Residential Redevelopment and Land-Value Spillovers in East Vancouver

Bing Xuan Chen

Abstract

Vancouver has long been labelled as one of the most expensive housing markets in the world. With increased policies encouraging more redevelopment, this paper seeks to figure out whether new construction changes the land values of nearby land. The study relies on tax roll data, building permits, and parcel boundaries to examine the effect across four East Vancouver neighbourhoods. Parcels are regressed on redevelopment. Exposure to new builds is measured in narrow distance bands around each parcel and separated by construction type. A fixed-effects model is used to track each parcel's history over time, comparing exposed parcels to those not yet exposed as a control group. The results indicate that a first nearby build is associated with a small amount of extra annual growth in land values of adjacent land, suggesting redevelopment raises property values rather than easing affordability. Since nearby construction raises surrounding land values, existing landowners capture those gains rather than housing becoming more affordable.

Keywords: Housing affordability; Residential redevelopment; Land values; Property-value spillovers; Infill housing; East Vancouver.

1. Introduction

Vancouver is one of the world's most expensive housing markets. Surveys label Greater Vancouver severely unaffordable, ranking fourth in 95 major markets [1]. The mortgage payment on a home absorbs around 79.4% of the median pre-tax income [2].

To address this, the government has implemented policy reforms that encourage larger redevelopments in previously limited single-family zones. This raises the question of whether private, market-driven residential redevelopment affects the assessed land values of nearby lots.

The existing research on spillover effects from new construction is limited and difficult to apply in generalized forms. Studies that focus on subsidies and tax-incentivized projects often capture the effects of the policy instead of the actual properties. Therefore, these estimates can be large, ranging from 12-17% [3]. Studies that focus on private construction find much smaller price effects, but the standard ring-based method struggles to separate the impact of new buildings from the reasons those sites were chosen for development in the first place [4,5].

This paper addresses that gap by using annual property assessments, building permits, and parcel boundaries for four East Vancouver neighbourhoods from 2014 to 2026, tracking how each parcel's assessed value changes as new construction appears nearby. Exposure to new builds is measured in narrow distance bands around each parcel and separated by construction type. The analysis tracks each parcel through time. Parcel-level panel regressions with parcel and year-pair fixed effects compare each parcel to its own assessment history, using parcels not yet exposed as controls for those already exposed.

2. Data

2.1 Setting

The study area is comprised of four adjacent neighbourhoods in East Vancouver, British Columbia, chosen because they share the low-density residential character and private redevelopment activity central to the analysis: Grandview-Woodland, Hastings-Sunrise, Kensington-Cedar Cottage, and Renfrew-Collingwood.

Redevelopment in these neighbourhoods is mostly private and unsubsidized, consisting of single-lot teardown-and-replacement, laneway house construction in rear yards, and a smaller volume of small-scale multifamily conversion.

At the end of the panel, the city enacted a policy that changed the development rights on primary residences. Specifically, in October 2023, Vancouver replaced its old single-family zoning rules with the R1-1 Residential Inclusive zone, allowing up to six units on a lot. In June 2024, the city further updated five other restricted zones to follow British Columbia's Bill 44 housing rules [6,7]. This policy raises the redevelopment option value: the amount one would pay for the right to build. All parcels in the study area were affected, but the effects on price are absorbed during the regression via year-pair fixed effects.

2.2 Data sources

The analysis uses four administrative sources, all publicly available.

Assessed land values

Annual BC Assessment tax-roll data from 2014 to 2026 are used in the study. The quantity chosen is assessed land values instead of total property value because land value reflects a parcel's location and redevelopment potential. If the study had used building value, the estimate would be affected by a multitude of factors, including depreciation, inspections, renovations, and more. Focusing on land value helps isolate changes related to nearby construction. An assessment does not reflect market conditions at one exact date. For assessment year *t,* the market valuation date is July 1 of the previous year. Then, on October 31st, the property's physical condition and permitted use are fixed.

Therefore, the assessed value for roll year *t* is a combination of two different moments: market pricing from mid-year $t-1$ and the property's condition and zoning the following fall.

On another note, assessed land value is a modelled estimate produced through a mass appraisal system, not a transaction price. This aids the research because the system provides an annual observation for every parcel instead of just the parcels that were transacted [9,10].

Table 1. Assessed land values, 2014-2026
Four East Vancouver neighbourhoods

		Assessed land value (CAD)		Year over year	
Assessment year	Parcels	Mean	Median	Growth (log points per 100)	SD of dlog
2014	26,422	$795,430	$702,000	–	–
2015	26,450	$891,991	$783,000	11.5	0.037
2016	26,967	$1,140,960	$1,012,000	24.7	0.037
2017	26,993	$1,530,560	$1,360,000	29.2	0.036
2018	27,009	$1,553,259	$1,356,000	1.1	0.037
2019	27,021	$1,516,253	$1,305,000	−3.3	0.039
2020	27,033	$1,335,970	$1,155,000	−12.9	0.040
2021	27,013	$1,455,853	$1,271,000	9.5	0.047
2022	27,022	$1,707,426	$1,504,000	16.3	0.041
2023	27,034	$1,834,438	$1,619,000	7.2	0.024
2024	27,053	$1,913,499	$1,690,000	4.3	0.027
2025	27,065	$1,901,486	$1,683,000	−0.4	0.026
2026	27,065	$1,783,595	$1,595,000	−5.8	0.050

Assessment year *t* reflects market conditions as of 1 July $t-1$. Values are nominal. Growth is the mean within-parcel change in log land value, in log points.

Parcel counts cover all parcels in the four neighbourhoods.

Land value instability complicates interpreting the regression estimates. The market moves dramatically with steep rises and recoveries. Annual growth is therefore not a stable quantity across the panel. This is a characteristic of the East Vancouver land market.

A parcel's annual growth therefore depends heavily on which years it is observed in. A parcel with no construction within 25 m recorded +29 log points in 2017 and −13 in 2020.

Parcel geometry

Parcel boundaries are taken from ParcelMap British Columbia. The dataset holds a total of 38,380 parcels. The study focuses on Subdivision-class parcels, meaning normal lots that are owned by a single person, leaving 30,541 parcels. Of those, 3,428 parcels could not be matched to a record in the assessment tax roll, which meant they were excluded from the final panel. This leaves a final set of 27,113 parcels. Each parcel holds an ID that is used to match the lot to the assessment roll, lot-area data, and title class data. Distances between the parcels are measured from the centre point of one lot to the centre point of the next, known as a centroid.

Table 2. Parcel characteristics
Fee-simple Subdivision-class parcels in the estimation panel

		Lot area (m²), percentiles					Share (%)
Neighbourhood	**Parcels**	**10th**	**25th**	**Median**	**75th**	**90th**	**300-450 m²**
Grandview-Woodland	2,980	232	294	373	375	475	61.9
Hastings-Sunrise	7,485	330	352	374	396	475	82.5
Kensington-Cedar Cottage	8,428	301	336	373	407	515	73.6
Renfrew-Collingwood	8,220	313	337	369	436	520	76.0
All four	**27,113**	**306**	**337**	**374**	**415**	**504**	**75.5**

A standard 33 × 122 ft lot is approximately 374 m².

The parcels in the study area are mostly uniform in size. This aids the research as parcels of similar size and shape face similar redevelopment economics, so a development nearby represents an event that is comparable across most of the study area.

Building permits

New construction is identified through building permits issued by the City of Vancouver, which were accessed through the municipal open data API. The records identify the issue date, address, and type. Since the data only goes back to 2017, the first three years of the assessment period are unobservable.

To break down how different types of construction lead to different effects, build events are classified into three groups: rebuilds, laneways, and multifamily. A rebuild is defined as the demolition and replacement of the main building, including duplexes, which replace the main building and have a similar effect in terms of scale and market valuation. Laneway builds are detached secondary homes built in the rear of the yard with no changes to the main building. Multifamily builds refer to the construction of multiple units, apartments, or townhouses.

Table 3. Building permits by year and category
Four East Vancouver neighbourhoods, 2017-2026

Year	Rebuild	Laneway	Multifamily	Total
2017	239	233	18	**490**
2018	230	254	17	**501**
2019	218	157	13	**388**
2020	179	110	13	**302**
2021	186	79	23	**288**
2022	267	126	26	**419**
2023	227	84	23	**334**
2024	157	104	39	**300**
2025	133	96	89	**318**
[1] 2026	47	39	32	**118**

[1] Partial year; the permit extract does not cover the full calendar year.

Construction activity peaks at the beginning of the sample and declines to its lowest point in 2020-2021 before recovering. The mix of construction also changes over time. The 2026 figures represent a partial year.

Transit distance

The distance from each parcel's centre to the nearest SkyTrain transit station is built from the City's rapid transit station layer, with the median distance being 1,075 metres. No new stations were opened in the study area across the study period.

2.3 Variables

As mentioned earlier, the study tracks 27,113 parcels per year-pair across 12 consecutive year-pairs, from 2014-2015 to 2025-2026. This generates a total of 323,023 parcel-year observations, which is 2,333 short of the expected 27,113 × 12. This discrepancy is due to three reasons: 1,976 observations were removed because a parcel was missing a land value for a given year; 355 observations from 66 parcels were reclassified mid-panel; and some extra data filters are presented in Section 3.3.

Table 4. Variable definitions

Estimation panel: 27,113 parcels, 323,023 parcel-year observations

Variable	Definition	Observations
Outcome		
d_log_land	Change in log assessed land value between consecutive years	323,023
Unit		
pid	Parcel identifier (hyphenated PID)	27,113
year	Later year of the assessment year-pair	12
Exposure		
n_0_25	Cumulative count of build events within 25 m	43,917
n_25_50	Cumulative count of build events 25-50 m away	91,734
n_50_100	Cumulative count of build events 50-100 m away	199,111
0_25_rebuild	Of which: teardown and replacement of the principal dwelling	31,332
0_25_laneway	Of which: detached rear-yard accessory dwelling	24,137
0_25_multifamily	Of which: multiple dwelling, apartment or townhouse	1,120
nearest_d	Distance to the nearest build event (m); parcels with none carry a 500 m fill value and are not counted here	217,739
no_build_nearby	Indicator: no build event within 100 m	105,284
Covariate		
lot_area_sqm	Parcel area (m^2), fixed within parcel	323,023
dist_skytrain	Distance to nearest SkyTrain station (m), fixed within parcel	323,023
year_built	Year of construction of the principal dwelling	320,638
zoning_district	Zoning district code	323,023

Exposure counts report parcel-year observations with a non-zero value. The three category counts sum to more than the 0-25 m band count because a parcel may have builds of more than one category nearby.

The outcome variable is a year-to-year change. d_log_land measures the change in the log of the assessed land value between consecutive years for the same parcel. Land values are kept in nominal terms instead of adjusting for inflation. This is because the fixed year effects in the regression would account for market-wide changes over time.

A parcel's exposure to nearby construction is measured in three ways. First, an indicator variable shows whether a parcel has at least one project within a given distance band. Second, count variables measure the number of nearby projects. Third, a variable measures the distance to the nearest construction. 105,284 observations out of 323,023 do not have a build within 100 m and carry a fill value, excluded whenever the distance measure is called.

2.4 Treatment

A **build event** is defined as a new residential building permit, marked by the location and year it was issued. From 2017 to 2026, there were 3,458 build events. The analysis also includes Strathcona, an area just west of the study area, to ensure that parcels on the western edge wouldn't be labelled wrongly if there was construction nearby. Strathcona had 32 build events; including them did not change the results in any significant way.

A permit records the start of construction, not its completion. The wait between the two is 12 to 18 months for a rebuild, less for a laneway house, and 2 to 3 years for a multifamily project. The lag from the assessment data also extends that timeframe, meaning that the first year-pair in which a parcel is "exposed" carries a treated label over an untreated window.

Therefore, the headline number should be interpreted as a lower bound of the effect of a new build.

A parcel is defined as exposed in year *t* if there was at least one build event that occurred on a different parcel within a specific distance band in that year. The parcel where the construction occurred is not counted because its land value will directly reflect the redevelopment instead of a spillover.

Exposure is measured using three distance bands: 0-25 metres, 25-50 metres, and 50-100 metres, based on the distance between parcel centroids. These narrow bands are used because the study strives to break down the effects of a spillover on individual lots. For the sample, 25 metres is the width of two typical lots.

Exposure is cumulative and permanent. As nearby parcels are redeveloped, a parcel's number of nearby projects and distance to the closest project are updated over time. When a build event takes place within the specified band, it remains in the exposure measure for the rest of the panel. The reported estimates are averages over time since construction.

Build events are spread out throughout the panel, beginning at different times. The study uses parcels that have not been exposed to serve as a control group against parcels that have experienced redevelopment.

Table 5. Cumulative exposure by band and year
Share of parcels with at least one build event within each distance band

		Exposed (%)			Nearest build
Year	Parcels	0-25 m	25-50 m	50-100 m[1]	Mean distance (m)[2]
2015	26,422	0.0	0.0	0.0	–
2016	26,441	0.0	0.0	0.0	–
2017	26,966	4.0	9.2	32.6	61.2
2018	26,992	8.0	17.6	52.6	57.0
2019	27,008	10.9	24.1	64.6	54.1
2020	27,020	12.9	28.4	71.4	52.3
2021	26,989	15.1	32.7	76.8	50.3
2022	27,013	18.1	38.1	82.4	47.8
2023	27,021	20.5	42.6	86.3	45.6
2024	27,034	22.6	46.1	88.5	43.9
2025	27,052	24.9	49.8	90.7	42.3
2026	27,065	25.7	51.0	91.1	41.7

[1] By the end of the panel, this band doesn't have enough parcels to support a comparison.

[2] Parcels with no build nearby carry a fill value and are excluded.

By the end of the panel, around 26% of parcels have experienced build events within 25m; that number rises to about 51% at 25-50 m. Over 95% of parcels are exposed at 100m.

2.5 Initial observations

Table 6. Annual land value growth by exposure status, 0-25 m
Within year-pair comparison; no controls

	Parcels		Mean growth (log points per 100)		
Year pair	**Unexposed**	**Exposed**	**Unexposed**	**Exposed**	**Difference**
2014-2015	26,422	—	11.52	—	—
2015-2016	26,441	—	24.72	—	—
2016-2017	25,883	1,083	29.19	29.10	**−0.09**
2017-2018	24,845	2,147	1.14	0.39	**−0.74**
2018-2019	24,075	2,933	−3.21	−3.65	**−0.44**
2019-2020	23,522	3,498	−12.98	−12.78	**0.20**
2020-2021	22,926	4,063	9.46	9.86	**0.40**
2021-2022	22,132	4,881	16.17	16.75	**0.59**
2022-2023	21,488	5,533	7.22	6.93	**−0.29**
2023-2024	20,932	6,102	4.33	4.41	**0.09**
2024-2025	20,323	6,729	−0.54	−0.20	**0.34**
2025-2026	20,117	6,948	−6.00	−5.34	**0.66**

Weighted average difference: 0.183 log points, weighting each year pair by its exposed count.

The comparison is made separately for each pair of years, so exposed and unexposed parcels are compared under the same overall market conditions.

In 6 of the 10 year-pairs where both exposed and unexposed parcels could be compared, parcels with a nearby building grew faster. The comparison finds that a new build within 25 m is correlated with 0.183 log points of extra annual land-value growth. This is small compared with the large overall market changes from year to year.

In the other year-pairs, the results showed the opposite. The estimates were negative from 2016 to 2019 because of a market downturn and the fact that construction had just started appearing. These early results may be affected by the timing lag from the permits and assessments.

3. Methods

3.1 Software

The software used to carry out the modelling is R 4.6.0 on Windows 11. Spatial operations use **sf** 1.1-1; data manipulation uses **dplyr** 1.2.1 within **tidyverse** 2.0.0. City of Vancouver open data are retrieved through **VancouvR** 0.1.9. Clustered standard errors are computed with **sandwich** 3.1.3 and **lmtest** 0.9.40. Tables are formatted with **gt** 1.3.0.

3.2 Assigning permits to parcels

Permits were assigned to the nearest parcel that wasn't a road, as long as it was within 20 metres. A lot of permits already sat inside the parcel that it was attached to, and 75% were within 5 metres. Under 6% were too far from any parcel to match and were dropped.

Since distances are measured from a parcel's centroid instead of the property itself, laneway houses, which sit at the back of the lot, may appear closer to the parcel next door than the parcel it's on. This means that treatment distance is measured with some error for laneway houses.

3.3 Constructing the outcome

Assessed land values are logged and differenced year over year within each parcel. A change is computed only when a parcel appears in two consecutive assessment years. All estimates are reported in log points, which is 100 times the change in log assessed land value. Since the estimates are all small, log points and percentages are interchangeable. For reference, 0.119 log points is roughly a tenth of a percentage point of extra growth per year.

Aside from the filters applied during data collection, three checks are also applied. First, parcels with a land value under $1000 are dropped since they are unlikely to be actual market assessments. No parcels triggered this check. Second, observations where the land value swung by more than 0.75 log points in a year are removed. Such explosive changes are not caused by market factors but by reclassification. Two observations were removed through this check, and every parcel kept its place in the panel. Lastly, sixty-six parcels were reclassified mid-panel. These parcels were kept in the dataset until they were reclassified. A change in zoning will be reflected in the land value due to its new permitted use rather than a spillover. This check removed 0.11% of the panel.

3.4 Estimation

The panel is organized in year-pairs, with year-pair fixed effects absorbing all market growth between the two assessments.

Group comparisons

To compare exposed and unexposed parcels, each parcel's growth rate is first demeaned by year-pair. The average growth for that year-pair is subtracted from each parcel in that year-pair. This removes all market-wide fluctuations, regardless of direction, making it clear how much a parcel grew relative to others. Average growth is then compared between parcels with nearby construction and parcels without, both within each year-pair and pooled across all of them.

Linear regression

Annual land-value growth is regressed on measures of nearby construction, with parcel and year-pair fixed effects. The main specification is:

$$y_{it} = \alpha_i + \gamma_t + \beta' E_{it} + \varepsilon_{it}$$

Where y_{it} measures how much parcel *i*'s land value changed within the year pair *t.* α_i are parcel fixed effects, controlling for parcel characteristics that stay the same throughout the panel. Individual parcel characteristics that are indicative of their appreciation are also absorbed. γ_t are year-pair fixed effects, controlling for the Vancouver real estate market. E_{it} is a vector of exposure measures such as distance, number of projects, and construction type. Standard errors are grouped by parcel. Two models are estimated. Model 1 includes nearby construction and a count of nearby projects. Model 2 adds indicators for construction type within 25 m. The two models are compared using an F-test to see if Model 2 added any variables that delivered more detail.

A separate specification then replaces the count variables in Model 2 with indicators for one, two, and three or more build events within 25 m. The estimate shows how the effect shifts with each new project.

In the main model, the indicator variable records the first build event, while the count variable continues to increase for each new one. The effect of the first build event is the sum of the indicator and count coefficients.

The total R^2 is not useful because it includes the effects of the parcel and year controls. This causes the total R^2 to be high even without the new build variables. The paper chooses to rely on the within-R^2 value instead. This is because it includes the parcel and year effects, clearly stating the effect of new builds. The models show a small within-R^2 value; this means new builds do have an effect but not a substantial one in determining the growth of land values.

3.5 Robustness checks and sample restrictions

Two filters were applied to the estimate after the first round of modelling. The first filter drops the 2026 year-pair because the coverage in that year is incomplete. The 2026 year is kept at the end because the data is incomplete, not wrong. The second filter involves dropping parcels at the start of the panel, between 2014 and 2016. This corrects a mislabelling of parcels in the pre-2017 permit gap. The resulting estimate from the second filter is the headline number of the paper.

Because a parcel can have more than one type of construction nearby in the same year-pair, the specification is rerun on the subset of parcels exposed to only one type. The estimate then reflects a single build type instead of overlapping builds.

4. Results

4.1 Effect by distance band

Section 2.5 compares parcels with and without construction within 25m, one year-pair at a time. Table 7 pools the comparison and extends it to the 25-50 m and 50-100 m bands.

Table 7. Growth contrast by distance band
Exposed minus unexposed, after removing each year-pair's average growth. Log points per 100.

	Exposed parcel-years	Unexposed parcel-years	Difference	95% CI
Within 25 m	43,917	279,106	0.156	[0.13, 0.19]
25 to 50 m	91,734	231,289	0.119	[0.09, 0.14]
50 to 100 m	199,111	123,912	0.104	[0.08, 0.13]

Bands overlap: a parcel with a build within 25 m usually has other builds farther away.

The combined 0-25 m difference is 0.156, slightly lower than the 0.183 from Section 2.5. This is mostly due to weighting: the first comparison gives more weight to years with more exposed parcels, while Table 7 gives each observation equal weight.

The difference becomes smaller as the distance band increases. The estimates point in the direction of spillover being concentrated at close distances, though the overlapping confidence intervals mean the pattern is not conclusive. Furthermore, the distance bands also overlap; a parcel that experiences a build event within 25m may also experience build events in the 25-50 m or 50-100 m bands. This means the outer bands do not represent parcels with only construction farther away.

4.2 Regression results

Table 8 shows the results of the two models from Section 3.4, plus a third version of Model 1 using the restricted sample from Section 4.5. Individual regression coefficients are estimated before being combined to show the effect of the first build event in each distance band.

Table 8. Nearby construction and annual land-value growth

Log points per 100. Parcel and year-pair fixed effects; standard errors clustered by parcel in parentheses.

	(1) Distance bands	(2) + construction type	(3) Restricted sample
Within 25 m			
Any build nearby	0.037 (0.043)	0.032 (0.056)	0.058 (0.046)
Each additional build	0.057* (0.025)	−0.006 (0.039)	0.061* (0.026)
25 to 50 m			
Any build nearby	−0.083** (0.031)	−0.081** (0.031)	−0.091** (0.032)
Each additional build	0.081*** (0.013)	0.080*** (0.013)	0.093*** (0.014)
50 to 100 m			
Any build nearby	−0.263*** (0.028)	−0.263*** (0.028)	−0.274*** (0.029)
Each additional build	0.070*** (0.006)	0.069*** (0.006)	0.075*** (0.007)
Construction type, within 25 m			
Rebuild	–	−0.005 (0.066)	–
Laneway	–	0.201** (0.063)	–
Multifamily	–	−0.175 (0.156)	–
Effect of a first build			
Within 25 m	0.094*** (0.027)	0.026 (0.071)	**0.119*** (0.028)**
25 to 50 m	−0.002 (0.024)	−0.001 (0.024)	0.002 (0.026)
50 to 100 m	−0.194*** (0.028)	−0.194*** (0.028)	−0.199*** (0.029)
Model fit			
Within-R^2	0.00072	0.00076	0.00082
Parcels	27,113	27,113	25,220
Observations	323,023	323,023	300,410

*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$.

Column 3 repeats column 1 on the sample that excludes parcels near 2014-2016 rebuilds; the bolded cell is the paper's headline estimate.

Lot area, transit distance, and year built are fixed within a parcel and are absorbed by the parcel effects.

The first build event within 25 metres results in 0.094 log points of additional annual growth, with each build adding 0.057. Both are significant at the 1% level. In the 25-50 metre band, the first-build coefficient is essentially zero (-0.002), while each additional build is associated with 0.081. The 50-100 metre coefficients are negative.

Both sets of added variables improved the model. First, adding six nearby construction measures improves the model compared with using only parcel and year effects, $F(6, 295893) = 40.3$, $p < 0.001$. Second, adding three construction types also improved the model, $F(3, 295893) = 8.44$, $p < 0.001$.

For construction 25-50 metres away, the model uses two variables: one measuring whether there are any nearby projects and another counting the number of nearby projects. Having one project 25-50 metres away is not linked to meaningfully faster or slower land-value growth. However, each additional project in this distance range is linked to 0.081 more annual land-value growth, similar to the 0.057 effect of each additional project within 25 m. The variable counting the number of projects is more reliable because it isn't affected by the shrinking group of unexposed parcels that the first-build variable is comparing itself to.

The 50-100 m result is negative, but this does not mean that construction farther away lowers land values. By 2026, 91% of parcels in the study had a new build 50-100 metres away, leaving a small group of unexposed parcels that are likely unusual and unattractive to developers because of their smaller sizes, inability to access lanes, or more. This causes their land values to grow more slowly. A group so small and unusual can not be treated as a proper comparable population, so the paper doesn't treat the negative result as an actual spillover effect. This is a main limitation of the research design.

4.3 Construction category

Among the three types of build events, only laneway houses show a clear positive relationship with land-value growth. In Model 2, the laneway variable has a coefficient of 0.201, while the rebuild and multifamily variables do not show clear results (Table 8).

Although the rebuild coefficient is near zero, that does not mean rebuilds have no effect. Rebuilds are the most common type of nearby construction, so parcels near rebuilds are often also counted as having nearby construction in general. The model had trouble separating the effect of a rebuild from the overall effect of nearby construction because of the overlap between the two variables.

Table 9 deals with this issue by looking only at parcels exposed to one type of nearby construction, then comparing them with parcels with no nearby construction. These are simple average differences, not regression results, so they are not to be compared directly with the coefficients in Model 2. However, they do provide a clear comparison between the construction types.

Table 9. Growth within 25 m by sample restriction and construction type
Exposed minus unexposed, after removing each year-pair's average growth. Log points per 100.

	Exposed parcel-years	Difference	95% CI	Fixed-effects estimate
Sample restriction				
Full sample	43,917	0.156	[0.13, 0.19]	0.094*** (0.027)
Excluding the 2026 year-pair	36,969	0.077	[0.04, 0.11]	0.026 (0.027)
Excluding parcels near 2014-2016 rebuilds	40,479	0.163	[0.13, 0.19]	**0.119*** (0.028)**
Construction type (one type only)				
Rebuild	18,766	0.117	[0.07, 0.16]	—
Laneway	11,629	0.206	[0.15, 0.26]	—
Multifamily	911	−0.223	[−0.52, 0.07]	—
More than one type	12,611	0.195	[0.15, 0.24]	—

Every row compares against parcels with no build within 25 m. Bold marks the paper's preferred estimate.

When the sample is limited to parcels exposed to only one construction category, both rebuilds and laneway homes have positive estimates. The laneway estimate is about twice as large as the rebuild estimate. The multifamily estimate is negative, but its confidence interval includes zero, based on only 911 observations compared with 18,766 for rebuilds.

4.4 Does more construction do more?

Table 10 directly estimates a separate effect for parcels with one, two, and three or more builds within 25 m.

Table 10. Growth by number of builds within 25 m
Each level compared with parcels that have no build within 25 m. Log points per 100.

Builds within 25 m	Parcel-years	Association	SE	95% CI	*p*
None	279,106	–	–	(baseline)	–
One	29,415	0.119	0.028	[0.06, 0.17]	< 0.001
Two	12,269	0.148	0.035	[0.08, 0.22]	< 0.001
Three or more	2,233	0.367	0.062	[0.25, 0.49]	< 0.001

The figures do not assume that every extra build adds the same amount.

The first project carries the largest effect. Increasing from one build event to two adds only 0.029 more annual land-value growth, which is small given the uncertainty around the estimates. This table states that one nearby project produces an effect of 0.119, which is different from 0.094 presented in Table 8 because of the difference in methods. Table 8 assumes every extra build carries the same effect. This table estimates the effect of one project, two projects, and three or more projects separately, compared with parcels that have no nearby projects. For parcels with three or more build events, the estimate is much higher at 0.367. However, this group has only 2,233 observations, less than 1% of the data, and these parcels are likely on blocks with lots of redevelopment happening. This means the estimate likely reflects broader economic conditions rather than the direct effects of multiple builds.

4.5 Robustness and sensitivity results

The permit record begins in 2017, which means the parcels that may have been labelled as unexposed may have experienced build events before 2017. The data from the assessment provided a partial check through the year-built variable. It identifies that 493 parcels were redeveloped between 2014 and 2016. Accounting for the parcels whose centres lie within the 25 metre distance band of those rebuilds, 1,893 parcels are affected (7.0% of the panel).

After applying the check, the study re-estimates model 1 and finds that the effect of a first build within 25 metres rises from 0.094 to 0.119 log points (SE 0.028, 95% CI [0.064, 0.174]). This is expected because a parcel that was exposed being labelled as unexposed would only make the effect seem smaller. When the study removed the 2026 data, the group comparison estimate fell from 0.156 to 0.077, showing that the estimate is very sensitive to the data in 2026. However, removing 2026 would mean removing real data because construction is still occurring in that year.

4.6 Summary

Build events within 25 metres are linked to faster growth in the land value of nearby parcels. The estimate is 0.119 log points for the first new build. This result comes from the sample that removes parcels near rebuilds that may have occurred before permit data began in 2017.

Analyzing different types of construction yields an uncertain result, as only laneway houses have a clear positive result. The results for rebuilds and multifamily projects are less certain.

5. Conclusion

5.1 Research Motivation

The motivation of the paper was to understand and analyze how private residential redevelopment changes the land value of nearby lots. As citizens of Vancouver face increasing pressure from housing prices, it is important to determine whether the city's policies actually solve the problem. If new construction drives up nearby land values while also providing more supply, the extent of the effects needs to be weighed.

5.2 What the estimates support

The estimate of 0.119 log points per year confirms that nearby land values do rise with redevelopment. In terms of scope, a parcel that's exposed for the full ten years would gain about 1.2 percent in assessed land value.

Laneway houses have consistently shown the clearest positive effect, almost double the estimate for standard rebuilds. One possible explanation is that a laneway house can physically become a second home without removing the original one, which builds on redevelopment potential.

5.3 What the estimates do not support

Although the land-value spillover is confirmed, whether that translates into higher rents or displacement for residents is not tested in this paper and should remain tentative.

First, the outcome measured in this analysis is a mass-appraisal estimate set on valuation data, not a transaction. Modelling errors and delays in the assessment timeline mean the spillover effect may not translate into a listing price.

Second, the outcome selected was land value, which represents what a buyer would pay for the right to build something new. Land value rises with option value even if the existing building is untouched. Rents and purchase prices are different quantities. Pennington [11] finds rents fall by 2% for parcels within 100m of new builds. Asquith, Mast, and Reed [12] find new builds in low-income areas reduce nearby rents by 6% compared to units farther away. The results are not contradictory; an increase in land value is compatible with a decrease in rent, so this paper's finding does not conflict with evidence that new builds lower rents.

Third, most parcels in the population are owner-occupied, and for an owner who is not selling, a higher land value doesn't cost anything. This is due to British Columbia's property tax, which spreads the municipality's budget across the total assessed value of all its property. When assessments rise together, the tax rate falls to match it, leaving the typical tax bill unaffected. A property's tax bill only rises if it outperforms the citywide average. Since the effect is one-tenth of a percentage point per year, it only represents a slight deviation from the market.

The fourth and most debated claim is that rising housing costs cause forced displacement. Hepburn, Louis, and Desmond [13] analyzed over six million eviction cases filed across 72 U.S. metro areas between 2000 and 2016 and found most evictions happened in low-income neighbourhoods that were not gentrifying. In fact, their research finds that eviction rates dropped more in gentrifying areas than in comparable non-gentrifying ones.

In short, this study estimated an asset effect for property owners, but stopped short of linking that to rents or evictions. It does not form the link between new construction and housing costs. Questions regarding how this reflects in higher rents or evictions are for a separate study. The evidence is not clear.

5.4 Directions for further work

The next direct step is to see if the land value spillover translates into actual listing prices. Linking the panel to Land Title transaction data would show whether the modelled valuations and actual prices are related. Following that, rents should also be part of the data, found in CMHC rental market data. This links the estimate to occupancy costs.

A harder problem is that developers choose which lot to build on, meaning the sites that get redeveloped were already attractive in the first place. One solution would be to use Vancouver's fire and demolition records that locate buildings forced by an unrelated event, much like Pennington [11] using building fires in San Francisco.

5.5 Implications

Ultimately, the result is modest. It is confirmed that private redevelopment in East Vancouver causes slightly faster growth in nearby land values. Against Vancouver's market swings, a tenth of a percentage point a year is not eye-catching. It is too small to be presented as an argument against new builds, or policy targeting rezonings. This presents itself as a gain from redevelopment that shows up in land values of neighbouring owners. Some of the benefits of housing reform may go to people who already own nearby land, regardless of whether it lowers housing costs for anyone else.

References

[1] W. Cox, Demographia International Housing Affordability: 2025 Edition, Center for Demographics and Policy, Chapman University, Orange, CA, 2025. https://www.chapman.edu/communication/_files/Demographia-International-Housing-Affordability-2025-Edition.pdf.

[2] K. Dahms, Housing Affordability Monitor: Housing affordability recovery extends into 2026Q2 as home prices fall, Economics and Strategy, National Bank of Canada, Montréal, 14 August 2026. https://www.nbc.ca/content/dam/bnc/taux-analyses/analyse-eco/logement/housing-affordability.pdf (accessed 17 August 2026).

[3] N. González-Pampillón, Spillover effects from new housing supply, Reg. Sci. Urban Econ. 92 (2022) 103759, https://doi.org/10.1016/j.regsciurbeco.2021.103759.

[4] V. Zahirovich-Herbert, K.M. Gibler, The effect of new residential construction on housing prices, J. Hous. Econ. 26 (2014) 1-18, https://doi.org/10.1016/j.jhe.2014.06.003.

[5] V. Guerrieri, D. Hartley, E. Hurst, Endogenous gentrification and housing price dynamics, J. Public Econ. 100 (2013) 45-60, https://doi.org/10.1016/j.jpubeco.2013.02.001.

[6] City of Vancouver, Zoning and Development By-law, R1-1 Residential Inclusive District Schedule, City of Vancouver, Vancouver, BC, 2023 (enacted 17 October 2023).

[7] Province of British Columbia, Bill 44 - 2023, Housing Statutes (Residential Development) Amendment Act, 2023, 4th Sess., 42nd Parl., Victoria, BC, 2023 (assented to 30 November 2023). https://www.bclaws.gov.bc.ca/civix/document/id/bills/billsprevious/4th42nd:gov44-1.

[8] Assessment Act, RSBC 1996, c. 20. https://www.bclaws.gov.bc.ca/civix/document/id/complete/statreg/96020_01.

[9] BC Assessment, Understanding the assessment process, BC Assessment Authority, Victoria, BC, 2022.
https://info.bcassessment.ca/Services-products/Understanding-the-assessment-process.

[10] International Association of Assessing Officers, Standard on Mass Appraisal of Real Property, IAAO, Kansas City, MO, 2017.
https://www.iaao.org/wp-content/uploads/StandardOnMassAppraisal.pdf.

[11] K. Pennington, Does building new housing cause displacement? The supply and demand effects of construction in San Francisco, Working Paper, 2021,
https://doi.org/10.2139/ssrn.3867764.

[12] B.J. Asquith, E. Mast, D. Reed, Local effects of large new apartment buildings in low-income areas, Rev. Econ. Stat. 105 (2023) 359-375, https://doi.org/10.1162/rest_a_01055.

[13] P. Hepburn, R. Louis, M. Desmond, Beyond gentrification: Housing loss, poverty, and the geography of displacement, Soc. Forces 102 (2024) 880-901,
https://doi.org/10.1093/sf/soad123.