



CHAPTER 4

DEFINING THE NEED

FEASIBILITY ANALYSIS

The economic feasibility of building, renovating, or rehabilitating different types of housing affects the ability of developers to add these units to the market and meet demand. Understanding the factors that affect feasibility will help to guide the use of incentives and investment tools in the city.

The previous chapters outline the housing needs and goals for the Study Area and identify demand for a broad range of housing types and price points, including those that cannot easily be delivered by the market. Meeting these needs will require some type of incentive, subsidy, or other support.

This chapter evaluates the level of support needed to successfully deliver these different types of housing, which informs the role and potential impact of available tools and resources.

About the Methodology

One must first understand the economic feasibility of building, rehabilitating, or renovating a single housing unit to understand the scale of impact possible through an incentive or subsidy program.

This evaluation—feasibility analysis—seeks to evaluate the two sides of this feasibility equation:

- The typology- and market-specific costs to deliver a single unit of housing, including purchase/acquisition, construction, and soft costs.
- The market value of the housing product, based on target rents or sale prices, standard financing terms, a modest profit, and stabilized occupancy.

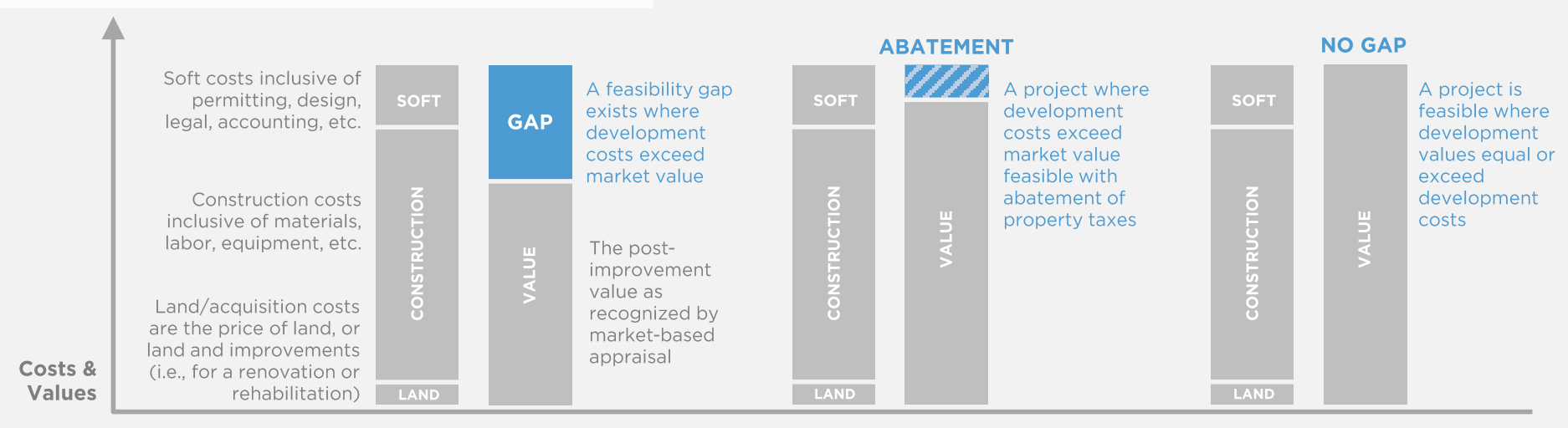
Where development value exceeds development costs, a housing unit can typically be delivered without the support of incentives or subsidy. Where development costs exceed development value, there is a feasibility gap, which incentives or subsidy can help fill.

This methodology was used to analyze the feasibility of six different housing typologies:

- Market-rate multifamily;
- New single-family;
- Rehabilitation and renovation;
- Missing middle infill;
- Affordable housing; and
- Neighborhood Context.

The findings from this analysis are summarized on the opposite page, and the pages that follow.

ILLUSTRATIVE DIAGRAM OF FEASIBILITY ANALYSIS



FEASIBILITY ANALYSIS: SUMMARY & KEY FINDINGS

MARKET-RATE MULTIFAMILY



The economic feasibility of market-rate multifamily projects varies greatly with location due to the disparate conditions of the neighborhoods. Rents range from less than \$1.00 in North Topeka to nearly \$1.40 per square foot Downtown. High market rents, combined with incentives, can “cross-subsidize” a small number of affordable units within the same building in some locations.

NEW SINGLE-FAMILY



As illustrated by the market analysis, home values vary widely by condition and location. In growing neighborhoods like New Build, home values surpass the development costs despite higher acquisition costs while in transitional neighborhoods like Central and North Topeka where the post-construction appraised value of a home does not fully match the costs of purchase and acquisition.

REHAB & RENOVATION



Topeka’s Core Neighborhoods have a stock of older properties that require rehabilitation or renovation to be marketable. Supports and incentives to renovate these properties will create more affordable homeownership opportunities. A relatively small amount of assistance—ranging from \$5,000 to \$30,000 per unit combined with the NRP tax rebate—could have a significant impact.

MISSING MIDDLE INFILL



Stakeholder conversations and market analysis reveal an unmet demand for “missing middle” housing typologies such as townhomes, duplexes, quadplexes, and other small multifamily housing types. These typologies can be difficult to deliver because of economic feasibility.

This type of housing could be delivered in a mixed-income model, but likely only with some significant source of gap financing or other support.

AFFORDABLE HOUSING



No single solution will meet the substantial need for quality affordable housing in Topeka. Affordable housing can be provided in different ways—renovating existing homes or multi-family properties, new construction, reduced unit sizes, and more. The existing housing stock will be an important asset in providing and preserving affordable housing—a modest renovation with minimal subsidy could make many homes a higher quality without making them unaffordable.

NEIGHBORHOOD CONTEXT



Understanding the feasibility at a neighborhood scale enables the city to plan for the long-term as funds become available. Yet, different areas require different approaches because of the condition, age, location, and marketability of the housing stock. Focus areas in neighborhoods like the East Topeka require more substantial renovations, while the scale of the need in Hi-Crest exceeds the other focus areas because of the type of housing in that neighborhood.

MARKET-RATE MULTIFAMILY

Very little new market-rate multifamily development occurred in Topeka during the past decade. The demand analysis indicates that there is demand for this type of housing, but prevailing market rents do not support new construction without some sort of public subsidy.

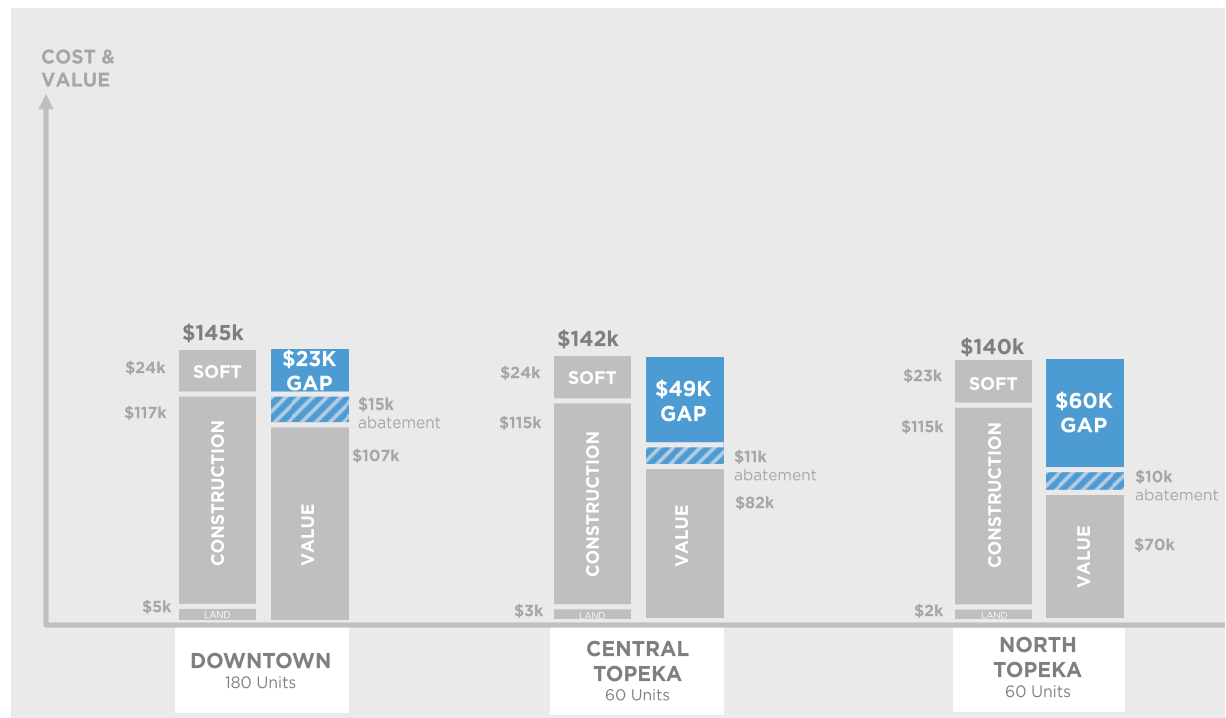
While the market analysis concludes that higher rents are achievable in the Topeka market for the right product in the right location, being the first developer to try to prove the market carries added risk. This can make it more difficult to find investors or lending partners, especially when deals are available in stronger, competing markets.

The estimated acquisition, development, and operating costs are based on current market conditions, including recent development projects and prevailing market rents.

Key observations include:

- While the rents and acquisition costs vary significantly across locations in Topeka, increasing rents are insufficient to support overall development costs.
- The feasibility gap ranges from \$23,000 per unit Downtown to about \$60,000 in North Topeka, after tax abatement.

- Increasing density (number of units per acre) does not significantly impact the overall feasibility of multifamily development. In a Downtown environment, this would require structured parking, thus adding cost.
- At this stage in the market, some sort of public participation in the form of tax abatement or other subsidy will be required to catalyze market rate development that meets the segment of demand.



NEW SINGLE-FAMILY

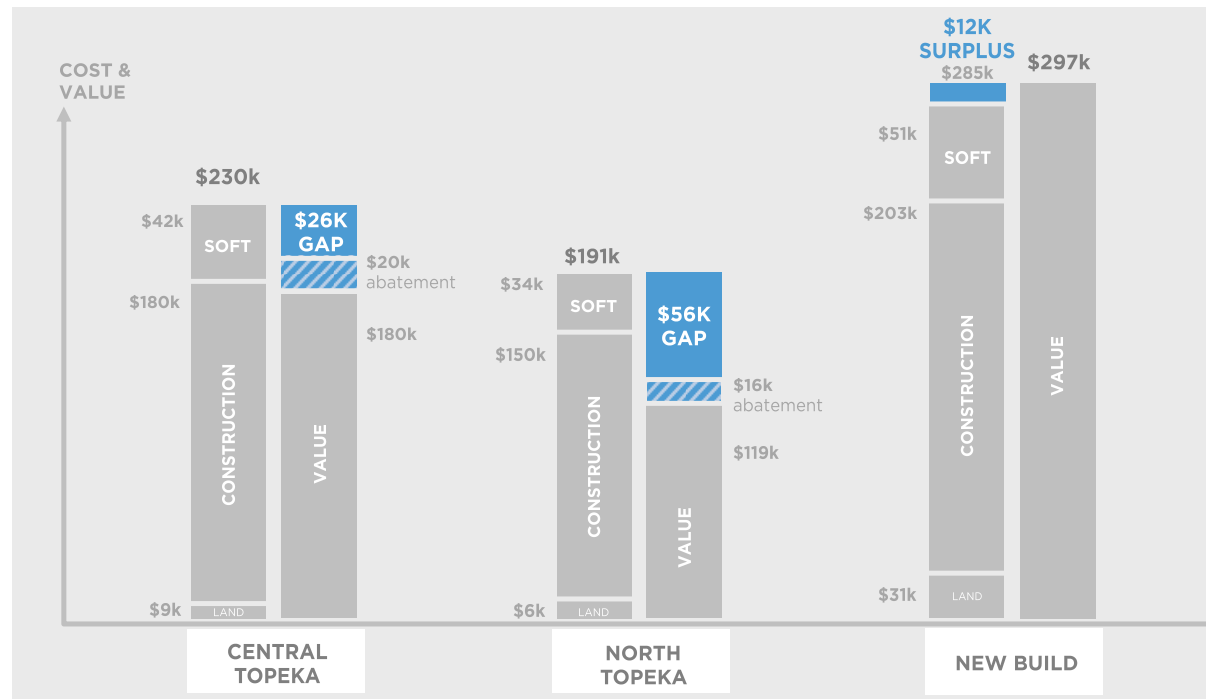
New single-family development has occurred at a relatively low pace in Topeka compared to some of its peers. Most new development occurred in newly platted subdivisions at the periphery of the city or outside of the city in Shawnee County. Yet, there is a market preference for new housing in established neighborhoods and more walkable, urban locations. Such demand can be met by new construction infill development.

Single-family infill development can be more difficult or time consuming than traditional suburban subdivision development because sites can be scattered, contiguous lots may not be available to assemble and build on, and existing lot sizes can require a different type of housing than local developers are accustomed to building. The primary benefits of infill single-family development are providing a new product that is not currently available in the market and stabilizing neighborhoods with reinvestment.

Similar to market-rate multifamily development, the primary barrier to new single-family development in established core neighborhoods is economics—land costs, land assembly, and lack of economies of scale for scattered site development.

Key observations include:

- Market values, even at the top of the market in the core focus areas, are not high enough to support construction costs.
- The feasibility gap ranges from \$26,000 per unit in Central Topeka to about \$56,000 in North Topeka, after tax abatement.
- New single-family development is feasible in the new-build neighborhoods, evidenced by the \$12,000 surplus when comparing cost to value.
- There are core neighborhoods and older neighborhoods in Topeka where new infill development would be feasible; however, there are not many, if any, vacant parcels on which to build new homes.



REHAB & RENOVATION

Topeka has a number of vacant lots or relatively low priced homes that could be reinvested in to meet a significant portion of demand for affordable housing. A rehab and renovation effort would serve to not only improve the condition of the existing stock but also the overall marketability of many of the core neighborhoods.

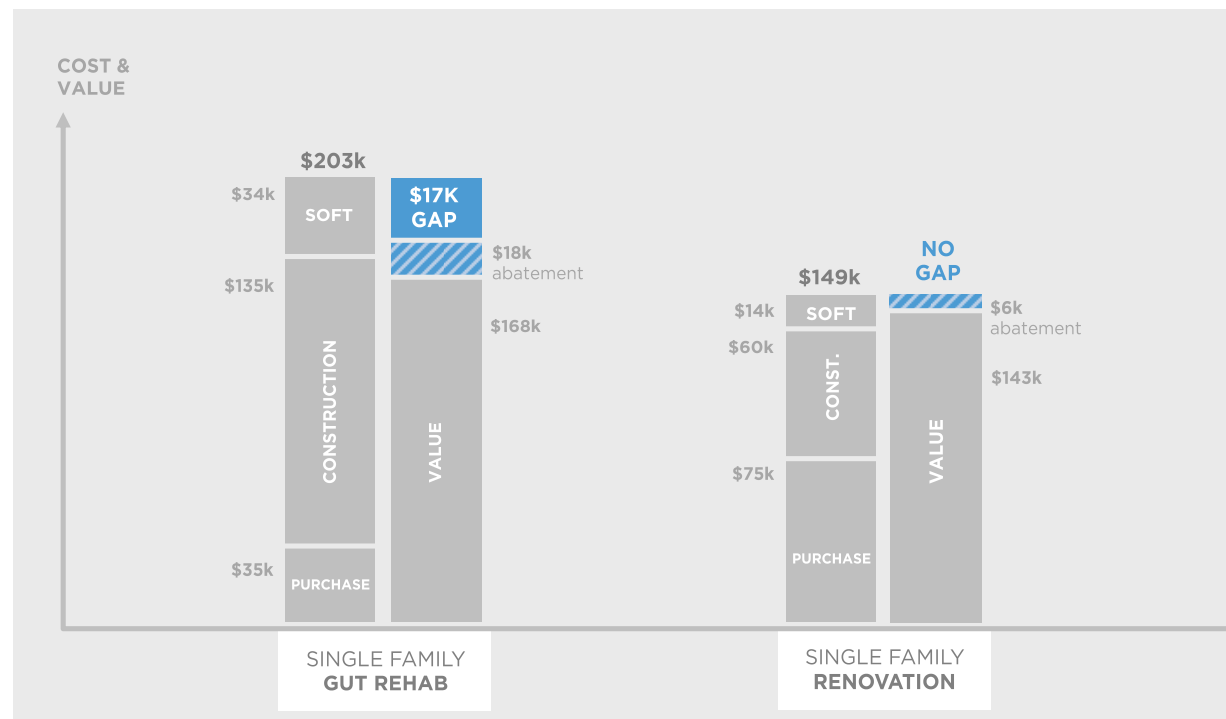
Reinvesting in the existing housing stock would also provide a range of housing types and sizes at a range of different price points. A variety of affordability levels is more difficult to achieve with all new construction without substantial subsidies because of construction costs.

It is important to note that housing rehabilitation and renovation projects can vary considerably in scale and cost. One factor impacting this variability is the underlying condition of the home, and another is the size of the home. For the purposes of this analysis, rehabilitation assumes that the major systems of the home, such as plumbing, heating and air conditioning, and electrical are replaced, as well as windows, roof, and other critical items. This is in addition to what would be covered in a renovation, which is considered to be more cosmetic such as an upgraded kitchen or bathroom, or painting and updating the home to meet modern preferences.

The costs in this scenario include acquisition of existing homes and are based on conditions in Central Topeka.

Key observations include:

- Overall, housing rehabilitation is feasible in several neighborhoods, but not in the core focus areas.
- Housing renovation is feasible in most locations in Topeka.
- The average feasibility gap for rehabilitation is \$17,000 per unit, after tax abatement.
- The average renovation project has no gap, after tax abatement.



MISSING MIDDLE INFILL

Missing middle housing refers to types of housing situated between traditional single-family homes and larger multifamily properties. These properties are considered to be missing because they are not commonly developed in markets like Topeka.

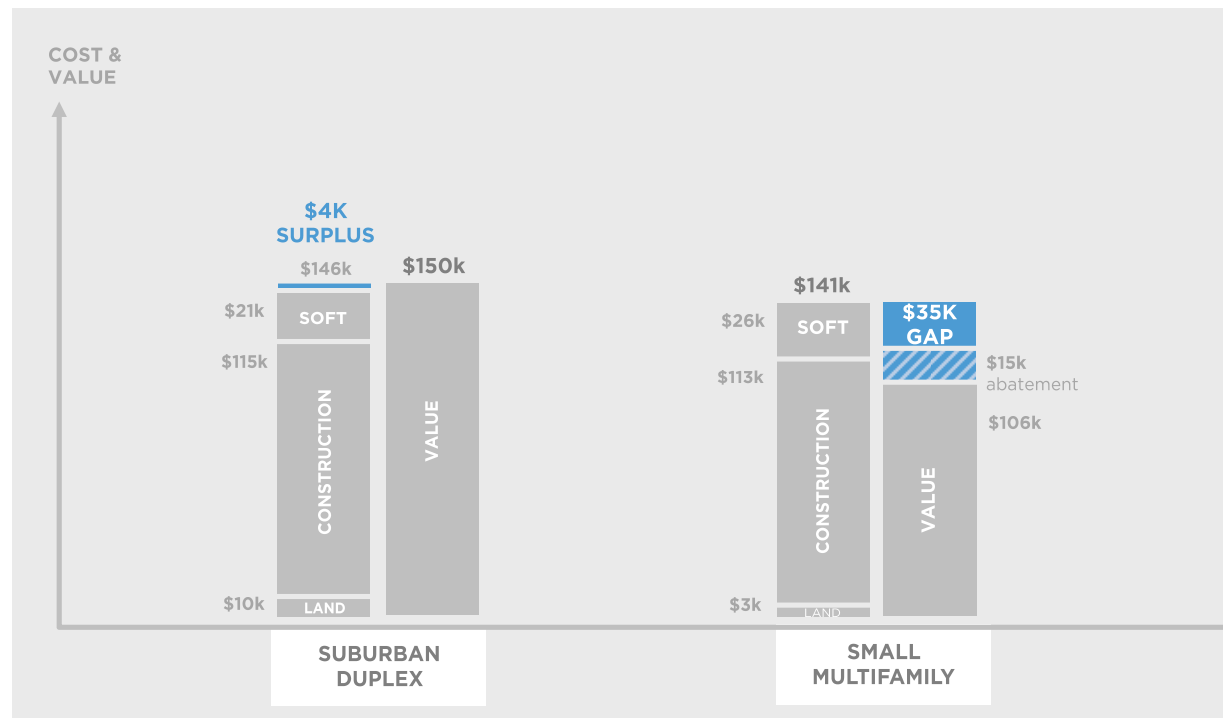
There can be several reasons why missing middle housing is not developed. One, is the regulatory environment, where existing zoning code or subdivision regulations exclude or make more difficult missing middle typologies which are typically denser than the predominant single-family zoning. Fortunately, Topeka has taken steps to make this less of a barrier than in other cities. The other primary reason for a lack of missing middle housing, especially in Topeka, is simple economics.

For this scenario, suburban duplexes, which could use some of the 800 platted lots currently available (with some replatting needed), and an 8-unit infill multifamily property were tested.

Key observations include:

- An average three-bedroom/two-bathroom duplex should be feasible in certain subdivision in Topeka, with a small surplus on a per unit basis.
- A small infill multifamily development would require sizable incentives to be feasible, with a gap of \$35,000 per unit.

- The fact that duplexes are economically feasible should start a discussion about what lot sizes and other subdivision requirements would support duplex development in existing subdivisions, as well as what locations are ideal. This would set the state to engage with developers to build this product.
- Infill development is still needed, but should be part of a neighborhood redevelopment strategy so that appropriate projects are identified, if and when funds become available, or when market conditions improve.



AFFORDABLE HOUSING

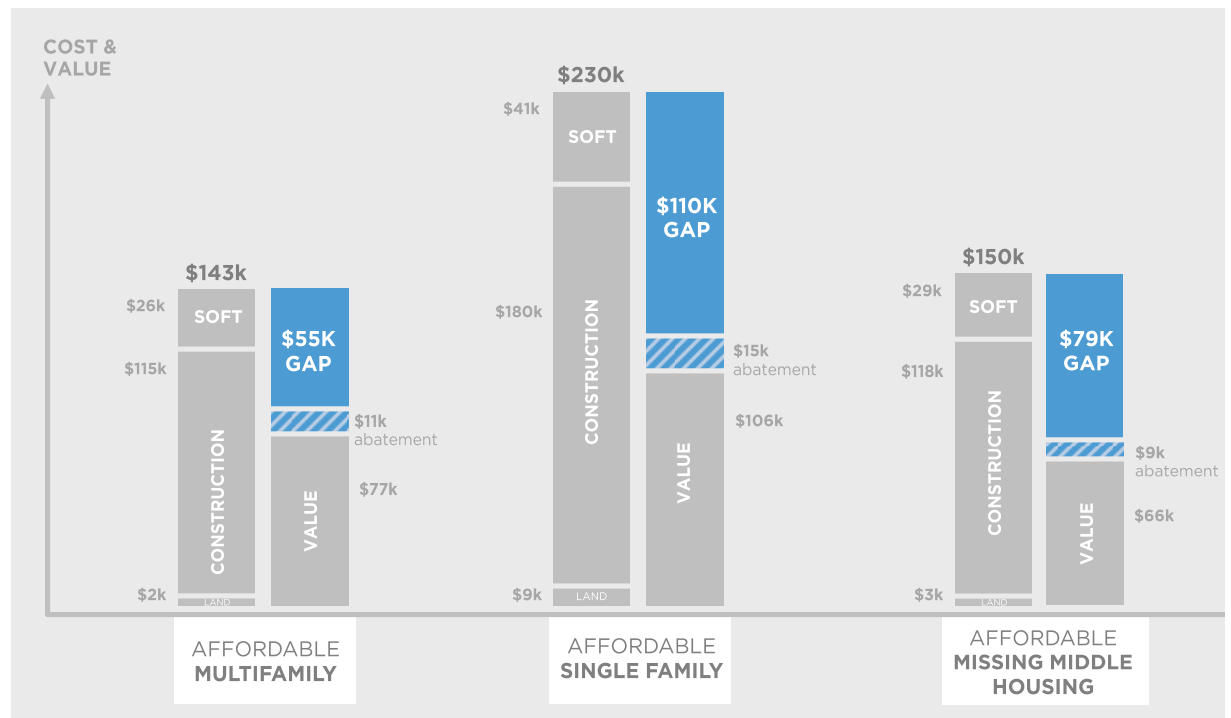
Despite being a relatively affordable city, there are simply not enough quality affordable and workforce units to meet demand in Topeka.

Producing affordable housing at a scale to meet demand is challenging, especially after years for funding reductions for entitlement programs that support affordable housing development. The primary tool for producing affordable housing is the 9 percent LIHTC program, which is highly competitive. The process required to apply for the credits, to find an investor or syndicator to buy the credits, and to meet ongoing compliance requirements has made producing affordable units through this program more expensive than producing comparable market rate units.

The need for affordable housing is not going away, and many existing units that have affordable rents are of poor quality. Many households are forced to make tough decisions, such as choosing to live in an affordable unit in poor condition, or be cost burdened and live in a better quality unit.

For these reasons, finding new ways to produce affordable housing, such as through the Affordable Housing Trust Fund, is critical to producing more units, stretching dollars further, and ultimately meeting a critical housing need.

The feasibility summary shows the gaps associated with developing previously discussed typologies with affordability requirements, which range from \$55,000 to \$110,000 per unit, after abatement.



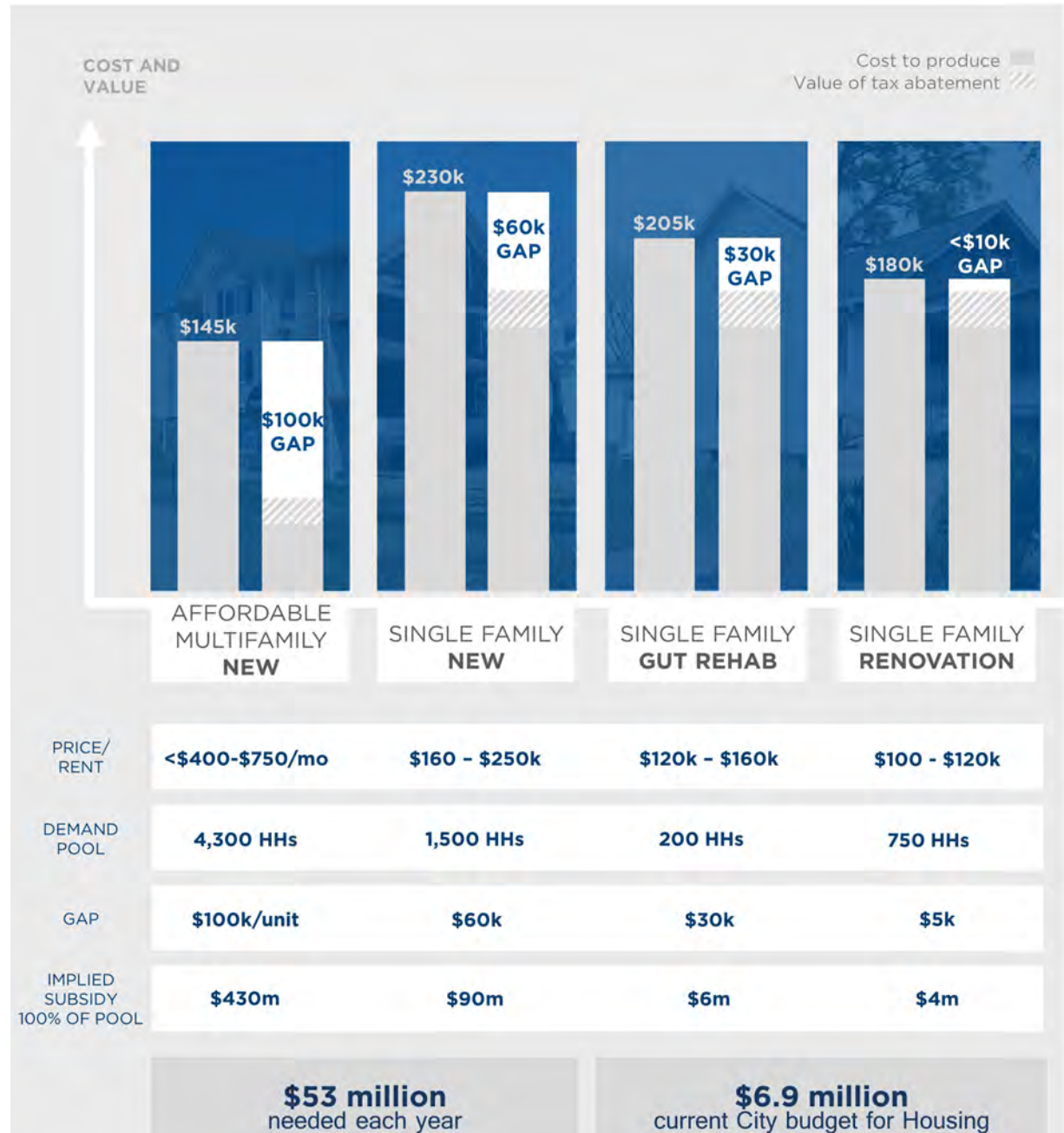
FEASIBILITY SUMMARY

Pairing feasibility analysis with demand projections allows an understanding of the overall scale of the economics of housing development, and the incentive needed to support housing production to meet demand over the next 10 to 15 years.

The graphic to the right summarizes the feasibility gap and demand calculations for housing types that, on average, require public subsidy to support development. The examples on this page are slightly different than those on the previous pages because these are intended to reflect all areas of the city, not just specific focus areas. For instance, the gap for multifamily is larger than on pages 59 and 63 because a substantial portion of the need is for very low income units, which require a larger gap subsidy to produce.

The calculations also assume that, by meeting the demand noted, most households in Topeka would not be cost burdened. Assuming a 10-year production period, a total of \$53 million is needed each year to produce an equitable housing stock. The current city budget for housing programs, which include housing production, vouchers, and funding for partners, is nearly \$7 million per year. This number does not include what private developers spend to produce housing, or what is raised from other sources for ongoing initiatives from other providers, like Habitat for Humanity, Cornerstone of Topeka, Topeka Housing Authority, Catholic Charities, Community Action, Inc., and others. The combined efforts of the city and these organizations is not enough to meet demand.

This analysis clearly illustrates the need to expand the financial and organization capacity of the city and its partners to provide quality housing.



CATALYST SITES

A catalyst project is a development at a key location that has public, political, and financial support, and is intended to stimulate redevelopment in a neighborhood.

The Client Team provided several sites and locations within the core neighborhoods so that the economic feasibility of potential catalyst projects could be tested. Three of those projects are summarized on the facing page. In this context, a catalyst project is intended to serve as a pilot for redevelopment in a particular location. Catalyst projects can be targeted at publicly-owned, long-time vacant properties, or land situated at a strategic location within the city. A catalytic development would serve community needs while being an important step in supporting the stabilization of surrounding blocks.

The three catalyst sites selected are College Hill Bark Park, College Hill Extension, and Central Park Infill. While each of these is located in the Central Topeka focus area, similar developments can be scaled to reflect the market conditions and sites in other focus areas and neighborhoods.

College Hill Bark Park

The College Hill Bark Park site is located at the southeast corner of SW Lane Street and SW 13th Street, and consists of a 15,000 square foot vacant parcel. The site could accommodate approximately 13 units of apartments or townhomes. It would cost approximately \$174,000 per unit to construct and the estimated value is \$123,000 per unit. This results in a \$51,000 per unit gap, which is reduced to \$34,000 per unit after accounting for tax abatement.

College Hill Extension

The College Hill Extension site is at the northeast corner of SW Washburn Avenue and SW 13th Street. It consists of nearly and entire city block. There are existing homes on this site that would need to be acquired and demolished, which impacts development costs. The development concept tested here is a four-story multifamily building with 123 units priced at market rates (107 units) and at affordable rates at 80 percent of AMI (19 units). Development costs are estimated at \$18 million, or \$146,000 per unit, while the estimated market value is \$14.1 million, or \$114,000 per unit. The resulting feasibility gap is \$32,000 per unit, reduced to \$16,000 per unit after tax abatement.

Central Park Infill

The final catalyst site example is Central Park Infill, which is located on both sides of SW Fillmore Street north of SW Douthitt Avenue. This site is located in the middle of residential development, so new infill duplexes were tested. A total of 12 three-bedroom, two-bathroom units containing 1,200 square feet could fit on the site. This project could cost approximately \$2.3 million to construct (\$195,000 per unit), and have an estimated market value of \$1.7 million, or \$143,000 per unit. The resulting gap—\$53,000 per unit—would be reduced to \$33,000 per unit with tax abatement.

STEP 1



College Hill Bark Park

New Multi-family Garden Style Apartments/
Attached Townhomes near College Hill Bark
Park at SW Lane St & SW 13th St

Development Area: 15,000 SF

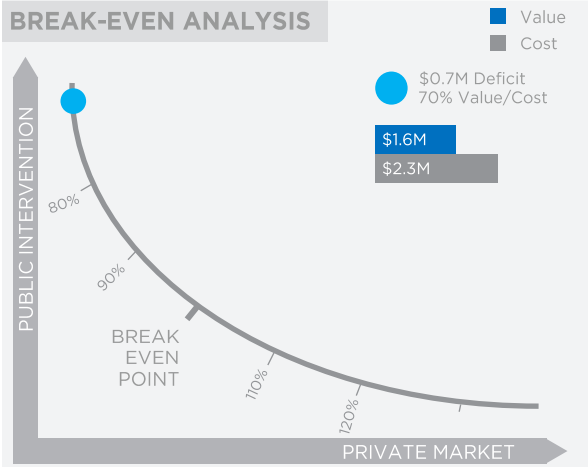
Apartments: 13 units (@1,000 sf/unit, 2 floors)

Parking: 20, surface @1.5 spaces/unit

Average Monthly Rent: \$1,100

Gap: \$0.7 million

BREAK-EVEN ANALYSIS



STEP 2



College Hill Extension

New Mixed-Income Multi-family Apartments
near College Hill Extension Bark Park at SW
Washburn Ave & SW 13th St

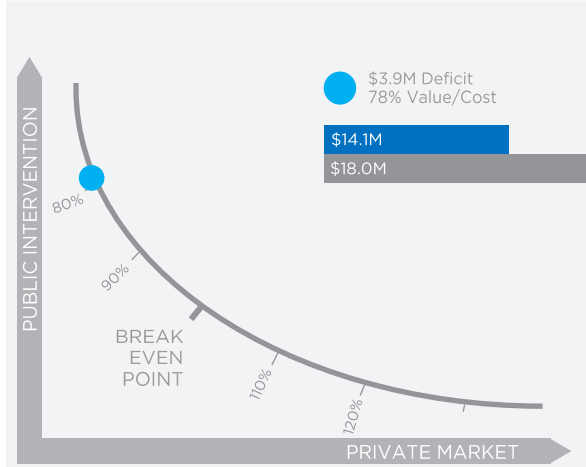
Development Area: 120,000 SF

Apartments: 123 units (@850 sf/unit, 4 floors)

Parking: 123, surface @1 space/unit

Average Monthly Rent: 85% units @ \$1,260
(100% AMI), and 15% units @ \$830 (60% AMI)

Gap: \$3.9 million



STEP 3



Central Park Infill

New Duplex Apartments at two infill sites near
Central Park at SW Central Park Ave @ SW
Douthitt Ave

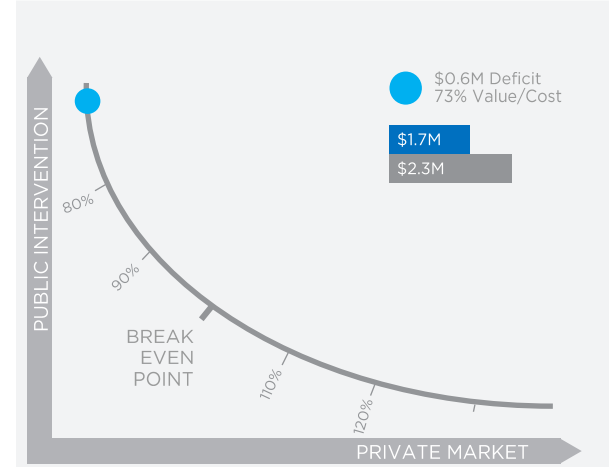
Development Area: 15,000 SF

Apartments: 12 units (@1,200 sf/unit, 2 floors)

Parking: 12, surface @ 1 space/unit

Average Monthly Rent: \$1,380

Gap: \$0.6 million



NEIGHBORHOOD CONTEXT

Housing conditions vary considerably within the core focus areas. Understanding the scale of investment needed to stabilize the housing stock allows us to calculate what level of investment is needed to support neighborhood-wide improvement.

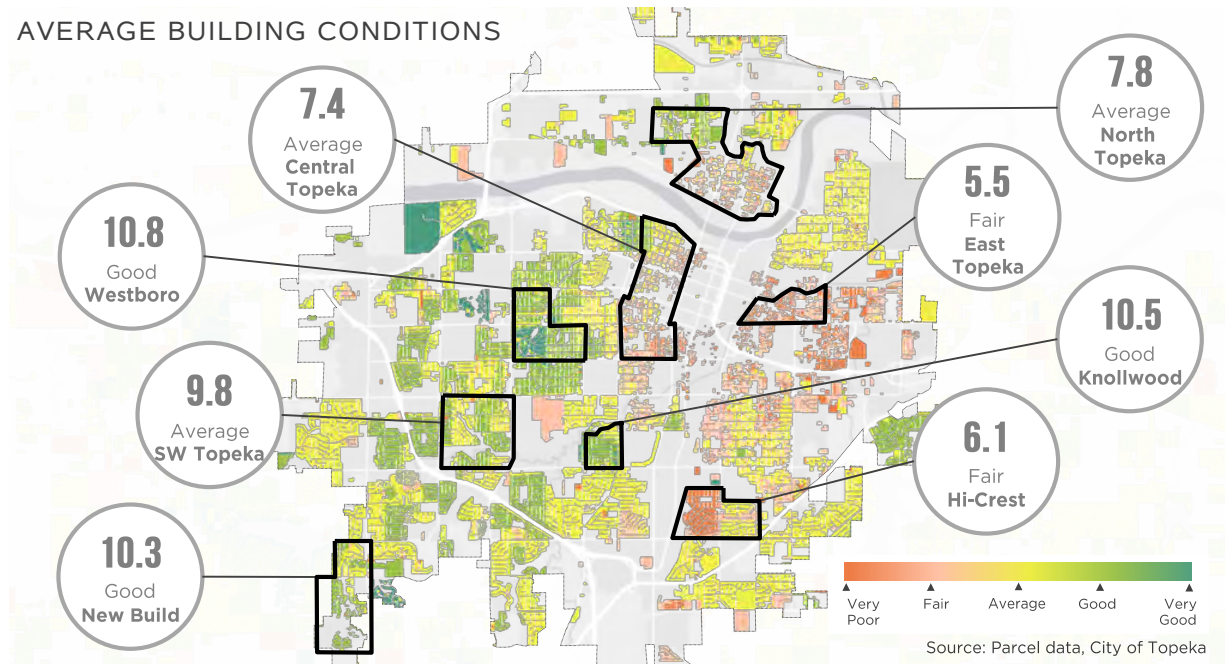
This analysis focuses on opportunity and transitional neighborhoods in the Central Topeka, North Topeka, Hi-Crest, and East Topeka focus areas. The other focus areas do not have the concentration of housing condition challenges that need intervention. A blend of different types of housing investments can utilize finite resources to support housing stabilization at the neighborhood scale.

The intent of this analysis is to quantify the scale of the need, or the cost to stabilize the whole housing stock in each focus area, as well as support new construction on suitable vacant lots. In reality, addressing all of the housing investment needs is a daunting task, yet significant strides can be made by setting more achievable goals, such as on a block-by-block basis, or as a percentage of the total need.

Methodology

Housing investment needs are estimated based on the average per unit costs for renovation, rehabilitation, and new construction, and weatherization costs are estimated at \$5,000 per unit¹. These estimates are paired with “Condition/Desirability/Utility”, or CDU, ratings from the Shawnee County Appraiser’s Office as follows:

AVERAGE BUILDING CONDITIONS



- **Weatherization:** Parcels rated as CDU-8, or “average”, are assumed to require modest repairs or weatherization to enhance their stability, at an estimated cost of \$5,000 per unit.
- **Renovation:** Parcels rated as CDU-6 and CDU-7, or “fair”, are assumed to require modest renovation, or primarily cosmetic upgrades, at costs ranging from \$21,000 to \$60,000 per unit.
- **Rehabilitation:** Parcels rated as CDU-3 to CDU-5, or “very poor” to “poor” are assumed to need extensive rehabilitation, which involves replacing systems, cosmetic upgrades, window replacement, and other work, at costs ranging from \$63,000 to \$203,000 per unit.
- **New Construction:** Parcels rated as CDU-1 and CDU-2, or “unsound” to “very poor” are assumed to be structurally deficient and

candidates for demolition and redevelopment. Vacant parcels with land use classification code 9910 (residential highest and best use) are also included for potential new construction². The estimated cost of each housing unit varies from \$152,000 to \$230,000.

As summarized in the graphics on the opposite page, results are aggregated by focus area. Generally, Central Topeka and North Topeka have average to fair building conditions, with relatively small pockets of poor housing conditions. The typical building condition in Hi-Crest is fair or worse. East Topeka has the most challenging housing unit conditions, with relatively few units in above average condition.

¹Office of Energy Efficiency and Renewable Energy, United States Department of Energy, 2018.

²It is assumed that 60% of the existing vacant parcels are suitable for development. Some parcels are too small, need to be combined with other parcels, or have other limitations.

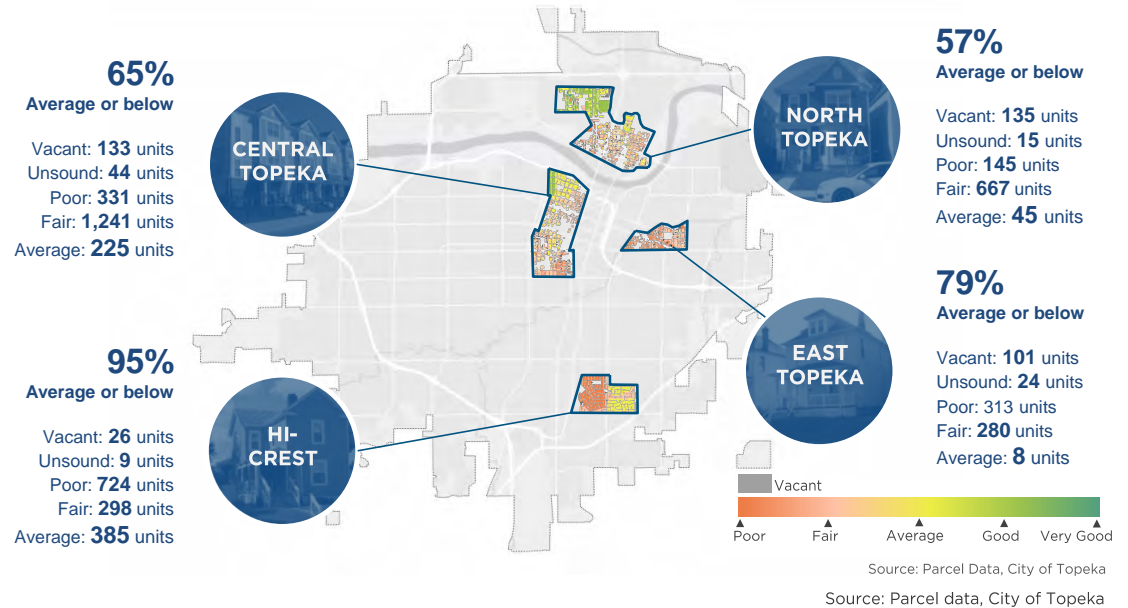
Summary of Results

The analysis produced the following key results:

- Approximately 48 percent of the parcels in the four focus area were rated “fair”, suggesting that renovation would be sufficient to increase the quality of the housing stock
- Several of the usable vacant residential lots, and parcels rated “unsound” and “very poor” provide opportunity for construction of up to 500 new units.
- About 60 percent of the properties in Central Topeka and North Topeka are in average or below average condition and need some level of reinvestment to improve their quality. Approximately two-thirds of these units can be improved with renovation.
- Nearly all of the units in East Topeka are in below average condition and require renovation or more significant improvements. New construction will have a relatively more impact to stabilize East Topeka as compared to other focus areas.
- More than half of the housing stock in Hi-Crest is rated at poor or worse and the need for rehabilitation is greater than in the other Focus Areas.

Based on these assumptions, approximately \$314 million is needed to substantially improve the condition of the *all housing units* in the focus areas. Central Topeka needs the highest level of investment (\$121 million), followed by Hi-Crest (\$83 million), North Topeka (\$61 million), and East Topeka (\$49 million).

VACANT PARCEL AND BUILDING CONDITIONS



NEIGHBORHOOD ANALYSIS

	NORTH TOPEKA	CENTRAL TOPEKA	EAST TOPEKA	HI-CREST
WEATHERIZE	\$225k	\$1.1m	\$40k	\$1.9m
RENOVATION	\$19.1m	\$46m	\$8.6m	\$12.4m
REHAB	\$13.3m	\$33m	\$20.9m	\$61.6m
NEW CONST.	\$28.6m	\$40.8m	\$19m	\$7m
\$314 MILLION NEEDED				

Source: Parcel data, City of Topeka



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