

A Reprint from *Tierra Grande*

# GROWING PAINS

## FM 2499 Case Study

By Randall S. Guttery



It is no secret that growth brings challenges — and sometimes controversies — to communities. Since mid-2002, citizens in the Dallas-Fort Worth metroplex have been debating the proposed project to extend Texas Farm-to-Market Road 2499 through the City of Highland Village.

Project opponents cite increased traffic noise, pollution, property devaluation and crime, as well as possible damage to vegetation and wildlife if the road requires elevated bridges over Lake Lewisville, adjacent wetlands or both. Proponents contend the road would encourage commercial construction, thereby enhancing Highland Village's tax revenues.

For many citizens, the biggest question is whether FM 2499 will affect housing values positively or negatively. This case study addresses that issue.

### Project Boundaries

The Texas Department of Transportation has proposed widening and extending FM 2499 through much of southeastern Denton County over the next seven to ten years. Phases 1, 2 and 3 of the construction project, bounded by Highway 121 on the south and FM 407 on the north, currently handle through-traffic.

The southern end of Phase 4 from FM 407 to Highland Shores Boulevard handles local traffic into Highland Village.

The balance of Phase 4 is expected to travel north through the western edge of the Highland Shores subdivision to FM 2181 in Lake Dallas. Phase 5 will continue FM 2499 north to Corinth, terminating at I-35E near Shady Shores.

### Study Data Limitations

Seven neighborhoods in Flower Mound, south of Highland Village, include houses adjacent to FM 2499. Assessed values of houses in the neighborhoods were reduced to a per-square-foot value and the properties were categorized as either adjacent to FM 2499 or interior lots.

Because real estate sale prices are not disclosed in Texas as a matter of law, assessed value was used as a surrogate for price in this study. Assessed value is likely a better measure of value than sales price because sales price may or may not reflect fair market value. Assessed value is applied even-handedly, with a prescribed process for appealing an assessment.

Using assessed value does have drawbacks. First, there is a sample selection bias. Real estate research suggests that assessed value, in aggregate, will always be less than fair market value because only overassessed property values get challenged by taxpayers.

A second problem is one of perception more than reality. Many taxpayers believe that tax assessors have no incentive

to lower assessments because doing so reduces county tax revenues. While decreasing an assessment will, in fact, lower the revenue, assessors are obligated to do so if facts support the action. Nevertheless, assessed values were used in this study because they are updated annually and are readily available.

## Properties Studied

The Denton Central Appraisal District (DCAD) identified seven sample subdivisions and 653 houses for the study. Of these, 68 (10.4 percent) are adjacent to FM 2499, and 585 (89.6 percent) are not.

From north to south, the seven subdivisions studied were The Forums, Surrey Woods, The Estates at Creekwood, Forest Park Estates, The Villages of Northshore, Phase 1; The Villages

Each subdivision's sample properties were reduced to their NAVs. An average NAV for the entire subdivision was calculated, as were average NAVs for properties adjacent to FM 2499 and those in the interior of the neighborhoods.

**R**esults were aggregated for the entire 653-property sample. Each property's NAV was then divided by square feet of living area to determine the NAV per square foot (psf). Finally, the NAVs psf for FM 2499-adjacent properties were compared with interior properties (see Table 2).

Ten properties abutting FM 2499 in the Estates at Creekwood were granted a 10 percent adjustment for economic obsolescence (EO) by DCAD. The records state, “-10% EO; Property backs up to Hwy. 2499.”

The 10 percent EO adjustment was not applied to the gross assessed value, however. It was applied only to the value of the residence. In other words, there was no adjustment granted for the value of the lot, the swimming pool, the deck or any other part of the property. With the adjustment, the ten properties' average reduced NAV was \$73.34. Without the adjustment, NAV psf would have been \$79.96.

The ten properties' reduced assessed values ranged from 91.4 to 92.5 percent of what they would have been without the EO adjustment. In other words, they received overall downward adjustments

Table 1. Description of Studied Subdivisions

Subdivision Name	Im- proved Lots	Lots Ad- jacent to FM 2499	Lots, FM 2499 Separated by	Average As- sessed Value	Average Sq. Ft. of Living Area
The Forums	65	9	Wrought iron fence	\$248,380	3,030
Surrey Woods	29	2	Wooden fence, greenbelt	\$203,776	2,653
Estates at Creekwood	106	10	Wooden fence	\$180,736	2,309
Forest Park Estates	106	23	Brick wall fence, greenbelt	\$216,616	2,661
Villages of Northshore, Phase 1	176	11	Brick wall fence, greenbelt	\$242,249	2,737
Villages of Northshore, Phase 3	59	4	Brick wall fence, greenbelt	\$271,417	3,066
Lakeview Estates	112	9	Brick wall fence, greenbelt	\$267,510	3,090
<b>TOTAL</b>	<b>653</b>	<b>68</b>	—	<b>\$233,973</b>	<b>2,771</b>

Source: Randall S. Guttery

of Northshore, Phase 3, and Lakeview Estates (see maps and Table 1).

Gross assessed values were adjusted to reflect major component parts that some properties have but others do not. For example, the assessed value of a swimming pool, deck, enclosed glass porch, storage building or enclosed garage is deducted from the gross assessed value so that all sample properties, theoretically speaking, are nearly identical. This adjustment process results in *net assessed value (NAV)*.

**S**ubtracting the value of a pool, deck or storage building is simple, but glass porches and enclosed garages require more investigation. An enclosed glass porch's value was not deducted from gross assessed value because without the glass enclosure, the improvement still had an open-air porch. Instead, the difference between the assessed value of the enclosed glass porch valued at \$3,200 and an open-air porch valued at \$1,200 was subtracted from the gross assessed value.

This is referred to as *incremental value*. Similarly, an enclosed garage valued at \$15,000 versus a traditional garage valued at \$9,000 prompted a \$6,000 reduction in gross assessed value.

Table 2. Net Assessed Values Per Square Foot of Studied Subdivisions

Subdivision Name	All Properties	FM 2499- Adjacent Properties	Interior Lot Prop- erties	Properties Not Adjusted by the DCAD	11 Properties Adjusted by the DCAD
The Forums	\$80.84	\$85.96	\$80.01	\$80.84	N/A
Surrey Woods	\$75.77	\$77.50	\$75.64	\$75.77	N/A
Estates at Creekwood	\$78.24	\$79.96	\$78.06	\$78.06	\$79.96
Forest Park Estates	\$80.74	\$84.33	\$79.75	\$80.74	N/A
Villages of Northshore, Phase 1	\$87.94	\$86.39	\$88.04	\$87.94	\$87.79
Villages of Northshore, Phase 3	\$88.16	\$86.27	\$88.30	\$88.16	N/A
Lakeview Estates	\$83.69	\$84.03	\$83.66	\$83.69	N/A
<b>TOTAL</b>	<b>\$83.15</b>	<b>\$84.11</b>	<b>\$83.04</b>	<b>\$83.28</b>	<b>\$80.67</b>

Source: Randall S. Guttery

ranging from 7.5 to 8.6 percent, with an average of 8.07 percent. This is less than the ten percent EO adjustments because the DCAD reductions were applied only to the value of the residences, not the entire property.

One of the 11 lots on FM 2499 in the Villages of Northshore, Phase 1, subdivision received a 5 percent EO adjustment, applied only to the value of the residence. This lot received a reduced assessed value of \$84.21 NAV psf compared with \$87.79 NAV psf.

Because of the large number of properties in the subdivision (176), the 5 percent reduction for only one property decreased the NAV psf for the entire subdivision sample by only two cents and for the 11 FM 2499-adjacent properties by 32 cents. The NAV psf for the 165 interior lots was unchanged.

The assessed values shown in Table 2 reflect all adjustments for swimming pools, decks, enclosed glass porches, storage buildings, enclosed garages and for the 11 FM 2499-adjacent properties that received an EO adjustment.

## What the Results Suggest

**T**he study data suggest that properties located next to FM 2499 assess for approximately \$1.07 more per square foot than those not adjacent to the roadway (\$84.11 versus \$83.04, a 1.3 percent difference).

Fifty-seven of the 68 FM 2499-adjacent properties had a NAVs psf of \$84.77, while the 585 interior properties were valued at \$83.04, a \$1.73 difference.

Had the DCAD granted an EO adjustment to most or all of the 68 property owners whose houses abut FM 2499, it would

be evident that these properties have suffered adverse effects from being located next to the roadway. Their NAVs psf, however, were not systematically lower than those of interior lots. In fact, for five of the seven subdivisions and for the overall sample, the NAVs psf were higher for FM 2499-adjacent properties than for interior lots.

DCAD did stipulate that 11 properties adjacent to FM 2499 suffered economic obsolescence and granted an 8 percent adjustment, on average, to the assessed values of those residences. All 11 of these were case-by-case tax challenges, not uniform adjustments, suggesting that homeowners must show undue hardship.

At the same time, the fact that the remaining 57 houses did not receive a downward adjustment does not mean that the adjustments were superfluous.

The DCAD's action or inaction related to the other 57 houses adjacent to FM 2499 should signal whether it believes the roadway systematically affects housing values. 

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