

2. EXISTING CONDITIONS ASSESSMENT

Introduction:

The Existing Conditions Analysis considers the relationship between history, culture, natural setting, and built fabric that uniquely defines Westlake. In the course of this assessment, naturally occurring, organic sub-districts will be identified as well as the strengths, weaknesses, opportunities, and constraints that this unique confluence of conditions creates.



Figure 35: 1956 Historic Aerial

Analysis of Historic Aerials and Changes Over Time:

This analysis of Westlake starts with Westlake's tenure as a host to a ranch belonging to Dallas Attorney, Glen Turner. The pasture and livestock management decisions made during this period create a template upon which future uses of the land are, and will be, built. Mr. Turner acquired the Circle "T" ranch property in 1956. Therefore, taking a look at historic aerials from 1956 to the present should reveal how rural beginnings translate into present conditions.

1956 Aerial: The aerial photograph seen in Figure 35 was taken in 1956 (the year

of Mr. Turner's acquisition). Using the reference roadways, highlighted in yellow, one can see the landscape before most of these roadways were built. Within this photograph, there are numerous straight lines. Because straight lines do not exist in nature, such lines must be fence lines expressing crossed fenced pastures and/or property lines. This means that the consolidated pasture lands of Circle 'T' Ranch were not present, for the most part. Compare this to the present condition where many of these internal lines have been removed and pasture lands consolidated in the yet un-built western portions of Westlake (currently located mostly in Planned Development 3). In the

eastern and southern portions of Westlake, many of these original internal fence and property lines, visible in the 1956 aerial, now express themselves as project limits. The boundary lines of Glenwyck Farms, Terra Bella, and Vaquero are clearly seen in the 1956 land patterns. This is most likely related to the existence of Dove Road at that time and the move to purchase property along existing roadways in the early days of Westlake Development. One can even see the Vaquero entry drive in 1956 which then was a ranch road. The south to north roads flowing into the Westlake area in 1956 are the same north to south roads that residential development, to date, clings to (areas west of Davis Boulevard). These roads include Roanoke Road, Ottinger Road, Pearson Lane, and Precinct Line Road. Therefore, Dove Road east of Davis Boulevard and the south to north rural roads west of Davis Boulevard became the framework of development within Westlake seen as early as 1979 and definitely in full swing by 1990 with roads like Lazy Lane and Greenwood Lane being completely built out. By 2001, the grading work for Vaquero is also well under way. The significance of this infill pattern is that residential development, to date, is placed along a general north to south grain, infilling smaller parcels lying between the county and rural roads flowing into Westlake and, thereby, internalizing natural drainage ways running between such roads.

In 1956, Turner Lake was not yet built, and the location of Turner Lake was then a point of confluence for two active creek ways complete with well-defined bed and bank as well as a robust riparian plant community. This active creek system flowed across the right-of-way of SH 114, which was then a small two-lane rural highway that connected with a primary creek system now flowing north of Trophy

Club. Today, that creek system has been significantly altered, and most of the riparian plant community is gone. Once active creek ways are now compromised by in-line detention and check dams. The point of creek confluence is now the location of Turner Lake and the natural connection across SH 114 was replaced by a spillway that leads water to a piped connection. That pathway from spillway to inlet shows significant erosion in the present day aerial. The 1956 aerial shows a continuous branch of the converging creeks extending to the south, between Ottinger Rd. and Stone Hollow Rd. By 2001, this system element is significantly compromised with inline detention, loss of riparian plant communities and physical discontinuities. Much of the plant community that populates the creek way within Circle "T" has been converted to pasture land. After 1956, there is a continued succession of removing forested areas for conversion to pasture land. Without the entourage of natural features, the ability of the creekway to influence future development (north of Dove Road) in the same way that the streets influenced past development (south of Dove Road) is weakened; the PD Development Plan reflects a new development orientation, which is discussed later in this analysis.

Among present day property lines that are visible in the 1956 aerial as fence lines, is an east to west fence line running along what is presently the northern property line of Fidelity Investments, which then extends west along the northern property line of Deloitte and the northern building line of Westlake Academy to a fence corner that exists today and is visible on the 1956 aerial. In that this fence line has already become the northern boundary of present day development, it will likely become the southern boundary of future development, thereby bringing the agricultural past into the future. It is already the southern line of



Figure 36: 1963 Historic Aerial

the R-1 residentially zoned area surrounded by PD-3. If this line has such influence, it should be recognized in the design of development as Westlake matures. While the fence line is still there, a lot of the tree canopy along its alignment is now gone.

The retention lakes now west of Fidelity Investments can be seen as “under construction” in the 1956 aerial. These and other water bodies, such as Turner Lake, were constructed as part of the ranch conversion, making stock ponds for fenced pasture areas.

Finally, there is a large forested area that currently lies south of Solana Boulevard that is visible in 1956, which has the same

configuration as one sees today.

1963 Aerial: Figure 36 shows some important changes from 1956, which were made in a few short years. The first of these is the construction of Turner Lake and other retention ponds for stock watering purposes. Other changes include:

- A loss of tree cover visible in the 1956 photograph. This reflects a consolidation of pasture land in accordance with ranch management practices and begins to set up the development template of PD 3.
- Various barns and ranch structures are now visible, further establishing the ranch consolidation. The most important structures are the ranch



Figure 37: 1970 Historic Aerial

house and house lying at the end of the Turner Lake canal.

As of yet, significant residential development has not entered the Westlake Area.

1970 Aerial: Figure 37 shows Westlake in 1970. There is not much change from earlier images except that trees on the present day Westlake Academy site are gone. Note that there is still no significant residential development within the Westlake area. Also, it is noteworthy to point out that further pasture consolidation within the Circle "T" Ranch has further obscured old parcel lines that were visible on earlier aerials because of vegetative



Figure 38: 1990 Historic Aerial

differentiations at the old fence lines. However, ranch management within the Circle “T” boundary has begun to disperse the historic foot print of previous ownership.

1990 Aerial: Figure 38 shows Westlake in 1990. While not much has changed, there is residential development beginning to enter the Westlake area from the south along such streets as Lazy Lane. The early 90’s was the beginning of residential development in the Southlake/Colleyville area with such projects as South Ridge Lakes (along 1709). There is a steady march of housing infill northward along Pearson Lane and entering Westlake by 1990.

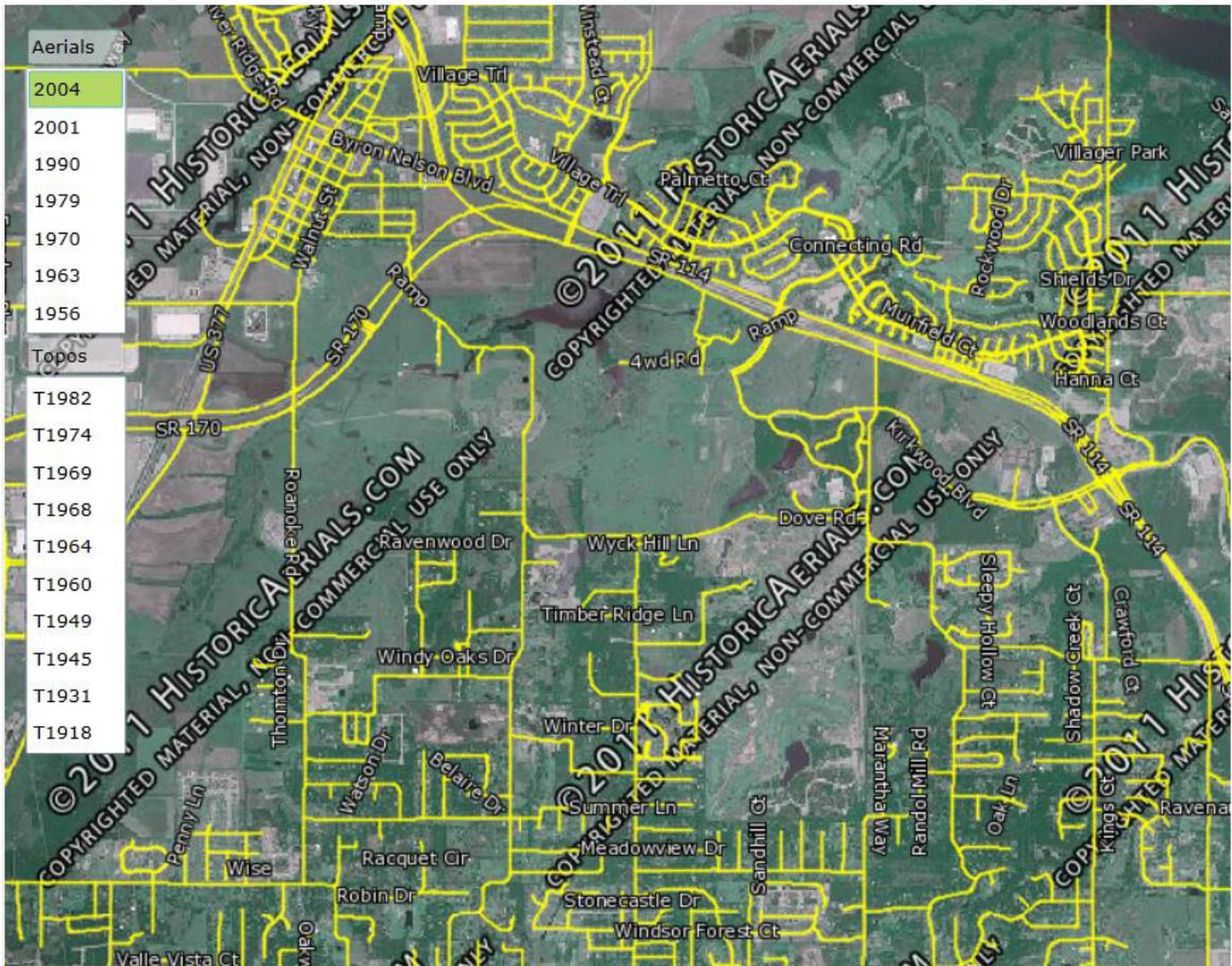


Figure 39: 2004 Historic Aerial

2004 Aerial: Figure 39 shows Westlake in 2004. Westlake Academy is visible, Vaquero Estates is complete (started in 2001), and substantially more residential development (which has progressed north along the south to north roads mentioned earlier) at the southern edge of Circle "T" due to Dove Road, which is seen here as a residential break-off line. Now clearly visible is an area of consolidated pastures and system of stock ponds.

In addition to more residential development, Solana North and South are visible, as well as the first phase of Fidelity Investment. This additional development begins to suggest a potential, and

emerging conflict of, residential development (running generally north to south) and commercial development (generally running east to west, along the SH 114 frontage). Therefore, whatever is developed north of Dove Road will define the interface between the north/south residential and the east/west commercial. Whether such future development will successfully reconcile the different patterns into a consolidated whole is a function of design. Roadways define the direction of and edges of development south of Dove Road. However, north of Dove Road amenity systems will define the direction of and edges of development, according to the Planned Development instruments.

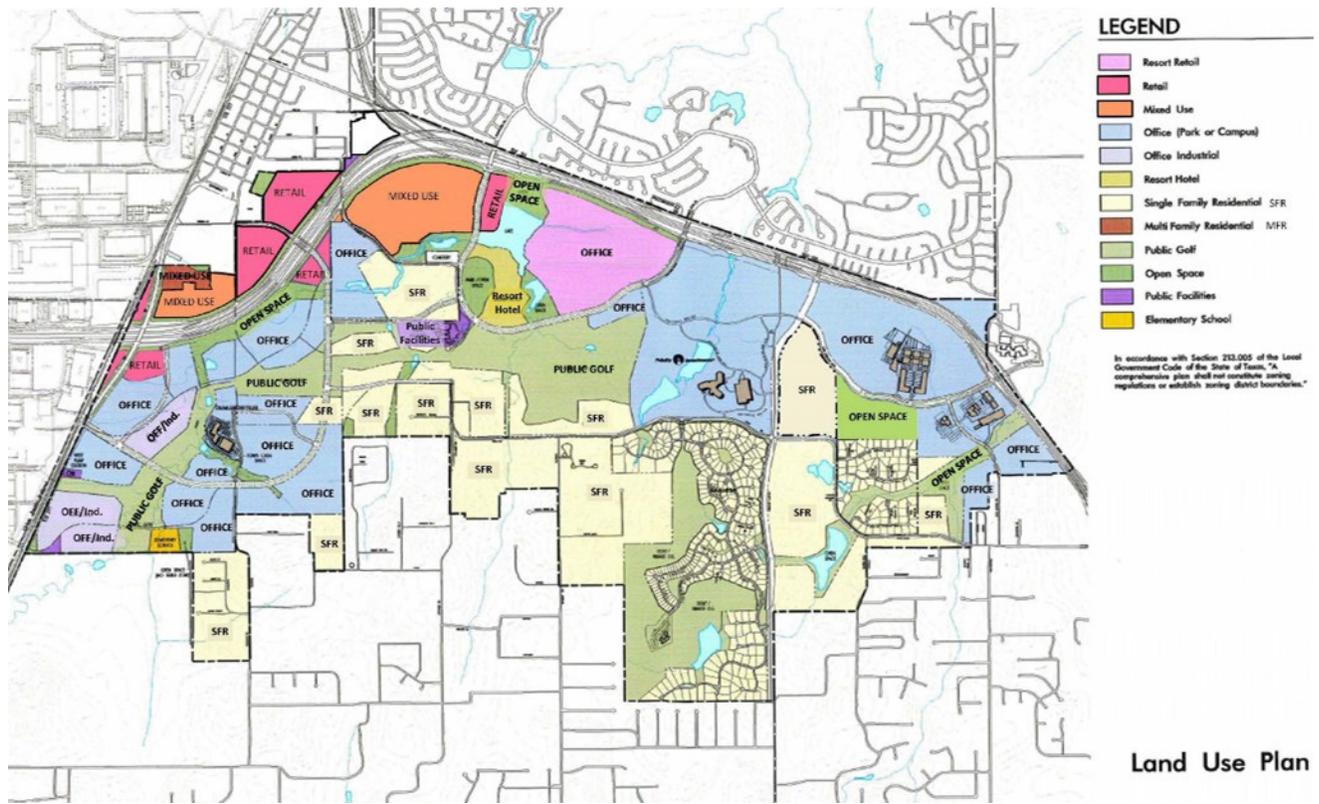


Figure 40: Existing Land Use Plan

2004 is also the year that Westlake's Land Use Plan (Figure 40) was adopted, and it illustrates the above point. In this Plan, Dove Road is the termination of residential development patterns along south to north roads and serves as the introduction of a new development reference north of Dove Road, namely the public golf course system and SH 114 (which run east to west). With the exception of the R-1 zoning area (north side of Westlake Academy), there is no residential development north of the golf course, making the golf course a residential growth boundary. In 2004 and today, Westlake Academy is served by Dove road, still a rural roadway and part of the pastoral setting that the Academy enjoys. However, in the 2004 Land Use Plan, Dove Road is realigned in an east/west direction, south of the Academy, becoming part of the general east/west grain of future development and making a residential road system that is separate from the non-residential road system,

except for two points of connection. As a result, Westlake Academy is served by a commercial street, which is a significant transformation of the current setting. Also, southern residential areas, including Southlake and Keller, seeking access to the commercial uses fronting SH 114 will flow to Dove Road via routes like Pearson Lane having to flow east or west to Precinct Line or a future commercial road before returning east or west to the commercial center. The discontinuation of south to north roads north of Dove makes Dove a primary arterial in terms of future traffic volume coming into Westlake from the south.

Finally, the augmentation of natural creek ways that began with the creation of pastures and stock ponds will have to remain in order to accommodate storm water run-off from future development. The 100 year, 24 hour. storm event in the Dallas area is projected to deliver 9.5

inches of rain. At a .4 to .45 FAR level of development, the 1,091 acres of commercial entitlement would require detention capability ranging from 267 to 775 acre feet. A potential detention requirement in the middle of this range (521 acre feet) would be accommodated in 116 acres of water at an average depth of 4.5 feet. The present level of detention (counting Turner Lake, the two lakes at Fidelity Investments, the detention lake at Deloitte, and one detention pond on the far west side of Westlake) is roughly 19 acres. Therefore, an additional 100 +/- acres of water located in logical storm water collection areas along existing creek ways or other low areas will dramatically change the current creek way system. Further, metered flow from detention areas must recognize the extent to which Trophy Club has restricted flood plain capacity downstream, which can become more restricted by future development. Therefore, a downstream sensitivity to any rise in water levels caused by development in Westlake can further influence the magnitude of detention capacity that has to be maintained in Westlake. The following quote from a technical memorandum prepared by Gresham Smith Partners describes the detention situation today:

“Regional detention facilities are a viable means to mitigate the increase flows resulting from new development. Low impact development best management practices could also be used in concert with detention. Modifications to existing dams, restricting the size of openings at new bridges, utilizing existing lakes, wetlands, and streams can be utilized for means of providing new storm water runoff detention. The 2000 drainage study showed that fully developed conditions within the Marshall and Kirkwood Watersheds would require large detention facilities, 52 acres for the Marshall Watershed and 17 acres for the Kirkwood Watershed. The costs could be borne by the upstream communities, including the City of Keller, The City of Fort Worth, and the City of Southlake, where increased flows originate. Development within the Town of Westlake could potentially impact Trophy Club and the City of Southlake. A closer look at current PDs is warranted to further refine the amount of required detention in the future (not within the scope of this effort). Based on 1,091 acres of commercial entitlements and a FAR of .4 to .45, crude methods of estimating future detention requirements indicate a range from approximately 200 to 775 acre-feet of additional detention.”

Perhaps the most significant change for Westlake is reorganization of the natural mosaic that exists today (Figure 41) to what will likely exist in the future. Based on the above analysis, the historic south to north flow of water in six complete creek ways has, through agricultural land management improvements, been reduced and much of the riparian plant community removed. However, the 1990 aerial (Figure 38) shows a number of the riparian plan clusters still in existence, reflecting a natural pattern that reinforces the south to north growth pattern of Westlake development to date. By 2013 the only riparian communities left are those within residentially developed areas, with the exception of Solana. The earlier described redirection of future commercial development from the south/north historic pattern to an east/west future pattern means that the replacement landscape (open areas within and flanking the large open space system) will also be arranged in an east/west pattern. Planning will be needed to make sure that the natural system that once linked the community across its south to north width will be more than simply a barrier that separates commercial and residential development.

The above analysis of historic aerals and natural systems reflects a south to north development history coming against an east to west development future that will also redirect the natural grain of the community, changing its historic relationship to development to a threshold of change from residential to commercial. However, the dramatic need for increased detention capacity may necessitate such change anyway, making design more critical than ever.

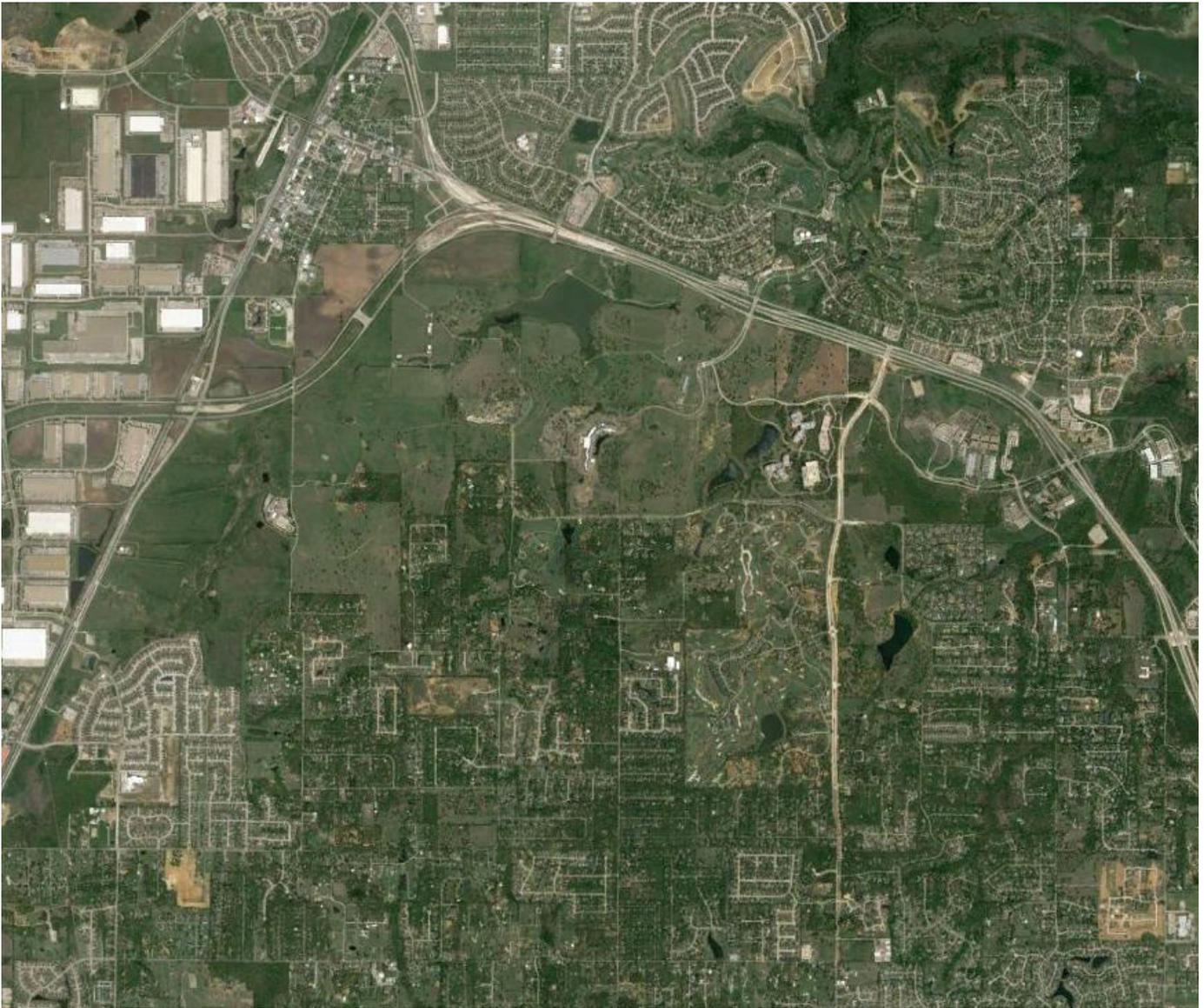


Figure 41: 2013 Historic Aerial

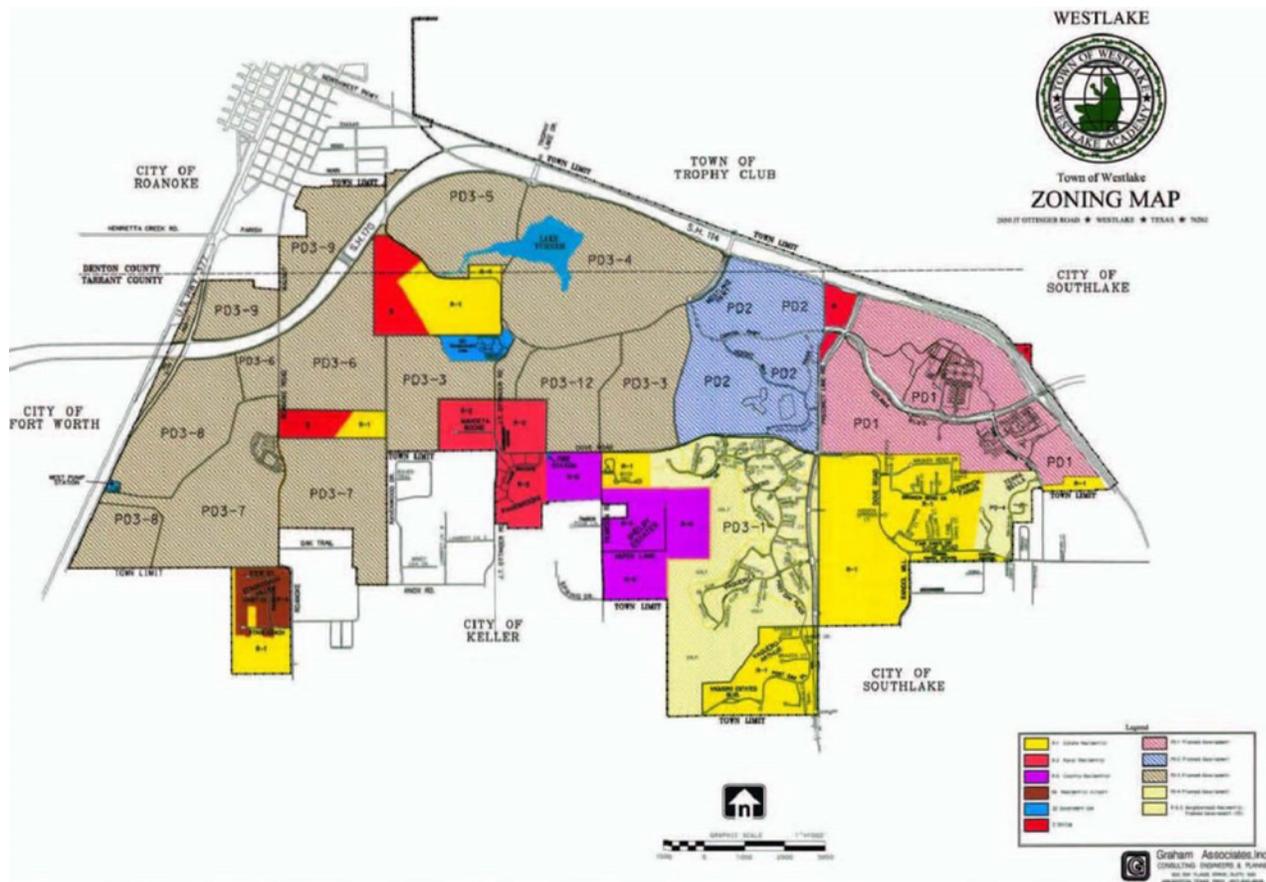


Figure 42: Current Zoning Map

Analysis of Zoning and Planned Development Entitlements and Their Relationship to the Present Condition:

Westlake's most recent Zoning Map, seen in Figure 42, shows the location and zoning of each parcel within Town limits. Zoning is a police power put in place to restrict the uses allowed, height and density of individual parcels in order to protect public health, safety and welfare. Figure 42 reveals the most current zoning allocations, whether it be straight zoning for residential, office, industrial, etc. or Planned Development (PD). A Planned Development is a special zoning category that typically allows a mix of uses and design standards beyond straight zoning categories. Planned Developments, like all other zoning, must be allotted through the Town's approval process. Entitlements already in place via approved Planned Developments can be summarized in the

following assessment.

Figure 43 summarizes land areas by land use and the magnitude of development rights (expressed as square feet or units) conveyed by categorical zoning and Planned Development Ordinances. This is an important summation to see, as it suggests the internal and external pressures that Westlake must be positioned to address at some point in its near future.

Figure 43 reveals the potential of a substantially different Town than what exists today. The resident population capacity at 2,046 single-family units and 330 multi-family units is 6,846 (assuming a 90% occupancy in the multifamily and 2.1 persons per MF household and 93% occupancy in single-family and 3.28 persons per SF household). As discussed in the earlier population analysis, this number represents the population capacity as established by current zoning,

	Building Area (Sq. Ft.)	Units	Rooms
Straight Zoning Areas			
Office/Education	1,100,347		
Residential		639	
PD-1 (Entrada & Granada)			
Hotel	150,000		250
Retail	349,483		
Office/Education	1,399,372		
Residential		207	
PD-2			
Office	5,217,752		
PD-3			
Hotel	1,970,000		3283
Retail	1,147,885		
Office/Education	6,996,881		
Residential		1,502	
PD-4 (Terra Bella)			
Residential		28	

Totals	Building Area (Sq. Ft.)	Units	Rooms
Residential (SF)		2,046	
Residential (MF)		330	
Total Residential		2,376	
Hotel	2,120,000		3,533
Office/ Industrial/ Educational	13,314,980		
Retail (Inc. Mall)	3,127,368		
Total Commercial	18,562,348		

Figure 43: Unit and Area Breakdown

which the Town of Westlake, growing at 7.21% annually, will come up against by approximately 2036. While this is still a relatively small population residing in low residential density, the magnitude of commercial square footage presents a dramatic contrast. The chart above reveals total permitted rights of 18.5

million square feet of non-residential development (hotel use at 3,533 rooms, office/industrial/educational at 13,314,980 square feet and retail at 3,127,368 square feet). This suggests a significant urban center. This much square footage on 1,091 acres is more than half of the square footage in downtown Dallas (30 million

WESTLAKE POPULATION SETTINGS				
City	Average Rate	2012 population	2025 population	2040 population
The Four Surrounding Cities	3.35%	85,745	131,643	215,801
Westlake Upstream Region 114 (12 Cities)	4.34%	67,208	116,758	220,826
Regions Accessing 114, through Westlake	1.85%	131,190	166,492	219,184
15 min. Retail and Commuter Drive Zone	3.82%	103,448	168,421	295,521

Figure 44: Population Settings

square feet). However, downtown Dallas has a permitted FAR of 20:1 while Westlake has an average permitted FAR of .45:1. Therefore, the .45:1 could yield a greater street level density. Properly designed, such density could create a truly unique urban street space. However, the greater challenge is to reconcile the urban density of commercial entitlement with the pastoral scale and density of single-family development. The open space element of the Future Land Use Plan must be porous to north/south movement so that it does not become a barrier; it must be more than a northern growth boundary for residential use.

In addition to density, future non-residential development will bring significant non-resident populations to the Town. Large malls across the United States such as Woodfield Mall (Shamburg, IL) and the Houston Galleria attract approximately .04 people per square foot per day (source: Travel and Leisure). Therefore, 3,127,368 sf. of retail will attract approximately 125,000 shoppers per day. In addition, the 13,314,980 square feet of office/office-

industrial/educational uses (if 85% leased) will house an employee population of 37,726 people. Finally, 1,300 hotel rooms at 60% occupancy (the State of Texas average) will host 1,462 people considering percentage of triple and double occupancy (source: Room Division Basic Theories by Eugene Win) and require 910 employees. Therefore, the total temporary non-resident population per day could be as high as approximately 165,000 people per day. This is more than half of the resident population of Westlake, Keller, Southlake, Trophy Club, and Roanoke combined.

The intensity of Westlake's commercial area makes it an urban center to the surrounding populations. Figure 44 above illustrates the level of population concentration.

Note that the largest population concentration is within the 15 minute drive-time window (295,521). This is about the population of Corpus Christi, Texas, and, as discussed in the population analysis section, the 15-minute drive time window

	Land Area (AC)	Land Area (Sq. Ft.)	Land Area (%)
Total Land Area (Entitlements)	4,288.00	186,785,280.00	100%
Residential	2,234.23	97,323,030.80	52%
Commercial	1,091.27	47,535,875.90	25%
Public/Non-Taxable	37.48	1,632,664.00	1%
Open Space	911.38	39,699,505.00	21%

Figure 45: Westlake Land Uses

office workforce population (140,000 people) could easily fill the office space offerings of Westlake. Also, a general rule of thumb is that a population of about 250,000 is required to support the magnitude of retail generally associated with a mall.

The notion of Westlake as a commercial center, serving a tributary population of over 200,000 people is dramatically different from the pastoral identity that currently prevails and is perhaps the greatest planning challenge going forward. Traffic, density/scale, urbanization, and east/west orientation of development will have to co-exist with rural roadways, pastoral landscapes, low-density housing, and south/north orientation of community.

Of particular importance to understanding the future of Westlake is the relationship to Westlake's commercial land supply to the land supply available in the general market. Figure 45 above summarized how the land area of Westlake and surrounding communities breaks down in terms of Land Use and the percent of total land area represented by each use.

Figure 45 clearly shows that while the amount of non-residential square footage is high, the percent of total land area devoted to commercial use is relatively typical at 25% (a figure consistent with the commercial distribution in many Texas cities).

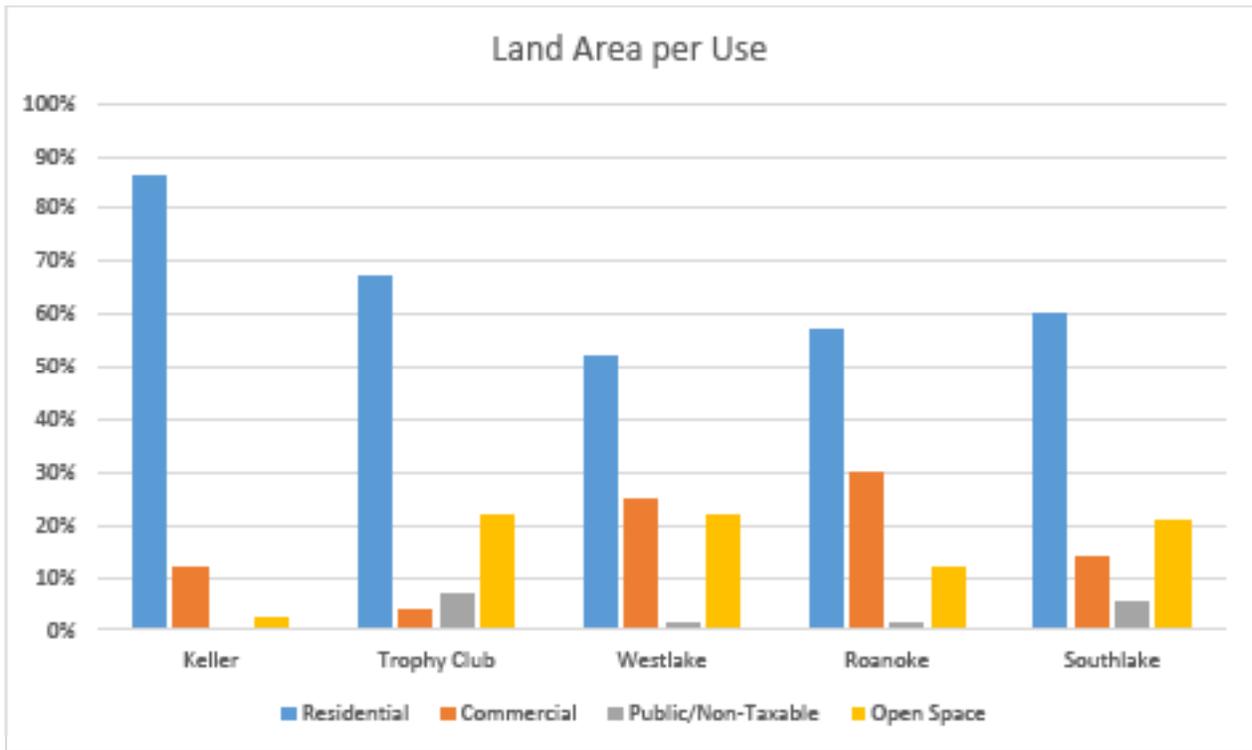


Figure 46: Surrounding Land Areas Graph

Figure 46 above shows how Westlake's land areas compare to the distribution in neighboring cities:

1. Total commercial is only 4% of the Trophy Club Land Supply.
2. Total commercial is 30% of the Roanoke Land Supply.
3. Total commercial is 12% of the Keller Land Supply.
4. Total commercial is 14% of the Southlake Land Supply.

In this comparison, Westlake's distribution of 52% residential and 25% commercial is similar to Roanoke (about the same land area as Westlake) at 30% commercial and 57% residential/agriculture (agriculture is likely to go to residential use), and Southlake at 60% residential and 14% commercial. However, both Keller and Trophy Club are dominated by

residential use (86% and 67% residential use respectively with Trophy Club's large amount of land area set aside for open space at 22%), with small allocation to commercial (12% and 4% respectively). At present, Southlake is approaching residential build-out and getting close to commercial build-out. As the commercial market comes close to absorption of available prime commercial space, that market will jump westward along the SH 114 corridor with Westlake being the next viable location (given the residential dominance in Trophy Club). Also note that Southlake has a commercial land area almost twice the size of Westlake that represents only half the percentage of total land area within the City. This allows the residential fabric of Southlake to have greater presence in the face of commercial square footage that will likely exceed 14,000,000 sf. at build-out.

With commercial land availability beyond Southlake limited in Keller and Trophy Club,

Westlake can expect to be the target of commercial growth. In addition, with the exhaustion of residential land supply for upper price point custom builders in both Colleyville and Southlake, Westlake will likely see pressures to host housing development at price points below the \$1million+ price point that currently dominates.

In this analysis of entitlement and land area, it is clear that Westlake is truly unique in its dominance of the \$1million+ home market and the magnitude of non-residential square footage compared to neighboring cities. The former reinforces the notion of a unique township while the latter reinforces the notion of economic integration. Economic patterns are not sensitive to political boundaries as the economic organ is defined by transaction and the political organ is defined by legal standing. Comprehensive plans are typically responsive to the political organ, taking into account only a spatial slice of the economic picture that falls within political boundaries. However, such a view may not be in the best interest of Westlake as its commercial scale makes Westlake a commercial center for an economic envelope covering several neighboring communities. The regional-centric view brings important issues into focus that the Town-centric view does not. These issues include:

- External traffic flows,
- Externally generated demand on internal facilities and resources, and
- Relationship of town to region WITHIN Westlake.

With regard to the last point, Westlake is set up to accomplish this reconciliation of town and region with the open space amenity, which is both the northern limit of residential growth and generally the southern boundary of commercial use.

The Tax Revenue Implications of Future Development:

The following analysis investigates the ad valorem performance of Westlake today and Westlake at build-out. The importance of such investigation is to determine how present and future development positions the Town to build the public domain necessary to manage growth. At the start, there are several terms that should be defined as follows:

- **Ad Valorem Revenue:** Every city and town must have sufficient ad valorem (residential and commercial) revenue to fund debt supported by the full faith and credit of the municipality. Where such assurance is committed, such as general obligation bonds, the persons to whom the assurance is given has the expectation that the municipality would increase taxes, if ultimately necessary, to meet the debt obligation. This is only possible with property taxes as sales taxes are capped by state law and often already committed to such things as economic development.
- **General Fund:** This is the city budget for operations of city departments and facilities. The general fund typically provides for services and programs and is, therefore, a good measure of the level of support for a particular quality of life level. The Planning Team maintains that a typical Texas municipality should be able to support 60% to 65% of its general fund through ad valorem revenue, as such levels of ad valorem income allows the municipality the option to substitute other revenue for general fund purposes and divert ad valorem revenue to support debt.
- **Residential Ad Valorem Revenue:** This is the town revenue derived from taxes on the value of residential property. The taxable value of property is set by the

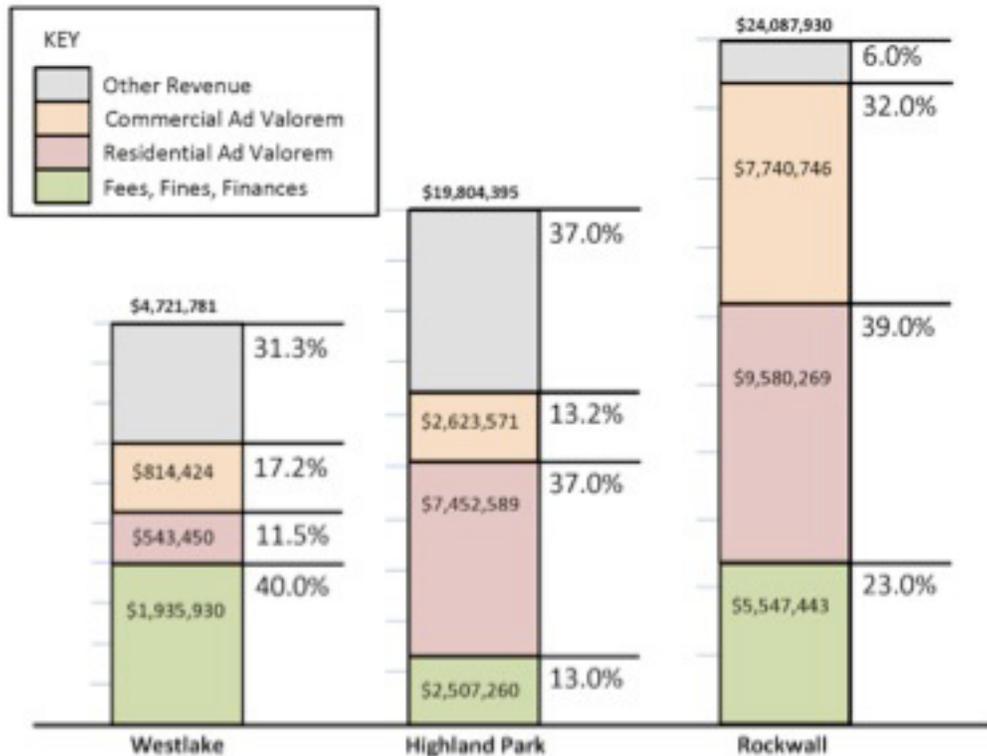


Figure 47: Ad Valorem of three Cities/Towns

county appraisal district. In Westlake, this tax equals \$0.15684 per \$100 dollars of taxable value.

- Commercial Ad Valorem Revenue:** This is the town revenue derived from taxes on the value of non-residential property. The taxable value of property is set by the county appraisal district. In Westlake, this tax equals \$0.15684 per \$100 dollars of taxable value.
- Fees, Fines, and Finances (3 F's):** This is the town revenue derived from the fines leveled by municipal court and other enforcement, the fees derived from permits/ applications/ other administrative services and the finances that include investment income/ interest.
- Locally Supported Commercial:** Typically the residential ad valorem revenue of a city falls short of the general fund needs of a municipality because on average every \$1.00 of ad valorem revenue flowing from

residential land use incurs \$1.33 of service costs. Therefore, commercial (non-residential) land uses (costing \$0.33 for every \$1.00 of revenue) become necessary to close the "tax gap" between what residential costs (in terms of services) and the ad valorem revenue it generates. However, a local population typically is not large enough to support the scale of retail necessary to close this gap; meaning that regional patronage (imported spending) becomes critically important to most Texas municipalities. The amount of non-residential development that is locally supported is called "Locally Supported Commercial".

- Regional Dependence:** The commercial ad valorem base needed to close the above described tax gap that is not supported by the local population but rather supported by people living outside the municipality and shopping and working within the municipal limits.

Figure 47 compares three cities, Westlake, Highland Park and Rockwall, in terms of their ad valorem contributions to their general funds. Highland Park demonstrates a current population of 8,600 people and average home value of \$1,400,000.00, while Westlake at build-out population is right at 6,800 people and the average home value at present is \$1,100,000. Rockwall can be viewed as a city with impressive demographics that generally conforms to State of Texas averages in terms of ad valorem performance relative to the general fund. The vertical bar above each city/town name represents the general fund as approved for fiscal year 2013-2014. Each vertical bar is divided into four color segments, scaled to reflect the percent of total general fund requirement that can be supported by current levels of revenue from Fees/Fines/Finances, Residential Ad Valorem, Commercial Ad Valorem, and other revenues.

Considering Figure 47, there are several key comparisons that reveal where Westlake is today, which sets up the analysis of Westlake at build-out:

- **Westlake:** The vertical bar indicates that the 2014 general fund is \$4,721,781, which equates to a per capita cost of services and governance (the general fund) of \$4,584.00 per capita. This is significantly higher than the State of Texas norms, which set a per capita cost of services and governance at \$600.00. However, investigation of the revenues flowing into the general fund reveal that Westlake enjoys significant income flows from non-tax sources, making the per capita burden not as burdensome as the figures suggest. Note in Figure 47 that the contribution to total general fund coming from Fees/Fines/Finances is right at 40%. This is higher than most Texas municipalities, which vary between

12% and 20%. Therefore, the 3F's and "Other Revenues" constitute 71.3% of the total General Fund Obligation. With Westlake's current ad valorem tax rate being lower than most Texas cities (Westlake rate = .15684), it becomes necessary to serve the general fund with other revenue sources.

Typically the cost of services to residential land use and the ad valorem revenue derived from residential land use (taxed at typical rates) do not balance out until the taxable value of the residential property rises above \$350,000.00. Certainly Westlake has residential values well above the \$350,000 threshold. However, the low tax rate pushes this threshold higher. At current tax rates, a \$1,100,000.00 house in Westlake yields the same revenue as a \$286,000.00 residence taxed at a rate of .60 (a rate common to many Metroplex cities). The beneficial rate enjoyed by the citizens of Westlake makes it necessary to rely on significant commercial contribution to ad valorem revenues. Note that the commercial contribution is approximately 17.2% (\$814,424) of the General Fund Obligation. Therefore, the residential ad valorem contribution overall is 28.7% of the General Fund Obligation. This is below the state norm of 55% to 65%. This will change as the levels of commercial development within the Town rise. Perhaps greater commercial intensity is necessary to keep ad valorem rates at the present low level. Westlake already imports demand to fill the roughly 2,200,000 sf. of office and commercial space within the Town, as commercial population required is approximately 7,300 people.

While the sum of contributions to the general fund flowing from the 3F's and ad valorem revenues support the

general fund at a level that compares favorably with Texas norms, the ad valorem portion of that contribution is unusually low. This necessitates greater dependence on other income sources and limits the Town's bonding ability, which may be necessary to build appropriate growth management infrastructure and amenities.

- **Highland Park:** With a current population of 8,600, Highland Park has established a general fund of \$19,804,395 for fiscal year 2013-2014. This equates to a per capita cost of services and governance equaling \$2,475.00. Note the 3F's portion of the vertical bar that contributes only 13% of the General Fund Obligation. This is more typical of Texas cities and likely reflects a more developed city. The residential ad valorem segment of the vertical bar contributes approximately 37% of the ad valorem obligation, which is also very typical of Texas cities. However, the commercial segment is relatively low (13.2%) yielding a total contribution to the General Fund Obligation of 50.2%, which is below Texas norms. Normally, a city would reach its regional retail to improve this number, but the close association of Dallas and University Park promotes commercial leakage from Highland Park, making the city more dependent on other income sources.

By contrast, Westlake will be a commercial center in its economic region, thereby enjoying a considerable amount of retail and commercial demand coming from outside its corporate limits.

At 8,600 people, Highland Park becomes a precursor of Westlake at build-out. As such, it suggests

that the current cost of services and governance per capita (presently \$4,584.00) could settle out at \$2,475.00. Note that the per capita general fund cost for Highland Park is less than that of Westlake while its population is higher, and the general fund cost for Rockwall is less than Highland Park with a higher population. This suggests that as the population increases, the per capita cost of services and governance goes down, provided that the city is performing to normative ad valorem standards. Therefore, the future cost of services and governance for Westlake at build-out could be \$16,941,375.00, which is significantly higher than today.

- **Rockwall:** Rockwall's current population is 39,322 people, and the per capita cost of services and governance is \$612.00 (conforming to Texas norms). The segmentation of the general fund vertical bar reflects an economically vibrant community. Note that the residential and non-residential contributions to the general fund obligation totals 71%, which is actually higher than most cities and suggests that Rockwall is better positioned for debt. In addition, the 3F's contribution to the General Fund Obligation (23%) is slightly higher than Texas norms (12% to 20%), suggesting that there is considerable permitting and other growth management activities taking place. Note that the 3F's contribution of Westlake, Highland Park, and Rockwall is relatively close in magnitude despite vast differences in population. For example, Highland Park has a population that is 754% larger than Westlake but its 3F revenues are only 29% greater. The same is true for Rockwall. Therefore, it is likely that the future 3F contribution in Westlake will represent a smaller percentage of total

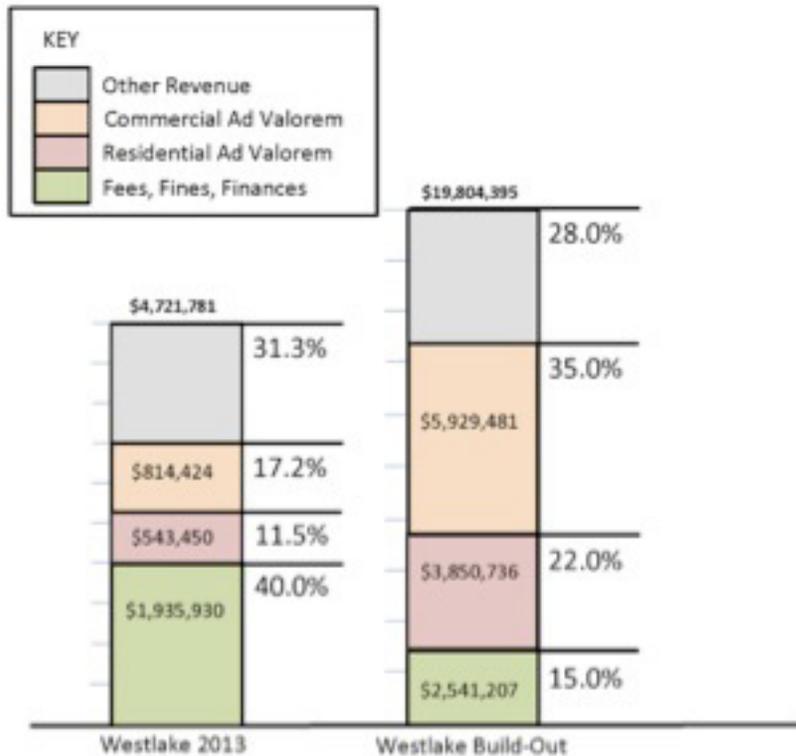


Figure 48: Westlake Ad Valorem Build-Out

contribution. Assuming that Westlake performs slightly higher than Highland Park because of its commercial dominance, the 3F contribution could be \$2,541,207 (15%).

Figure 48 projects Westlake's ad valorem performance at build-out and the picture looks much more balanced. Note that the total General Fund Obligation is \$19,804,395, which equates to a per capita cost of \$2,900.00 (very much like Highland Park today). Also, note that the 3F contribution to that obligation is only 15%, reflecting the dynamic that this number decreases as a proportion of total as population increases (discussed previously). The residential ad valorem contribution is \$3,850,736.00 (22%) and

the commercial ad valorem contribution is \$5,929,481 (35%). This means that the combined 3F and ad valorem contributions are 72%, which is right in the middle of the range recommended by the Planning Team.

The distribution illustrated in Figure 48 in combination with the earlier charts explaining the magnitude of square footage represented by non-residential entitlements illustrates the extent to which low rate assessment on ad valorem value necessitates commercial square footage to close the tax gap. If ad valorem rates were ever to rise, then the amount of commercial presence in Westlake would not be so important to the overall ad valorem picture.

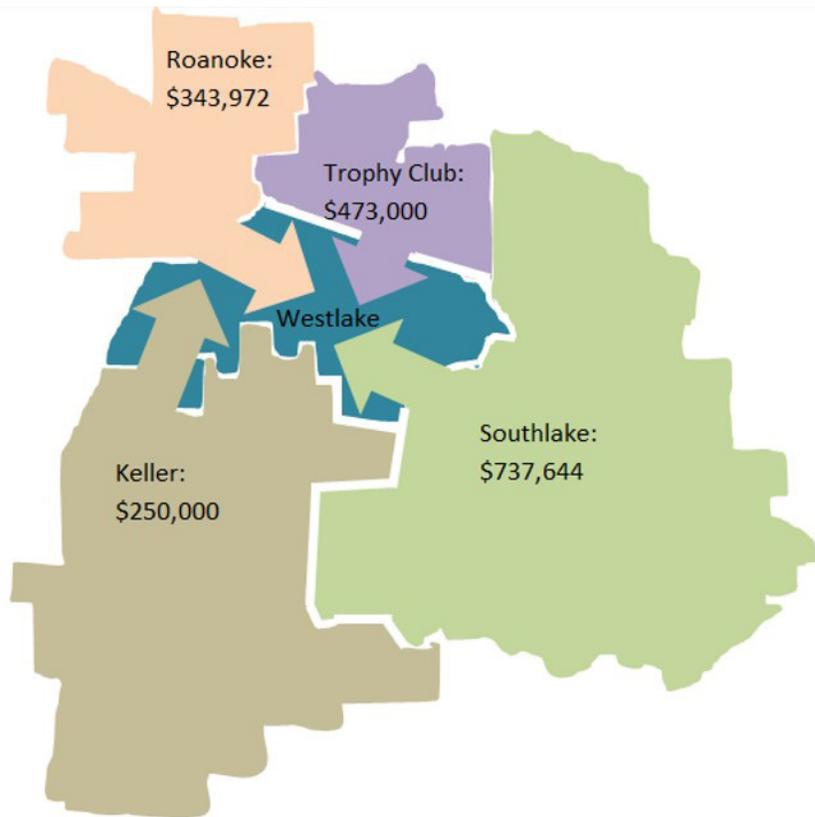


Figure 49: Home Value Diversification

Home Value Diversification of Abutting Home Markets

Figure 49 illustrates the mean home sale values in the four cities surrounding Westlake. As Westlake approaches build-out, the influence of community adjacency on home values may increase, precipitating fragmentation of Westlake's currently homogeneous housing market (\$1 million+ price point). The diagram shows that Southlake (with home sales ranging from \$529,990 to \$1,084,990) reinforces home values in Westlake's southerly and easterly portions (most adjacent to Southlake). However, as land to the south and west begins to fill out with residential development, it is likely that Keller, Roanoke, and Trophy Club will set value references for these portions of the Town. Despite such influences, Westlake will always be significantly higher than neighboring markets, but the \$1 million + price point could move to the \$500,000-

\$800,000 range.

The emergence of other price points in Westlake is also supported by the fast diminishing residential land supply in Southlake and Colleyville. Once lot availability is gone in these markets, custom builders will seek other locations attractive to their market segment. The easiest choice for expansion of such markets is Westlake. At a price point of \$800,000, land prices could approach \$200,000 for the smaller lots allowed under existing entitlement (15,340 sq. ft.). If such lots can be sold for \$200,000, then the price per square foot is \$13.00. Land at these prices is competitive with small office land values.

Among the various product markets that Westlake will serve (residential, retail, hospitality, and office), office is the most frequently overbuilt and fluctuating. In addition, office faces the greatest area competition. Therefore, it is highly possible

**NEW HOME COMMUNITIES
WESTLAKE, TEXAS AND SURROUNDING AREAS
NOVEMBER 2013**

COMMUNITY	BUILDER	LOT FRONTAGE	SIZE RANGE (SF)		PRICE RANGE		PRICE PER SQFT.	
			MIN	MAX	MIN	MAX	MIN	MAX
SOUTHLAKE								
Estancia	Ashton Woods Homes	85'-95'	3,008 - 5,244		\$529,990 - \$695,572		\$133 - \$231	
Carillon	K. Hovnanian Homes	85'-95'	2,886 - 3,794		\$553,900 - \$685,900		\$181 - \$238	
Shady Oaks	Toll Brothers	100'	3,888 - 5,640		\$723,995 - \$808,995		\$143 - \$208	
Carillon - The Estates	K. Hovnanian Homes	100'	4,295 - 5,263		\$799,000 - \$871,900		\$166 - \$203	
Shady Oaks	Standard Pacific Homes	105'	4,506 - 6,335		\$879,990 - \$970,990		\$153 - \$215	
Winding Creek	Standard Pacific Homes	105'	4,143 - 6,335		\$938,990 - \$1,084,990		\$171 - \$262	
TOTAL/AVERAGE			2,886 - 6,335		\$529,990 - \$1,084,990		\$133 - \$262	
TROPHY CLUB								
Highlands at Trophy Club	Lennar	70'-90'	2,070 - 4,341		\$304,990 - \$488,990		\$113 - \$236	
Turnberry at Trophy Club	Standard Pacific Homes	75'	2,801 - 5,193		\$422,990 - \$531,990		\$102 - \$190	
Hogan's Glen	Ashton Woods Homes	80'	3,008 - 5,244		\$480,990 - \$612,990		\$117 - \$204	
TOTAL/AVERAGE			2,070 - 5,244		\$304,990 - \$612,990		\$102 - \$236	
ROANOKE								
Bluffview of Roanoke	Ashton Woods Homes	55'	1,569 - 2,926		\$216,990 - \$288,990		\$99 - \$184	
Chadwick Farms	Grand Homes	55'	1,894 - 4,182		\$247,900 - \$331,900		\$79 - \$175	
Briarwyck - The Reserve	Meritage Homes	62'-72'	3,153 - 4,316		\$311,990 - \$362,990		\$84 - \$115	
Fairway Ranch	Highland Homes	70'	2,200 - 3,726		\$335,990 - \$467,990		\$126 - \$213	
Fairway Ranch	Darling Homes	75'	2,882 - 3,658		\$417,990 - \$456,990		\$125 - \$159	
TOTAL/AVERAGE			1,569 - 4,316		\$216,990 - \$467,990		\$79 - \$213	

SOURCE: RCLCO; NewHomeSource.com

Figure 50: New Home Communities

that office zoned land further from the SH 114 frontage (south of the open space area) could be considered for residential rezoning and that the price points in these rezoned areas would be lower than \$1 million +.

Figure 50, prepared by RCLCO, summarizes values in neighboring cities.

In conclusion, it appears that Westlake can maintain its low rates as long as it has significant commercial development within the Town, as reflected by the magnitude of commercial entitlement. However, the presence of such commercial development dramatically redirects the historic grain and orientation of the Town, establishing a commercial center for an economic region. Reconciliation of the two Westlake characters and maintenance of the current low ad valorem rates will require a design-based vision of how the patterns are reconciled in a natural matrix that is responsive to both the Town's history and its future.