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AI-Backed Insights Into the Rental Market

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October 7, 2025

Breaking Ground

Unlocking Canada's housing future

A generational housing crisis in Canada

Supply far below growing demand

Affordability at breakpoint

Housing reform and innovation can unlock solutions

AI-driven insights to guide the path forward

Chronic Undersupply and Unrelenting Demand

- Canada faces a housing crisis:
  Supply can't keep up with demand.
- Multifamily demand remains resilient amid ongoing housing challenges
- Pressure mounting on households and policymakers
- The challenge is multi-faceted.
  - Beyond simply achieving more completions
  - Must address regulatory, demographic, and construction factors

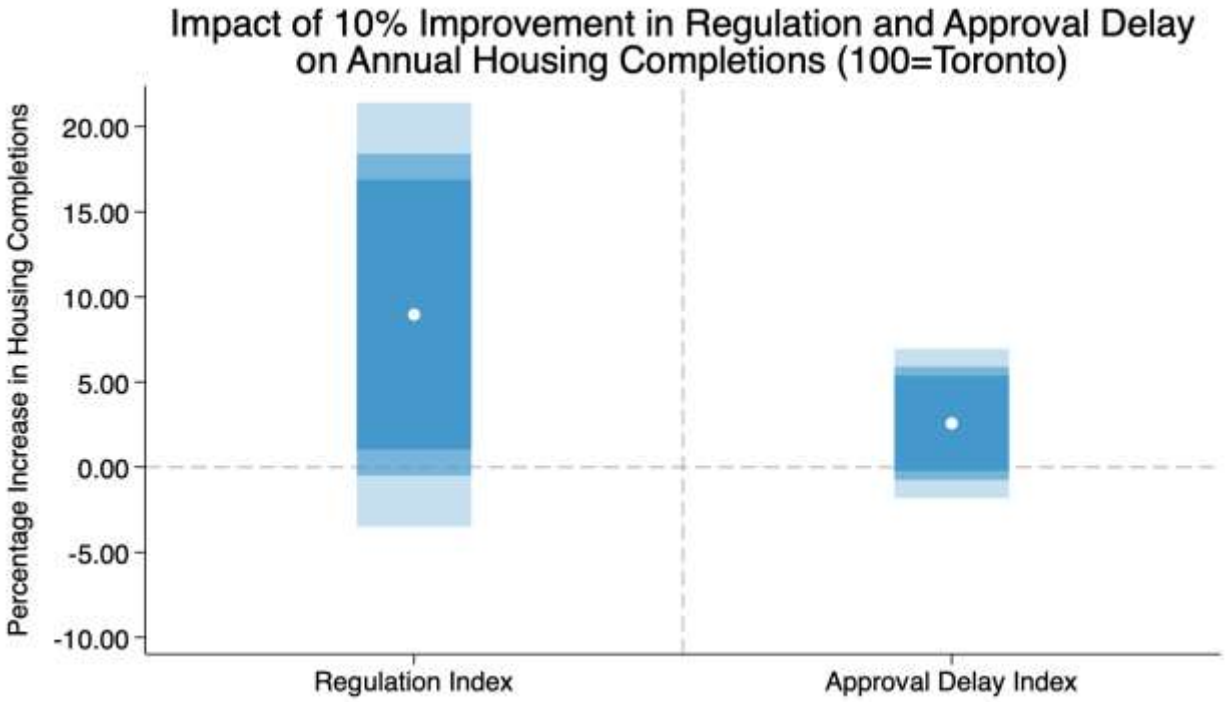
AI and data analytics provide insights and solutions.

Determinants of Housing Completions

- Unique dataset combining
  - Municipal regulation indices;
  - Input price shocks;
  - Population & demographic factors
- Methodology
  - Econometric analysis
  - AI-powered forecasting models

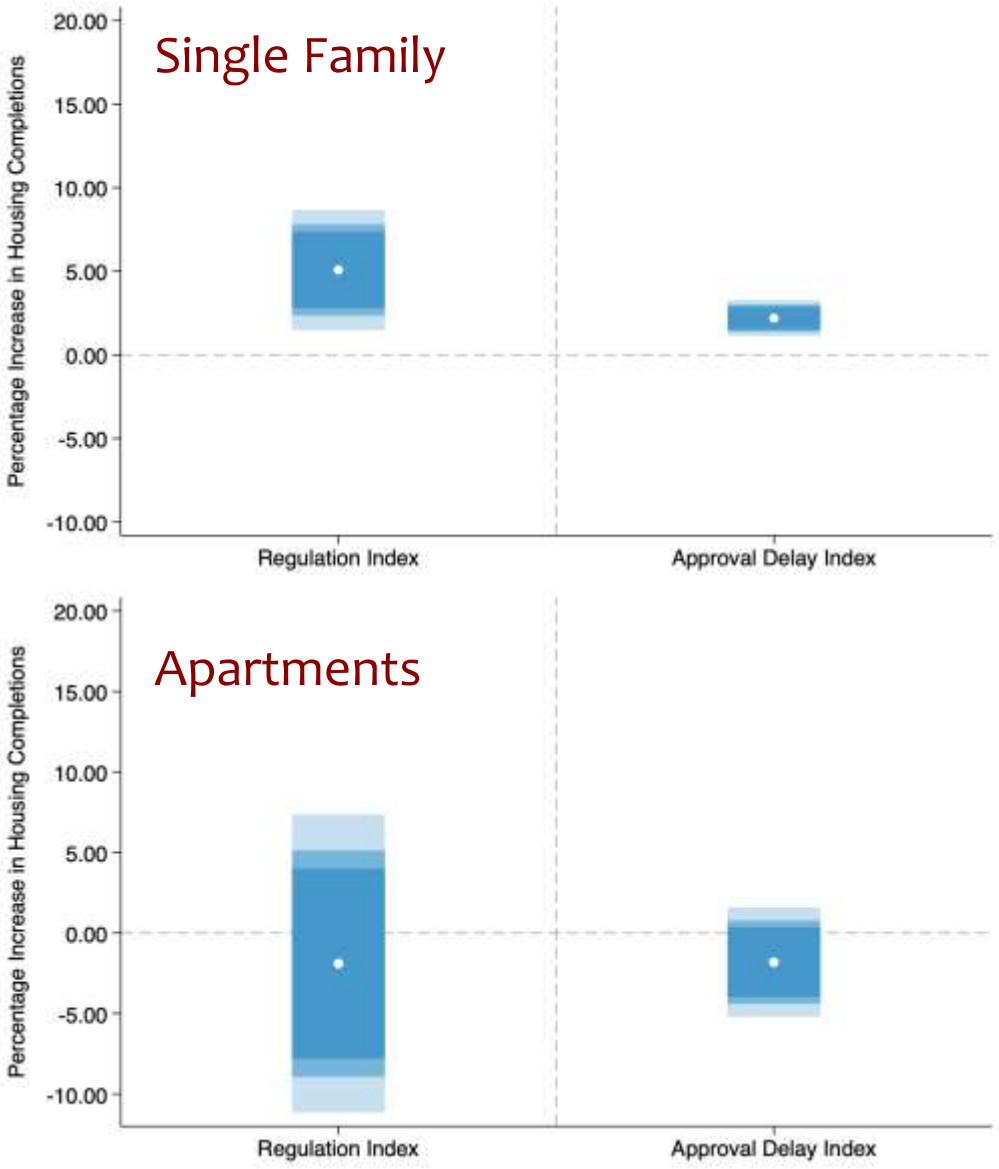
Our goal is to quantify how policy actions and market shifts can realign supply with demand.

Municipal Regulation and Approval Delays



- **Regulation Index** represents zoning rules, fees, community consultation requirements, density limits, and environmental assessments.
- *A 10% improvement in the Regulation Index* is associated with an almost **10% increase** in housing completions.
- *A 10% reduction in the Approval Delay Index* results in a **3% increase.**

Municipal Regulation and Approval Delays

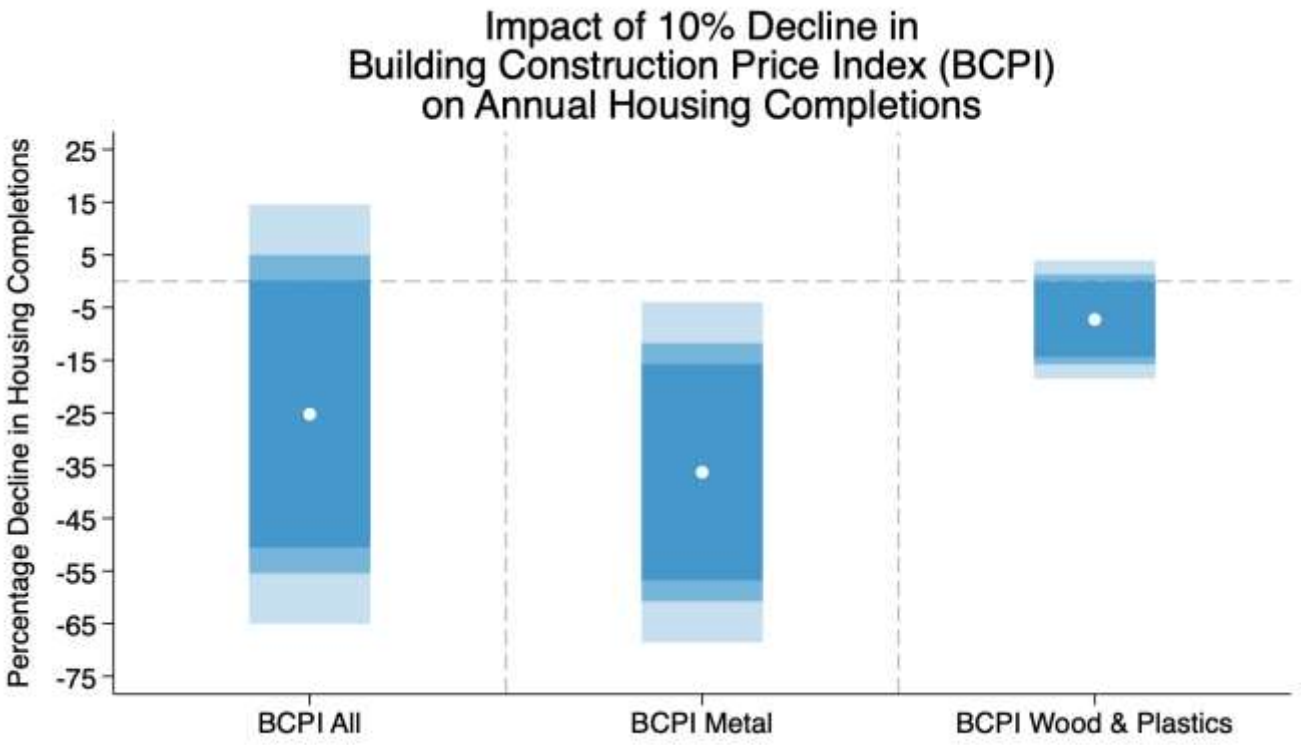


- Fewer rules and faster approvals disproportionately boost single-family housing
- Single-family homes face the heaviest zoning and municipal barriers (esp. in greenfields)
- Apartments often benefit from pre-zoned areas and provincial planning
- Relaxing regulation → outsized impact on single-family vs. smaller effect on apartments

Key Insights: Regulation and Approval Delays

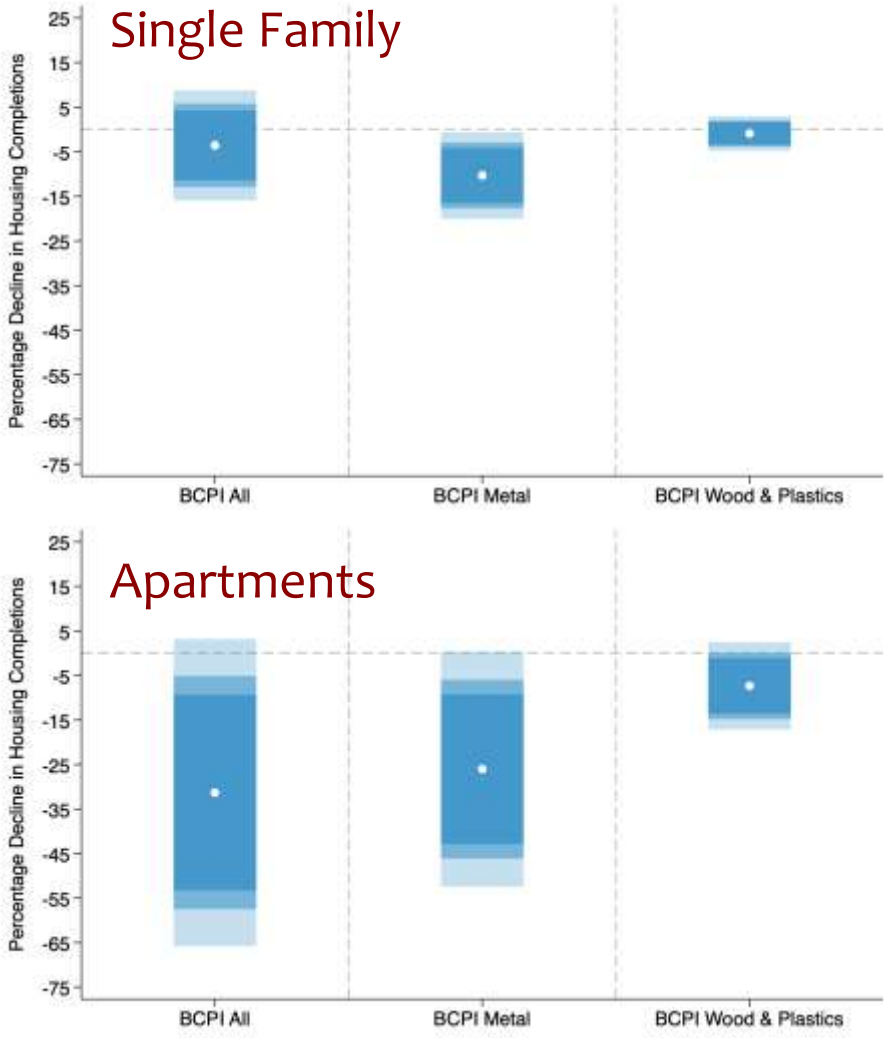
- Streamlining regulations and approvals can raise housing supply **by 10–13% without new spending**
- Cutting delays is a low-cost, high-impact way to meet housing goals
- Single-family homes respond strongly to local regulatory reform → faster timelines, lower costs, better returns
- Apartments need provincial-level tools: incentives, infrastructure, subsidies
- Matching policy tools to housing type (single family, apartment, etc.) helps investors and policymakers act more effectively

Input Price Shocks and Housing Supply



- Construction input prices are a key driver of housing supply.
- Global trade uncertainty makes this issue more critical.
- We use Building Construction Price Index (BCPI) to measure impacts.
- A 10% rise in input costs reduces housing completions **by 25% of national averages**.

Input Price Shocks and Housing Supply



- Rising construction costs reduce both single-family and apartment completions.
- The effect is stronger for apartments
- A 10% rise in BCPI → 30% reduction in historical mean apartment completions
- Apartments are more sensitive due to capital intensity and cost structure.
- Early construction phases are especially exposed to material price swings.

Key Insights: Input Price Shocks and Housing Supply

- ***Policy response:*** Protect housing supply from rising input costs with tax relief or targeted supports
- ***Investors and housing developers:*** Need agile cost-contingency planning and smart timing strategies
- ***Apartment developers:*** Tighter margins → lock in contracts, explore modular construction, and strong cost controls
- Recognizing cost inflation helps prioritize capital and policy tools
  - Adjust timelines
  - Lobby for relief
  - Rebalance project mix

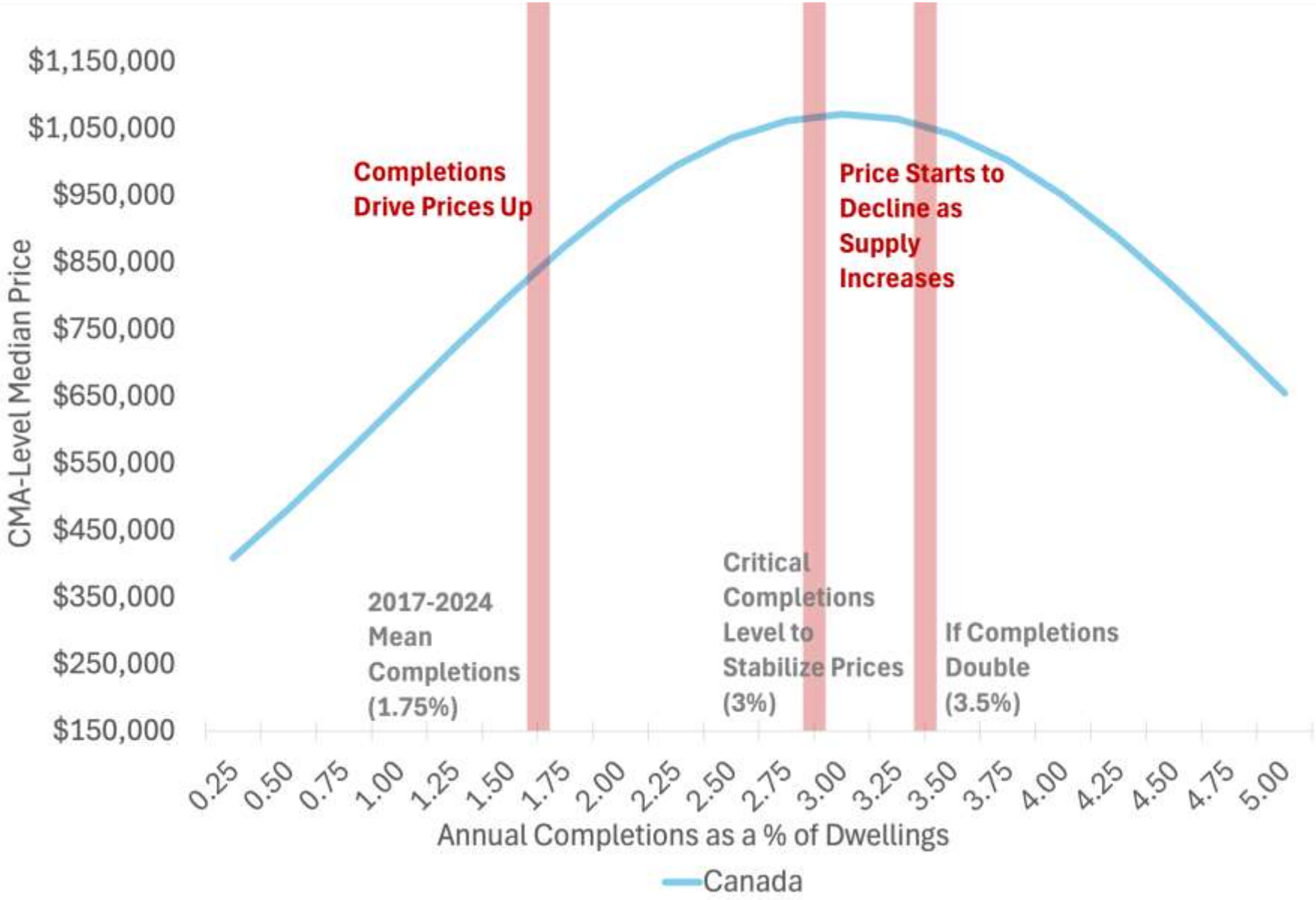
How We Link Supply to Prices

- More housing supply usually lowers prices — but supply & prices affect each other
- We use construction cost shocks (metal, wood, composites) as a neutral way to measure how completions impact prices
- This method shows the true effect of building more homes, separate from demand pressures

- Results:
  - Below 3% annual completions → supply is absorbed, prices still rise
  - At 3%+ completions → prices begin to stabilize
  - At 3.5%+ completions → prices start to fall

- **Key takeaway:** Accelerating completions is critical for affordability
  - Regulation and cost relief directly matter

Housing Completions and Median House Prices

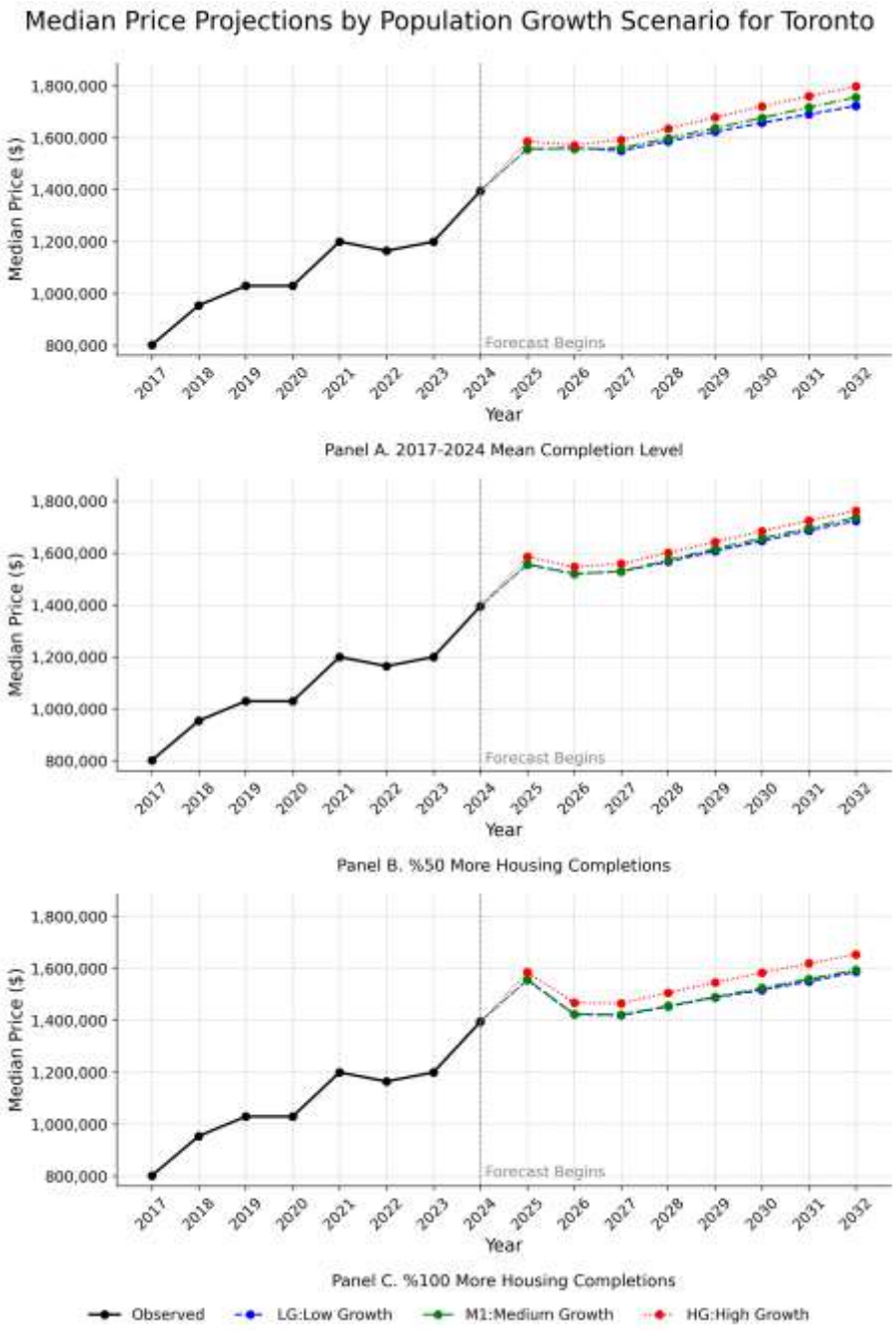


AI-Driven Housing Price Projections

- Built on Statistics Canada population forecasts (low, medium, high growth to 2032)
- Three supply scenarios tested: baseline, +50%, doubling completions
- AI model (neural network) provides more accurate forecasts than traditional tools
- Findings:
  - Immigration policy moderates price growth temporarily (to 2026)
  - Prices accelerate again as population growth resumes
  - More supply = slower price growth, especially in high-demand cities

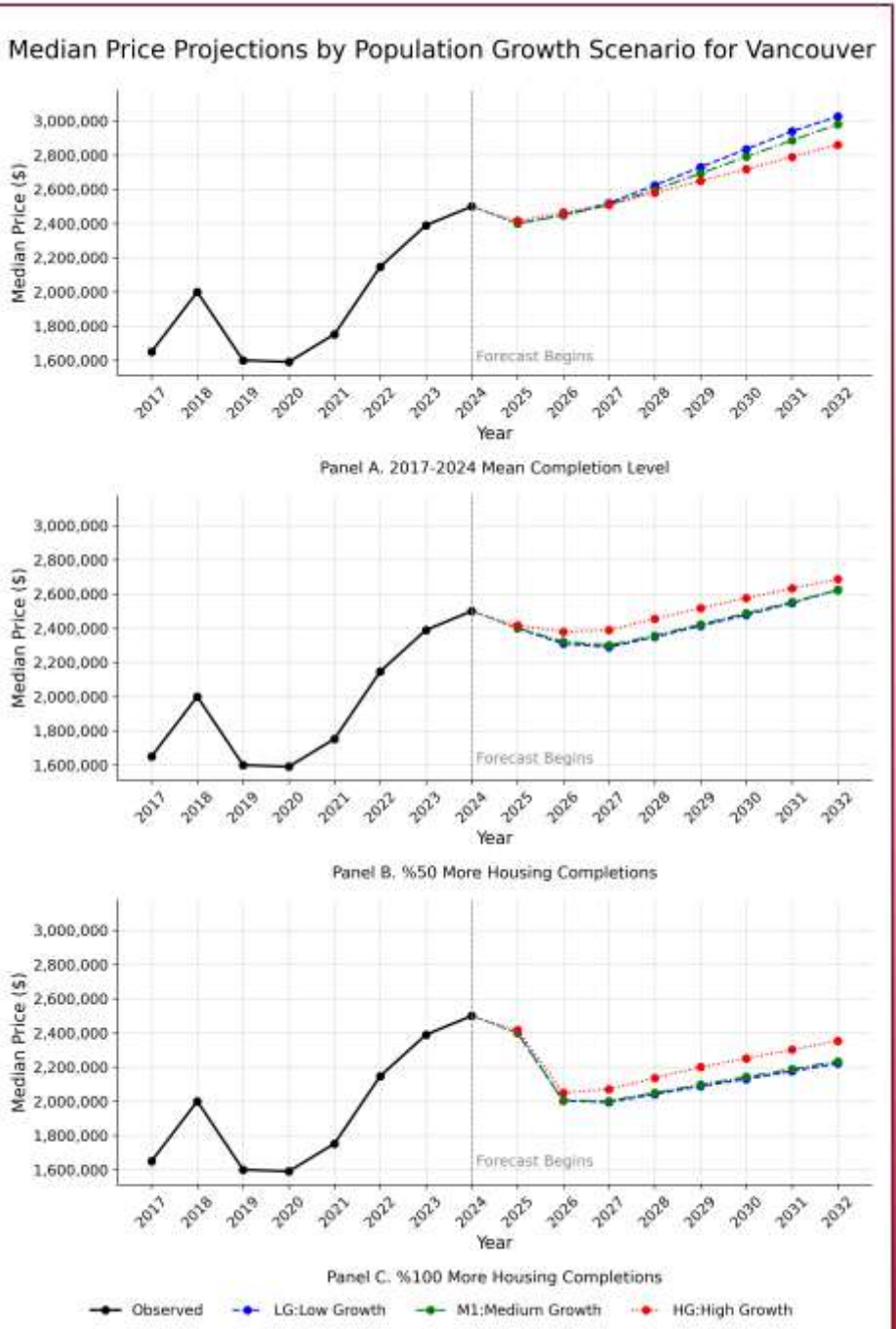
Toronto Price Projections

- $1.5M in 2025 → temporary pause until 2027
- Prices climb again with population growth
- 2032: $1.8M (baseline)
- +50% completions: just under $1.8M
- Doubling completions: $1.6M
- Takeaway: Only major supply growth slows the trend



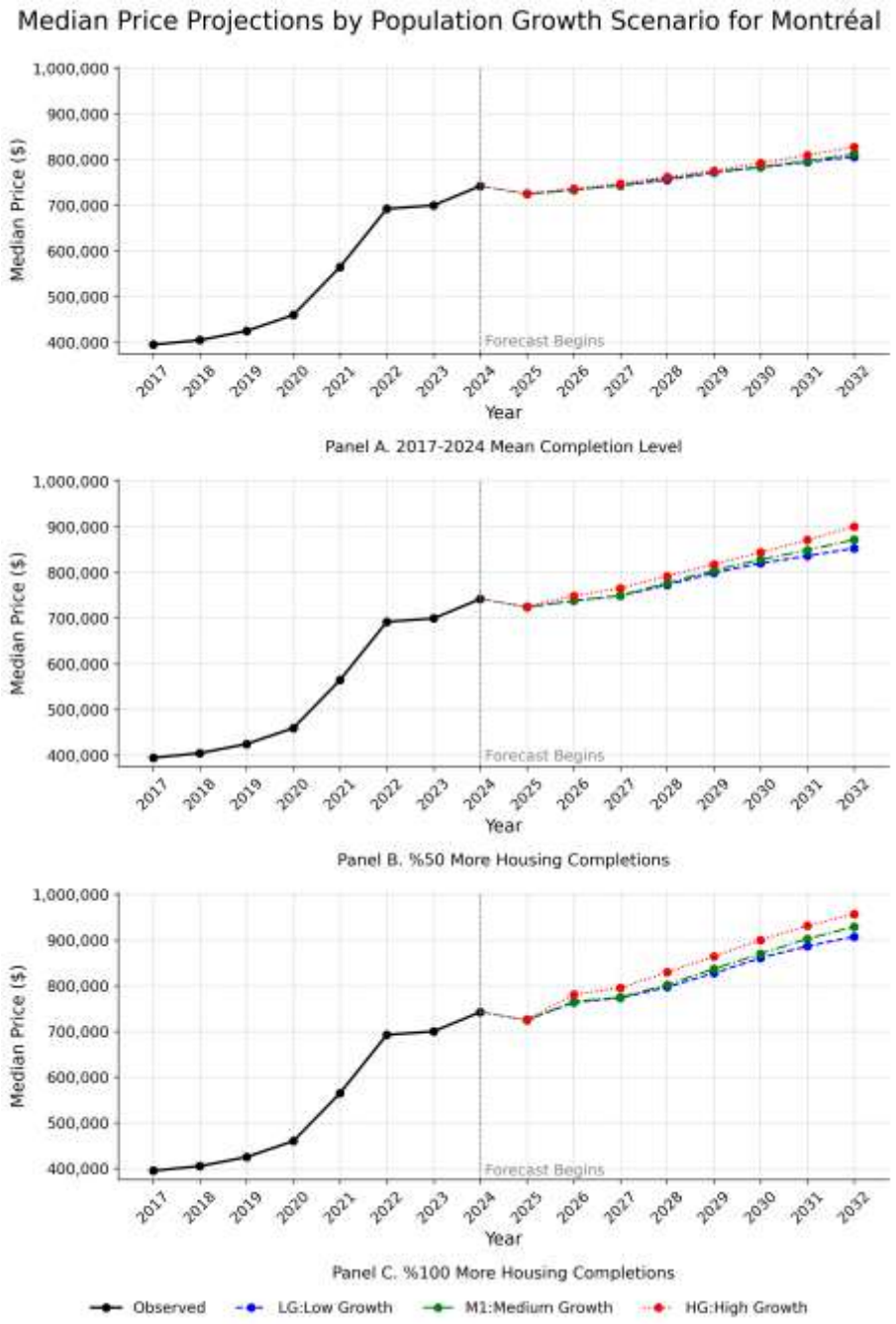
Vancouver Price Projections

- $2.5M in 2025 → small dip, then rebound
- 2032 baseline: nearly $2.8M
- +50% completions: still above $2.8M
- Doubling completions flattens prices near $2.5M
- Takeaway: Deep supply-demand imbalance — only aggressive building stabilizes prices



Montreal Price Projections

- $740K in 2025 → brief dip, then steady rise
- 2032 baseline: >$800K
- Higher completions: prices approach $900K (absorbed by excess demand)
- Takeaway: Inverted supply curve — completions must rise substantially before prices stabilize



Conclusion: Breaking Ground

- Canada's housing crisis is structural – demand persistently exceeds supply
- Streamlining rules can lift supply by 10–13%, but not enough to reduce prices
- Rising costs cut completions, especially apartments
- New supply first meets pent-up demand → prices stabilize rather than fall
- Stabilization requires 3%+ completions relative to existing housing stock (mean = 1.75%)

- City lessons:
  - Toronto and Vancouver → need 50–100%+ more supply growth to catch up
  - Montréal → inverted curve, very large increases required
  - Calgary → more responsive to supply, better affordability potential

Bottom line: Bold supply expansion + tailored policies are key to affordability.