# GROWING DEVELOPMENTS

## Building a successful multi-use development in Rosenberg

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## INTRODUCTION

Large metropolitan hubs continue to grow, as well as their surrounding suburbs. Fort Bend County saw a 16.3% population increase in 2019-2023 compared to 2014-2018 [1]. Mixed-use developments are one of the best options for meeting these new demands by being able to utilize property for commercial, residential, and/or industrial uses with fewer zoning restrictions [2]. As a result, property use is guided by the market, rather than the government.

Many factors influence the success of mixed-use development, including its location, design, and strong community engagement [3]. Ultimately, these factors come down to the market and what the surrounding area and its residents desire. As the residents make up the market driving mixed-use development, its success comes from earning the highest return, while creating a project that the community supports and enjoys. Mixed-use developments are the perfect solution to meet these needs by providing flexibility and an environment that is adaptable to meet the community's needs in the long run [4].

With individual markets for each development being extremely unique to each project, there is no generic template you could use to test a market. While some general data is available for the Houston area, each suburb surrounding it has vastly different residents with differing needs and desires. Without data specific to Rosenberg, there is no way of knowing what the market wants to make a successful mixed-use development that will thrive from residential support and maximum returns. While it is predicted that the growing population of this area will desire dense residential options with supporting restaurant infrastructure, this research endeavor will utilize the demographic, residents' needs, travel patterns, and other market data to create a mixed-use project that succeeds. Especially with a growing population, understanding the Rosenberg market and creating a mixed-use development plan aimed at success through this research endeavor will pave the way for future developments as they continue to scale across metropolitan suburbs.

## METHODOLOGY

Multiple layers of data will be utilized to support one another in building the final multi-use development. For this study, profitability and an increase in community happiness will be used as the determinants for success. First, a survey will be conducted to gain an idea of what the Rosenberg residents want or believe is lacking in the area. This will give a starting point for what types of development to explore, as well as give insight into their current happiness and happiness after the developments are built. The survey will be distributed through electronic communication by local neighborhood groups. Next, size, location, popularity rankings, and demographic data will be gathered through Placer.ai for the surrounding area. Placer.ai gathers data using location signals sent from consumer phones, giving accurate information about people's destinations and paths. This data will be used to support the initial survey results by giving quantitative data on travel patterns. This data can also be used to predict market growth and patterns to help future-proof this development. Zillow will be utilized to give quantitative data on property values, which will be used to estimate purchase, sale, and leasing prices. Ultimately, this data will be used within the pro forma to estimate and create an accurate example of the revenue and expenses, calculating profitability used to determine the success of this multi-use development. By utilizing these data points, a model can be built for a successful multi-use development in Rosenberg that meets residential desires and is profitable with good investor return.

## RESULTS

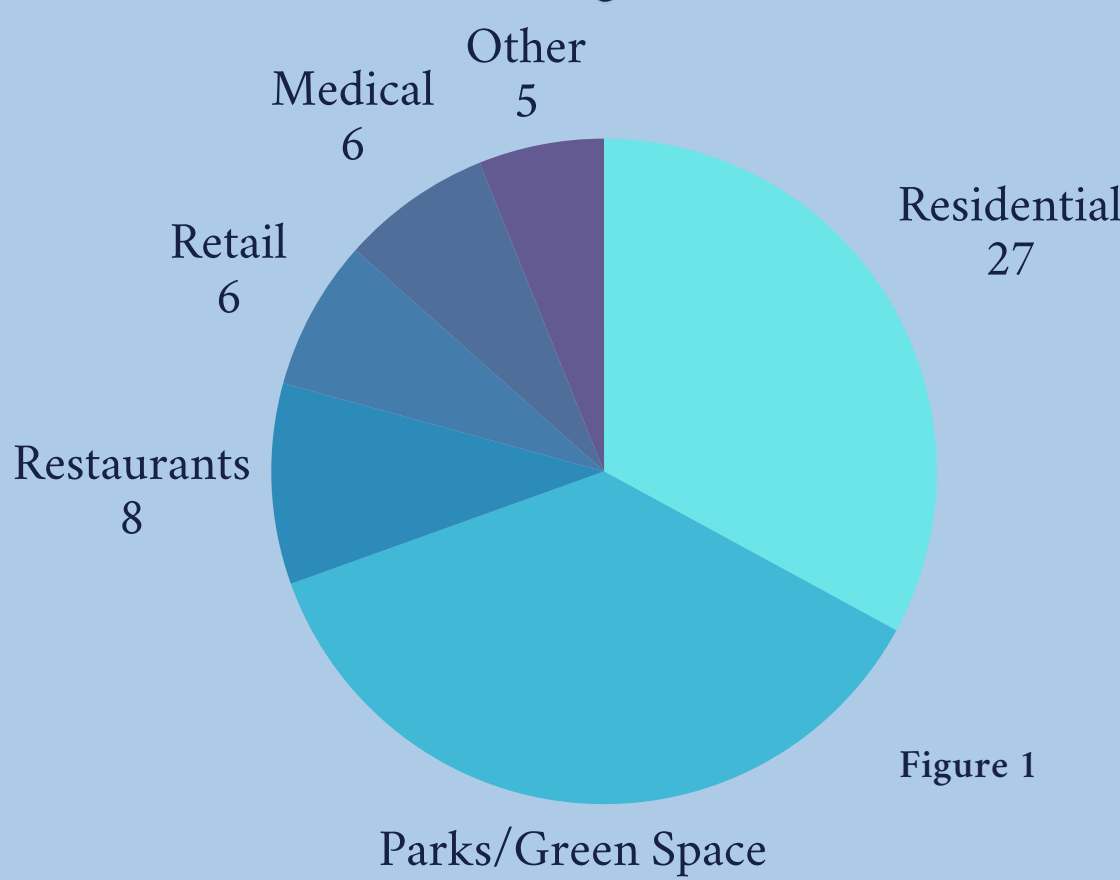What types of development would you like in the Rosenberg area?
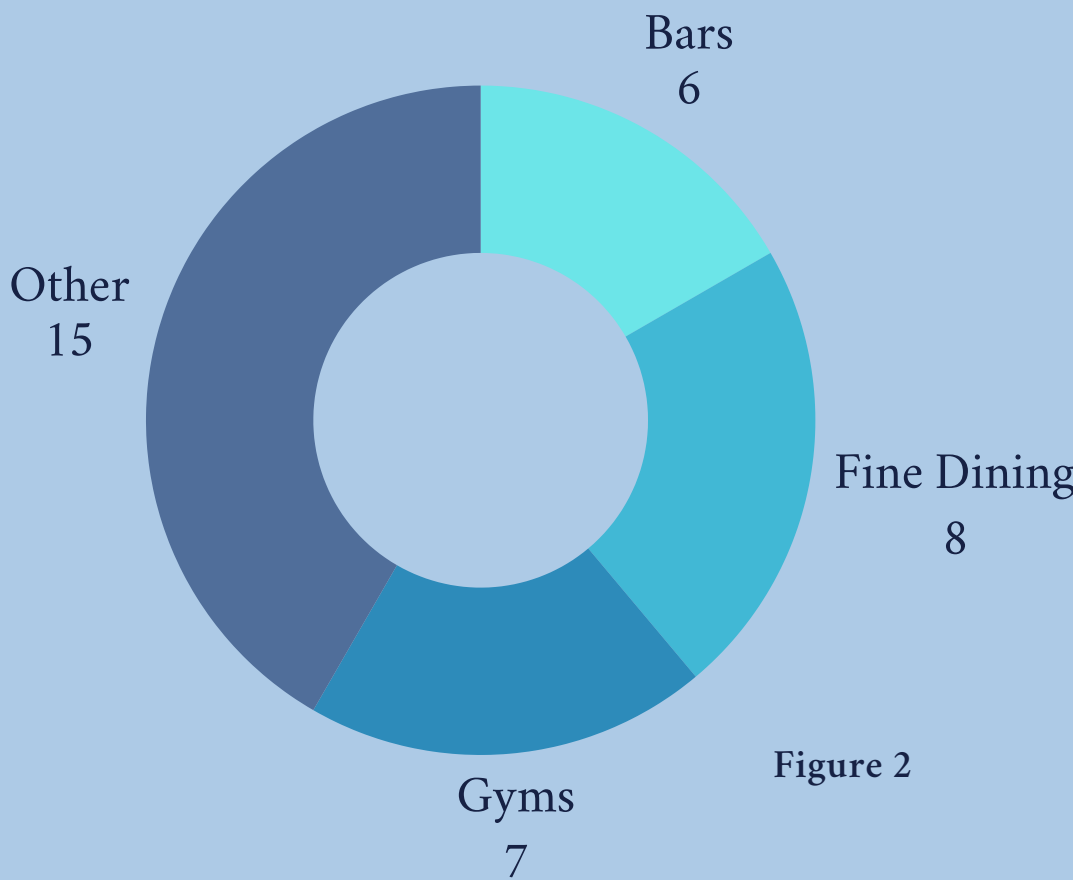


Figure 1

What amenities do you want more of?



Figure 2

Increase in happiness from amenity additions


100%

Figure 3

| Metric Name | Sunset Park Mulcahy St, Rosenberg, TX | Brazos River Park Southwest Fwy, Sugar Land, TX |
|---|---|---|
| Visits | 35.4K | 80K |
| Visits / sq ft | 0.04 | < 0.01 |
| Size - sq ft | 790.9K | 13.7M |
| Visitors | 16.9K | 47.1K |
| Visit Frequency | 2.1 | 1.7 |
| Avg. Dwell Time | 63 min | 74 min |

Figure 4

**$1,650,000**    14.47
0 Fm 723 Rd, Rosenberg, TX 77471    Acres

**$2,090,000**    15
3723 Cottonwood School Rd, Rosenberg, TX 77471    Acres

**$2,500,000**    16.95
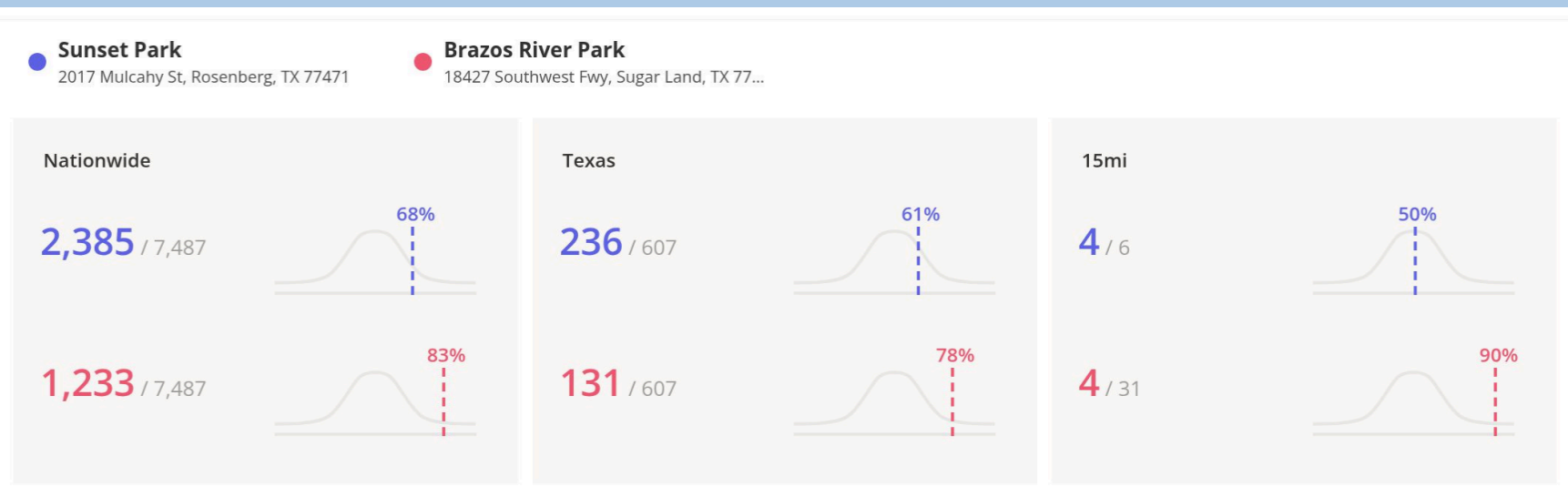111 Klauke Rd, Rosenberg, TX 77471    Acres

Figure 6



Figure 5

| ABSORPTION | | Year 1 2025 | Year 2 2026 | Year 3 2027 | Year 4 2028 | Year 5 2029 | Year 6 2030 | TOTAL |
|---|---|---|---|---|---|---|---|---|
| | Acreage Sales | 2 | 14 | 4 | 0 | 0 | | 20 |
| TOTAL REVENUE | Sch 2 Cash Flow | 435.6 | 13,068.0 | 3,920.4 | 0.0 | 0.0 | 0.0 | 17,424.0 |
| ACQUISITION/DISTRIB COSTS | Sch 2 Cash Flow | 441.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 441.8 |
| NET DEVELOPMENT COSTS | Sch 2 Cash Flow | 3,695.0 | 8,797.1 | (1,379.6) | (1,032.2) | (1,083.8) | (1,138.0) | 4,325.0 |
| TAXES SELLING G&A | Sch 2 Cash Flow | 1,116.3 | 1,378.2 | 923.9 | 666.5 | 493.0 | 326.5 | 5,084.4 |
| PROPERTY ACQUISITION COSTS | (3,049.2) | | | | | | | |
| NET CASH FLOW BEFORE FINANCING | (3,049.2) | (4,817.6) | 2,892.7 | 4,376.1 | 365.7 | 590.8 | 811.5 | 4,523.6 |
| PROJECT INTERNAL RATE OF RETURN (BEFORE FINANCING) | 13.90% | | | | | | | |
| PROJECT Net Cashflow | (3,406.4) | (1,484.3) | 5,561.9 | 2,172.1 | (4,497.3) | 1,059.4 | 811.5 | 3,570.8 |
| PROJECT INTERNAL RATE OF RETURN (AFTER FINANCING) | 17.96% | | | | | | | |

Figure 7

## FINDINGS

Out of the 36 responses, 83.3% wanted additional green spaces, and 75% wanted more residential options in Rosenberg (Figure 1). Using this information, the development can be split into land-use categories to fulfill citizens' demand. While the initial hypothesis anticipated an increase in residential and restaurants to support it, the desire for parks and green spaces was not initially predicted.

Figure 2 introduces options for amenities and restaurants to lease the development to fit citizen demand and increase happiness (Figure 3), leading to more successful long-term tenants and customers. The desire for fine dining and bars aligns with the results from Figure 1, as restaurants were the 3rd most requested development type, aligning with our hypothesis. Additionally, the request for more gyms aligns with the increase in park/green space demand (Figure 1) and overall modern focus on health and wellness.

With parks and green spaces seeing an overwhelming interest (Figure 1), Figure 4 represents data from Placer.ai to back up this data. Oftentimes, parks aren't added into developments due to their lack of revenue and return on investment. Yet, because of this large demand, the park can act as a hub bringing people to the development. When comparing Sunset Park, a smaller comparable Rosenberg park to Brazos River Park, ranked in the top quartile of parks in Texas (Figure 5), we see many indicators for a park addition to the multi-use development as a success. Sunset Park brings in nearly half the number of visitors that the Brazos River Park brings in, even though its land area is about 6% of the size. Additionally, the higher visit frequency shows citizen loyalty, an indicator of a returning customer base if attracted to the development.

Using the $3 million estimated land acquisition cost from Zillow (Figure 6), Figure 7 shows a projected return. This represents a summary of a larger spreadsheet, which calculates land values, taxes, loans, expenses, inflation, and more to determine the internal rate of return. With nearly an 18% return after financing, the multi-use development is projected to be successful financially.

## DISCUSSION

While the results from this research endeavor show promising results for upcoming multi-use developments in Rosenberg, the sample size was extremely small compared to Rosenberg's population. Additionally, the sample was from no specific part of Rosenberg, even though the city itself is quite large.

Ultimately, this project was a success since the data allowed us to create a development that brought in an industry comparable rate of return. If this project were to be repeated, I would suggest further utilizing the data Placer.ai retrieves through its reports to create more correlations and connections between the citizens' travel patterns to build a more specific multi-use development model.

While the desire for parks was not initially anticipated, it makes sense when compared with other data and the overall trend of a healthier lifestyle that many young adults have begun to shift towards. Additionally, while the parks don't bring in much revenue on their own, they can be utilized as a hub within the development to attract consumers to the plaza.
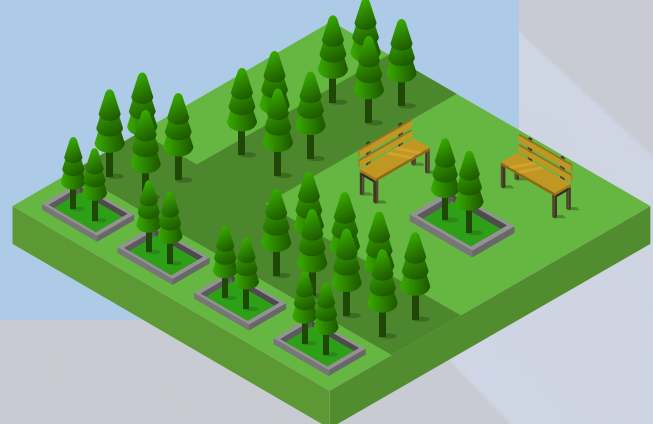
## REFERENCES

1. Fitzpatrick, Alex, et al. "Houston Suburbs Continue to Boom." Axios, Axios Houston, 8 Jan. 2025, www.axios.com/local/houston/2025/01/08/houston-suburbs-continue-to-boom. Accessed 21 Mar. 2025.
2. Bonura, John. "Increasing Housing Supply in the Urban Core through Mixed-Use Commercial and Residential - Texas Public Policy Foundation." Texas Public Policy Foundation –, 19 Dec. 2024, www.texaspolicy.com/increasing-housing-supply-in-the-urban-core-through-mixed-use-commercial-and-residential/. Accessed 21 Mar. 2025.
3. The Peebles Corporation. "What Makes Mixed-Use Developments Successful?" Peeblescorp.com, 2025, peeblescorp.com/what-makes-mixed-use-developments-successful. Accessed 21 Mar. 2025.
4. Tranel, Ben. "The Future Is Mixed Use: How Principles of Mixed Use Design Will Restore Our Communities." Gensler, 27 Jan. 2025, www.gensler.com/blog/how-principles-of-mixed-use-design-will-restore-communities. Accessed 21 Mar. 2025.