

JUE Insight: Condominium Development Does Not Lead to Gentrification

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Online Appendix

Appendix A: Additional Figures and Tables

This appendix provides additional tables and figures that supplement the main text exhibits. These are displayed in order of reference in the main text.

Table A.1: List of Metropolitan Areas by Passage of Restrictive Condo Ordinance

Passed Ordinance (Treatment Areas)	Did Not Pass Ordinance (Control Areas)
(1)	(2)
Baltimore-Columbia-Towson, MD	Albuquerque, NM
Boston-Cambridge-Newton, MA-NH*	Anchorage, AK
Chicago-Naperville-Elgin, IL-IN-WI*	Atlanta-Sandy Springs-Roswell, GA
Detroit-Warren-Dearborn, MI	Austin-Round Rock, TX
Fresno, CA	Bakersfield, CA
Indianapolis-Carmel-Anderson, IN*	Baton Rouge, LA
Lincoln, NE	Birmingham-Hoover, AL
Los Angeles-Long Beach-Anaheim, CA	Buffalo-Cheektowaga-Niagara Falls, NY
Minneapolis-St. Paul-Bloomington, MN-WI*	Charlotte-Concord-Gastonia, NC-SC
New York-Newark-Jersey City, NY-NJ-PA	Cincinnati, OH-KY-IN
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD*	Cleveland-Elyria, OH
Portland-Vancouver-Hillsboro, OR-WA	Colorado Springs, CO
Reno, NV	Columbus, OH
Riverside-San Bernardino-Ontario, CA	Corpus Christi, TX
Sacramento-Roseville-Arden-Arcade, CA	Dallas-Fort Worth-Arlington, TX
San Diego-Carlsbad, CA*	Denver-Aurora-Lakewood, CO
San Francisco-Oakland-Hayward, CA*	Durham-Chapel Hill, NC
San Jose-Sunnyvale-Santa Clara, CA	El Paso, TX
Seattle-Tacoma-Bellevue, WA*	Fort Wayne, IN
Stockton-Lodi, CA	Greensboro-High Point, NC
Tucson, AZ	Houston-The Woodlands-Sugar Land, TX
Washington-Arlington-Alexandria, DC-VA-MD-WV*	Jacksonville, FL
	Kansas City, MO-KS
	Laredo, TX
	Las Vegas-Henderson-Paradise, NV
	Lexington-Fayette, KY
	Louisville/Jefferson County, KY-IN
	Lubbock, TX
	Madison, WI
	Memphis, TN-MS-AR
	Miami-Fort Lauderdale-West Palm Beach, FL
	Milwaukee-Waukesha-West Allis, WI
	Nashville-Davidson-Murfreesboro-Franklin, TN
	New Orleans-Metairie, LA
	Oklahoma City, OK
	Omaha-Council Bluffs, NE-IA
	Orlando-Kissimmee-Sanford, FL
	Phoenix-Mesa-Scottsdale, AZ
	Pittsburgh, PA
	Raleigh, NC
	Rochester, NY
	San Antonio-New Braunfels, TX
	Spokane-Spokane Valley, WA
	St. Louis, MO-IL
	Tampa-St. Petersburg-Clearwater, FL
	Toledo, OH
	Tulsa, OK
	Virginia Beach-Norfolk-Newport News, VA-NC
	Wichita, KS
	Winston-Salem, NC

Notes: This table lists the treatment and control metro areas in the estimation sample that contain the one-hundred largest cities by population. Column 1 lists all metro areas that passed an ordinance restricting condo conversion and Column 2 lists all metro areas that did not pass an ordinance restricting condo conversion. Asterisks denote metro areas that passed an ordinance in the 1970s and are dropped from the primary analysis sample.

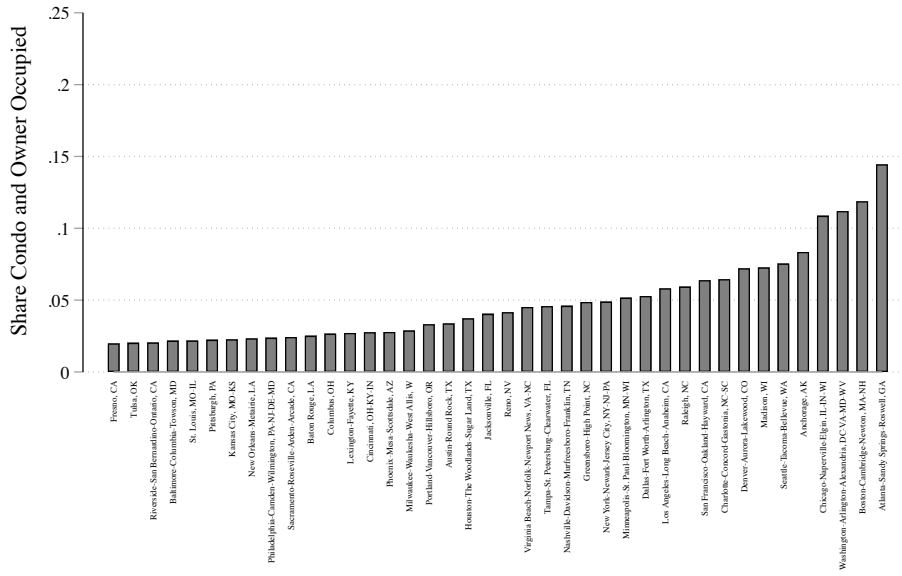
Table A.2: List of Metropolitan Areas which Passed Restrictive Condo Ordinance Along with Passage Year and Ordinance Severity

	Passage Year	Ordinance Severity
	(1)	(2)
Baltimore-Columbia-Towson, MD	1983	2
Boston-Cambridge-Newton, MA-NH	1979	2
Chicago-Naperville-Elgin, IL-IN-WI	1977	3
Detroit-Warren-Dearborn, MI	1980	3
Fresno, CA	1980	3
Indianapolis-Carmel-Anderson, IN	1975	1
Lincoln, NE	1980	1
Los Angeles-Long Beach-Anaheim, CA	1980	2
Minneapolis-St. Paul-Bloomington, MN-WI	1979	1
New York-Newark-Jersey City, NY-NJ-PA	1982	3
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	1979	3
Portland-Vancouver-Hillsboro, OR-WA	1980	2
Reno, NV	1980	3
Riverside-San Bernardino-Ontario, CA	2007	2
Sacramento-Roseville-Arden-Arcade, CA	1980	3
San Diego-Carlsbad, CA	1979	2
San Francisco-Oakland-Hayward, CA	1979	3
San Jose-Sunnyvale-Santa Clara, CA	2000	2
Seattle-Tacoma-Bellevue, WA	1978	2
Stockton-Lodi, CA	2009	2
Tucson, AZ	1995	2
Washington-Arlington-Alexandria, DC-VA-MD-WV	1976	3

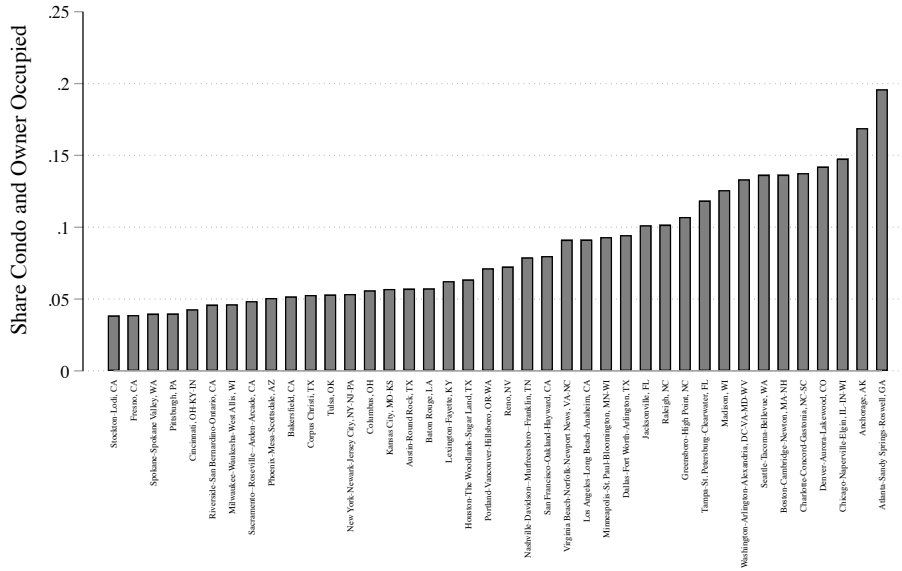
Notes: This table lists the metro areas that passed an ordinance limiting condominium conversions between 1970 and 2010, along with the passage year and the severity of the ordinance. See Appendix Table B.1 for additional details on the procedure used to code ordinance severity.

Figure A.1: Condo Share of the Housing Stock in Central Cities, 2010

Panel A: All Building Types

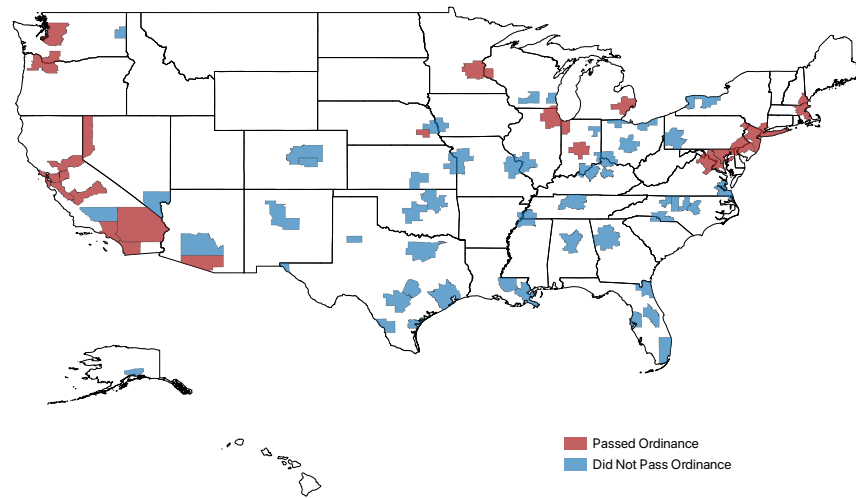


Panel B: Multi-Family Buildings



Note: This figure reports share condo and owner occupied in central cities from the estimation sample that we identify in the 3-year 2011 American Community Survey. Panel A reports the forty metro areas with the greatest condo share including all building types. Panel B reports the forty metro areas with the greatest condo share in multi-family buildings.

Figure A.2: Map of Metropolitan Areas in Sample by Passage of Restrictive Condo Ordinance



Notes: This figure displays the metro areas which passed and did not pass ordinances which limited condominium conversions between 1970 and 2010. Red shaded metro areas passed an ordinance which limited condominium conversions between 1970 and 2010. Blue shaded metro areas did not pass an ordinance in the same time period.

Appendix B: Index of Regulation Severity

The municipal codes contain a substantial amount of detail about each regulation governing the conversion of dwelling units to condominiums, which we use to construct an index of regulation severity. The construction of the index is best illustrated by example, for which purpose we use the Detroit (MI) municipal code.

Detroit’s code contains several restrictive provisions. First, prior to the transfer of title of any building containing four or more residential units for the purpose of a condominium conversion, the owner is required to offer the tenants of a majority of the rental units a joint right to match any third-party developer’s offer of purchase (Detroit Municipal Code § 26-6-4, 2017). Second, the ordinance allows senior citizens residing in subsidized or otherwise low-rent apartments to execute a lifetime lease for their unit, with limited rent increases (Detroit Municipal Code § 26-6-5, 2017). Third, the ordinance also requires owners to provide the mayor, the city planning commission, and each tenant with 120 days notice of the intent to convert apartments to condominium ownership, prohibits evictions without cause during the notice period, and grants the tenants a 60-day right of first refusal to purchase their dwelling units as condominium estates (Detroit Municipal Code §§ 26-6-6, 26-6-7, 26-6-10, 2017). Finally, the regulation requires relocation assistance payments equal to one month’s rent to be paid to any tenant of a subsidized or otherwise low-rent apartment (Detroit Municipal Code §§ 26-6-11, 2017). The notes to the code indicate that these provisions were enacted by Ordinance 400-H of 1980. Archives of the Detroit Free Press confirm that the ordinance was approved 4-1 by the Detroit City Council on July 30, 1980. Mayor Young vetoed the ordinance, objecting that, “A potential investor might go to a city that does not have such an ordinance,” but the council voted 9-0 to override the veto on August 7 (Jackson 1980a; Jackson 1980b).

Table B.1 provides a typology of the regulations included in each ordinance. As noted in the text, the ordinance severity for each city that enacted one can be found in Table A.2. Ordinances that include time frames and requirements for tenant notification of condominium conversions or offer tenants the right of first refusal are classified as a “1.” Ordinances that went further to require tenant relocation assistance or tenant relocation payments are classified as a “2.” Ordinances that impose a cap on the number of permissible annual condominium conversions, establish a minimum city-wide rental vacancy rate before conversions were permitted, grant some categories of tenants’ lifetime leases, require the replacement of low-income rentals elsewhere, or require tenant approval for condominium conversion are classified as a “3.” The regulations serve as barriers to development so, for our main analysis, we categorize any municipality with an ordinance score of one or higher as having passed an ordinance. As robustness, we consider differences by regulation intensity (see **Table D.2**).

Table B.1: Coding of Restrictive Condo Ordinance Severity

	Law Severity		
	1	2	3
	(1)	(2)	(3)
Vacancy Rate Minimum			X
Replacement of Low-Income Housing			X
Tenant Approval Required			X
Lifetime Lease			X
Annual Conversion Cap			X
Owner Occupancy Requirement		X	X
Tenant Assistance/Relocation Payments		X	X
Right of First Refusal	X	X	X
Notice of Conversion	X	X	X
FD/BC/Warranties/Right to Cancel	X	X	X

Notes: This table provides additional details on the procedure used to grade condo ordinance severity.

Appendix B References

Jackson, L., 1980a. Council OKs law to regulate condo switches, Detroit Free Press, July 31, B section, 4.

Jackson, L., 1980b. Council OKs GM loan plan, Detroit Free Press, August 7, C section, 8.

Appendix C: City-Suburb Comparison

We verify our conjecture that city-suburban neighborhoods are more similar near municipal borders in **Table C.1**.

We regress various attributes of neighborhood residents at baseline (in 1980) on an indicator for being in the central city for the full sample of tracts and for tracts that are increasingly closer to the municipal border:

$$y_{ijm} = \sigma_m + \rho city_j + \lambda distance_{ijm} + \tau city_j \times distance_{ijm} + \phi_{ijm} \quad (C.1)$$

The regression also controls for distance to the city border interacted with the central city indicator. Our main coefficient of interest is ρ , which captures the mean differences in the resident attributes of interest between city and suburban tracts controlling for distance to the border.

Both for the full housing stock (Panel A) and for neighborhoods with above median multi-family dwellings (Panel B), the clear differences between city and suburban residents in income and race disappear at the border. For example, the 15 log-point gap in income (row 1) falls to a 2 log-point gap (not statistically significant) in a sample of tracts closer to the border (rows 2 and 3). The same is true to the 15 percentage-point gap in Black population share and the 6 percentage point gap in poverty in the full sample also disappear when considering a sample of tracts close to the border. The one counter-example is share of the population with a BA. Although there is no difference between city and suburban residents in this measure in the full sample in 1980, a 4 percentage-point gap emerges *at the border itself*, which may be due to cross-border differences in public school districts.

Table C.1: Differences in Resident Characteristics Between City and Suburb Tracts, 1980

	Reported Coefficients on an Indicator for City Status			
	Ln Mean HH Income	Dependent Variable		
		Poverty Rate	Share Black	Share BA or More
	(1)	(2)	(3)	(4)
<i>Panel A: Full Housing Stock</i>				
All Tracts (<i>N</i> = 28,794) (Mean Distance (mi.) = 4.6)	-0.153*** (0.044) [10.862]	0.064*** (0.012) [0.111]	0.151*** (0.032) [0.119]	0.006 (0.014) [0.176]
Within 25 th Percentile Distance (<i>N</i> = 7,199) (Mean Distance (mi.) = 0.7)	0.021 (0.041) [10.855]	-0.002 (0.007) [0.119]	0.047** (0.021) [0.160]	-0.019* (0.010) [0.191]
Within 10 th Percentile Distance (<i>N</i> = 2,879) (Mean Distance (mi.) = 0.4)	0.108 (0.081) [10.865]	0.007 (0.014) [0.112]	0.032 (0.027) [0.160]	-0.047*** (0.017) [0.189]
<i>Panel B: Share 2-4 Units Above Median</i>				
All Tracts (<i>N</i> = 14,398) (Mean Distance (mi.) = 4.1)	-0.118*** (0.035) [10.747]	0.061*** (0.009) [0.143]	0.169*** (0.027) [0.169]	-0.003 (0.011) [0.157]
Within 25 th Percentile Distance (<i>N</i> = 4,261) (Mean Distance (mi.) = 0.7)	0.022 (0.057) [10.735]	-0.006 (0.008) [0.148]	0.042* (0.025) [0.205]	-0.025* (0.014) [0.162]
Within 10 th Percentile Distance (<i>N</i> = 1,847) (Mean Distance (mi.) = 0.4)	0.092 (0.082) [10.777]	-0.012 (0.012) [0.135]	-0.030 (0.033) [0.201]	-0.038** (0.017) [0.163]
Metro FE	Yes	Yes	Yes	Yes

Notes: This table reports tests of whether characteristics differ across city and suburb tracts using different samples of tracts with varying distances to the city/suburb border and baseline housing composition. The dependent variable is listed in the column title. Each row lists any distance restriction that narrows the set of tracts used in the estimation, where percentile cutoffs are calculated from the distribution of tract distances to the city/suburb border. Each row also lists the corresponding number of observations and mean distance to the city/suburb border for each sample. Reported distances are half of the calculated distance from the centroid-to-centroid procedure we use to approximate distance to the city/suburb border. Panel A uses all tracts and Panel B uses tracts that have an above median concentration of 2-4 unit buildings in 1980. Each point estimate is from a separate regression and we report the coefficient and standard error on the indicator for city status. The regression also includes a linear measure of distance to the border that varies by city/suburb status and metro fixed effects. Standard errors clustered at the metro level are reported in parentheses. Dependent variable means are reported in brackets. *** = significant at the 1 percent level, ** = significant at the 5 percent level, * = significant at the 10 percent level.

Appendix D: Robustness Checks

We consider three alternate specifications of the relationship between local regulation and aspects of the housing stock and population. In each case, we continue to find that restrictive ordinances were effective in shifting development away from condominiums, but this shift did not forestall gentrification.

Table D.1 weights each Census tract by the number of underlying housing units. We continue to find that restrictive condo ordinances reduce the condo share and raise the renter share of the housing stock in neighborhoods with a high multi-family share at baseline.

Table D.2 explores the possibility that more onerous regulations had a larger effect on condo development. Indeed, we find that each step on our coding of law severity (ranging from 1-3) results in a 2 percentage-point decline in the condo share of housing units, particularly again in neighborhoods most at risk of condo conversions. We note that this intensive margin specification assumes a linear relationship across ordinance severity levels. We do not have enough variation in the sample to test the importance of specific regulations.

Next, we incorporate the nine metropolitan areas anchored by cities that passed restrictive regulations in the 1970s into the analysis. We include these areas in **Table D.3** as part of the control group, because they always had regulations in the sample period (in both 1980 and 2010), and so they are “always treated.” One benefit of doing so is that these areas are larger and more coastal, and so they may serve as better controls for cities that pass ordinances in our sample period. The substantive results do not change.

Tables D.4 and **D.5** reproduce the full analysis for two alternative definitions of neighborhoods that are conducive to condo conversions: neighborhoods with above median share of units in attached single-family units (townhouses, Table D.4), or neighborhoods with above median share of units in buildings with 5+ units (apartment buildings, Table D.5). We find similar results when defining ‘at risk’ neighborhoods according to the presence of townhomes: areas with ordinances restricting condo conversion have lower condo shares and higher rental shares in the housing stock yet have no differences in resident attributes. The effect of the condo regulation on the condo share of housing units is present but weaker in areas with above median presence of large apartment buildings.

Table D.1: Relationship Between Housing Characteristics and Condo Conversion Ordinances,
Weighting by Total Housing Units

	Reported Coefficients on the Triple Interaction of Ordinance \times Post \times City		
	Dependent Variable		
	Share Condo and Owner-Occ.	Share Renter-Occ.	Ln Total Housing Units
	(1)	(2)	(3)
<i>Panel A: Full Housing Stock</i>			
All Tracts (<i>N</i> = 57,588)	0.003 (0.023) [0.107]	-0.006 (0.016) [0.332]	0.166** (0.063) [7.563]
Within 25 th Percentile Distance (<i>N</i> = 14,398)	-0.005 (0.028) [0.119]	0.004 (0.015) [0.403]	0.034 (0.046) [7.538]
Within 10 th Percentile Distance (<i>N</i> = 5,758)	-0.015 (0.021) [0.116]	-0.009 (0.017) [0.412]	-0.035 (0.057) [7.510]
<i>Panel B: Share 2-4 Units Above Median</i>			
All Tracts (<i>N</i> = 28,796)	-0.048*** (0.013) [0.113]	0.023** (0.011) [0.410]	0.144** (0.062) [7.508]
Within 25 th Percentile Distance (<i>N</i> = 8,522)	-0.039*** (0.014) [0.120]	0.017 (0.011) [0.452]	0.045 (0.046) [7.463]
Within 10 th Percentile Distance (<i>N</i> = 3,694)	-0.038** (0.017) [0.118]	0.007 (0.010) [0.449]	-0.015 (0.053) [7.456]
Tract FE	Yes	Yes	Yes
Metro x Year FE	Yes	Yes	Yes
Center City x Year FE	Yes	Yes	Yes

Notes: This table reports tests of whether ordinances restricting condo conversion affect characteristics of the housing stock using different samples of tracts with varying distances to the city/suburb border and baseline housing composition. The dependent variable is listed in the column title. Each row lists any distance restriction that narrows the set of tracts used in the estimation and the corresponding number of observations, where percentile cutoffs are calculated from the distribution of tract distances to the city/suburb border. Panel A uses all tracts and Panel B uses tracts that have an above median concentration of 2-4 unit buildings in 1980. Each point estimate is from a separate regression and we report the coefficient and standard error on the triple interaction of Ordinance \times Post \times City. All specifications include tract, metro-by-year, and center city-by-year fixed effects, and are weighted using total housing units. Standard errors clustered at the metro level are reported in parentheses. Dependent variable means from 2010 weighted by total housing units are reported in brackets. *** = significant at the 1 percent level, ** = significant at the 5 percent level, * = significant at the 10 percent level.

Table D.2: Relationship Between Housing Characteristics and Condo Conversion Ordinances,
Using 0-3 Coding of Ordinance Severity

	Reported Coefficients on the Triple Interaction of Ordinance \times Post \times City		
	Dependent Variable		
	Share Condo and Owner-Occ.	Share Renter-Occ.	Ln Total Housing Units
	(1)	(2)	(3)
<i>Panel A: Full Housing Stock</i>			
All Tracts (<i>N</i> = 57,588)	-0.007 (0.005) [0.091]	-0.001 (0.005) [0.331]	0.084** (0.039) [7.369]
Within 25 th Percentile Distance (<i>N</i> = 14,398)	-0.005 (0.006) [0.097]	0.005 (0.004) [0.391]	0.014 (0.026) [7.339]
Within 10 th Percentile Distance (<i>N</i> = 5,758)	-0.010** (0.005) [0.093]	0.004 (0.005) [0.395]	-0.022 (0.026) [7.324]
<i>Panel B: Share 2-4 Units Above Median</i>			
All Tracts (<i>N</i> = 28,796)	-0.020*** (0.004) [0.096]	0.008* (0.005) [0.412]	0.093*** (0.030) [7.317]
Within 25 th Percentile Distance (<i>N</i> = 8,522)	-0.020*** (0.005) [0.098]	0.012*** (0.004) [0.442]	0.033 (0.026) [7.278]
Within 10 th Percentile Distance (<i>N</i> = 3,694)	-0.022** (0.009) [0.094]	0.013 (0.008) [0.434]	0.004 (0.029) [7.282]
Tract FE	Yes	Yes	Yes
Metro x Year FE	Yes	Yes	Yes
Center City x Year FE	Yes	Yes	Yes

Notes: This table reports tests of whether ordinances restricting condo conversion affect characteristics of the housing stock using different samples of tracts with varying distances to the city/suburb border and baseline housing composition. We replace the binary ordinance indicator from the main text with a linear measure ranging from zero to three. The dependent variable is listed in the column title. Each row lists any distance restriction that narrows the set of tracts used in the estimation and the corresponding number of observations, where percentile cutoffs are calculated from the distribution of tract distances to the city/suburb border. Panel A uses all tracts and Panel B uses tracts that have an above median concentration of 2-4 unit buildings in 1980. Each point estimate is from a separate regression and we report the coefficient and standard error on the triple interaction of Ordinance \times Post \times City. All specifications include tract, metro-by-year, and center city-by-year fixed effects. Standard errors clustered at the metro level are reported in parentheses. Dependent variable means from 2010 are reported in brackets. *** = significant at the 1 percent level, ** = significant at the 5 percent level, * = significant at the 10 percent level.

Table D.3: Relationship Between Housing Characteristics and Condo Conversion Ordinances, Adding 1970s Ordinance Passing Metros as Control Areas

	Reported Coefficients on the Triple Interaction of Ordinance \times Post \times City		
	Dependent Variable		
	Share Condo and Owner-Occ.	Share Renter-Occ.	Ln Total Housing Units
	(1)	(2)	(3)
<i>Panel A: Full Housing Stock</i>			
All Tracts (<i>N</i> = 75,542)	-0.039*** (0.014) [0.103]	0.004 (0.012) [0.328]	0.188* (0.097) [7.376]
Within 25 th Percentile Distance (<i>N</i> = 18,886)	-0.015 (0.015) [0.108]	0.005 (0.009) [0.391]	0.045 (0.069) [7.344]
Within 10 th Percentile Distance (<i>N</i> = 7,554)	-0.023 (0.014) [0.108]	0.004 (0.009) [0.391]	-0.028 (0.071) [7.331]
<i>Panel B: Share 2-4 Units Above Median</i>			
All Tracts (<i>N</i> = 37,770)	-0.070*** (0.013) [0.108]	0.022* (0.012) [0.407]	0.208** (0.082) [7.331]
Within 25 th Percentile Distance (<i>N</i> = 11,442)	-0.044*** (0.015) [0.110]	0.015 (0.010) [0.437]	0.087 (0.061) [7.295]
Within 10 th Percentile Distance (<i>N</i> = 4,854)	-0.048* (0.025) [0.112]	0.022 (0.016) [0.428]	0.034 (0.064) [7.300]
Tract FE	Yes	Yes	Yes
Metro x Year FE	Yes	Yes	Yes
Center City x Year FE	Yes	Yes	Yes

Notes: This table reports tests of whether ordinances restricting condo conversion affect characteristics of the housing stock using different samples of tracts with varying distances to the city/suburb border and baseline housing composition. We add to the sample metros that passed an ordinance restricting condominium conversions in the 1970s to the sample and consider them as control areas. The dependent variable is listed in the column title. Each row lists any distance restriction that narrows the set of tracts used in the estimation and the corresponding number of observations, where percentile cutoffs are calculated from the distribution of tract distances to the city/suburb border. Panel A uses all tracts and Panel B uses tracts that have an above median concentration of 2-4 unit buildings in 1980. Each point estimate is from a separate regression and we report the coefficient and standard error on the triple interaction of Ordinance \times Post \times City. All specifications include tract, metro-by-year, and center city-by-year fixed effects. Standard errors clustered at the metro level are reported in parentheses. Dependent variable means from 2010 are reported in brackets. *** = significant at the 1 percent level, ** = significant at the 5 percent level, * = significant at the 10 percent level.

Table D.4: Relationship Between Housing Characteristics and Condo Conversion Ordinances in Additional Neighborhood Subsamples

	Reported Coefficients on the Triple Interaction of Ordinance \times Post \times City		
	Dependent Variable		
	Share Condo and Owner-Occ.	Share Renter-Occ.	Ln Total Housing Units
	(1)	(2)	(3)
<i>Panel A: Share SFA Above Median</i>			
All Tracts ($N = 28,794$)	-0.056*** (0.013) [0.112]	0.018 (0.014) [0.385]	0.170* (0.095) [7.345]
Within 25 th Percentile Distance ($N = 8,112$)	-0.045** (0.022) [0.105]	0.027* (0.014) [0.430]	0.088 (0.074) [7.311]
Within 10 th Percentile Distance ($N = 3,322$)	-0.029 (0.026) [0.102]	0.024 (0.020) [0.434]	0.017 (0.092) [7.302]
<i>Panel B: Share 5+ Units Above Median</i>			
All Tracts ($N = 28,794$)	-0.030*** (0.011) [0.140]	0.031*** (0.010) [0.446]	0.198*** (0.071) [7.397]
Within 25 th Percentile Distance ($N = 8,538$)	-0.017 (0.025) [0.141]	0.015 (0.011) [0.478]	0.057 (0.071) [7.388]
Within 10 th Percentile Distance ($N = 3,472$)	-0.029 (0.021) [0.134]	-0.002 (0.011) [0.477]	-0.030 (0.074) [7.387]
Tract FE	Yes	Yes	Yes
Metro x Year FE	Yes	Yes	Yes
Center City x Year FE	Yes	Yes	Yes

Notes: This table reports tests of whether ordinances restricting condo conversion affect characteristics of the housing stock using different samples of tracts with varying distances to the city/suburb border and baseline housing composition. The dependent variable is listed in the column title. Each row lists any distance restriction that narrows the set of tracts used in the estimation and the corresponding number of observations, where percentile cutoffs are calculated from the distribution of tract distances to the city/suburb border. Panel A uses tracts that have an above median concentration of single-family attached homes in 1980 and Panel B uses tracts that have an above median concentration of 5-plus unit buildings in 1980. Each point estimate is from a separate regression and we report the coefficient and standard error on the triple interaction of Ordinance \times Post \times City. All specifications include tract, metro-by-year, and center city-by-year fixed effects. Standard errors clustered at the metro level are reported in parentheses. Dependent variable means from 2010 are reported in brackets. *** = significant at the 1 percent level, ** = significant at the 5 percent level, * = significant at the 10 percent level.

Table D.5: Relationship Between Resident Characteristics and Condo Conversion Ordinances in Additional Neighborhood Subsamples

Reported Coefficients on the Triple Interaction of Ordinance \times Post \times City,
Ordinances Restrict Condo Conversions and Reduce Condo Share

	Dependent Variable			
	Ln Mean HH Income	Poverty Rate	Share Black	Share BA or More
	(1)	(2)	(3)	(4)
<i>Panel A: Share SFA Above Median</i>				
All Tracts (<i>N</i> = 28,794)	0.050 (0.038) [11.029]	-0.010 (0.011) [0.167]	-0.013 (0.034) [0.208]	-0.004 (0.014) [0.284]
Within 25 th Percentile Distance (<i>N</i> = 8,112)	0.001 (0.048) [10.965]	0.004 (0.011) [0.188]	-0.008 (0.036) [0.256]	-0.016 (0.017) [0.281]
Within 10 th Percentile Distance (<i>N</i> = 3,322)	0.057 (0.068) [10.967]	-0.006 (0.014) [0.184]	-0.005 (0.038) [0.260]	-0.016 (0.021) [0.278]
<i>Panel B: Share 5+ Units Above Median</i>				
All Tracts (<i>N</i> = 28,794)	0.064 (0.056) [10.994]	-0.010 (0.014) [0.181]	-0.018 (0.025) [0.209]	-0.003 (0.014) [0.291]
Within 25 th Percentile Distance (<i>N</i> = 8,538)	0.100 (0.064) [10.968]	-0.009 (0.011) [0.194]	-0.035* (0.020) [0.237]	0.006 (0.013) [0.306]
Within 10 th Percentile Distance (<i>N</i> = 3,472)	0.111** (0.052) [10.969]	-0.011 (0.011) [0.187]	-0.039 (0.024) [0.242]	0.001 (0.013) [0.302]
Tract FE	Yes	Yes	Yes	Yes
Metro x Year FE	Yes	Yes	Yes	Yes
Center City x Year FE	Yes	Yes	Yes	Yes

Notes: This table reports tests of whether ordinances restricting condo conversion affect resident characteristics using different samples of tracts with varying distances to the city/suburb border and baseline housing composition. The dependent variable is listed in the column title. Each row lists any distance restriction that narrows the set of tracts used in the estimation and the corresponding number of observations, where percentile cutoffs are calculated from the distribution of tract distances to the city/suburb border. Panel A uses tracts that have an above median concentration of single-family attached homes in 1980 and Panel B uses tracts that have an above median concentration of 5-plus unit buildings in 1980. Each point estimate is from a separate regression and we report the coefficient and standard error on the triple interaction of Ordinance \times Post \times City. All specifications include tract, metro-by-year, and center city-by-year fixed effects. Standard errors clustered at the metro level are reported in parentheses. Dependent variable means from 2010 are reported in brackets. *** = significant at the 1 percent level, ** = significant at the 5 percent level, * = significant at the 10 percent level.