

**TO:** Lexin Murphy, AICP, Director of Planning Services

**CC:** Erin Perdu, AICP, Planning Group Leader – Midwest, Stantec

**FROM:** Chance Sparks, AICP, CNU-A, Urban Planning+Design Group Manager

**SUBJECT:** The Connection between Residential Density and Economic Viability

**DATE:** 6/24/2022

**PROJECT:** Flower Mound Ranch Mixed Use Development 3<sup>rd</sup> Party Review Services

---

The project team received a request regarding the number of residential units necessary to economically support non-residential components within the Flower Mound Ranch mixed use development.

### **The Question of Residential Density’s Effect on Non-Residential Economic Viability**

The question is intended to find, if present, a connection between the number of residential units needed to maintain the economic viability of non-residential functions within the same market area. Research on this topic was centered around mixed use town center developments, emphasizing multi-family rooftops related to residential purchasing power (measured as the product of households and household income). It is also recognized that the Flower Mound Ranch presents non-residential uses in both a mixed-use context and a suburban (automobile-oriented) context.

### **Findings**

Research on retail viability is traditionally conducted assuming developers want a supply of existing residential rooftops to support a project before building. For several reasons, the number of rooftops or units is not often a topic of direct research. Residential demographics, including household composition, income, and spending priorities, vary greatly even between similar projects within the same market area. Moreover, commercial and retail lessees or buyers cannot be predicted long-term and are primarily driven by market demand and product types. In other words, **predicting success for undetermined retail or commercial entities is difficult considering the unpredictable preferences of the public.**

Despite these challenges in predicting market success, the connection between residential purchasing power and non-residential viability within Flower Mound Ranch can be evaluated against research on regional retail absorption rates and average retail square-footage per household density conducted elsewhere in the United States. The shopping center vacancy rates within Lewisville/Flower Mound decreased by approximately 4.11% between 2020 and 2021, indicating a healthy retail trend moving out of the thick of the Covid-19 pandemic.<sup>1</sup> This decrease in vacancy more than doubles that found in the larger Dallas-Fort Worth (DFW) market at 1.85%. Trends indicate that larger commercial entities (those occupying more than 25,000 square feet) seek to fill existing space within the Lewisville/Flower Mound

---

<sup>1</sup> Weitzman Group. (2022). *2022 Shopping Center Survey & Forecast Report* [Brochure].  
<http://www.weitzmangroup.com/report/2022-texas-retail-report>

submarket. **Even accounting for the pandemic, the occupancy rates noted in 2021 for the DFW market were the third-highest measured since 1990.** This success could be attributed to a rapidly growing regional population, indicating that higher retail rental rates are following the population growth in DFW. In short, there is latent demand already present, which explains not only the Flower Mound Ranch project optimism but the interest of multiple other nearby properties entering various stages of entitlement.

Additional studies link the number of households and purchasing power to the amount of retail square footage within populous counties across the United States. Although these data pools were significantly larger than Flower Mound and the Flower Mound Ranch project limitations, **the linear correlation between household density, purchasing power, and quantity of retail square footage may be anticipated.** In 2019, Cushman and Wakefield found that retail square feet per household within several counties in northern California, southern California, and the five boroughs of New York City yielded positive coefficients in all instances.<sup>2</sup> Although this study did not focus on retail or commercial health, an assumption was made that more retail square footage indicated higher market demand and success.

Between the northern and southern California counties observed by Cushman and Wakefield, **the best fit for retail square feet per household fell between 126 to 139.** Every market is different and every project is different. We often see mixed-use projects inserted into an existing development fabric as just the mixed-use core to support the surroundings. In those circumstances, we expect to see a relatively small amount of the market support from within the project since the surrounding residential already exists. Flower Mound Ranch differs due to scale and location within the overall context of the metro area.

Based on the aggregate residential dwelling units discussed in the latest mixed-use zoning ordinance proposal, Flower Mound Ranch will include 12,982 residential units, including both multi and single-family housing types. Based on the anticipated non-residential square feet of 6,688,163, Flower Mound Ranch alone will provide approximately 515 square feet of non-residential use per household. It is important to note that the non-residential square feet will include retail, office, hospitality, entertainment, and other non-residential uses as permitted in each mixed-use sub-district by *Table 3.1: Land Use*. With those uses, totaling approximately 4.5 million square feet (see TIA) backed out, **Flower Mound Ranch is planning approximately 170 square feet of retail per residential unit.**

It is critically important, however, to recognize that the retail/restaurant component of Flower Mound Ranch occurs in both the mixed-use core and in the more suburban, auto-oriented portions against the major roadways. Unfortunately, data is not available indicating how the anticipated ratio of retail/restaurant falls between these two development environments. Generally speaking, the suburban, auto-oriented retail/restaurant is more focused on the larger market area of Flower Mound Ranch beyond its boundary. The Mixed-Use Core, by contrast with its walkable nature, is more focused on the residential units and purchasing power within the confines of Flower Mound Ranch. That said, a major town center often pulls a significant consumer base from beyond the edge of the immediate project area much like a destination, as people flock to experiential consumer experiences. The Cushman and Wakefield research seems to account for this phenomenon, though we recommend a small downward adjustment in the residential units to retail/restaurant ratio given that the location has limited transit access, is in a suburban location, and also anticipates a level of suburban, auto-oriented restaurant/retail.

---

<sup>2</sup> Segal, D. (2019). Is Retail Development Success Related to Housing Density?: Retail Square Footage per Capita and Other Benchmarks. *Cushman & Wakefield: Insights*.

Flower Mound Ranch should target a ratio of 75 to 100 square feet of retail/restaurant within the Mixed-Use Core areas to the ultimate number of residential units WITHIN Flower Mound Ranch. For example, presuming that 10,000 residential units are constructed in various forms within Flower Mound Ranch, this reflects 750,000 to 1,000,000 square feet of restaurant/retail within Mixed Use Core environments. Again, this recognizes the pull of experiential retail/restaurant from across the larger market area as well as the likelihood that Flower Mound residents also frequent the suburban, auto-oriented restaurant/retail.

Particular uses inevitably draw from outside of the retail market area, particularly hospitality and to a lesser extent entertainment. As a rule, however, **mixed-use projects perform best when residential in a wide variety of densities and formats is designed integral to the project with thoughtful connectivity and placemaking.** This helps to assure a customer base during any economic recessions. Projects without these connections and housing integration tend to have greater levels of risk. While not local to the Dallas/Fort Worth market, The Hill Country Galleria in Bee Cave, TX experienced this during the recession circa 2007. Since then, they have begun efforts to retrofit urban residential.

Likewise, office and corporate uses (as well as hospitality) increasingly target mixed-use cores or adjacency to such cores. This phenomenon is present throughout the Dallas/Fort Worth market, particularly in the Plano and Frisco submarkets. This occurs for a variety of reasons, with two dominating the reasoning:

- Employee desire to work in a location that offers leisure and activities to enjoy throughout the day and after work, which has only increased as an incentive to encourage employees to return to the office.
- Changing consumer preferences, as younger professionals often seek the ability to live lifestyles less reliant on the personal automobile, lifestyles that result in less time spent on home maintenance, and the ability to balance work and life through efforts like reduced commutes.

This drives at the importance of residential product diversity—these office uses and employers cross a broad salary spectrum, desired lifestyles, stage in life, etc.

### **Future Analysis and Areas of Concern**

Flower Mound Ranch is anticipated to complete build-out in four phases extending into 2064. Although assumptions have been made above for the project, the specific uses and distributions that will make up each phase depend on private investment and *Table 3.1: Land Use*. The mixed-use zoning ordinance caps residential units for the entire project; however, non-residential areas will fluctuate as all phases approach build-out. The viability of additional or existing retail and commercial entities should be assessed per phase to verify the residential and non-residential uses remain appropriate to one another.

**Of primary concern is the timing of the mixed-use core subdistrict development, which is not scheduled in significant amounts until Phase 3.** This introduces potential that the developer may elect to build the residential and suburban-style commercial elements only.

If concerns regarding the balance between residential density and economic viability persist during build-out, **we recommend that the Land Use Summary conducted in Table 3.3 of the zoning ordinance (Area A excerpt provided below) be further applied to each building phase, as compared to the current analysis per each zoning area. In other words, proportional amounts of the mixed-use core should be developed in earlier phases to assure project implementation aligned to the stated intent.**

The ratios described above may provide a method to determine appropriate ratios of mixed-use core for completion in each phase, though there should be recognition that rooftops generally lead retail.

Excerpt of Table 3.3: Land Use Summary

				Town of Flower Mound Master Plan Standards	
MU Area	Land Use	Percentage of the Acreage	Acreage	Percentage of the Acreage	Flexibility Factor
<b>Area A</b>					
	Non-residential uses*	57.22%	313.95	45%	±25%
	Public uses	3.54%	19.40	5%	±5%
	Residential uses**	28.84%	158.25	45%	±25%
	Civic/Open Space (public and private)	10.00%	57.05	5%	±10%
	<b>Total</b>	100.00%	548.65		
*Non-residential uses shall include retail, office, hospitality, entertainment, and other non-residential uses as listed in Table 3.1: Land Use.					
**Residential uses above commercial uses shall not be included in the calculation of percentage of residential uses in the overall development.					

Assessing the ratios of Land Uses depicted above against the acreage of each phase will give City Council and staff a better understanding of how Flower Mound Ranch will build out over the 40-year timeline.

**Commentary on Appropriate Use of February 2022 Memo Regarding Market-Drive Requirements for Mixed-Use Development**

The February 2022 Memo includes a discussion of appropriate ratios of multifamily units in relation to acres of mixed-use development, identifying a 500 unit-to-50 acres of mixed-use. Some have asked whether this ratio could be extrapolated to the entirety of the Flower Mound Ranch. The memo is explicit in this regard, stating, “a key assumption being that the question primarily pertains to a core mixed-use area comprised of multistory buildings in an urban style, with and without vertical mixed-use.” Only a portion of the overall Flower Mound Ranch project falls into this category, as the project is comprised of multiple sub-districts that vary from mixed-use core to exclusively residential areas.