Kildare Residential Property Price Analysis (2010–2020)

C OUNTY K ILDARE



Ten Years of Prices, Patterns, and Policy Implications

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Problem Statement

- Launch of Property Price Register: Initiated in 2010, this register offers transparency in residential property sales across Ireland.
- Focus Area: County Kildare: Examines a decade of house price trends in Kildare, reflecting both urban and rural dynamics.
- Core Research Question: How have house prices changed across towns in County Kildare from 2010 to 2020, and what spatial and temporal trends can be identified to inform buyers, policymakers, and planners?



Methodology Overview

- **Data Collection:** Consolidated 2010–2020 Kildare datasets from annual CSV files.
- Data Cleaning: Standardization and fuzzy matching (SPEDIS) used to clean town names, Validated and parsed price/date fields.
- Aggregation & Metrics: Computed average prices and annual percentage changes per town.
- Visualization: Generated multiple plots to illustrate Temporal trends (line charts), Outliers (boxplots) and Geographic price dynamics (heatmaps/maps)



Data Cleaning – Town Name Standardization

- Town Name Extraction: Scanned address strings using HASH lookup against a predefined valid town list; fallback logic used last comma word or last word.
- Manual Overrides: Common errors (e.g., cellebridge~Celbridge, leixkp~Leixlip) fixed using LEFT JOIN with override_map for known misspellings.
- Fuzzy Matching (SPEDIS): Unmatched town names were resolved using SPEDIS function with match threshold of 30.
- Final Filtering: Only rows with towns from the valid list were retained; from 23,077 rows, 19,813 remained post-cleaning.



Visual Analytics

- Line Plot: Track top 5 towns by price growth across the decade.
- Boxplots: Illustrate yearly and town-specific price distribution and variance.
- Heatmap: Visualizes average prices by town and year, highlighting regional patterns.
- National Median Price Trend: Overlays national price trends for contextual comparison
- Bubble Map: Depicts 2020 prices spatially, emphasizing economic geography.

Key Insights

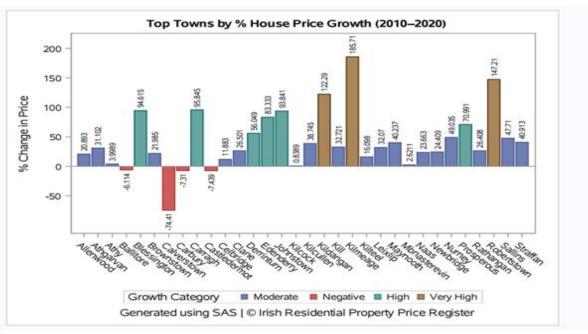
Town-Level Growth Trends:

. *High Growth:* Kilmeage (185.7%),

Robertstown (147.2%)

Carbury



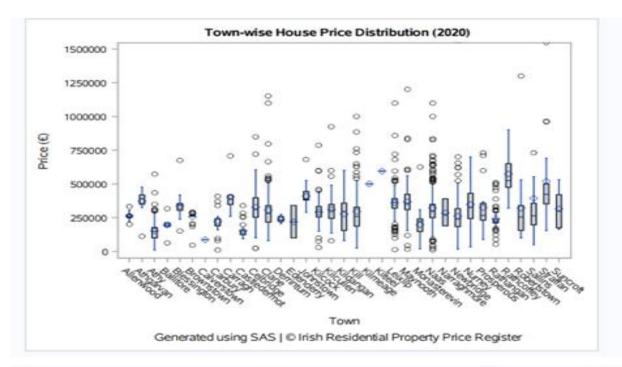


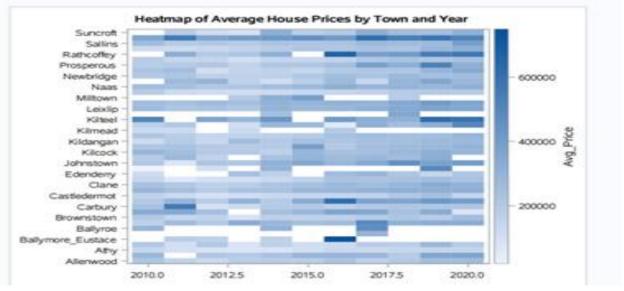
Consistent Climbers:

- Blessington, Carragh, Robertstown
- Kilmeage rebounded after 2016 dip

Market Dynamics

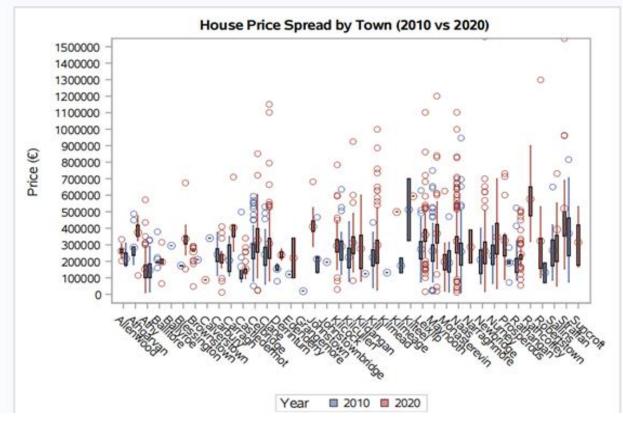
- Post-2013 Recovery: House prices saw a steady rise after 2013, reflecting broader economic recovery.
- Luxury Market Indicators: Increased outliers suggest a rise in high-end property transactions.
- 2020 Market Snapshot: High prices in Naas, Leixlip, and Maynooth; lower in Castledermot and Edendecry.
- Spatial Heatmap Trends: Post-2014 price intensification seen in towns like Sallins, Leixlip, and Newbridge.

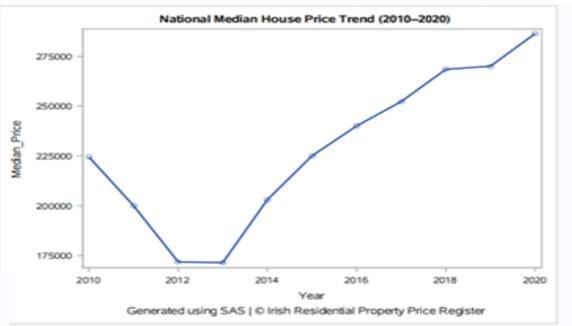




National Context

 U-Shaped Recovery: National median house prices dipped around 2013 before recovering strongly.

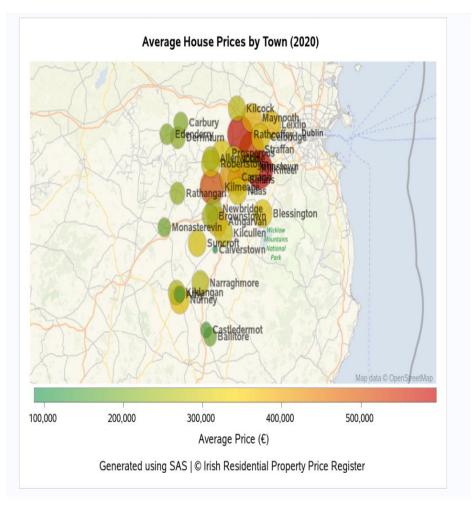




- 2020 Price Comparison:
 Boxplots show higher medians and greater spread in 2020 vs 2010.
- Market Segmentation: Wider spread in prices indicates differentiated market tiers.

Map of 2020 House Prices

- Visualizing Price Distribution: Bubble map shows 2020 average house prices by town, sized and colored by value.
- High-Price Clusters: Larger red bubbles (Kill, Prosperous, Newbridge) cluster near Dublin, indicating higher prices.
- Affordable Areas: Smaller green/yellow bubbles in the south and west reflect more affordable options.
- Planning Implications: Visual insights aid policymakers and buyers in identifying price disparities and planning needs.



Summary of Key Findings

- **Diverging Growth Patterns**: Significant appreciation in Kilmeage and Robertstown vs. stagnation in Calverstown and Carbury.
- **Urban vs. Rural Dynamics**: Naas, Leixlip, and Maynooth show sustained high prices, while rural areas show late-stage growth.
- **Post-2014 Price Surge**: Heatmaps indicate broad-based price rises after 2014, reflecting economic recovery.
- Market Segmentation: Wider price spreads in 2020 highlight dual trends of luxury growth and affordability needs.



CONCLUSION

Post-Crisis Recovery

Strong rebound in housing market post-2013 linked to national economic recovery.



Regional Inequalities

Visual trends exposed disparities and growth clusters across County Kildare.

Urban vs. Rural Dynamics

Urban towns led price hikes while rural areas lagged initially but showed late growth.



Policy Implications

Data-driven insights can support informed policymaking and strategic planning.

Thank You!

Questions? Let's Discuss.

