

Hidalgo County's Participation in the Local Update of Census Addresses: A Case Study

According to the U.S. Office of Management and Budget, Texas has 254 counties, more than any other state in the United States. Of these 254 counties, 191 are classified as rural, representing 75% of all counties in the state. In 2018, only 55 counties participated in the Local Update of Census Addresses ([LUCA](#)), meaning only about one in five counties participated. This low participation rate affected the quality of the address data the Census Bureau used in 2020 and contributed to the half a million person undercount in Texas.

LUCA and its Significance

LUCA is a voluntary program run by the U.S. Census Bureau that allows state, local, and tribal governments to review and update their residential address lists ahead of the decennial census. To participate, governments register with the Census Bureau, receive the Bureau's confidential address list for their area, and verify it against local records such as GIS databases, appraisal district files, and 911 addressing data. Governments then submit corrections and additions within the review window for the Census Bureau to verify and incorporate into the Master Address File (MAF), a comprehensive inventory of all known living quarters in the United States. Because the Census Bureau mails census materials based on the MAF, addresses missing from it may never receive an invitation to respond, so local review directly affects whether households are counted. Hidalgo County followed this process during its LUCA participation ahead of the 2020 Census.

Purpose of this Case Study

The Texas Census Institute (TxCI) is seeking to address the lack of participation in LUCA by highlighting the benefits of participation to counties, offering a resource toolkit for counties to use when updating their addresses, and elevating the issue to the state level to encourage collaboration amongst agencies and municipalities. Of the state's 29 million people, 7.6 million (1 in 4) live outside of incorporated cities and rely on counties for basic services, such as law enforcement and emergency medical services. Local address updates lead to accurate census data, which in turn helps ensure accurate federal funding allocations and fair congressional representation.

Given the importance of LUCA participation, TxCI performed a preliminary analysis of the *potential benefits of LUCA on the 2020 Census* in one Texas county that registered to participate: Hidalgo County.

Our preliminary findings suggested that in the Pueblo de Palmas neighborhood in Hidalgo County, more than 90% of the housing units counted in the 2020 Census were added through LUCA participation.

A Closer Look at the Case Study

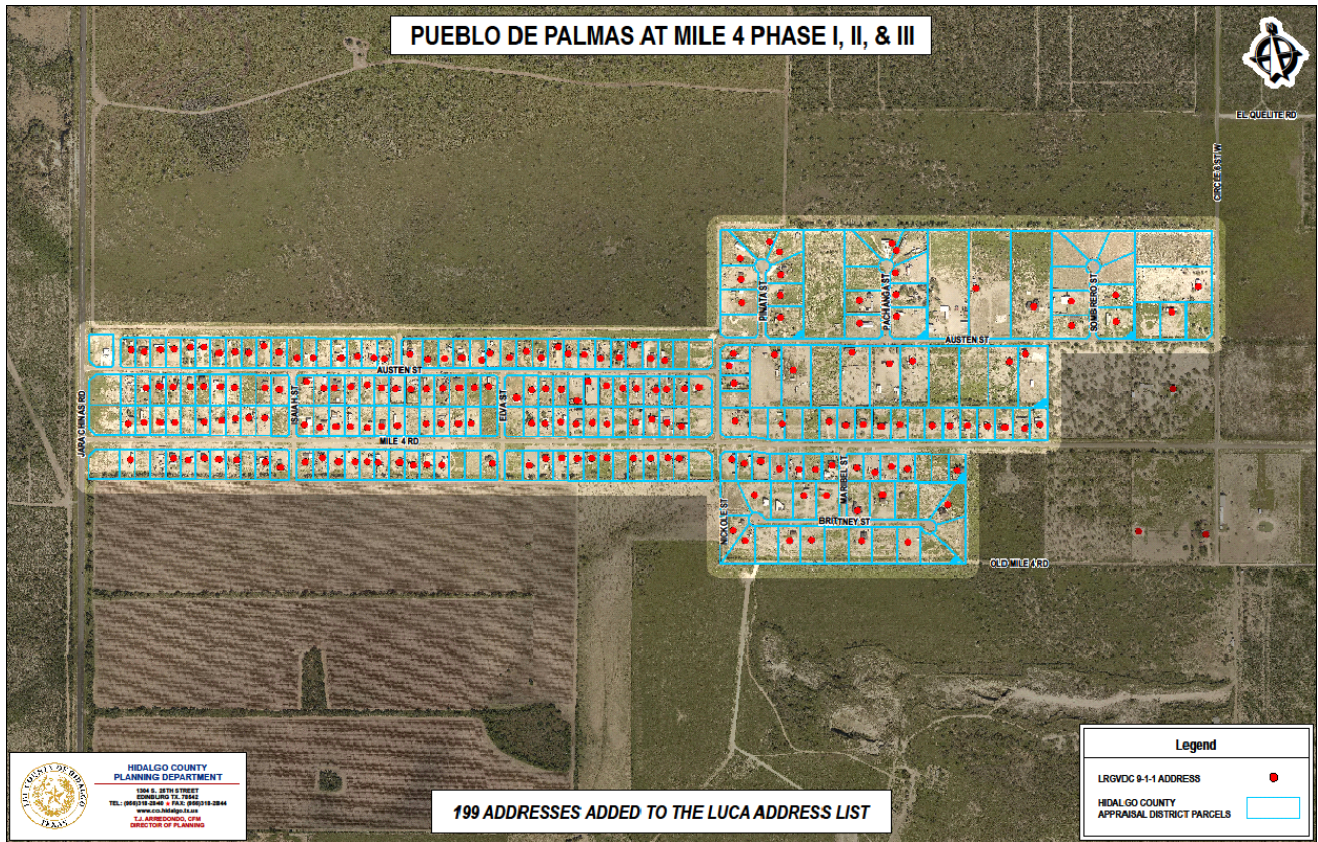
During the 2010 Census, Hidalgo County experienced a substantial undercount, in part because it did not participate in LUCA in 2008. When local officials compared the post-enumeration survey results in 2012 with their working knowledge of where community members lived, they realized there was a significant discrepancy in the numbers. These community leaders began working with the U.S. Census Bureau and several partners, including La Unión del Pueblo Entero (LUPE), the Hidalgo County Planning Department, and the Lower Rio Grande Valley Development Council (LRGVDC). Together, they addressed the discrepancy by canvassing neighborhoods to identify unrecorded housing units and strengthen the county's address records.

Benefits of LUCA in Hidalgo County

a) What we identified in Hidalgo County's LUCA submission

Hidalgo County (2018) reported that 199 addresses were recommended for addition in a neighborhood called Pueblo de Palmas, as marked in red dots in Figure 1.

Figure 1 Aerial view of Pueblo de Palmas in Hidalgo County, TX.



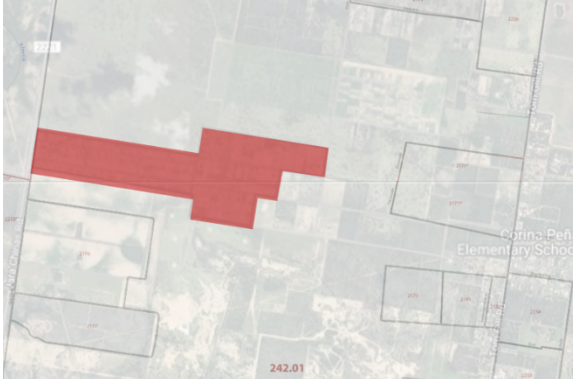
Source: Hidalgo County (2018).

b) Location of Pueblo de Palmas

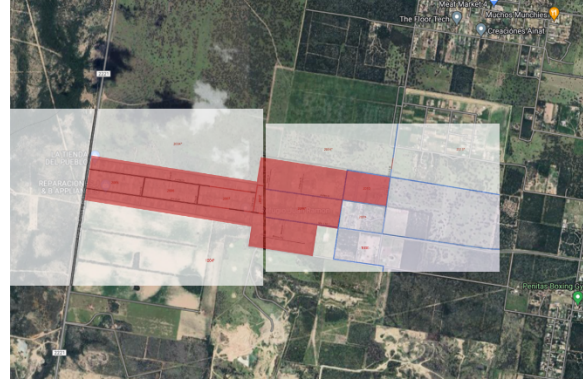
The *geographic labeling* of Pueblo de Palmas changed between 2010 to 2020. In 2010, it was labeled in Tract 024201, Block 2170. In 2020, it fell within Tract 024211, Blocks 1004, 2004, 2005, 2006, 2007, 2008, and 2010. Figure 2 shows how Pueblo de Palmas passed from being a small part of Block 2170 (under the 2010 census classification), to 5 entire blocks (2005, 2006, 2007, 2008, and 2010) and portions of two other blocks (1004 and 2004).

Figure 2 Geography labels of Pueblo de Palmas in Hidalgo County, TX, 2010 v. 2020.

2010



2020



Source: Texas Census Institute with information from U.S. Census Bureau (2011, 2021).

c) Potential benefits of LUCA

The above analysis shows that it is possible to compare the number of addresses Hidalgo County recommended for addition at the block level with the total housing units published by the U.S. Census Bureau (2024). By doing so, we can approximate the benefits of LUCA as the housing units that were recommended to be added as a share of the 2020 Census total housing units. Table 1 shows the results at the block level.

Table 1 Potential Benefits of LUCA in Pueblo de Palmas in Hidalgo County, TX.

Block	2020 Census Housing Units	Housing Units recommended to be added by Hidalgo County during LUCA	Potential benefits of LUCA
1004	60	53	88.3%
2004	53	51	96.2%
2005	20	18	90.0%
2006	25	24	96.0%
2007	26	23	88.5%
2008	31	24	77.4%
2010	4	6	150.0%
Total	219	199	90.9%

Source: Texas Census Institute (2024).

Main Conclusion

We estimate that LUCA contributed to **adding more than 90% of the addresses in Pueblo de Palmas that appear in the 2020 Census**. This suggests that the work performed by Hidalgo County through LUCA was successful and helped them achieve an accurate 2020 Census. According to Castellanos-Sosa (2024), **Hidalgo County did not experience an undercount, unlike the 2010 Census**.

References:

- Castellanos-Sosa, Francisco A. (2024) The 2020 Census Undercount in Texas Counties. Texas Census Institute. Retrieved from: <https://texascensus.org/our-research/the-2020-census-undercount-in-texas-counties/>.
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- U.S. Census Bureau (2024) National, State, and County Housing Unit Totals: 2020-2023. Retrieved from: <https://www.census.gov/data/tables/time-series/demo/popest/2020s-total-housing-units.html>.