Supporting research

The Market Is Flat. Your Next Deal May Not Be.

Detailed methods, selected ZIP-code extremes, four-date panel and ten-metro maps. The separate core article contains the investment narrative.

Appendix: how we made the comparisons

What the measure means

Advertised occupancy is a listing-derived indicator: 100 × (1 − recorded vacant units / profile units). We combine properties by units, not by averaging their percentages. Changes are percentage points. The profile-unit denominator is held fixed; historical delivered inventory is not independently verified. These are unique source records, not independently verified unique physical buildings. Aliases or phases may remain.

The displayed results describe changes in covered listing records, not how much of each change reflects leasing versus listing coverage or advertising practices. Remaining aliases or phases may affect the weights assigned to physical properties.

The indicator is not verified physical occupancy, achieved rent, executed leases, collections or NOI. Changes can reflect listing coverage and advertising practices. Missing observations are not zero vacancies or unchanged performance.

National research: March 29–November 2, 2026

The two-endpoint panel contains 44,907 source records and 9,737,088 units. Recorded construction years of 2026 or later are excluded; unknown years remain in the overall panel. We separate older stock from recent construction so newer buildings filling recorded vacancies do not obscure the older group’s performance. Older means a known recorded year through 2021, not verified stabilization. Recent means recorded 2022–2025, not verified lease-up. The cutoff is a construction-year split, not proof that every older building had stabilized.

The twenty metros are selected by eligible sampled units, not population. The main metro/ZIP comparison then uses older records with positive endpoint effective rents and no more than a 30% absolute rent-ratio change. A displayed ZIP code needs at least 1,000 screened units. Metro results include screened records in ZIP codes below that display threshold; they are not averages of the displayed ZIP results.

The rent screen keeps this chart on a consistent rent-plausibility cohort for the related rent analysis. It excludes nonpositive effective rents and absolute endpoint rent changes above 30%; it does not establish that excluded occupancy observations are wrong, and an occupancy-only measure does not inherently require it. We retain the screened chart for continuity and disclose the unscreened check rather than treating the screen as independent validation.

A November 19, 2026 sensitivity check held the same twenty metros, recorded construction-year cutoff, endpoint dates and fixed unit counts constant, then removed only the rent screen. The screened comparison has 16,104 records and 4,007,665 units; without the screen it has 16,648 records and 4,085,409 units, restoring 544 records and 77,744 units. Qualifying ZIPs rise from 1,205 to 1,226. The middle-90% ZIP range remains approximately −1.8 to +1.8 points, and all twenty metros still contain gaining and losing ZIPs. Pooled change is −0.013 points with the screen and −0.004 without it. These are pooled changes for the selected sample, not nationwide population estimates.

The exact claim that every metro moves by less than 0.5 points depends on the screen: Austin changes from +0.446 to +0.513 points when it is removed. No other metro crosses that threshold. The largest metro-level screen-removal difference is 0.105 points in Nashville. Individual ZIP results can be more sensitive: Austin ZIP 78750 changes from −0.65 to +1.82 points. The broad metro-versus-local contrast survives this check; the screen does not leave every local result unchanged. ZIP eligibility is recalculated in each variant using the same 1,000-unit minimum.

There are 1,205 qualifying ZIP codes. The middle-90% range counts each ZIP once and is the fifth-to-95th-percentile band, not a confidence interval or the full range. Geography is joined by recovered source metro code, not ambiguous market names. This is a covered-property sample, not a representative census.

The big-movers chart uses a separate older-stock comparison without the rent screen. It shows the highest and lowest ZIP-code changes within each of the eight largest metros by eligible sampled units. Each displayed ZIP needs at least 1,000 older units and ten source records. These are selected extremes, not typical outcomes; they need not match the endpoints of the rent-screened dot plot. The Dallas examples in the main article were separately re-aggregated with the dot plot’s exact screen on November 18, 2026: 75228 retains 14 records and 3,583 units (357 → 247 recorded vacant units); 76116 retains 18 records and 4,324 units (204 → 307). Neither ZIP loses a record to the screen. Their changes are +3.0701 and −2.3821 percentage points under both methods, rounded to +3.1 and −2.4. The screened Dallas–Fort Worth metro calculation is (20,907 − 20,701) / 472,824 × 100 = +0.0436 points, rounded to +0.04.

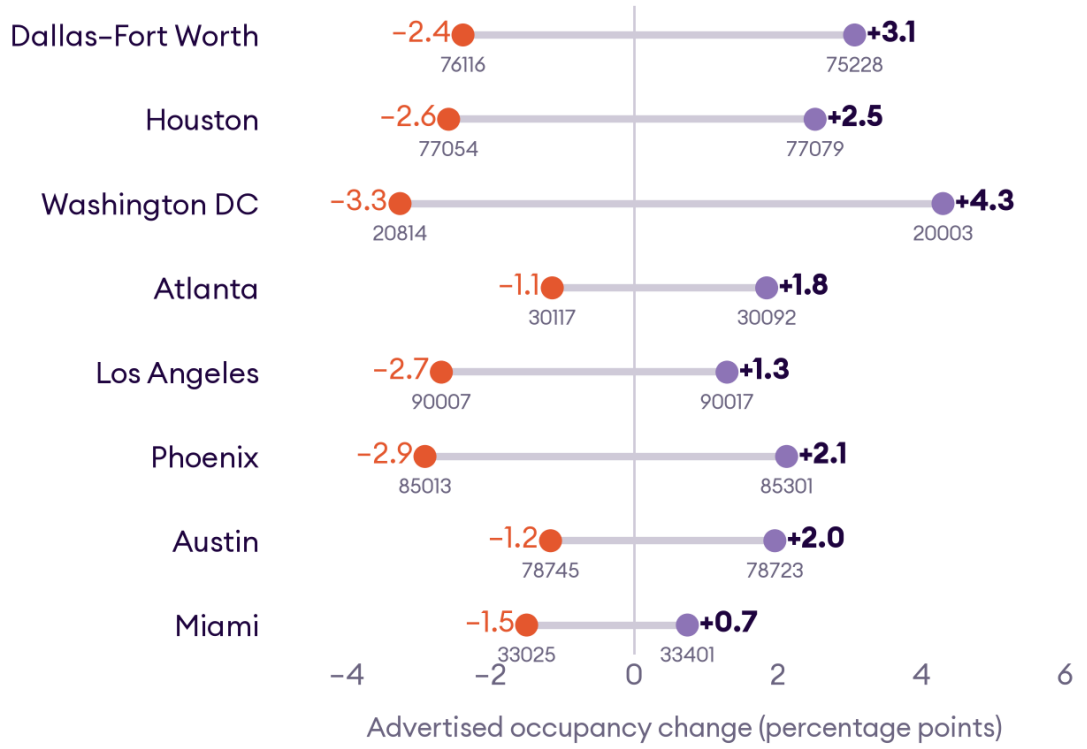
The ten detailed maps use the same screened outcomes as the main metro comparison. Cached Census ZCTA polygons approximate postal ZIP codes; their vintage was not freshly verified. Any qualifying ZIP without a usable polygon is listed in that map's coverage note, not shown as unchanged. The maps use a shared color scale, capped at ±3 points; color saturation does not imply identical extreme values.

Selected ZIP-code extremes: additional context

The chart below is supplementary, not the next step in the article’s argument. It uses the separate, unscreened older-stock comparison described above.

Older stock · Mar 29–Nov 2, 2026

Opposite ZIP outcomes inside large metros.



Highest and lowest qualifying ZIP per metro, not typical outcomes.

1,000+ older units and 10+ source records per ZIP; no rent screen.

Source: lizo · corrected metro assignments · checked Nov 17, 2026

lizo

Highest and lowest qualifying older-stock ZIP changes inside eight large metros. Each ZIP has 1,000+ units and 10+ source records. Unlike the first chart, no rent-data screen is applied. March 29–November 2, 2026. Extremes, not typical outcomes. [1]

Why we also check four dates

The four-date chart requires a known year through 2025 and a usable observation on March 29, June 28, September 29 and November 2. It contains 41,875 records and 9,384,660 units: 34,559 older records and 7,316 recent records. This is a different fixed panel from the two-endpoint sample and has no hero rent screen. Lines connect observed snapshots; they do not measure the daily path.

The four-date chart appears in the main article before the metro/ZIP comparison.

Dallas 75219: March 29–November 8, 2026

This separate follow-up includes all recorded building years. Of 57 tracked profiles, one explicit test record is excluded. Of the 56 remaining, 31 have usable observations at both dates and 25 do not. The paired profiles cover 7,570 units: sixteen improve, twelve weaken and three are unchanged. They are not an independent census of all apartments in the ZIP code.

Recorded vacancies fall by a net 205: 275 fewer across improving properties, offset by seventy more across weakening ones. Three properties recorded as built in 2022 or later contribute a net 78 fewer vacancies, or 38% of the net improvement; the 28 older paired properties contribute 127. Build years do not independently establish opening dates, delivery dates or stabilization.

Pockets and the asset example

Pockets use recorded census-tract assignments, restricted to sampled properties inside ZIP code 75219. They are not newly drawn statistical neighborhoods, complete tract censuses or verified comp sets. Seven groups contain at least two properties with observations at both dates. Three other groups have one property with observations at both dates each; all three decline. Map cards locate property groups, not tract boundaries. The faint street basemap is schematic context, credited to OpenStreetMap contributors.

The weakening five-record pocket has 1,704 units; vacancies rise from 31 to 74. All five tracked records weaken. Physical-property identities have not been independently established, so aliases or phases cannot be ruled out. This identifies shared sampled weakness, not its cause.

Eclipse has 77 profile units and a recorded year of 1966. Its recorded vacancies are nine on March 29, seven on June 7, fifteen on August 17, twenty on September 20, twenty-three on October 10, fifteen on November 2 and fourteen on November 8. Nine vacancy observations are missing from June 14 through August 10. The chart plots recorded observations only. The nine missing weeks have no estimated values. A dotted connector joins the June 7 and August 17 observations only as a visual guide; it is not an observed or estimated weekly path. Neither the gap nor the connecting lines between other observed dates establishes the intervening path. Its five additional March–November recorded vacancies equal a 6.49-point decrease in the indicator, from 88.31% to 81.82%. The October-to-November decline in recorded vacant units does not establish leasing success: advertised availability, a distinct measure that includes pre-leasing, rises from 31.17% on October 10 to 33.77% on November 8. It was 15.58% on March 29.

Eclipse was selected after examining outcomes; it does not establish how common this pattern is. The three other tracked properties in Eclipse's assigned tract cover 650 units; their recorded vacancies fall from 27 to 12. One property supplies 13 of the 15 fewer vacancies, another is unchanged, and the buildings differ in recorded construction year and class. The combined decline therefore does not establish broad-based strength or renter substitutability. These properties are geographic context, not a confirmed comp set.

Neither the geography nor the listing records prove renter movement, a supply-driven loss, an operational cause, a renovation payoff or investment value. Local demographics describe an area, not the residents of a particular building. Eclipse is a public-property research example, not a customer case.

Sources and observation dates

[1] National and metro research. lizo market-property database, frozen March 29–November 2, 2026 observations; corrected original-build-year and metro-code audit completed November 16. The corrected figure and supporting exports were assembled November 17. Main hero: twenty metros and 1,205 qualifying ZIP codes. Detailed maps use the same screened values. The rent-screen sensitivity check was reproduced from the frozen extracts on November 19, 2026. Underlying database records are not publicly downloadable.

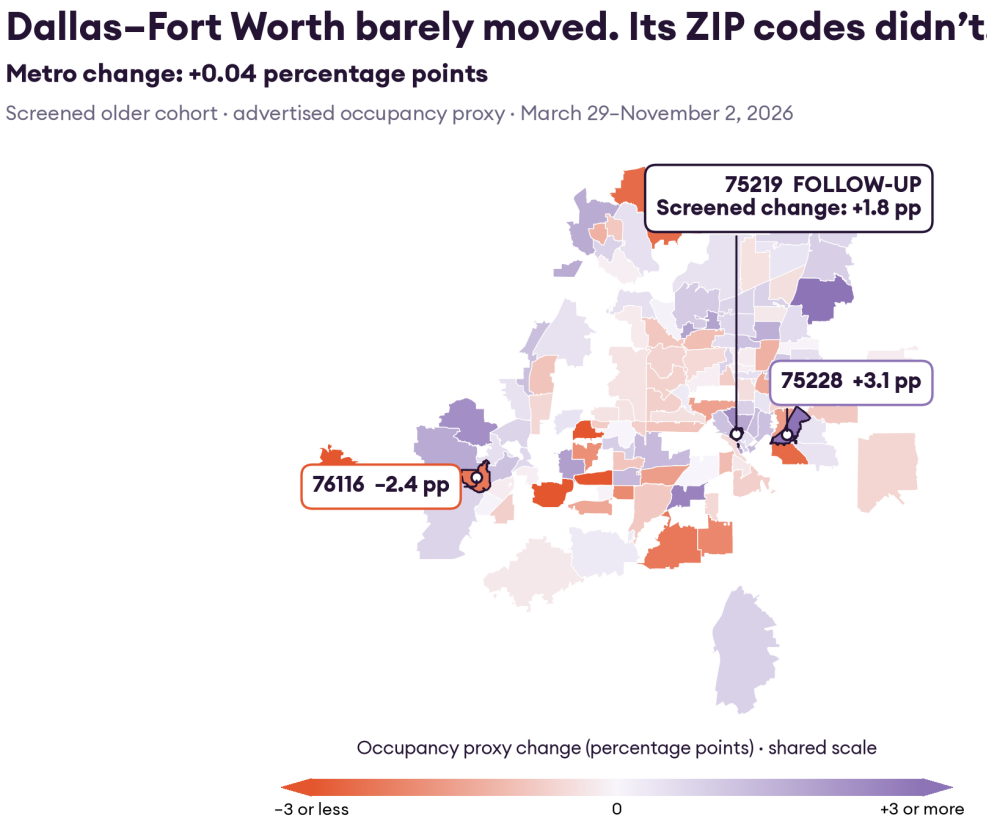
[2] Full ZIP-code follow-up. lizo market-property database, ZIP code 75219, extracted November 17, 2026; paired March 29 and November 8 observations. The complete non-test roster and missing-comparison disposition were checked, not just a selected set of gainers.

[3] Pocket comparison. Assigned census-tract aggregation of the same Dallas follow-up, November 17, 2026. Street basemap: OpenStreetMap contributors. Census polygons in the metro maps are cached ZCTA approximations, not certified current postal boundaries.

[4] Asset investigation. Eclipse Oak Lawn and the three other tracked properties with observations at both dates assigned to tract 48113000405 inside ZIP code 75219. Profile metadata and weekly observations were checked in lizo’s production database on November 17, 2026. The March 29–November 8 comparison and intermediate observations are separate from the national panel. The four-property pocket calculation uses the full ZIP follow-up. These are source-derived listing measures, not audited rent rolls or independently verified unit-level comps.

Ten-metro map appendix

Same screened older-stock values as the main comparison. March 29–November 2, 2026. Read each map’s geometry coverage note. [1]

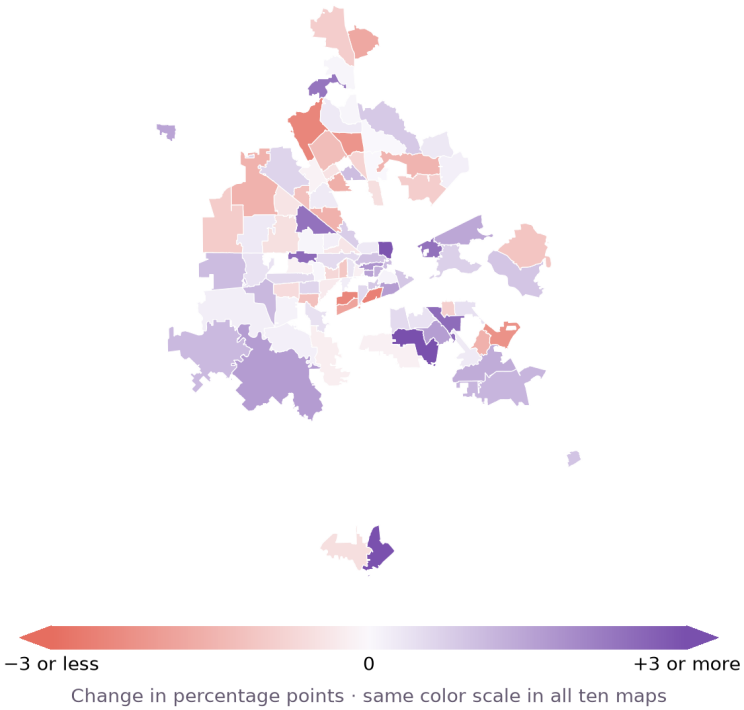


Dallas–Fort Worth · 125/126 qualifying ZIP codes mapped. Missing geometry: 75033. Cached ZCTA approximation; not postal boundary certification.

Houston

ZIP advertised occupancy proxy change · March 29–November 2, 2026

Metro change: +0.11 percentage points



Change in percentage points · same color scale in all ten maps

Coverage: 97 of 97 qualifying ZIPs mapped. No qualifying ZIPs omitted.

Screened older cohort · recorded original built year ≤2021 · qualifying ZIPs: 1,000+ units

Source: lizo · corrected identity audit, November 16, 2026 · hero_ranked20

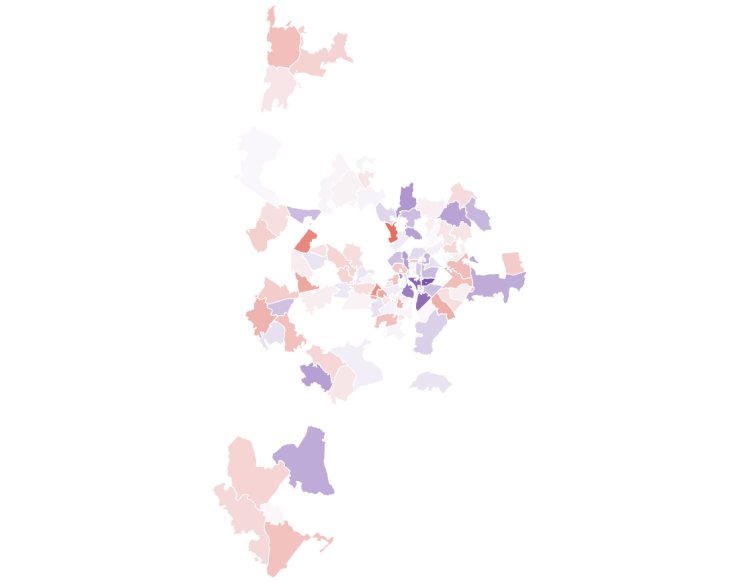
Cached Census ZCTAs approximate postal ZIPs; boundary vintage not reverified. Blank areas: not mapped.

Houston · 97/97 qualifying ZIP codes mapped. Cached ZCTA approximation; not postal boundary certification.

Washington DC

ZIP advertised occupancy proxy change · March 29–November 2, 2026

Metro change: +0.11 percentage points



Change in percentage points · same color scale in all ten maps

Coverage: 101 of 101 qualifying ZIPs mapped. No qualifying ZIPs omitted.

Screened older cohort · recorded original built year ≤2021 · qualifying ZIPs: 1,000+ units

Source: lizo · corrected identity audit, November 16, 2026 · hero_ranked20

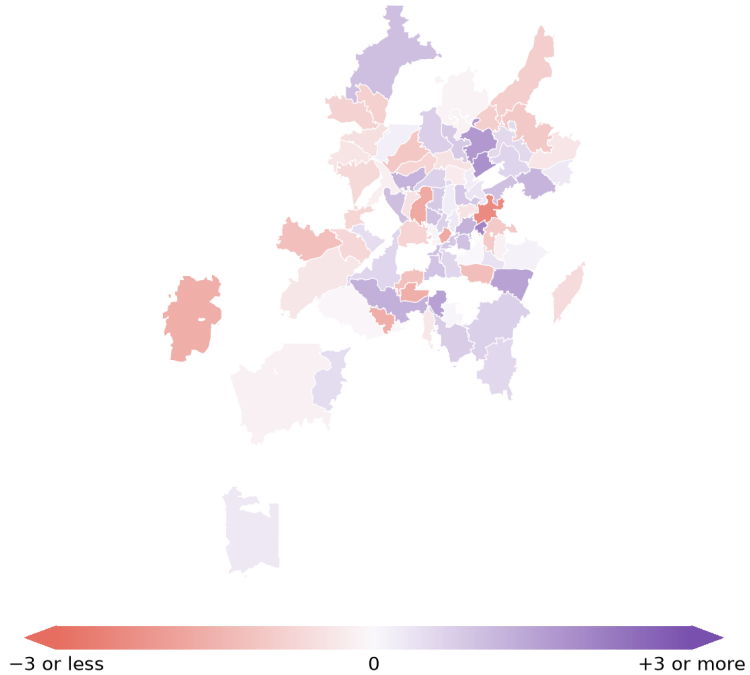
Cached Census ZCTAs approximate postal ZIPs; boundary vintage not reverified. Blank areas: not mapped.

Washington DC · 101/101 qualifying ZIP codes mapped. Cached ZCTA approximation; not postal boundary certification.

Atlanta

ZIP advertised occupancy proxy change · March 29–November 2, 2026

Metro change: +0.20 percentage points



Change in percentage points · same color scale in all ten maps

Coverage: 84 of 84 qualifying ZIPs mapped. No qualifying ZIPs omitted.

Screened older cohort · recorded original built year ≤2021 · qualifying ZIPs: 1,000+ units

Source: lizo · corrected identity audit, November 16, 2026 · hero_ranked20

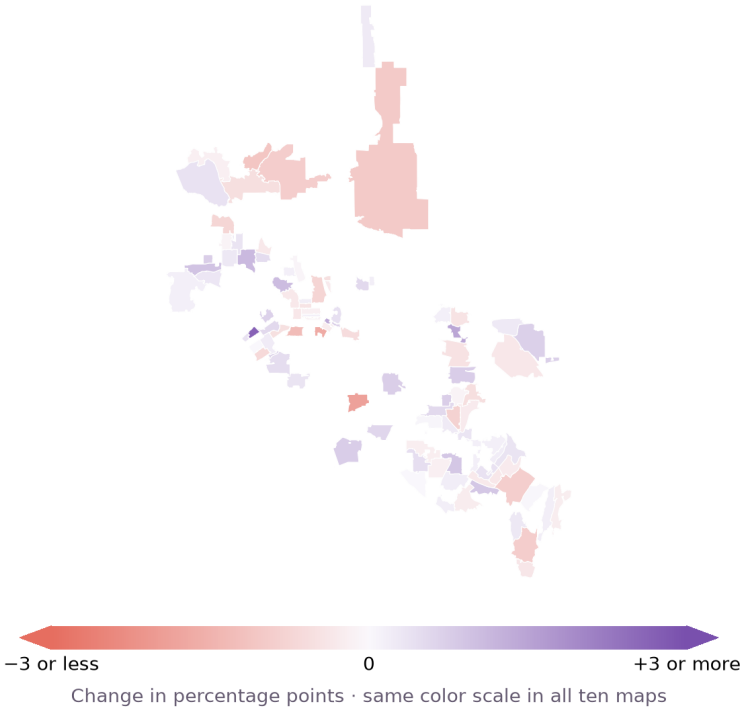
Cached Census ZCTAs approximate postal ZIPs; boundary vintage not reverified. Blank areas: not mapped.

Atlanta · 84/84 qualifying ZIP codes mapped. Cached ZCTA approximation; not postal boundary certification.

Los Angeles

ZIP advertised occupancy proxy change · March 29–November 2, 2026

Metro change: +0.06 percentage points



Change in percentage points · same color scale in all ten maps

Coverage: 97 of 97 qualifying ZIPs mapped. No qualifying ZIPs omitted.

Screened older cohort · recorded original built year ≤2021 · qualifying ZIPs: 1,000+ units

Source: lizo · corrected identity audit, November 16, 2026 · hero_ranked20

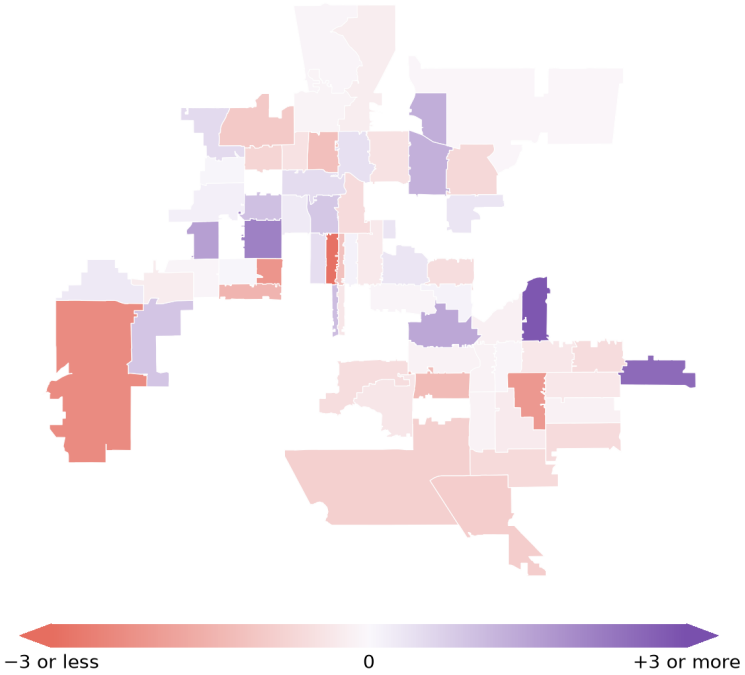
Cached Census ZCTAs approximate postal ZIPs; boundary vintage not reverified. Blank areas: not mapped.

Los Angeles · 97/97 qualifying ZIP codes mapped. Cached ZCTA approximation; not postal boundary certification.

Phoenix

ZIP advertised occupancy proxy change · March 29–November 2, 2026

Metro change: −0.07 percentage points



Change in percentage points · same color scale in all ten maps

Coverage: 64 of 64 qualifying ZIPs mapped. No qualifying ZIPs omitted.

Screened older cohort · recorded original built year ≤2021 · qualifying ZIPs: 1,000+ units

Source: lizo · corrected identity audit, November 16, 2026 · hero_ranked20

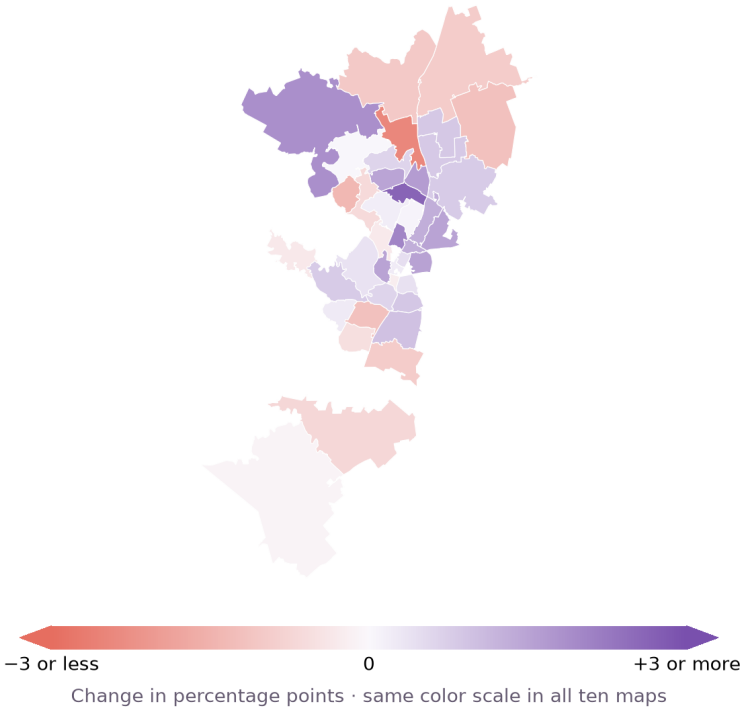
Cached Census ZCTAs approximate postal ZIPs; boundary vintage not reverified. Blank areas: not mapped.

Phoenix · 64/64 qualifying ZIP codes mapped. Cached ZCTA approximation; not postal boundary certification.

Austin

ZIP advertised occupancy proxy change · March 29–November 2, 2026

Metro change: +0.45 percentage points



Change in percentage points · same color scale in all ten maps

Coverage: 40 of 40 qualifying ZIPs mapped. No qualifying ZIPs omitted.

Screened older cohort · recorded original built year ≤2021 · qualifying ZIPs: 1,000+ units

Source: lizo · corrected identity audit, November 16, 2026 · hero_ranked20

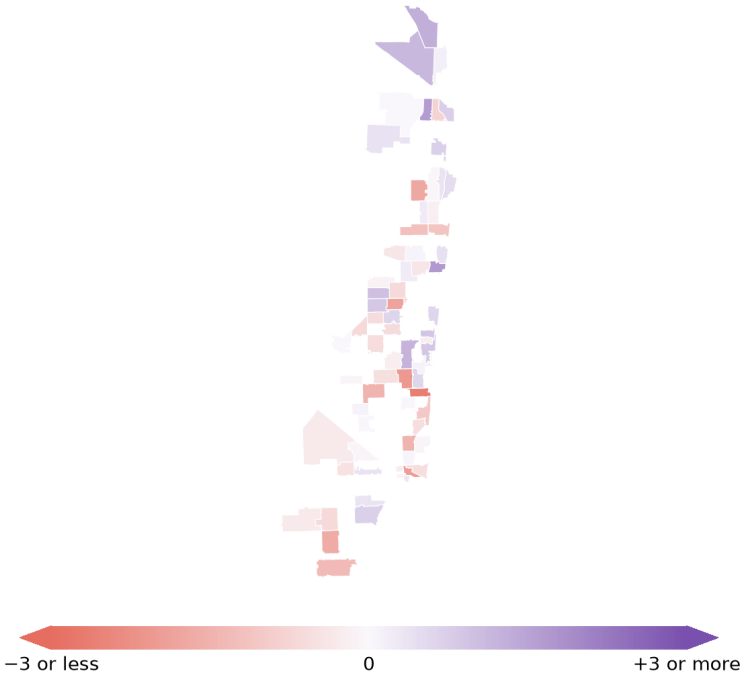
Cached Census ZCTAs approximate postal ZIPs; boundary vintage not reverified. Blank areas: not mapped.

Austin · 40/40 qualifying ZIP codes mapped. Cached ZCTA approximation; not postal boundary certification.

Miami

ZIP advertised occupancy proxy change · March 29–November 2, 2026

Metro change: −0.10 percentage points



Change in percentage points · same color scale in all ten maps

Coverage: 70 of 70 qualifying ZIPs mapped. No qualifying ZIPs omitted.

Screened older cohort · recorded original built year ≤2021 · qualifying ZIPs: 1,000+ units

Source: lizo · corrected identity audit, November 16, 2026 · hero_ranked20

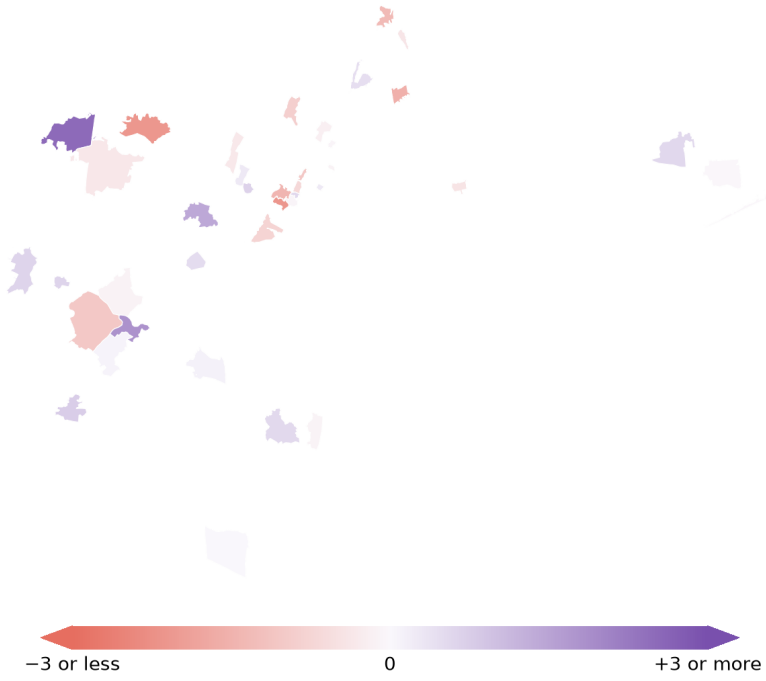
Cached Census ZCTAs approximate postal ZIPs; boundary vintage not reverified. Blank areas: not mapped.

Miami · 70/70 qualifying ZIP codes mapped. Cached ZCTA approximation; not postal boundary certification.

New York

ZIP advertised occupancy proxy change · March 29–November 2, 2026

Metro change: −0.05 percentage points



Change in percentage points · same color scale in all ten maps

Coverage: 37 of 37 qualifying ZIPs mapped. No qualifying ZIPs omitted.

Screened older cohort · recorded original built year ≤2021 · qualifying ZIPs: 1,000+ units

Source: lizo · corrected identity audit, November 16, 2026 · hero_ranked20

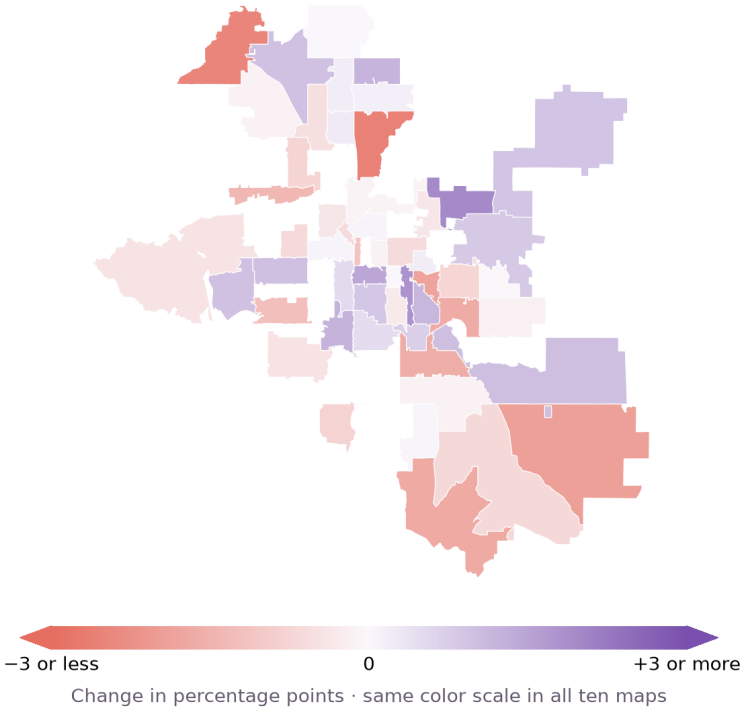
Cached Census ZCTAs approximate postal ZIPs; boundary vintage not reverified. Blank areas: not mapped.

New York · 37/37 qualifying ZIP codes mapped. Cached ZCTA approximation; not postal boundary certification.

Denver

ZIP advertised occupancy proxy change · March 29–November 2, 2026

Metro change: −0.12 percentage points



Change in percentage points · same color scale in all ten maps

Coverage: 54 of 54 qualifying ZIPs mapped. No qualifying ZIPs omitted.

Screened older cohort · recorded original built year ≤2021 · qualifying ZIPs: 1,000+ units

Source: lizo · corrected identity audit, November 16, 2026 · hero_ranked20

Cached Census ZCTAs approximate postal ZIPs; boundary vintage not reverified. Blank areas: not mapped.

Denver · 54/54 qualifying ZIP codes mapped. Cached ZCTA approximation; not postal boundary certification.