VISUALIZING THE IMPACT OF CORPORATE INVESTMENT ON THE U.S. HOUSING MARKET

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1. MOTIVATION/INTRODUCTION

What is the problem?

- Corporate investors are buying an increasing share of U.S. homes, but the public lacks accessible tools to understand how this activity impacts affordability.

Why is it important?

- Investor ownership can raise prices, reduce homeownership opportunities, and destabilize communities. Clear visual tools help policymakers and residents understand local housing pressures.

2. APPROACHES

Methods Used

- **City-Level Clustering:** Identifies patterns in investor activity (2019–2025).
- **Forecasting Models:** Holt-Winters exponential smoothing for state, county, and ZIP-level ZHVI trends.
- **Interactive Map:** Multi-scale exploration tool integrating forecasts and historical data.

How They Work

- Investor metrics are standardized and clustered by temporal patterns.
- ZHVI time series are modeled to learn trends and produce forward-looking estimates.
- The map synchronizes geographic regions with their historical and forecasted price curves.

Why Effective

- Captures structural investor behavior and localized pricing trends.
- Connects complex analytics with intuitive visual tools.

What Is New

A unified platform combining investor behavior, multi-scale forecasting, and interactive visualization.

3. DATA

Sources

- Redfin: Annual investor-home-purchase and market-share metrics (2019–2025).
- Zillow (ZHVI): Home-value trends at state, county, ZIP levels.

Characteristics

- Multi-year time series
- National geographic coverage
- Hierarchical state–county–ZIP structure

4. EXPERIMENTS/RESULTS

Evaluation

- Clustering reveals high, rising, and declining investor activity patterns across cities.
- Forecasting highlights regional differences in both expected price trajectories and investor market share trends.

Key Findings

- Investor activity is geographically uneven.
- High-investor regions often show distinct pricing volatility or appreciation.

Comparison to Other Methods

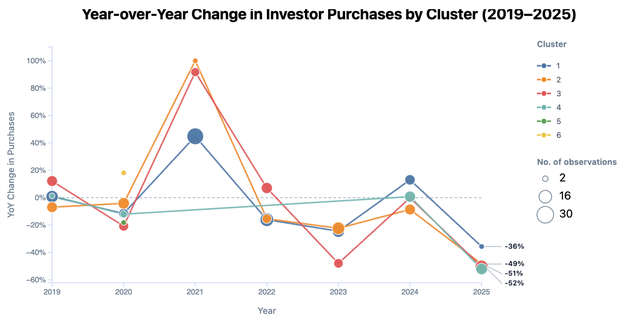
- Existing tools are static or fragmented; this platform integrates analytic and interactive components for clearer interpretation.

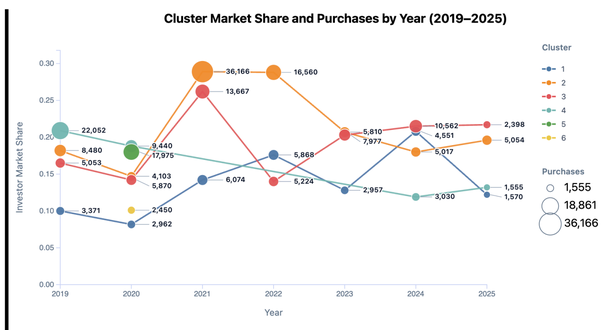
5. CONCLUSION

Our project shows that corporate investor activity varies widely across U.S. cities, forming clear patterns rather than a single national trend. By combining clustering, forecasting, and an interactive multi-scale map, we provide an accessible tool for understanding how investor presence relates to housing prices and future affordability.

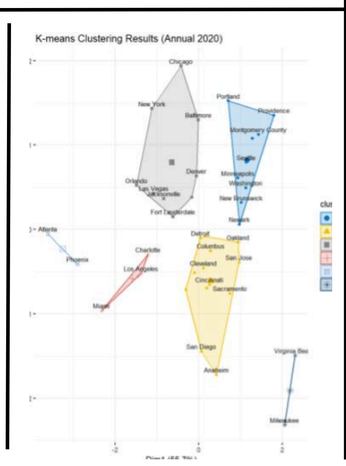
VISUALS

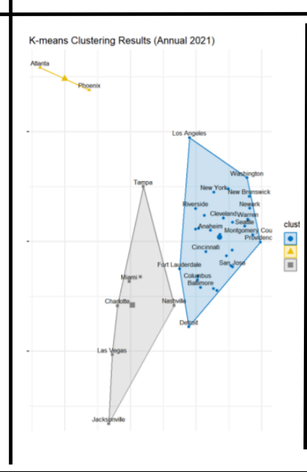
CLUSTERING (2019-2025)

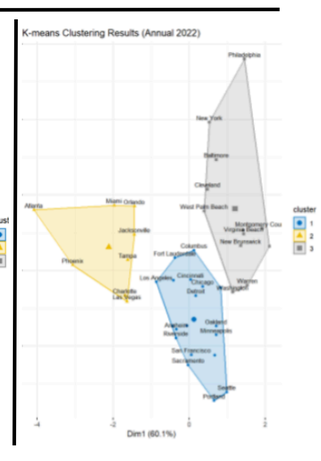


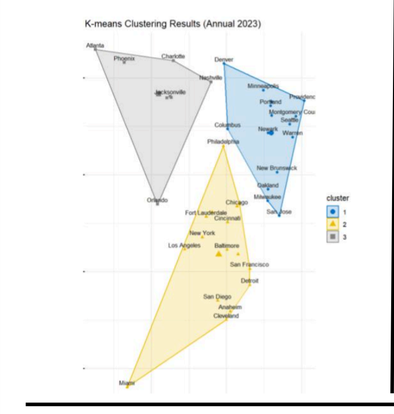


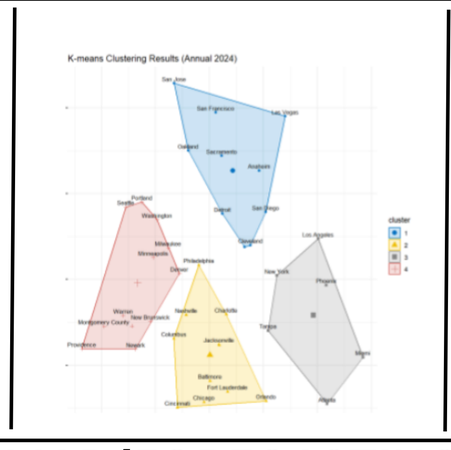


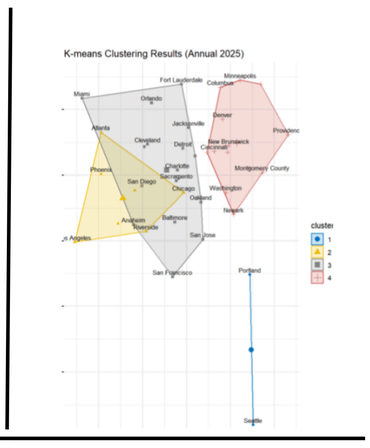












MAP/FORECASTING

