



TROPICAL STORM **IMELDA**

PROPERTY IMPACT BRIEF

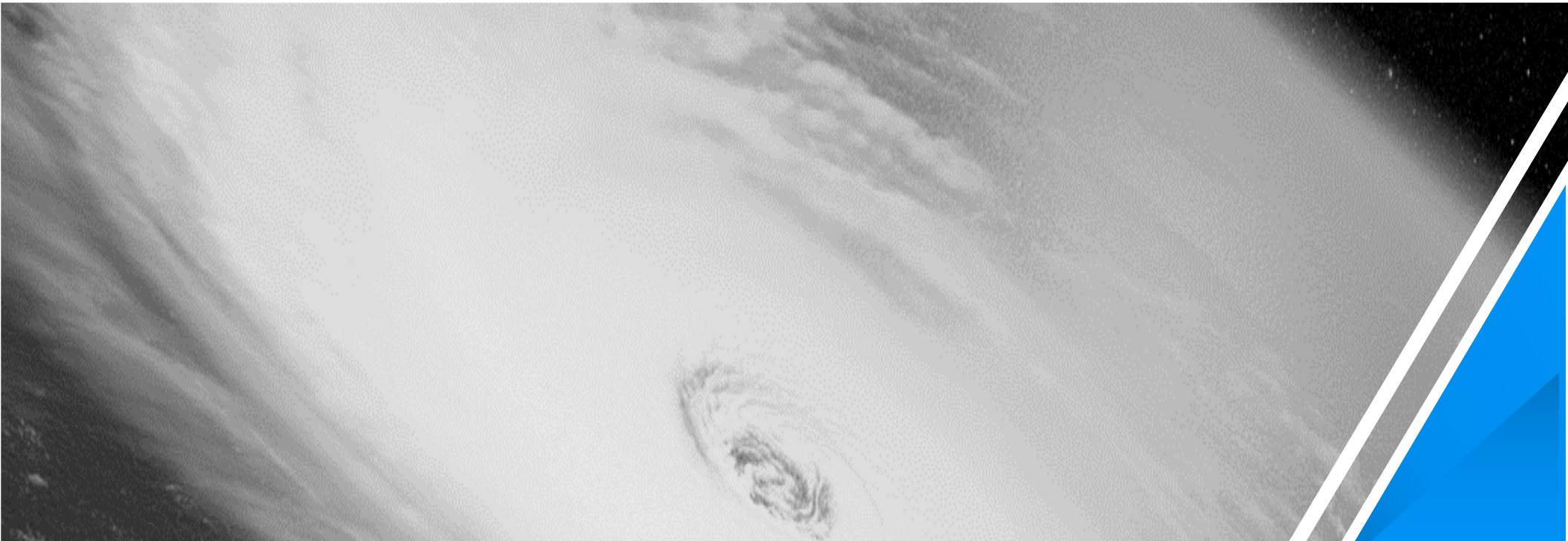
Veros Real Estate Solutions
Determines the Residential
Property Risk Resulting from
Tropical Storm Imelda:
September 2019

VEROS DISASTER DATA



CONTENT

Report Highlights	3
Overview	3
Storm Facts & Figures	4
Tropical Storm Imelda Path.....	5
FEMA Designated Counties	6
VEROS Determined Properties Impacted In FEMA Designated Counties.....	7
Tropical Storm Imelda Actual County Impact	9
VEROS Predicted Tropical Storm Imelda Property Damage Impact by County	10
Summary	12





Overview

Tropical Storm Imelda struck parts of Texas and Louisiana on September 17- 23 2019, with rain, flooding and wind damage recorded in more than 30 counties across the two states. Veros Real Estate Solutions determined the potential number of residential properties that may have sustained some level of damage.

Veros Real Estate Solutions identified over 172,800 residential properties in the core of Tropical Storm Imelda and the damage to these homes resulted in a market value of \$43.7 billion based on the predicative analytics available through the VeroVALUE AVM.

Using public records, proprietary data and mapping technology, this report details the potential impact to homes, outstanding mortgages and potential impact to insurance coverage.

Report Highlights



Potentially **822,275 properties** in the region were at stake; with approximately 172,800 in the direct core of the storm with the potential for greater damage.



Total market value of potentially impacted properties in the core and buffer zones tops **\$204 Billion**.



Hardest hit counties in Texas were **Harris, Galveston and Brazoria**.



Vernon was the hardest hit county in Louisiana.



Over **25%** of the residential properties in the hardest hit Texas counties are likely to have experienced some damage.

Storm Facts & Figures

Tropical Storm Imelda September 17- September 23.

5th Wettest tropical depressions on record to impact the continental U.S.

SE Texas Record-breaking floods in Texas.

11th Tropical depression of 2019 Atlantic Hurricane Season.

9th Named storm of 2019 Atlantic Hurricane Season.

Galveston & Beaumont Heaviest rain occurred.

40 MPH Highest sustained wind speed.

Texas & Louisiana States most affected.

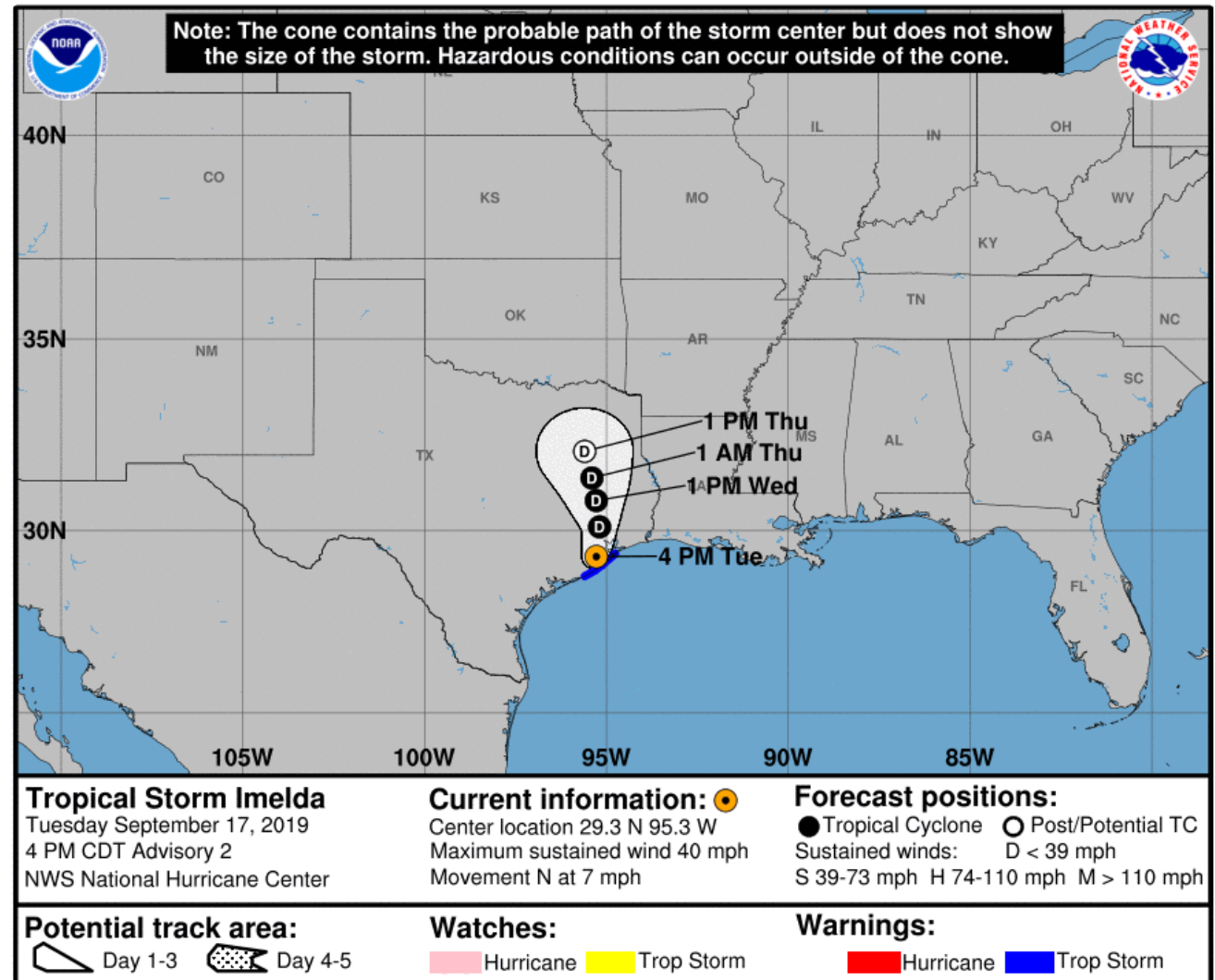




Tropical Storm Imelda Path

Tropical Storm Imelda almost seemed to form out of nowhere, and once it made landfall along Texas' Gulf Coast, it unleashed both heavy rainfall and tropical-storm-force winds.

Source: [nhc.noaa.gov](https://www.nhc.noaa.gov) - NOAA image



FEMA

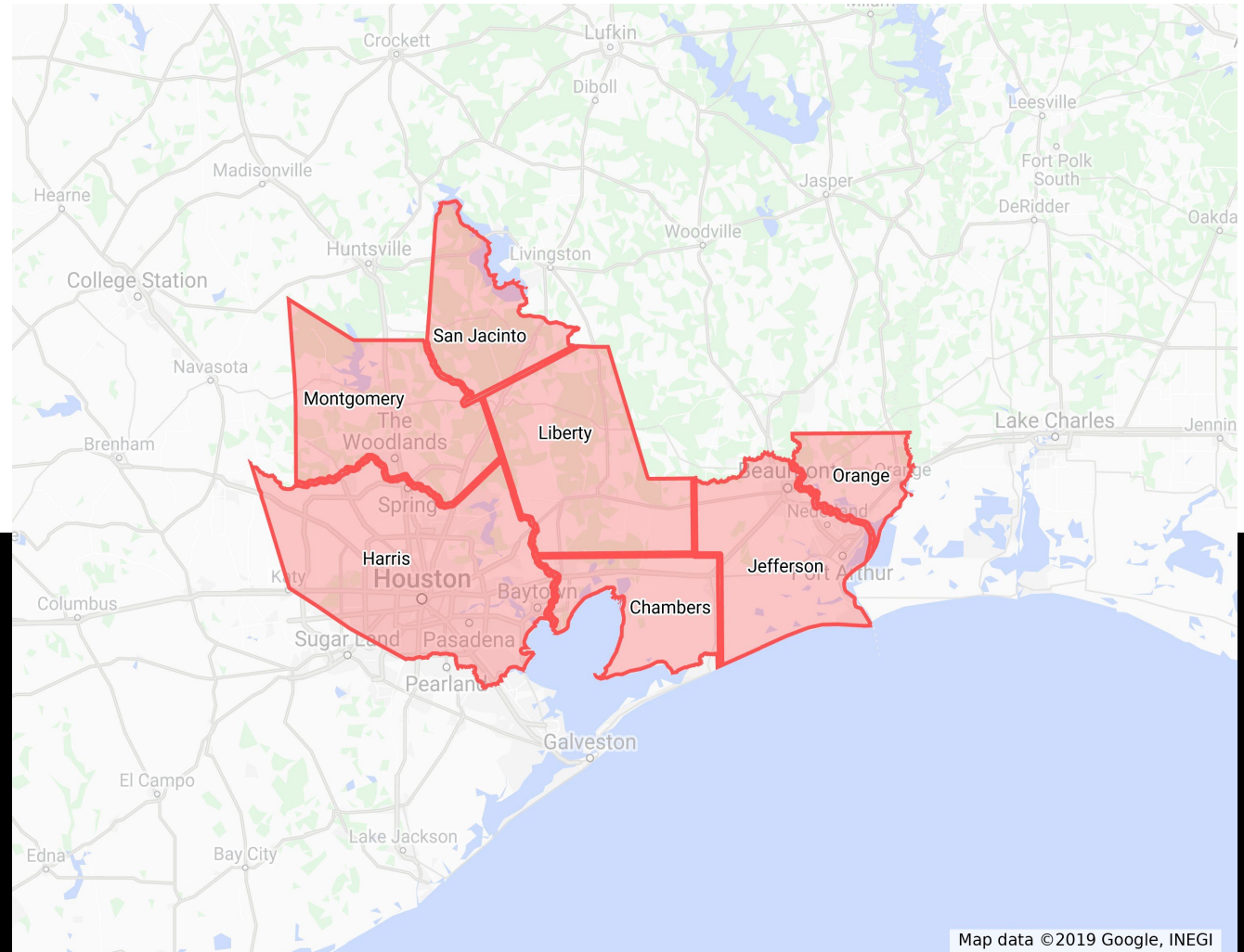
Designated Counties

Despite Tropical Storm Imelda reaching both Texas and Louisiana, the Federal Emergency Management Agency (FEMA) ultimately designated seven Texas counties in its Disaster Declaration as of 10/24/2019.

These counties include:

Chambers
Harris
Jefferson
Liberty
Montgomery
Orange
San Jacinto

This graphic shows the seven counties in the Texas Disaster Declaration as of 10/24/2019



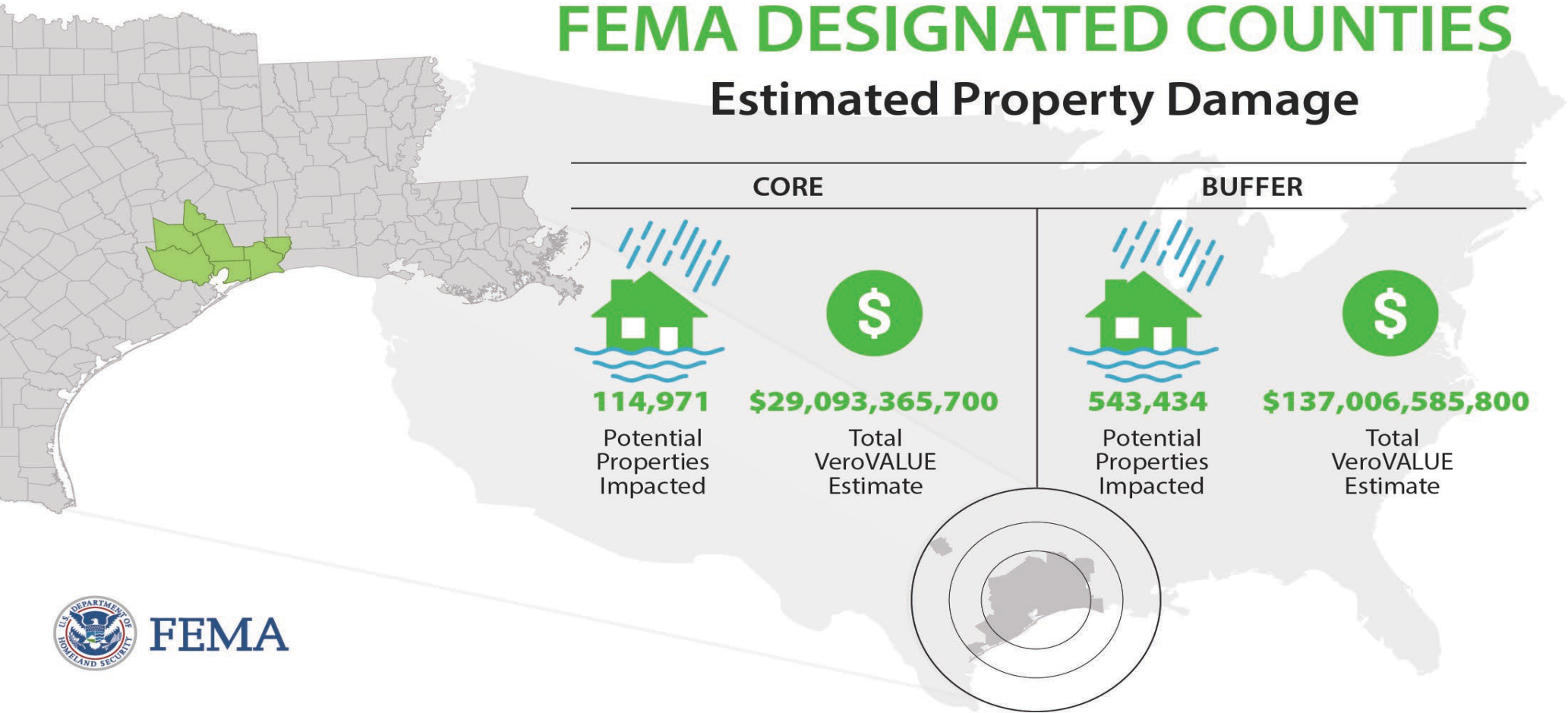
VEROS Determined Properties Impacted In FEMA Designated Counties.

Based on the counties designated by FEMA, Veros determined the estimated number of properties and their value directly impacted by their proximity in the core and buffer zone of the event.

FEMA DESIGNATED IMELDA IMPACT		INSIDE EVENT CORE			INSIDE BUFFER			OUTSIDE OF EVENT & BUFFER	
Texas & Louisiana Counties		Total VeroVALUE	Number of Properties	Percentage of Properties Inside Event	Total VeroVALUE	Number of Properties	Percentage of Properties Inside Buffer	Number of Properties	Percentage of County Not Affected
CHAMBERS	TX	\$73,667,300	361	2.11 %	\$1,554,269,300	5,970	34.83 %	10,811	63.07 %
HARRIS	TX	\$25,638,909,000	95,569	7.64 %	\$100,874,701,600	400,388	32.00 %	755,202	60.36 %
JEFFERSON	TX	\$1,063,991,600	5,850	6.56 %	\$3,114,257,200	17,228	19.32 %	66,100	74.12 %
LIBERTY	TX	\$279,403,400	1,798	4.74 %	\$1,431,998,100	8,822	23.28 %	27,281	71.98 %
MONTGOMERY	TX	\$718,505,400	3,674	1.81 %	\$26,123,719,200	89,432	44.14 %	109,491	54.04 %
ORANGE	TX	\$1,218,256,600	7,171	19.92 %	\$2,678,580,800	15,666	43.53 %	13,154	36.55 %
SAN JACINTO	TX	\$100,632,400	548	3.45 %	\$1,229,059,600	5,928	37.36 %	9,390	59.18 %
TOTAL		\$29,093,365,700	114,971		\$137,006,585,800	543,434		991,429	

FEMA DESIGNATED COUNTIES

Estimated Property Damage



FEMA

CORE AND BUFFER ZONE EXPLAINED

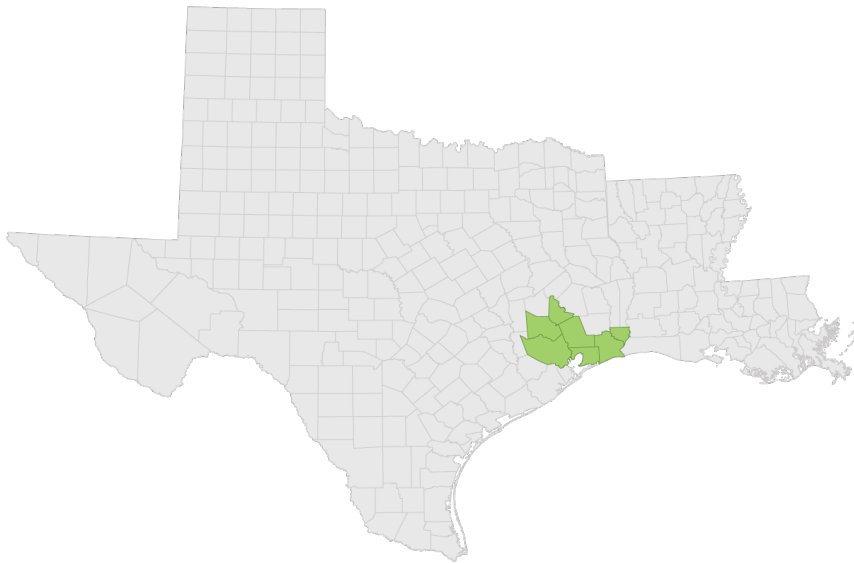
The disaster data set from Veros combines data and satellite imagery from multiple sources in near real-time, indicating whether or not a specific parcel has been affected by the hurricane. This disaster data provides accuracy more precise than FEMA, which uses county boundaries for its designations. Using parcel boundaries, latitude and longitude, address information and more, Veros creates two geographic areas that pertain to a disaster event: residential properties in the Core (inside the event) and residential properties in the Buffer (within ½ mile outside of the core). If a property is located within the core or the buffer, it is not implicit that there is damage, but rather, an indication of the likelihood that a property may have experienced damage. The total VeroVALUE is based on the total of the impacted properties calculated from the VeroVALUE AVM.

Tropical Storm Imelda Actual County Impact

Through data collected via satellite imagery and multiple data sources, Veros determined the actual counties that were impacted was far greater than FEMA's designation, extending beyond Texas into four counties in Louisiana. Here is a visual comparison indicating the counties where damage occurred based on FEMA and the data collected by Veros.

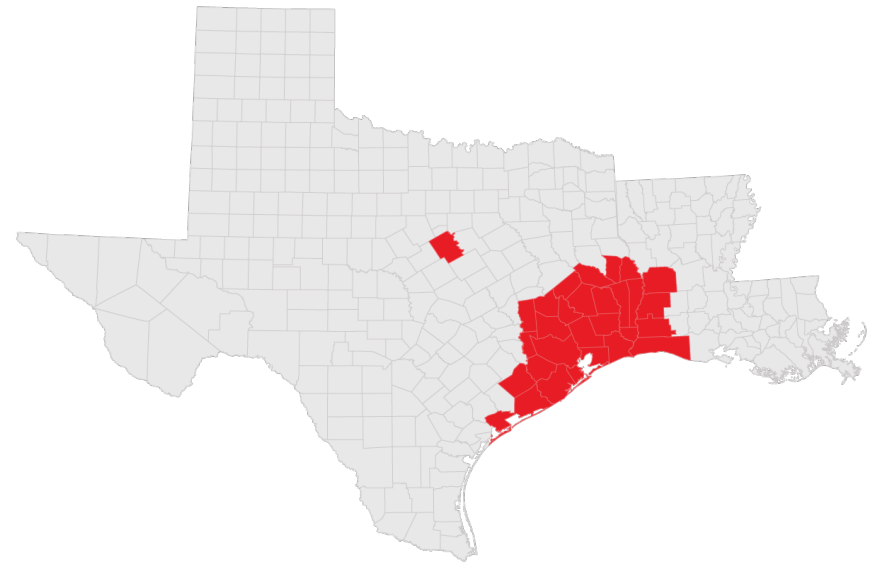
FEMA Declared County Map

FEMA—4466—DR, Texas Disaster Declaration as of 10/24/2019



FEMA

VEROS County Impact Map



VEROS Predicted Tropical Storm Imelda

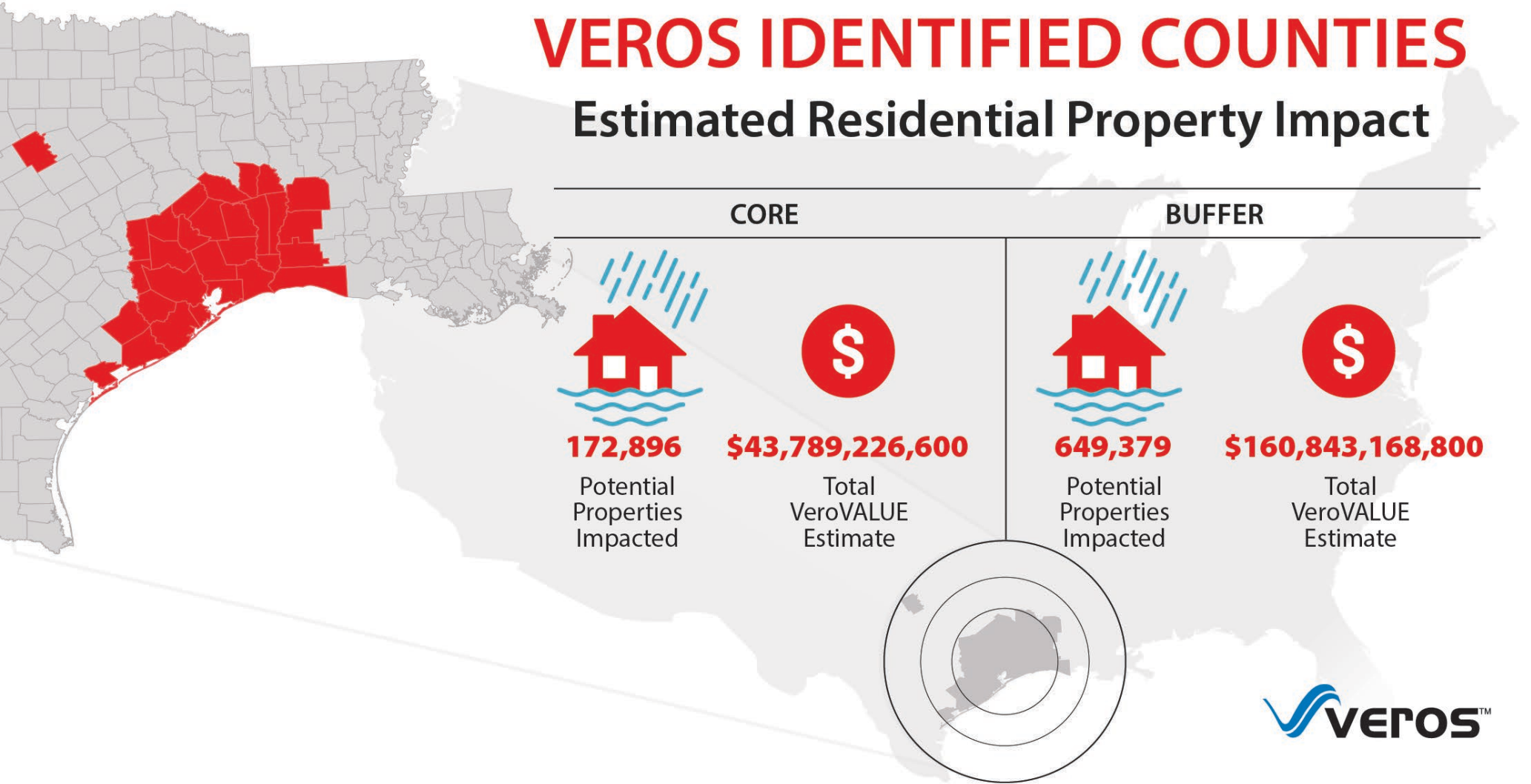
Property Damage Impact by County

Veros has determined the potential property level impact within the counties identified by Veros to have been impacted by Tropical Storm Imelda.

VEROS PREDICTED IMELDA IMPACT		INSIDE EVENT CORE			INSIDE BUFFER			OUTSIDE OF EVENT & BUFFER	
Texas & Louisiana Counties		Total VeroVALUE	Number of Properties	Percentage of Properties Inside Event	Total VeroVALUE	Number of Properties	Percentage of Properties Inside Buffer	Number of Properties	Percentage of County Not Affected
BEAUREGARD	LA				\$6,892,800	43	0.26 %	16,375	99.74 %
CALCASIEU	LA				\$158,000	1	0.00 %	71,768	100.00 %
CAMERON	LA				\$3,418,400	17	0.45 %	3,731	99.55 %
SABINE	LA				\$78,000	1	0.01 %	13,779	99.99 %
VERNON	LA				\$46,312,000	281	1.97 %	13,983	98.03 %
ANGELINA	TX				\$4,965,000	47	0.16 %	29,666	99.84 %
BRAZORIA	TX	\$3,989,767,300	17,822	13.94 %	\$9,506,983,400	42,212	33.02 %	67,819	53.04 %
CALHOUN	TX				\$5,375,400	34	0.34 %	10,059	99.66 %
CHAMBERS	TX	\$73,667,300	361	2.11 %	\$1,554,269,300	5,970	34.83 %	10,811	63.07 %
DALLAS	TX				\$229,000	1	0.00 %	672,213	100.00 %
FORT BEND	TX	\$5,064,200	17	0.01 %	\$482,240,200	2,080	0.82 %	253,021	99.18 %
GALVESTON	TX	\$9,876,411,800	35,728	25.87 %	\$9,992,805,600	37,496	27.15 %	64,901	46.99 %
GRIMES	TX				\$33,290,000	248	2.05 %	11,858	97.95 %
HARDIN	TX	\$197,009,400	1,015	4.28 %	\$1,110,141,800	5,855	24.72 %	16,819	71.00 %
HARRIS	TX	\$25,638,909,000	95,569	7.64 %	\$100,874,701,600	400,388	32.00 %	755,202	60.36 %
JACKSON	TX	\$284,000	2	0.02 %	\$671,400	5	0.06 %	8,054	99.91 %
JASPER	TX	\$40,022,800	292	1.65 %	\$873,510,800	6,301	35.56 %	11,125	62.79 %
JEFFERSON	TX	\$1,063,991,600	5,850	6.56 %	\$3,114,257,200	17,228	19.32 %	66,100	74.12 %
LIBERTY	TX	\$279,403,400	1,798	4.74 %	\$1,431,998,100	8,822	23.28 %	27,281	71.98 %
MADISON	TX				\$202,000	1	0.02 %	4,753	99.98 %
MATAGORDA	TX	\$549,545,200	2,791	16.18 %	\$962,726,200	5,963	34.56 %	8,499	49.26 %
MONTGOMERY	TX	\$718,505,400	3,674	1.81 %	\$26,123,719,200	89,432	44.14 %	109,491	54.04 %
NACOGDOCHES	TX	\$80,000	1	0.00 %				21,600	100.00 %
NEWTON	TX	\$35,930,200	251	3.13 %	\$379,953,600	2,763	34.49 %	4,997	62.38 %
ORANGE	TX	\$1,218,256,600	7,171	19.92 %	\$2,678,580,800	15,666	43.53 %	13,154	36.55 %
POLK	TX				\$56,285,600	342	1.57 %	21,465	98.43 %
SABINE	TX				\$119,985,200	744	13.01 %	4,973	86.99 %
SAN AUGUSTINE	TX				\$22,070,000	162	5.17 %	2,974	94.83 %
SAN JACINTO	TX	\$100,632,400	548	3.45 %	\$1,229,059,600	5,928	37.36 %	9,390	59.18 %
TRINITY	TX				\$18,133,000	131	1.77 %	7,275	98.23 %
TYLER	TX				\$39,627,000	368	3.33 %	10,678	96.67 %
WALKER	TX	\$213,000	1	0.01 %	\$35,655,800	230	1.17 %	19,437	98.83 %
WALLER	TX	\$1,533,000	5	0.02 %	\$121,433,800	489	2.30 %	20,761	97.68 %
WHARTON	TX				\$13,439,000	130	0.77 %	16,701	99.23 %
TOTAL		\$43,789,226,600	172,896		\$160,843,168,800	649,379		2,400,713	

VEROS IDENTIFIED COUNTIES

Estimated Residential Property Impact



Summary

The total impact of this storm was devastating with extensive flooding of agricultural lands, roads, homes, county infrastructure and businesses. Interstate 10 was closed for a day at the border between Texas and Louisiana, shutting down a critical transportation corridor. There was damage to homes and businesses, as well as people's valuables and cars, job and wage losses, farm and crop losses, contamination of drinking water wells, infrastructure damage, auxiliary business losses and the long-term impact from flooding. All of these factors may result in a temporary spike in mortgage delinquencies and a tightening of available rental units. Veros will continue to monitor the impact of Tropical Storm Imelda and future natural disasters as they occur. Our thoughts are with the people and responders challenged with the effects of this storm.

When Disaster Strikes, Veros Is There For You.

To request a complete list of potential properties and localized damage as a result of Tropical Storm Imelda, visit: [Veros.com/Imelda](https://veros.com/imelda) or call: **866.458.3767**

To subscribe to future natural disaster reports from Veros Real Estate Solutions, please visit: [Veros.com/ 911](https://veros.com/911)

What Disaster Data Can Do For Your Business.

- ≈ Identify damaged and high-risk properties
- ≈ Streamline the property assessment process
- ≈ Accelerate clear-to-close time for unimpacted properties
- ≈ Determine risk rating and focus risk management efforts on high risk properties
- ≈ Eliminate unnecessary property inspections
- ≈ Enhance borrower relations by proactively identifying at risk loans and rapidly initiating contact

Find out more: [Veros.cc/data](https://veros.cc/data)



Corporate Headquarters
2333 N. Broadway, Suite. 350
Santa Ana, CA 92706
www.veros.com

Veros.com

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