

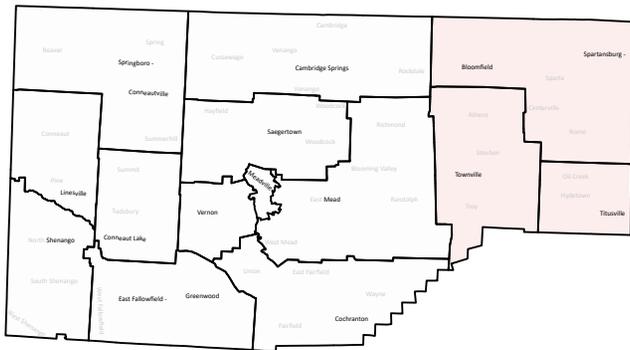


EASTERN REGION

SPARTANSBURG-BLOOMFIELD SUBMARKET

TOWNVILLE SUBMARKET

TITUSVILLE SUBMARKET



THE TITUSVILLE SUBMARKET

Comprising much of the southeastern corner of Crawford County, the Titusville Submarket includes three municipalities – Oil Creek Township, Hydetown Borough, and the City of Titusville. The Titusville Submarket is adjacent to the Townville and Spartansburg submarkets within Crawford County and shares a border with Venango and Warren Counties.

A HOUSING ECOSYSTEM ANALYSIS OF THE TITUSVILLE SUBMARKET (FOR A VISUALIZATION OF THE TEXT BELOW, SEE PAGE 10) –

We have placed the factors that determine a housing market’s characteristics into three categories: drivers, influencers, and indicators. Analyzing the trends and statistics related to these characteristics can guide local communities towards those housing interventions and strategies that make the most sense for them.

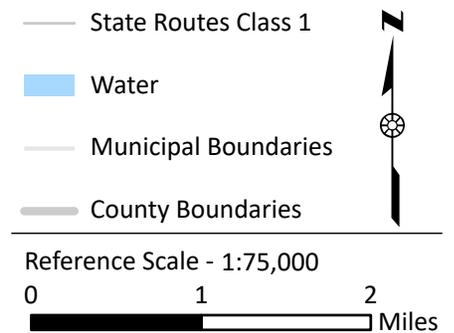
Drivers are those forces that directly propel the need for housing units or development. Drivers are designated by this icon (⚡). Our analysis identifies three major drivers: job growth, population growth, and housing stock growth. The pushing and pulling of these driving forces with each other creates the broad model of the housing market. To simplify, job opportunities attract people to an area, and in reverse, a population already in place may help attract employers. The housing stock of an area is the physical result of these population and economic trends and also drives them in turn, since its attractiveness and contribution to quality of life may attract people, or if in poor condition or unable to meet their needs, may repel them. We can collect the results of these broad forces into broad outcomes, designated by this icon (📊), namely total jobs, total population, and total housing stock.

Within this model, influencers are more specific, measurable aspects of the housing market that reflect these driving forces and, in response, may make an impact elsewhere in the market. Influencers have this icon (🔗). For instance, the influencer “Household Income Change” may be a response to a change in the wages offered from area jobs; in turn, this change in income may influence the choice of the homeowner to make renovations or move to a better home, which impacts the housing stock. We have identified eight influencers. Within Job Growth is the influencer “Household Income Change;” within Population Growth are “Home Value Change,” “Rent Change,” “Household Formation,” “Education,” and “Demographics;” and within Housing Stock Growth are “Building Type” and “Housing Units Built Pre-1940.”

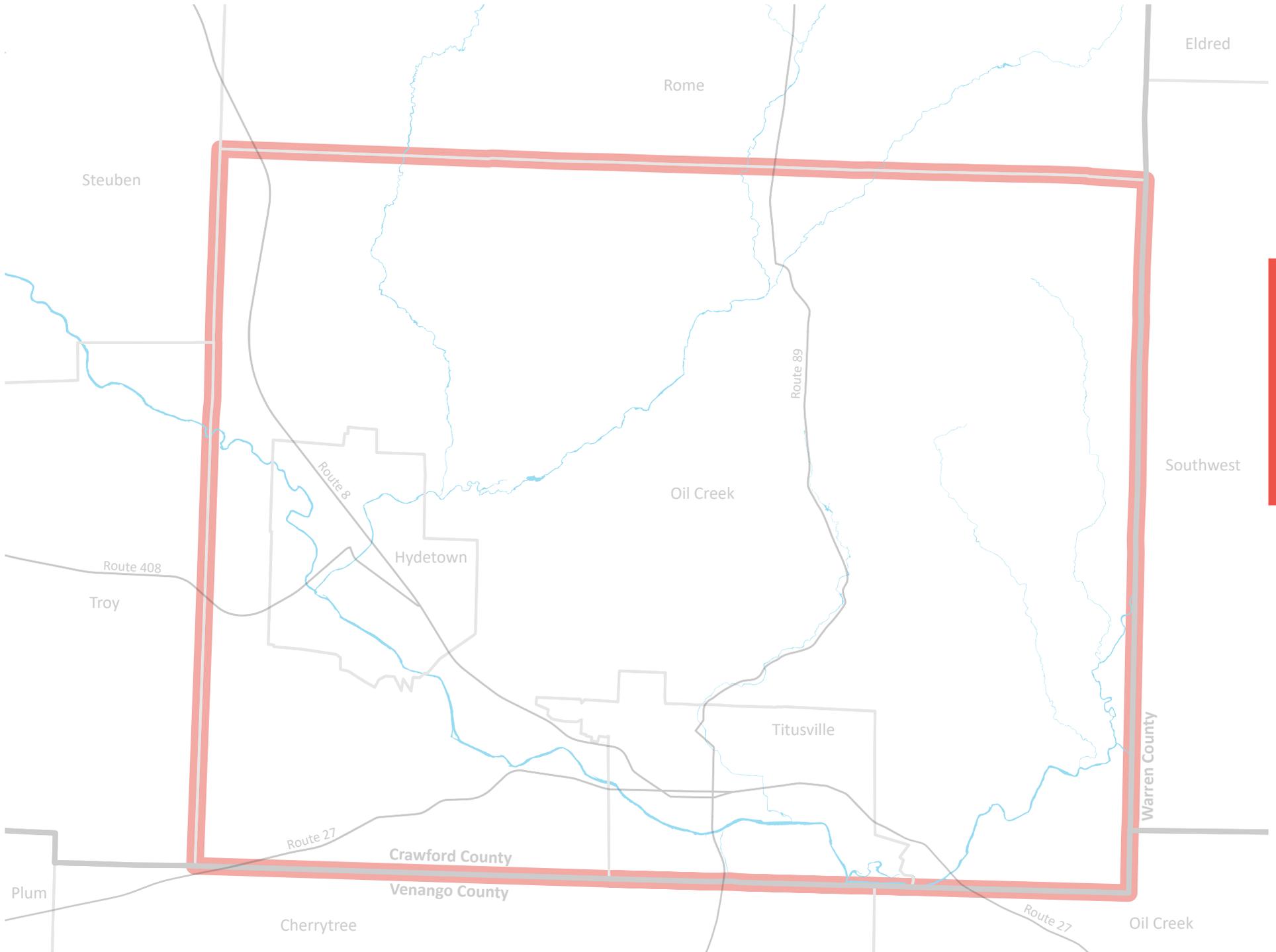
Indicators are metrics useful for providing further insight but are not assumed to produce wider impacts on their own. Indicators have this icon (🍷). These indicators generally gauge how well parts of the market are responding to each other or how people are being accommodated by the housing market. For instance, the indicator “Household Size vs. Unit Size” gauges whether available homes are too big or too small for the families that would occupy them, which indicates inefficiencies that may be harming the community. Useful indicators we have identified are “Vacancy Type,” “Vacancy Tenure,” “Median Home Value,” “Median Rent,” “Household Size vs. Unit Size,” “Loan Approval Rates,” and “Loan Purposes.”

Our analysis of the Titusville Submarket is based on the premise that a healthy housing marketplace consists of an environment where households have access to adequate housing and maintain the ability to willingly transition between housing segments in order to meet their needs. The terms “new household market,” “starter home market,” “move-up home market,” “downsizing market,” and “senior housing market” are used to define the stages of housing consumption that exist within a healthy housing market ecosystem. Since these terms are used frequently, please refer to the “glossary of terms” in the appendix for a definition of each.

A second premise built into our analysis is that positive growth in terms of jobs, housing units, population, incomes and other characteristics is necessary to sustain a housing market. Not all communities within submarkets may desire to take on significant development. The assumptions inherent within our analysis should be taken into consideration by municipalities when setting their local objectives and strategies.



Source: Created by the Crawford County Planning Office with data from the U.S. Census Bureau



TITUSVILLE SUBMARKET

JOB GROWTH ANALYSIS:

This section explores job growth as a driver and the relationships between its influencers, leading to the outcome of total jobs. Before exploring job growth trends, this section provides a study of the live-work trends for residents living within the Titusville Submarket.

LIVE-WORK TRENDS OF RESIDENTS LIVING WITHIN THE TITUSVILLE SUBMARKET —

The map on the next page uses dots to represent where residents living within the Titusville Submarket work. From this map, it is apparent that the City of Titusville contains a significant portion of jobs that are filled by local residents. Based on analysis from 4ward Planning, a strong concentration of employment opportunities within a submarket is crucial for producing an adequate job-to-housing ratio. A job-to-housing ratio between 0.75 and 1.5 is beneficial for potentially reducing vehicle miles traveled, which in turn promotes housing market stability since a portion of long distance commuters tend to move out of the submarket and closer to their job. The Titusville Submarket produces a job-to-housing ratio of 1.06, which lies nicely within the beneficial range.

The radar graph on the bottom left displays the distance and direction of where Titusville Submarket residents work. The dark red wedges of the graph demonstrate those commuting less than ten miles; however, a larger share of residents travel beyond ten miles to reach work. Live-work observations within the Titusville Submarket demonstrate somewhat split commuter trends with more residents leaving the Submarket for work than those both living and working inside. Many Titusville Submarket residents travel to jobs in Venango and Erie counties.

- Interstate Highways
- U.S. Routes
- County Boundaries
- - - State Boundaries

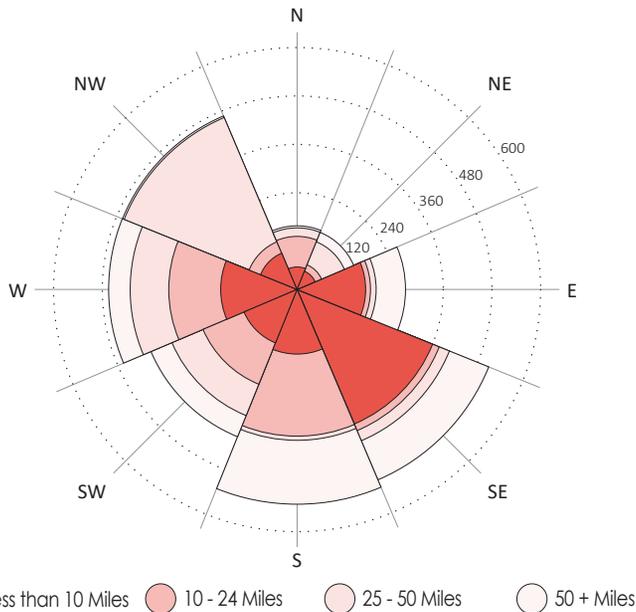


Reference Scale - 1:750,000

0 10 20 Miles

Source: Created by the Crawford County Planning Office with data from the U.S. Census Bureau

WHERE TITUSVILLE SUBMARKET RESIDENTS WORK



38.2%

of Titusville Submarket residents work at a location **inside the submarket.**

47.3%

of Titusville Submarket residents work inside **Crawford County.**

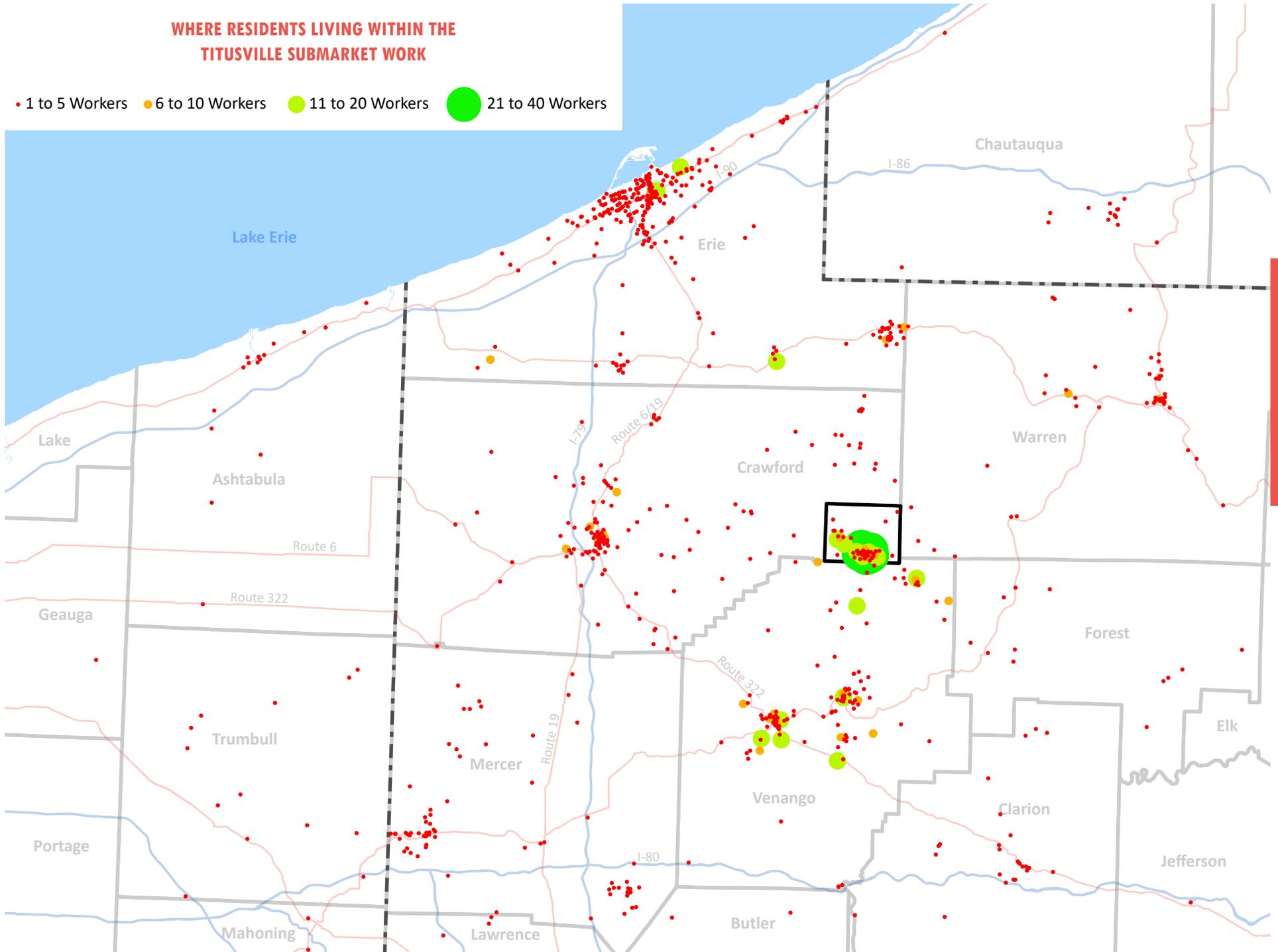
52.7%

of Titusville Submarket residents work outside **Crawford County.**

Source: U.S. Census Bureau Center for Economic Studies - Local Employment Dynamics Partnership

WHERE RESIDENTS LIVING WITHIN THE TITUSVILLE SUBMARKET WORK

- 1 to 5 Workers
- 6 to 10 Workers
- 11 to 20 Workers
- 21 to 40 Workers



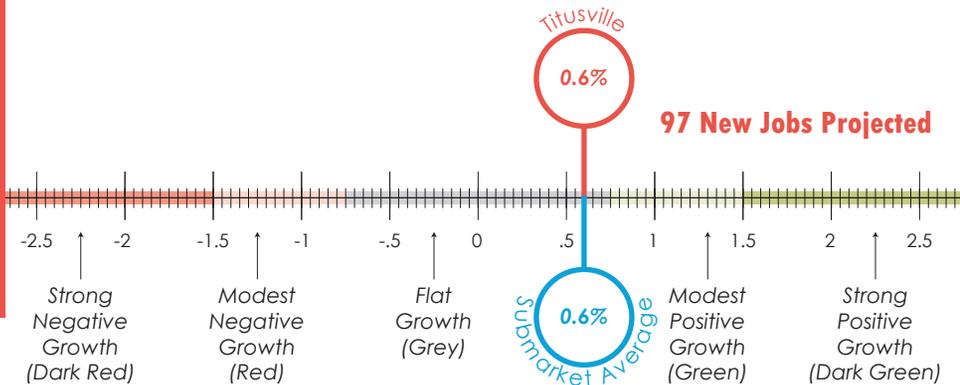
TITUSVILLE SUBMARKET

JOB GROWTH ANALYSIS:

🔧 JOB GROWTH —

From the graph below, the Titusville Submarket’s 0.6% projected annual job growth rate is equal to the submarket average of 0.6%. However, it is important to recognize that this rate lies within the “flat growth” range. Recognizing this, it can be assumed that projected job growth alone within the Titusville Submarket will not provide workers additional employment options which can be leveraged to encourage an increase in wages.

ANNUALIZED PROJECTED JOB GROWTH RATE (2017-2022)



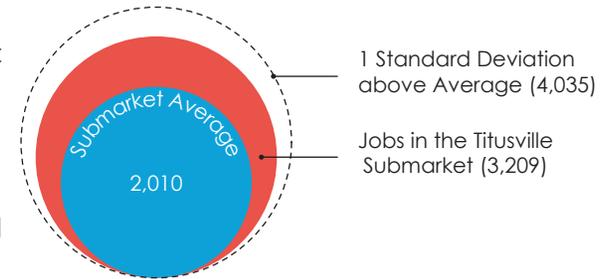
Source: Esri; PA CWIA; 4ward Planning, Inc., Retrieved 2018

👤 HOUSEHOLD INCOME CHANGE —

Despite flat job growth trends, from the projected change in household income displayed in the graph on the bottom left, the Titusville Submarket is expected to experience a modest-to-strong rate of household income growth. An increase in household income will bolster the stability of existing households while opening up new housing opportunities for others.

📊 TOTAL JOBS —

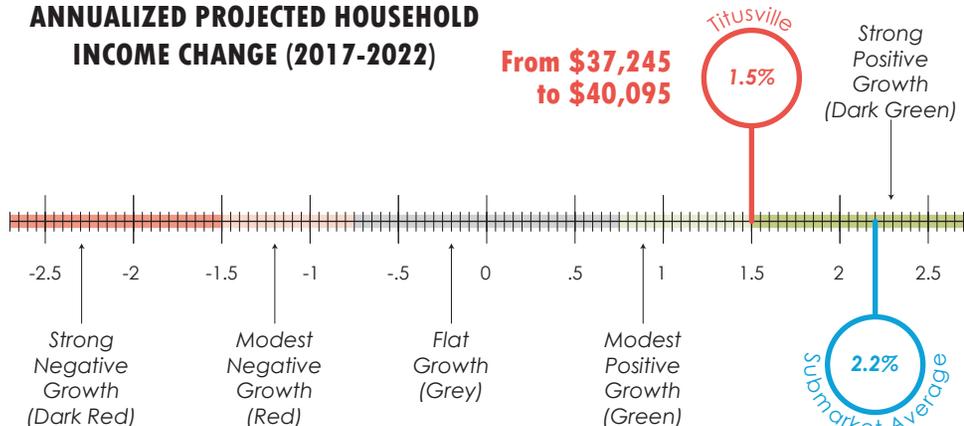
To explore the magnitude of the Titusville Submarket’s employment base, we compared the number of jobs inside the Submarket to the average number of jobs located within a Crawford County submarket. The standard deviation was applied to measure the average difference from the average value of jobs present within a submarket. If the Titusville Submarket contained more jobs than two standard deviations above the submarket average, then it was considered as a job center. From the graphic above, the Titusville Submarket contains more jobs than the submarket average but doesn’t deviate significantly above the average. Although jobs within the Submarket provide important opportunities for local residents, the Titusville Submarket is currently more reliant on the growth and stability of nearby job centers.



Source: U.S. Census 2011-2015 ACS

In summary, although the Titusville Submarket is projected to have a flat job growth rate, it is expected to experience a moderate-to-strong household income growth rate. Such household income growth may bolster housing market stability. Commuter trends show that Submarket residents are split between working within the Submarket and working elsewhere. Additionally, the Titusville Submarket alone is not a job center and therefore relies significantly on the productivity and growth of its surrounding region.

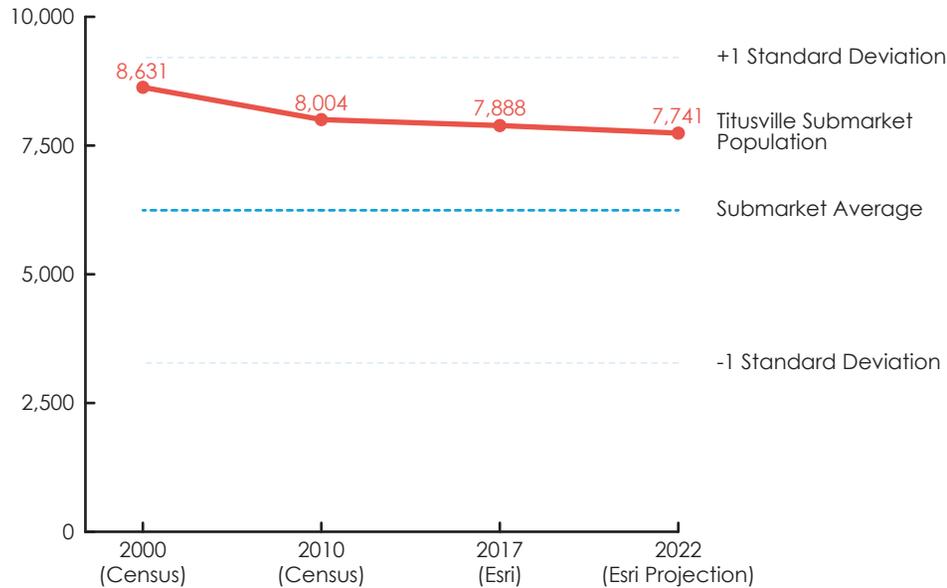
ANNUALIZED PROJECTED HOUSEHOLD INCOME CHANGE (2017-2022)



Source: 2010 ACS 5-Year Estimates; BLS., Esri, Retrieved 2018

POPULATION GROWTH ANALYSIS:

TITUSVILLE SUBMARKET POPULATION GROWTH



This section explores population growth as a driver and relationships between its influencers, which leads to a submarket’s total population. Population growth within the Titusville Submarket would directly lead to household formation and increased housing demand. Conversely, stagnant population growth may make it more difficult for homeowners to sell their homes when transitioning into other housing segments.

POPULATION GROWTH –

As demonstrated within the graph on the left, the population of the Titusville Submarket has declined since 2000. This decline suggests that population growth is not driving the demand for housing within the Submarket.

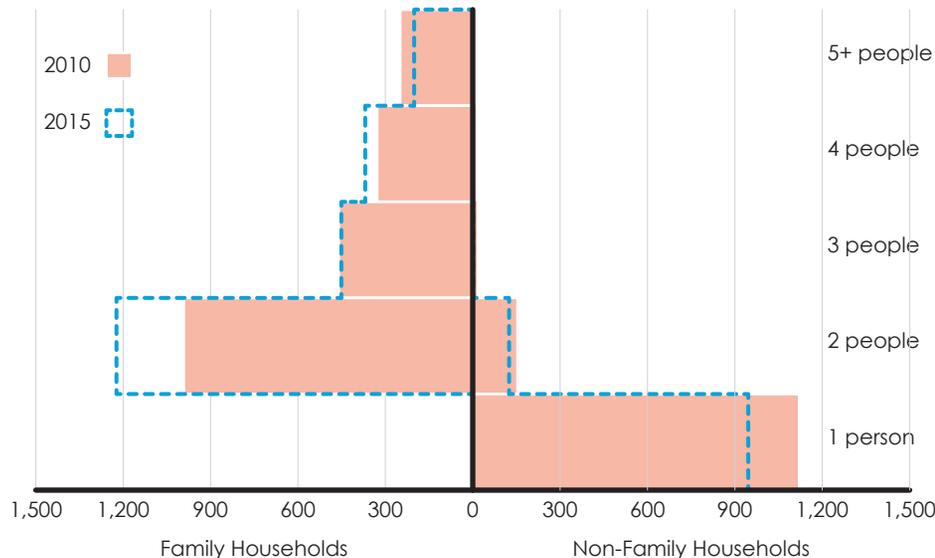
HOUSEHOLD FORMATION –

According to the U.S. Department of Housing and Urban Development, a household is:

all the people who occupy a housing unit. A household includes the related family members and all the unrelated people, if any, such as lodgers, foster children, wards, or employees who share the housing unit. A person living alone in a housing unit, or a group of unrelated people sharing a housing unit such as partners or roomers, is also counted as a household.

A household must comprise at least one person in a dwelling unit. It is almost impossible to experience population growth without seeing an increase in the number of households within a community. As more households are formed, demand for housing units increases as individuals, couples, families, and roomers seek living accommodations. The graph on the left demonstrates the composition of Titusville Submarket households by size between 2010 and 2015. The Titusville Submarket experienced a decline in one- and two-person non-family households between 2010 and 2015 while simultaneously seeing an increase in two- and four-person family households. Such household formation trends suggest a decline in the demand for rental units, since one-person households are less likely to be homeowners, with a potential increase in the demand for starter homes and move-up housing.

TITUSVILLE SUBMARKET HOUSEHOLD FORMATION TRENDS



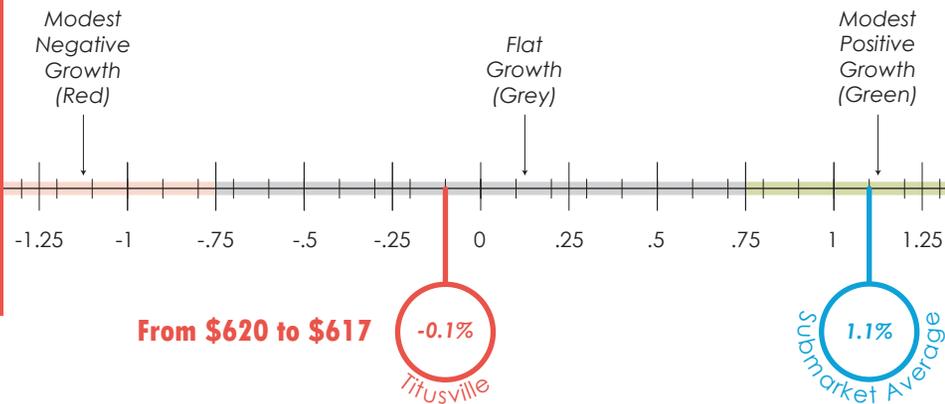
Source: U.S. Census

POPULATION GROWTH ANALYSIS:

RENT PRICE & HOME VALUE CHANGES —

An increase in median rents or home values may delay individuals from forming new households and thus ease housing demand. Conversely, declines in these values may encourage household formation as the ability to move into your own unit becomes more attainable. The line graphs below demonstrate how the Titusville Submarket's median rent prices and median home values have changed compared to the corresponding submarket averages. Despite slight fluctuations in rent prices and home values, both represent flat growth.

ANNUALIZED RENT CHANGE (2010-2016)



Source: U.S. Census

ANNUALIZED HOME VALUE CHANGE (2010-2017)



Source: U.S. Census (inflation adjusted)

RENTAL COST BURDEN —

Rental cost burden, or “affordability,” is an important indicator of how household income and median rent prices interact. The U.S. Department of Housing and Urban Development defines affordable housing as:

In general, housing for which the occupant(s) is/are paying no more than 30% of his or her income for gross housing costs, including utilities. Please note that some jurisdictions may define affordable housing based on other, locally determined criteria, and that this definition is intended solely as an approximate guideline or general rule of thumb.

A household that is spending more than 30% of its total income on housing, including essential utilities, is considered cost burdened. Cost burdened renter households may have more difficulty saving the money for a down payment on a home. The infographic below demonstrates the percentage of cost burdened rental households within the Titusville Submarket with comparisons to Crawford County and the submarket average. We see that the Titusville Submarket struggles with more cost-burdened renter households than other submarkets and the county.

RENTERS PAYING MORE THAN 30% OF INCOME ON HOUSING



48.7% of Titusville Submarket Renters
(730 Households)

41.3% of Crawford County Renters

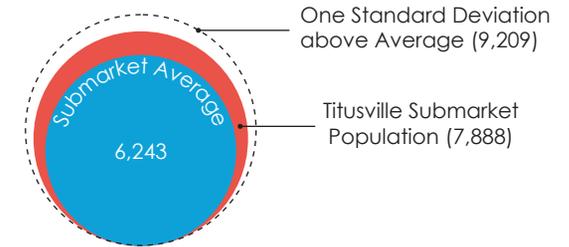
34.3% Submarket Average

Source: U.S. Census 2011-2015 ACS

POPULATION GROWTH ANALYSIS:

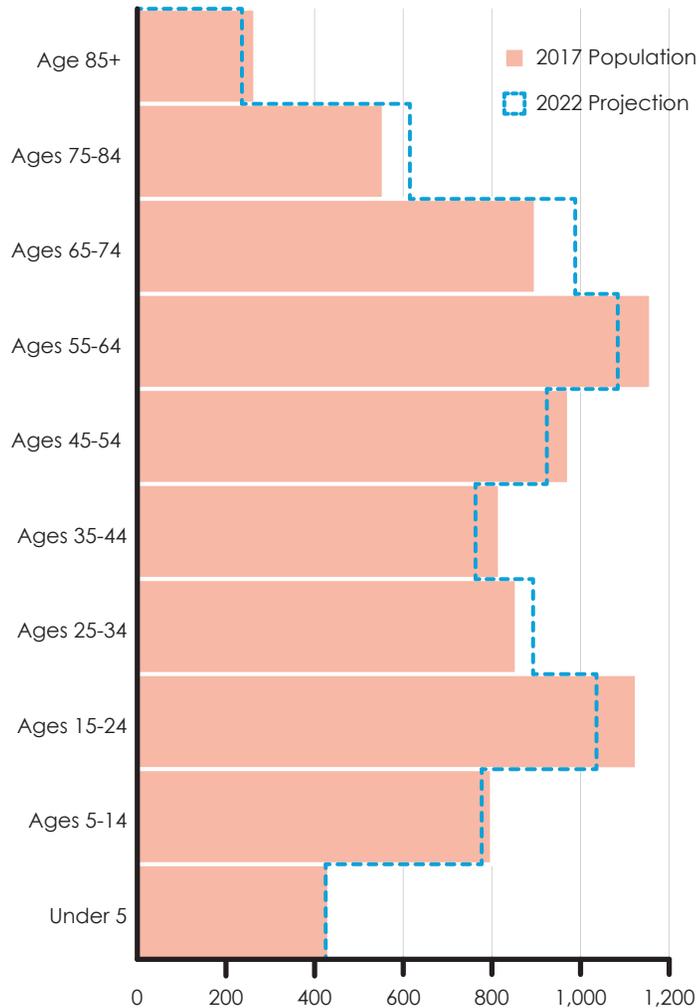
TOTAL POPULATION –

The cycling of households between different homes creates some of the housing demand within a community. To understand this type of housing demand, we established whether the Titusville Submarket represents a population center by comparing its population to the average population living within a Crawford County submarket. The standard deviation was applied to measure the average difference from the average population living within a submarket. If the Titusville Submarket contained more residents than one standard deviation above the submarket average, then it was considered a regional population center.



Source: Esri, Retrieved 2017

TITUSVILLE SUBMARKET POPULATION PYRAMID & PROJECTION



Source: Esri, Retrieved 2018

From the graphic shown on the right, although the Titusville Submarket is more populated than the submarket average, its population is less than one standard deviation above the submarket average. By this standard, the Titusville Submarket is not a regional population center but a local population center instead.

Although there must be some housing demand created by the cycling of households between different homes within the community, such demand may not exist at a magnitude large enough to drastically transform individual neighborhoods based on the shifting preferences of local consumers alone. Additionally, from the Submarket's relative population size, it can be inferred that the Titusville Submarket does not have the gravity to attract new residents on a speculative basis. Those moving into the Submarket are likely anchored in some personal manner such as to be close to a recently secured job or to be near family members.

AGE BRACKET COMPOSITION –

Whether the type or quantity of housing within a community meets the needs of its population is largely influenced by its age composition. For example, a community with a large senior population will likely generate demand for senior living accommodations such as older-age communities and assisted living facilities. Similarly, a community with an emerging population of younger, family-age residents will likely produce demand for additional "starter home" housing units. Additionally, significant voids in certain age cohorts comprising a community will produce lopsided demand for certain types of housing. The graph on the left demonstrates the age composition of the Titusville Submarket in 2017 with a projection to 2022. Age cohorts within the Titusville Submarket are projected to decline across the working age brackets comprising individuals ages 35-to-64 with a somewhat larger drop for those ages 15-to-24. These demographic changes may negatively impact the internal demand for both move-up (family-sized- 3-5 bedrooms) and smaller rental units (1-2 bedroom rentals- with the exception of senior friendly units). However, the slight increase projected for those ages 25-to-34 and among seniors ages 65-to-84 may produce local demand for both starter homes and downsizing homes.

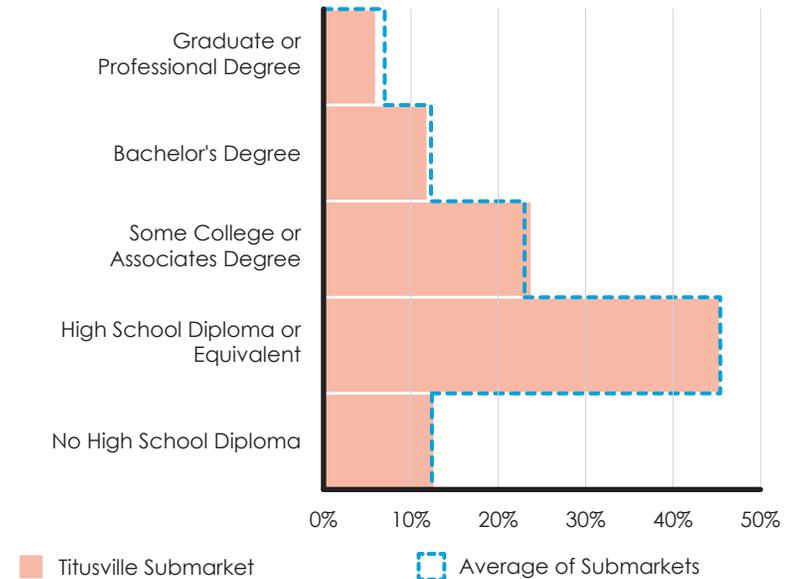
POPULATION GROWTH ANALYSIS:

The demographic trends and household formation trends addressed earlier suggest increased local pressure on the market for both starter and downsizing homes. Furthermore, growth in older age brackets suggest that many new two-person households within the Submarket may be formed by seniors after their children have moved out. The combination of these trends appear consistent with the rough finding that rental prices have slightly declined while home values have fared better.

EDUCATIONAL ATTAINMENT —

The educational attainment of residents within a community will influence its potential for job growth. In general, a more educated community presents a more inviting environment for a greater range of potential employers. Similarly, a more educated community will also better encourage existing employers to remain and expand their operations. The graph on the right demonstrates the educational attainment of the Titusville Submarket with a comparison to the average educational attainment of all submarkets across the county. From this graph, it appears that the Titusville Submarket is about as educated as the submarket average with the minor exception that the area contains a lesser proportion of those holding a bachelor's degree or higher. The Titusville Submarket also contains a slightly higher proportion of individuals holding associates level degrees. Due to the Titusville Submarket's similar educational attainment to the submarket average, no unique conclusions can be gathered.

TITUSVILLE SUBMARKET EDUCATIONAL ATTAINMENT (2017)



Source: Esri, Retrieved 2018

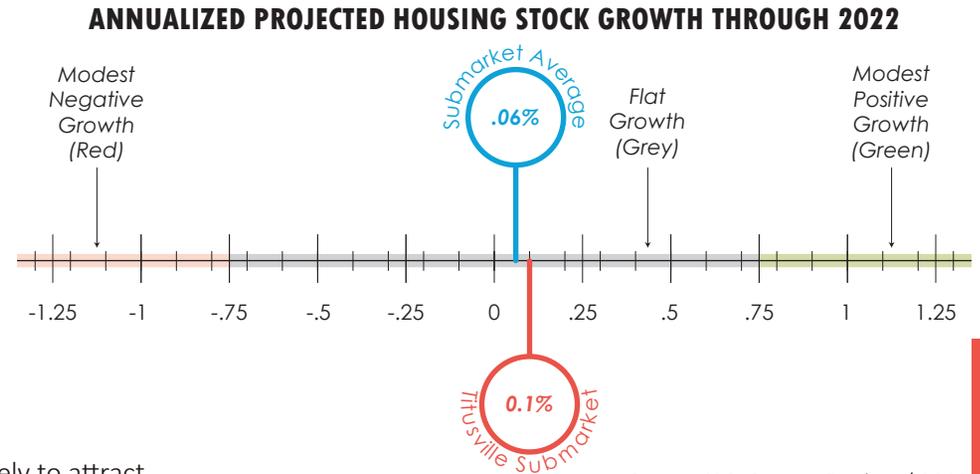
In summary, although the Titusville Submarket contains a higher population than the submarket average, it is only a local population center. The Titusville Submarket has been experiencing a decline in population, which is projected to continue into 2022, leaving housing demand largely to the cycling of existing residents. Household formation trends within the Submarket suggest a decline in the demand for one- and two-bedroom rental units along with an increase in demand for starter and downsizing home units. This trend is also supported by projected variations in age demographics within the Submarket. Titusville Submarket household formation trends are also reflected in fluctuations observed in rent prices, which have slightly declined, and home values, which have increased only barely. However, it should be noted that changes in both rent prices and home values have lied within the “flat growth” range since 2010. Despite flat rent prices and a projected modest-to-strong household income growth rate, nearly half of all Titusville Submarket renters are cost burdened - a barrier that might inhibit home ownership. Overall, the Titusville Submarket is about as educated as the average of other submarkets.

HOUSING STOCK GROWTH ANALYSIS:

This section of our analysis explores housing stock growth as a driver and the relationships between its influencers, which leads to the outcome of the total housing stock. A stable and growing housing stock, balanced with population and job growth, is essential for sustaining a healthy housing market. A healthy housing market ecosystem provides housing opportunities for individuals and families at every stage.

HOUSING STOCK GROWTH —

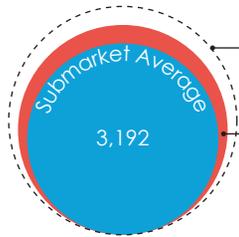
The graph on the right presents the projected housing stock growth rate for the Titusville Submarket. Although within the flat growth range, the Submarket's rate is similar to the submarket average.



Source: U.S. Census, Retrieved 2018

TOTAL HOUSING STOCK —

Larger communities are more likely to attract speculative real estate investment than smaller communities where developers may more strictly adhere to the fundamentals of observable market demand. A larger housing stock may indicate the presence of niche investment opportunities for housing developers. To study the relative size of the Titusville Submarket's housing stock, we compared the number of housing units located within the Submarket to the average number of housing units within a Crawford County submarket. The standard deviation was applied to measure the average difference from the average number of housing units within a submarket. From the graphic on the left, we see that the Titusville Submarket has more housing units than the submarket average but does not deviate significantly above the average. Based on this analysis, it can be safely assumed that housing development within the Titusville Submarket is largely a creature of immediate responses to observable market demand rather than along speculative lines.

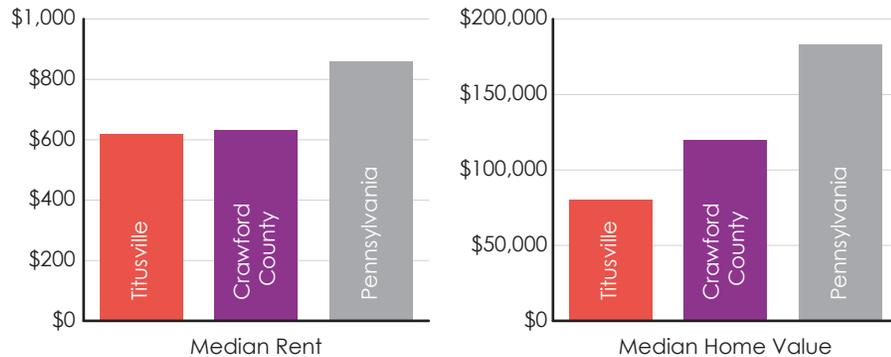


One Standard Deviation above Average (4,541)

Housing Units in the Titusville Submarket (3,836)

Source: Esri, Retrieved 2018

TITUSVILLE SUBMARKET MEDIAN RENT (2016) & MEDIAN HOME VALUE (2017)



Source: U.S. Census, Esri - Retrieved 2018

MEDIAN RENT & HOME VALUES —

High median rent prices and home values may encourage the development of additional housing units as developers look to capitalize on greater and more reliable profit margins. From the graphs on the left, the Titusville Submarket has a median rent price similar to Crawford County but much lower than Pennsylvania on the whole. For home values, the Titusville Submarket has lower home values than Crawford County and Pennsylvania. These figures alone will likely not encourage new housing investment in the Submarket.

HOUSING STOCK GROWTH ANALYSIS:

UNITS BUILT PRE-1940 —

A home's age may influence a consumer's or investor's decision to purchase or renovate the property. A submarket with a high proportion of older housing units might encounter extra challenges meeting the needs of its population or attracting reinvestment. The infographic on the right shows that nearly half of the Titusville Submarket housing stock was built prior to 1940. Although older homes are often of quality construction and contain fine architectural details, they're usually maintenance intensive and inaccessible for seniors and those with disabilities. This finding is concerning given that the Titusville Submarket is projected to see growth in its population over the age of 65. In addition to the challenges older units present for seniors, many historic homes contain four or more bedrooms in response to past demographic and wealth trends, which may make them inadequate for many two-person family households- a growth consumer housing segment in the Titusville Submarket.

TITUSVILLE SUBMARKET HOUSING UNITS BUILT PRE-1940

47.3%



Homes Built Pre-1940

52.7%



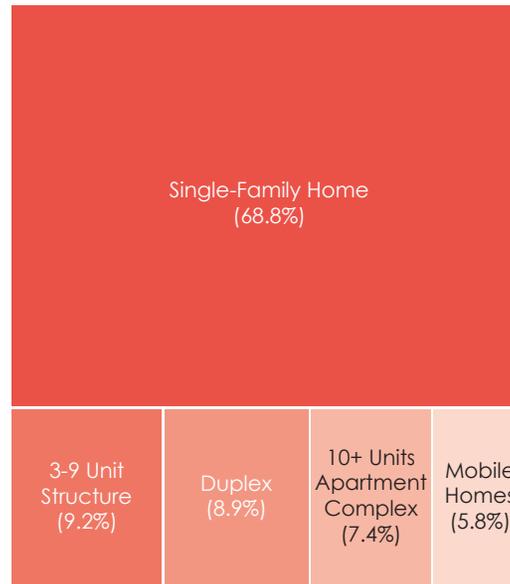
Homes Built Post 1940

Source: U.S. Census, Retrieved 2018

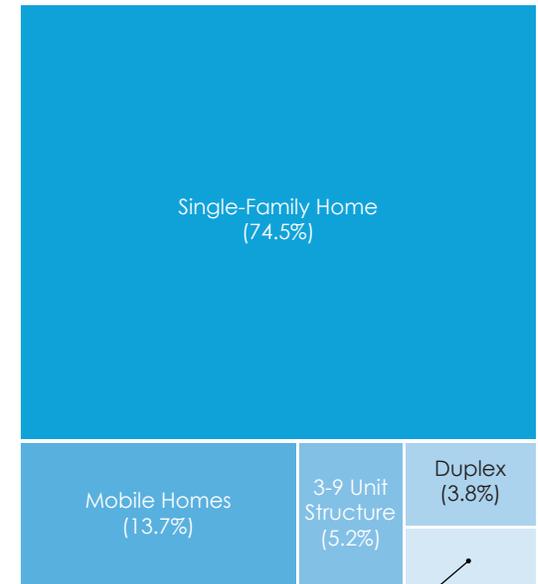
HOUSING BUILDING TYPES —

The graphic on the right divides housing structures into five categories of common forms: single-family homes, duplexes, three-to-nine unit structures and complexes, ten-or-more unit structures and complexes (apartment complexes) and mobile homes. In terms of building types, the Titusville Submarket is similar to the submarket average except that single-family homes make up a smaller proportion of the housing stock whereas duplex and apartment style structures are more represented. Significantly, mobile homes and associated types of housing structures comprise less than 6% of housing units within the Titusville Submarket, whereas this type of housing structure is the second most represented within the submarket average at nearly 14%.

TITUSVILLE SUBMARKET



SUBMARKET AVERAGE

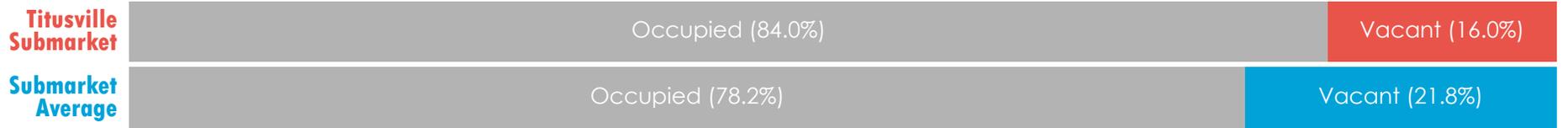


Source: U.S. Census, Retrieved 2018

HOUSING STOCK GROWTH ANALYSIS:

🍷 OVERALL VACANCY & VACANCY BY TYPE –

The overall rate and type of vacancy is an important indicator of the stability of a submarket’s housing market. The bar graphs below display the Titusville Submarket’s recorded vacancy rate in 2016 with a comparison to the submarket average. Although still substantial at 16%, the Titusville Submarket reported a lower vacancy rate than the submarket average. However, nearly half of the Submarket’s vacancy results from “other” reasons, marking a substantial deviation from the submarket average. “Other vacant” housing units are likely those which are abandoned, condemned, dilapidated, or off the market. This observation may indicate serious problems within the Titusville Submarket’s housing stock in that nearly half of all vacancy is unintentional. Such unintended vacancy may demonstrate a significant cycle of disinvestment as landlords struggle to profit from their properties and owners abandon them.

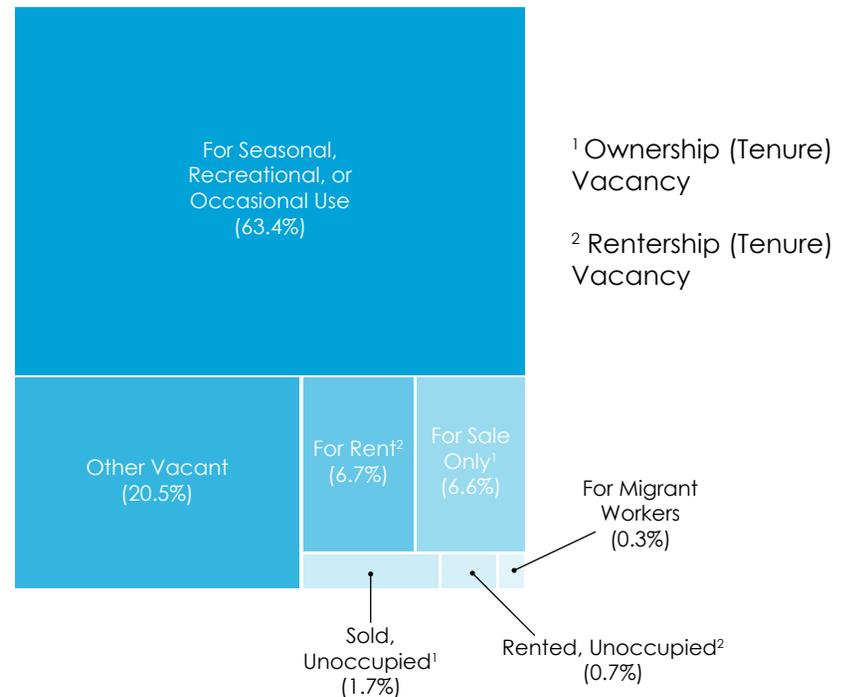


Source: U.S. Census, Retrieved 2018

TITUSVILLE SUBMARKET



SUBMARKET AVERAGE

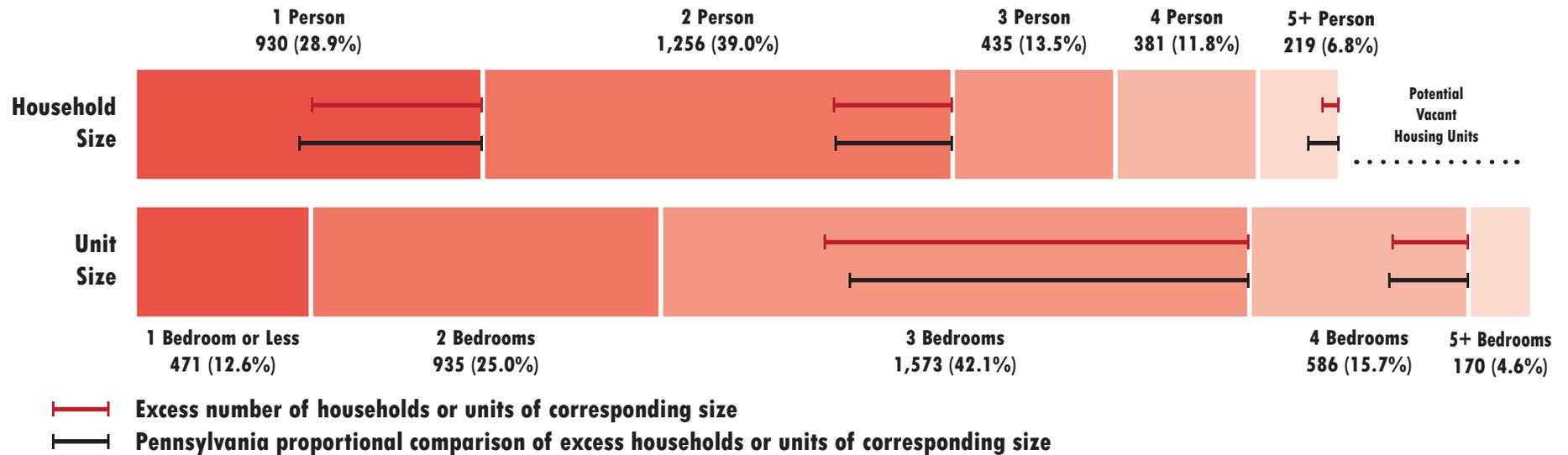


Source: U.S. Census, Retrieved 2018

HOUSING STOCK GROWTH ANALYSIS:

HOUSEHOLD SIZE V. UNIT SIZE —

Exploring the relationship between household and unit sizes can reveal whether there are potential mismatches between a community's available housing stock and the needs of its population. The bar graphs below represent the compositions of households and housing units by size within the Titusville Submarket. The red lines within the bars show either the excess of households or housing units of corresponding size within the Submarket while the black lines show the same corresponding mismatch for the whole Commonwealth scaled down to the size of the Submarket's figures for comparison purposes. The Titusville Submarket exhibits a minor surplus of one-, three-, and five-or-more-bedroom housing units, along with relatively adequate supplies of two- and four-bedroom housing units. The Submarket's surplus of five-or-more-bedroom homes is a concern when considering household formation trends which show a decline in the number of family households composed of at least five members.

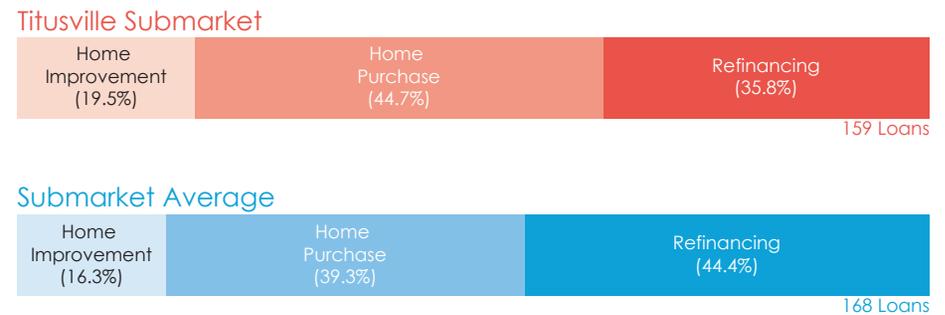


Source: U.S. Census, Retrieved 2018

TITUSVILLE SUBMARKET LOANS BY PURPOSE (2016)

THE PURPOSE OF LOAN ORIGINATIONS —

The purpose of loan originations is a key indicator of real estate investment. A marketplace experiencing a great deal of loans for new purchases may indicate its desirability for attracting new residents, whereas one with a significant amount of refinancing loans might be experiencing economic difficulties. Along different lines, a submarket exhibiting a great deal of renovation activity might be experiencing the beginnings of an economic resurgence. The bar graphs on the right demonstrate the purpose of loan activity within the Titusville Submarket. From this graphic, it appears that loan activity within the Titusville Submarket has been more investment oriented, at least in 2016, than activity reported across the submarket average. This is apparent from a relatively large portion of loans for home improvement and purchase activities.



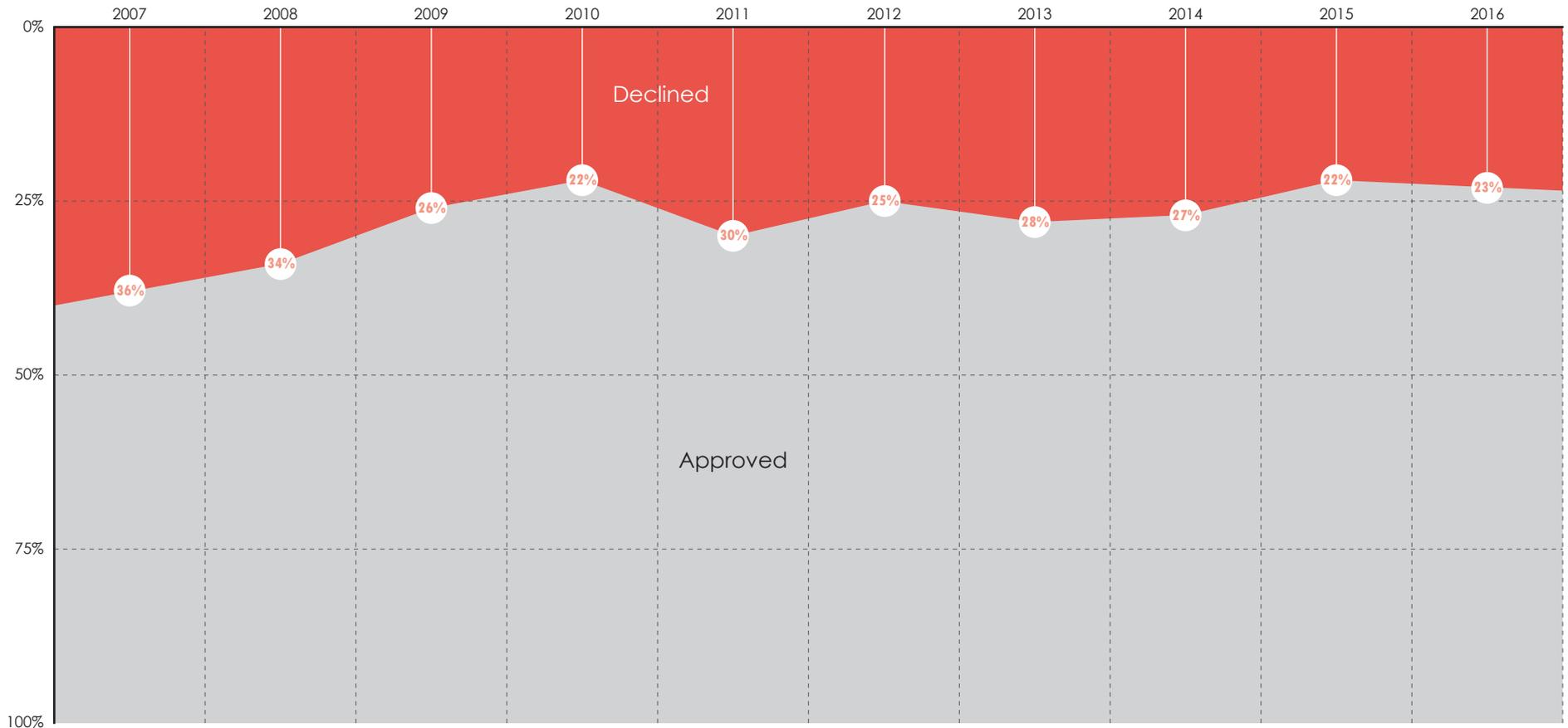
Source: Consumer Financial Protection Bureau, Retrieved 2018

HOUSING STOCK GROWTH ANALYSIS:

RATE OF DECLINED LOANS —

The rate of declined loans is an indicator of the ability of potential home buyers to purchase homes. Within the Titusville Submarket, the rate of declined loans has hovered in the mid-twenties in recent years (see below) and appears to show slight improvement since 2007.

TITUSVILLE SUBMARKET DECLINED HOUSING LOANS (2007-2016)



Source: Consumer Financial Protection Bureau, Retrieved 2018

In summary, the Titusville Submarket has a larger housing stock than the submarket average despite projections showing that housing development will be flat. Such projections are consistent with the finding that nearly half of all homes were built before 1940. The abundance of older homes may present challenges particularly for cost-burdened households and aging residents. Median rent prices are similar to those observed county-wide but median home values are well below the county's figure. The Titusville Submarket is experiencing a lower level of vacancy than the submarket average but with a much higher proportion of its vacancy coming from "other" reasons which signifies more abandonment and dilapidation. However, loan origination activity does show a more investment oriented trend than the submarket average and the rate of declined home loans has improved slightly. Comparisons between the composition of household and housing unit by size suggest that the Submarket has a surplus of homes containing five-or-more bedrooms.

OVERALL STATUS OF THE TITUSVILLE HOUSING SUBMARKET:

AN ECONOMIC OVERVIEW —

Despite containing more jobs than the submarket average, live-work observations show that the majority of the Titusville Submarket's workforce relies on employment opportunities in nearby job centers. Specifically, many workers living within the Submarket commute to jobs located in Erie and Venango counties. Such observations are unlikely to change given projections that show a flat job growth rate in the Titusville Submarket. Despite these observations, the Submarket's job-to-housing ratio is relatively balanced at 1.06, which lies within the beneficial range. This finding suggests that the Titusville Submarket contains a significant enough concentration of job opportunities such that it is not overly reliant on other job centers.

The overall educational attainment of residents living in the Titusville Submarket is comparable to the submarket average. This finding suggests that its labor force is economically competitive relative to other submarkets within Crawford County. Additionally, recent projections forecast modest-to-strong household income growth within the Submarket, which may support housing market stability in the future. Such projections may already be playing out on the ground as overall real-estate related loan originations within the Titusville Submarket have been more investment oriented than the submarket average, with higher proportions of overall originations for home improvements and purchases.

POPULATION TRENDS —

The Titusville Submarket is a local population center within Crawford County. However, the Submarket's total population has declined since 2000. Given this observation, it appears that population growth is not driving housing demand. Instead, much of the demand for housing within the Titusville Submarket may come from the cycling of existing households. Within the context of declining population, demographic projections forecast an overall decline in the population of youth and working age individuals within the Submarket but an increase in the population of senior citizens. In terms of household formation, non-family households comprised of either one or two members have declined in number while two-person family households have increased and those family households comprised of more than three members have remained flat.

THE HOUSING MARKET GENERALLY —

The Titusville Submarket contains a larger overall quantity of housing units than the submarket average. However, recent projections forecast that the development of new homes will be flat. Such projections are consistent with observations that growth in median rent prices and home values has been flat as well. Overall, median rent prices within the Titusville Submarket are similar to those observed county-wide, but median home values are well below the county's figure. In terms of affordability, the overall rate of cost-burdened renter households within the Submarket is much higher than the submarket average and even the combined rate for all of Crawford County. This finding suggests that renter households within the Titusville Submarket may have a more difficult time overall putting aside the savings necessary to make a down payment on a starter home.

Nearly half of the Titusville Submarket's housing stock was built prior to 1940, a finding that may translate into financial and physical challenges for all homeowners. Given the characteristics often associated with old homes, such as expensive renovation needs and limited accessibility for those with disabilities, the Submarket's concentration of older housing units may particularly burden consumers in the starter and downsizing home markets. Comparisons between the composition of households and housing units by size suggest that the Titusville Submarket has a surplus of homes with either three- or five-or-more-bedrooms. This surplus of larger housing units within the Submarket may also present both physical and financial challenges for two-person households, a growth segment, who may be faced with maintaining more space than what their needs require. Despite having an overall vacancy rate below the submarket average, the share of vacancy related to "other" reasons within the Titusville Submarket is disproportionately higher than the submarket average. "Other" vacancy is often unintentional, and a disproportionate presence of vacancy for other reasons within the Submarket is a sign of disinvestment.

THE TITUSVILLE SUBMARKET'S HOUSING ECOSYSTEM:

HOUSING MARKET ECOSYSTEM —

The graphic on the next spread demonstrates the housing market ecosystem for the Titusville Submarket. Consumer housing segments are represented by the arch-like blocks with the ability of households to transition between segments displayed as arrows. All segments are impacted by the economic conditions, population trends, and overall housing market dynamics discussed on the previous page. However, to better understand the Titusville Submarket, the conditions and trends explored within this chapter are examined at the level of each housing segment that constitutes a portion of the overall housing ecosystem.

NEW HOUSEHOLD MARKET — The Titusville Submarket's new household market will likely be negatively impacted by household formation trends that show a decline in the overall number of non-family households. This trend is accompanied by demographic projections that forecast a decline in the population of all individuals between the ages of 15 and 34. A decline in the population of individuals within this age range is problematic for the new household market as these residents are mostly likely to participate in this consumer segment. As a result, the combination of household formation trends and demographic projections suggests that the consumer demand within the new household housing market is in decline.

Projections that forecast that household income will increase at a modest-to-strong rate provide a sign for supporting the stability of the new household market. Comparisons between the composition of households and housing units by size suggests that the Titusville Submarket has a minor surplus of one-bedroom housing units along with an adequate supply of two-bedroom units. Such finding may benefit consumers entering the new household market as smaller housing units are typically suitable for those participating in this segment. Fortunately, the Titusville Submarket contains a higher share of multi-unit housing structures when compared to the submarket average. An abundance of multi-unit housing structures will support the Submarket's new household market as such buildings are often more accommodating to the needs of those participating within this consumer segment.

The combination of median rent prices just below those observed county-wide along with the flat growth of such prices both provide negative signs for suppliers participating in the Titusville Submarket's new household market. Furthermore, relatively lower rent prices do not appear to have translated into affordability for consumers, as the Submarket's overall rate of cost-burdened renter households is much higher than the already relatively high submarket average, which suggests that many renters are struggling to afford housing based on their income. Such observation indicates instability within the Submarket's new household marketplace.

Overall, the Titusville Submarket's new household market is considered inadequate largely due to a combination of household formation trends and demographic projections suggesting a decline in consumer demand. Additionally, the ability of a household participating in the Submarket's new household consumer segment to transition into the starter home segment is also considered inadequate because of the Submarket's relatively high rate of cost-burdened renter households.

STARTER HOME & DOWNSIZING MARKETS — The Titusville Submarket's starter and downsizing markets will likely be positively impacted by household formation trends that show an increase in the overall number of two-person family households. However, this trend is accompanied by demographic projections that forecast an overall decline in the population of all individuals between the ages of 15-to-34 but an increase in the number of those over age 65. A decline in the population of those between the ages of 15 and 34 may translate into reduced consumer demand for starter homes as residents within this age range are mostly likely to constitute those within this consumer segment. However, an increase in the population of those over age 65 is a sign for growing consumer demand in the downsizing market.

The healthy share of single-family homes within the Titusville Submarket will benefit both the starter and downsizing markets since consumers within these segments often prefer this type of home. However, accessible multi-unit structures of quality construction are also attractive to many downsizing senior couples, of which the Submarket may also have an abundant supply. Comparisons between the composition of households and housing units by size suggests that the Submarket has an adequate supply of two-bedroom homes along with a surplus of three-bedroom houses, which will likely support the needs of most consumers within the starter and downsizing market segments. However, consumers within the starter and downsizing home segments will have to content with the

THE TITUSVILLE SUBMARKET'S HOUSING ECOSYSTEM:

Submarket's relatively old housing stock, of which nearly half was built prior to 1940. This significant concentration of older homes could present either financial or physical burdens on younger and older buyers alike. Another challenge may come from the Titusville Submarket's proportionally larger share of homes vacant from "other" reasons when compared against the submarket average as the presence of such structures may be an indicator of disinvestment issues.

Projections that forecast household income will increase at a modest-to-strong rate provide support for consumer stability within both the starter and downsizing markets. Less optimistically, the Submarket's median home value is well below the county-wide figure and appreciation has been flat over recent years. The combination of relatively low median home values and household income projections may be reflected in real-estate loan activity across the Titusville Submarket, which has been more investment oriented than the submarket average overall with higher portions of originations for home improvements and purchases.

Overall, the Titusville Submarket's starter home market is considered adequate largely as the result of household formation trends suggesting an increase in consumer demand. However, if demographic projections hold true, starter home demand could decline with dwindling numbers of individuals between the ages of 15 and 34. Additionally, the combination of projections showing an increase in household income suggest that the ability of a household participating in the Submarket's starter home market to transition into the move-up segment may be adequate. Household formation trends also suggest an increase in the demand for downsizing homes, with demographic projections that show gains in the number of senior citizens indicating that future demand for this housing segment may be strong. Therefore, the Submarket's downsizing market segment is adequate, and the ability to transition from this segment and into a senior living accommodation is also adequate.

MOVE-UP MARKET – The move-up housing market within the Titusville Submarket will likely benefit from household formation trends that show a stable overall number of family households comprised of at least three members. However, this trend is accompanied by demographic projections that forecast an overall decline in the population of all individuals between the ages of 35 and 64. A decline in the population of individuals within this age range is problematic for the move-up market as these residents are mostly likely to participate in this consumer segment. The combination of household formation trends and population projections suggest that the demand for move-up housing will be stagnant.

Similar to the Submarket's starter and downsizing segments, the move-up market may be positively affected by modest-to-strong gains in household income if such projections hold up. Real-estate loan originations have been more investment oriented overall even as the Submarket's median home value lags behind the county's overall figure. Comparisons between the composition of households and housing units by size suggests that the Submarket has an abundance of three-bedroom homes, an adequate stock of four-bedroom houses, and a surplus of five-or-more-bedroom homes. However, consumers must contend with the Submarket's relatively old housing stock, of which nearly half was built prior to 1940.

Overall, the Titusville Submarket's move-up market is considered inadequate largely due to a combination of household formation trends and demographic projections that suggests stagnant consumer demand. Despite more investment oriented real-estate loan originations, limited consumer demand may make it difficult for households currently participating in the move-up market to transition into the downsizing segment. As a result, this transition is considered inadequate.

SENIOR HOUSING MARKET – Please see the chapter on county-wide trends for details regarding the senior housing marketplace.

THE TITUSVILLE SUBMARKET'S HOUSING ECOSYSTEM:

