

**BT2102  
GROUP 04**

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**Beijing Housing  
Prices**



# Presentation Flow

## GENERAL OVERVIEW

Data cleaning  
Overview of market

## KEY INSIGHTS

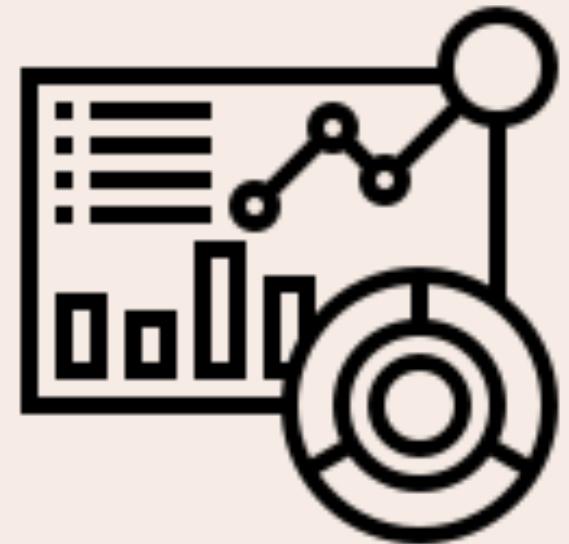
Decade build  
Location  
Features of the building

## SUMMARY

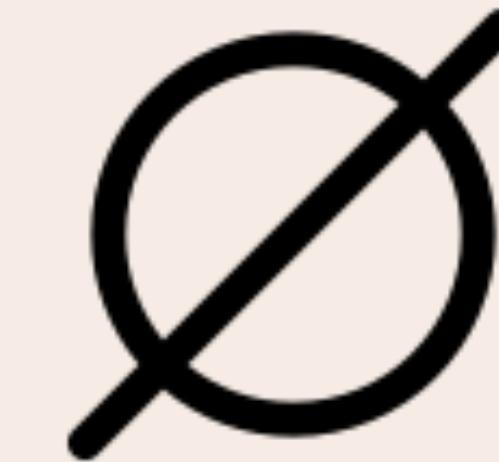
Recommendation wrap up

# DATA CLEANING

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Different data  
types



Null values

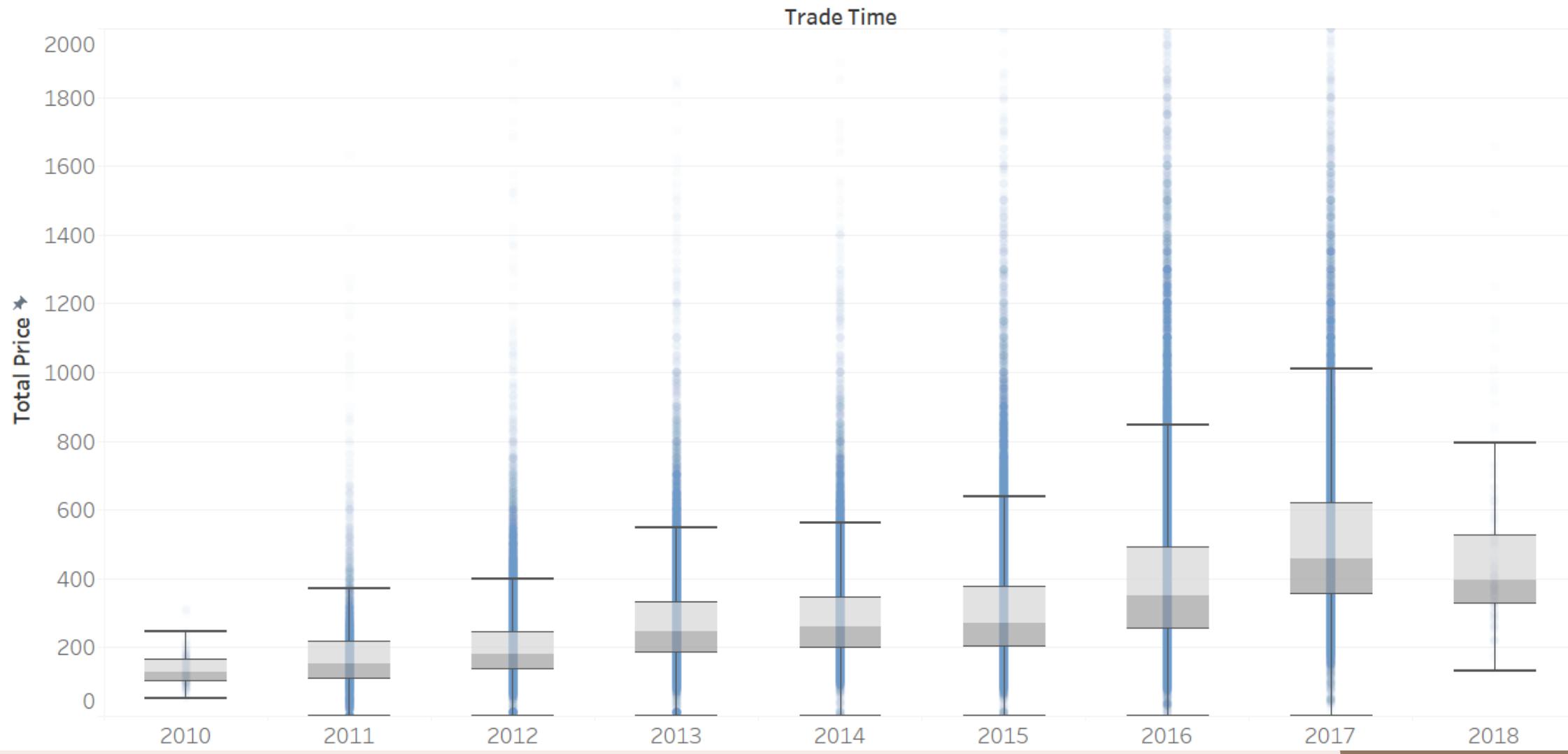


Irrelevant data



# General Overview

## Growth in housing prices



Upper Whisker: **248**  
Upper Hinge: **163**  
Median: **127**  
Lower Hinge: **100**  
Lower Whisker: **51**

2010 statistics

Upper Whisker: **1,012**  
Upper Hinge: **617**  
Median: **458**  
Lower Hinge: **353**  
Lower Whisker: **1**

2017 statistics

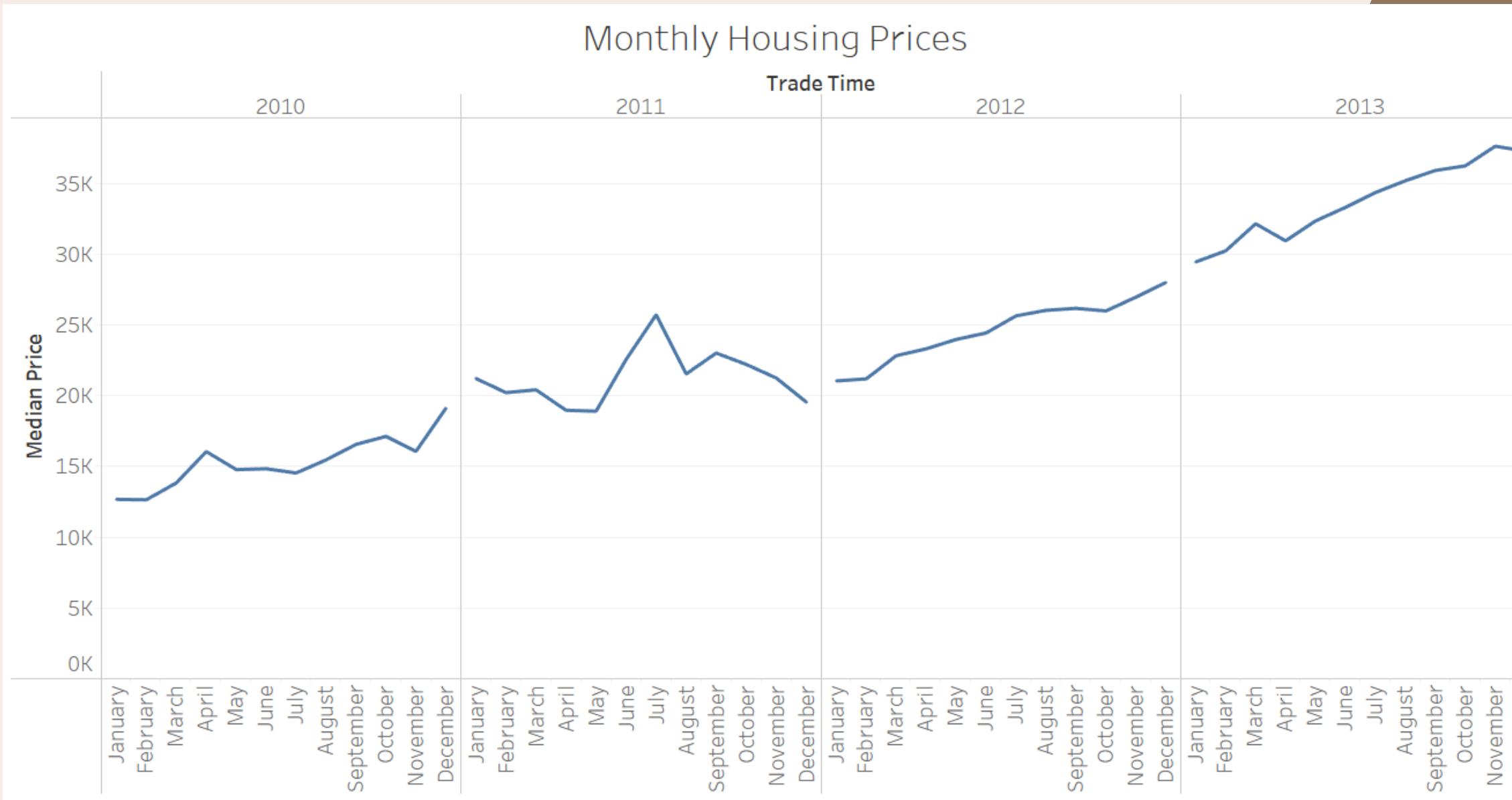
# INCREASING PRICES

## Sale Year



Market  
**SURGED** after  
2015  
WHY?

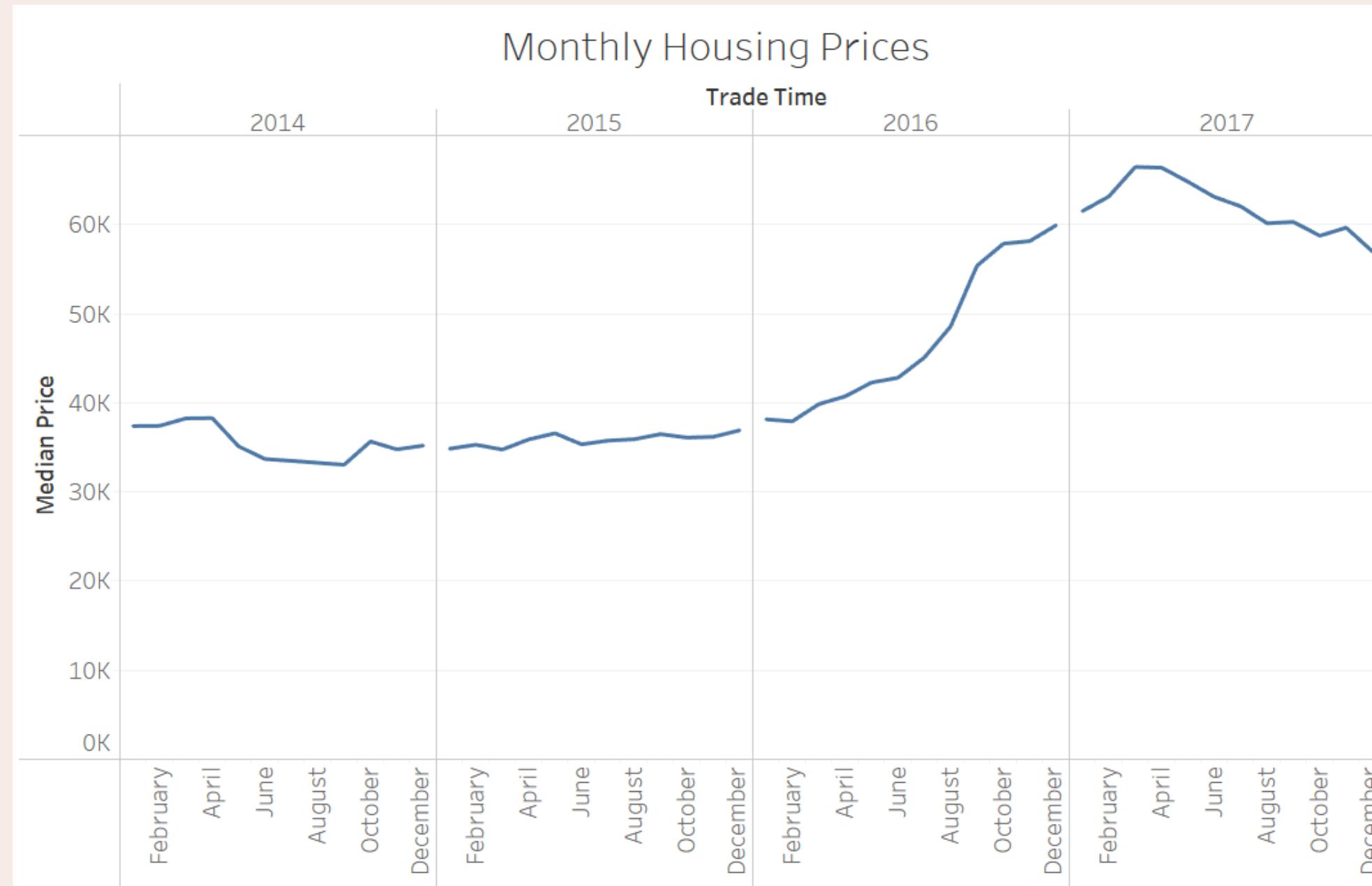
# Key Reasons for rapid Price fluctuations



China's government spent **largest stimulus package**, USD\$552 billion in to **infrastructure, housing** and other projects.

Economic recovery after the global financial crisis in 2008

# Key Reasons for rapid Price fluctuations



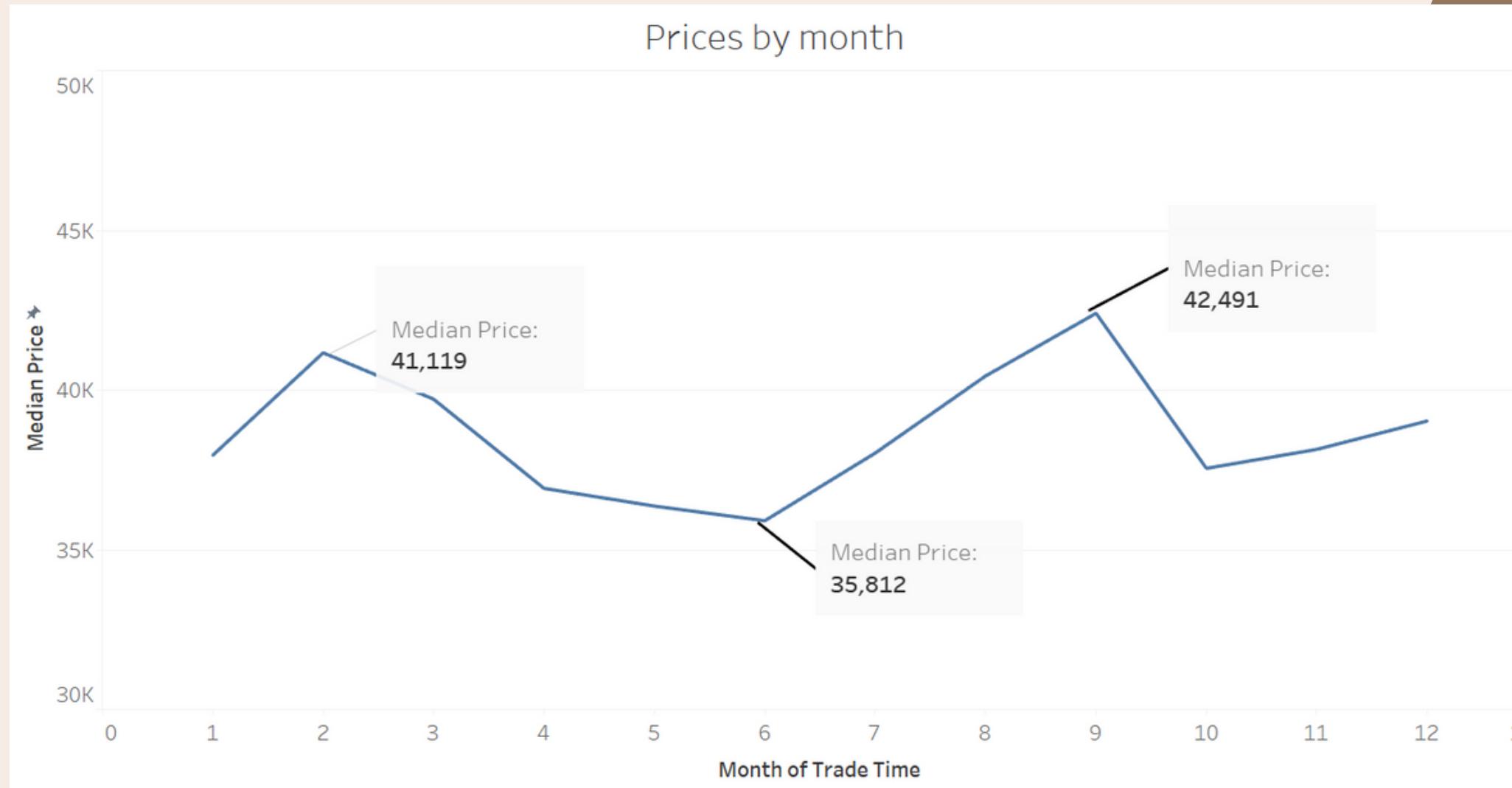
Economic **slow down** in 2014 and government clamp down on **speculative** property investment

Changes in **Government policy** in 2016

Ending of one-child policy and easing restrictions of foreign ownership

Government increased **down payment ratios** up to 70% for second property as an easing measure

# Median monthly prices

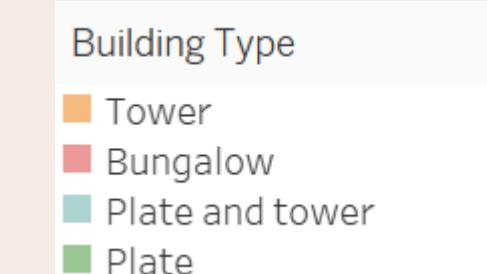
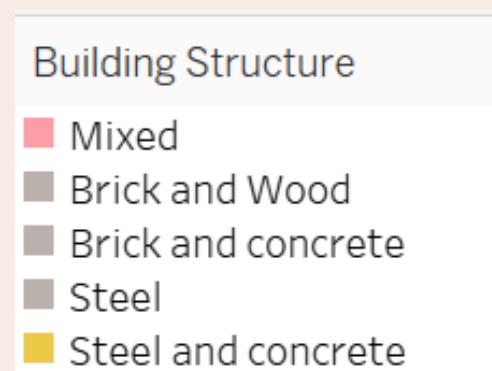
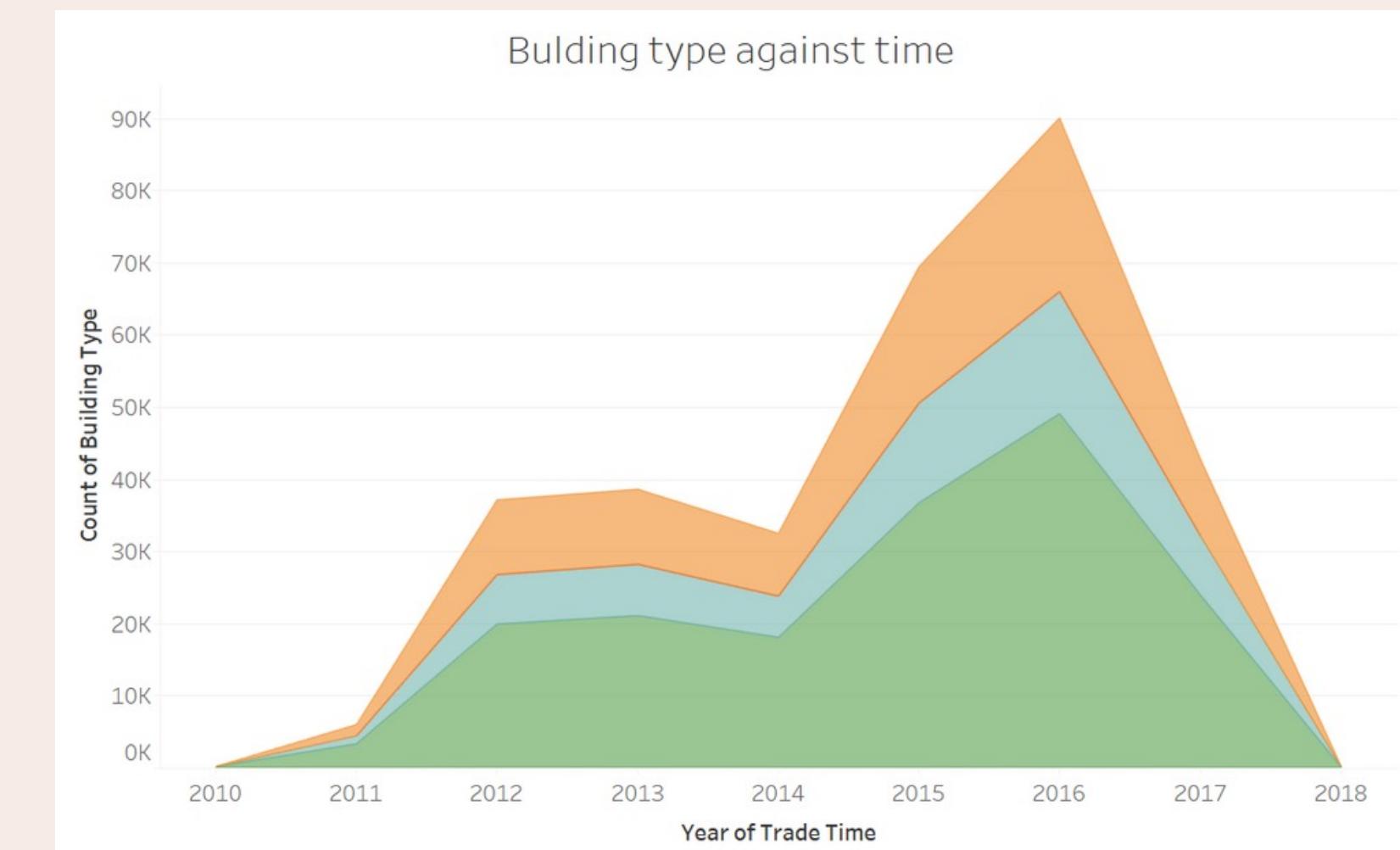
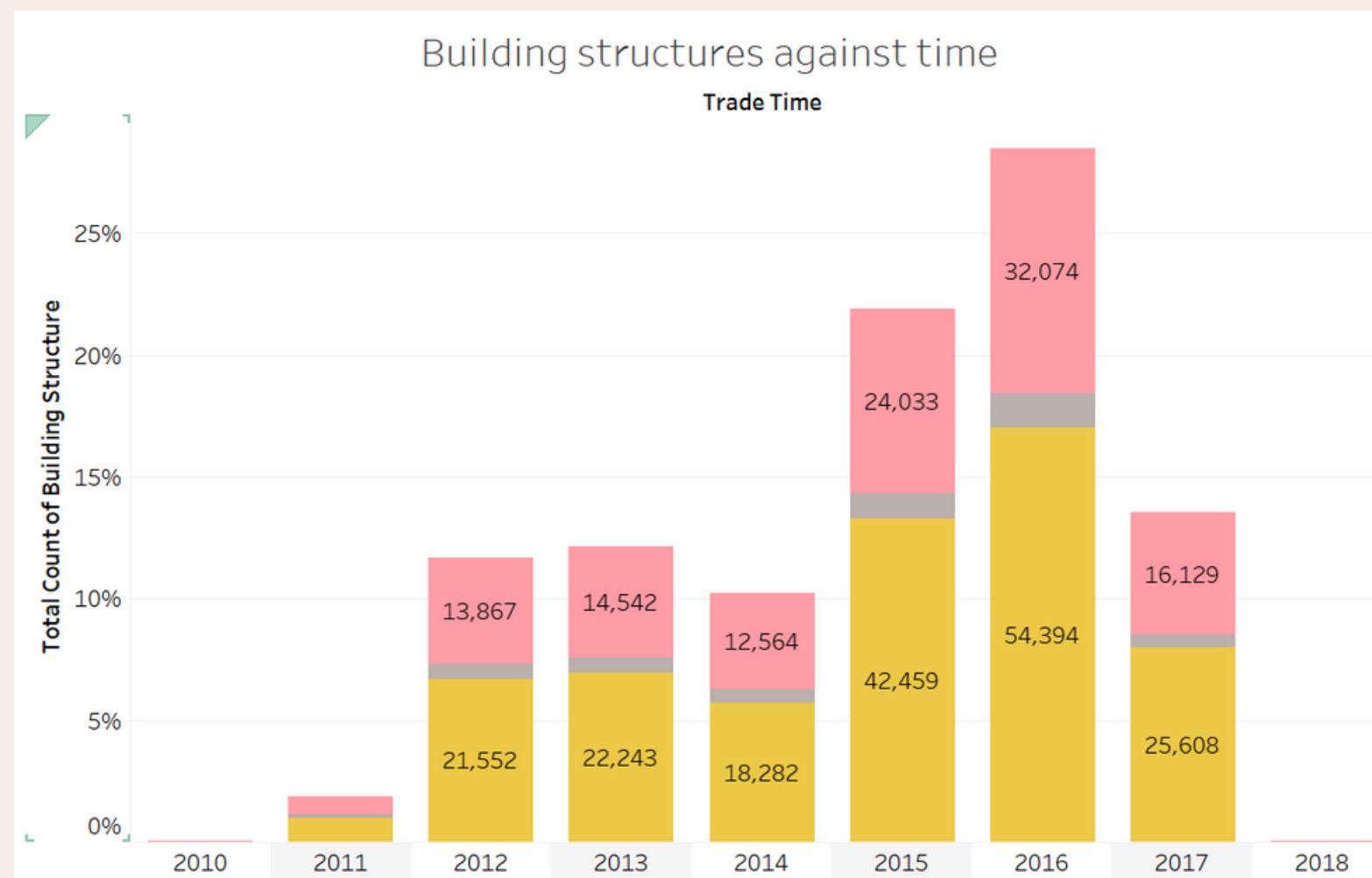


Prices rise at the start of the year due to Chinese New Year

Cools off from March till July with the lowest being in June

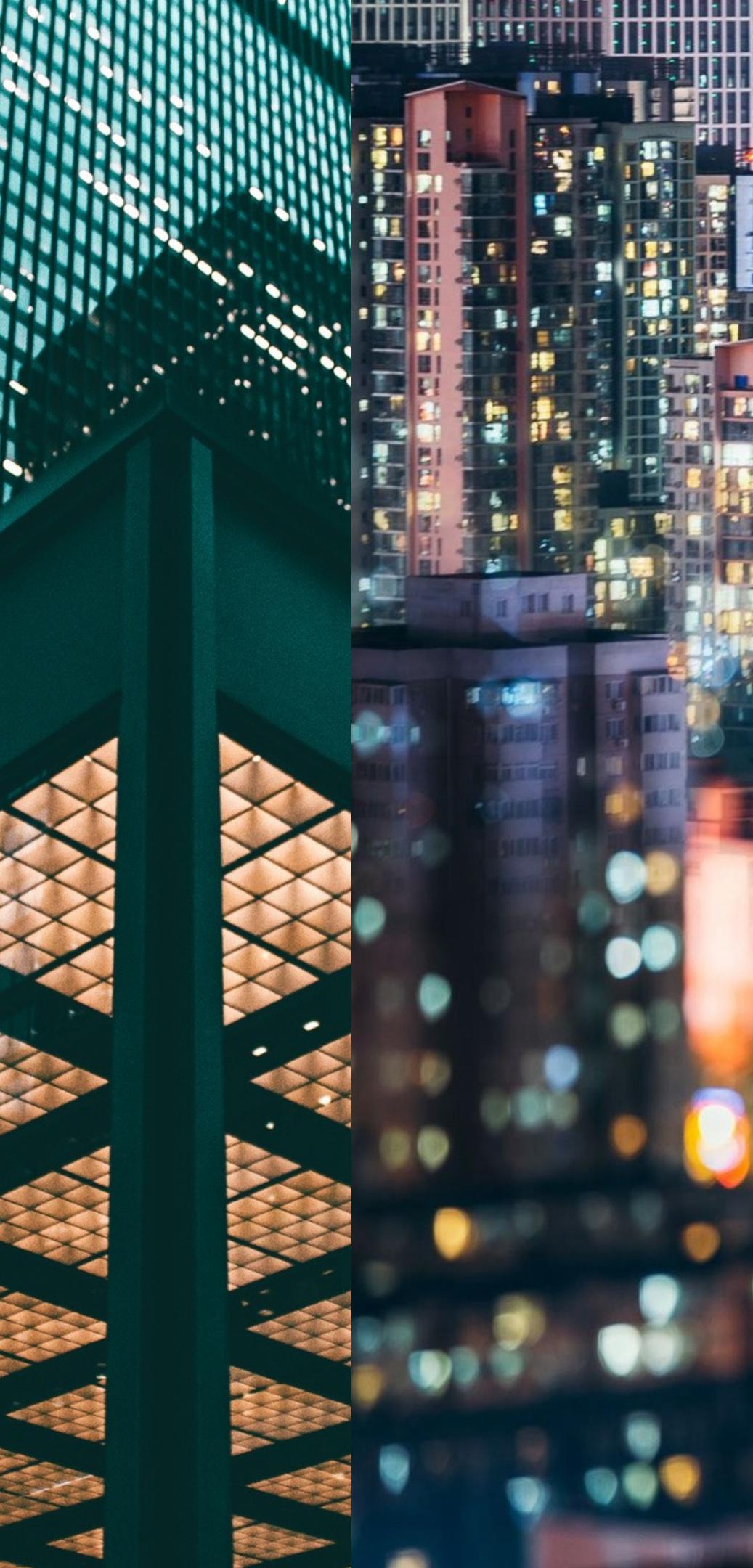
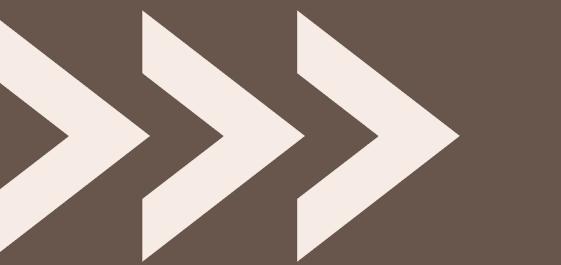
Prices began to rise again due to developers putting out more deals for China's national day

# GROWING DEMAND OVER THE YEARS

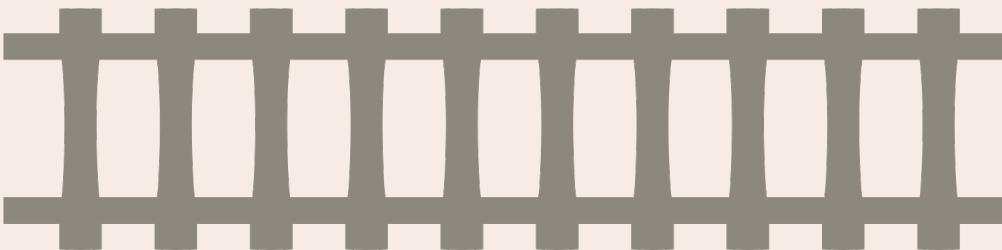


# Key Insights

# Insight #1



# Beijing Subway Network



(Here's How the Beijing Subway Will Look in the Near Future, n.d.)

(Sina\_Mobile, 2022)

**780 KM** → **2063 KM**

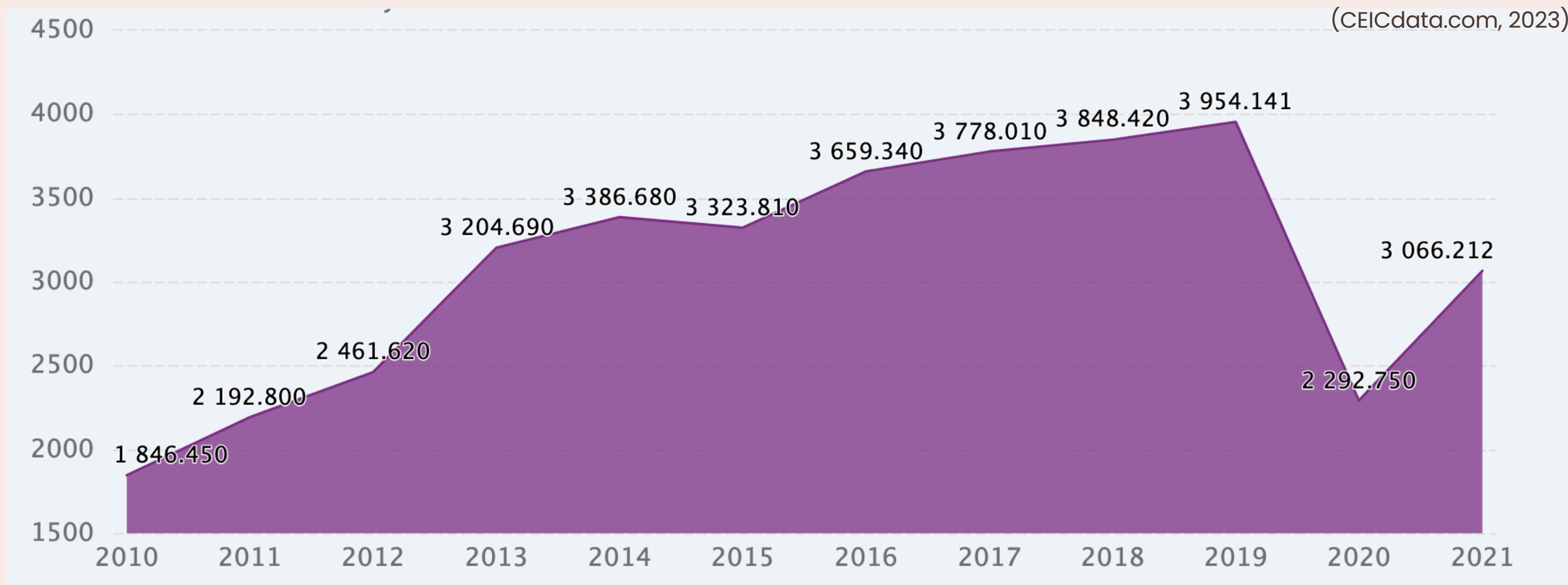
*Present*

*Future*



# PASSENGER NUMBERS BY YEAR

(in millions)



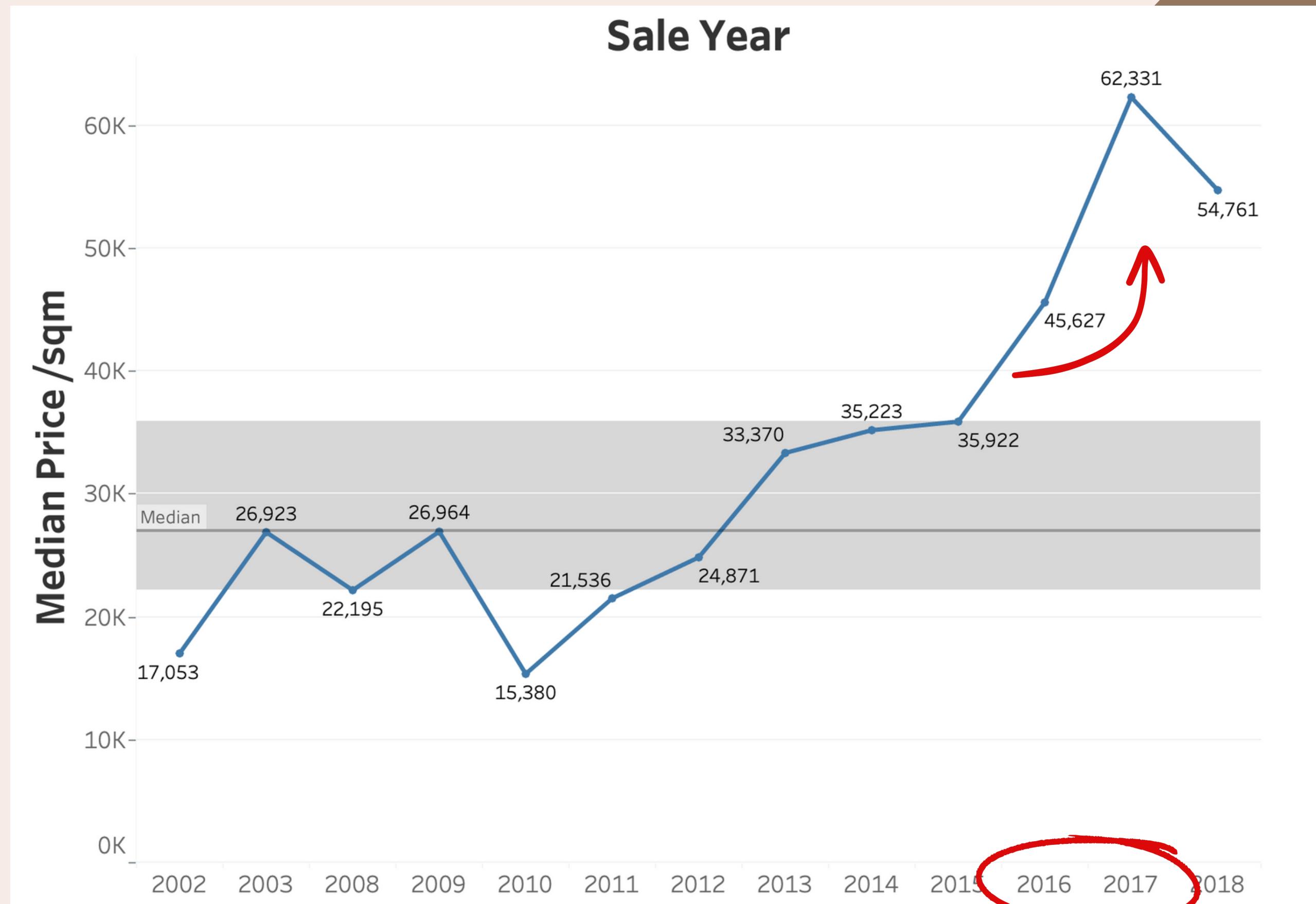
Public transport usage has  
been **INCREASING**

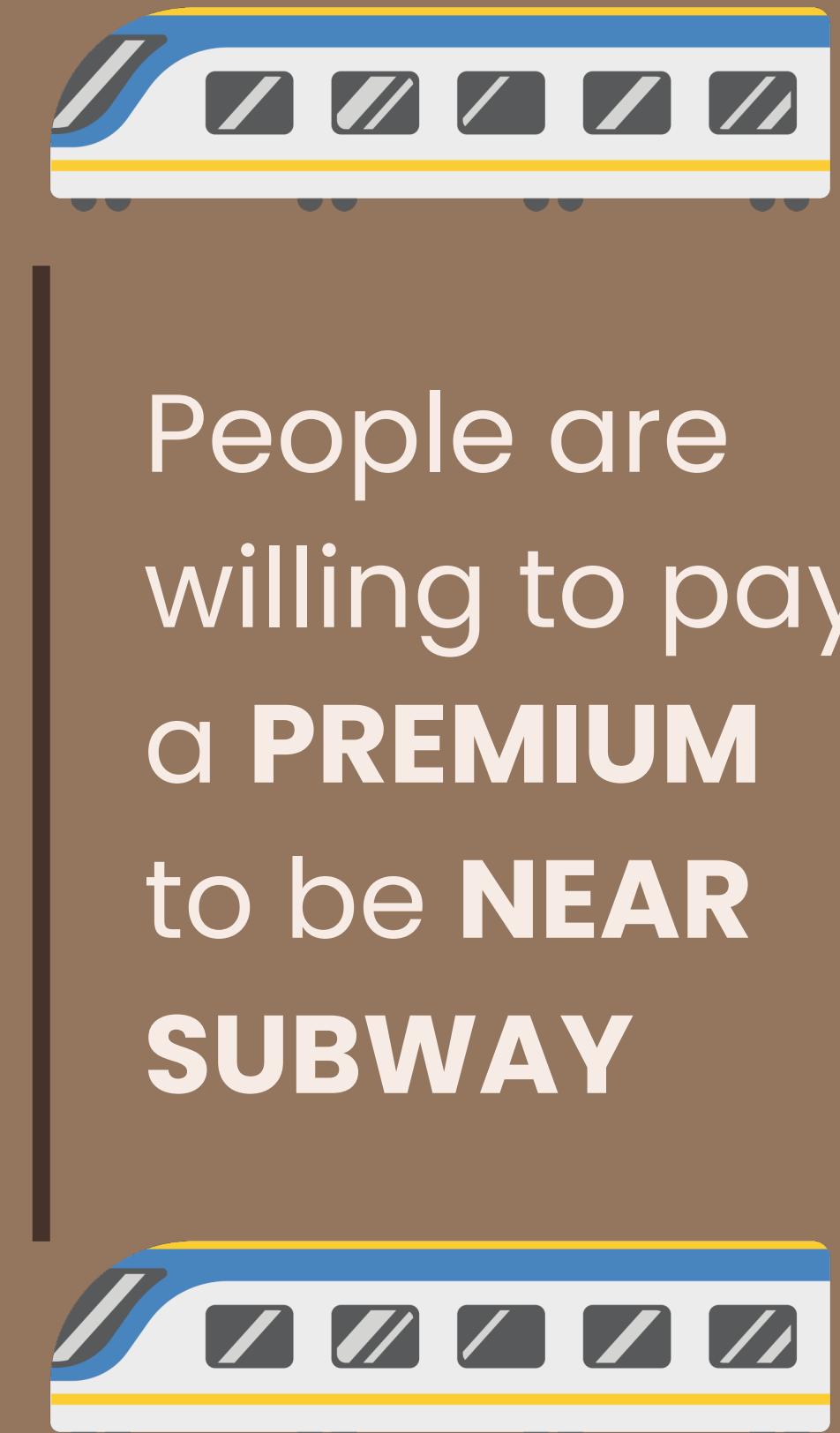
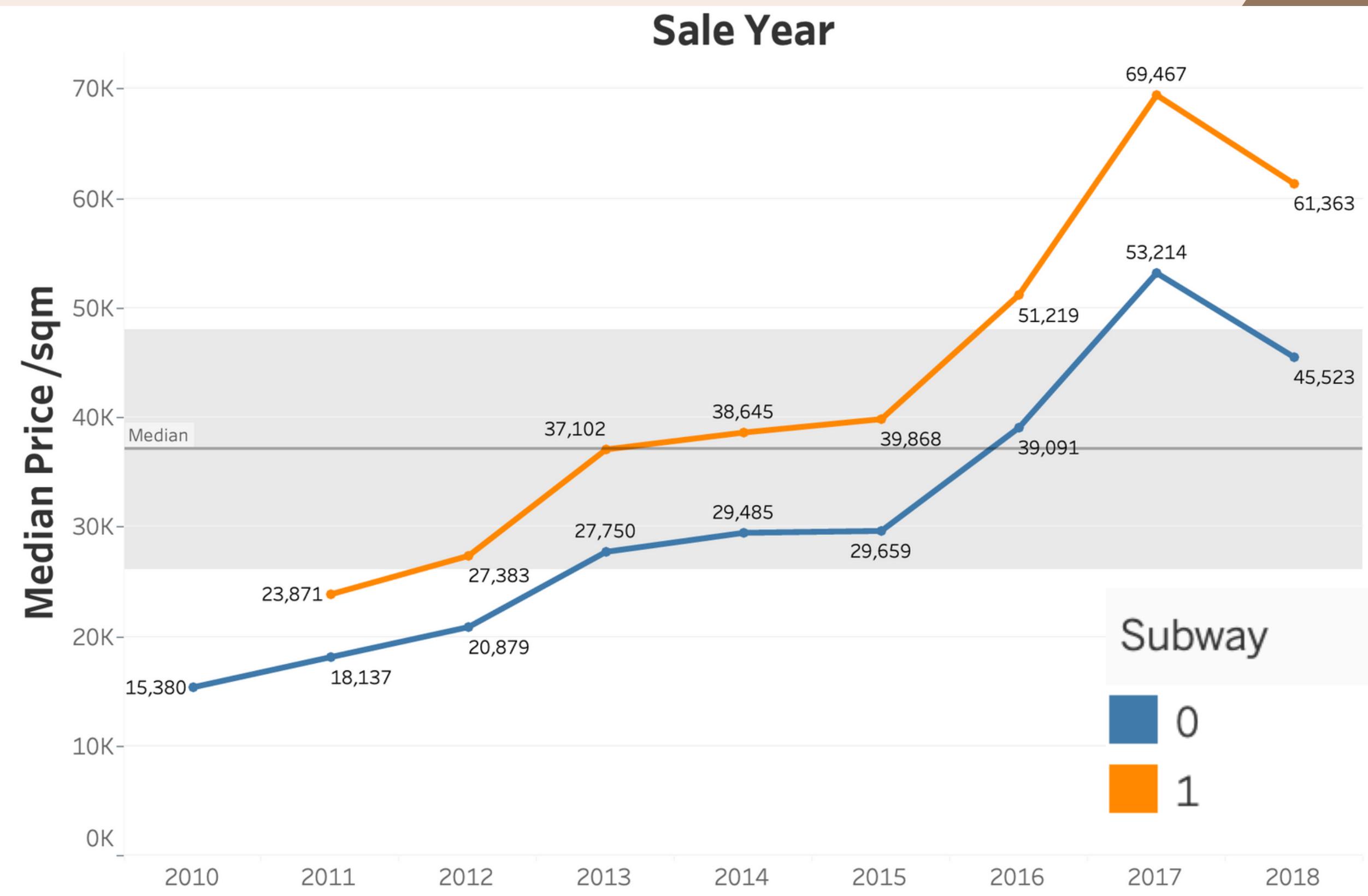
Market  
**SURGED** from  
2016

**22.5%**

Property sales  
compared to  
2015  
(in floor area)

("China 2016 Property Investment Rises 6.9% in 2016,"  
2017)

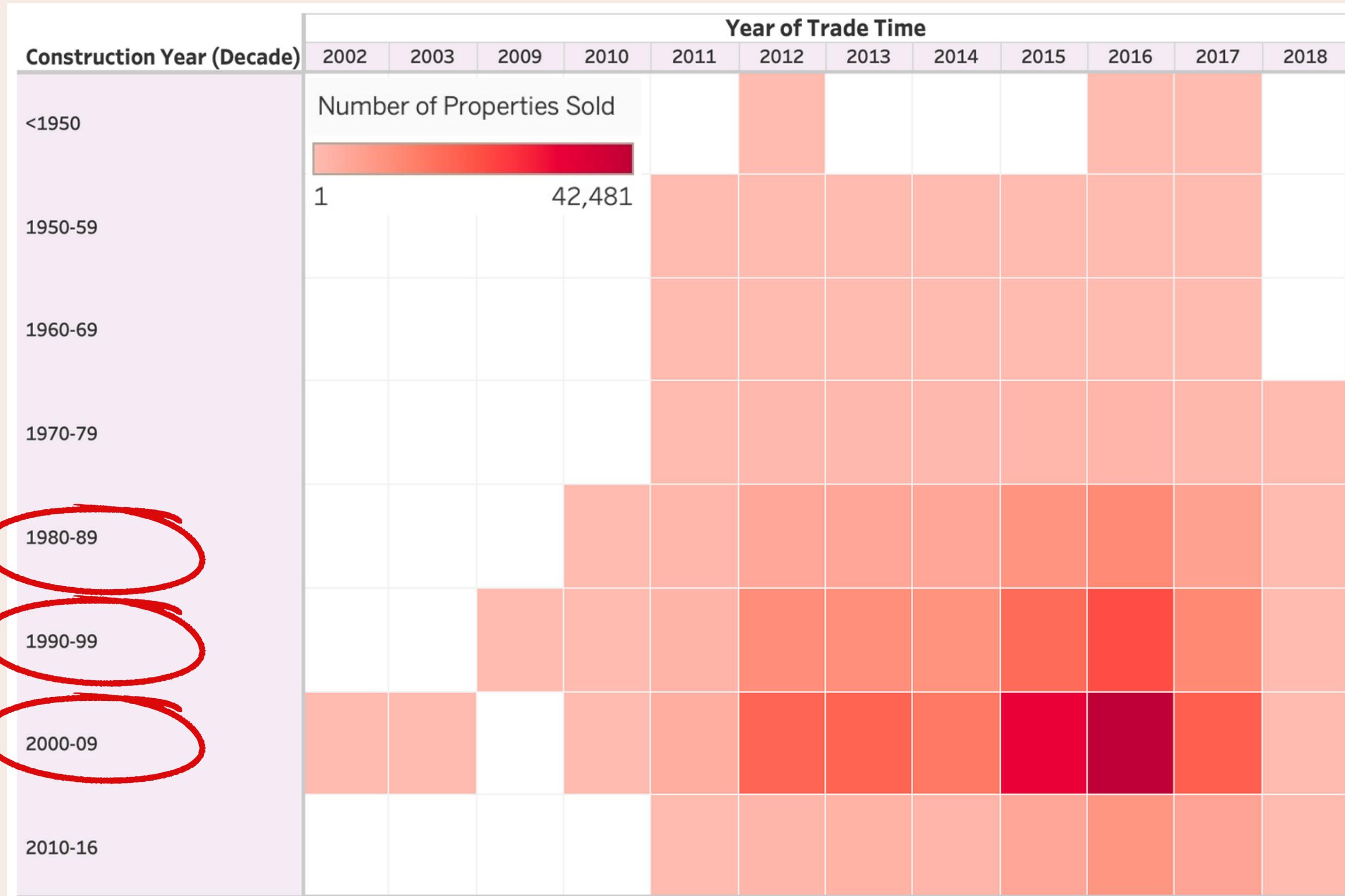




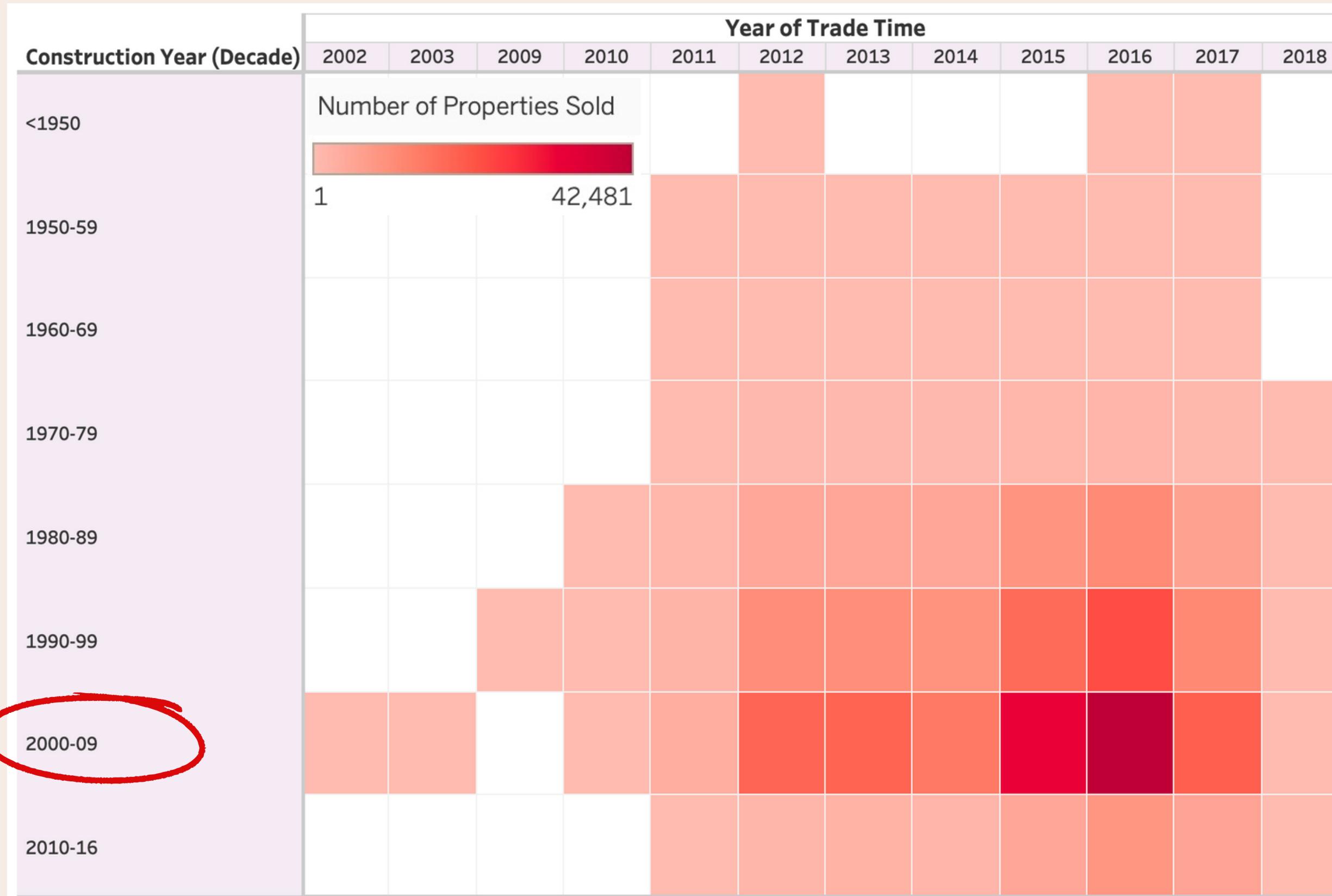


what about  
age of  
property?

# How old are the properties being bought?

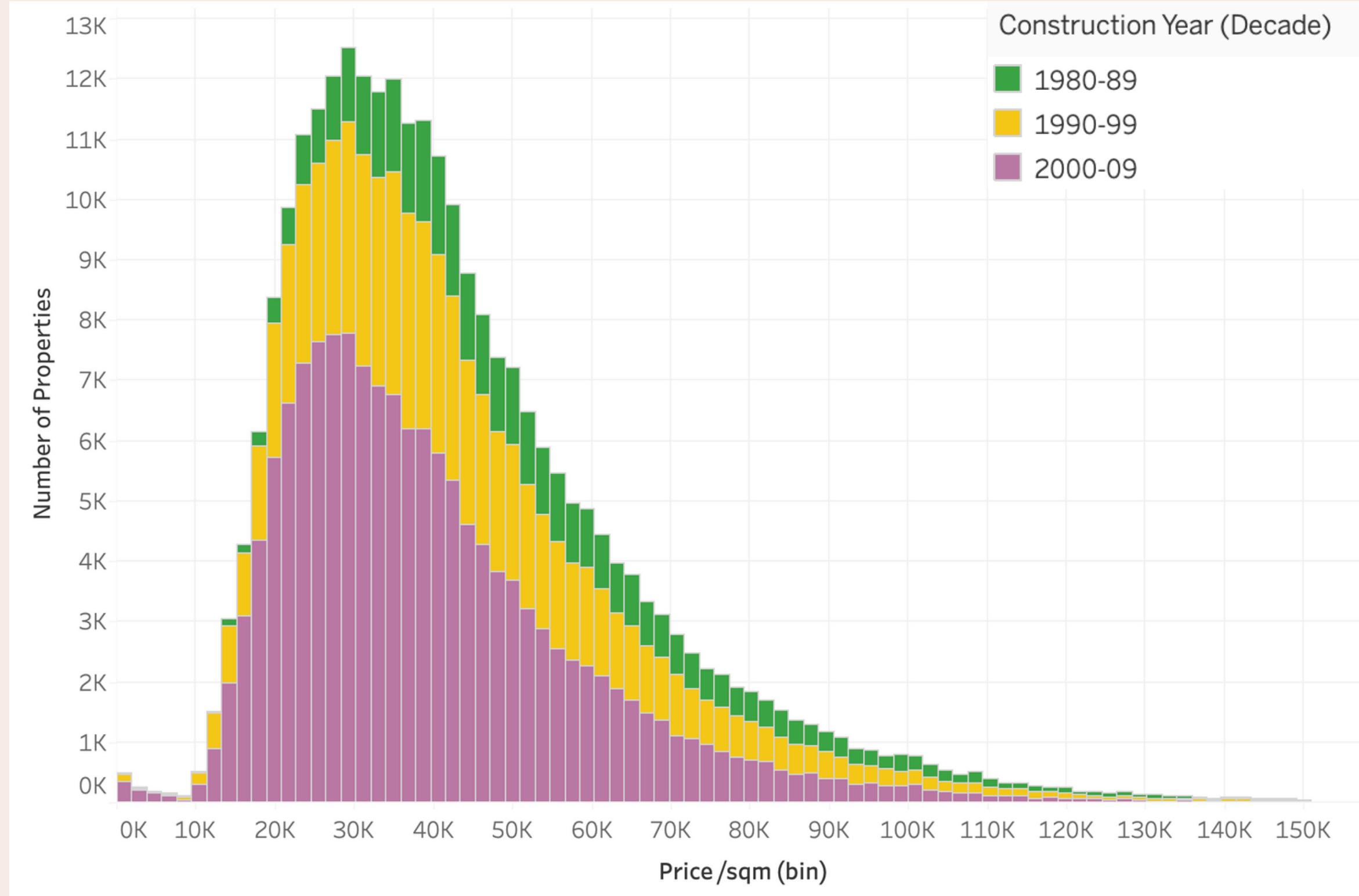


# How old are the properties being bought?

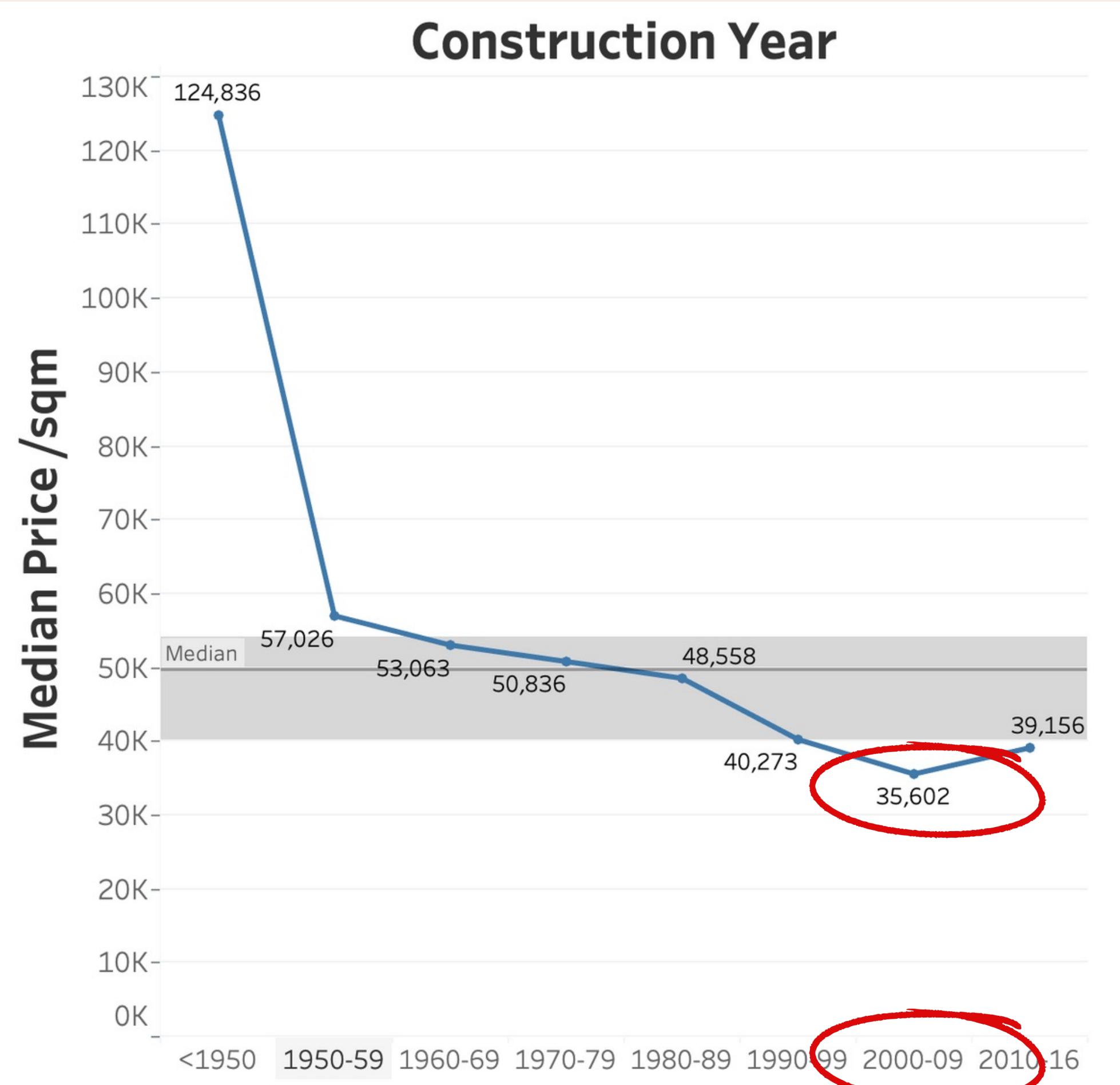


During the  
**PROPERTY BOOM  
OF 2016**, investors  
chose to buy  
properties built in  
**2000-09!**

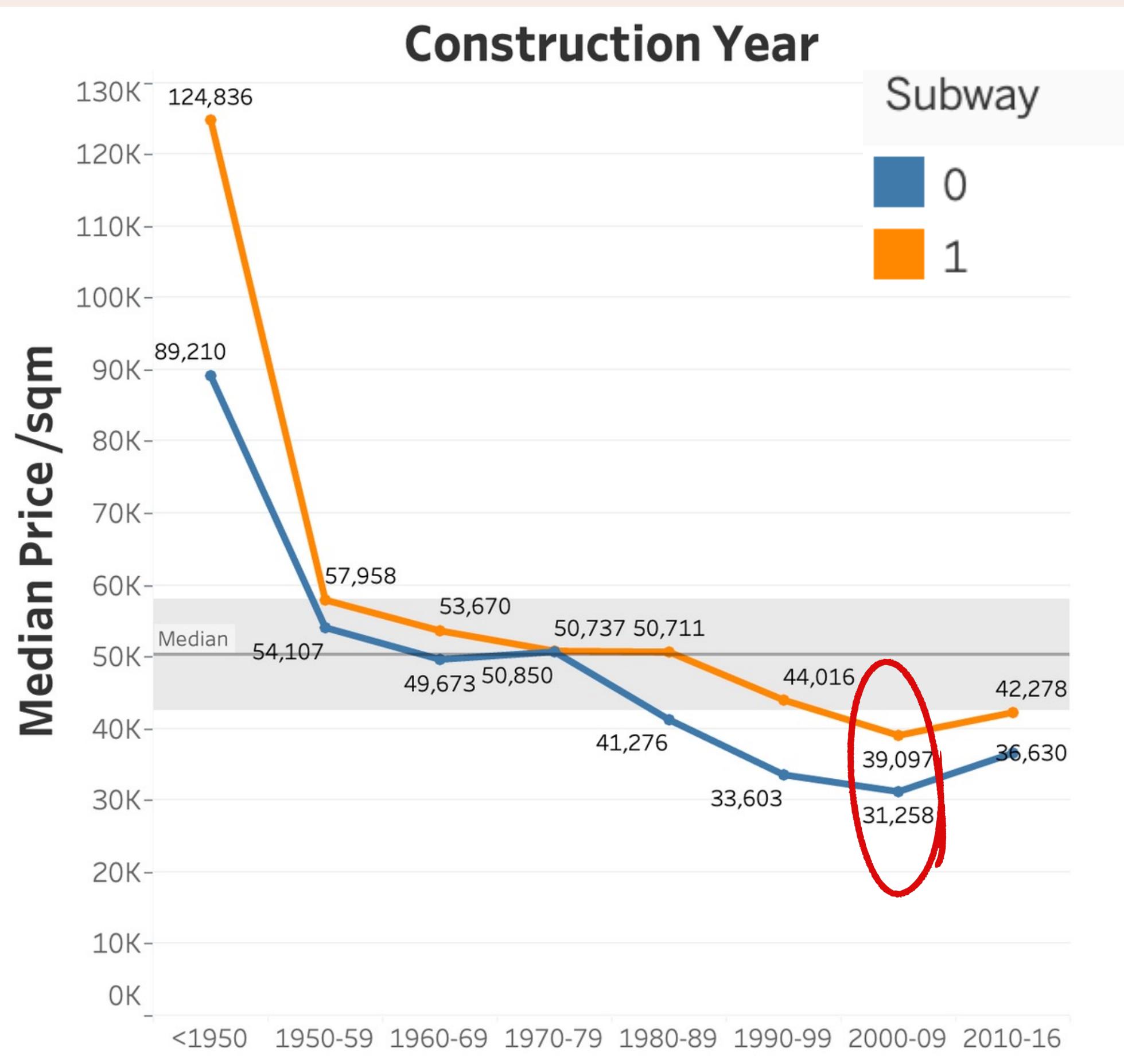
# Looking at the most popular construction years (price distribution)



2000-09 is more  
**RIGHT-SKEWED**

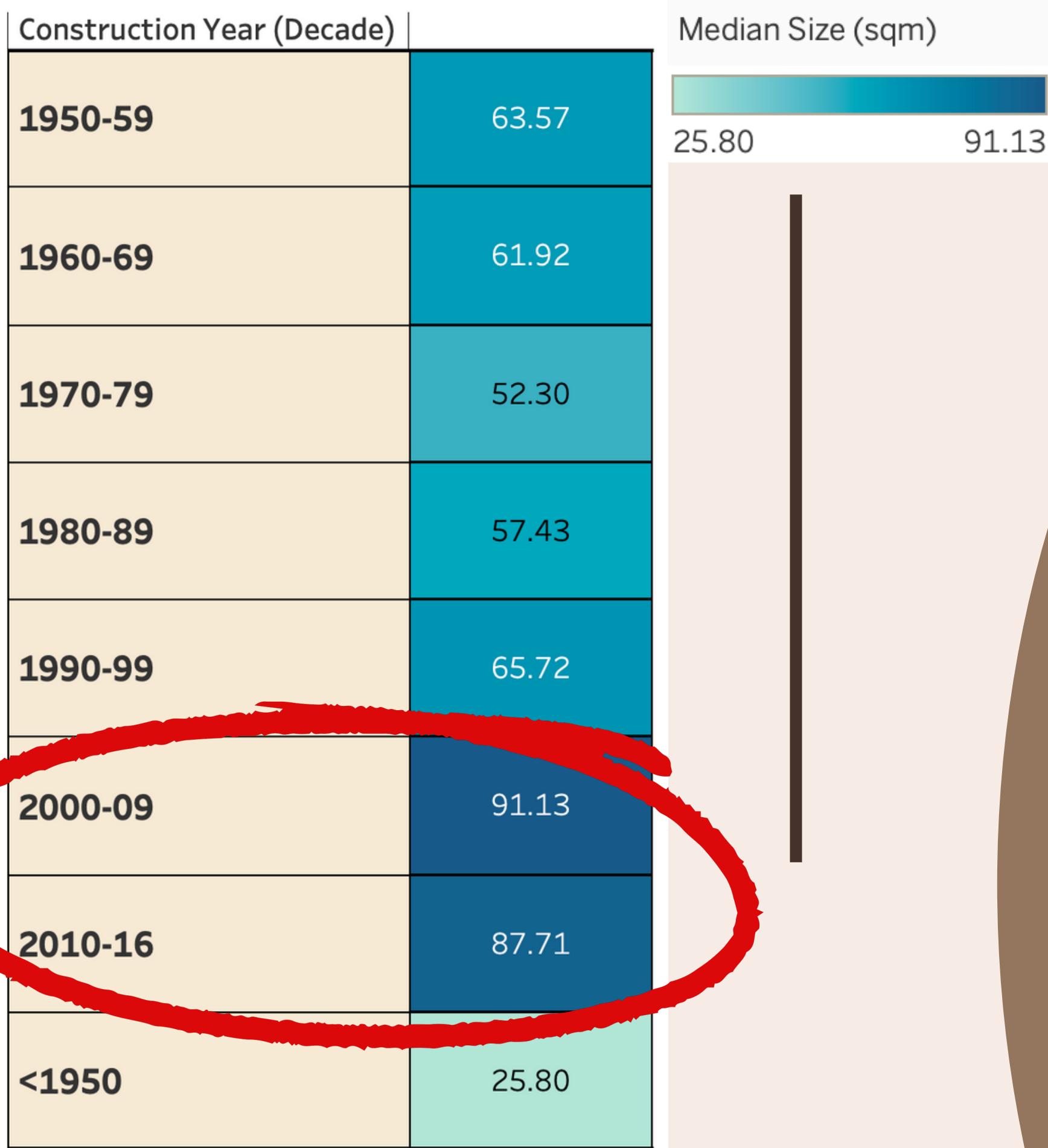


Median price  
per sqm for  
**2000-09** is the  
**LOWEST**



Again, LOWER  
than median

# Comparing total size (in sqm) of properties



Newer properties  
are generally  
**BIGGER**

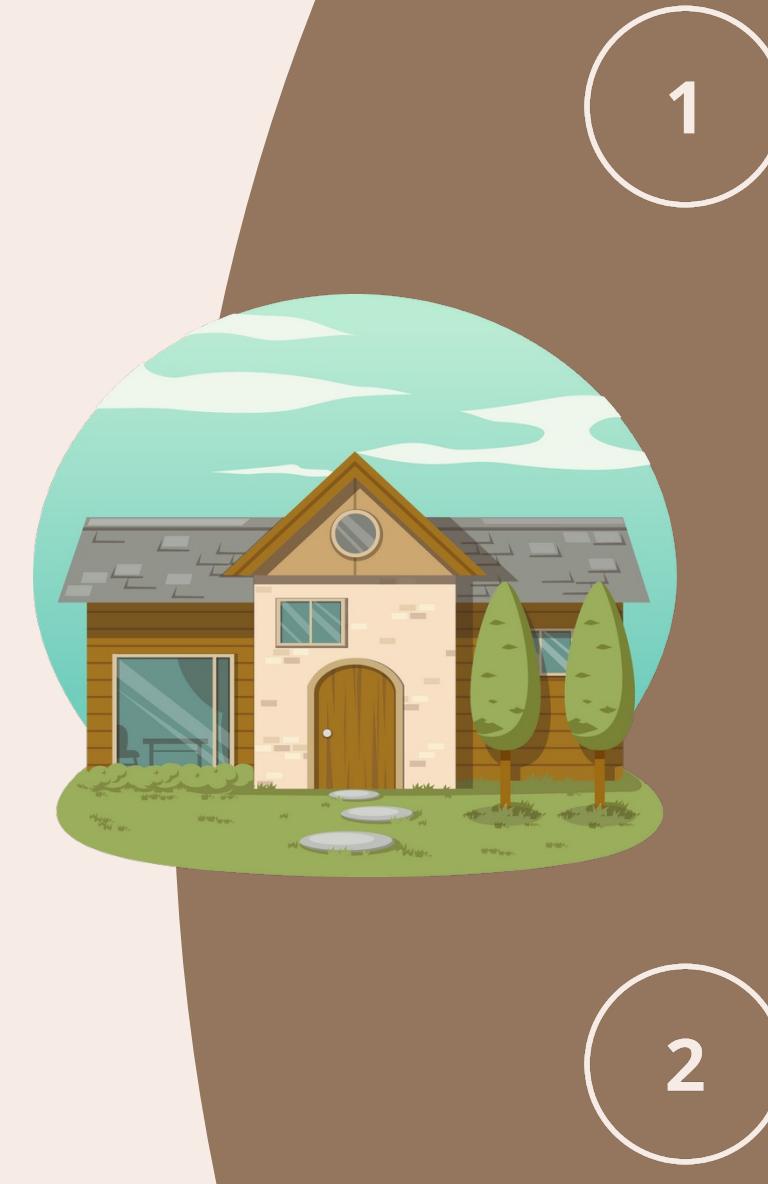
Compared to the  
other popular  
decades, the total  
size of properties  
built in 2000-09 is  
the **LARGEST**



What can  
we draw  
from these  
insights?

## Recommendation

A good starting point would be properties built in **2000-09**, and **NEAR SUBWAYS**

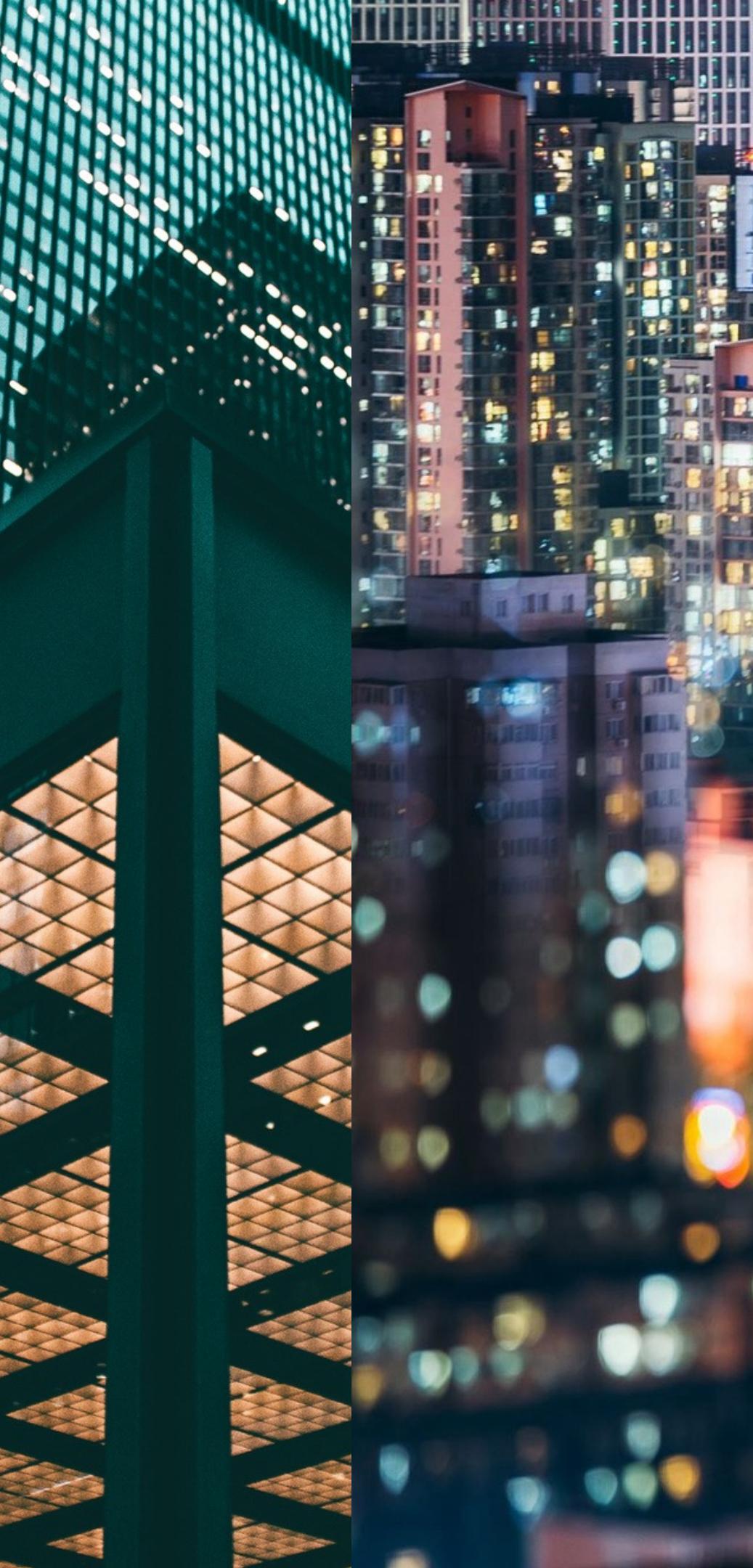
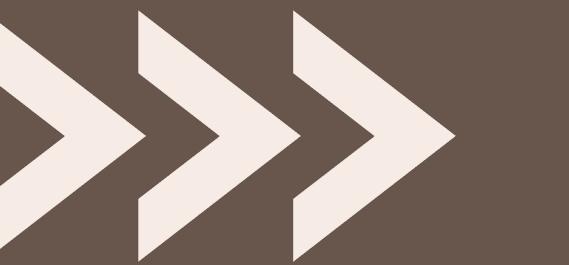


It is more **COST EFFICIENT** to invest in **NEWER PROPERTIES**,

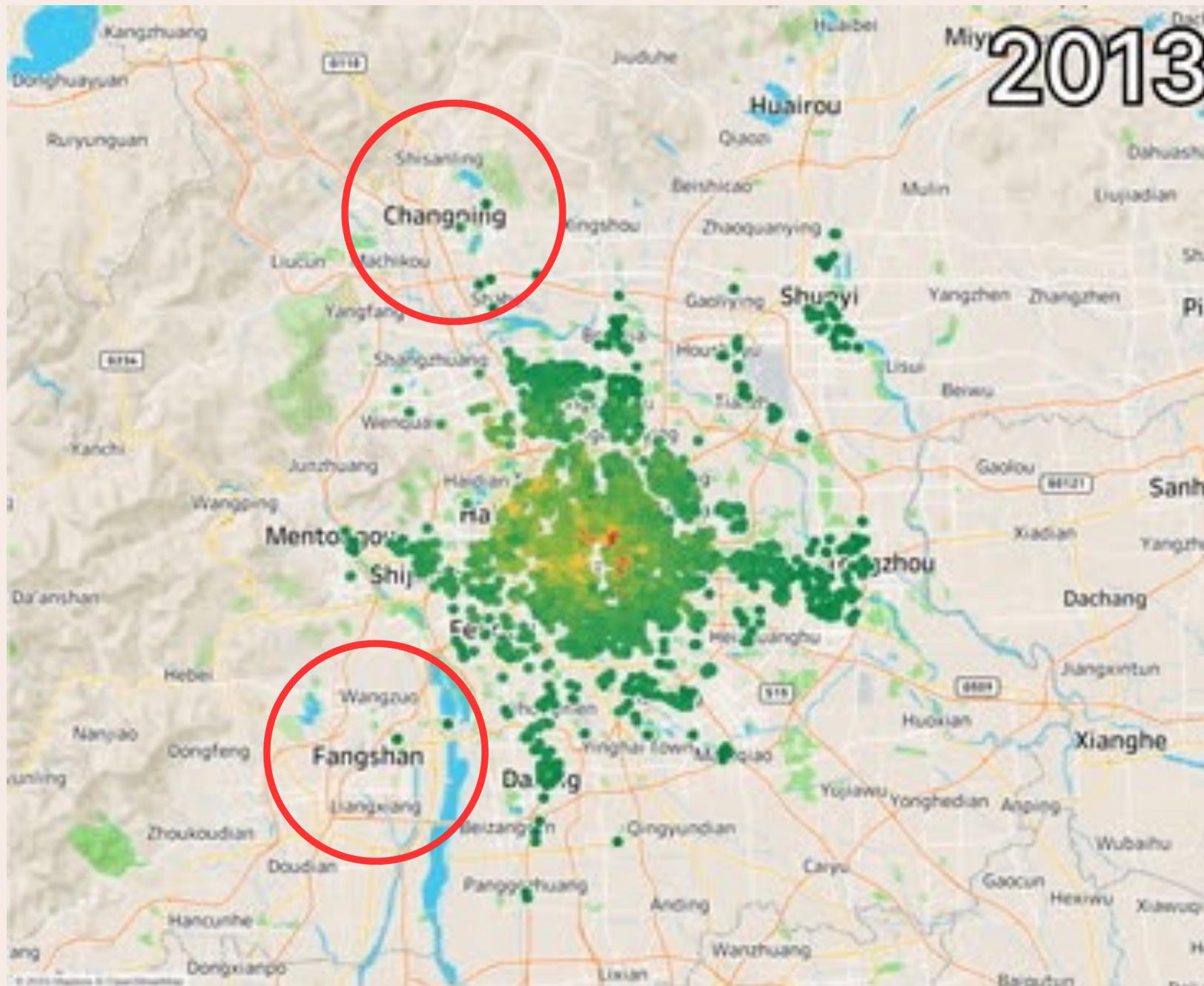
as demonstrated

Invest in properties **NEAR SUBWAYS**, given future transportation outlook

# Insight #2



Average price per sqm by location and year

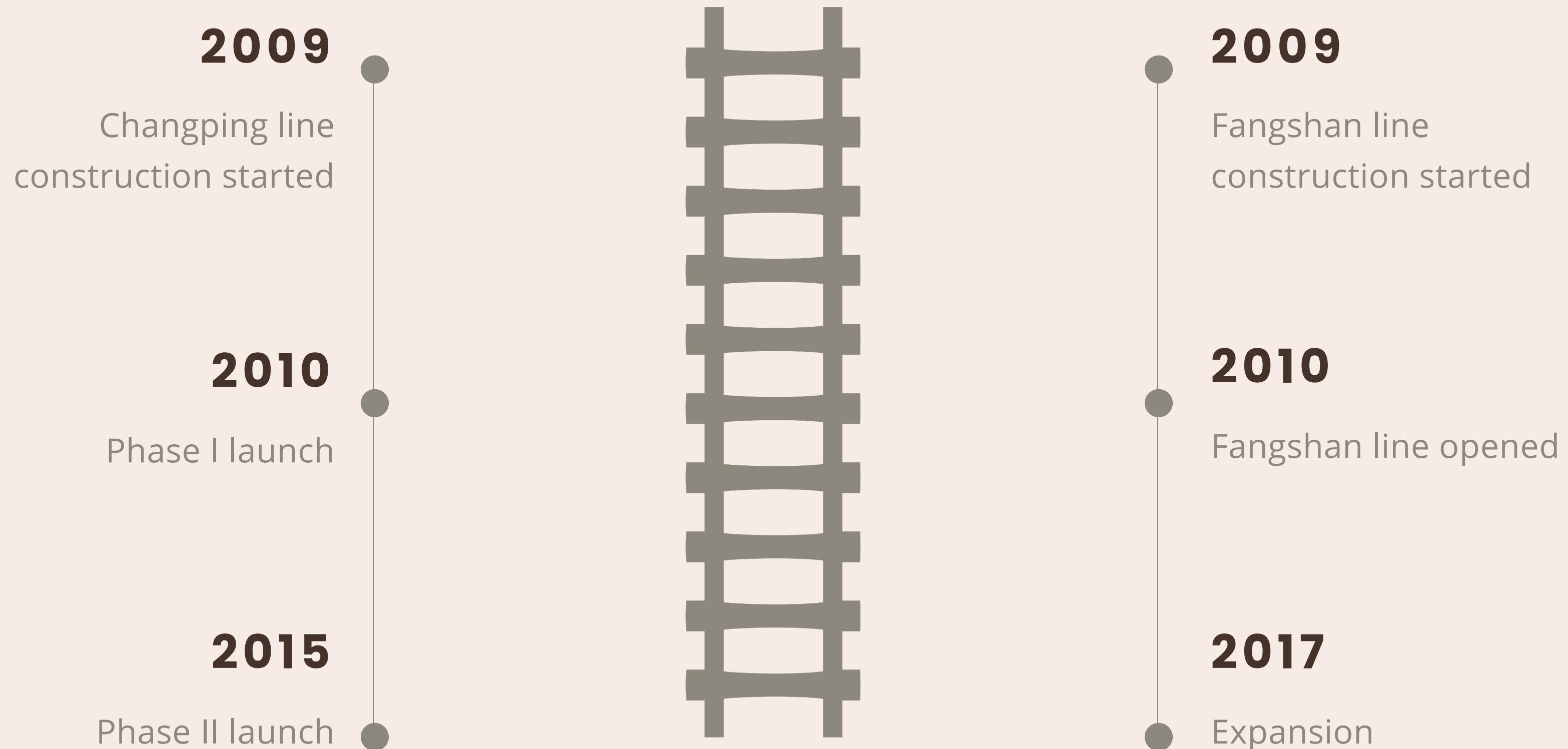


Average price of  
housing **INCREASED**  
over the years.

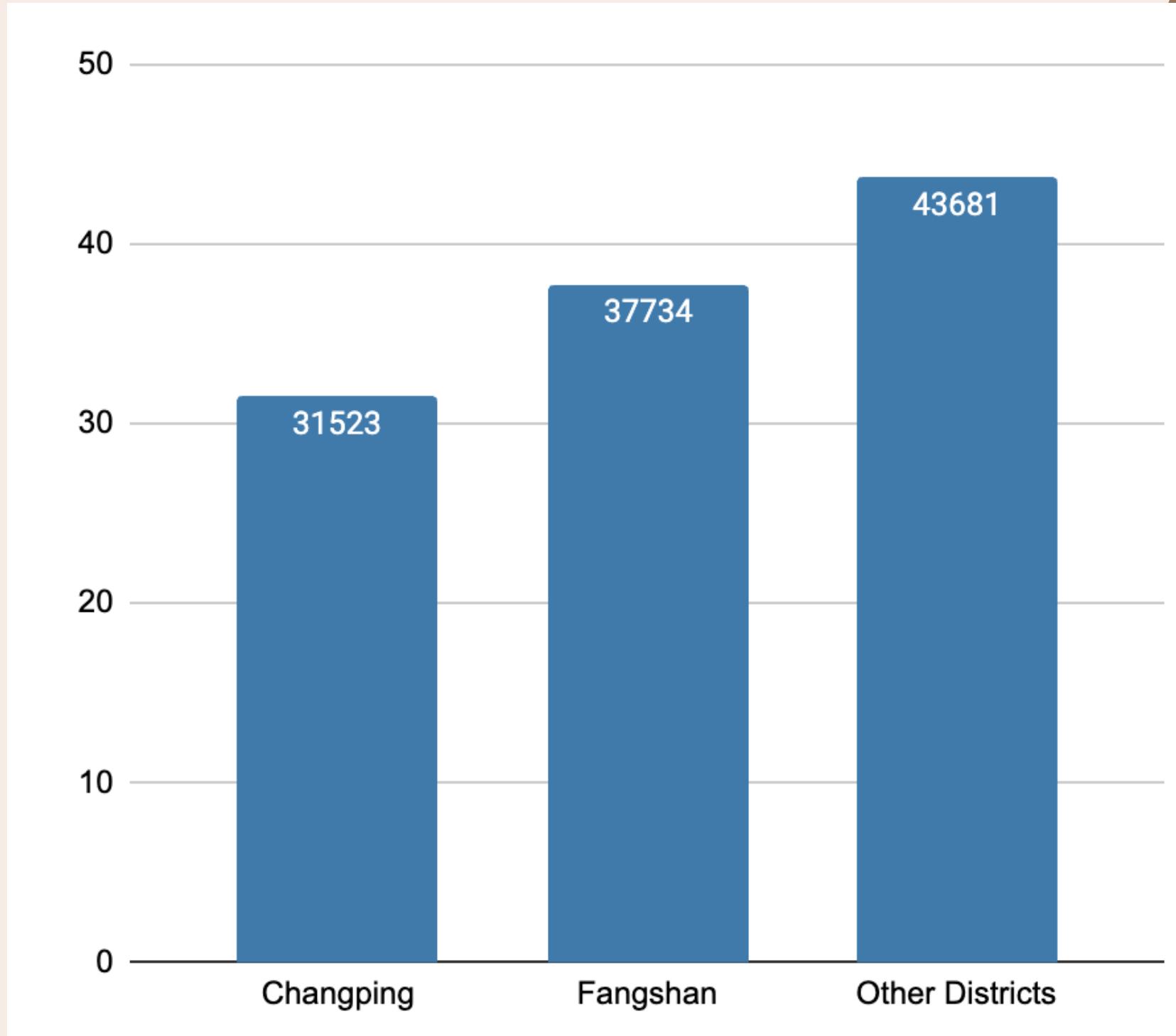
Housing near the **CITY  
CENTRE** are affected  
more.

More housing being  
bought in the **SUBURBS**  
in recent years,  
especially **Changping**  
and **Fangshan** district.

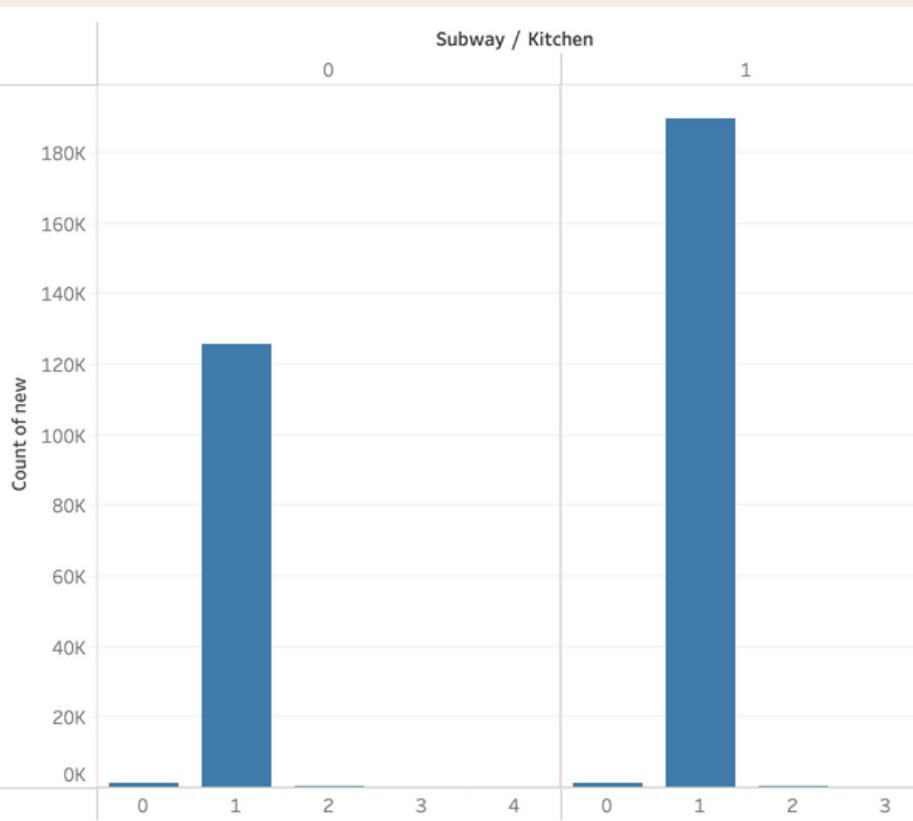
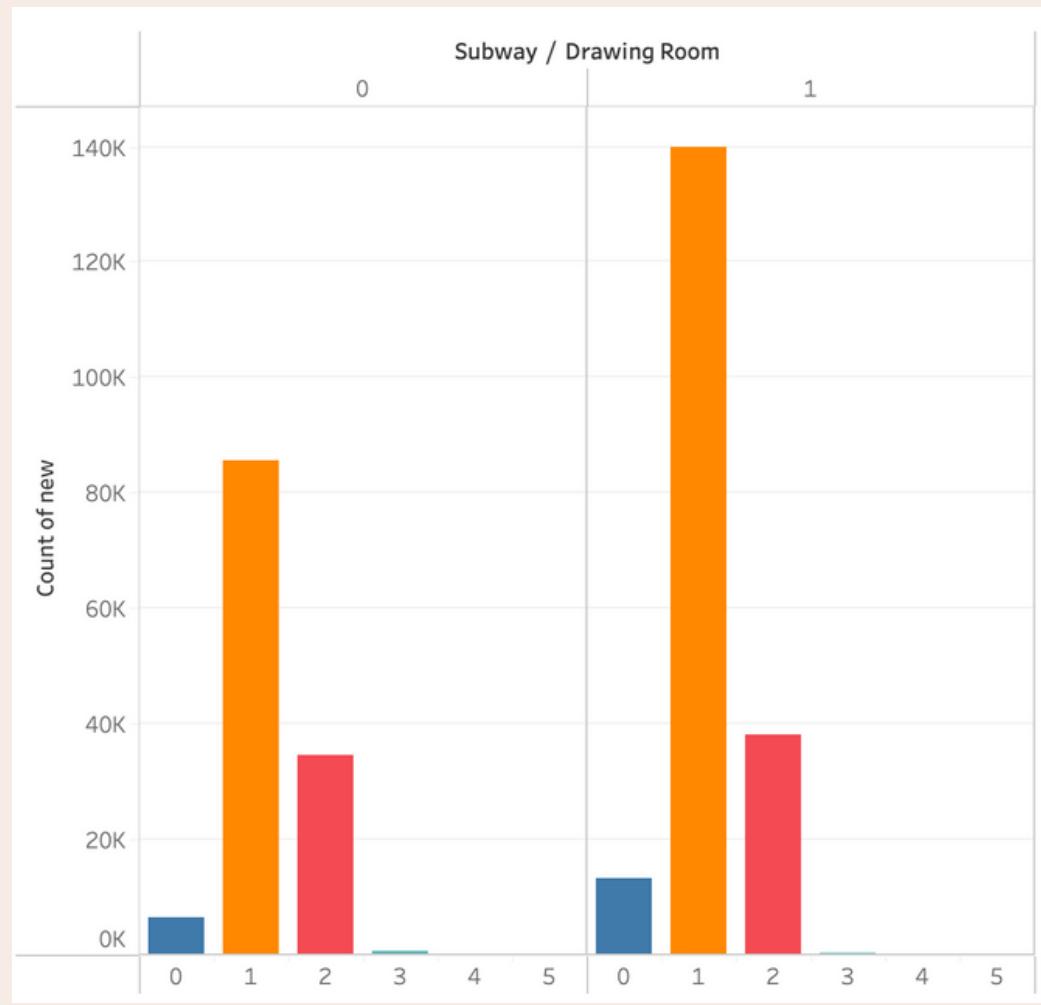
# What happened?



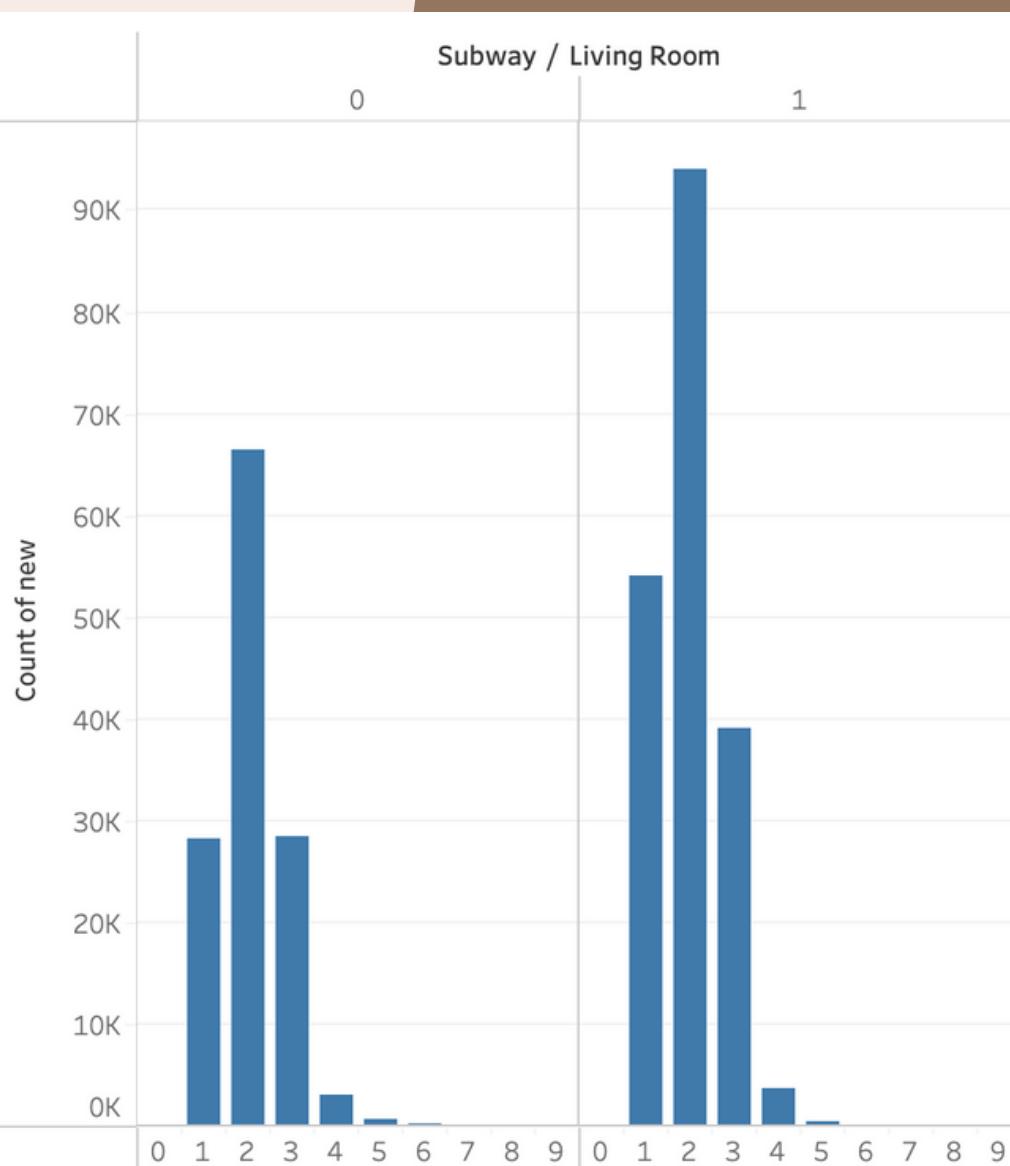
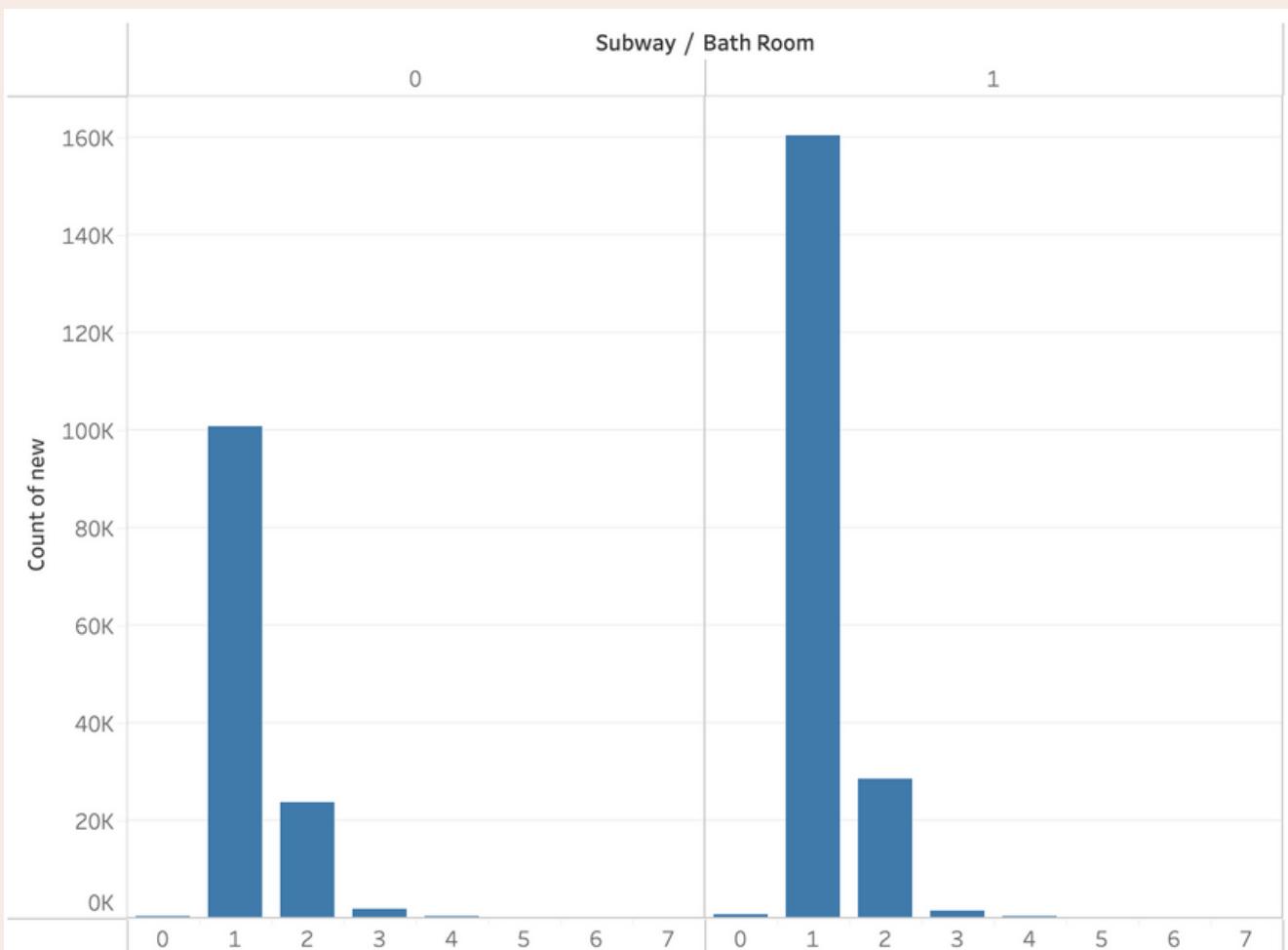
## Average price per sqm by region (estimated)



The **average price** of a unit  
in Changping and  
Fangshan Districts are  
**lower than average.**



Housing unit exhibits similar characteristics regardless of proximity to subway.



The most popular type of housing has **1-2 drawing rooms, 1-2 bathrooms, 1 kitchen, and 1-3 living rooms.**

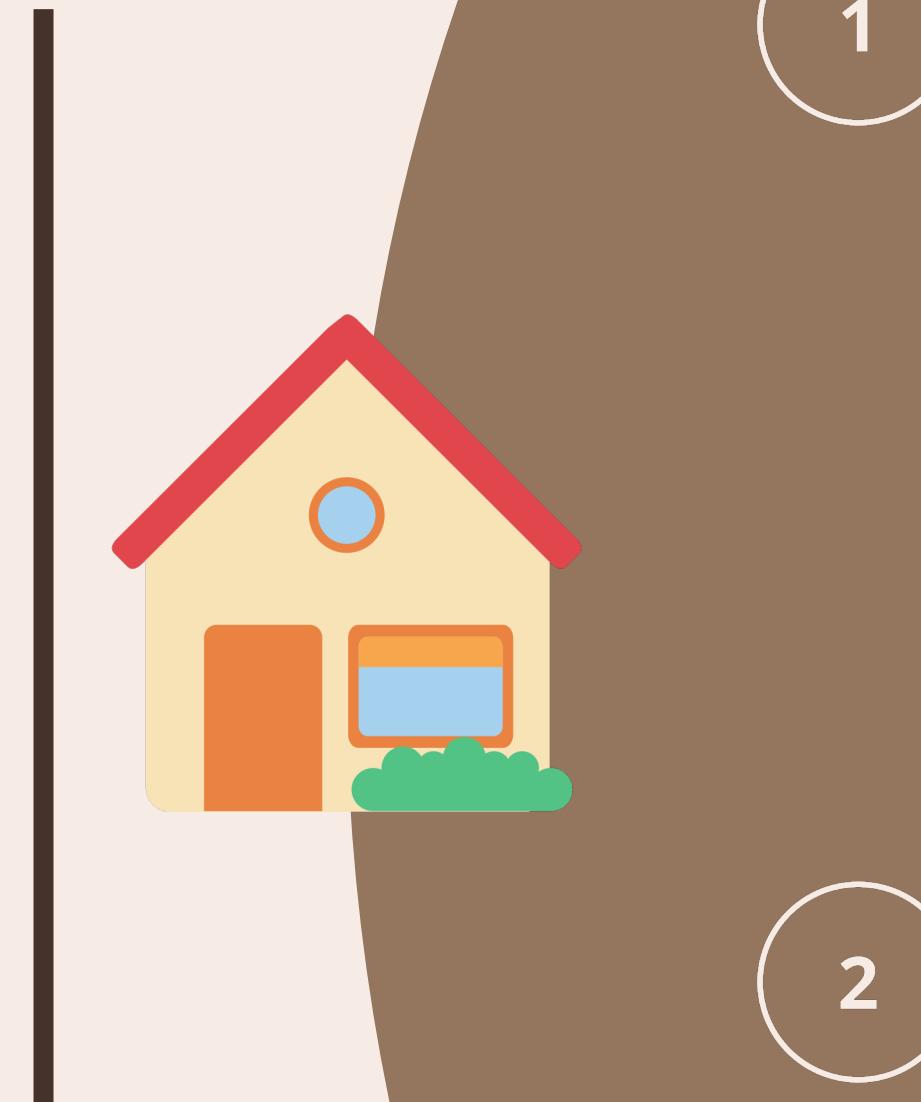
After checking the dataset, it was found that units in Changping and Fangshan also have these characteristics.



What can  
we draw  
from these  
insights?

## Recommendation

Look for properties  
in the suburbs,  
such as  
**Changping** and  
**Fangshan.**

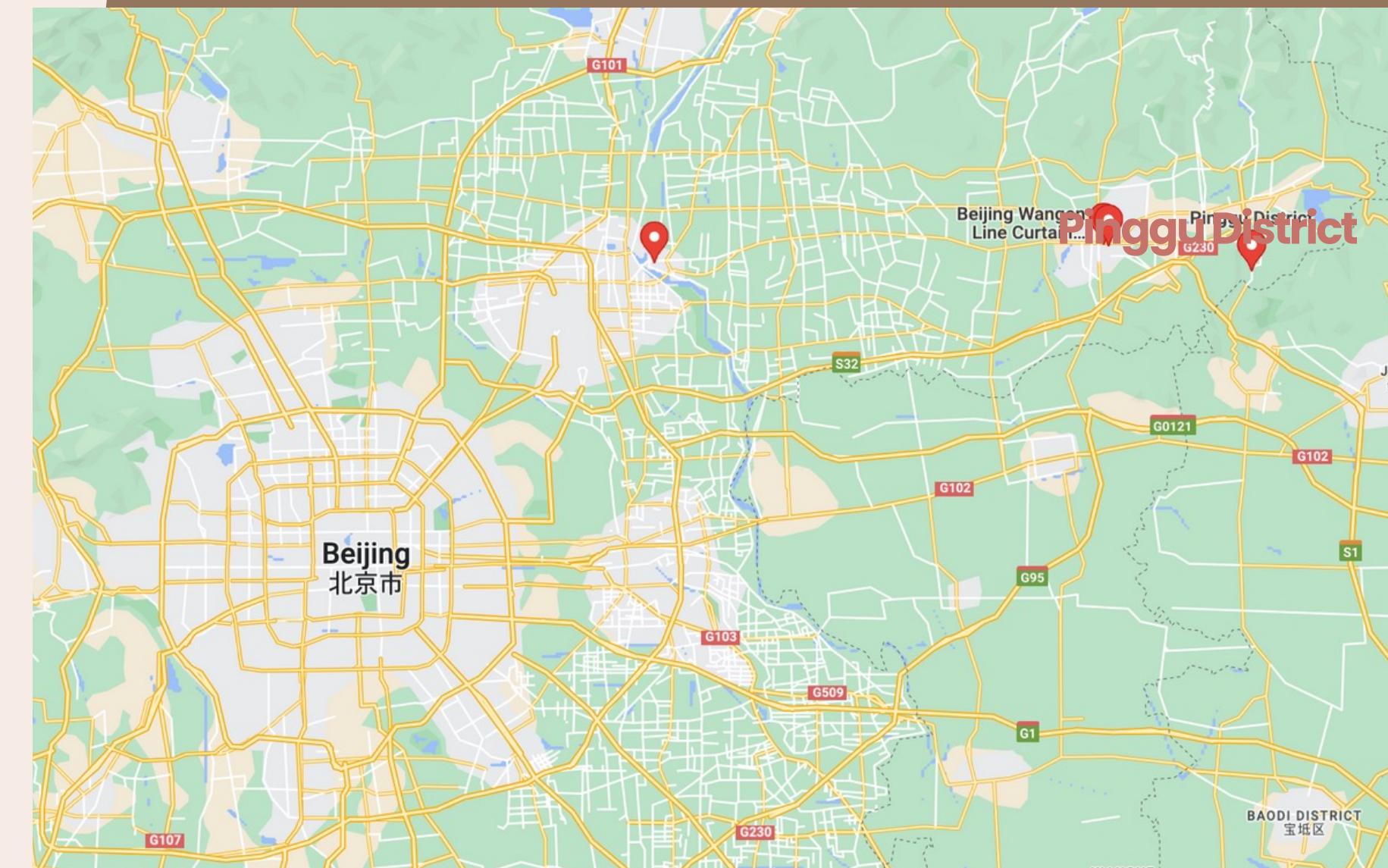


The properties are  
similar in build to  
those in the central  
district while having  
a lower price.

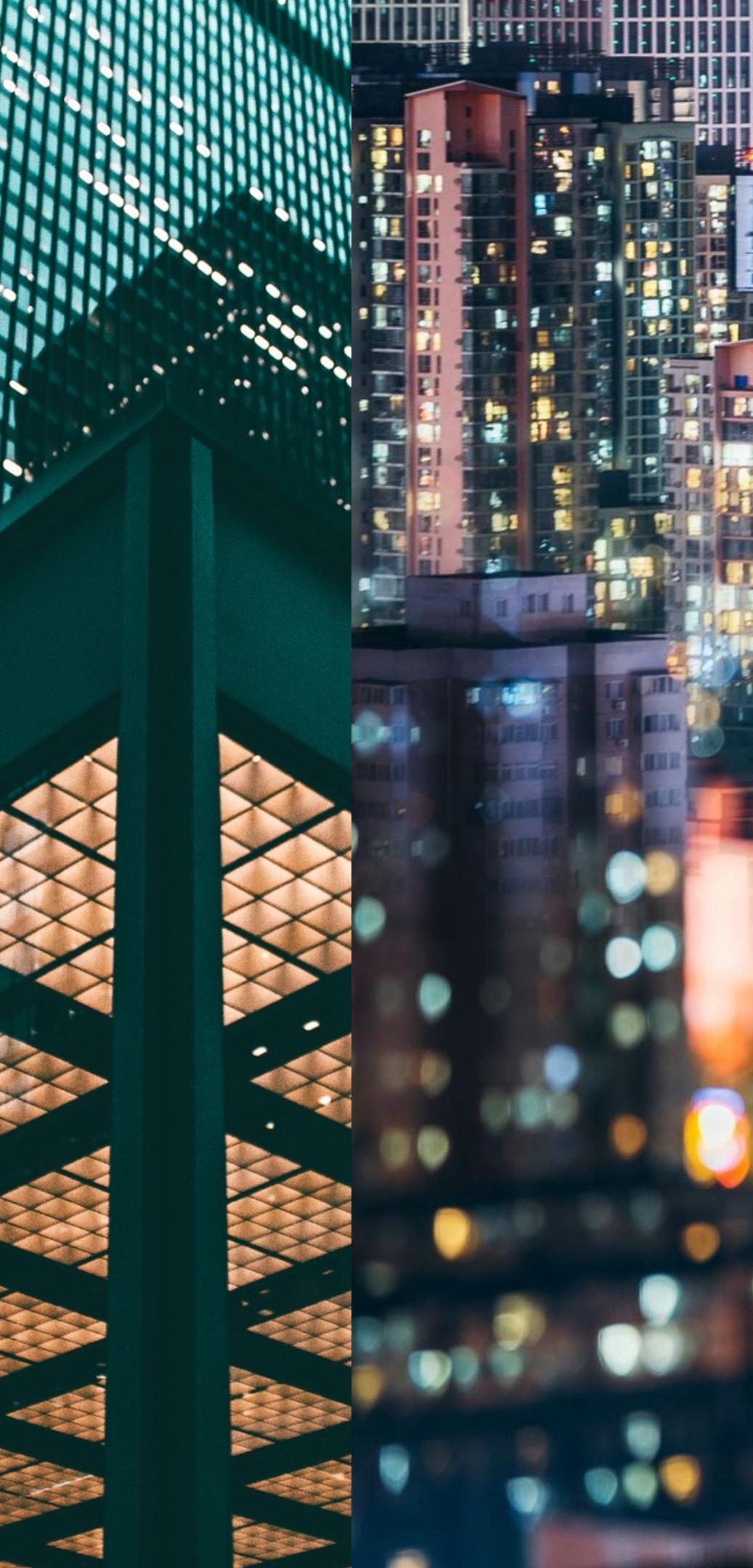
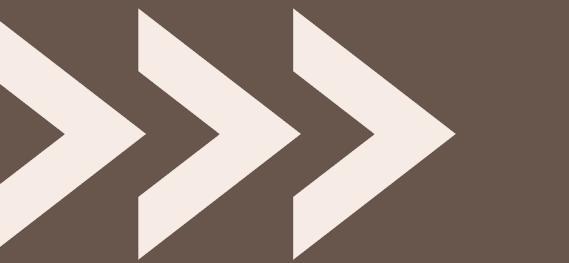
As these districts  
become more  
developed, their value  
will also increase.

## Future Expansions

**Line 22 (Pinggu Line)** which aims to connect Pinggu District to the Beijing Subway system. Planned to open in 2025.

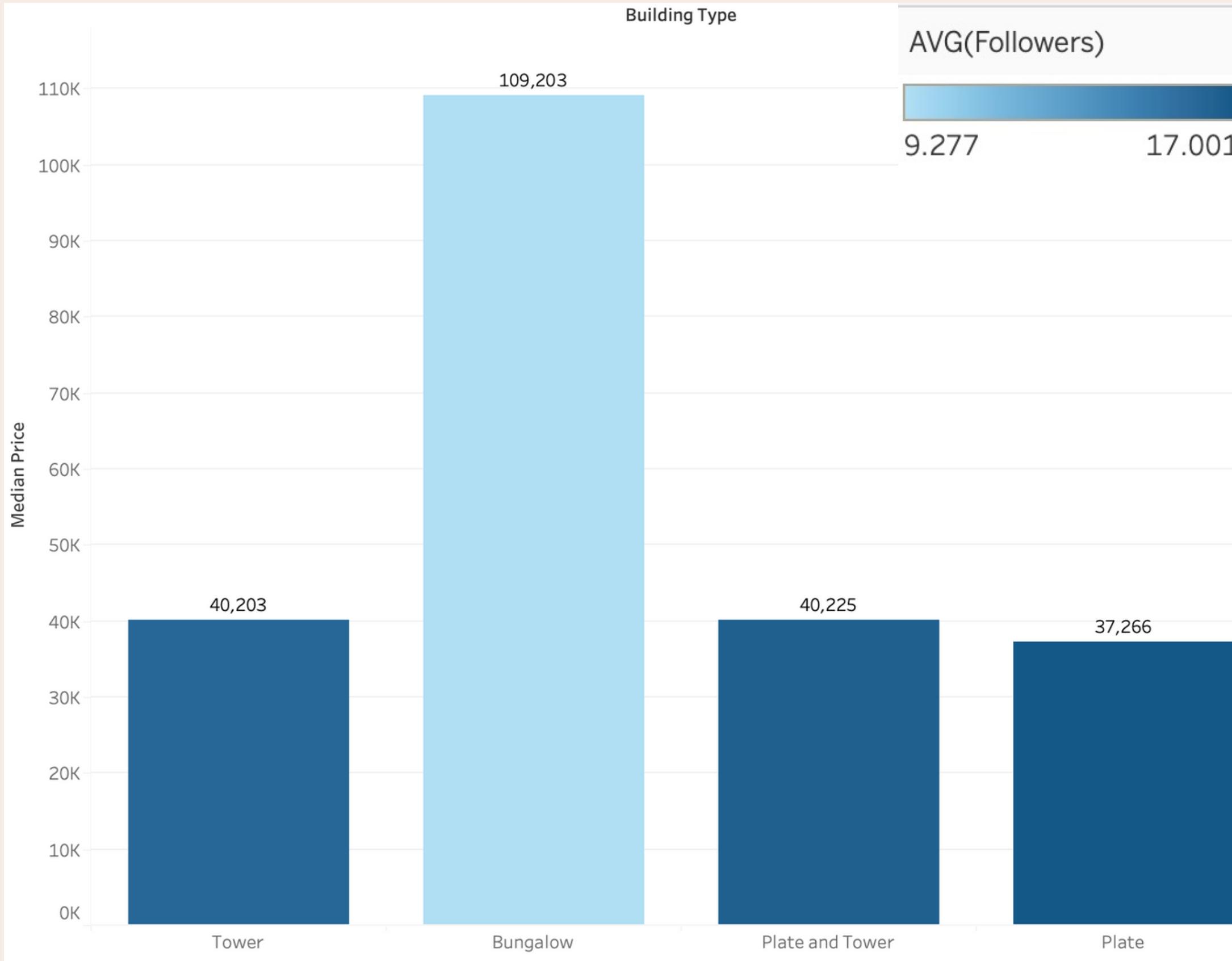


# Insight #3



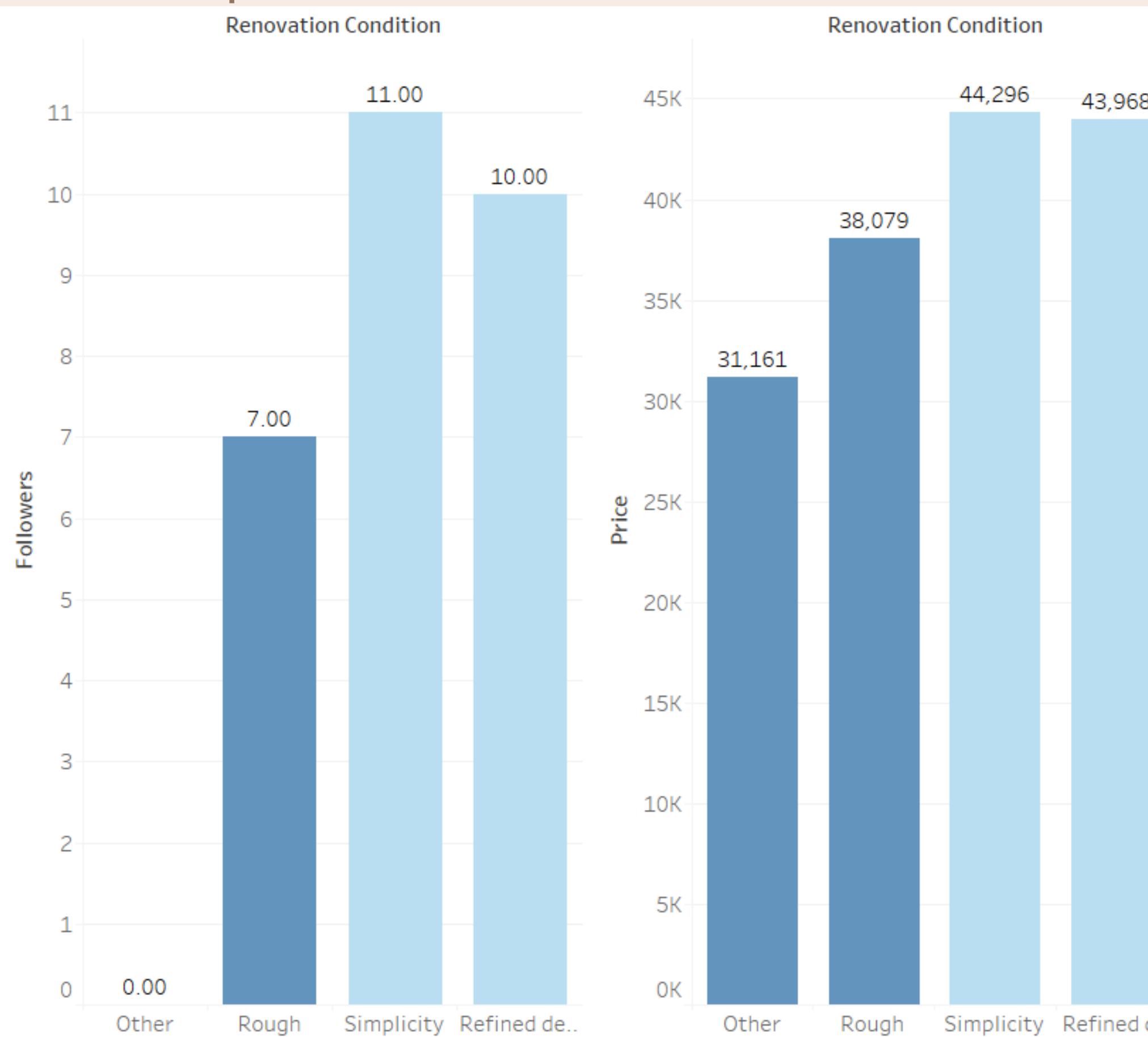
# Looking at the most popular building types

(price and follower distribution)



The **average followers** of a bungalow unit is **low** despite its high price

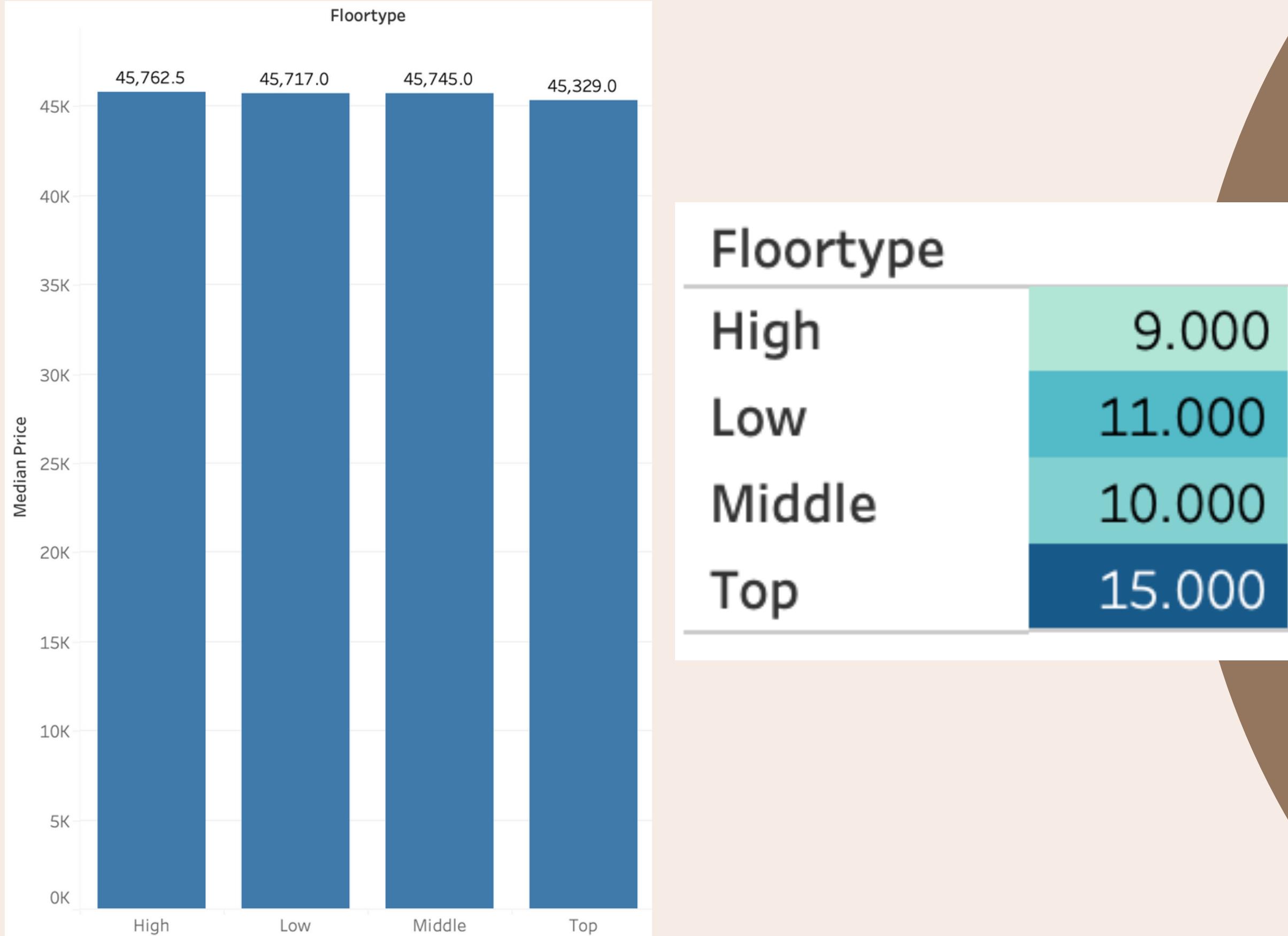
# Looking at the most popular renovation condition (price and follower distribution)



**Simplicity** and  
**refined decoration**  
renovation conditions are  
recommended

# Looking at the most popular floor types

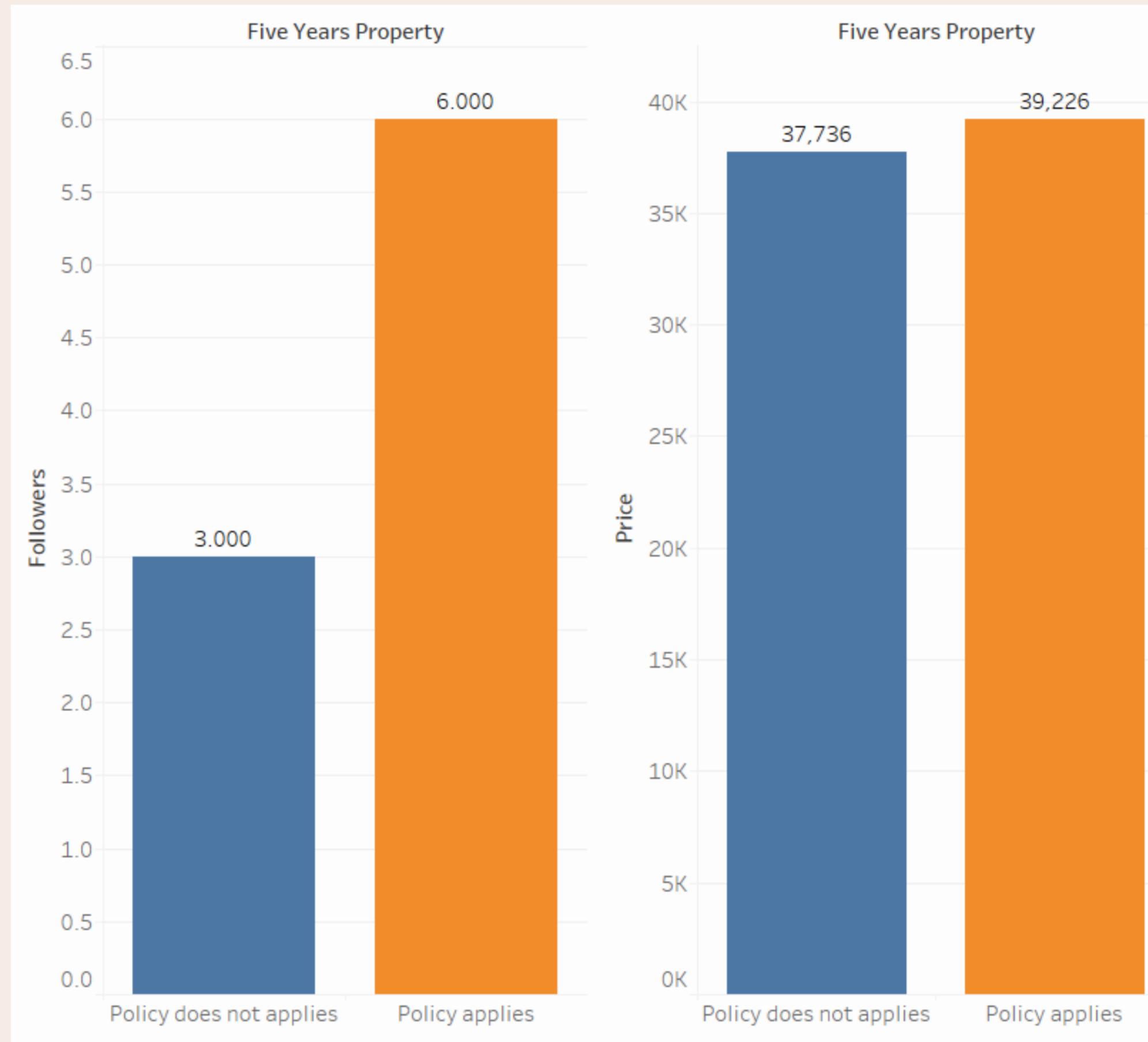
(price and follower distribution)



**Top floor**  
units are the most popular

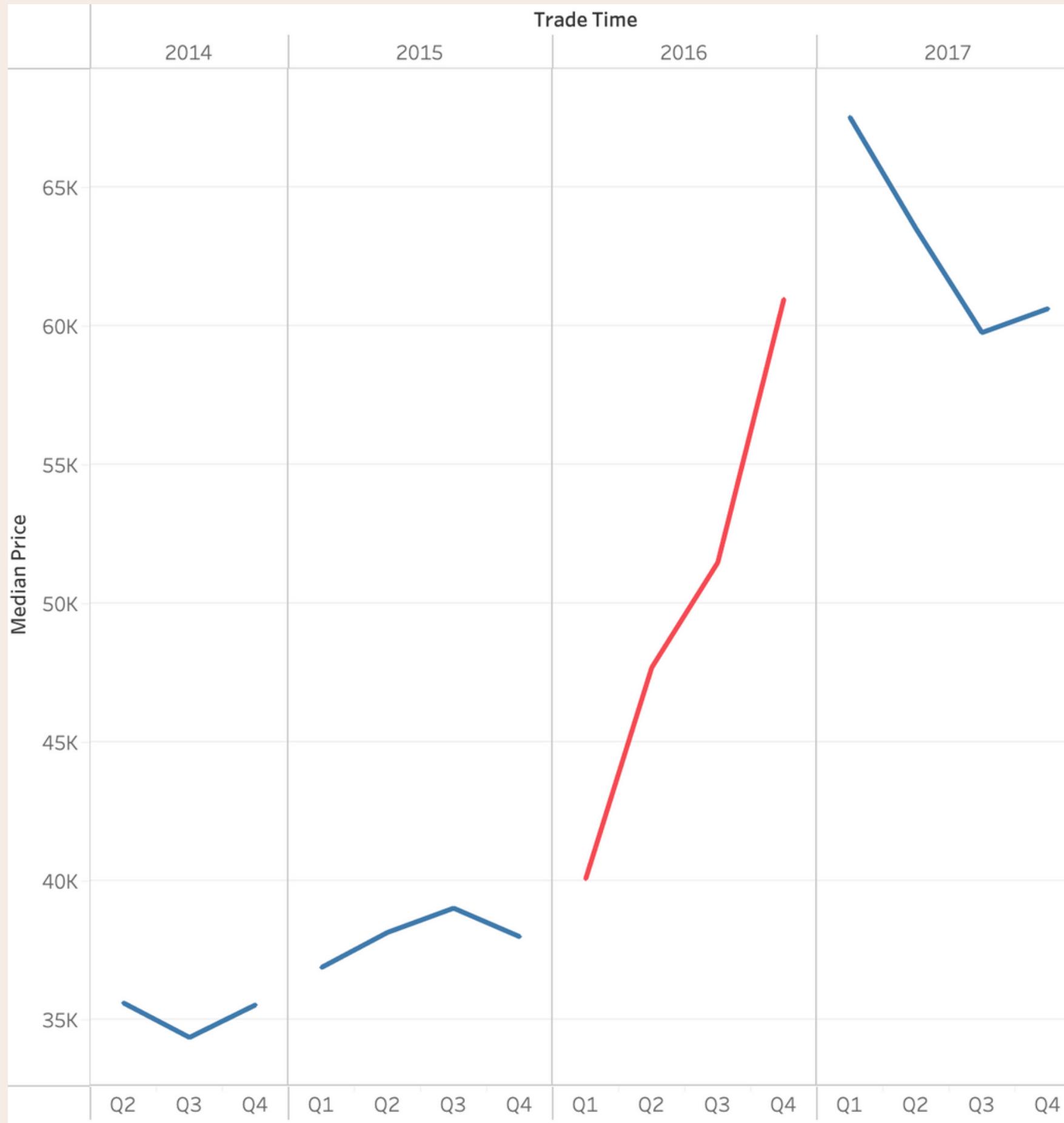
# Five Year Property Policy

## (price and follower distribution)



Higher followers and prices  
for properties **with this  
policy**

# Looking at the median price over time

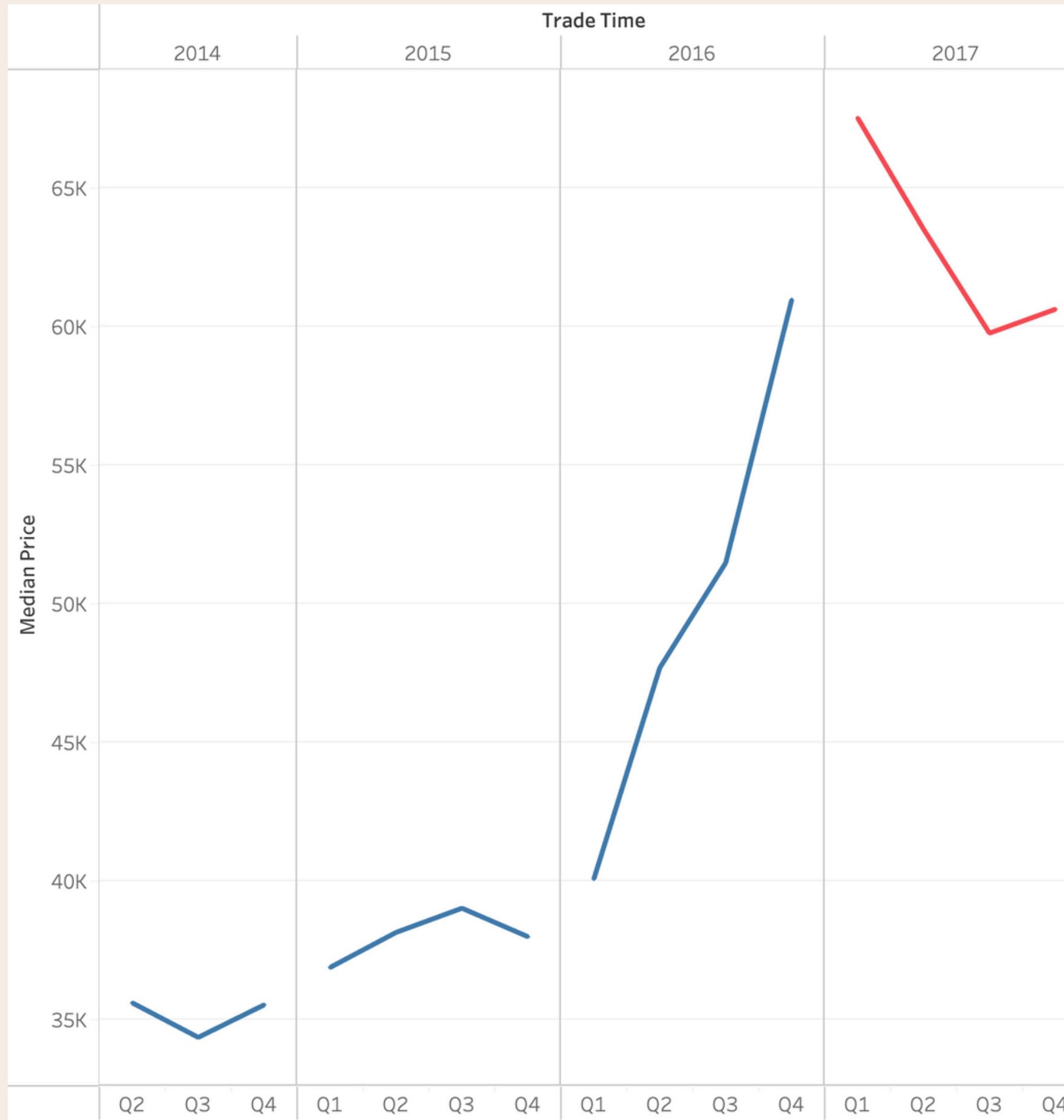


Median price of units  
**ROSE SHARPLY in 2016**

- Since start of 2016, government loosened monetary policies

(Chen, 2017)

# Looking at the median price over time



Median price of units  
**DROPPED** in **2017 Q1 to Q3**

- Starting mid-March, authorities in Beijing have rolled out more than 20 policies to cool the property market

(Daily Sun, 2018)

What can  
we draw  
from these  
insights?



# Recommendation

Look for properties with:

- **Simplicity/refined decoration renovations**
- **Top floor**
- **5 year policy applies**

**Avoid :**

- Bungalows

1

The properties have  
the features the  
market is interested in

2

These features also  
give high returns

# Recommendation

## Buy when:

- **1 quarter before** policies are **tightened** or **introduced**

## Sell when:

- **1 quarter after** policies are **loosened**

1

Be alert to catch property price fluctuations in the market

2

Maximises profit returns

# Summary

# What should you consider?

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Invest in properties built in  
**2000-2009** and **near subways**



Look for properties in the  
suburbs, such as  
**Changping and Fangshan.**

# What should you consider?

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Look for properties with:

- **Simplicity/refined decoration** renovations
- **Top** floor
- 5 year policy **applies**

**Avoid:** Bungalows

**Buy** when:

- 1 quarter **before** policies are **tightened** or **introduced**

**Sell** when:

- 1 quarter **after** policies are **loosened**



**Thank You!**

# References

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