

**Revisions to the
MLS[®] Home Price
Index (HPI)
Methodology**

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Methodology

Why is the MLS® HPI methodology being revised?

Certain aspects of the MLS® HPI Methodology have been found in need of an update to ensure the MLS® HPI remains robust over time and provides the most accurate and relevant data to REALTORS®.

What changes are being implemented?

1. Shorten the period from which benchmark attributes are derived.
2. Calculate benchmark prices based on current benchmark attributes instead of linking benchmark prices to historical benchmark attributes.

How will these changes improve the MLS® HPI?

1. Benchmark attributes are currently determined by using all sales data from January 2005 until the time of a board's MLS® HPI development or most recent annual review. When the MLS® HPI first launched in 2012 there were only a few years worth of sales, but over time there has been a large accumulation of data. In an extreme hypothetical example, members would have to wait until the year 2039 before new sales data in a neighbourhood outweighs historical data to see a change in attributes. This presents a significant challenge to users of MLS® HPI data who will see these attributes grow outdated over time (see Appendix A for example). The appropriate time span for calculating benchmark attributes has been reviewed and determined to be five years. This shorter window captures more recent changes in the resale housing stock. The span of this window will remain constant but will move forward through time with each annual review.
2. Because the MLS® HPI is a constant quality measure of prices, and benchmark attributes change over time, a process called linking is used that provides an apples-to-apples comparison through history. When new benchmark attributes are determined with each annual review, the new set of benchmark prices must be linked to the previous year to ensure they remain comparable over time. However, over a larger span of time this approach will cause a divergence between calculated benchmark prices and actual prices REALTORS® observe in their local areas (see Appendix B for example). An improved approach at each annual review is to recalculate the entire historical set of benchmark prices based on current benchmark attributes. Under the original methodology the MLS® HPI answers the question, "What would a typical home from 10-15 years ago be worth today?" while under the new approach it answers the question, "What would a modern typical home be worth today?" The latter is deemed to be the more important of the two for REALTOR® members.

What impact will this have on boards' MLS® HPI data?

Changes to the methodology will be implemented in sync with changes arising from the annual review to avoid multiple revisions throughout the year. New data under these changes (and those from the annual review) will come into effect on June 1, 2022, with the release of May 2022 data. Because these changes are being implemented along with the work from the annual review, there will be no additional cost to boards for these upgrades.

Appendix A – Attributes are not robust under current methodology

In the example below we start with a hypothetical scenario where none of the two-storey single-family home sales in a neighbourhood have a finished basement from the beginning of 2005 (the starting point of the MLS® HPI) through the end of 2019.

Based on the current methodology, the benchmark attribute for the presence of a finished basement would be “No”.

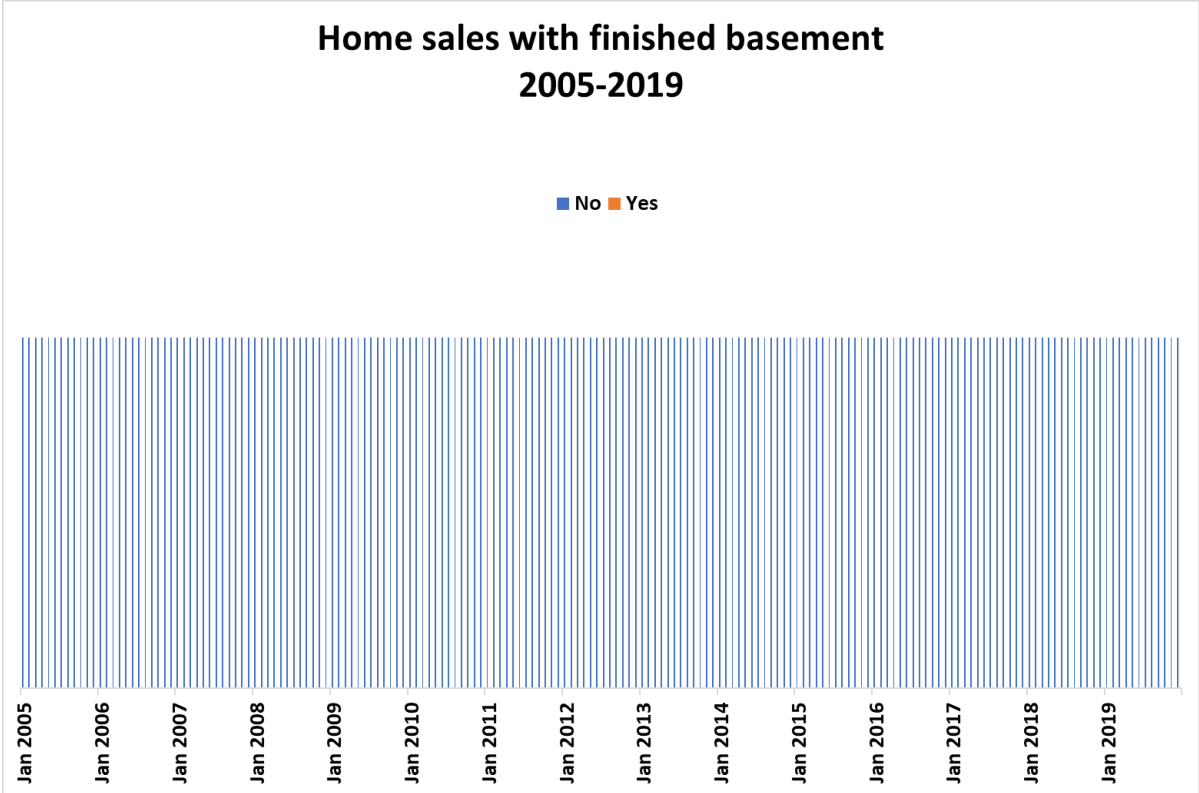


Figure 1 – There are no homes sold with a finished basement in the neighbourhood

The neighbourhood undergoes a rapid transition where many homeowners are now deciding to have their basements renovated and finished. From the beginning of 2020 through the end of 2024 there are multiple sold listings appearing on the market with a finished basement.

Under the current methodology the benchmark attribute for a finished basement remains “No” since most home sales in the entire time span of 2005 to 2024 have an unfinished basement.

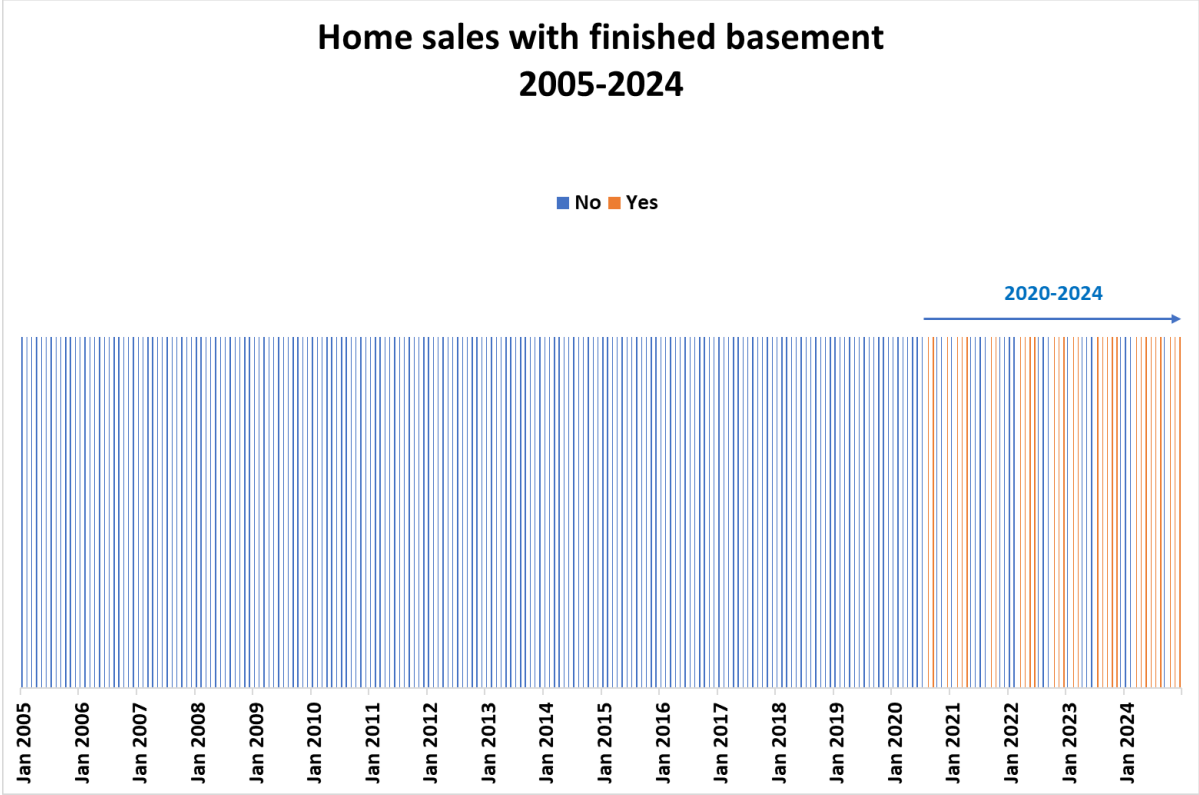


Figure 2 – Some homes sold with finished basement begin to appear

By the time 2025 begins, all two-storey single-family homes in this neighbourhood have a finished basement. Over the next five years through the end of 2029 all two-storey single-family sold listings have a finished basement.

Under the current methodology, as of the end of 2029 the attribute for a finished basement for two-storey single-family homes in this neighbourhood will still be “No”, since the methodology considers all sales back to 2005 and at this point there are still more home sales without a finished basement than there are with a finished basement.

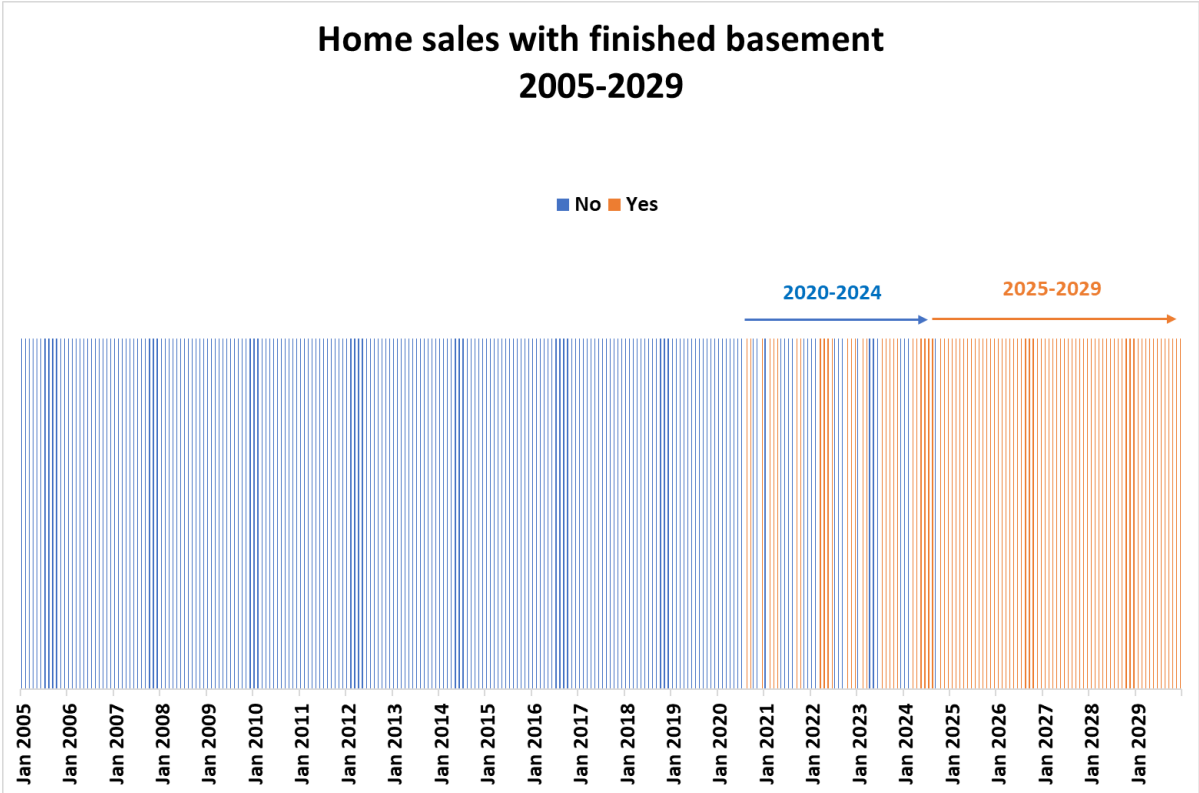


Figure 3 – Beginning in 2025 all homes sold have a finished basement

However, even though there has been a full five years of nothing but two-storey home sales with finished basements, under the current methodology the attribute for basement finish will still be “No”. The volume of historical sales without a finished basement still outweighs the volume of sales with a finished basement. This presents an issue to the REALTOR® who will note that although every single two-storey single-family home in their neighbourhood has a finished basement, the benchmark (or “typical”) two-storey home in the MLS® HPI does not. At this point the benchmark attribute is detached from reality.

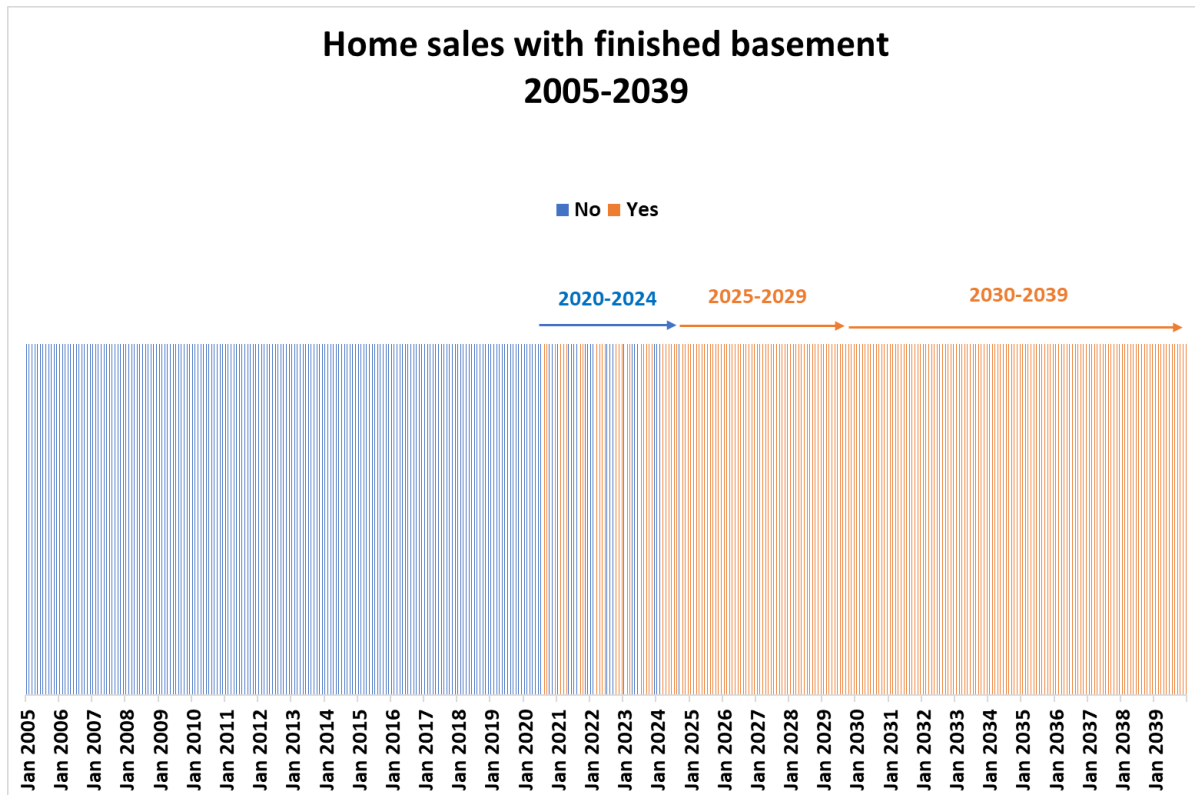


Figure 4 – Length of time it will take for the benchmark attribute for finished basement to change

If the current methodology is left in place when the annual review for 2039 is released in early 2040, there will finally be enough sales data where sold listings with a finished basement will outweigh historical sales data where sold listings had an unfinished basement. This means that even though the “typical” two-storey home in this neighbourhood would have had a finished basement since sometime around 2025, REALTORS® would have to wait another 15 years to see this change reflected in the MLS® HPI.

Under the new methodology, in this hypothetical example the attribute for finished basements would have changed from “No” to “Yes” in 2025 based on the new window of five years.

Appendix B – Linking data can lead to a divergence between calculated prices and reality

In another hypothetical example we will consider the long-term effects of linking on MLS® HPI benchmark price data.

Linking is a process used to ensure MLS® HPI data remains comparable over time (apples-to-apples). This is the same concept used by Statistics Canada in their Consumer Price Index (CPI). Just as the basket of goods and services in the CPI changes through time, so do the attributes of homes sold across MLS® Systems.

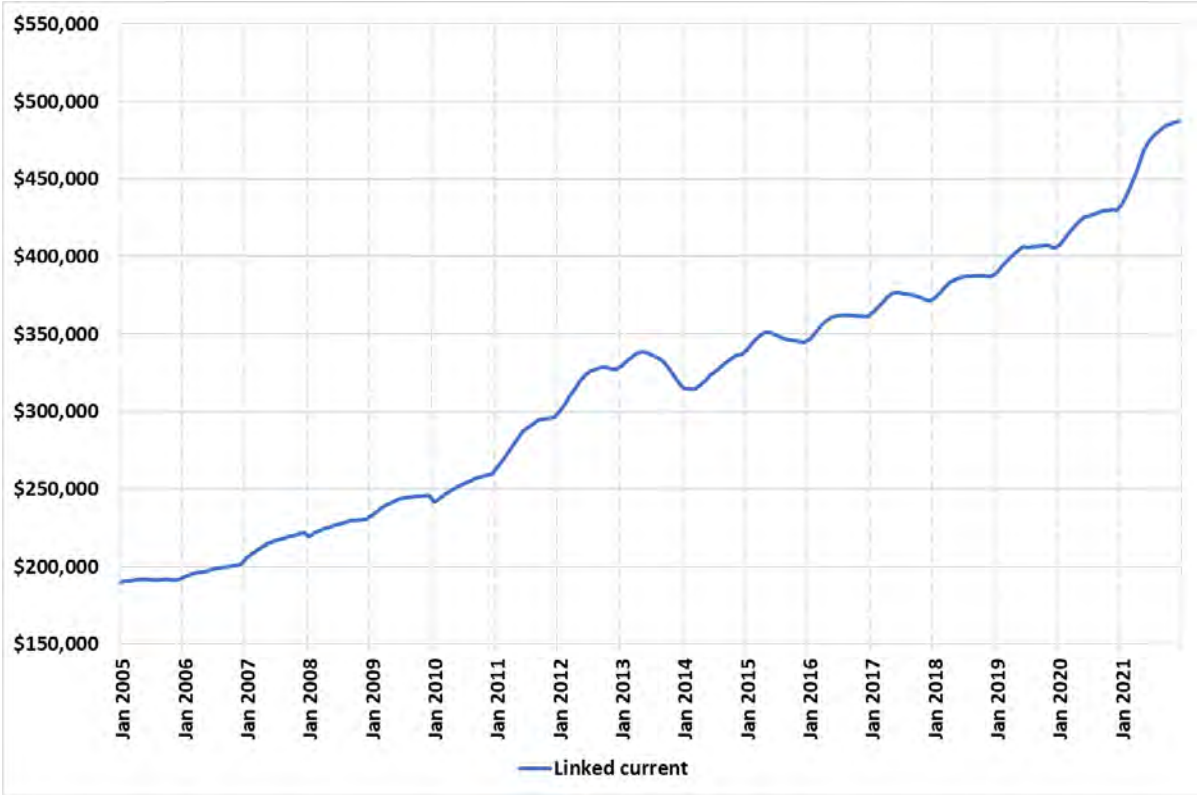


Figure 5 – Existing benchmark prices

Under this hypothetical example, although benchmark prices are slightly higher in 2022 without linking due to a new set of benchmark attributes, the benchmark prices in 2022 are linked to historical values from the end of 2021, which are themselves linked to historical values from the end of 2020, and so on.

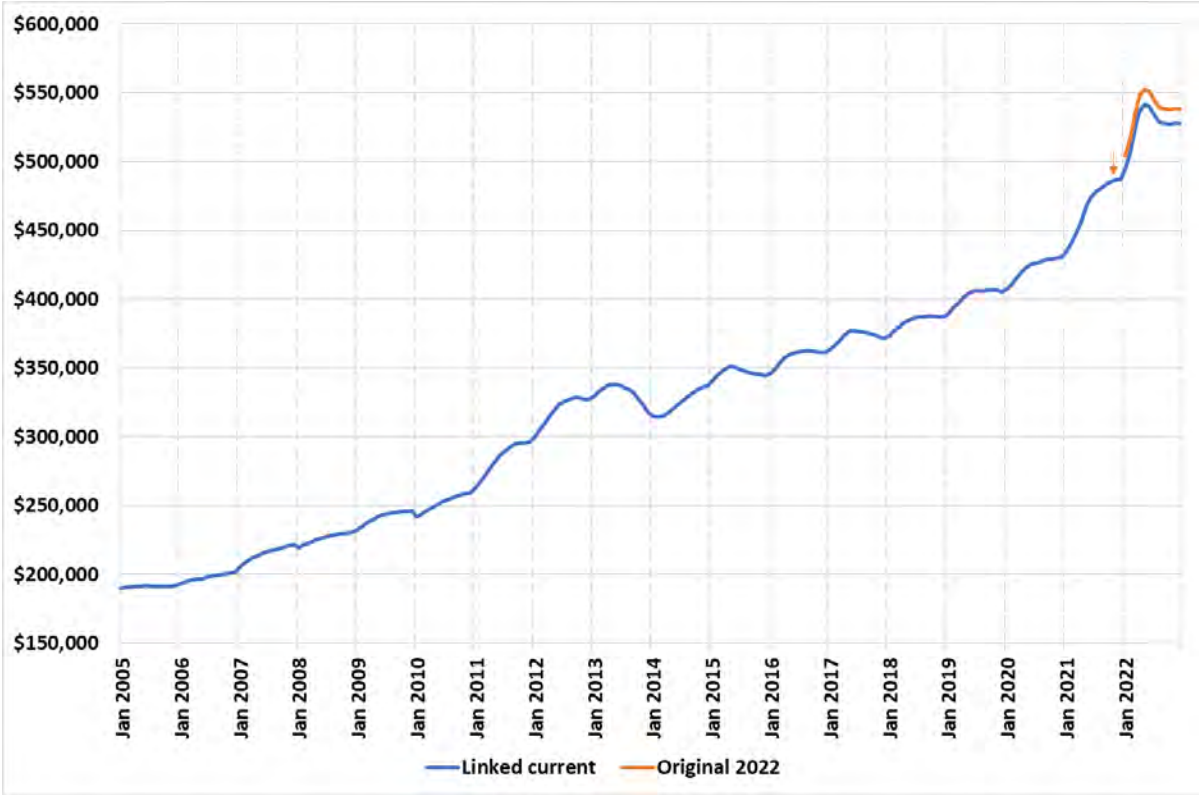


Figure 6 – New benchmark prices in 2022 will be linked to historical values to ensure comparability

Moving forward through time, our hypothetical example shows pre- and post-linking benchmark prices. Each set of new benchmark attributes arising from each new annual review results in increased price values, and the process of linking creates a growing divergence between what benchmark prices would have been under their current benchmark attributes and what they ended up being under the current methodology of historical linking.

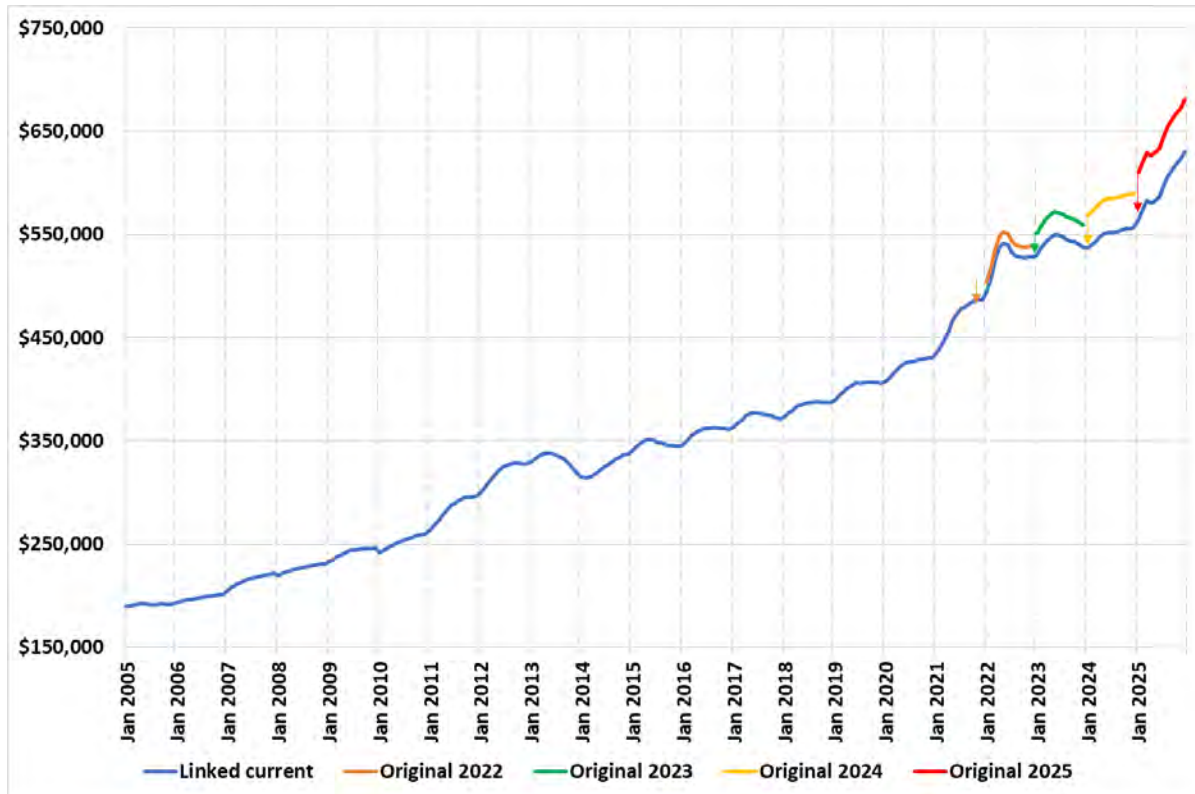


Figure 7 – A divergence between original and linked values emerges over time

An alternative approach to the methodology currently in place is to link historical benchmark prices to current benchmark attributes rather than the other way around.

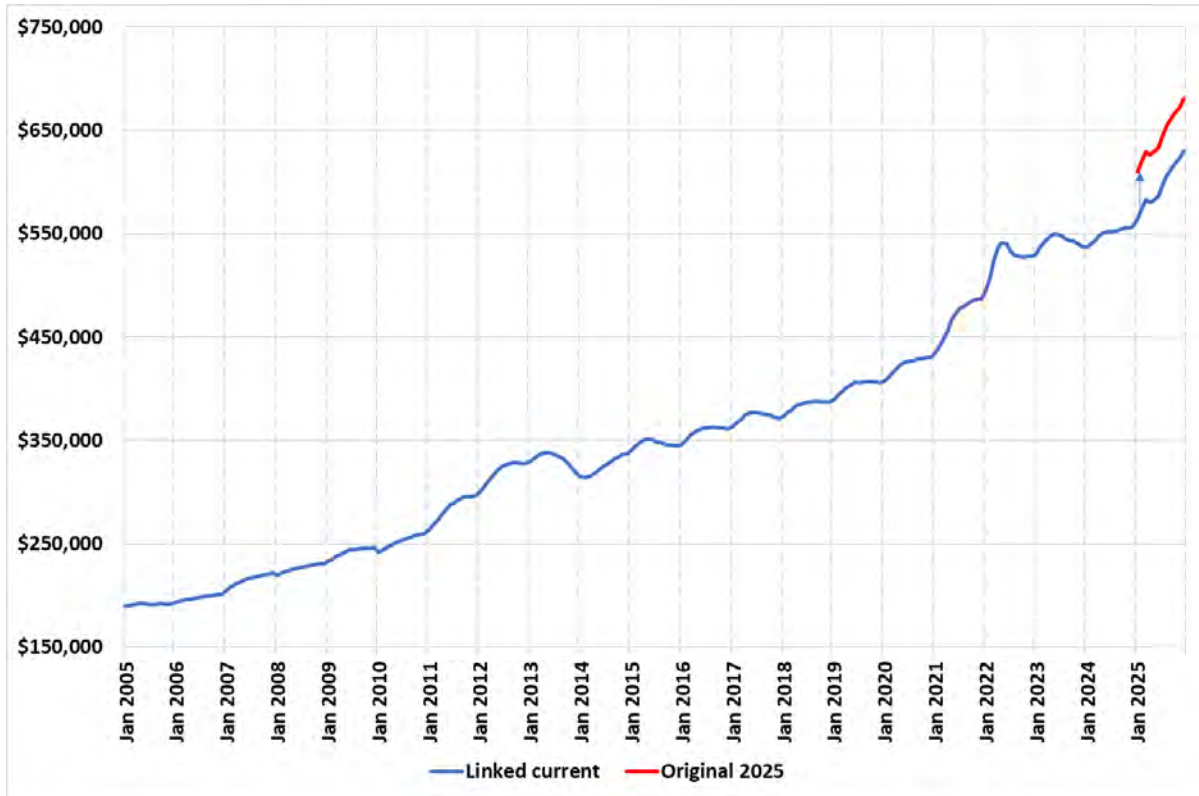


Figure 8 – New methodology proposes to link historical values to current prices

Instead of continuing to link future benchmark prices by adjusting their values to match the historical definition of a benchmark (or “typical”) home, historical values would be adjusted to match the current definition of a benchmark home.

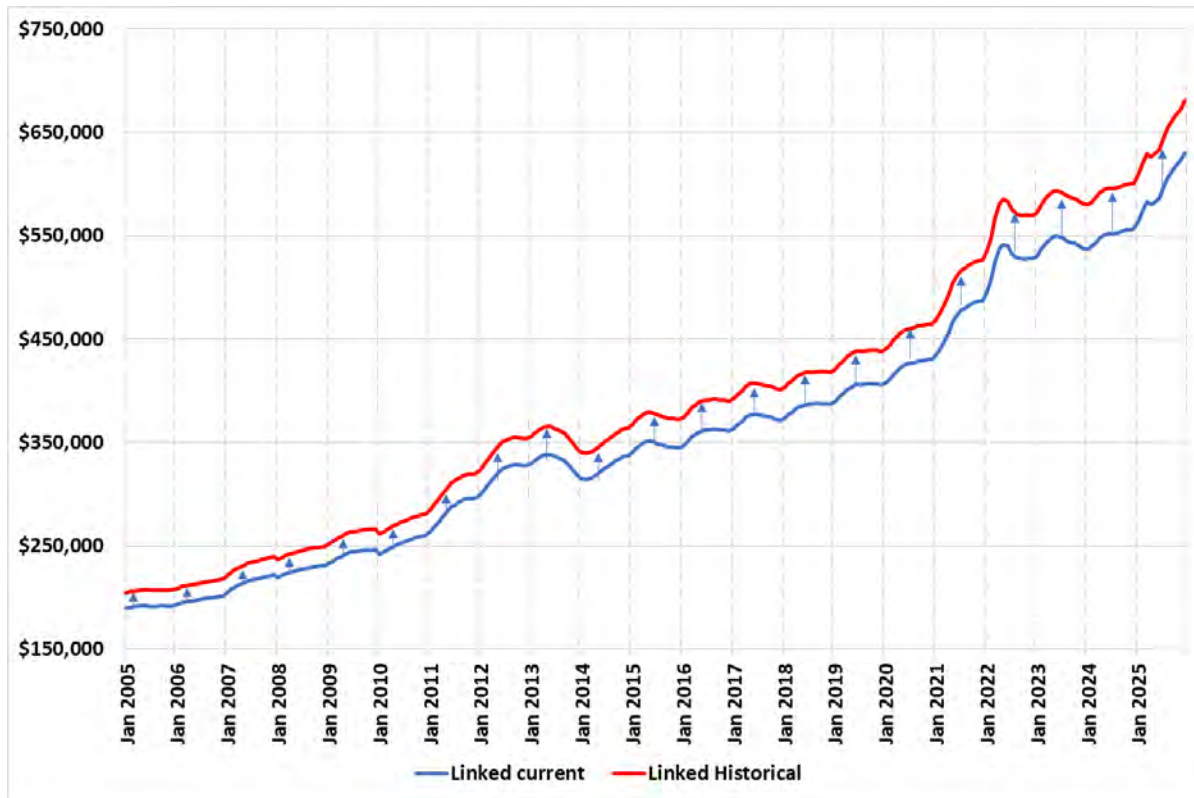


Figure 9 – The effect of calculating historical benchmark prices using modern benchmark attributes

This would ensure current benchmark prices reflect prices based on modern housing stock, rather than reflecting prices of homes using attributes from 10-15 years ago.

With a statistical product like the CPI, only the index values are published—Statistics Canada does not publish the price of an average basket of goods and services each month. However, because both index values and benchmark prices are published under the MLS® HPI it's important benchmark prices reflect the current reality of home prices in the respective neighbourhoods.