Market Analysis City of Franklin & Goose Creek Basin

Submitted to: City of Franklin, TN

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Executive Summary

As part of the Goose Creek Basin planning process, TischlerBise is under contract to analyze underlying economic and market conditions in Franklin in order to inform planning for future development in the area. This report will help to develop an understanding of Franklin's current economic base and is intended to provide guidance to the City of Franklin by evaluating the City's current market position with respect to its economic targets. This will be done by examining the strengths, weaknesses, opportunities, and challenges facing the residential and nonresidential markets. Recommendations for land use and infrastructure strategies can then be made from this analysis. This report also works to identify realistic economic opportunities in line with the City and stakeholder visions.

The report is based on information gathered through a variety of means including:

- Review of secondary available data, from the U.S. Census Bureau, ESRI Business Analyst, and private firms (Colliers International, Realtor.com)
- Stakeholder interviews with members of the development/real estate/leasing community
- Independent research
- Proprietary computer modeling
- Experience of TischlerBise principals involved with the effort

Major Findings

The following section highlights major findings from our analysis:

RESIDENTIAL SECTOR

- Franklin has a top tier housing market which has seen an even further uptick recently. In 2021, there was a dramatic increase in listing prices and a drop in the average number of listing days.
- Based on a "hotness" index, Franklin is currently in the top one-percent of housing markets nationally.
- Although the housing market is very strong, the existing pipeline of approved developments will
 not meet the future demand, resulting in an unmet need of 4,000 housing units over the next 20
 years. Goose Creek may not have the land capacity or stakeholder desire for this level of housing
 growth, the unmet demand signals future success of housing development in the area.
- Lastly, residential density will be necessary to support the desired commercial development along with the necessary infrastructure projects. Dense developments have been growing in popularity with wealthier and older households.



NONRESIDENTIAL SECTOR

- The retail and office markets in Franklin are booming. Franklin's retail is a regional attractor and has evolved with recent e-commerce trends. While, the office market has continued to expanded since its watershed moment ten years ago.
- However, commercial development in the Goose Creek Basin area may look different than other hot spots in Franklin (i.e., Cool Springs and Berry Farms).
- Stakeholders have expressed their desire to promote local-serving retail, not regionally attracting shopping and entertainment. Based on the current spending of Franklin residents, if housing development were to expand by 1,000 2,000 housing units in the Goose Creek area, there would be enough local demand to support a small town center with several commercial options.
- Based on floor area, Franklin is only second to the downtown market in the Nashville metro. However, there is currently a high level of vacancy (nearly 2 million square feet) and the Berry Farms developments have been approved for an additional 4 million square feet. These two locations have the ability to absorb the projected 20-year office space need, if developments can match with future market desires. With that said, Goose Creek has a strategic location along two interstates and may have a timing advantage as well to be successful in targeting certain industries.

INFRASTRUCTURE

- The market analysis did not identify additional projects beyond the items that have already been indicated by City staff.
- However, after examining the plans for new transportation, water, and sewer infrastructure it is clear that substantial funding will be necessary to accommodate further growth in the Goose Creek Basin area.
- Funding may be available from state and federal grant programs and utility rates and fees are able
 to cover some capital projects. But most of the projects will only be viable with dense residential
 development. However, dense residential developments will be reliant on infrastructure
 improvements. This relationship emphasizes the importance of cooperation between City land
 use planning, stakeholders, and the building community.



Existing Conditions

Franklin has been the benefactor of a number of different strategic discussions and other influential factors. When Nissan North America moved its headquarters to Franklin, more than ten years ago, the city was established as a premier office location, adding to the Cool Springs commercial momentum. Nashville provides an additional employment epicenter, less than thirty minutes from Franklin residents, the international airport being a similar distance as well. Franklin's historic and thriving downtown provides a destination for visitors and identity for residents. Focus has now turned to the southern portion of Franklin and potential growth in the Goose Creek Basin. Existing projects (i.e., Berry Farms) in the area illustrates that the market can continue supporting further growth, both in new housing and new commercial. However, it is important to uncover the remaining market demands and conditions to appropriately plan for future growth in the Goose Creek area. Since the study area is still very much rural and undeveloped, the following chapter takes a citywide approach to understand the current residential and nonresidential conditions.

RESIDENTIAL EXISTING CONDITIONS

The following section includes a brief assessment of the population in Franklin. This information will facilitate recommendation for residential land uses for future residents and commercial land uses to the new demand. Illustrated in Figure 1, over the past ten year, the City of Franklin has grown from 62,500 residents to 86,600 residents, or nearly 2,200 new residents every year.

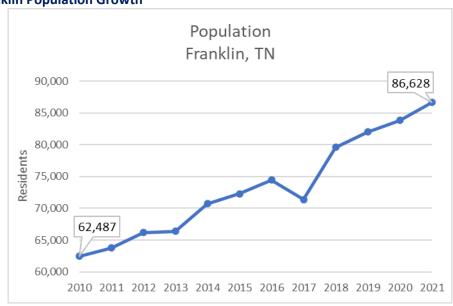


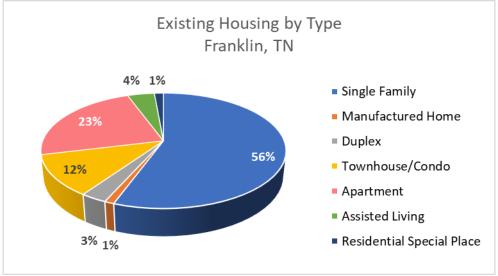
Figure 1. Franklin Population Growth

Source: City of Franklin 2021 Development Report

From the City's 2021 Development Report, at the end of 2021, Franklin had a total of 37,306 housing units. Single family accounted for 56 percent of the housing stock, while apartments and condos accounted for 35 percent of the total.



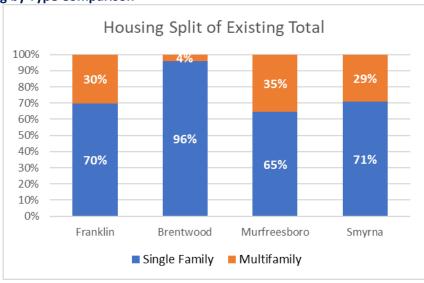




Source: City of Franklin 2021 Development Report

In Figure 3, U.S. Census data is used to compare Franklin to its neighbors. In 2019, 30 percent of Franklin's housing stock was multifamily and 70 percent single family. This split is similar to that in the Town of Smyrna. Multifamily units are more prevalent in Murfreesboro and is far less prevalent in Brentwood.

Figure 3. Housing by Type Comparison



Source: U.S. Census American Community Survey, 2019 5-Year Estimate

Listed in Figure 4, residents of Franklin have a considerable median household income. As of 2019, the median income in the city was nearly \$100,000. The only neighboring community with a higher income was Brentwood. At that point, the average household in Franklin was earning about 50 percent greater than in Murfreesboro, Smyrna, and the Nashville metro area.



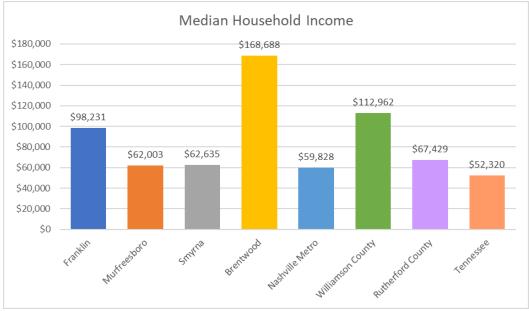


Figure 4. Median Household Income

Source: U.S. Census American Community Survey, 2019 5-Year Estimate

One reason for the higher earnings in Franklin is the prevalence of university degrees. Over 60 percent of Franklin residents (over the age of 25) possess a bachelor's degrees or higher. This rate is higher than the neighboring communities of Murfreesboro, Smyrna, and the Nashville metro, while it is lower than in Brentwood.

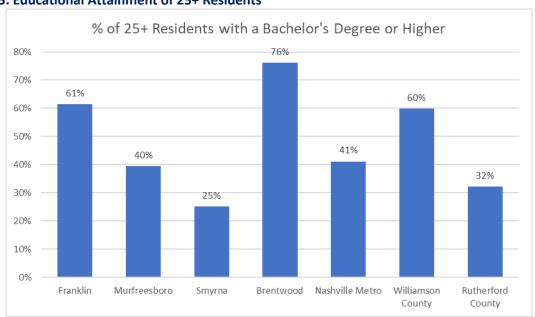


Figure 5. Educational Attainment of 25+ Residents





EMPLOYMENT EXISTING CONDITIONS

The following section outlines a few details regarding the employment in Franklin.

As of 2021, there were nearly 80,000 jobs in Franklin. Listed in Figure 6, the largest share is in office industries (35 percent). However, there is significant employment in healthcare and education (25 percent). Industrial, retail, and food service industries have a similar employment level of about 10,000 jobs. For a city of its size, Franklin has a significant job market. There is nearly a 1:1 population to job ratio while communities are generally satisfied with a 3:1 ratio.

Figure 6. Franklin Job Market

	2021	
Industry	Jobs	%
Retail	10,320	13%
Office	28,082	35%
Industrial	11,380	14%
Healthcare & Education	20,204	25%
Accommodation & Food Services	9,277	12%
		4000/

Total 79,263 100%

Source: ESRI Business Analyst

Illustrated in Figure 7, there has been a substantial employment growth over the last five years. Since 2016, employment in Franklin has risen from 68,100 to 79,300, averaging over 2,100 new jobs every year. Furthermore, while office industries have held a consistent 35 percent of the total employment, there has been an uptick in healthcare, education, accommodation, and food service industries. Compared to the total employment, industrial industries have fallen from 19 percent to 14 percent.



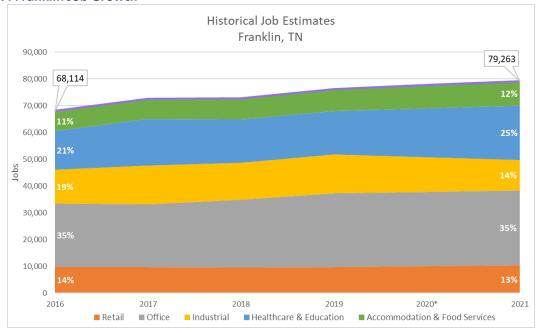


Figure 7. Franklin Job Growth

Source: U.S. Census Burau, LEHD on the Map; ESRI Business Analyst

*Note: Due to the covid-19 pandemic, the 2020 job estimates are not provided. Estimates for 2020 would not properly illustrate the job growth in Franklin.

While the City of Franklin may be perceived as a secondary employment center in the region compared to Nashville, the city boasts a significant net employment inflow. Illustrated in Figure 8, with the most recent data from 2019, there were 76,237 jobs physically located in Franklin. Of those jobs, 65,935 are filled by workers commuting into Franklin and 10,302 are filled by Franklin residents. Furthermore, there are 23,016 Franklin residents that commute outside of the city for work. Interestingly, the 10,302 residents that stay within Franklin for employment represent about 31 percent of the 33,318 employed Franklin residents. In most communities, 10-15 percent of employed residents both live and work in the community.



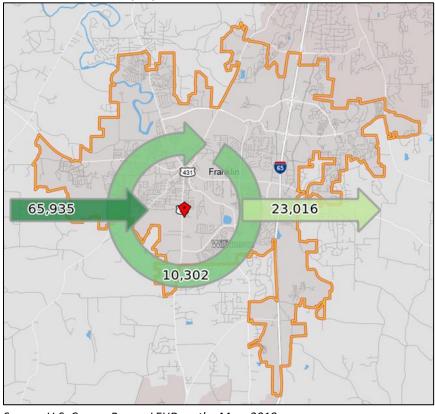


Figure 8. Franklin Inflow-Outflow Employment Patterns

Source: U.S. Census Burau, LEHD on the Map, 2019

Listed in Figure 9, of those commuting out of the city for work, roughly 34 percent work at jobs that pay \$40,000 or less annually, while 66 percent of commuters are earning more than \$40,000 annually. There is about 45 percent of the inflow and interior flow workers earning \$40,000 annually, 55 percent earning more than \$40,000 annually.

Figure 9. Franklin Inflow-Outflow Employment Salaries

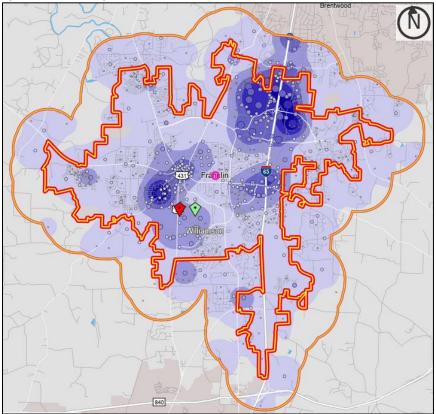
Job Type	Less than \$40,000 Annually		\$40,000+ Annually		Total Jobs
Outflow Jobs	7,832	34%	15,184	66%	23,016
Inflow Jobs	29,312	44%	36,623	56%	65,935
Interior Flow Jobs	4,648	45%	5,654	55%	10,302

Source: U.S. Census Burau, LEHD on the Map, 2019

Lastly, a heat map of employment is provided below to illustrate the location of jobs in and around Franklin. The city boundary along with a one-mile buffer is included in the map. In northern Franklin, also known as Cool Springs, there is a significant presence of jobs. Employment continues down Interstate-65 and into the downtown area of Franklin. There is a small, but presumably growing, hot spot in the southern area of the city where the Berry Farms development is occurring.



Figure 10. Employment Heat Map



Source: U.S. Census Burau, LEHD on the Map, 2019



Market Assessment

Residential Market Assessment

There has been a significant amount of housing development approved and constructed over the past five years. Listed in Figure 11, between 2017-2021 the City has approved over 10,000 housing units. Over the same period, nearly 5,800 units have been constructed, an annual average of 1,149 units. Furthermore, since 2001, there have been 13,708 approved housing units that have yet to be built. As a result, the existing inventory of unbuilt development projects will be able to absorb the recent annual average of construction for the next 12 years, assuming the residential pipeline matches with market demands.

Figure 11. Housing Development Pipeline

		Units	Units
	Year	Approved	Constructed
	2017	861	1,595
	2018	302	1,027
	2019	1,978	1,126
	2020	3,143	980
	2021	3,790	1,017
2017-	2021 Total	10,074	5,745

Note: 13,708 total approved but not yet

built units (2001-2021) Source: City of Franklin; 2021 Development Report

With that said, there are numerous ways of determining the health of a housing real estate market, such as listing price and average days on the market. Realtor.com provides a comprehensive indicator, "Market Hotness Index," which can be used to compare housing markets over time. The Index analyzes both the supply and demand side of the local housing market. The Index is scaled from 0 to 100, 0 representing the lowest and 100 representing the highest, or "hottest," housing market. The average score is 50, so the score represents the community's ranking relative to the U.S. as well.

There are three indicators presented in Figure 12 for the Franklin housing market: hotness score, median days on the market, and median listing price. From 2018 to 2020, Franklin's hotness score stayed within 70 to 80. At that point, Franklin was "hotter" than at least 90 percent of the housing markets across the country. In 2021, the score increased even further to above 80. In May 2021, Franklin's score reached 91, putting it within the top one-percent of housing markets.

Housing markets are cyclical, summer tends to be peak season, while in the winter housing sales tend to slow down. This is illustrated in Figure 12 with a higher number of median days on the market during the winter months. Before 2021, the yearly average was 45 days in Franklin, just slightly shorter than the average in the Realtor.com database of 48 days. However, in 2021, Franklin's yearly average dropped to



29 days. During the summer months, the median length was below 20 days. This is even more impressive considering Franklin has high valued homes, which typically take longer to sell.

In 2018 and 2019, the median listing price in Franklin ranged between \$750,000 to \$850,000. Listing prices saw about a 10 percent increase in 2020. In 2021, listing prices almost doubled, climbing from \$950,000 to \$1,800,000 by the end of the year. Although this reflects only the listed homes and the Franklin market is predominately single family homes, so it is not an accurate listing prices for all homes and home types in Franklin. However, it is safe to assume that in this case all boats rose and all Franklin homeowners saw a steep appreciation of their home values.

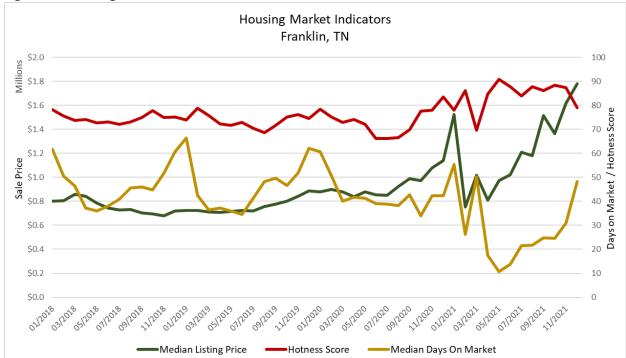


Figure 12. Housing Market Indicators

Source: Realtor.com Market Hotness Index

The 2021 Development Report provides housing development still to be built by housing type. Listed in Figure 13, of the 13,708 total units that have been approved but yet to be built, 9,749 units are multifamily types. There is a small number of duplex developments, while there are 2,996 townhome/condos and 6,683 apartment units approved but unbuilt. Also, there are about 14,000 multifamily units existing in Franklin, thus if the development pipeline were to buildout, there would be a 70 percent increase in multifamily housing stock.



Figure 13. Multifamily Development Pipeline

Multifamily Housing Type	Housing Units Still to be Built	% of Multifamily Total
Duplex	70	0.7%
Townhome/Condo	2,996	30.7%
Apartment	6,683	68.6%
Multifamily Total	9,749	_

Source: City of Franklin 2021 Development Report

Furthermore, the majority of the multifamily development pipeline has been approved within the last five years, indicating a response to market demands. A trusted source for multifamily housing markets, RentCafe.com, published a review of trends in the past decade¹. When examining data from 2010 to 2019, the study concluded:

- More wealthy Americans are choosing to rent over homeownership. Nationally, there was an increase of 157 percent in households earning \$150,000 or more that are renters. In the Nashville metro, the increase was 370 percent.
- While still popular with younger populations, renting has increased in popularity among older households. Nationally, renters that are 60 and older increased by 32 percent. Also, while homeownership decreased by 8 percent for the 35-59 age group, renting increased by 7 percent.
- In 40 out of the 50 largest metros, the number of suburban renter-households grew faster than the number of urban ones. Specifically, in the Nashville metro, suburban renters increased by 27 percent and urban renters increased by 18 percent.

These points coalesce into a theme, suburban communities are becoming more attractive to affluent, city dwellers for a number of reasons including the communities integrating certain quality-of-life aspects, like entertainment and walkability, that are traditionally only found in urban cores. These are also influencing location decisions for older households who may be downsizing. Lastly, multifamily developments are being designed to meet the desires of these groups including luxury, amenity-rich facilities.

Retail & Commercial Market Assessment

TischlerBise examined Franklin's existing commercial market using ESRI Business Analyst. A comparison of retail supply and demand indicates the health of the market and can be used to assess opportunity.

A retail gap occurs when household expenditures within an area exceed the corresponding retail sales estimates. This difference indicates that resident households are meeting the available supply and supplementing their additional demand by shopping outside of their resident trade area; this is referred to as leakage. The opposite is true in the event of a retail surplus. When estimated household expenditures are lower than the retail sales estimates, local retailers are attracting customers from outside the

¹ https://www.rentcafe.com/blog/rental-market/market-snapshots/renting-america-housing-changed-past-decade/



immediate area. In the figure below, leakage is indicated with a positive unmet demand, while a surplus is indicated with a negative unmet demand.

When examining purely Franklin residents and Franklin businesses. There is a surplus in almost all categories. The largest surplus is in general merchandise stores (i.e., department stores) while food and beverage related businesses have a substantial surplus as well. In these cases, the businesses are attracting customers from within and outside Franklin. Overall, there is nearly double the retail supply as there is retail demand. The most predominate industry with a retail leakage is nonstore retailers, which includes e-commerce and is expected to indicate a higher demand than supply.

Those industries with the unmet demand closest to zero are those where Franklin's business community is able to match the demand from Franklin residents. This is the case for miscellaneous stores (i.e., florist), garden supply stores, and electronic & appliance stores.

Figure 14. City of Franklin Retail Supply & Demand

City of Franklin				
	Demand	Supply		
Industry Group	(Retail Potential)	(Retail Sales)	Unmet Demand	
Furniture & Home Furnishings Stores	\$54,177,302	\$118,498,025	-\$64,320,723	
Electronics & Appliance Stores	\$45,787,118	\$57,863,710	-\$12,076,592	
Bldg Materials, Garden Equip. & Supply Stores	\$95,140,448	\$88,218,950	\$6,921,498	
Food & Beverage Stores	\$247,435,718	\$381,406,920	-\$133,971,202	
Clothing & Clothing Accessories Stores	\$68,405,289	\$207,331,279	-\$138,925,990	
Sporting Goods, Hobby, Book & Music Stores	\$39,806,934	\$137,936,908	-\$98,129,974	
General Merchandise Stores	\$244,275,204	\$554,386,747	-\$310,111,543	
Miscellaneous Store Retailers	\$54,780,771	\$51,983,733	\$2,797,038	
Nonstore Retailers [1]	\$25,843,748	\$3,382,637	\$22,461,111	
Food Services & Drinking Places	\$156,410,325	\$275,588,964	-\$119,178,639	

Total \$1,032,062,857 \$1,876,597,873 -\$844,535,016

Source: Esri and Data Axle. Esri 2021 Updated Demographics. Esri 2017 Retail MarketPlace Note: The difference between retail demand and retail supply is the unmet demand

[1] Nonstore retailers is predominately e-commerce

The oversupply of retail and commercial business indicates that Franklin is a commercial center for the surrounding area. To estimate the extent of the Franklin's commercial basin, Figure 16 lists the retail supply and demand estimates for an area with a 7-mile radius from the center of Franklin.



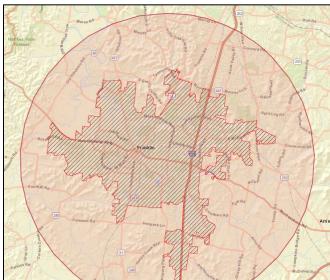


Figure 15. 7-Mile Radius from Center of Franklin

Source: ESRI Business Analyst

Overall, there is still a surplus of commercial business within the area. However, the surplus is much smaller than in the city indicating a closer balance in supply and demand.

Figure 16. 7-Mile Radius from Center of Franklin Retail Supply & Demand

7-mile Radius from the Center of Franklin				
	Demand	Supply		
Industry Group	(Retail Potential)	(Retail Sales)	Unmet Demand	
Furniture & Home Furnishings Stores	\$91,214,348	\$139,575,379	-\$48,361,031	
Electronics & Appliance Stores	\$76,630,341	\$104,919,154	-\$28,288,813	
Bldg Materials, Garden Equip. & Supply Stores	\$162,304,333	\$108,339,014	\$53,965,319	
Food & Beverage Stores	\$410,027,565	\$412,049,132	-\$2,021,567	
Clothing & Clothing Accessories Stores	\$114,943,772	\$272,643,163	-\$157,699,391	
Sporting Goods, Hobby, Book & Music Stores	\$66,686,219	\$161,024,083	-\$94,337,864	
General Merchandise Stores	\$407,052,619	\$622,740,388	-\$215,687,769	
Miscellaneous Store Retailers	\$90,814,499	\$62,377,827	\$28,436,672	
Nonstore Retailers [1]	\$43,503,340	\$5,521,160	\$37,982,180	
Food Services & Drinking Places	\$261,366,140	\$329,213,114	-\$67,846,974	
Total	\$1,724,543,176	\$2,218,402,414	-\$493,859,238	

Source: Esri and Data Axle. Esri 2021 Updated Demographics. Esri 2017 Retail MarketPlace Note: The difference between retail demand and retail supply is the unmet demand

[1] Nonstore retailers is predominately e-commerce

Lastly, the retail demand within the 7-mile radius around Franklin is compared to the retail supply within the city to understand the commercial balance. There is still an overall surplus of retail in Franklin compared to the 7-mile radius demand. For the industries that have a surplus (i.e., a negative in the figure



below), there are customers traveling from outside the area. While the industries that have an unmet demand (a positive in the figure below), there are customers traveling outside of the area to shop elsewhere.

Figure 17. Commercial Basin Demand vs Franklin Commercial Supply

	7-Mile Radius	City of Franklin	
	Demand	Supply	
Industry Group	(Retail Potential)	(Retail Sales)	Unmet Demand
Furniture & Home Furnishings Stores	\$91,214,348	\$118,498,025	-\$27,283,677
Electronics & Appliance Stores	\$76,630,341	\$57,863,710	\$18,766,631
Bldg Materials, Garden Equip. & Supply Stores	\$162,304,333	\$88,218,950	\$74,085,383
Food & Beverage Stores	\$410,027,565	\$381,406,920	\$28,620,645
Clothing & Clothing Accessories Stores	\$114,943,772	\$207,331,279	-\$92,387,507
Sporting Goods, Hobby, Book & Music Stores	\$66,686,219	\$137,936,908	-\$71,250,689
General Merchandise Stores	\$407,052,619	\$554,386,747	-\$147,334,128
Miscellaneous Store Retailers	\$90,814,499	\$51,983,733	\$38,830,766
Nonstore Retailers [1]	\$43,503,340	\$3,382,637	\$40,120,703
Food Services & Drinking Places	\$261,366,140	\$275,588,964	-\$14,222,824

Total \$1,724,543,176 \$1,876,597,873 -\$152,054,697

Source: Esri and Data Axle. Esri 2021 Updated Demographics. Esri 2017 Retail MarketPlace Note: The difference between retail demand and retail supply is the unmet demand

[1] Nonstore retailers is predominately e-commerce

Beyond challenging economics today, the long-term future of retail more broadly is being questioned by industry experts. Internet retailers, most notably Amazon, account for an expanding share of consumers' total retail spending. Between 2010 and 2018, ecommerce's share of total retail sales expanded from less than 5 percent to more than 10 percent according to the U.S. Census Bureau. The rise of e-commerce has caused retail sales revenue to shift away from brick-and-mortar storefront toward online retailers. However, the retail landscape is different in Franklin. Based on the ESRI Business Analyst data, in 2021, there was about a billion dollars of retail spending in Franklin while less than \$20 million in online shopping, or less than 2 percent of total spending. Although there is not an indication of the reasons for the below average penetration of e-commerce in Franklin, it reasons that impacted industries have right-sized over time while the overall marketplace has been able to demonstration its value over the convenience of online shopping to Franklin residents.

Figure 18. Franklin Residents Online Shopping

	Total	Online	
2021 Retail Market	Retail Demand	Shopping Demand	% of Total
Franklin Residents	\$1,032,062,857	\$19,246,419	1.9%

Source: Esri and Data Axle. Esri 2021 Updated Demographics. Esri 2017 Retail MarketPlace.

In the competitive retail market of today and the future, shopping is no longer merely a battle of price and convenience. Rather, retail is increasingly about creating a "retail experience." The most common



manifestation of this shift is the emergence of "town centers." Modeled on traditional downtowns, these new commercial anchors strive to create a vibrant, walkable commercial district with a mix of uses, often incorporating a residential component that heavily features multifamily residential units and townhomes. These developments have become magnets for millennials who want to live in a dense, walkable community. The trend behind mixed-used, lifestyle-oriented shopping is already having an impact, and this trend will continue for the foreseeable future. In light of this shift in consumer preferences, even Walmart, a company partially credited with the downfall of downtown retail, has begun exploring the development of town center concepts surrounding its stores.

Office Market Assessment

The map below (Figure 19) illustrates the advantageous location contributing to Franklin's success. Within a 30-minute drive from the Goose Creek area a resident can reach Nashville, Nashville International Airport, and Murfreesboro. Within a 60-minute drive, an employee can live throughout Williamson County, Rutherford County, and along Tennessee's northern and southern borders and commute to Franklin. This location allows for Franklin to attract employers and talent, also reflected in the city's commuting pattern and higher education attainment.

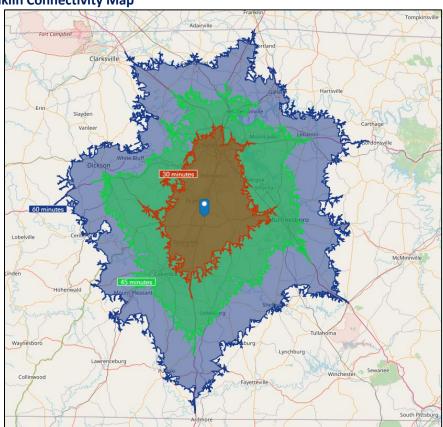
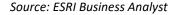


Figure 19. Franklin Connectivity Map





There has been an extensive history of growth in office space. Office buildings have been constructed for long-term headquarters and tenants, but also as speculative investments because of Franklin's attractive market. As a result, Franklin, specifically the Cool Springs area, is second to only the downtown market in the Nashville metro area for total office floor area. Listed in Figure 20, as of 2021 Q3, there was nearly 10 million square feet of office space in Cool Springs. With that said, Cool Springs has the second highest vacancy rate in the metro (18.8 percent), a significant difference compared to the metro average (12.6 percent). Based on those figures, there is nearly 2 million square feet of office space in the Cool Springs area that is vacant.

Additionally, from the Colliers database, the most notable current office projects are downtown Nashville in the Gulch, Nashville Yards, and Music Row areas totaling 2 million square feet. Also, based on interviews with stakeholders, TischlerBise learned that the Berry Farms developments have built about a million square feet of office and are entitled to another 4 million square feet (5 million square feet total).

Figure 20. Nashville Metro Office Inventory

2021 Q3	Vacancy Rate	Total Sq. Ft.	Vacant Sq. Ft.
Rivergate	2.5%	3,238,000	81,000
Green Hills	6.3%	3,530,000	222,000
Airport N	11.0%	5,135,000	565,000
Downtown	12.1%	16,221,000	1,963,000
Brentwood	13.3%	7,535,000	1,002,000
West End	13.7%	6,421,000	880,000
Airport S	16.2%	6,837,000	1,108,000
Cool Springs	18.8%	9,766,000	1,836,000
MetroCenter	19.7%	1,962,000	387,000
Nashville Metro	12.6%	60,649,000	7,642,000

Source: Colliers Research & Forecast Report, Nashville

Office Q3 2021 Report

Importantly, due to the covid-19 pandemic, office development is in a short-term and possibly long-term adjustment. As remote working was already trending up, during the pandemic shutdowns employers and employees realized the advantages of not working in the traditional office setting. By the beginning of 2022, large corporate employers were announcing "back to office" dates. However, a study conducted by market research company, Apartment List, found that 30 percent of jobs in the Nashville-Davidson-Murfreesboro-Franklin metro are remote-friendly, leading to the very real possibility that Franklin employers will implement a hybrid or full remote work policy. In this case, employers will be scaling down their floor area or completely shifting business.

Amenity-rich workplaces were also trending up before the pandemic to lure talent. Franklin office developments were offering a variety of amenities such as walking trail, pop-up lunch events, and dog daycare to entice employers and employees from the downtown market. This practice will be reinforced with the added competition from remote work opportunities. However, evident from the current projects in the area, being located in an exciting neighborhood, like the Gulch and Nashville Yards, may have an oversized influence in location decisions.



Market-Supportable Growth

The following chapter details the feasibility of future development in Franklin. These results will provide insight for future land uses recommendation for the Goose Creek Basin area.

Residential Development Feasibility

On top of the uptick in the city's "hotness" housing score, demand for housing is not anticipated to decline. Franklin is projected to grow by 44,000 residents over the next 20 years, a 50 percent increase from its 2020 population.

Figure 21. Franklin Population Projections

				20-Year
City of Franklin, TN	2020	2030	2040	Increase
Population	83,454	105,955	127,205	43,751

Source: City of Franklin 2021 Development Report

To accommodate that growth, there will have to be considerable housing development. The average household size in Franklin is 2.47 people, resulting in a need for 17,713 new dwelling units to house the new population. Listed in Figure 22, there are 13,708 unbuilt yet approved units, thus there is an additional need of 4,005 units.

Figure 22. Franklin Future Housing Need

City of Franklin, TN			
20-Year Population Increase [1]	43,751		
Persons per Housing Unit [2]	2.47		
Housing Need to Accommodate Population	17,713		
Approved But Not Yet Built Units [1]	13,708		
Additional Housing Need	4,005		

[1] Source: City of Franklin 2021 Development Report

[2] Source: U.S. Census Bureau, 2015-2019 American

Community Survey 5-Year Estimates

This analysis presents a conservative estimate of market-supportable, net new development. As the Franklin and Nashville market continues to boom the need for housing will expanded with it. Also, the area is no stranger to "game-changer" developments (i.e., Nissan North America HQ) and as the market continues to be attractive to large corporations the residential market will have to respond. With that said, the housing analysis does not indicate that the Goose Creek Basin carry the full development burden. Rather, holding all conditions unchanged, there is an existing appetite in the market for further residential development indicating residential development in the Goose Creek Basin will have an immediate market.



Explained further in the next section, there is a market and desire in the Goose Creek Basin for retail and commercial development that is serving the local residential demand, not a regional-serving development. However, to support such commercial development, dense residential housing stock will be needed. This would include townhouse projects along with multifamily developments with condos and apartments. Growth in denser housing would create the aesthetic and environment of a small town center. Furthermore, if designed appropriately, there would be synergy between the quality-of-life desires of the residents (i.e., entertainment and walkability) and the commercial development.

Retail & Commercial Development Feasibility

As mentioned, the Franklin commercial market has a number of advantages including an affluent and well-educated population, a strong employment center, and location. The commercial market is also a strong attractor, providing services and retail to an area larger than just Franklin. However, based on stakeholder input, there is desire for commercial development in the Goose Creek Basin that supports the local area demand, rather than serving a wider population. This would include multiuse developments and a small town center, rather than large big-box retailers or entertainment centers.

The following figures estimate the potential local retail floor area needs based on new residential development that may occupy in the Goose Creek Basin area. In Figure 23, the retails sales and retail employees in Franklin are listed. As of 2021, there was nearly \$1.9 billion in retail sales and 18,400 retail jobs, resulting in an average of \$102,000 per job. This represents the current level of service and production of the average Franklin retail and food service employee.

Figure 23. Retail Sales per Employee

	Supply	Total Retail	Sales
	(Retail Sales)	& Food Service Jobs	per Job
City of Franklin	\$1,876,597,873	18,377	\$102,117

Source: Esri and Data Axle. Esri 2021 Updated Demographics. Esri 2017 Retail MarketPlace

Based on the average spending per person in Franklin (\$11,955 annually) and the average persons per household (2.47 persons), the average retail demand per household is nearly \$30,000, or \$30 million per 1,000 housing units. Comparing the demand to the sales per retail job, there are 289 retail jobs supported by every 1,000 housing units in Franklin.

Figure 24. Retail Jobs Supported by Household Demand

	Retail Demand	etail Demand Retail Demand	
	per Household	per 1,000 Hsing Units	per 1,000 Hsing Units
City of Franklin	\$29,529	\$29,529,182	289

Source: Esri and Data Axle. Esri 2021 Updated Demographics. Esri 2017 Retail MarketPlace

Lastly, the national average for retail development is 471 square feet per employee. As a result, on average in Franklin, for every 1,000 housing units there will be a demand for 136,000 square feet of retail



development. That level of new retail floor area is relatively modest in size and conceptually amounts to a few restaurants and local-serving retailers, consistent with the perceived public desires. With that said, mentioned in the previous section, success of these commercial developments would require dense residential development to ensure there is a critical mass of demand.

Figure 25. Retail Square Feet per Household Demand

	Retail Jobs	Average Sq. Ft.	Estimated Retail Sq. Ft.
	per 1,000 Hsing Units	per Retail Employee [1]	per 1,000 Hsing Units
City of Franklin	289	471	136,000

^[1] Source: Trip Generation, Institute of Transportation Engineers, 11th Edition (2021)

Office Development Feasibility

The Goose Creek Basin is in a strategic location for office and other nonresidential developments. The area is bordered by Interstate-65 and Interstate-840, highways that travel north/south and east/west, respectively, across the state of Tennessee. A unique benefit in Franklin's notable office market. However, it is important to consider the existing inventory of office development and entitled office space yet to be built when determining the market-supportable growth in the Goose Creek Basin area. As of 2021 Q3, there was nearly 2 million square feet of vacant office space in the Cool Springs area, nearly 20 percent of the 9 million total. Also, the Berry Farms developments, adjacent to Goose Creek, have yet to construct 4 million square feet of entitled office space. These are significant market surpluses.

All things considered, office industries in Franklin are projected to grow significantly over the next 20 years. Based on current growth trends and the *Envision Franklin Plan*, office industries are projected to grow by 19,600 employees by 2040. This is about 40 percent of the total employment increase in Franklin.

Figure 26. Office Employment Growth

Franklin, TN	2021 [1]	2040 [2]	Increase
Office Employment	28,082	47,692	19,610
Total Employment	79,263	126,667	47,404

[1] Source: ESRI Business Analyst

[2] City of Franklin, Envision Franklin Plan 2017; TischlerBise analysis

Based on TischlerBise analysis, the 2040 increase in office jobs will require 6 million square feet of office space. If the existing inventory and office development in Berry Farms matches with the future need of office space, there will not be an overwhelming demand for further development in Goose Creek. However, market desires shift, and future office development in Goose Creek may have the benefit of timing to better suit the shift. Additionally, placement of targeted office development along the bordering highways may give Goose Creek a strategic edge over other locations.



Importantly, estimates may be on the high end of need because of the shift to remotely working. Before the covid-19 pandemic, certain standards could be used to approximate development needs, but although major employers are beginning to allow employees back into the office place, typical standards will not be applicable, at least in the short-term. Those that can reimagine the future office environment will be able to adjust quicker to the new normal. For example, work spaces will need to a more flexible to match a new flexible work schedule or the office environment may be entirely virtual. That virtual environment has already sent short-term shockwaves through every type of market and we are at the precipice of understanding the long-term impacts of the pandemic on the office environment.

Infrastructure Feasibility

Importantly, to accommodate future growth in the Goose Creek Basin, there will need to be infrastructure improvements and expansions. This is common for a growing city, but existing infrastructure limitations and necessary improvements need to be considered when planning for future growth. In this case, there are specific transportation and utility infrastructure needs:

- Transportation. In the 2019 Comprehensive Transportation Network Plan, City staff identified collector, arterial, and highway road projects that would be needed to accommodate the projected traffic demand from Goose Creek. This includes extension of the Goose Creek Bypass, improvements to Peytonsville Road, and a new I-65 interchange. Although some funding may be available from the state or federal government, there will be substantial local funding needed. For example, the extension of the Goose Creek Bypass would be 0.68 miles and cost \$12.1 million.
- Water & Sewer. There is relatively small demand from the existing population in the Goose Creek Basin. Consequently, if the area were to buildout, major water and sewer line expansions would be necessary to services the new flow rates. Additionally, new water facilities (i.e., pumps and storage) would be necessary to ensure capacity. There are some benefits to the topography of the area for sewer services. However, water and sewer facilities are typically oversized to accommodate a long-term planning horizon, so there will need to be a certain degree of confidence that a critical mass of development would occur to justify major expansion projects.

New infrastructure will ensure the safety of residents, utility services, and capacity in the transportation network. However, revenues are limited, constraining the City when upfronting costs for new infrastructure. Some funding may be available from state and federal grants, while utility rates and fees can offset some capital expansions. Also, development agreements can be constructed to ensure projects construct site specific needs. With that said, buy-in for major improvements will only occur if residential development is able to occur at dense levels, including both single family subdivisions and multifamily-mixed use projects. In short, costs become more palpable as they are able to be spread across more future growth. Yet, dense development will need said infrastructure improvements. Consequently, partnership between the City, service providers, stakeholders, and the development community will be necessary to ensure there is harmony between land use and infrastructure.

