**INSIGHTS AND RECOMMENDATIONS**

1. What factors have the strongest correlation with higher sale prices?

**Building Grade is a *very* strong indicator**

* Almost all expensive properties have Building Grade as 13 or 12, which is high. The top 10 most expensive homes all have a grade of 13 or 12, even if bedrooms/bathrooms vary slightly. The better the quality/grade of the home (materials, design, finish), the more expensive.

**Number of Bathrooms**

* High-priced homes often have 5+ bathrooms. Several top-priced homes have 6 to 7 bathrooms, even with 5 or 6 bedrooms. Bathrooms add value, possibly more than bedrooms once you cross a luxury threshold.

**Living Area**

* Homes above 7000 sq. ft of living space dominate the top tiers. For example: one home with 9290 sq. ft. has an average price of $8M+. Bigger is better—but only up to a point. More living area supports luxury. Higher square footage means more living space, more features, and more luxury appeal.

**Bedrooms are not a strong standalone factor**

* Some of the highest priced homes have just 4–6 bedrooms, while there are cheaper homes with 8–13 bedrooms too. It's not *how many* bedrooms, but *what kind* and the overall quality of the home. Bedrooms alone don’t drive price as much as grade, bathrooms, and total size.

**Lot Size**

* Some top-priced homes have very large lot sizes (e.g. 54220 sq. ft). But it's inconsistent—some have just average lot sizes (~7000–10000 sq. ft).

**Recommendations**

**Focus on Building Grade, Number of Bathrooms, and Number of Bedrooms**

* Higher building grades seem to correlate with higher sale prices. It's crucial to focus on properties with better grades when considering investments or market strategy. Homes with more bathrooms tend to command higher prices. Investors or sellers should prioritize adding extra bathrooms to increase value. Similar to bathrooms, homes with more bedrooms are associated with higher prices. This can be especially important for families or larger households, which could make these homes more desirable.

**Optimize for Larger Lot Sizes and Living Areas**

* The data shows that larger homes tend to have higher sale prices. Buyers are likely willing to pay more for homes that offer more space. Developers and investors should aim for properties that maximize living space. Larger lot sizes also show a correlation with higher prices. This is especially relevant in markets where outdoor space is a premium, and buyers are willing to pay more for expansive lots.

**Focus on Mid-Range Homes**

* There’s a noticeable concentration of homes around certain ranges for the number of bedrooms and bathrooms, particularly homes with 3-5 bedrooms and 2-3 bathrooms. Focusing on mid-range properties might cater to the largest segment of the market, offering high returns.

**Market Strategy: Pricing and Upselling**

* Based on the correlation with building grade and living area, it would be wise to upsell these features when marketing properties. Emphasize the quality of construction (building grade), space (living area), and the luxury of additional bathrooms and bedrooms. Price adjustments could be implemented to reflect these key factors, targeting high-value properties for those who seek better living conditions.

**Data-Driven Decisions for Homebuilders**

* Homebuilders should prioritize high-grade materials and features in their designs. This should be done without overpricing, as the market for higher-end homes might be limited. Focus on the market demand for properties with larger living areas and bedrooms/bathrooms, ensuring the right balance between luxury and affordability.

**Investment Strategy: Look for Areas with High Upside Potential**

* If there are homes with large square footage or bathrooms that are priced lower than expected, they could offer opportunities for investment by making small improvements or renovations (e.g., adding a bathroom or increasing square footage). Consider investing in homes that are priced below market value due to underutilization of space or features.

1. How do home prices vary by property type and zip code?

**Property Type and Price Trends:**

* Single Family Homes: These consistently have higher average prices than townhouses and multiplexes. For instance, in zip code 98039, the average sale price for a Single Family Home is approximately $2,154,126, which is significantly higher than the average prices for townhouses and multiplexes in the same region.
* Multiplexes: These tend to have lower average sale prices, such as in zip code 98166, where the average price is $391,266. This could reflect their nature of being more affordable, multi-unit properties compared to single-family homes.
* Townhouses: In many cases, townhouses have a moderate price range between single-family homes and multiplexes. For instance, in zip code 98053, the average price for a townhouse is $473,267, which is higher than multiplexes but significantly lower than single-family homes

**Zip Code Variations in Property Prices:**

* High-Cost Areas: Some zip codes consistently show higher property prices for single-family homes, such as 98039 (average $2,154,126), 98004 (average $1,470,898), and 98040 (average $1,352,090). These are affluent areas, likely with larger properties or prime locations, such as in proximity to city centres, parks, or desirable amenities.
* Affordable Areas: Areas like 98032 (average $293,896) and 98198 (average $341,484) show more affordable home prices, potentially indicating suburban or less central areas where property values are lower.

**Market Distribution of Property Types**:

* Single Family Homes dominate many zip codes with a higher number of sales and prices. They are the most common type of property in the dataset, especially in affluent areas. Multiplexes and Townhouses are relatively fewer in number, suggesting they might cater to specific market segments or are less commonly available in high-demand areas.

**Recommendations:**

**Focus on High-End Single-Family Homes for Premium Markets:**

* Given the higher prices associated with single-family homes in zip codes like 98039 and 98004, real estate developers or investors looking for premium offerings should prioritize single-family homes in these areas. These properties could attract affluent buyers willing to invest in larger, more luxurious homes.
* For luxury property investors, zip codes like 98039 (with an average price of $2,154,126) and 98004 (with an average price of $1,470,898) are key markets for potential investment. These locations likely have access to exclusive amenities, schools, and services, which justify the premium pricing.

**Affordable Housing Focus in Suburban Areas:**

* Areas like **98032** (average $293,896) and **98198** (average $341,484) provide opportunities to cater to buyers or renters in the more affordable housing segment. Investors or developers could focus on providing single-family homes or townhouses in these regions. Multiplexes or smaller properties can also be considered for these areas to offer more affordable multi-unit options for larger families or those looking for rental opportunities.

**Consider Mixed-Use Developments with Townhouses and Multiplexes:**

* Developers could focus on mixed-use developments where they build both townhouses and multiplexes. Townhouses could serve as a mid-tier product appealing to young professionals or small families, while multiplexes could cater to investors or lower-income families. This strategy could diversify the real estate portfolio and capture different market segments.

**Evaluate Price vs. Number of Properties Sold:**

* In areas where single-family homes are priced higher but have fewer transactions (such as in 98039 or 98004), developers may consider smaller-scale developments or renovations to maximize the market potential.
* In contrast, areas like 98092 (with a larger number of single-family homes and relatively lower prices) could be ideal for bulk residential developments, possibly catering to a growing suburban population.

**Invest in Emerging Suburban Markets:**

* Zip codes like **98198** (average $341,484) and **98032** (average $293,896) might offer growth opportunities for those looking for emerging suburban markets where property prices are still affordable but may appreciate over time due to increased demand.
* Since these areas show relatively lower prices, it might be beneficial to target potential buyers or investors looking for more budget-friendly options.

**Explore Townhouses as a Cost-Effective Housing Solution in Suburbs:**

* + Townhouses, such as those found in **98072** (average price **$464,830**) or **98056** (average price **$465,436**), offer an affordable option that could appeal to families or investors looking for lower-maintenance properties with better affordability than single-family homes.

1. How does inflation-adjusted pricing affect real estate trends?

**Inflation-Adjusted Price Trends:**

* The inflation-adjusted prices follow a relatively steady increase over the years. For example, the inflation-adjusted price in 2006 is $544,337 and increases to $612,229 in 2011, peaking in 2009 at $574,807 and $605,914 in 2010. However, there is a drop in inflation-adjusted price in 2014 and 2015, which aligns with the overall slowdown in real estate prices observed in those years.

**Nominal Price vs Inflation-Adjusted Price:**

* In 2006, the average sale price was $506,599, while the inflation-adjusted price was higher at $544,337. Over the years, the nominal price seems to fluctuate significantly, but the inflation-adjusted prices provide a more consistent upward trend, reflecting the increasing cost of homes after accounting for inflation.
* 2009-2011: Despite the nominal price falling, inflation-adjusted prices remain relatively high, indicating that the actual value of homes in these years was still increasing when adjusted for inflation.

**Drop in 2014 and 2015:**

* In 2014 and 2015, the average nominal price drops significantly, while inflation-adjusted prices are still higher than the nominal price. This could indicate a real estate correction or that the market is not keeping pace with inflation.

**Recommendations**

**Monitor Real Estate Market Cycles:**

* The data suggests that real estate prices are prone to fluctuations, with inflation-adjusted prices being a more reliable indicator of overall value. If you're looking to invest, consider inflation-adjusted trends to understand the true cost/value of properties over time, rather than just looking at nominal prices.

**Adjust Pricing Strategies for Inflation:**

* In markets where inflation is high or fluctuating, adjusting property prices based on inflation ensures that you are accurately reflecting the value of real estate over time. Real estate developers and agents should consider adjusting pricing models to account for inflation to maintain profitability and prevent pricing mistakes during periods of inflation.

**Forecasting Market Trends:**

* The relationship between nominal and inflation-adjusted prices can help forecast future trends, as inflation adjustments offer a clearer picture of true market performance. Use inflation-adjusted data when forecasting market performance for real estate investments, as it offers a more accurate reflection of long-term trends.

**Focus on Real Estate in Stagnant/Declining Years:**

* In 2009-2011, despite nominal prices falling, inflation-adjusted prices were relatively high. This could suggest a stronger market foundation during that period, especially for long-term investors. In markets where inflation-adjusted prices are higher than nominal prices, consider targeting properties that could be undervalued but have strong long-term potential.

1. Which locations have the highest proportion of new vs. old constructions, and do new homes sell for more?

**Proportion of New vs. Old Constructions**:

* Zip codes like **98053**, **98075**, **98074**, and **98092** have relatively higher numbers of new constructions compared to older homes. This indicates an ongoing development and newer neighbourhoods with potentially higher demand for new builds.
* Zip codes like **98118**, **98002**, and **98177** show a high count of old homes relative to new constructions, indicating established neighbourhoods with fewer new developments or a preference for older homes.

**New vs. Old Home Pricing**:

* **Higher Prices for New Homes**:
  + In many zip codes, new homes tend to sell for significantly more than old homes. For instance:
    - 98075: New homes average $989,624, while old homes are priced at $797,489.
    - 98052: New homes average $763,289, while old homes are priced at $617,573.
  + This indicates that buyers are willing to pay a premium for new constructions, likely due to factors such as modern amenities, updated designs, and longer expected lifespans.

**Zip Codes with the Most Expensive Homes**:

* 98004 stands out with a high average sale price for new homes ($2,226,969) compared to old homes ($1,411,204), suggesting this is a high-demand area with wealthy buyers. 98075, 98074, and 98039 also have very high prices, with 98075 showing strong sales of new homes. On the other hand, areas like 98002, 98168, and 98177 show a much lower average price for both new and old homes, indicating more affordable or less-desirable areas.

**Low or No New Constructions**:

* Some zip codes have no new constructions, such as **98113**, **98166**, **98043**, and **98050**. These might be either older, already established areas with little new development or regions where real estate construction is limited by zoning or other factors.
* **98008**: A zip code with very few new constructions (3) but an extraordinarily high price for new homes (**$1,061,653**), suggesting this could be an area with high demand for premium properties despite low new home construction.

**Recommendations:**

**Target Areas with High Proportions of New Constructions for Investment**:

* If you're considering real estate investments, target zip codes like **98053**, **98075**, and **98074**, where new constructions are frequent and the homes command high prices. These areas show strong demand for newer homes.

**Focus on Pricing Strategies**:

* For real estate agents or developers, it is evident that new homes fetch a premium in most zip codes. Consider adjusting pricing strategies based on the neighbourhood type: If focusing on new construction, emphasize modern amenities and design features that justify higher prices. For older homes, focus on renovations or improvements that can increase their value closer to new construction pricing.

**Develop in High-Demand, High-Priced Areas**:

* + **98004**, **98075**, and **98039** are prime locations for developers looking to build new luxury homes, as these areas consistently show high sale prices.

**Reassess Developments in Low Construction Areas**:

* Zip codes like **98113**, **98043**, and **98050** have no new construction and may be either saturated or facing restrictions that limit development. Developers should consider looking into potential zoning changes or opportunities to introduce new builds in these areas. Otherwise, focus on areas with greater development potential.

**Focus on Affordable Housing in Lower-Priced Areas**:

* For first-time homebuyers or investors targeting more affordable housing, zip codes like **98002**, **98168**, and **98177** may offer opportunities to purchase at a lower price point. However, these areas may also have fewer new constructions and require more significant investments in renovation or property upgrades to improve resale value.