

On the Border

Appraising LRGV Land Impacted by Wall Construction

Charles E. Gilliland
November 19, 2020

Publication 2291



The South Texas border wall's effect on land values has inspired spirited discussions among appraisers. Often these disputes have produced litigation with dueling appraisals based on differing interpretations of market data.

A number of reports are available from the United States Department of Justice (DOJ) to help appraisers in rural areas of the Lower Rio Grande Valley better understand the region's land market. They ensure access to pertinent information about controversies and provide guidance on future individual appraisal assignments of real properties being acquired as part of the proposed wall construction.

One such report is the *Real Estate Market and Sales Study of The Lower Rio Grande Valley to Support the Proposed Border Wall Construction Project Within Starr, Hidalgo, and Cameron Counties of Texas*. The report, which is online at <https://www.justice.gov/enrd/page/file/1301801/download>, includes sales data and

The Takeaway

Whether the border wall has impacted Lower Rio Grande Valley land values is a subject of much contention among appraisers. The United States Department of Justice provides data and analysis that can help ensure more uniform land appraisals for that region.

analysis that can assist with identifying and measuring land characteristics that influence market value. It is intended to help the user “arrive at some uniformity as to a range of adjustments that the data is indicating for these transactional and property adjustments.”

Prepared by three Member Appraisal Institute appraisers, the report contains exhaustive analyses of 1,286 sales of properties in Cameron, Hidalgo, and Starr Counties. Focusing on agricultural properties reduced the number to 80 purely agricultural sales. Analysis of

those sales relies on the allocation of land sale prices presented in the textbook *Valuing Rural America*, published by the American Society of Farm Managers and Rural Appraisers. Reflecting the productive capabilities of the soils, this system allocates sales prices based on the composition of the soils on each property.

The DOJ's companion reports, found at <https://www.justice.gov/enrd/real-estate-market-and-sales-study-rio-grande-valley>, offer an analysis and sale-price allocation for each sale gathered for the overall study. They begin with a detailed color aerial map of the subject property along with basic information about the transaction, including price, size, date of sale, land use, and location. The analysis continues with detailed descriptions of the property, a breakdown of the property's soil types, and the contribution of each soil type to the overall sale price. The analysis has United States Geological Survey (USGS) topographic maps and a soils map that shows the location of each soil type on the property. Finally, the sale is compared with a comparable median sale price adjusted for differences between the properties.

Maps 1 and 2 and Tables 1 and 2 show the analysis for the first listed sale (RGV502). The sale shows the adjusted price exceeded the actual price by 23 percent. The difference might have resulted from plans for the border wall to bisect the property. The seller viewed the wall as a negative influence on price. However, the buyer indicated it had no impact at all. Plus the property lacked secured legal access with the owner depending on informal permission from the International Boundary and Water Commission to use their levy. Lack of access caused the existing tenant to decline to purchase, so the

negative impact might have resulted from the access issue. The DOJ's reports contain this type of detailed analysis on each property listed.

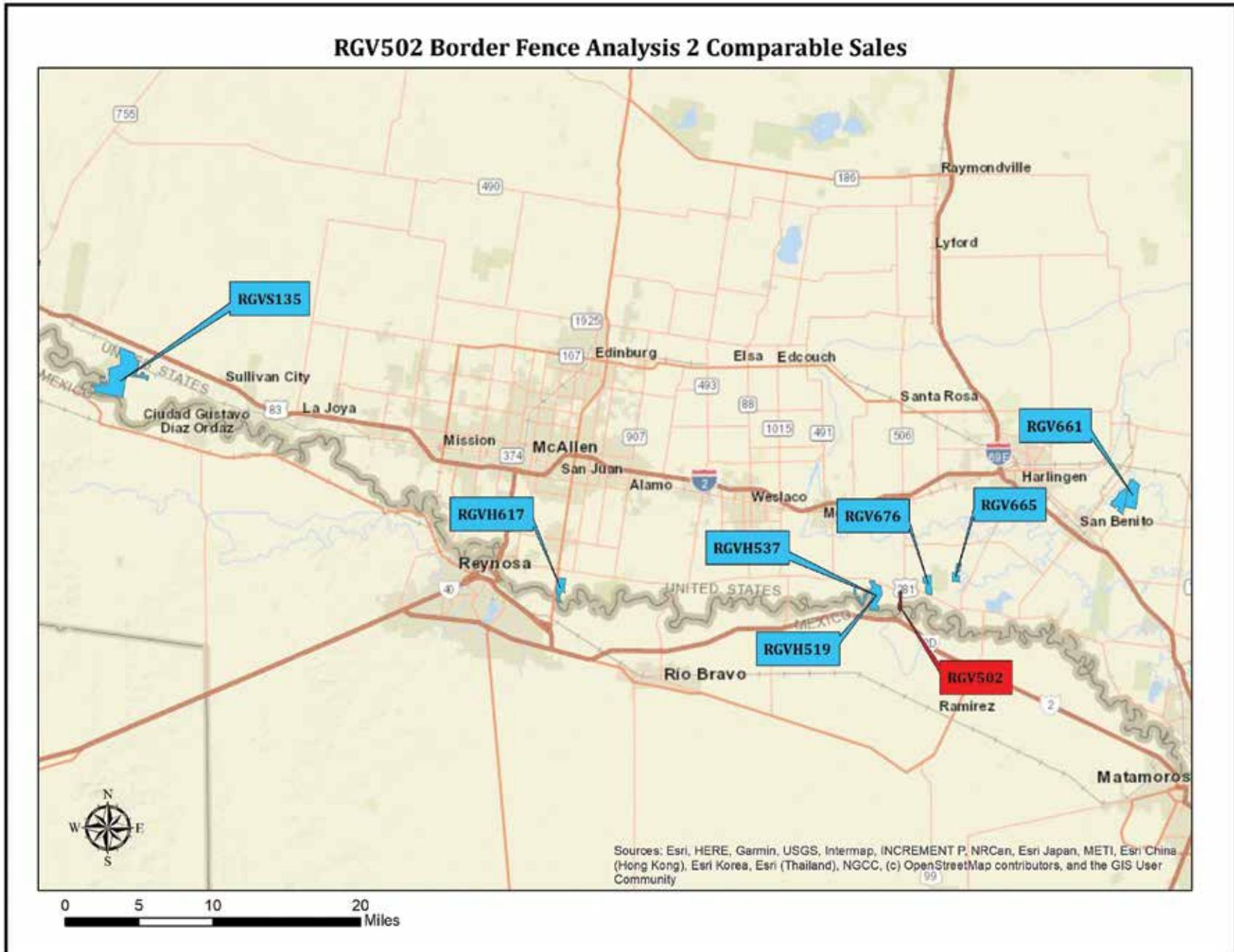
The authors of the report concluded that agricultural and rural residential uses dominated areas affected by the border wall project. Salient influences on sales prices included market conditions related to date of sale, property rights conveyed (including water rights), and location. Physical factors impacting price included size, access, soil class, amount of floodway, amount of irrigation, and amount of land with development potential. The analysis in the main report included adjustments for these factors.

Ultimately, the authors see no evidence of a border wall affecting agricultural land values. However, the report does note that other appraisers should not use the information without independently verifying and analyzing the data. The report's greatest value may be in its presentation of the data and the analytical approach applied to the agricultural properties making up the study.

The reported analysis of specific sales detailing the facts about the transactions is required by the DOJ document entitled *Uniform Appraisal Standards for Federal Land Acquisitions*, colloquially called "The Yellow Book." In addition, the reported information conforms to requirements of the Appraisal Institute's *Code of Professional Ethics* and the *Standards of Professional Practice* and the Appraisal Foundation's *Uniform Standards of Professional Appraisal Practice*. ♦

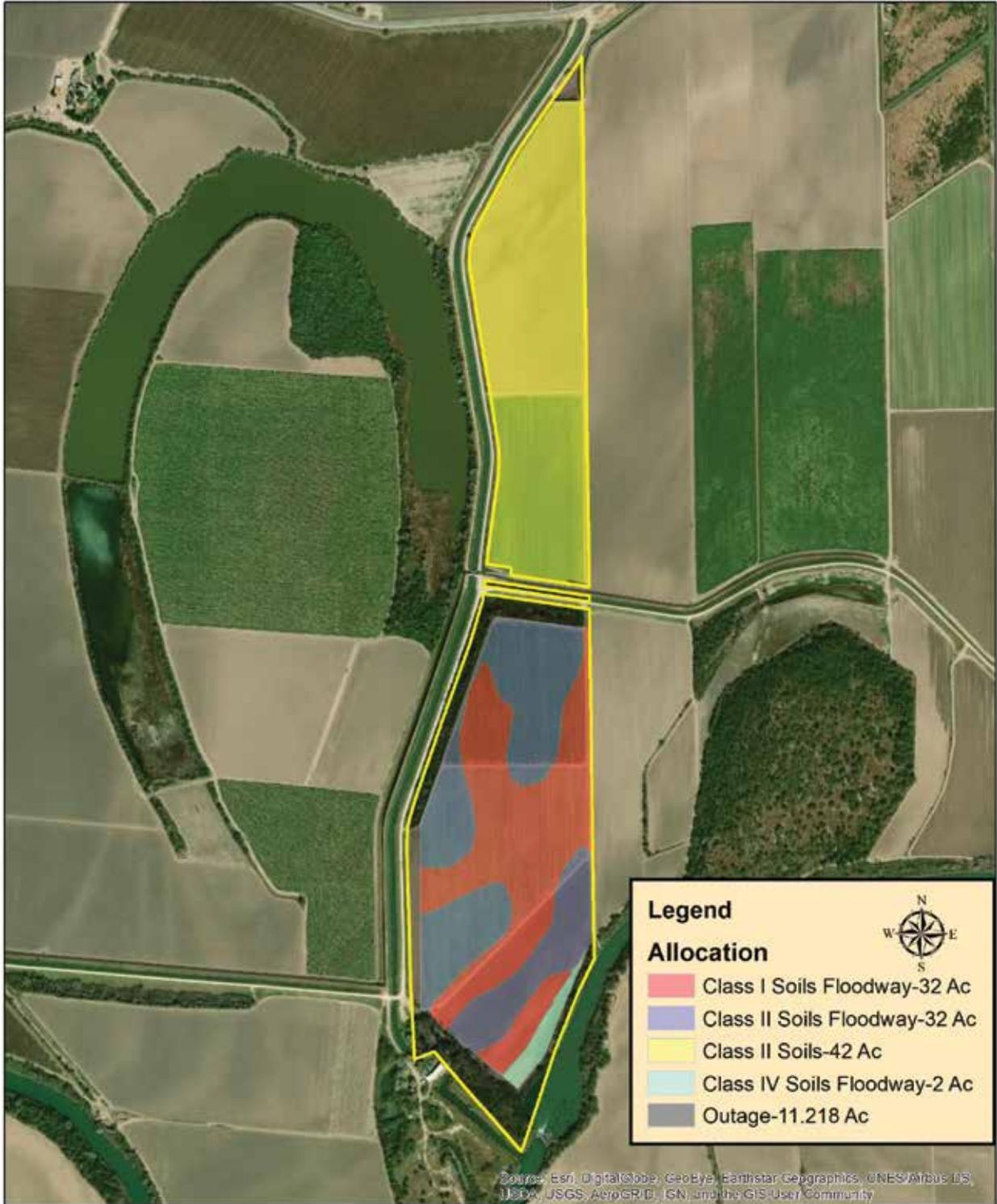
Dr. Gilliland (c-gilliland@tamu.edu) is a research economist with the Real Estate Center at Texas A&M University.

Map 1



Map 2

RGV502 Allocation



0 650 1,300 2,600 Feet

Table 1

Land Allocation Table				
<u>Description</u>	<u>Ratio</u>	<u>Acres</u>	<u>Indicated \$/Ac.</u>	<u>Total Contribution</u>
Class I Soils	100%	0	\$2,548.28	\$0
Class I Soils Floodway	80%	32	\$2,038.62	\$65,236
Class II Soils	90%	42	\$2,293.45	\$96,325
Class II Soils Floodway	72%	32	\$1,834.76	\$58,712
Class III Soils	70%	0	\$1,783.8	\$0
Class III Soils Floodway	56%	0	\$1,427.04	\$0
Class IV - VIII Soils	50%	0	\$1,274.14	\$0
Class IV - VIII Soils Floodway	40%	2	\$1,019.31	\$2,039
Outage	15%	11.218	\$382.24	\$4,288
Spec. Dev.	180%	0	\$4,586.91	\$0
	TOTALS	119.218	\$1,900.72	\$226,600
	Equiv. Rating	75%		

TOTAL SALE PRICE ALLOCATION	
Total Sale Price:	\$226,600
Less Est. Land Value:	\$226,600
Less Est. Improvements	\$
Residual to Other Contribution:	\$0
Other Description:	None

Note: All information contained herein is subject to rounding which may slightly alter total sale price and further allocations. Such small inefficiencies within the software do not materially impact the results of any analysis.

Table 2

RGV502 BORDER FENCE ANALYSIS NO. 2									
SALE ALLOCATION DATA									
A. Property ID	RGV502	RGVH617	RGV5135	RGV676	RGVH337	RGVH519	RGV665	RGV662	RGV661
B. Sale Price		\$1,000,000	\$5,113,251	\$749,780	\$1,043,205	\$1,493,433	\$706,973	\$1,782,000	\$1,686,000
C. Sale Date	6/12/2009	10/23/2006	1/26/2006	10/12/2007	1/30/2008	4/1/2010	12/8/2008	9/13/2007	9/23/2006
D. Water Rights		\$195,841	\$1,069,919	\$35,301	\$0	\$0	\$0	\$0	\$0
E. Surface (B - D)		\$804,159	\$4,043,332	\$694,479	\$1,043,205	\$1,493,433	\$706,973	\$1,782,000	\$1,686,000
F. Deeded Acres	119.218	429.1384	3098.91	374.89	924.08	853.39	282.789	630.968	843
G. Price/Deeded Acre (B/F)		\$2,330	\$1,630	\$2,000	\$1,129	\$1,750	\$2,500	\$2,824	\$2,000
H. Surface/Deeded Acre (D/F)		\$1,874	\$1,305	\$1,852	\$1,129	\$1,750	\$2,500	\$2,824	\$2,000
I. Water/Deeded Acre (D / F)		\$456	\$345	\$148	\$0	\$0	\$0	\$0	\$0
J. Ac. Feet of Water	0	702.8	4859.1	131.7	0	0	0	0	0
K. \$/AF of Water (D / J)		\$279	\$220	\$420	\$0	\$0	\$0	\$0	\$0
Sale Adjustment Progression									
L. Surface \$/Ac. (H)		\$1,874	\$1,305	\$1,852	\$1,129	\$1,750	\$2,500	\$2,824	\$2,000
ER Adjustment	M. Equiv. Ratio	75%	66%	65%	76%	55%	56%	79%	87%
	N. % Change from Subject		13.64%	15.38%	-1.32%	36.36%	33.93%	-5.06%	-13.79%
	O. ER \$ Adjustment (L x N)		\$256	\$201	-\$24	\$411	\$594	-\$127	\$390
	P. Adjusted Price (L + O)		\$2,129	\$1,505	\$1,828	\$1,539	\$2,344	\$2,373	\$2,435
Time Adjustment	Q. Time Periods		32	41	20	17	10	6	21
	R. Compound Rate		0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%
	S. Time Adjusted Price		\$2,307	\$1,668	\$1,922	\$1,606	\$2,286	\$2,409	\$2,566
Size Adjustment	T. % Adjustment		0%	12%	0%	12%	12%	0%	12%
	U. \$ Adjustment (S x T)		\$0	\$200	\$0	\$193	\$274	\$0	\$251
	V. Adjusted Price (S + U)		\$2,307	\$1,868	\$1,922	\$1,799	\$2,560	\$2,409	\$2,566
Irrigation Adjustment	W. Irrigation Efficiency	100%	74%	76%	15.5%	0%	0%	100%	100%
	X. Effective Efficiency	100%	74%	76%	15.5%	50%	30%	100%	100%
	Y. % Difference from Sale to Subject		26%	24%	85%	50%	70%	0%	0%
	Z. Adjustment Rate		33%	33%	33%	33%	33%	0%	0%
	AA. Total % Adjustment (Y * Z)		8.58%	7.92%	27.89%	16.50%	23.10%	0.00%	0.00%
	BB. Total \$ Adjustment (AA x V)		\$198	\$148	\$536	\$297	\$591	\$0	\$0
CC. Adjusted Price (V + BB)		\$2,504	\$2,016	\$2,458	\$2,096	\$3,152	\$2,409	\$2,566	
Access Adjustment	DD. % Adjustment		0%	0%	0%	0%	0%	0%	0%
	EE. \$ Adjustment (CC x DD)		\$0	\$0	\$0	\$0	\$0	\$0	\$0
	FF. Adjusted Price (CC + EE)		\$2,504	\$2,016	\$2,458	\$2,096	\$3,152	\$2,409	\$2,566
Water Right Adjustment	GG. Sale Water Right/Surface Ac. (I)		\$456	\$345	\$148	\$0	\$0	\$0	\$0
	HH. Adjusted Price/Acre (FF + GG)		\$2,961	\$2,361	\$2,605	\$2,096	\$3,152	\$2,409	\$2,566
	II. Indicated Subj. Water/AF. (K)		\$279	\$220	\$420	\$380	\$380	\$380	\$380
	JJ. Indicated Subj. Water/Surface Ac.		\$0	\$0	\$0	\$0	\$0	\$0	\$0
	KK. Water Right Adjustment (JJ - HH)		-\$456	-\$345	-\$148	\$0	\$0	\$0	\$0
LL. Final Indicated Value (FF + KK)		\$2,504	\$2,016	\$2,458	\$2,096	\$3,152	\$2,409	\$2,566	
Indicator									
Median Indication		\$2,481							
Average Indication		\$2,491							
Concluded Value		\$2,485							
Sale Price		\$226,600							
Price/Acre		\$1,901							
Relation to Concluded Value		76%							

© 2020. Real Estate Center. All rights reserved.

