Report 2: Madison Area Single-Family Home Sales Time Series

Ira Sharenow

August 27, 2025



### **Executive Summary**

This report expands the analysis to include Madison and surrounding suburban communities (1994-2024), revealing market dynamics across the broader metropolitan area:

Key Findings: - Market Scale: Madison represents the largest single market, with suburban communities collectively providing additional market depth - Price Relationships: Suburban homes command higher absolute prices, while Madison properties show higher price per square foot values - Growth Patterns: Both markets show similar long-term appreciation trends, with suburban markets showing slightly higher volatility - Size Differences: Suburban homes average 200-300 square feet larger than Madison properties across all bedroom categories - Market Dynamics: The price relationship between suburbs and Madison reflects trade-offs between home size and location convenience

### Introduction

This second report expands our analysis beyond Madison city limits to include the broader metropolitan area. While Report 1 established baseline trends for Madison proper, this analysis compares urban and suburban single-family housing markets to identify key differentials and market dynamics.

**Methodology Notes:** - Madison properties identified by attendance at Madison high schools (Memorial, West, East, LaFollette) - Suburban properties include all other communities in the dataset with sufficient transaction volumes - Analysis maintains the same 1994-2024 time frame for consistency - All data cleaning and filtering criteria consistent with Report 1.

# Market Geography Overview

### Transaction Volumes by Location

Table 1: Single-Family Home Sales by Location (1994-2024)

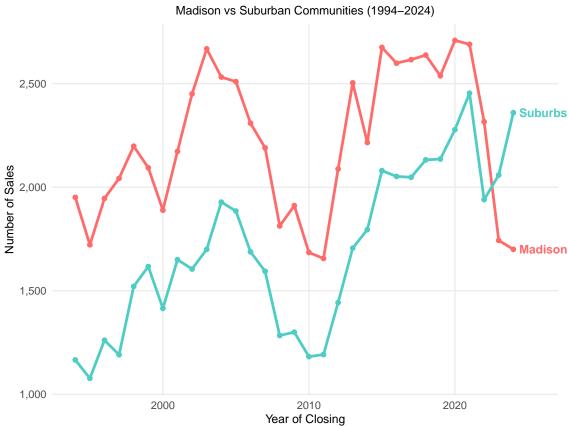
Location	Type	Total Sales	Percent of Market
Madison	Madison	68,773	56.7
Sun Prairie	Suburbs	13,336	11.0
Stoughton	Suburbs	5,591	4.6
Waunakee - V	Suburbs	5,083	4.2
Verona	Suburbs	4,887	4.0
Madison	Suburbs	4,780	3.9
Fitchburg	Suburbs	3,912	3.2
Oregon - V	Suburbs	3,781	3.1
Mcfarland - V	Suburbs	2,904	2.4
Monona	Suburbs	2,660	2.2
Cottage Grove - V	Suburbs	2,649	2.2
Middleton	Suburbs	1,784	1.5
Cottage Grove	Suburbs	1,051	0.9

The table above shows the distribution of sales across all included locations, with Madison accounting for the majority of transactions as the single largest market.

# Market Volume Analysis

## Annual Sales Activity - Madison vs Suburbs

## **Annual Single-Family Sales Volume**



Suburban markets show higher volatility but greater overall volume

# Recent Market Activity Summary

Table 2: Recent Sales Activity by Market and Bedroom Count  $\left(2019\text{-}2024\right)$ 

Year	Market	1-Bed	2-Bed	3-Bed	4-Bed	5+Bed	Total
2024	Madison	11	181	993	429	86	1,700
2024	Suburbs	3	112	1,198	804	243	2,360
2023	Madison	8	161	1,041	439	94	1,743
2023	Suburbs	2	131	1,045	650	231	2,059
2022	Madison	12	255	1,380	560	109	2,316
2022	Suburbs	3	97	993	643	204	1,940
2021	Madison	9	272	1,600	694	115	2,690
2021	Suburbs	4	130	1,204	838	278	2,454
2020	Madison	6	231	1,588	741	143	2,709
2020	Suburbs	3	76	1,113	823	263	2,278
2019	Madison	9	212	1,533	680	104	2,538
2019	Suburbs	3	71	1,095	756	211	2,136

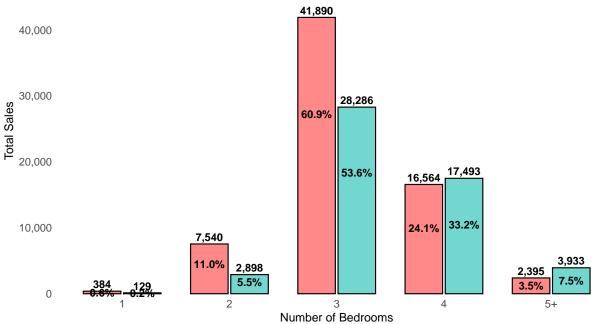
# Market Composition Analysis

### **Bedroom Distribution Comparison**

### **Sales Distribution by Bedroom Count**

Madison vs Suburban Communities (1994-2024)



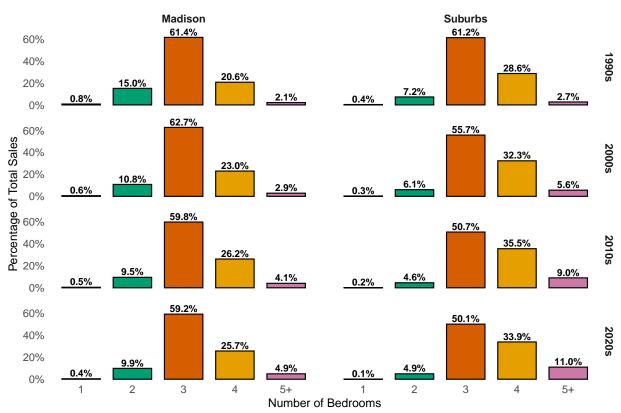


Percentages shown inside bars, total counts above bars

### Decade Evolution by Market

### **Market Composition Evolution by Decade**

Bedroom distribution remains stable across markets and time



Consistent patterns suggest stable housing demand preferences

# Price Analysis

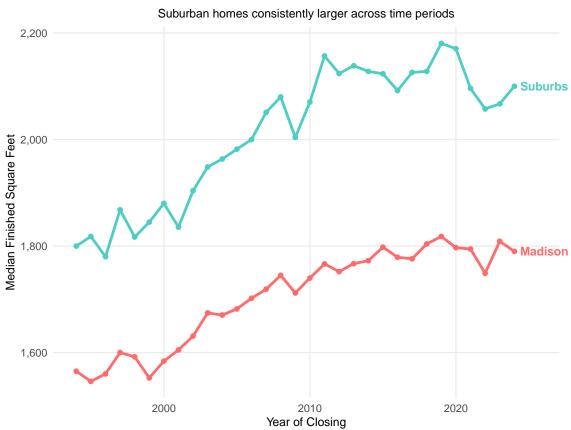
### Overview

Price analysis reveals important trade-offs between location and home size. Detailed price trend and index analysis has been moved to the Price Intensity section below for better organization alongside related persquare-foot metrics.

# Home Size Analysis

# Square Footage Comparison

### **Median Home Size Trends**

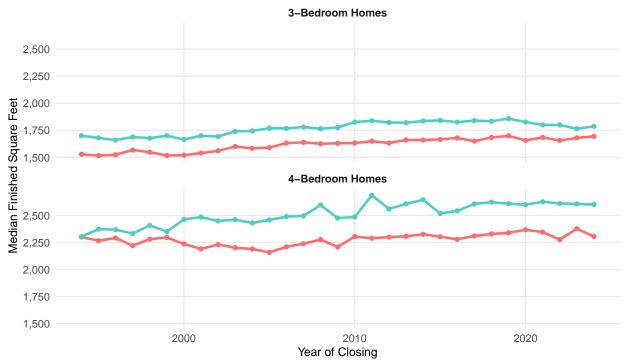


Size differential averages 200-300 square feet

## Median Home Size by Market and Bedroom Count

Size premiums consistent across property types

Madison Suburbs



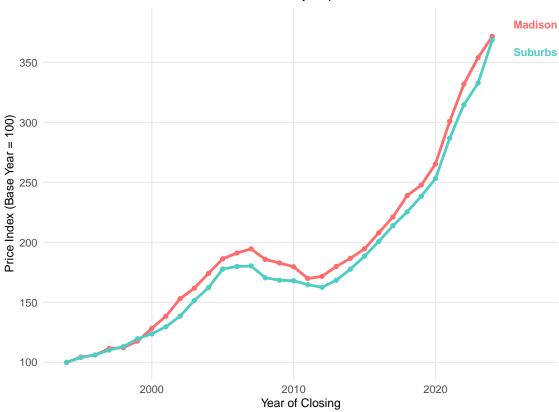
Suburban size advantage maintained across all time periods

# Price Intensity Analysis

## Price Appreciation Index - 3-Bedroom Homes

### **Price Appreciation Index – 3–Bedroom Homes**

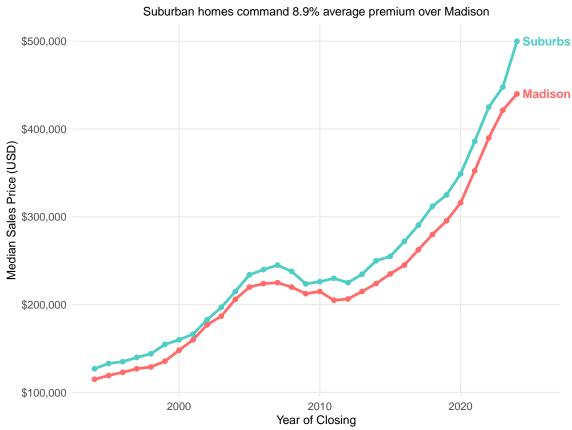
Index: 100 = first available year price for each market



Similar appreciation rates despite absolute price differences

### Median Price Trends

### **Median Home Price Trends**



Both markets show similar appreciation patterns with consistent premium gap

# Price Per Square Foot Trends

## **Price Per Square Foot Trends**

Madison shows higher price per square foot values throughout the period

\$250

Madison

Suburbs

\$150

\$200

\$200

\$200

\$200

\$200

\$200

\$200

\$200

\$200

\$200

\$200

\$200

\$200

\$200

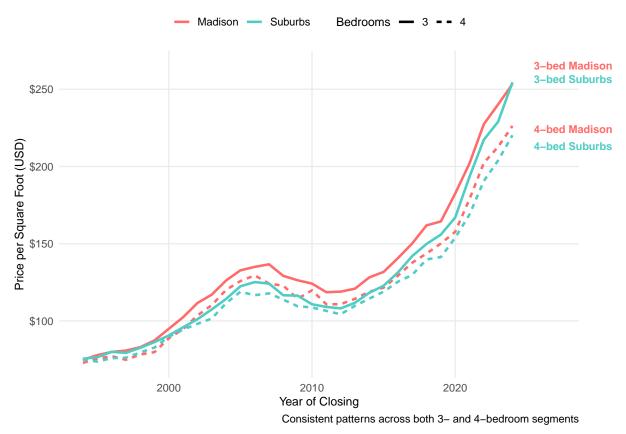
Year of Closing

Higher Madison price intensity reflects location premium vs. size trade-off

### Price Intensity Comparison by Property Type

## **Price Intensity Comparison by Property Type**

Madison maintains price per square foot premium across property sizes



# Lot Size Analysis

Table 3: Table 3: Median Lot Sizes by Market and Bedroom Count

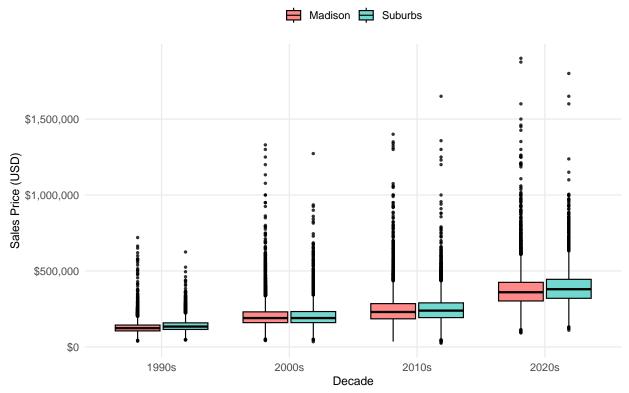
Category	Median Lot Size (sq ft)
Madison 3-bedroom	8,712
Madison 4-bedroom	10,454
Suburbs 3-bedroom	10,454
Suburbs 4-bedroom	12,197

## Historical Distribution Analysis

### Price Distribution Evolution (3-Bedroom Homes)

### Price Distribution Evolution – 3-Bedroom Homes

1990s: M(7341) S(4790), 2000s: M(14070) S(8939) 2010s: M(13877) S(9004), 2020s: M(6599) S(5552)



Prices capped at \$2M to reduce extreme outlier effects

### **Summary and Market Implications**

#### **Key Market Dynamics**

**Volume and Scale:** - Madison represents the largest single market location across all included areas - Combined market represents the total transactions shown in Table 1 across 30 years - Both markets show similar cyclical patterns with suburban areas showing higher volatility

**Price Relationships:** - Suburban homes command higher absolute prices, averaging 8.9% premium over Madison - Madison maintains higher price per square foot values, reflecting location vs. size trade-offs - Both markets show similar long-term appreciation rates despite absolute price differences

**Property Characteristics:** - Suburban homes average 200-300 square feet larger across all bedroom categories - Market composition by bedroom count remains stable across both markets - Size premiums consistent across all time periods and property types

Market Dynamics: - Price intensity patterns reveal clear location vs. space value propositions - Both markets show mature, interconnected transaction patterns - Trade-offs between location convenience and home size drive pricing differentials

#### Strategic Implications

- 1. **Market Segmentation**: Clear differentiation between location-premium (Madison) and size-premium (suburban) markets
- 2. Value Propositions: Buyers choose between Madison's convenience premium and suburban space advantages
- 3. **Investment Considerations**: Both markets offer similar appreciation potential with different value drivers
- 4. Development Patterns: Consistent demand preferences suggest stable market fundamentals

#### Data Quality and Methodology

- Analysis includes the transactions shown in Table 1 across all included markets
- Madison identification via high school attendance zones ensures geographic accuracy
- Excluded communities: Mount Horeb V, Cross Plains V, Cross Plains, Maple Bluff V, Shorewood Hills V
- Consistent data cleaning and error filtering applied across all analyses

**Next Report Preview**: Future analysis will explore micro-market variations within suburban communities and examine the impact of lot sizes and specific location amenities on pricing differentials.

### Personal Note

I am very pleased to say that I am an alumnus of the University of Wisconsin-Madison. I have an M.A. in mathematics and an M.S. in Business from UW-Madison.

Ira Sharenow El Cerrito, CA irasharenow100@gmail.com

 $Go\ Bucky!$ 

