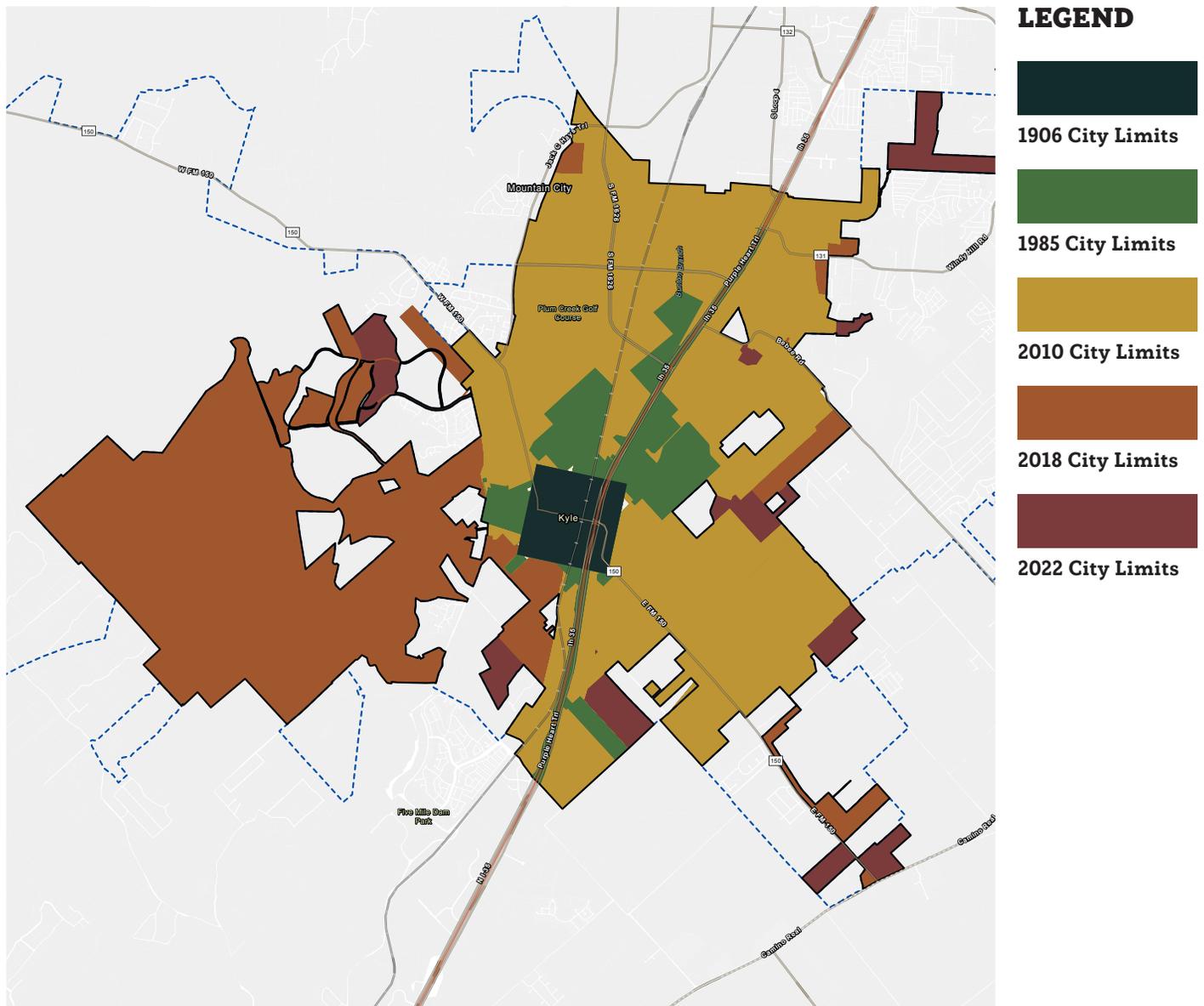
An aerial photograph of a golf course with a large black circle overlay in the center. The circle contains the chapter title in white text. The background shows a green golf course, a blue lake, and a residential area in the distance under a clear blue sky.

Chapter 2

Land Use Fiscal Analysis

Population and Land Footprint Growth

City Limits, Kyle 1906-2022



As discussed earlier, the post-World War II development pattern has two characteristics which are problematic. First, it eats up more land and requires more infrastructure (both adding to the existing infrastructure network and by requiring more miles to connect the existing network to the new development). Second, the lots are larger and more spread out, meaning fewer people are housed or served by much larger tracts of property.

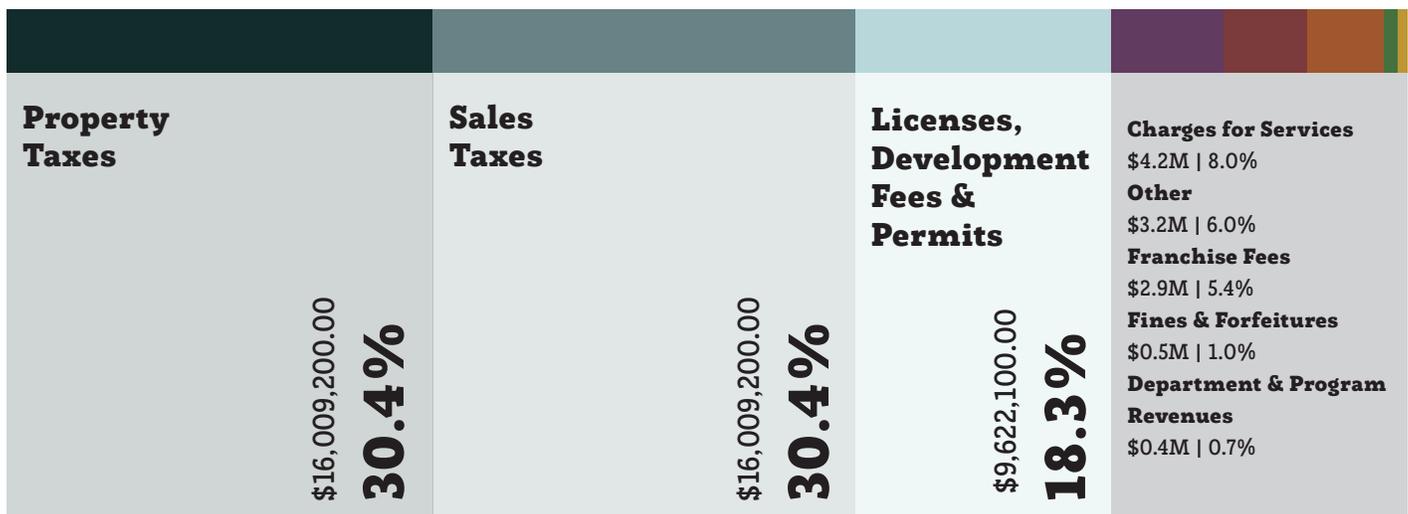
In most cases, a city's service area expanded much faster than the population of the city over the same period of time. This puts the community in a position where the expanded area has newly built roads, water and sewer lines, additional police and fire coverage, water towers, pump stations, parks, and other quality of life amenities and services for the broader footprint,

but there is not enough population or tax base to cover the costs. In terms of finances, this means that the amount citizens were paying prior to this expansion will inevitably increase many times over because the population hasn't likewise grown enough to - just as discussed on a block level on page 41 - spread the burden across more people within the city limits.

The Current Budget

In the City's 2022-2023 fiscal year budget, general fund expenditures are budgeted to total \$60.2M, approximately a 44.3 percent increase from the previous year's budget. Property taxes and sales taxes are the largest source of revenue for the City, with each contributing 30 percent. This budget includes a 22.3 percent increase in property tax revenue, due to continued new construction. Sales tax revenue increased a little over \$2.8M (22 percent) over the previous year, primarily due to the continued introduction of businesses into the community.

General Fund Revenue



General Fund Expenditures



Deferred Maintenance & Street Replacement Costs

Kyle has roughly 485 lane miles of city-owned streets today. City staff and consultants worked together to determine an appropriate replacement for each lane mile (\$750,000) that was reflective of real-world buildout costs of asphalt roads in Central Texas. This means that it would require over \$357 million to replace the existing streets when they reach the end of their life cycle. Averaged over 20 years, this would require the City to be saving or spending an average of \$17.9M per year on street reconstruction, which is over a third of the City's entire general fund budget (\$50.6M). As construction costs continue rising and additional development is built, the cost and amount of streets to maintain and replace in the future will continue to increase.

When used in this document, *lane mile* indicates an 11-foot travel lane over one mile of linear distance. This means that a two-lane road where each lane is 11 feet wide and is one mile long is two lane miles. This also means that a two-lane road that is a mile long, but whose lanes are 14 feet wide is 2.55 lane miles in total.

Currently, the City spends \$3.7M on street maintenance and construction, or 8% of annual expenditures. Careful inspection of new construction and continuing to invest in preventative maintenance can extend the life of streets and spread out future replacement costs. If the City wants to avoid street fees, property tax revenue will need to cover street maintenance and reconstruction costs. In addition to looking to increase property tax revenue from development, reducing the width of lanes and streets can help to reduce the amount needed for new construction and maintenance.



\$ 17.9M
Needed Yearly Spending/Saving

— \$ 3.7M
Actual Yearly Spending on
Maintenance or Construction

\$ 14.2M
Yearly Funding Gap

Baseline Land Use Fiscal Analysis

An in-depth analysis of the fiscal productivity of Kyle's development pattern and service model was performed as part of the comprehensive planning process. A parcel-level analysis of the property taxes and general fund service costs for the various land uses and development patterns in Kyle provides a glimpse into which perform better than others in terms of their ability to generate sufficient property tax revenue to cover their share of service costs, including long-term roadway maintenance. The analysis used the metrics of property tax revenue per acre and net revenue per acre to map the net fiscal productivity (revenue minus each parcel's proportionate share of service costs) of all parcels in the city.

Three levels of analysis were completed to understand the fiscal performance of development today and when costs for future infrastructure replacement are considered. Each of those levels are explained on this and the pages immediately following.

Certain development patterns will hold their value and remain positive, even with the additional cost burden, while others will decrease significantly. The following pages provide the maps and additional detail on each level of the analysis, followed by a summary of key takeaways from the analysis. Results of this baseline modeling and context from other cities were then used to project how different future development scenarios would perform financially and inform the final growth scenario, recommendations, and action plan.

Property Tax Revenue Targets

EXISTING CONDITIONS

\$765

CURRENT REVENUE PER ACRE

This also assumes that 39.3% of general fund revenue comes from property tax (based on 2021-2022 budget).

LEVEL 2 ANALYSIS

\$2,000

BREAK-EVEN FOR CURRENT BUDGET CONDITIONS

This is the estimated target to cover current services plus existing street infrastructure liabilities with property tax revenue.

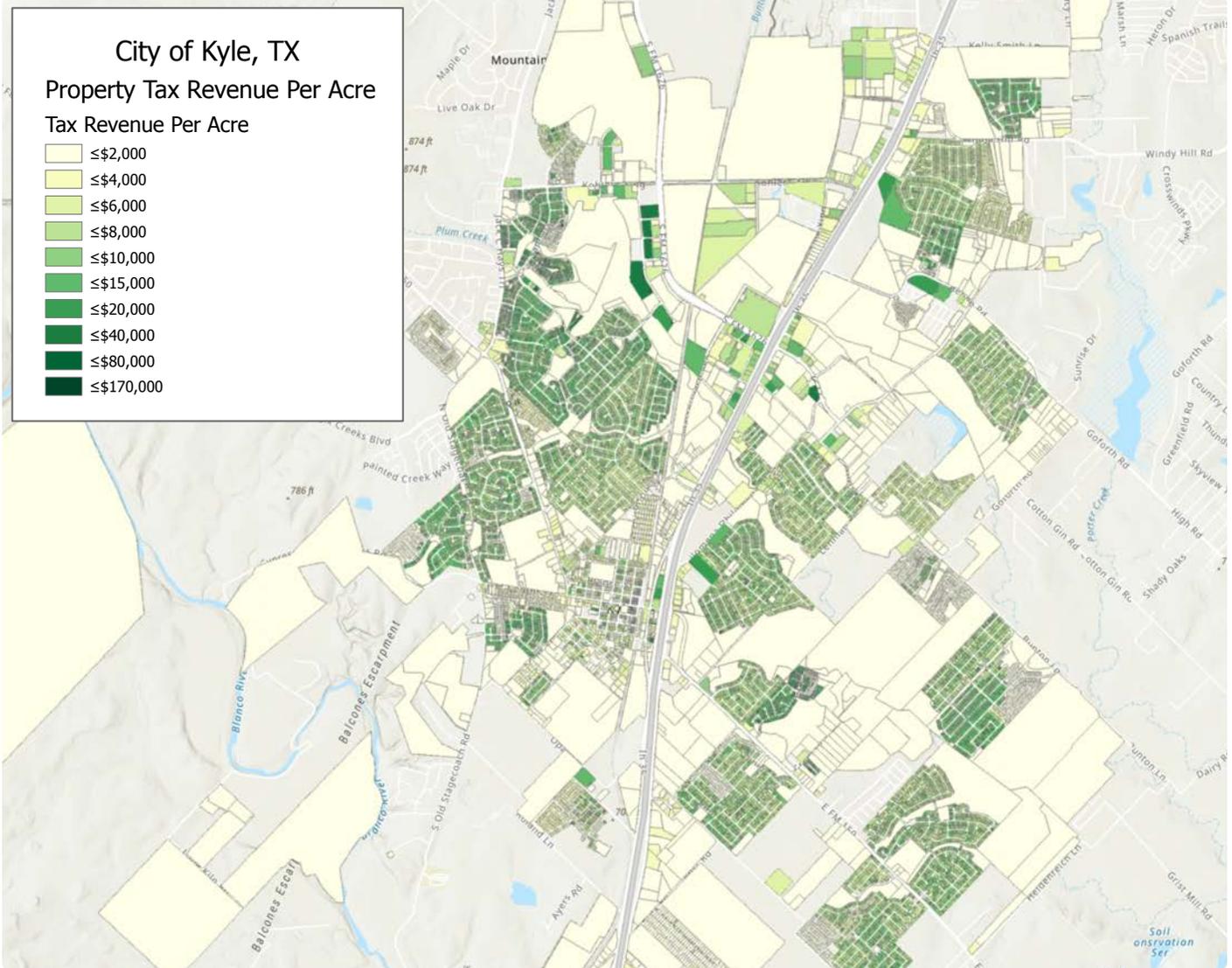
LEVEL 3 ANALYSIS

\$3,000

FISCALLY SUSTAINABLE

This target is tuned to sustain and expand city services to a larger population and service area as new growth pushes into the area.

**LEVEL I ANALYSIS
PROPERTY TAX REVENUE PER ACRE**

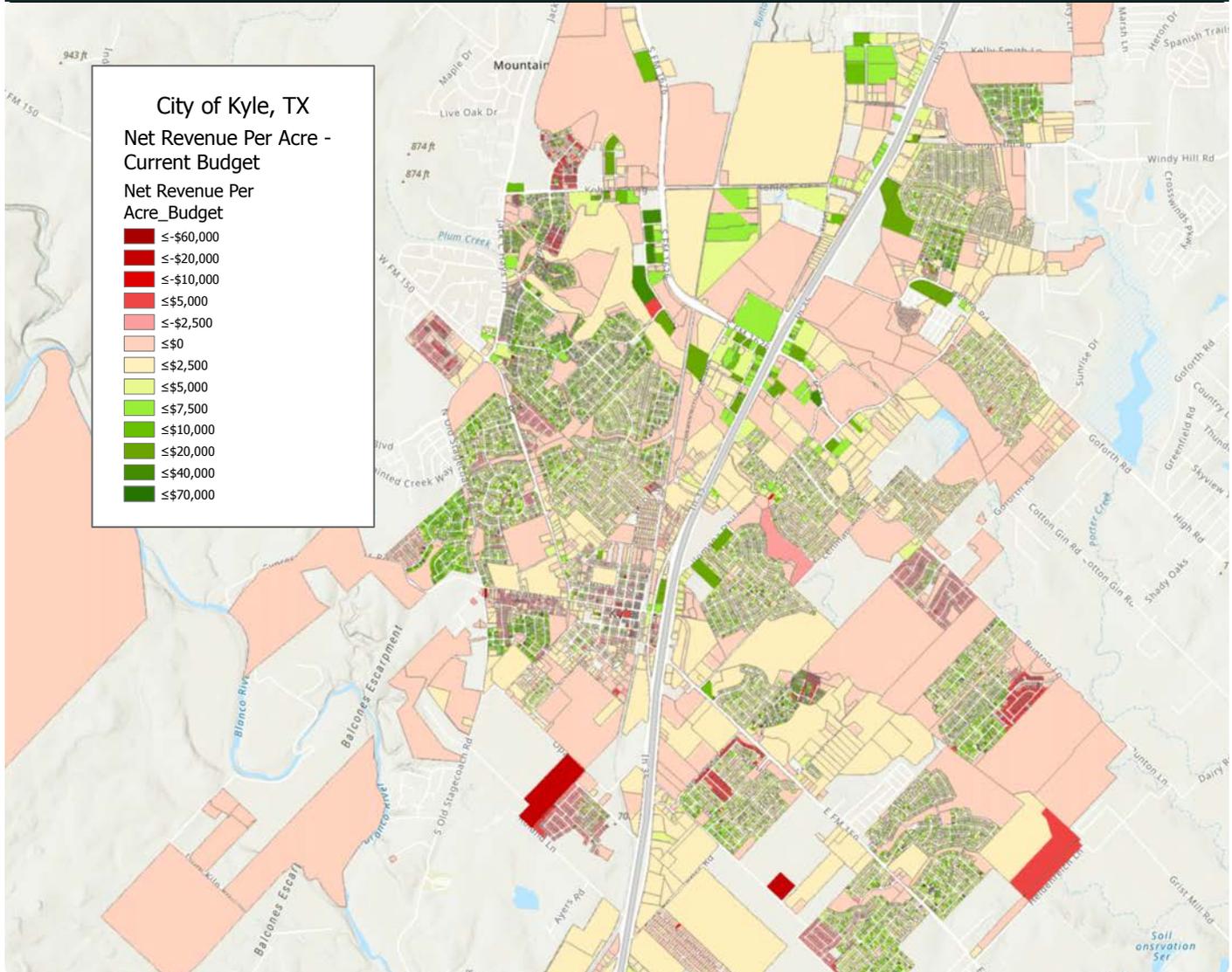


The first level of the analysis process involves mapping the revenue side of the fiscal equation. Property data and property tax levy amounts were pulled directly from the Hays Central Appraisal District database files for the certified tax rolls. Levy amounts were verified with the City budget and then the appraised value, assessed value, and actual levy paid after exemptions were mapped to the parcel level. Exempt parcels such as City-owned properties, churches, and other tax exempt areas such as street rights-of-way were removed from the analysis.

are under this value. Finally, should the city continue to build out in a pattern similar to what's been built in the city limits so far, the average levy per acre value would need to be over \$3000/acre to cover half of the projected general fund service costs and street replacement costs. 79% of the city's parcels and 18% of the city's land area currently exceed this value. If future development is in a more spread out footprint with larger lots, wider suburban style roadways and more utility infrastructure, then the required cost could be as high as \$4000/acre.

The map on the adjacent page illustrates the property tax levy per acre for parcels in Kyle, ranging from \$0/acre up to a maximum of \$78,857/acre. Three reference points are important when reviewing this map. First, the current property tax revenue per acre in the city is \$765/acre. In order to cover roughly half of Kyle's current (budgeted) general fund costs and replacement of existing streets with property tax revenue, Kyle needs to have an average levy per acre value of approximately \$2000/acre, or roughly \$1200/acre more than it's currently getting. 18% of the city's parcels and 79% of the city's land area

LEVEL 2 ANALYSIS NET VALUE PER ACRE WITH CURRENT BUDGET EXPENDITURES



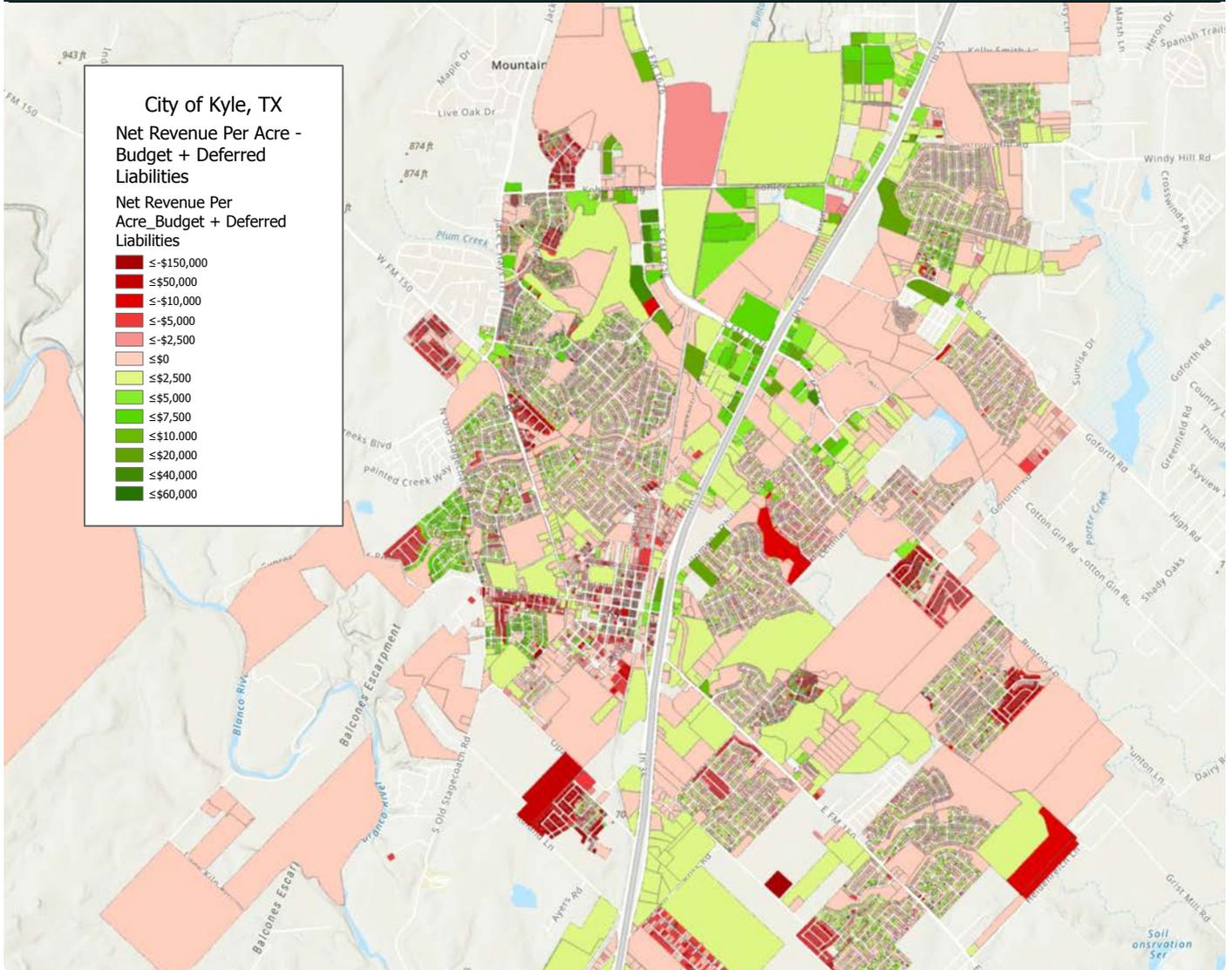
The revenue per acre mapping alone does not tell the full story. In order to understand the fiscal impacts of different development patterns, costs for services and infrastructure must also be taken into account. The level 2 analysis focuses on allocating general fund service costs from the current year's budget to the parcels. First, the amount of general fund costs being covered by property tax was determined using the city's budget (32% or \$16M). Developed properties were assumed to carry 85% of these costs, while undeveloped properties carried 15%. These amounts were then allocated to individual parcels based on proportionate area.

Only costs covered from the general fund and property taxes were considered in this analysis. Costs for water and wastewater infrastructure were not factored in, as those are typically funded through a separate enterprise fund tied to utility rates. It's important to note that utilities tend to follow the same trend as streets in that cities do not have sufficient revenue to maintain and replace utility infrastructure at current funding levels.

This generates a "red/green" or "profit/loss" map that illuminates which parcels generate surplus revenue based on current budget costs, and which ones cost more to serve than they generate in tax revenue.

This map shows the net value per acre for each parcel when you take the revenue it generates and subtract the costs as calculated above. Any parcels shown in green on this map are generating a surplus amount to cover current conditions, while those in the red cost more to serve than they generate in property tax. This map and the supporting data and analysis behind it demonstrate that under the current budget and tax rate structure, while there are some development patterns and properties in the city that do generate a surplus, the majority of the city is not generating enough revenue overall to pay for the future replacement of streets and other infrastructure. This is the resource gap that future development strategies must work to close if the City hopes to avoid significant tax increases or substandard infrastructure in the future.

LEVEL 3 ANALYSIS NET VALUE PER ACRE WITH PROJECTED MAINTENANCE NEEDS



The third and final step in the baseline analysis projects what additional revenue the City would need to replace existing streets when they reach the end of their life cycle. Typically cities budget an annual amount for preventative maintenance and fund a few capital improvement projects (CIP) through bond programs every 3-5 years. While these costs are often out in the future, having a plan to reserve and build up funds annually will ensure the funding is there when it's needed.

The additional amount it would take for Kyle to replace existing street infrastructure was estimated as roughly \$360 million over 20 years. A straight average over 20 year life cycle for asphalt pavement was calculated, and then these additional costs were allocated to each parcel based on a similar proportionality process. This second version of the "red/green" map shows how different parcels and development patterns perform fiscally when considering the true infrastructure burden and assuming these costs are covered from property tax revenue.

It's important to note that this step only accounts for replace-

ment of existing streets, and assumes that the City does not build or take on (from new development) any additional pavement, either through widening of existing roads or adding new ones.

FISCAL BASELINE TAKEAWAY

Kyle is a young community, and therefore not overburdened with a large amount of aging infrastructure and fiscally unproductive development. This is common in many Texas suburbs that embraced the suburban expansion model during prior decades. However, the city is already facing some significant resource and affordability challenges, as well as rapid growth and service pressure in the Extra-Territorial Jurisdiction, or ETJ. Where, when, and how the city adds development in the

years ahead is crucial. This may align revenues with service costs and affordability. Or, if not managed well, it could exacerbate the gap. Three primary takeaways are summarized below.

TAKEAWAY

1

It is imperative that a replacement for development revenue is determined now. Revenue from building and development review fees makes up 19% of the city's general fund, over \$9.6M. When development slows down, this revenue stream will be reduced. Then, it must be replaced by other more sustainable methods. One option to replace development fee revenue is to increase the property tax rate. A second option is to increase sales tax revenue by allowing more commercial development throughout the city. A third option is to increase property tax revenue by encouraging development with a higher taxable value per acre. One or a combination of these could be used.

TAKEAWAY

2

Kyle is at a point of great change. Policy decisions will determine whether affordable housing exists. The costs to build, buy, or rent in Texas are on a steep climb. Inflation and shortages of labor and materials have played a role, but the primary factor is a growing gap between housing supply and demand. Building only single family detached homes and auto-oriented commercial development will likely result in values and taxes continuing to rise. This model can pencil out for the city, if the tax rate and appraisal cap policy are aggressive. Even then, it will not make the city more affordable and inclusive. If the City embraces policies that encourages more diverse housing in compact, walkable neighborhoods, it will provide a broader spectrum of lifestyle and price point options. It will also generate more property tax revenue per acre and a reduced cost per household.

TAKEAWAY

3

A growth management policy that supports a fiscally sustainable development pattern is necessary. To be financially resilient and affordable long-term, development must produce sufficient revenue to cover service and infrastructure costs permanently. Development must be guided into the appropriate locations and form. This balances revenues, costs, and affordability for residents and businesses. One way to do this is to focus on location, maximizing development in areas with existing infrastructure and services before building in greenfield areas that will add liabilities and costs. The other way is to focus on the pattern of what is built to generate higher taxable value per acre. This would allow the City to capture additional property tax revenue without having to raise the tax rate.

BRIDGING THE GAP

For cities to be financially resilient and affordable for years to come, city leaders must work to close the gap between their resources and their obligations to citizens. More specifically, they must find ways to generate additional revenue for rebuilding aging streets and infrastructure. Generally speaking, there are three ways in which a city can close this gap:

OPTION

1



Keep development patterns and service levels as-is but charge more (via higher taxes and fees) to cover the true costs. This is a difficult option because an increasing number of people do not have the means to pay much more than they are currently paying.

OPTION

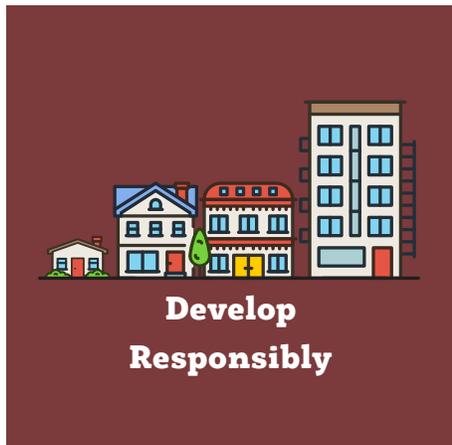
2



Maintain current taxes and fees where they are but cut services to align with revenues. This is what most cities are currently doing, where services and maintenance needs are budgeted to fit available revenue and those that are unfunded get deferred. This can work for a short period, but eventually the neighborhoods and infrastructure must be maintained, or property values will start to decline causing people and businesses to leave the city.

OPTION

3



Adjust development and infrastructure to enable an affordable balance of services and taxes. By prioritizing infill, redevelopment, and more financially productive development patterns, the city can generate additional tax base from its service area and improve the return on investment of taxpayer dollars without necessarily having to raise the tax rate or charge more fees. This is the most feasible and effective option.

Fiscally Sustainable Infill Development

While many areas of Kyle are already developed, there are numerous pockets of vacant lots throughout the city that represent opportunities to supplement the existing neighborhoods. Various blocks in the core of Kyle could be reimaged in a similar fashion. These illustrations demonstrate how diverse housing types can seamlessly be integrated into and enhance existing neighborhoods when appropriately scaled. While this approach will work for some blocks within the city boundary, it might not work everywhere, and the selected location is purely an example. These ideas are intended to uncover where additional value can be added for the community. Key advantages of this approach include:

ALLEYS

Existing alleys in Kyle's core area can be leveraged to connect to hidden parking areas, offering a practical solution that minimizes visual clutter and promotes a cleaner, more pedestrian-friendly streetscape. Kyle's residents have demonstrated an interest in solutions that help keep street life moving adequately, and placement is key. By improving the streets in the core, on-street parking can also be enhanced, making the streetscape more attractive and safer for all residents and visitors.

SCALE & USE

New activity and revitalization in the core area present an excellent opportunity to assess the current uses within the neighborhood. This is an ideal time to examine how and where to introduce neighborhood-scale, mixed-use development, an idea residents have shown support for. This approach can create vibrant and sustainable places where residents can live, work, and enjoy recreational activities nearby. These types of places are what keep a city from feeling like every other nearby city, introducing unique and approachable businesses and services.

INFRASTRUCTURE

The availability of existing infrastructure makes it more cost-effective for developers to build and bring different types of housing to the market, as the necessary infrastructure is already in place. Capitalizing on these existing resources can create smaller, more affordable housing units that cater to multiple needs. Furthermore, the walkable nature of these infill areas makes it possible to attract individuals who are not dependent on cars or have fewer vehicles in their households. Subtle increases in the number of people who can be housed in an area works more effectively with utility limitations and allows the existing infrastructure to be used in a more cost-efficient manner.

INFILL

It is essential to highlight that carefully planned infill development brings benefits to the area's long-term residents and businesses. While incremental infrastructure improvements may sometimes be required, such investments offer the added benefit of bringing new investment to older areas. This reinvestment ensures that all residents benefit from upgraded infrastructure, creating a more equitable and prosperous community. Moreover, these incremental infrastructure improvements are more affordable for developers who build these products. This also provides access to a more diverse development community by opening up opportunities for small developers.

Integrating Infill Within Existing Blocks



Output of This Pattern of Development

PARKING SPACES	35	NEW YEARLY COSTS GENERATED	\$8.9K
STREET-ADJACENT	12		
ALLEY-ACCESSED	5		
DRIVEWAY	18	NEW YEARLY REVENUE GENERATED	\$9.7K
SPACES PER UNIT	2.2		
NEW UNITS	16	YEARLY NET REVENUE	\$800
QUAD	4		
STACKED DUPLEX	4		
DUPLEX	2		
ADU	5		
COTTAGE (SINGLE-FAMILY)	1		
NEW TAXABLE VALUE CREATED	\$3.3M		
QUAD	\$1M		
STACKED DUPLEXES	\$1M		
DUPLEX	\$500K		
ADUS	\$425K		
COTTAGE (SINGLE-FAMILY)	\$350K		

In this scenario, more housing units are added to an existing block. In doing so, even with future infrastructure maintenance factored in, this block produces more value than it costs to maintain. While a yearly net revenue of only \$800 might appear small, consider that this block no longer needs to be subsidized by other property to cover its costs. This pattern replicated widely would be a boon to the fiscal bottom line in Kyle. What's more, this pattern produces a multitude of housing typologies, many of which are small and, thus, naturally occurring affordable housing (NOAH) that are not common in Kyle. This housing is also in keeping with the character of the neighborhood and creates significantly more housing per acre without the need for massive suburban apartment complexes.

Fiscally Sustainable Greenfield Development

While there are still areas of undeveloped land in Kyle, there are not many. Maximizing each to realize their full potential through careful development choices is a prudent approach. While these illustrations do not represent a specific, set project on the horizon, they are presented here with purpose. By taking the elements of development patterns covered in this document and showing them applied to a local context, residents can begin to see what shifting the approach can offer, both fiscally and visually. Key advantages of this approach include:

DENSITY

When strategically planned and designed, higher-density development can create vibrant and sustainable communities. It is essential to overcome the misconception that higher density leads to overcrowding, increased crime rates, and greedy developers. In this example, dwelling units are strategically placed to accommodate a larger population while creating ample green space and preserving natural features. Kyle leaders have expressed their openness to alternate housing styles, but felt it important to use natural features and design to create housing that is appropriately scaled and placed.

CHOICE

Higher density offers flexibility in housing affordability and various lifestyle choices. A more comprehensive range of housing options empowers individuals and families to choose living arrangements that best suit their preferences, current needs, and budgets. Additionally, the interconnected network of streets reduces automobile dependency and congestion, a concern the public has expressed in numerous engagement events. At the same time, the streets are safe and more attractive to walk. This example prioritizes pedestrian-friendly design principles, promoting active transportation and fostering a sense of community.

WALKABILITY

The residents in this example benefit from easy navigation, primarily by walking. They have convenient access to amenities like event lawns, nature play areas, and neighborhood-scale retail establishments. The high walkability factor attracts foot traffic, benefiting businesses of different scales and contributing to a vibrant local customer base. It becomes an active neighborhood rather than one filled with automobile traffic. This type of development promotes sustainability for various commercial and retail businesses, fosters place-based economies, and encourages the development of a unique local identity. When people are asked what they love about a neighborhood, the most frequent responses are related to a neighborhood identity or feel.

FISCAL SUSTAINABILITY

It is crucial to consider the fiscal sustainability of this approach. By using finite land resources more efficiently, the value per acre can be maximized. Narrower streets and a balanced density distribution, rather than concentrated density, reduce the strain on infrastructure maintenance. This approach ensures the long-term sustainability of different neighborhoods in Kyle and enables resources to be allocated to other areas in the city when needed.

Comparing Greenfield Development Patterns



Existing Pattern

RESIDENTIAL UNITS	329
SINGLE FAMILY	329
DUPLEX	0
QUAD	0
ADU	0
TOWNHOME	0
LIVE-WORK	0

Value of Most Affordable Unit

\$328K

Single-Family Home

Total Commercial Square Feet

0

ACRES OF OPEN SPACE **2.6**
3% OF LAND AREA

TAXABLE VALUE **\$79M**

YEARLY COSTS GENERATED **\$344K**

NEW YEARLY REVENUE GENERATED **\$236K**

YEARLY NET REVENUE **-\$108K**

Comparative Pattern

RESIDENTIAL UNITS	305
SINGLE FAMILY	80
DUPLEX	62
QUAD	44
ADU	69
TOWNHOME	46
LIVE-WORK	4

Value of Most Affordable Unit

\$85K

Accessory Dwelling Unit

Total Commercial Square Feet

73K

ACRES OF OPEN SPACE **12.5**
26% OF LAND AREA

TAXABLE VALUE **\$150M**

YEARLY COSTS GENERATED **\$329K**

NEW YEARLY REVENUE GENERATED **\$451K**

YEARLY NET REVENUE **\$123K**

NEIGHBORHOOD CHARACTER IN DIVERSE NEIGHBORHOODS

Throughout the planning process, Kyle's community and officials showed an interest in diversifying the housing types within neighborhoods. The workshop on housing intensities revealed some priorities about the look and feel of neighborhoods and how that affects the quality of life for residents. The neighborhood character and building types shown in the examples below reflect the positive input received from that workshop about middle-intensity housing.

They highlight a sampling of density levels from around the development scenarios on pages page 57 and page 59, and show the scale and feel from a pedestrian vantage point. These images demonstrate how a balance can be achieved between a more fiscally sustainable development pattern and the design of pleasant surroundings that increase activity and socialization. By incorporating green space and tree-lined streets, these areas are scaled to people, and not just to cars. The streets and adjacent outdoor spaces feel safer and calmer. They simultaneously incorporate the housing intensities and types.

Street Level Views of Diverse Housing on an Infill Block



These renderings demonstrate the inclusion of moderate residential density in a way that is scaled appropriately and feels like a neighborhood.

Street Level Views of Diverse Housing in a Greenfield Development



The inclusion and mixing of different housing types from the middle of the housing spectrum creates visual interest but does not create a feeling of overcrowding or high traffic. This is in part because of a balance between the level of intensity and an appropriate streetscape.



This vantage point shows the matching of multi-family housing products with carefully designed streets and preserved open space. The result is a walkable environment that offers recreational and social opportunities.