

Business Licensing Trajectories around Mixed-Use Housing Construction: *Evidence from Chicago*

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Abstract

Mixed-use development has become a cornerstone of contemporary urban planning, promoted as a way to add housing supply while keeping neighborhoods walkable and commercially active. Yet how nearby business activity evolves around these projects remains largely unknown. Linking permit records of mixed-use construction to annual business licensing in Chicago from 2002 to 2025, I examine how housing and local commerce develop together. Licensed business activity is higher in the years around mixed-use permit issuance, and a stock/flow decomposition points to new business entry, rather than fewer exits, as the clearest margin. The gains are positive across food, retail, services, and entertainment but differ in size and precision. Together, these patterns describe neighborhoods where new housing and licensed business activity grow together, adding descriptive evidence to debates over whether denser, mixed-use development supports neighborhood commerce.

Keywords: Mixed-use development; housing supply; business licensing; neighborhood change

JEL Codes: R12, R23, R31, R58

Word Count: 1,999

1 Introduction

Mixed-use residential development combines housing with ground-floor retail, restaurants, offices, or other commercial space. It has become a cornerstone of urban planning as cities reform zoning to encourage denser development. Advocates argue it can add housing supply while supporting walkable neighborhoods and access to local services (Urban Land Institute, 2010). Yet evidence on how this construction relates to nearby business activity remains limited (Rabianski et al., 2009).

Business activity is not only a downstream outcome of new housing, because such activity can also influence where housing is built. New housing can shift rents, neighborhood composition, and nearby commercial activity, while local business activity can itself precede residential development (Behrens et al., 2024).

I examine how mixed-use housing construction and nearby business licensing evolve together in Chicago, which maintains public records of permits and licenses. I identify mixed-use sites from permit records and link them to annual counts of nearby active business locations. I estimate event-study models with a modern difference-in-differences estimator (Gardner et al., 2025), using the staggered timing of mixed-use permits to track licensing trajectories near these sites. Because every local area eventually receives a mixed-use permit, the comparison is between earlier- and later-permitted areas, not between treated and never-treated neighborhoods, which limits concerns about endogenous site selection. Permit timing may still respond to local trends, so I interpret these estimates descriptively, as event-time correlations around permit issuance rather than the causal effect of construction.

I report three findings. First, active business locations rise following permit issuance across the cutoffs. Second, a stock/flow decomposition attributes most of this increase to business-location entry rather than fewer exits. Third, category-specific estimates at the preferred 0.25-mile cutoff are positive but heterogeneous. Together they describe neighborhoods where licensing and mixed-use construction grow together, with new entry the clearest margin.

2 Background

The rationale for mixed-use development is that new residents raise nearby demand for goods and services that ground-floor commercial space can serve. In practice, however, planned ground-floor retail is not automatically viable (Grant and Perrott, 2011; Brooks and Meltzer, 2025), so the realized commercial response is an empirical question.

Beyond a project’s storefronts, mixed-use development can affect business activity on nearby blocks, with ambiguous sign/timing. New housing can lower nearby rents and reshape local demand (Asquith et al., 2023; Li, 2022), new commercial space may add to or substitute for existing locations, and firms may enter early if they identify improving corridors before permits record a project (Behrens et al., 2024). Selection compounds this ambiguity. In Chicago, up-zoning has raised property values without a short-run construction response (Freemark, 2020), and mixed-use affordable housing concentrates in wealthier, whiter neighborhoods (Freemark, 2018). Licensing near mixed-use sites therefore reflects both where projects locate and what changes once they appear, motivating the descriptive event-study reading I adopt below.

Business licensing measures these dynamics at fine spatial scale, recording active, legally operating locations, though not employment or sales, where survey measures are often unavailable (Credit and van Lieshout, 2021; Glaeser et al., 2023). I use it to track how the number and composition of licensed businesses evolve near mixed-use sites.

3 Data and Methods

I identify mixed-use housing sites from Chicago building permit records (City of Chicago Data Portal, 2026a), retaining construction permits whose text contains both residential and commercial or mixed-use language and excluding demolition, maintenance, utility, and revision-only records; the Online Appendix details this classification. The site file includes coordinates, issue dates, and reported residential units when available. I date each site by its building permit issue year, when a developer secures authorization to build. I read this date as when a planned site becomes publicly visible to nearby businesses, not when the building opens; because permit timing may coincide with other neighborhood changes, I track licensing around it

rather than interpreting the estimates as the causal effect of a building opening. Because permit issuance precedes occupancy by a variable lag, the event-year-zero coefficient bundles anticipation, activity during construction, and, for faster projects, early occupancy. Figure 1 maps the mixed-use sites and plots annual permit-year counts and reported residential units; Table 1 reports summary statistics for the site and license panels.

I use Chicago business licensing records (City of Chicago Data Portal, 2026b) to build an annual panel of active business locations from 2002 to 2025. A business location is active in a year if a license interval overlaps that year and the record has valid location and identifier information. For each mixed-use site, I count active business locations within a distance buffer in each year, assigning the local area the first mixed-use permit year observed inside that buffer. The preferred specification uses a 0.25-mile radius, following multi-family housing studies emphasizing local spillovers (Asquith et al., 2023). I also construct 0.15- and 0.35-mile measures, with category-specific results at these cutoffs in the Online Appendix. Buffers can overlap, so a business location may enter more than one panel; an overlap robustness check that drops later-permitted neighbors leaves the aggregate estimates similar while attenuating some category estimates (Online Appendix). To separate stocks from flows, I define an entry as the first year a business-location identifier appears active and an exit as the last; these need not coincide with physical openings or closings. For category results, I classify licenses into food and drink, retail, entertainment and leisure, and local services.

The estimating equation is an event-study model at the local-area-by-year level:

$$Y_{at} = \alpha_a + \gamma_t + \sum_{\substack{k=-4 \\ k \neq -1}}^3 \beta_k \mathbf{1}\{t - G_a = k\} + u_{at}. \quad (1)$$

Here, Y_{at} is a business-licensing outcome near local area a in year t , α_a denotes local-area fixed effects, and γ_t denotes year fixed effects. G_a is the first mixed-use permit year observed within the relevant buffer. Event year -1 is omitted. I cluster standard errors at the local-area level, and the comparison group is not-yet-treated areas.

4 Results

Figure 2 presents event-study estimates for all active business locations, with the preferred 0.25-mile specification in Panel B. Active licensed business locations are higher in the event years following permit issuance across cutoffs. At 0.25 miles, the average post-permit estimate is 6.7 additional active locations over event years 0 through 3, about 3.5% above the pre-permit mean of 195 and significant at the 5% level; the 0.35-mile estimate is larger and the 0.15-mile estimate positive but imprecise. The increase builds over time, reaching roughly 11 additional locations by event year 3 at 0.25 miles. Pre-period coefficients are small (about -0.9 to 1.7 locations, each under 1% of the pre-permit mean); the joint pre-period test nonetheless rejects here and for most category outcomes because these coefficients are precisely estimated, rather than a sustained pre-trend. I therefore read the post-period pattern as suggestive; the level shift is concentrated after the permit year, but earlier- and later-permitted areas are not statistically identical beforehand.

Panel A of Table 2 decomposes the 0.25-mile result into the active stock, entries, and exits. Business-location entries rise by 2.9 per year on average after the permit year, about 10% above the pre-permit mean of 29 and significant at the 5% level, while the exit estimate is essentially zero (0.1 locations, or 0.3%, and not significant). The post-permit increase therefore reflects additional first appearances rather than fewer last appearances; because licenses count legally active locations rather than establishments or sales, I describe this as new licensing activity, not verified openings.

Figure 3 reports category-specific estimates at the 0.25-mile cutoff; the four post-permit averages are positive but differ in size and precision. Retail and food and drink post the largest level gains (4.9 and 4.5 additional locations, about 10% and 8% above their pre-permit means), and local services rises by 4.0 locations, the largest proportional gain at roughly 24%. Entertainment and leisure is positive but imprecise (1.0 locations). Because the categories are not mutually exclusive, the estimates need not sum to the aggregate; I read the broadly positive results as showing the increase is not concentrated in a single license class. Table 2 reports the corresponding pooled estimates.

5 Conclusion

This paper studies how mixed-use housing and business licensing evolve together in Chicago. Active licensed business locations are higher in the years around mixed-use permit issuance, and the increase comes through business-location entry rather than fewer exits. These patterns indicate that mixed-use projects tend to appear in neighborhoods where licensed business activity rises around the permit year, with new entry the clearest margin. Because timing reflects permit issue dates rather than realized occupancy, and licenses count active licensed locations rather than establishments, sales, or employment, I read these estimates as descriptive trajectories rather than the causal effect of a building opening.

Declaration of Interest

The author reports there are no competing interests to declare.

Declaration of Funding

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References

- Asquith, B. J., Mast, E., and Reed, D. (2023). Local effects of large new apartment buildings in low-income areas. *The Review of Economics and Statistics*, 105(2):359–375.
- Behrens, K., Boualam, B., Martin, J., and Mayneris, F. (2024). Gentrification and pioneer businesses. *The Review of Economics and Statistics*, 106(1):119–132.
- Brooks, L. and Meltzer, R. (2025). Retail on the ground and on the books: Vacancies and the (mis)match between retail activity and regulated land uses. *Journal of the American Planning Association*, 91(2):192–206.
- City of Chicago Data Portal (2026a). Building permits. <https://data.cityofchicago.org/>. Accessed May 26, 2026.
- City of Chicago Data Portal (2026b). Business licenses. <https://data.cityofchicago.org/>. Data owner: Department of Business Affairs and Consumer Protection. Accessed May 26, 2026.
- Credit, K. and van Lieshout, E. (2021). The pandemic economy: Exploring the change in new business license activity in Chicago, USA from March–September, 2020. *REGION*, 8(2):29–56.
- Freemark, Y. (2018). Challenges in the creation of mixed-use affordable housing: Measuring and explaining its limited prevalence. *Housing Policy Debate*, 28(6):1004–1021.
- Freemark, Y. (2020). Upzoning Chicago: Impacts of a zoning reform on property values and housing construction. *Urban Affairs Review*, 56(3):758–789.
- Gardner, J., Thakral, N., To, L. T., and Yap, L. (2025). Two-stage differences in differences. Working paper, University of Mississippi, Department of Economics.
- Glaeser, E. L., Luca, M. J., and Moszkowski, E. (2023). Gentrification and retail churn: Theory and evidence. *Regional Science and Urban Economics*, 100:103879.
- Grant, J. and Perrott, K. (2011). Where is the café? The challenge of making retail uses viable in mixed-use suburban developments. *Urban Studies*, 48(1):177–195.

- Li, X. (2022). Do new housing units in your backyard raise your rents? *Journal of Economic Geography*, 22(6):1309–1352.
- Rabianski, J. S., Gibler, K. M., Tidwell, O. A., and Clements III, J. S. (2009). Mixed-use development: A call for research. *Journal of Real Estate Literature*, 17(2):205–230.
- Urban Land Institute (2010). Land use and driving: The role compact development can play in reducing greenhouse gas emissions. Technical report, Urban Land Institute, Washington, D.C.

Table 1: *Summary Statistics for Mixed-Use Sites and Business Licensing Panel*

Panel A: Sample Counts		<i>Count</i>			
Unique mixed-use site records		523			
Unique local-area centers		513			
Unique business locations in 0.25-mile buffers		114,890			
Panel B: Mixed-Use Site Records		<i>Mean</i>	<i>SD</i>	<i>10th Pct.</i>	<i>90th Pct.</i>
Permit issue year		2,014.8	6.2	2,006.0	2,023.0
Residential units		75.7	123.3	3.0	246.4
Panel C: Local-Area Business Licensing Panel		<i>Mean</i>	<i>SD</i>	<i>10th Pct.</i>	<i>90th Pct.</i>
Active business locations		191.3	203.4	51.0	360.0
Business-location entries		27.4	30.9	4.0	60.0
Business-location exits		27.8	33.7	3.0	61.0
Food and drink locations		58.1	48.0	16.0	122.0
Retail locations		60.7	58.0	14.0	129.0
Entertainment and leisure locations		12.6	16.3	1.0	33.0
Local services locations		31.1	43.3	5.0	56.0

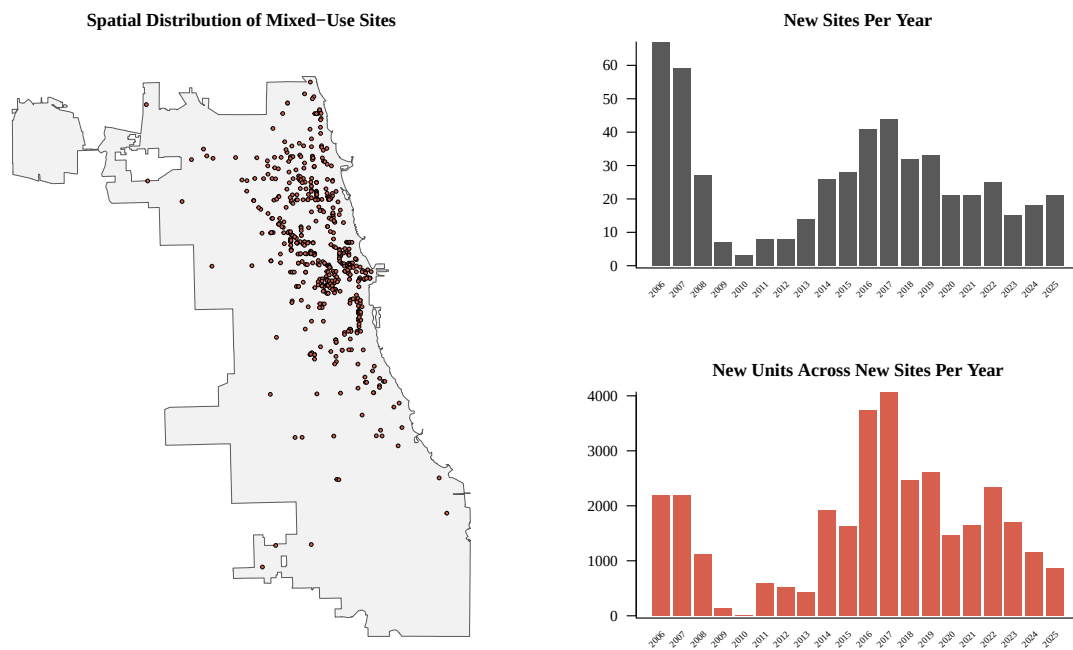
Notes: Panel A reports sample counts. Panel B summarizes permit-derived mixed-use site records in Chicago. Panel C summarizes annual local-area business licensing outcomes from 2002 to 2025, counting business locations within the preferred 0.25-mile buffer around mixed-use sites.

Table 2: *Mixed-Use Construction and Business Licensing Trajectories, 0.25-Mile Cutoff*

	Estimate	SE	<i>p</i> -Value	Pre-Treatment Mean	Observations
Panel A: Business-Location Stocks and Flows					
Active business locations	6.72	(2.72)	0.013	194.5	4,214
Business-location entries	2.92	(1.37)	0.033	28.6	4,214
Business-location exits	0.09	(1.57)	0.952	28.7	4,214
Panel B: License Categories					
Food and drink	4.46	(1.23)	<0.001	53.8	4,214
Retail	4.93	(1.11)	<0.001	48.2	4,214
Entertainment and leisure	1.00	(0.81)	0.218	9.6	4,214
Local services	3.96	(1.28)	0.002	16.4	4,214

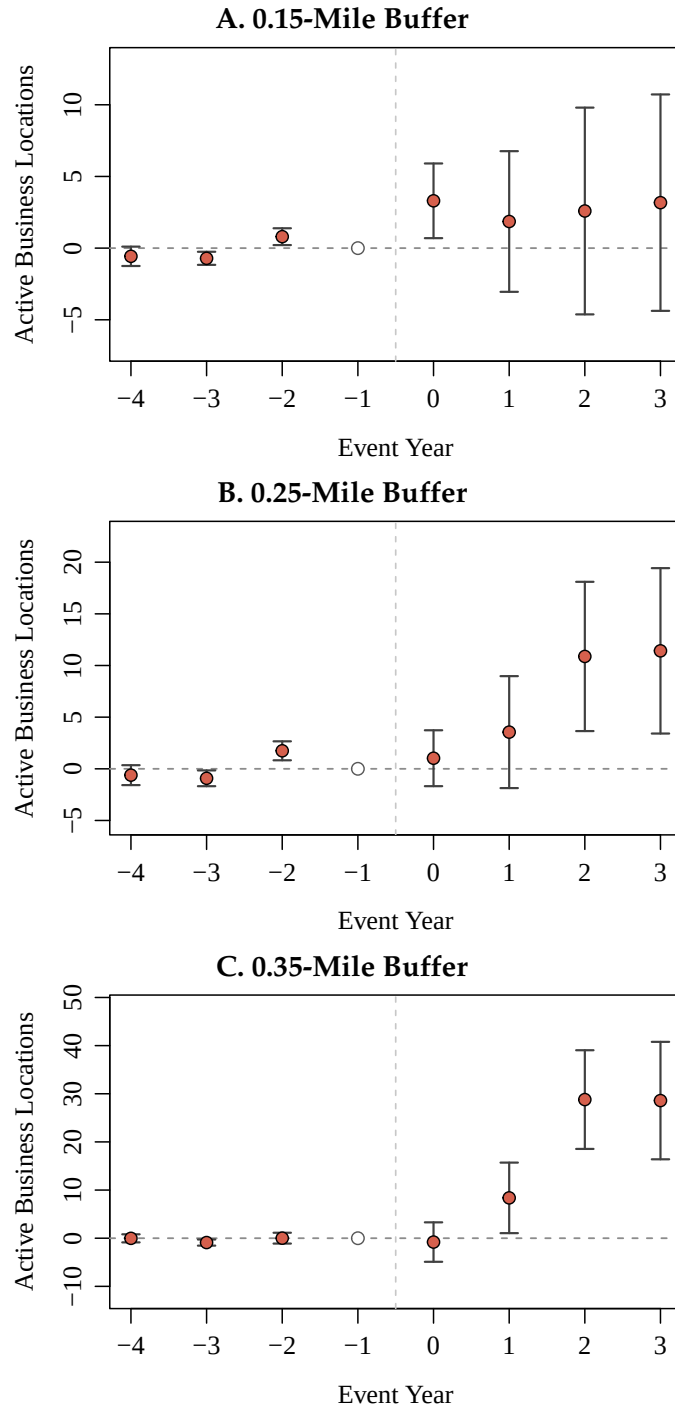
Notes: This table reports average post-permit estimates for event years 0 through 3 from the difference-in-differences estimator in Equation (1). The unit of observation is a local area by year, with exposure defined as business locations within 0.25 miles of mixed-use sites. All specifications include local-area and year fixed effects, with standard errors clustered at the local-area level in parentheses.

Figure 1: *Mixed-Use Housing Construction Across Chicago*



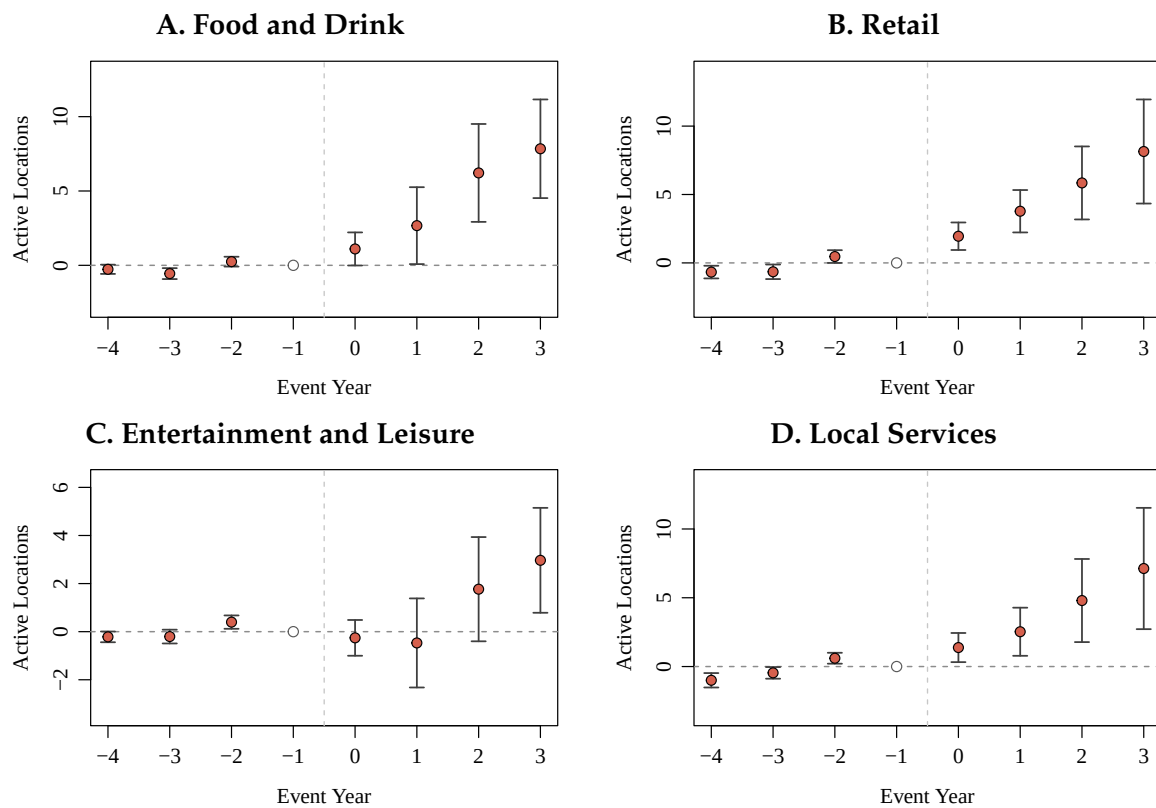
Notes: This figure maps mixed-use housing sites across Chicago and plots annual permit-year counts and reported residential units.

Figure 2: *Mixed-Use Construction and Active Business-Licensing Trajectories*



Notes: This figure reports event-study estimates for active licensed business locations near mixed-use sites; Panel B is the preferred 0.25-mile cutoff. Standard errors are clustered at the local-area level; bars show 95% confidence intervals.

Figure 3: *Mixed-Use Construction and Business Licensing by Category, 0.25-Mile Cutoff*



Notes: This figure reports event-study estimates for active licensed business locations by license category at the preferred 0.25-mile cutoff. Standard errors are clustered at the local-area level; bars show 95% confidence intervals.