Real Estate Sales 2001-2024 Group 3

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Dataset Overview

This dataset contains 20+ years of property sale transactions, capturing sale prices, property classifications, locations, and assessment details across the U.S. It enables analysis of housing trends, price dynamics, and geographic market behavior.

Relevant Columns
➜ Date Recorded
➜ Sale amount
➜ Property Type
➜ Residential Type
➜ Address
➜ Latitude and Longitude

There were around 1.5 million records in the data set, so we had to filter it out by years

Data in Table View

List Year	Date Recorded	Town	Address	Assessed Value	Sale Amount	Sales Ratio	Residential Type	Property Type
1/1/2018	3/18/2019	Brookfield	16 CROSS POND DR	122,560.00	145,000.00	0.84520	null	null
1/1/2018	4/11/2019	Clinton	22 NOD PLACE - UNITS 4 & 5	179,700.00	237,500.00	0.75660	null	null
1/1/2018	9/23/2019	Colchester	12 DANIEL DR	37,500.00	46,500.00	0.80640	null	null
1/1/2018	5/10/2019	Columbia	2 HUNTERS RIDGE	50,700.00	39,900.00	1.27060	null	null
1/1/2018	12/26/2018	Danbury	108 MILL PLAIN RD	2,024,500.00	3,300,000.00	0.61340	null	null
1/1/2018	1/16/2019	Danbury	CONN AVE PARCEL B	64,300.00	75,000.00	0.85730	null	null
1/1/2018	4/10/2019	Danbury	30-32 ROWAN ST	76,700.00	105,000.00	0.73040	null	null
1/1/2018	6/10/2019	East Hampton	5 GRAYSON LANE	56,000.00	75,000.00	0.74667	null	null
1/1/2018	12/26/2018	East Hartford	725 MAIN ST.	200,500.00	445,000.00	0.45050	null	null
1/1/2018	2/5/2019	East Haven	64 THOMPSON ST #A101	107,020.00	125,000.00	0.85610	null	null
1/1/2018	4/30/2019	East Haven	104 FRONTAGE RD	533,700.00	725,000.00	0.73614	null	null
1/1/2015	3/3/2016	Newtown	6 CASTLE MEADOW ROAD	112,630.00	100,000.00	1.12630	null	null
1/1/2015	8/18/2016	Newtown	87 SOUTH MAIN STREET UNI...	124,300.00	100,000.00	1.24300	null	null
1/1/2015	9/1/2016	Newtown	28 OAK RIDGE ROAD	145,400.00	100,000.00	1.45400	null	null
1/1/2015	9/27/2016	Newtown	13 COMMERCE ROAD	706,750.00	875,000.00	0.80771	null	null

Real_Estate_Sales_2001-2023_GL.csv

Why this Dataset Matters

Real estate market is a major indicator of economic health, consumer confidence, and regional development

Understanding sales patterns can help identify
- Housing Demand
- Urban Growth
- Market Volatility

Allows us to explore how things like property type, location, and time influence sale activity
This dataset interests us because it brings together things like how money moves in the housing market, how different areas grow, and what those patterns can tell us about the future
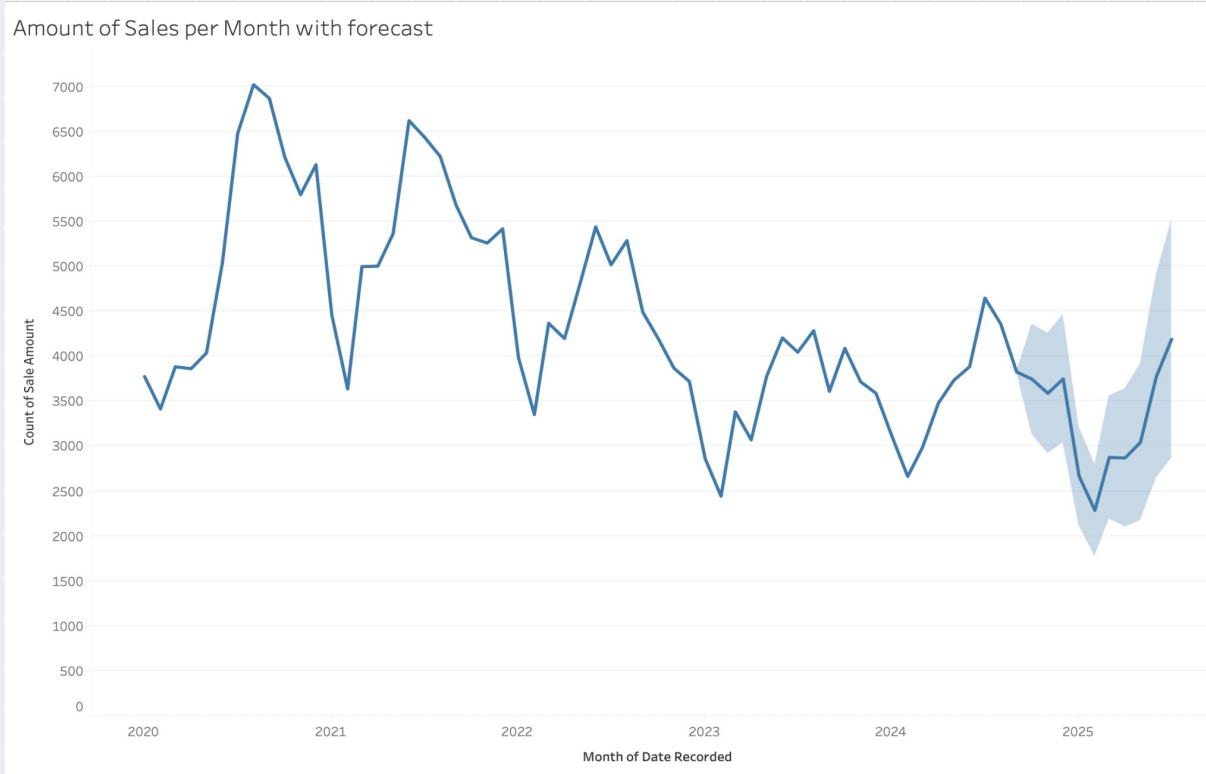
01

How have property sales changed over time, and what can we forecast about monthly & yearly sales trends?

Line chart — "Amount of Sales per Month with Forecast"

Amount of Sales per Month with forecast

- Why this matters: Real estate cycles reflect economic shifts, pandemic impacts, and seasonal buying patterns
- Key patterns visible:
- Strong seasonality with peaks in mid-year
- A large dip in 2023–2024, likely tied to interest rate hikes
- The forecast shows expected recovery through 2025

Bar Chart — "Average Sale Amount by Property Type for 2021-2023"

Average Sale Amount by Property Type for 2021-2023
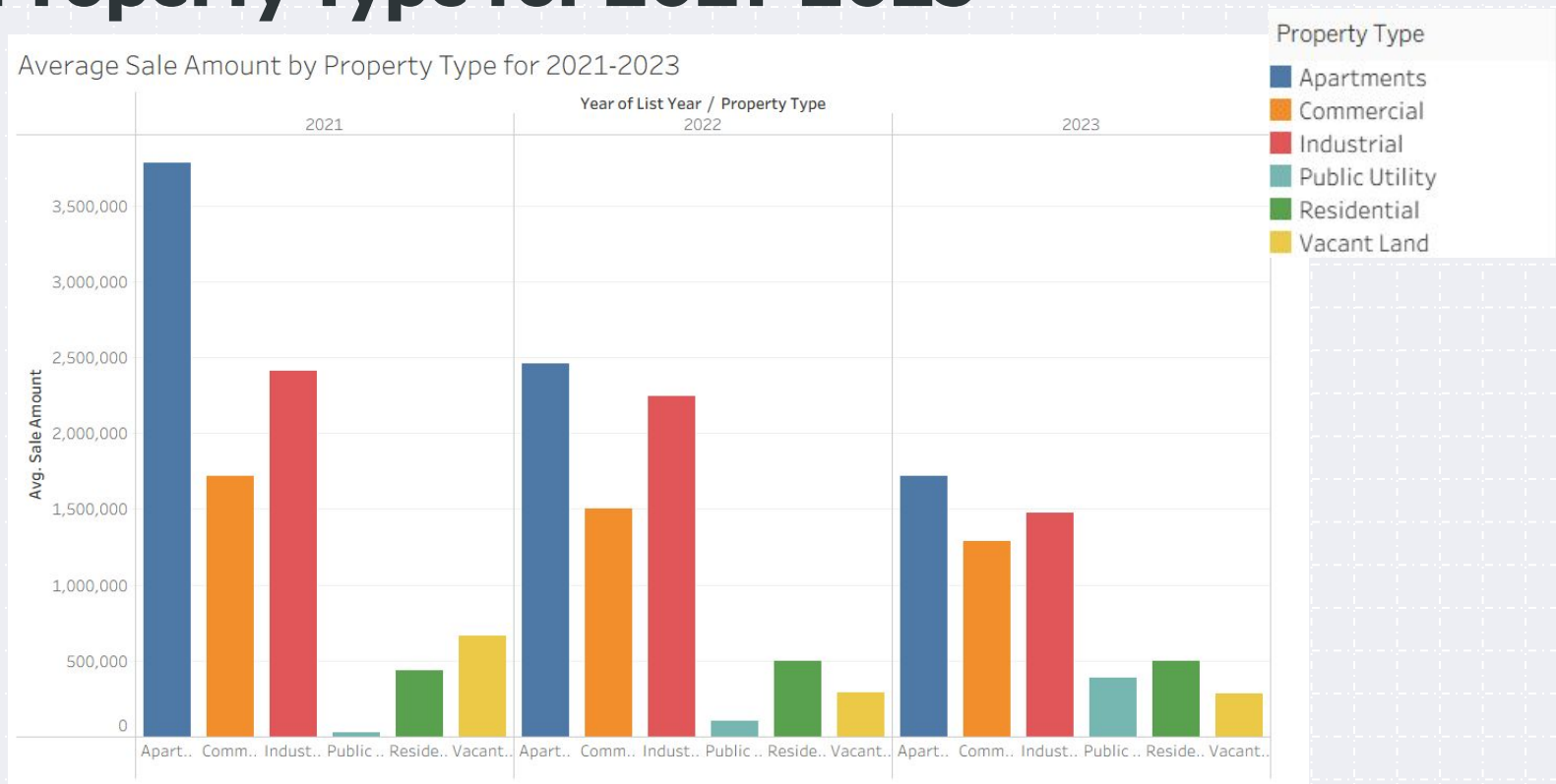
Key Insights

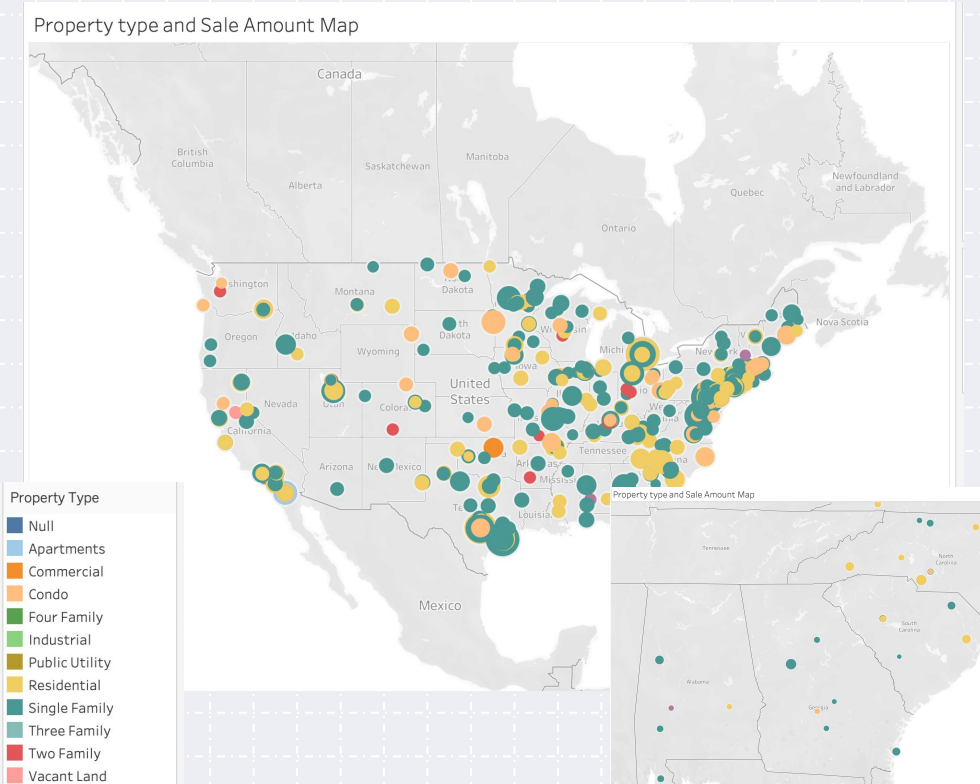|	
Clear yearly seasonality	Sales consistently spike in spring–summer and fall sharply in winter
Spike during the pandemic era (2020–2021)	Elevated sales activity aligns with nationwide housing demand surge
A sharp decline in 2023–2024	This is possibly driven by rising mortgage rates and limited inventory
Forecast indicates recovery	The model predicts an upward trend in 2025, though with wide confidence intervals

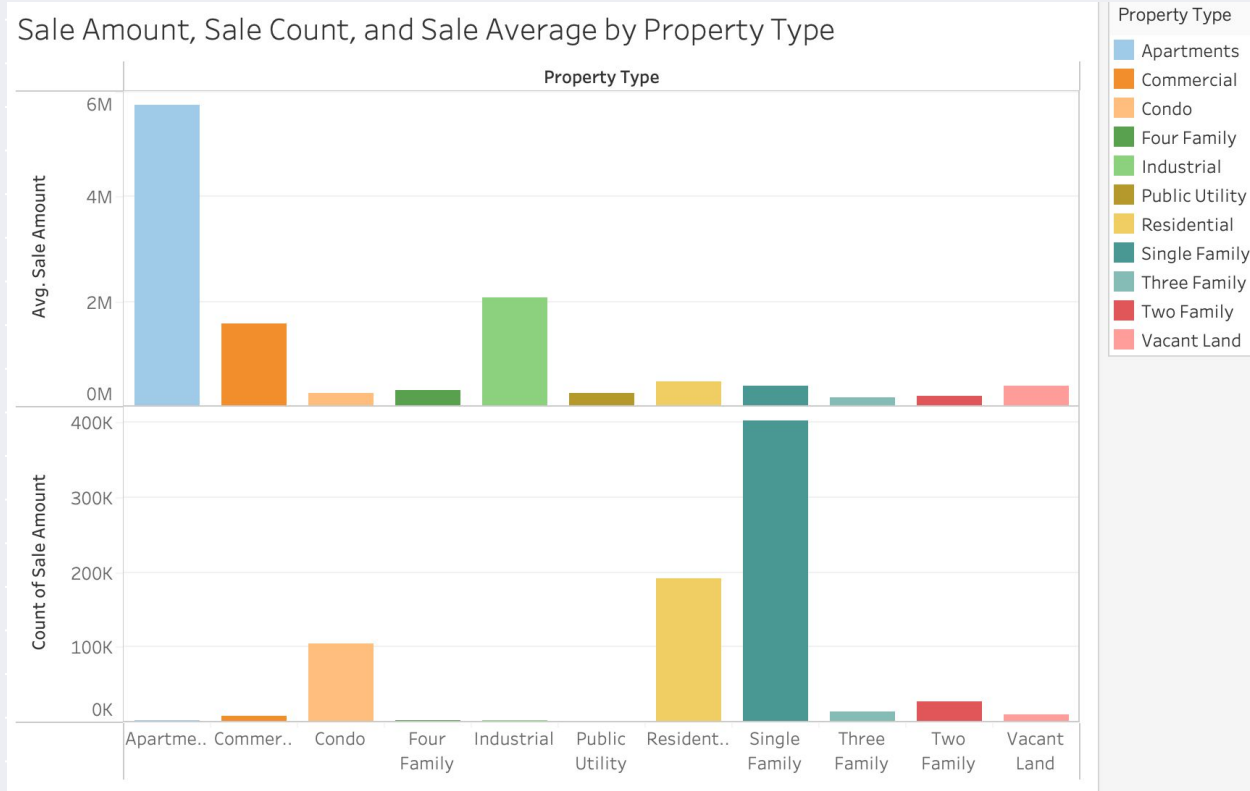# How do property types differ in total sale amount across the U.S.?

Geo Map — How do property types differ in total sale amount across the U.S.?

Property type and Sale Amount Map

Property Type
- Null
- Apartments
- Commercial
- Condo
- Four Family
- Industrial
- Public Utility
- Residential
- Single Family
- Three Family
- Two Family
- Vacant Land

- Why this matters: Understanding which property types dominate in different regions helps explain local housing markets
- Key patterns visible:
- Large clusters of high-value sales around major metros
- Single Family and Condo dominate in most regions
- Industrial, Commercial, and Apartments show large isolated transactions
- Vacant land is concentrated in rural/expanding regions
- Geographic patterns are clear and significant drivers of sale variability

Bar Chart — How do property types differ in total sale amount across the U.S.?

Sale Amount, Sale Count, and Sale Average by Property Type

Property Type

- Apartments
- Commercial
- Condo
- Four Family
- Industrial
- Public Utility
- Residential
- Single Family
- Three Family
- Two Family
- Vacant Land

Key Insights

- Single Family homes represent the majority of transactions nationwide

- High value clusters exist in major coastal and Midwest metros

- Few commercial and industrial properties drive big spikes in specific regions

- There exists clear regional specialization

- Value density differs from transaction density

- Industrial sales tend to cluster around logistics hubs
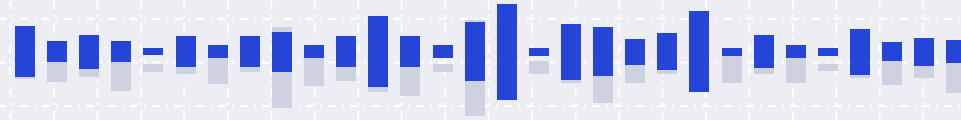
Preparation & Findings

Data Preparation

- Converted coordinates (Latitude/Longitude generated automatically in Tableau)

- Filtered years to manageable range

- Removed null sales amounts or properties with missing categories

- Used forecast model

- Grouped property types for cleaner visuals

Importance of Findings

Buyers
01
Seasonal timing can dramatically affect opportunity, winter shows lowest competition

Communities
02
Understanding property type trends supports development planning and housing affordability strategies

Policymakers
03
Geographic concentrations in high value property types may signal where infrastructure or zoning updates are needed

Businesses
04
Understanding property type trends supports development planning and housing affordability strategies

Conclusion

Final Takeaways

➔ Real estate activity moves in clear seasonal and economic cycles
➔ Different property types cluster in different regions, which plays a major role in how much they sell for
➔ The forecast suggests sales may bounce back over the next few months

Overall, the dataset gives us a solid foundation for understanding trends that matter to buyers, investors, and policymakers

Thank you!

Questions?