Richmond Development Scenarios

February 2026

Executive Summary: Comparing development scenarios

Annual housing production varies dramatically based on zoning provisions:

Question	Scenario	Annual Parcels	% of Inventory	Where It Happens
Q1	Side-by-Side Subdivision	28	0.06%	RD-C Subareas 1-2
Q2	Flexible Subdivision	296	0.67%	RD-C (1,2,4); RD-B (4,5)
Q3	Teardown 2+1	23	0.09%	RD-B Subarea 4 only
Q4	Preservation Rental Model	265	0.60%	RD-C (1,2,4); RD-B (2,4)

Critical Findings:

Preservation outperforms demolition: New construction that preserves the existing structure will lead to more housing than allowing teardowns, despite the physical constraints.

Minimal impact from allowing 2x1 with teardowns: Demolition costs eliminate the economic contribution of existing structures, making only the strongest markets viable.

RD-A produces virtually nothing regardless of scenario: High property values ($687,000 avg) eliminate feasibility across all approaches, and large minimum lot widths (90 ft) compound economic barriers.

Production is gradual, not transformative: Best scenario generates 296 parcels/year (0.7% of all RD-A, B, and C parcels) with total change capped at 25% of all parcels based on geometry limits.

Methodology

Richmond Zoning Code Change

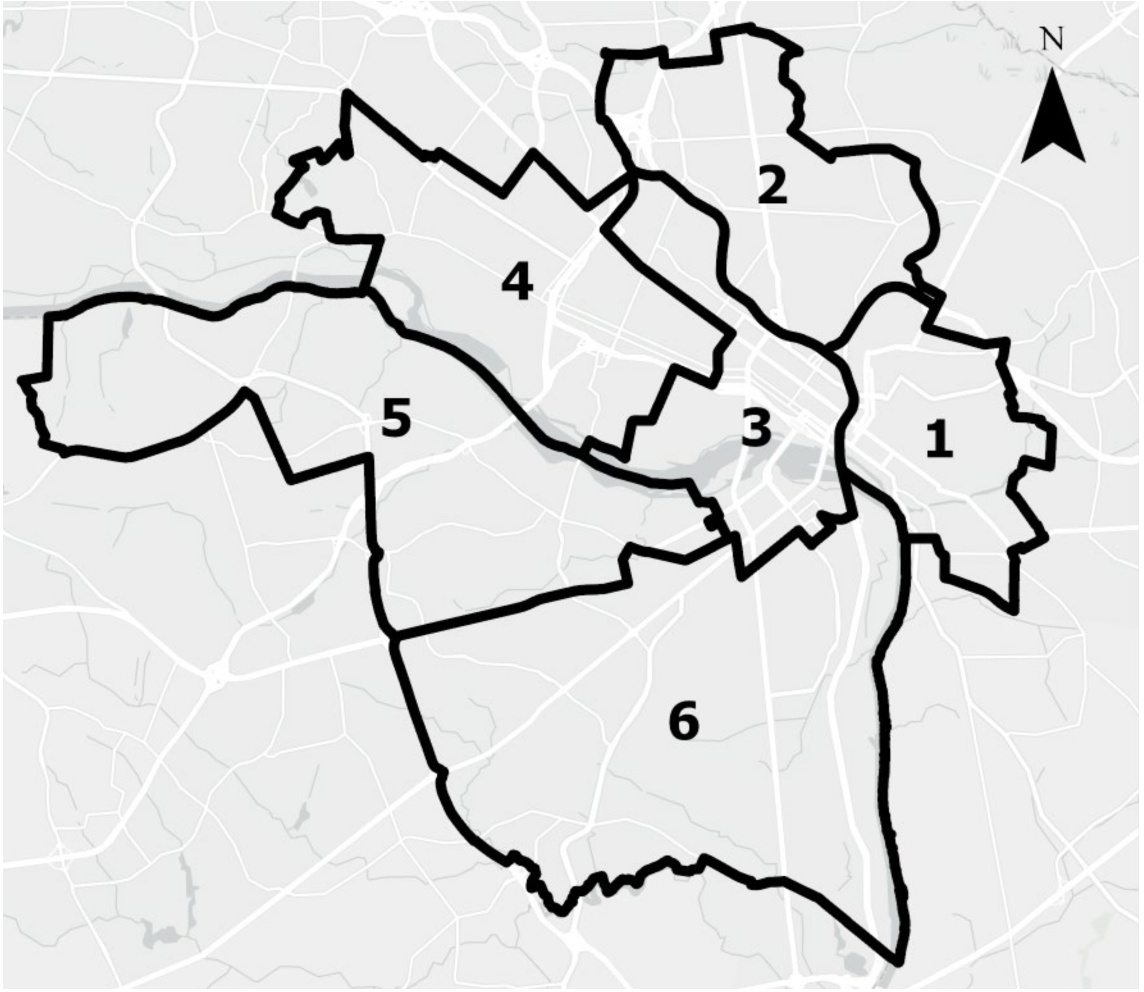
Methodology: Subarea market characteristics

The financial viability of new development under the proposed zoning varies substantially across the city. Each of the six subareas has distinct market characteristics that affect both subdivision potential and preservation bonus feasibility:

Property values affect acquisition economics
Calculated using property assessment database
Rental rates vary significantly across subareas, impacting income potential
Calculated using Redfin data
Sales prices for new homes vary geographically
Calculated using Redfin data

This geographic variation explains why development activity—whether through subdivision or build-to-rent models—will be concentrated in specific subareas rather than distributed evenly across the city.

Map of the six subareas



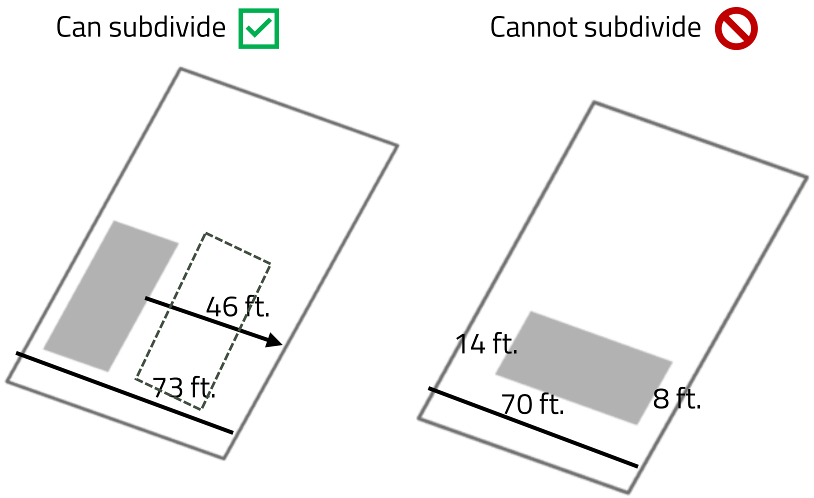
Methodology: Side-by-side subdivision (strict width requirement)

- To **subdivide side-by-side** without demolishing the existing structure, there needs to be space on either side of the structure that is at least the minimum lot width
- Out of 43,997 parcels zoned RD-A, RD-B, and RD-C, **8,501 are at least double the minimum width** (19%)
- Of these 8,501 parcels, **only 1,730 can physically subdivide** while keeping the existing structure intact

Parcels that can be subdivided with existing structure by zone

Zone	Total parcels	Minimum lot width	# Parcels x2 the min	Subdivide with existing structure
RD-A	7,272	90 ft.	637 (8.8%)	166 (2.3%)
RD-B	22,925	50 ft.	2,380 (10.4%)	611 (2.7%)
RD-C	13,800	25 ft.	5,484 (39.7%)	953 (6.9%)

Zone RD-C side-by-side subdivision with existing structure example



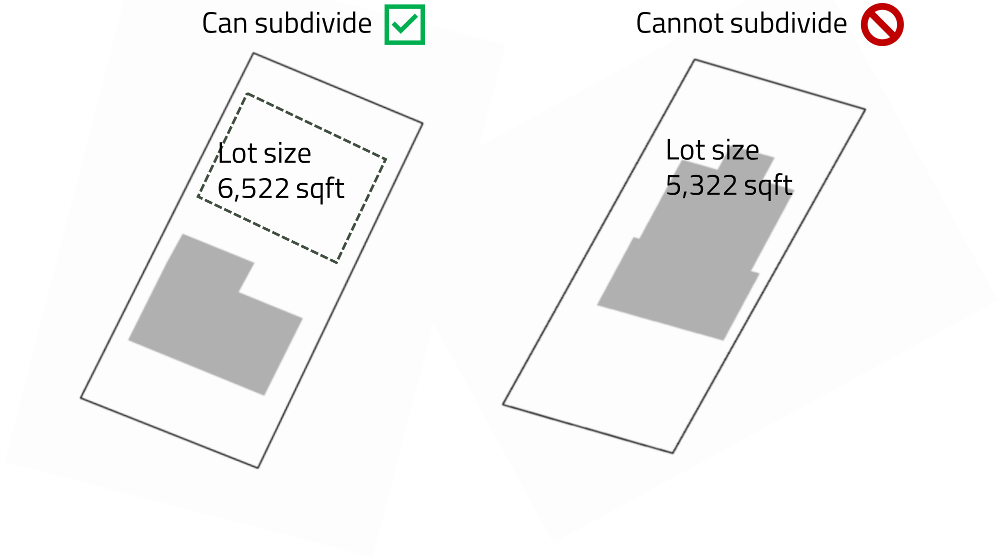
Methodology: Flexible subdivision (Front-back or side-by-side)

- To **subdivide front-back or side-by-side** without demolishing the existing structure, the only requirement is that the lot is big enough to accommodate additional structures
- Out of 43,997 parcels zoned RD-A, RD-B, and RD-C, **30,603 are at least the minimum practical lot size** (70%) necessary to subdivide
- For this type of subdivisions additional considerations like utilities, footprint of the existing structure, and required setbacks will constrain development further

Parcels that can be subdivided with existing structure by zone

Zone	Total parcels	Minimum practical lot size (SF)	# Parcels meeting minimum	Can add units (%)
RD-A	7,272	12,240	6,623	91.08%
RD-B	22,925	7,060	16,731	72.98%
RD-C	13,800	5,466	7,249	52.53%

Zone RD-C flexible subdivision with existing structure example



Methodology: But will parcels actually subdivide?

Just because a property *can* physically subdivide doesn't mean it *will* be purchased and subdivided.

The Key Question: Will developers be willing to pay enough to outbid other buyers and make subdivision financially viable?

Market Competition: Subdivision only happens when a developer can afford to pay *more* than a traditional buyer would pay for the existing property.

Traditional Homebuyer	Developer/Subdivider
Values property for current use	Values property for subdivision potential
Willing to pay based on comparable homes	Willing to pay based on new lot value
Keeps the existing lot as-is	Subdivides, builds new homes, sells lots

Our Approach:

We analyzed the economics for all **physically subdividable parcels** by calculating:

1. **Current market value** (what property would sell for today based on total assessed value)
2. **Developer's maximum offer** (value of new lots + remaining structure)
3. **Feasibility ratio** to estimate competitive advantage

When developer's offer > current market value: Subdivision is likely

When developer's offer < current market value: Property likely stays intact

Methodology: Building size assumptions

Consistent Assumptions Across All Scenarios

To maintain consistency across analyses, we used standardized building sizes based on Richmond market data:

Existing Structures: 2,000 SF

(Approximately the median home size in Richmond)

New ADUs: 1,000 SF

(Typical accessory dwelling unit size)

New Principal Structures: Varies by zone and based on lot coverage limits

- RD-A: Up to 2,500 SF
- RD-B: Up to 2,000 SF
- RD-C: Up to 1,500 SF

Methodology: Feasibility ratio calculation

Our Method: Calculate Developer Competitiveness for Each Parcel
For every subdividable parcel, we calculate:
Feasibility Ratio = Current Market Value ÷ Developer's Maximum Offer

Developer's Maximum Offer Includes:
- **New vacant lot value** × number of lots created
- **Existing structure value** (reduced 30% due to smaller lot)

Ratio	Category	Interpretation	Likelihood	Annual rate of change*
>100%	Above Value	Current value exceeds subdivision value	**Very Unlikely**	0%
80-100%	Marginal	Borderline, some profit	**Low**	.5%
60-80%	Favorable	Clear profit opportunity	**Likely**	3%
<60%	Highly Favorable	Strong profit margins	**Very Likely**	5%

**Annual rate of change reflects that properties with stronger economics (lower current value relative to maximum acquisition price) are more likely to convert.*

Example Calculation:
•Current market value: $300,000
•Developer's maximum offer: $450,000 (based on new lot values + preserved structure)
•Feasibility Ratio: $300,000 ÷ $450,000 = **67%**
•**Interpretation:** "Favorable" - Developer can outbid traditional buyers with clear profit opportunity

Q1: How likely is it that lots will subdivide side-to-side?

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Q1 Summary: Allowing side-by-side subdivision won’t have much impact

Q1 Summary: Why Side-by-Side Subdivision Won't Transform the City
Side-by-side subdivision faces two compounding constraints: geometric limitations and economic barriers.

The Geometric Challenge Most residential lots simply aren't wide enough. Only 19% of parcels meet the basic width threshold (double the minimum lot width), and once we account for the existing structure occupying the center of the lot, just 4% of all parcels can physically subdivide side-by-side.

The Economic Barrier Among the 1,730 parcels that *can* physically subdivide, most won't—because the economics don't work. Large minimum lot widths drive up acquisition costs and reduce the number of new lots created, making it difficult for developers to outbid traditional homebuyers.
This dynamic plays out differently across zones:

- **RD-A:** Minimum 90 ft widths mean massive lots and high property values. The value of the subdivided lots doesn't justify these costs. Virtually no activity expected.
- **RD-B:** Minimum 50 ft widths create a middle ground, but 78% of eligible parcels remain above value. Only Subarea 5 shows any meaningful potential, with perhaps 3 subdivisions annually across the entire zone.
- **RD-C:** Minimum 25 ft widths finally make subdivision economics viable in stronger market areas. Subareas 1 and 2, where land values are highest, will see the majority of activity—but even there, we're projecting just 17 conversions annually combined.

Bottom Line: Side-by-side subdivision will occur, but slowly and concentrated in RD-C's hottest submarkets. Expect roughly 27 parcels citywide per year—less than one-tenth of one percent of the residential parcel inventory.

RD-A Results – Q1 Side-by-Side Subdivision

- **Annual rate of change is less than 1 parcel** (less than 0.01% of total RD-A parcels), with only 46 parcels (0.6%) both qualifying for side-by-side subdivision and showing financial feasibility (maximum acquisition price exceeds current assessed value).
- **Side-by-side subdivision model fails in high-value RD-A properties**: With an average assessed value of $687,000 and the largest minimum lot width (90 ft), minimal activity is expected across all subareas, with only 7 parcels citywide showing strong feasibility (<60% ratio).

Subdivision Feasibility Analysis: RD-A Improved Parcels

Subarea	Above Value	80-100%	60-80%	<60%	Annual Rate of Change
1	0	0	0	1	0 parcels
2	6	1	0	0	0 parcels
3	0	0	0	0	0 parcels
4	28	16	3	2	0 parcels
5	77	13	6	4	0 parcels
6	9	0	0	0	0 parcels
TOTAL	**120**	**30**	**9**	**7**	**1 parcels**

RD-B Results – Q1 Side-by-Side Subdivision

- **Annual rate of change is 3 parcels** (0.01% of total RD-B parcels), with 136 parcels (0.6%) both qualifying for side-by-side subdivision and showing financial feasibility (maximum acquisition price exceeds current assessed value).
- **Side-by-side subdivision economics work selectively in RD-B's moderate price range**: With an average assessed value significantly lower than RD-A, RD-B properties are more affordable to acquire, though the 50 ft minimum lot width still constrains the number of new lots that can be created

Subdivision Feasibility Analysis: RD-B Improved Parcels

Subarea	Above Value	80-100%	60-80%	<60%	Annual Rate of Change
1	0	2	7	8	1 parcels
2	11	7	4	2	0 parcels
3	0	0	1	2	0 parcels
4	1	8	10	3	0 parcels
5	70	35	15	17	1 parcel
6	393	0	0	15	1 parcel
TOTAL	**475**	**52**	**37**	**47**	**3 parcels**

RD-C Results – Q1 Side-by-Side Subdivision

- **Annual rate of change is 24 parcels** (0.17% of total RD-C parcels), with 702 parcels (5.1%) both qualifying for side-by-side subdivision and showing financial feasibility (maximum acquisition price exceeds current assessed value)
- **Smaller lot widths make subdivision economics most favorable in RD-C**: With the smallest minimum lot width (25 ft) and lowest average assessed values across all three zones, RD-C properties face the most achievable acquisition threshold

Subdivision Feasibility Analysis: RD-C Improved Parcels

Subarea	Above Value	80-100%	60-80%	<60%	Annual Rate of Change
1	2	30	90	131	9 parcels
2	18	79	79	100	8 parcels
3	0	0	1	30	3 parcels
4	0	5	9	52	2 parcels
5	44	26	12	15	1 parcels
6	211	0	0	19	1 parcels
TOTAL	**275**	**140**	**191**	**347**	**24 parcels**

Q2: How likely is it that lots will subdivide either side-to-side or front-to-back?

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Q2 Summary: Flexible subdivision increases likelihood of new units

How does allowing front-back subdivision (in addition to side-by-side) affect development potential?
Side-by-side subdivision's strict geometric requirement—parcel must be double the minimum width with room for the existing structure in the middle—severely limited opportunities. What happens when we remove that constraint?

Geometry is less of an issue. Allowing structures to be placed anywhere on the lot (front-back, side-by-side, L-shaped configurations) transforms physical feasibility. Suddenly, 70% of all parcels have sufficient area to accommodate subdivision compared to just 4% under side-by-side requirements.

But Economics Still Rule Despite this increase in physical eligibility, financial feasibility tells a different story. Developers still must outbid traditional homebuyers, and this remains challenging in high-value areas.

RD-A: Geometric Flexibility Can't Fix Economics. Even with 6,623 parcels now physically eligible (up from 166), limited activity is expected. The average RD-A property worth $687,000 remains prohibitively expensive to acquire, and only 4 annual conversions are estimated.

RD-B: Flexibility Unlocks Select Markets The increase in physical eligibility (611 to 16,731 parcels) combines with moderate property values to create viable opportunities—particularly in Subareas 4 and 5. These areas see 110 of the 134 annual conversions (82%).

RD-C: From Hot Spots to Broader Activity RD-C already had the best economics under side-by-side subdivision. Annual conversions increase from 24 to 158—a 7-fold improvement.

Bottom Line: Flexible subdivision is a meaningful policy improvement that nearly triples total annual housing production from subdivision (27 to 296 parcels). However, this remains a gradual, market-driven process concentrated in areas where land values support development.

These projections represent likelihood based purely on financial feasibility. Actual market uptake could be much lower—front-back configurations place full-sized dwelling units behind existing homes, a development pattern with limited precedent in Richmond. Whether homeowners will sell for this purpose, and whether developers will embrace this unfamiliar configuration, remains an open question.

RD-A Results – Q2 Flexible subdivision

- **Annual rate of change is 4 parcels** (less than 0.1% of total RD-A parcels), with just 340 parcels (5%) both qualifying for subdivision and showing financial feasibility (maximum acquisition price exceeds current assessed value)
- **High property values and preservation penalty eliminate profit potential:** The average RD-A home is assessed at $687,000, and the requirement to preserve the existing structure—which loses 30% of its value due to the reduced lot size after subdivision—makes acquisition economics prohibitive.

Preservation Bonus Feasibility Analysis: RD-A Improved Parcels

Subarea	Above Value	80% to 100% of Value	60% to 80% of Value	< 60% of Value	Annual Rate of Change
1	0	0	0	1	0 parcels
2	642	6	1	0	0 parcels
3	0	0	0	0	0 parcels
4	1318	55	15	21	2 parcels
5	3927	196	17	5	2 parcels
6	396	20	3	0	0 parcels
TOTAL	**6,283**	**277**	**36**	**27**	**4 parcels**

RD-B Results – Q2 Flexible subdivision

- **Annual rate of change is 134 parcels** (0.6% of total RD-B parcels), with 6,107 parcels (27%) both qualifying for subdivision and showing financial feasibility (maximum acquisition price exceeds current assessed value)
- **Preservation economics work best in RD-B's moderate price range:** With an average assessed value significantly lower than RD-A, RD-B properties are more affordable to acquire, and the 30% devaluation of the preserved structure is less catastrophic to overall project economics.

Preservation Bonus Feasibility Analysis: RD-B Improved Parcels

Subarea	Above Value	80% to 100% of Value	60% to 80% of Value	< 60% of Value	Annual Rate of Change
1	17	10	101	94	8 parcels
2	1060	399	237	230	21 parcels
3	10	4	8	36	2 parcels
4	1031	330	428	642	47 parcels
5	2236	841	690	145	32 parcels
6	6270	1346	541	25	24 parcels
TOTAL	**10,624**	**2,930**	**2,005**	**1,172**	**134 parcels**

RD-C Results – Q2 Flexible subdivision

- **Annual rate of change is 158 parcels** (1.1% of total RD-C parcels), with 4,703 parcels (34%) both qualifying for subdivision and showing financial feasibility (maximum acquisition price exceeds current assessed value)
- **Lower property values make preservation economics most favorable in RD-C:** With the smallest lot sizes and lowest average assessed values across all three zones, RD-C properties are the most affordable to acquire.

Preservation Bonus Feasibility Analysis: RD-C Improved Parcels

Subarea	Above Value	80% to 100% of Value	60% to 80% of Value	< 60% of Value	Annual Rate of Change
1	112	103	384	1195	72 parcels
2	896	488	509	500	43 parcels
3	13	8	55	292	16 parcels
4	443	140	212	242	19 parcels
5	408	73	25	6	1 parcel
6	674	305	162	4	7 parcels
TOTAL	**2,546**	**1,117**	**1,347**	**2,239**	**158 parcels**

Q3: How much more uptake would there be if 2+1 was allowed for teardowns?

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Q3 Summary: Teardown scenario

How much more uptake if 2+1 is allowed with teardowns? The teardown scenario represents maximum development potential under the proposed zoning—developers can demolish existing structures and build two new principal dwellings plus an ADU. No preservation requirement and the only geometric constraint is whether the lot is big enough.

The Value Loss of Demolition Overwhelms Benefits When developers demolish, they lose all residual value from the existing structure. In preservation scenarios, even a 30%-discounted existing home contributes positively to project economics. In teardowns, it's pure cost: acquisition + demolition.

Results by Zone:
RD-A: Economically Impossible
$687,000 average values make acquisition prohibitive even at 10% discount. Revenue from two 2,500 SF units + ADU cannot justify costs. Result: <1 parcel annually.
RD-B: Viable Only in Highest-Value Subarea
17 of 18 annual conversions (94%) occur in Subarea 4, the zone's most expensive area. Counterintuitively, teardowns work only where sale prices are highest—lower-value areas can't support the economics. Result: 18 parcels annually.
RD-C: Constrained by Small Unit Sizes
Low acquisition costs are offset by small lot sizes limiting new units to 1,500 SF average—too small to generate adequate sale prices. Result: 4 parcels annually in Subareas 3-4.

Bottom Line: The teardown 2+1 scenario generates approximately 40 annual conversions citywide (120 total units)—the *lowest* uptake of any subdivision scenario despite maximum development flexibility. High acquisition costs and demolition expenses make teardown economics viable only in Richmond's strongest submarkets.

RD-A Results – Q3 Teardowns and 2+1

- **High acquisition costs make demolition scenario infeasible in RD-A**: The average assessed value in RD-A is $687,000—more than double the RD-B average—making it prohibitively expensive for developers to acquire and demolish existing homes even with the ability to build two new principal units plus an ADU
- **Minimal development activity expected**: With only 1 parcel showing any likelihood of conversion over the planning period (less than 1 parcel per year), the 2+1 demolition scenario is effectively non-viable in RD-A under current market conditions.

Teardown 2+1 Feasibility Analysis: RD-A Improved Parcels

Subarea	Above Value	80% to 100% of Value	60% to 80% of Value	< 60% of Value	Annual Rate of Change
1	1	0	0	0	0 parcels
2	649	0	0	0	0 parcels
3	0	0	0	0	0 parcels
4	1,381	7	20	1	1 parcels
5	4,145	0	0	0	0 parcels
6	419	0	0	0	0 parcels
TOTAL	**6,595**	**7**	**20**	**1**	**1 parcel**

RD-B Results - Q3 Teardowns and 2+1

- **Modest development activity concentrated in highest-value subarea:** Only 18 parcels annually are expected to convert under the 2+1 demolition scenario, with 17 of those (94%) located in Subarea 4.
- **Geographic concentration reflects micro-market dynamics:** The clustering of feasible conversions in Subarea 4 demonstrates that citywide zoning changes alone won't drive uniform development activity.

Teardown 2+1 Feasibility Analysis: RD-B Improved Parcels

Subarea	Above Value	80% to 100% of Value	60% to 80% of Value	< 60% of Value	Annual Rate of Change
1	222	0	0	0	0 parcels
2	1,926	0	0	0	0 parcels
3	22	20	16	0	1 parcels
4	1,659	330	350	92	17 parcels
5	3,912	0	0	0	0 parcels
6	8,182	0	0	0	0 parcels
TOTAL	**15,923**	**350**	**366**	**92**	**18 parcels**

RD-C Results - Q3 Teardowns and 2+1

- **Lower acquisition costs partially offset by constrained development potential:** RD-C has the lowest average assessed values and smallest lot sizes of the three zones, making initial acquisition more affordable. However, the estimated square footage of new principal structures at just 1,500 SF which constrains sale prices and overall project profitability.
- **Modest development activity despite favorable acquisition costs:** Only 4 parcels annually are expected to convert under the 2+1 demolition scenario, concentrated in Subareas 3 and 4

Teardown 2+1 Feasibility Analysis: RD-C Improved Parcels

Subarea	Above Value	80% to 100% of Value	60% to 80% of Value	< 60% of Value	Annual Rate of Change
1	1,794	0	0	0	0 parcels
2	2,393	0	0	0	0 parcels
3	191	156	21	0	1 parcel
4	841	129	60	7	3 parcels
5	512	0	0	0	0 parcels
6	1,145	0	0	0	0 parcels
TOTAL	**6,876**	**285**	**81**	**7**	**4 parcels**

Q4: How many owners will take advantage of the preservation bonus (2 full units plus one ADU) as a rental model?

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Q4 Summary: Will homeowners become landlords?

How many owners will take advantage of the preservation bonus (2 full units plus one ADU) as a rental model?
The preservation bonus without subdivision removes the developer from the equation. Instead of selling to a subdivider, existing homeowners could invest in adding rental units to their property.

The Investment Challenge Building a new principal dwelling unit plus an ADU requires substantial capital—typically $300,000-$500,000 depending on size and finish quality. For this investment to make sense, rental income must generate acceptable returns. This math works very differently across Richmond's neighborhoods.

Why RD-A Won't Participate In RD-A the typical homeowner would need to invest heavily in new construction, but the achievable rents—even for two units—cannot justify the capital outlay. The investment-to-income ratio simply doesn't work. Expect virtually no uptake (3 parcels annually).

RD-B Shows Selective Promise RD-B's moderate property values create a middle ground. Homeowners in stronger rental markets—particularly Subareas 2 and 4—can achieve returns that justify the investment. But this remains a minority of parcels: only 13% show financial feasibility, translating to 94 conversions annually.

RD-C Offers the Strongest Case Lower property values in RD-C mean homeowners face a more achievable investment threshold, while still commanding rents sufficient to generate returns. One-third of RD-C parcels (4,588) show financial feasibility, concentrated in Subareas 1, 2, and 4. This translates to 168 annual conversions—more than RD-A and RD-B combined.

Bottom Line: The preservation bonus rental model will generate approximately 265 conversions annually citywide, creating 530 new rental units per year. This is a meaningful but modest contribution to housing supply, concentrated almost entirely in RD-C's stronger rental submarkets.

RD-A Results – Q4 Owners as landlords

- **Annual rate of change is 3 parcels** (less than 0.05% of total RD-A parcels), with only 136 parcels (2%) both qualifying and showing financial feasibility for adding rental units without subdivision
- **Rental income model fails to justify investment in high-value properties:** With an average assessed value of $687,000, RD-A homeowners would need to invest significantly in adding a new principal structure and ADU, but rental income from two units cannot generate sufficient returns to make the project worthwhile.

Preservation Bonus Feasibility Analysis: RD-A Improved Parcels

Subarea	Above Value	80-100%	60-80%	<60%	Annual Rate of Change
1	0	0	0	1	0 parcels
2	588	51	9	1	1 parcel
3	0	0	0	0	0 parcels
4	1,335	43	11	20	2 parcels
5	4,145	0	0	0	0 parcels
6	419	0	0	0	0 parcels
TOTAL	**6,487**	**94**	**20**	**22**	**3 parcels**

RD-B Results - Q4 Owners as landlords

- **Annual rate of change is 94 parcels** (0.4% of total RD-B parcels), with 3,047 parcels (13%) both qualifying and showing financial feasibility for adding rental units without subdivision.
- **Rental income model shows modest viability in moderate-price markets:** With lower acquisition costs than RD-A, RD-B homeowners face a more realistic investment threshold for adding a new principal structure and ADU as rental units.
- **Activity concentrated in Subareas 2 and 4** with 43 and 45 annual conversions projected respectively.

Preservation Bonus Feasibility Analysis: RD-B Improved Parcels

Subarea	Above Value	80-100%	60-80%	<60%	Annual Rate of Change
1	30	79	84	29	4 parcels
2	499	392	543	492	43 parcels
3	13	6	17	22	2 parcels
4	1048	333	442	608	45 parcels
5	3912	0	0	0	0 parcels
6	8182	0	0	0	0 parcels
TOTAL	**13,684**	**810**	**1,086**	**1,151**	**94 parcels**

RD-C Results - Q4 Owners as landlords

- **Annual rate of change is 168 parcels** (1.2% of total RD-C parcels), with 4,588 parcels (33%) both qualifying and showing financial feasibility for adding rental units without subdivision
- **Lower property values make rental model most viable in RD-C:** With the smallest lot sizes and lowest assessed values across all three zones, RD-C homeowners face the most achievable investment threshold for adding rental units.
- **Broad activity across Subareas 1, 2, and 4** with 60, 73, and 20 annual conversions projected respectively.

Preservation Bonus Feasibility Analysis: RD-C Improved Parcels

Subarea	Above Value	80-100%	60-80%	<60%	Annual Rate of Change
1	182	224	519	869	60 parcels
2	376	375	526	1116	73 parcels
3	16	11	115	226	15 parcels
4	430	140	212	255	20 parcels
5	512	0	0	0	0 parcels
6	1145	0	0	0	0 parcels
TOTAL	**2,661**	**750**	**1,372**	**2,466**	**168 parcels**