Introduction & Project Overview

This project evaluates housing market health and investment potential across 21 U.S. East Coast metropolitan areas, grouped into regional peer groups for comparison. The analysis focuses on four core dimensions of market performance: long-term growth, affordability, liquidity, and short-term momentum. By leveraging Zillow's publicly available housing datasets, I constructed a set of standardized metrics and composite scores to identify where housing markets appear strongest, and which metros show the most attractive risk-reward profiles for potential investment.

The purpose of this work is twofold: first, to provide insights into the relative performance of different metro markets; and second, to demonstrate my ability to structure, clean, and analyze real-world housing data in a way that mirrors the rigor and presentation standards of a professional business or investment setting. The outcome is not only a set of findings about market health, but also a demonstration of how a data-driven framework can be applied to evaluate real estate trends and generate actionable information.

Data & Methods

Why I Picked Zillow Data

I selected Zillow data because of its breadth, timeliness, and accessibility. Zillow is a widely used resource with strong industry recognition, meaning the data is not only comprehensive and accurate, but also representative of broader housing market conditions. Additionally, the availability of support, transparency, and documentation made it a practical choice for analysis.

Why I Picked These Metros and Peer Groups

The 21 metros analyzed here were selected based on three criteria: (1) they are large, urban metros rather than rural areas, (2) Zillow provides sufficient historical and current data for each, and (3) they represent some of the most significant metros in their respective states. To enable meaningful comparisons, the metros were grouped into three peer sets: Massachusetts/Connecticut/Rhode Island (Southern New England), New York/Pennsylvania (Tri-State excluding New Jersey for lack of data), and North Carolina/Florida (Migration Destinations). The first two groups reflect logical geographic peers, while the NC/FL group was included because both states are major destinations for domestic migration (especially among the East Coast) and thus particularly relevant for housing market analysis.

Zillow Data Overview

I used four Zillow datasets:

- Sales Count (Nowcast)
- Median Sale Price (Nowcast)
- Zillow Home Value Index (ZHVI, Smoothed)
- Market Heat Index

These datasets were cleaned, merged, and reshaped into long form using PowerQuery. All were drawn for Zillow's "All Homes" segment, on a monthly frequency, with each observation tied to the final day of the month.

While some datasets span back to early 2000, the Market Heat Index only extends to January 2018. Accordingly, my analysis begins in 2018 for consistency.

Zillow Definitions (from Zillow.com/research/data/)**:**

All Homes – Single-family, condominium, and co-operative homes with a county record.
Smoothed – Seasonally adjusted by Zillow to reduce noise.

Core Data From Zillow

ZHVI – A measure of the typical home value and market changes across a given region and housing type. It reflects the typical value for homes in the 35th to 65th percentile range. Based on Zillow's "Zestimate" for each listing.
Sales count (Nowcast) – The estimated number of unique properties that sold during the month. For sales count nowcast, the latest month's number is the estimation after accounting for the latency between when sales occur and when they are reported.
Sale Price (median) – The price at which homes across various geographies were sold. The latest month's number is the estimation after accounting for the latency between when sales occur and when they are reported.
Market Heat Index – (MHI) Aims to capture the balance of for-sale supply and demand in a given market. A higher number means the market is more tilted in favor of sellers. It relies on three metrics: User engagement on Zillow's active home listings, Share of for-sale listings with a price cut, and Share of for-sale listings going pending within 21 days. It is calculated for single-family and condo homes.

Calculated Fields Created in Tableau

Investment Score

([w_CAGR]*[z_CAGR]) + ([w_Liquidity]*[z_Liquidity]) + ([w_Affordability]*[z_Affordability]) + ([w_Momentum]*[z_Momentum])

Z Scores (standardization across metros)

z_CAGR = *([CAGR] - WINDOW_AVG([CAGR])) / WINDOW_STDEV([CAGR])*

z_Liquidity = *([liquidity_raw] - WINDOW_AVG([liquidity_raw])) / WINDOW_STDEV([liquidity_raw])*

z_Affordability = *-1 * (([Affordability Index Proxy (% of Region AVG)] - WINDOW_AVG([Affordability Index Proxy (% of Region AVG)])) / WINDOW_STDEV([Affordability Index Proxy (% of Region AVG)]))*

z_Momentum = *([3M ZHVI % Change] - WINDOW_AVG([3M ZHVI % Change])) / WINDOW_STDEV([3M ZHVI % Change])*

CAGR

AVG(({ FIXED [Region Name] : MAX([ZHVI]) }
    /
    { FIXED [Region Name] : MIN([ZHVI]) })
  ^ (1 / (DATEDIFF('month', { FIXED [Region Name] : MIN([Date]) }, { FIXED [Region Name] :
MAX([Date]) }) / 12)) - 1)

liquidity_raw

*SUM(([Market Heat Index] * [w_MHI]) + ([12M SalesCount % Change] * 100 * [w_12MSC]))*

Affordability Index Proxy (% of Region AVG)

AVG([Latest ZHVI]) / AVG({ FIXED [PeerGroup] : AVG([Latest ZHVI]) })

Other Fields Created in Tableau:

- 12-month change in Market Heat Index
- 12-month change in Sales Count
- 12-month change in ZHVI
- 3-month change in ZHVI
- Latest ZHVI (July 2025)
- Latest Sales Count (July 2025)
- Latest Market Heat (July 2025)

Findings

MA/CT/RI

ZHVI
Home values in MA/CT/RI began high in 2018 and have remained strong. Growth accelerated after 2020, consistent with pandemic-era demand, and carried through into 2025. By July 2025, most metros in this group still outperformed peers across the dataset. Even metros that started lower have posted solid recent gains (New Haven (+3.81%) and Hartford (+4.25%), compared to Boston's more modest +1.46%). Providence stands out with the 4th highest ZHVI overall while also boasting +3.41% 12-month growth (Fig. 1.2).

Affordability
Affordability trends vary widely. Boston and Bridgeport rank as the 2nd and 3rd most expensive metros in the dataset relative to their group average. Worcester and Providence sit near the average, while Springfield, Hartford, and New Haven remain more affordable, at around 75% of the group's average ZHVI (Fig. 1.3).

Liquidity
Compared to last year, sales counts are up and market heat has cooled, suggesting improved buyer-seller matching and thus better liquidity. Every metro in this group posted positive

12-month sales growth, something unique among peer groups (Fig. 1.4). Most metros in this group saw market heat decline between -5.4% and -9.2% over the year, Boston and Worcester were outliers though, seeing -17.3% and -15.4% declines. Despite this, the group's current market heat remains strong, ranging from 66 to 87, mostly above the dataset median (Fig. 1.5), indicating the markets remain in sellers' favor. This cooling is also consistent across all metros, not just MA/CT/RI. Importantly, sales counts are evenly distributed, with no single metro carrying the group (Fig. 2.2). Additionally however, the average sales count of the entire peer group plateaued along with average median sale price from June to July, potentially signalling a short-term ceiling to liquidity growth. (Fig. 2.1)

Investment Score
No clear standout opportunities emerge in this group. New Haven (0.448) and Hartford (0.383) rank 4th and 5th overall, but both trail far behind 3rd-place Syracuse (0.973). Their lower scores likely reflect performance that is solid across multiple metrics (Affordability, 3-month ZHVI Growth, CAGR) but not exceptional compared to the top investment metros (Fig. 2.2, Fig. 2.3).

Prices in both metros have also stayed elevated and resilient. Over the past 12 months, the average median sale price dipped by -11% during a steep sales count drop (-44% from August 2024 into early 2025), but quickly rebounded in January, reaching a 12-month high in June before plateauing in July. Sales counts similarly rebounded in February, suggesting renewed demand has driven prices upward, although perhaps against a short-term ceiling (Fig. 2.1).

Summary
As a whole, MA/CT/RI offers a diverse mix: expensive markets like Boston and Bridgeport contrast more affordable and faster-growing metros such as New Haven and Hartford. Long-term value growth is strong, liquidity is improving, and markets remain seller-leaning despite the broader cooling trend. That said, plateauing prices and sales counts suggest a more uncertain short-term outlook.

NY/PA

ZHVI
NY/PA is dominated in most metrics by a single outlier: New York City, which sits near the top of the dataset for ZHVI ($712k) while most other metros in the group started and remain comparatively low. Excluding NYC, the group contains seven of the nine lowest typical home values in the sample, from Philadelphia ($386k) down to Pittsburgh (~$232k) (Fig. 1.2). Although the group's 2020 uptick in growth was more modest than other peer groups, recent momentum has been notable: all NY/PA metros except Pittsburgh posted >3.2% 12-month ZHVI growth between July 2024 and July 2025, and Syracuse led the entire dataset at +5.61% (also notable: Rochester +4.12%, NYC +4.02%). Overall, this is a relatively low-price group showing outsized recent appreciation.

Affordability
Affordability is concentrated here: Pittsburgh (~65% of peer average) and Syracuse (~71%) rank among the most affordable metros overall (Fig. 1.3). Because NYC skews the group mean

upward, several low-ZHVI metros appear even more attractive on an affordability-adjusted basis. But not all low-price metros translate to affordability advantages: Allentown and Albany, despite low recent ZHVI figures, sit near the peer average when adjusted for affordability, dampening their value. Several metros therefore offer low entry prices and strong appreciation, but comparisons are needed to distinguish genuine bargains from merely low prices.

Liquidity

The group contains the dataset's most extreme liquidity outliers. Buffalo (+9.43%) and Albany (+7.74%) posted the highest 12-month sales growth rates, while Rochester's Market Heat Index (145) is unmatched (dataset range: 35-91) (Fig. 1.4). However these outliers diverge in terms of sales count: Rochester, despite its extreme heat, saw a -3.3% sales count change, and Syracuse (heat 91) showed a decline in sales count of -4.15% and posted the dataset's lowest July 2025 sales count (601), suggesting constrained supply among the two.

Seasonal dynamics were also clear: like other groups, many metros experienced late-2024 drops in sales and median sale prices, followed by early-2025 rebounds. Sales counts typically rebounded 1-2 months before prices (Fig. 2.1). July 2025 sales counts highlight the group's wide range: NYC (~14,300) and Philadelphia (~7,200) at the top, Syracuse at the bottom (601). Another notable comparison is NYC vs. Boston: both similar in ZHVI, but with different trajectories. NYC's 12-month ZHVI growth (+4.02%) and smaller heat drop (-10.13%) outperformed Boston's (+1.46%, -17.28%), signaling firmer demand in NYC even at higher values.

Investment Score

NY/PA contains the dataset's three highest Investment Scores: Rochester (1.384), Buffalo (1.007), and Syracuse (0.973), all well above the next cluster (e.g., Hartford 0.448) (Fig. 2.3). Each ranks highly due to strong affordability and low ZHVI, very strong 12- and 3-month ZHVI growth, solid CAGR, and seller-favoring market heat. Where they differ most is sales activity: Rochester (-4.61%) and Syracuse (-3.3%) both posted negative 12-month sales count changes, with Syracuse also holding the dataset's lowest July sales count (601). This suggests possible re-rating or supply constraints. Buffalo, conversely, stands out for demand-led strength, with the dataset's highest 12-month sales growth (+9.43%).

Albany, while scoring far lower (-0.061), mirrors many characteristics of the top group: 12-month ZHVI growth (+3.67%, higher than Buffalo), 3-month ZHVI growth (+1.07%, higher than Rochester), seller-favoring market heat of 75, and strong 12-month sales count growth (+7.74%, second only to Buffalo) (Figs. 1.2, 1.4). Its lower score stems from affordability (~100% of group average due to higher ZHVI of $360k) and a weaker CAGR (6.28%, below the dataset median of 7.5% and group median of 6.98% (Fig. 2.2)). In effect, Albany looks more liquid and demand-driven than last year, but with higher pricing ($80k above Buffalo) and softer long-term growth.

Like most metros, these four showed late-2024 drops in sales and prices, followed by early-2025 rebounds. However, Syracuse, Buffalo, and Albany sustained their price rebounds into July, while Rochester appeared to hit a ceiling ($295k → $275k from June to July (Fig. 2.1))

– similar to New Haven and Hartford, the top MA/CT/RI investments – This may imply a short-term cap, though the high heat makes the drop puzzling and could just be noise.

Overall, these metros are attractive but differ in risk: Buffalo and Albany are demand-led (though at different entry prices), while Syracuse and Rochester appear more vulnerable to supply constraints or investor re-rating.

Summary
NY/PA offers heterogeneous but high-quality opportunities. The region mixes deep affordability (Pittsburgh, Syracuse) with the distortionary weight of NYC on averages. Many low-base metros now show strong price momentum, creating value-plus-momentum cases, though liquidity dynamics vary sharply. For investors: Buffalo and Albany look best for relatively low-cost, demand-driven plays (though Albany carries a higher entry point), while Rochester and Syracuse are attractive for opportunistic buys if inventory allows.

NC/FL

ZHVI
NC/FL metros cluster in the middle of the dataset for ZHVI, with no extremes on either side. Historically, they sat above most NY/PA metros (excluding NYC) but below MA/CT/RI (Fig. 1.1). This group also showed the least dispersion: in 2018, the ZHVI spread across NC/FL metros was only ~$67k, far tighter than other groups, and by 2025 the spread widened only modestly to ~$114k.

The timing of growth trends also diverges here. NC/FL metros experienced sharper 2020 price surges than their peers, but unlike other regions, those gains flattened quickly. Raleigh illustrates the pattern: ZHVI jumped from ~$306k to ~$443k between 2020-2022 (+44.8%), then essentially stalled, adding only ~$11k by 2024 (+2.4%) (Fig. 1.1).

The standout feature, however, is recent weakness. From July 2024 to July 2025, every single NC/FL metro declined in ZHVI, a unique outcome, as all 15 other metros in the dataset posted gains. Tampa led the drop (-5.61%). On a 3-month basis, all NC/FL metros again posted declines, ranging from Charlotte (-0.66%) to Tampa (-2.1%), while only three non-NC/FL metros in the dataset fell at all (and none more than -0.32%) (Fig. 2.3). This suggests a group-wide cooling. A plausible explanation is Covid-era migration: looser restrictions and open economies fueled outsized demand from 2020-2022, but as migration slowed and other states reopened, values began rebalancing.

Affordability
Affordability largely mirrors ZHVI. NC/FL metros again cluster toward the middle, ranging from Tampa (~88% of peer average) to Miami (~115%) (Fig. 1.3). The order of affordability matches exactly the order of ZHVI, leaving no significant anomalies.

Liquidity
Liquidity reinforces the picture of a cooling market. Current Market Heat Index values range

from 35-51, all below the dataset median of 67 and making this the only peer group uniformly in neutral or buyer-favoring territory (Fig. 1.4).

Trends are more uneven. On 12-month change, NC/FL metros occupy both ends of the dataset: Tampa (-2.33%) and Orlando (-4.26%) show the mildest declines, while Durham (-25.42%) shows the steepest, far beyond the next-worst Boston (-17.28%) (Fig. 1.5). Yet, present-day market heats for these three are almost identical (Tampa 42, Orlando 45, Durham 44). This suggests differences in timing: Florida metros may have cooled earlier, while Durham and other NC metros are only now correcting.

Sales counts add nuance however. Raleigh was the only grower (+0.9%), while the rest fell modestly (-1.61% to -4.92%), except Miami, which posted the dataset's steepest decline (-10.26%). Still, Miami sold ~7,000 homes in July 2025 (the third-highest count overall) despite weak heat and declining sales.

Investment Score
NC/FL scores were broadly weak. Charlotte (0.107) and Durham (0.001) hovered near neutral, while Miami (-0.660) ranked lowest in the group (Fig. 2.3). The drag stems from negative 3-month momentum, soft market heat, and middling affordability.

One counterpoint is long-term CAGR: NC/FL metros posted the highest floor (7.35% in Raleigh) and the dataset's maximum (8.58% in Tampa). This exceeds the 5.16-8.36% range of all other metros. However, much of this strength may reflect the potentially migration-driven 2020-2022 spike. With growth stalling since, CAGR may overstate potential and bias scores upward.

Summary
NC/FL metros stand out less for opportunity than for pattern. They surged early during Covid, probably fueled, at least in-part, by migration, but have since cooled across all metrics: ZHVI, momentum, market heat, and sales. Affordability offers little edge, and investment scores lag. And while long-term CAGR appears strong, it likely reflects the echo of past spikes rather than ongoing strength. For investors, this group signals caution: prices may be rebalancing, and unlike NY/PA or MA/CT/RI, few metros here show conditions supportive of near-term upside.

Limitations

This analysis has several limitations that should be considered when interpreting the results. First, the Market Heat Index (MHI) is tied in part to Zillow platform activity, meaning its performance may reflect engagement patterns specific to Zillow users. Additionally, MHI is calculated only for single-family and condominium homes, while the Zillow Home Value Index (ZHVI) also includes co-op homes. This creates a slight mismatch between datasets, though the impact is likely limited.

Second, this project does not attempt to make forward-looking predictions. Investment recommendations are based solely on current conditions and observed growth rates, rather

than explicit projections about the future. A more detailed year-over-year or intra-annual trend analysis would be necessary before making real investment decisions.

Third, the weighting scheme used in the Investment Score was designed by the author. Different weights could meaningfully change results, so findings should be understood as one possible weighting framework rather than definitive rankings.

Fourth, the scope of Zillow's "All Homes" definition excludes multifamily complexes and apartments. Given the prominence of these housing types in large metropolitan areas, especially those included in this analysis, their omission leaves part of the residential market unexamined.

Fifth, while the intent was to include New Jersey metros in the NY/PA peer group to form a true tri-state comparison, insufficient Zillow data coverage for New Jersey prevented their inclusion, likely due to data collection or reporting differences in that state.

Finally, the analysis emphasizes trends over the past 12 months (July 2024–July 2025). Because this project was completed in September 2025, August data has since been released, leaving the findings slightly out of date. Moreover, real estate investing typically requires a long-term perspective; future research would benefit from a deeper multi-year analysis at a more granular level.

Conclusion & Recommendations

The standardized scoring framework highlights three clear regional narratives: MA/CT/RI is high-value and resilient but showing short-term plateaus in prices and sales; NY/PA contains the strongest value-plus-momentum opportunities (notably Rochester, Buffalo, Syracuse) driven by affordability and recent price gains; and NC/FL appears to be broadly rebalancing after the pandemic surge and therefore offers the weakest near-term upside. These results are robust enough to guide comparative, portfolio-level thinking, but they rely on current conditions and the author's chosen weighting scheme, so care is required before converting scores into capital decisions.

Recommendations:

MA/CT/RI – favor affordability + stability: Consider smaller, more affordable metros (New Haven, Hartford) for balanced risk/return; be cautious about deploying new capital into Boston/Bridgeport unless the investment horizon is long and justifies premium pricing.

NY/PA– prioritize demand-led, low-entry plays: Target Buffalo and Albany for relatively lower-risk, demand-driven exposure; treat Rochester and Syracuse as opportunistic buys contingent on inventory and local supply signals (e.g., pending listings, price-cut trends).

NC/FL – exercise caution and wait for confirming signals: Avoid basing allocations solely on elevated historical CAGR here; require signs of renewed market heat or improving sales counts before increasing exposure.

Short technical next steps (data hygiene & recency): Re-run the analysis including the newly released August 2025 data and any subsequent monthly updates to remove the "stale by one month" limitation noted in the report.

Sensitivity & robustness checks: Run a formal sensitivity analysis on the Investment Score weights (and consider a simple, alternate equal-weight version) so stakeholders can see which metros are weight-dependent versus consistently strong.

Broaden data inputs for a fuller market picture: Add multifamily/rental data, local employment and migration flows, mortgage rate trends, and county-level inventory indicators (days on market, price cuts, pending rate) to reduce reliance on Zillow platform signals (noting MHI's platform dependence and the All-Homes/co-op mismatch).

Move from descriptive to conditional scenarios: For any investment recommendation, accompany the score with at least two scenario tests (base, downside) that model variations in demand (migration, job growth) and financing costs.