table 11. Abated Units by Neighborhood

	Average Units Abated per Year (2010-2019)	Single-Family Units	Multi-Family Units
City of Cleveland	**651**	**71**	**580**
Collinwood	0	0	0
Detroit Shoreway, Ohio City, and Tremont	164	40	124
Glenville, Central, and Hough	19	1	18
Greater Downtown	214	1	214
Metro West	19	4	14
Midtown, Opportunity Corridor, Fairfax	70	8	63
Old Brooklyn	1	0	1
Southeast	14	7	7
University Circle, Circle North, Buckeye, Shaker, Larchmere	131	10	121
West Park	19	0	18

HOUSING CONDITIONS

Changing housing conditions contribute to the demand for repairs and/or new units. The best housing conditions data available in Cleveland were gathered via a citywide property inventory conducted by the Western Reserve Land Conservancy (WRLC) in 2015, and a 2018 follow-up in the neighborhoods with the highest volumes of deteriorated stock. Table 12 on the following page shows the share of properties with structures, which are predominantly residential, rated C, D, and F in 2015. The table also presents the percent change in properties in these categories between 2015 and 2018 when available. Structures were rated D or F ("deteriorated" and "unsafe") because they exhibited major exterior cracks, rotting wood, broken or missing windows, open holes, and/or were filled with trash; many of these structures are vacant. Several neighborhoods saw percentages of such structures reach the double digits in 2015. But the shares of D- and F-rated structures declined in all neighborhoods where follow-up data are available, likely due to a robust demolition campaign.

Structures with some cracking of brick or wood, major painting needs, crumbling concrete, and cracked windows or stairs were rated C ("fair"). The highest shares of structures falling into this category occur in Glenville-Central-Hough, University Circle-Circle North-Buckeye-Shaker-Larchmere, and the Southeast. Concerningly, the share of C-rated structures *increased* in all neighborhoods for which two data points are available.

Table 12. Structures Rated C, D, and F, and change 2015-2018, by Neighborhood

	Percent of Structures Rated D & F	Percent Change 2015-2018	Percent of Structures Rated C	Percent Change 2015-2018
Collinwood	4%	-4%	17%	+2%
Detroit Shoreway, Ohio City, and Tremont	2%		20%	
Glenville, Central, and Hough	13%	-4%	25%	+8%
Greater Downtown	2%		20%	
Metro West	3%		19%	
Midtown, Opportunity Corridor, Fairfax	10%	-2%	20%	+7%
Old Brooklyn	0%		6%	
Southeast	8%	-2%	22%	+5%
University Circle, Circle North, Buckeye, Shaker, Larchmere	15%	0%	24%	+1%
West Park	0%		7%	

TENURE, AGE, AND INCOME TRENDS

Table 13 presents projected tenure trends based on 2011-2015 and 2015-2019 ACS five-year estimates. The data show that, if current trends persist, several neighborhoods will see substantial shifts toward renter-ship, especially West Park and Greater Downtown. A few neighborhoods will see boosts in homeownership as renter-ship levels decrease, including University Circle-Circle North-Buckeye-Shaker-Larchmere and Glenville-Central-Hough.

Table 13. Projected Change in Tenure by Neighborhood

	Percent Owners, 2019	Percent Renters 2019	Change in Owners 2020-2030	Change in Renters 2020-2030
Collinwood	39%	61%	-689	301
Detroit Shoreway, Ohio City, and Tremont	32%	68%	4,391	3,971
Glenville, Central, and Hough	37%	63%	449	-186
Greater Downtown	8%	92%	417	3,478
Metro West	36%	64%	-403	423
Midtown, Opportunity Corridor, Fairfax	23%	77%	-397	-297
Old Brooklyn	56%	44%	-523	518
Southeast	53%	47%	-2,601	-176
University Circle, Circle North, Buckeye, Shaker, Larchmere	33%	67%	1,834	58
West Park	57%	43%	-1,908	1,250

If current trends continue, most neighborhoods will see the number of households headed by those aged 15 to 24 decline, while the number headed by seniors (aged 65 and over) will increase. Exceptions include the Detroit Shoreway-Ohio City-Tremont and Greater Downtown neighborhoods, which will see growth in the number of young households as well as among older ones.

Table 14. Projected Change in Households by Age of Householder

	Change in Householders 15-24 years old	Change in Householders 25-44 years old	Change in Householders 45-64 years old	Change in Householders 65 years or older
Collinwood	-238	228	-969	591
Detroit Shoreway, Ohio City, and Tremont	445	5,650	-666	2,933
Glenville, Central, and Hough	-1,038	1,792	-319	-173
Greater Downtown	550	2,627	62	655
Metro West	-430	971	-985	465
Midtown, Opportunity Corridor, Fairfax	-103	-140	-603	152
Old Brooklyn	-207	80	201	-78
Southeast	-563	-1,710	-578	74
University Circle, Circle North, Buckeye, Shaker, Larchmere	-376	-27	-717	3,011
West Park	25	344	-2,340	1,313

Meanwhile, all neighborhoods (with the exception of Collinwood) will see declines in the number of households earning $25,000 or less (in 2019 inflation-adjusted dollars), but vary widely as to whether households will increasingly fall in the $25,000-$50,000 or $50,000-$75,000 range.

Table 15. Projected Change in Households by Inflation-Adjusted Income

	Household Income < $25k	Household Income $25k - $50k	Household Income $50k - $75k	Household Income $75k - $200k	Household Income > $200k
Collinwood	29	428	-665	-194	20
Detroit Shoreway, Ohio City, and Tremont	-2,295	1,541	3,053	5,175	858
Glenville, Central, and Hough	-2,166	1,969	326	123	10
Greater Downtown	-261	560	1,975	1,810	-169
Metro West	-1,253	221	64	970	19
Midtown, Opportunity Corridor, Fairfax	-1,089	-401	711	20	71
Old Brooklyn	-717	1,200	-84	-447	36
Southeast	-2,445	-1,288	274	730	-55
University Circle, Circle North, Buckeye, Shaker, Larchmere	-1,085	1,269	361	844	511
West Park	-396	-674	-124	461	85

NEIGHBORHOOD DEMAND

Together, construction, conditions, and demographic trends can give us a rough picture of the 10-year housing demand by Cleveland neighborhood. These trends suggest that the greatest demand for new units will be in neighborhoods like Detroit Shoreway-Ohio City-Tremont, Greater Downtown, and University Circle-Circle North-Buckeye-Shaker-Larchmere that have a history of strong growth in the number of occupied units and in new construction abatements. Middle-market neighborhoods, if current patterns persist, will see very little population growth by 2030. Underinvested neighborhoods, absent any intervention, will see continued population decline and very limited construction. In spite of this variation, *all* Cleveland neighborhoods are projected to have significant repair needs going forward, based on the current number of, and rates of increase among, C-rated structures.

Table 16 presents a simplistic calculation of neighborhood demand for strong, middle, and underinvested neighborhoods based on straight-line projections. It also assumes that the stock of vacant units in each neighborhood, minus projected decreases in vacancy due to demolition, will absorb new households that do not access a new unit up to a "natural" vacancy rate of 5%. This calculation finds that construction of new units, based on past abatement trends, plus vacancy, will not fully accommodate demand in strong-market neighborhoods. Thus, we might expect a growing rate of construction in those locations, unless altered market conditions in other neighborhoods are able to absorb this unmet demand. Finally, the citywide need for substantial repairs to occupied homes is allocated across neighborhoods based on projected changes in the housing stock and in the percentage of C-rated structures.

Table 16. Neighborhood Demand Projections

	Change in Households 2020-2030	New Units 2020-2030	Households Absorbed by Projected Vacant Units	Projected Units in Need of Substantial Repair
Strong-Market Neighborhoods				
Detroit Shoreway, Ohio City, Tremont Greater Downtown University Circle, Circle North, Buckeye, Shaker, Larchmere	14,149	5,090	3,754	13,213
Middle-Market Neighborhoods				
Glenville, Central, Hough Metro West Old Brooklyn	280	390	73	14,522
Underinvested Neighborhoods				
Collinwood Midtown, Opportunity Corridor, Fairfax Southeast West Park	-4,517	1,030	0	26,966