

Infrastructure Debt in Hispanic-Majority ZIP Codes — 2026

A 2026 ZIP-level cross-reference of Census ACS Hispanic/Latino population data with EPA, FEMA, CDC, and ZipCheckup compound-risk metrics across 41,344 US ZIP codes.

Version 1.0 · Generated 2026-05-02T14:28:56.481Z · 7 federal data sources · License: CC BY 4.0

1. Cohort definition

The Hispanic-majority cohort comprises ZIP code tabulation areas (ZCTAs) where the Hispanic or Latino population share, as reported by the U.S. Census Bureau American Community Survey 5-year estimates 2019–2023 (Table B03002), is at or above **50%**.

National baseline statistics include all ZCTAs with at least 50 residents present in the ACS sample.

2. Cohort scope

PARAMETER	VALUE
Hispanic-majority ZIP codes	1,508
Total residents covered	36,523,435
Hispanic-majority threshold	≥ 50%
Lead exposure index threshold (high)	≥ 70
Old-infrastructure threshold (housing pre-1980)	≥ 50%
Number of states represented	36

3. Data sources

DOMAIN	SOURCE
Demographics	Census ACS B03002 (2019-2023)
Water Quality	EPA SDWIS, EPA Lead and Copper Rule
Lead Exposure	EPA LCR + CDC Childhood Blood Lead Surveillance
Infrastructure	Census ACS housing age + EPA system-violation history
Flood Risk	FEMA NFIP + National Risk Index
Wildfire Smoke	FEMA NRI + AirNow

ZipCheckup · <https://zipcheckup.com/reports/hispanic-zip-risk-2026/> · Generated 2026-05-02
 Compound Risk ZipCheckup compound-risk model + anomaly engine

4. Composite metrics

Hispanic-majority filter applied to ZipCheckup compound-risk model. Hispanic share computed from Census ACS B03002 (2019-2023 5-year). Risk fields joined from EPA SDWIS, EPA Lead and Copper Rule, FEMA NRI/NFIP, ZipCheckup compound-risk and anomaly engines.

Compound annual cost

The compound annual cost combines per-ZIP estimates of water-lead remediation cost, infrastructure replacement cost, flood expected annual loss, wildfire smoke health cost proxy, energy code gap cost, and other vertical-specific cost components. The model is documented in the public ZipCheckup compound-risk repository (open data link below).

Triple cargo classification

A ZIP code receives the "triple cargo" label when (a) compound risk tier is high / very-high / critical, AND (b) daily safety index status is "poor". This composite identifies stacked vulnerability profiles that EPA enforcement data alone misses.

5. Findings summary

- 1,508 Hispanic-majority ZIP codes home to 36,523,435 residents
- 64.7% of Hispanic-majority ZIPs are classified high/very-high/critical risk (vs 40.7% national) — 1.6x more likely
- Median annual hidden environmental cost: \$2,200 per Hispanic-majority household vs \$1,220 national (80.3% higher)
- 26.6% of Hispanic-majority ZIPs face high wildfire smoke exposure (smoke risk \geq 50) vs 5.3% national — 5x more likely. Concentrated in CA, AZ, TX, NM
- 103 Hispanic-majority ZIPs show lead exposure index \geq 70 — top 4 states: IL (17), CA (17), TX (15), NY (11)
- Top 5 cities by Hispanic-majority high-risk ZIP concentration: miami FL (43), houston TX (37), san-antonio TX (27), los-angeles CA (25), bronx NY (16)
- 368 Hispanic-majority ZIPs face 'triple cargo' — high compound risk + currently-poor daily safety index
- 20 Hispanic-majority ZIPs in 'silent danger' subset (3.2% of national 616). Note: Hispanic-majority ZIPs are 4.7% of all ZIPs but 3.2% of silent-danger — sub-proportional, possibly indicating monitoring gap

6. Reproducibility

The cohort cross-reference is fully reproducible from the published source datasets:

- GitHub: <https://github.com/artakulov/us-water-quality-data>
- HuggingFace: <https://huggingface.co/datasets/artakulov/us-water-quality-data>
- Kaggle: <https://www.kaggle.com/datasets/artakulov/us-water-quality-data>

Data refresh cadence: Census demographics refreshed annually (5-year ACS). EPA SDWIS + LCR refreshed daily. FEMA NRI refreshed quarterly. Compound-risk and anomaly engines recomputed on every site build.

7. Citation

APA

Akulov, A. (2026). *Infrastructure Debt in Hispanic-Majority ZIP Codes — 2026*. ZipCheckup.
<https://zipcheckup.com/reports/hispanic-zip-risk-2026/>

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