

## Appendix A

### Regression Models: Gentrification, Exclusion, and Displacement

**Table A.1**

Logit regressions of gentrification, 1990–2000 and 2000–2013, San Francisco Bay Area gentrification-eligible tracts

	1990–2000	2000–2013
Intercept	–6.690***	–4.861***
Median household income (/10,000)	0.692**	0.332
Income squared	–0.032	–0.011
% Non-Hispanic black	0.012	2.030**
% Asian	–0.890	–0.362
% Hispanic	–0.711	–0.242
% Renters	2.373***	0.598
Downtown TOD	1.906***	0.782**
Non-downtown TOD	0.841**	–0.269
TOD 1990s	0.823**	–0.465
TOD 2000–2013		0.354
% Housing units built before 1950	0.438	1.783***
Employment density (# jobs/square mile)	0.000	0.000
Likelihood ratio	219.9***	229.9***
<i>n</i>	640	626

*Sources:* 1990 and 2000 decennial censuses, 2009–2013 five-year ACS.

*Notes:* Downtown refers to the entirety of Oakland, San Francisco, and San Jose. TOD refers to transit neighborhoods. Calculations by M. Zuk.

\* $p < .10$ , \*\* $p < .05$ , \*\*\* $p < .01$ .

**Table A.2**

Logit regressions of gentrification, 1990–2000 and 2000–2013, Los Angeles gentrification-eligible tracts

	1990–2000	2000–2013
Intercept	–3.281***	2.690***
Median household income (/10,000)	–0.213**	–0.816***
Income squared	0.021*	0.085***
% Non-Hispanic black	0.007***	–0.076***
% Asian	0.027***	–0.030***
% Hispanic	0.013***	–0.054***
% Renters	–0.006***	0.003
Downtown TOD	0.574***	0.484***
TOD 1990s	0.133***	–0.038
TOD 2000–2013	—	–0.296***
TOD recent	—	1.030***
% Housing units built before 1950	0.018***	0.035***
Employment density (# jobs / square mile)	0.000***	0.001***
Likelihood ratio	493.110***	2157.547***
<i>n</i>	937	929

Sources: 1990 and 2000 decennial censuses, 2009–2013 five-year ACS, NETS (1990, 2000).

Notes: TOD refers to transit neighborhoods. Calculations by C. Pech and P. Ong.

\* $p < .10$ , \*\* $p < .05$ , \*\*\* $p < .01$ .

**Table A.3**  
Modeling share of movers in by subgroups, multivariate regressions for the Bay Area, 2009–2013

	In poverty	High-income (>120% county median income)	Less than high school	Bachelor's degree or higher	Non-Hispanic white
Constant	0.412***	-0.055***	0.496***	0.078*	0.898***
Median household income	-0.053***	0.013***	-0.051***	0.055***	-0.001
Income squared	0.002***	0.000***	0.001***	-0.001***	0.000
% Non-Hispanic black	0.171***	-0.013*	0.198***	-0.345***	-0.794***
% Asian	0.016	-0.014***	0.132***	-0.043*	-0.933***
% Hispanic	0.077***	-0.048***	0.684***	-0.671***	-0.959***
Downtown TOD	0.019**	0.004*	-0.024**	0.045***	0.048***
Non-downtown TOD	-0.014	0.008***	-0.015**	0.048***	0.002
% Renters	0.020	0.091***	-0.258***	0.410***	0.066***
Adj. <i>R</i> -squared	0.3275	0.392	0.5685	0.579	0.717
<i>n</i>	1,575	1,578	1,575	1,575	1,576

Source: 2009–2013 five-year ACS.

Notes: TOD refers to transit neighborhoods. Calculations by M. Zuk.

\**p* < .10, \*\**p* < .05, \*\*\**p* < .01.

**Table A.4**  
Modeling share of movers in by subgroups, multivariate regressions for Los Angeles County, 2009–2013

	Low income (<\$ 10K)	High income (\$65K+)	Less than high school	Bachelor's degree or higher	Non-Hispanic white
Constant	19.233***	2.561	5.992*	0.744	51.633***
Median household income	-1.642***	0.633**	-0.677	1.472***	0.002
Income squared	0.064***	0.011	0.024	-0.052***	0.296***
% Non-Hispanic black	0.020	-0.041***	0.078***	-0.114***	-0.560***
% Asian	-0.033**	-0.048***	-0.016	0.007	-0.551***
% Hispanic	0.005	-0.076***	0.130***	-0.101***	-0.546***
Downtown TOD	-0.316	4.225*	2.970	2.700	4.821
Non-downtown TOD	-1.599**	1.315***	-1.175	2.798***	1.440*
% Renters	-0.024*	0.030***	-0.060***	0.105***	0.066***
Adj. <i>R</i> -squared	0.1206	0.592	0.570	0.677	0.764
<i>n</i>	2,307	2,307	2,307	2,307	2,307

Source: 2009–2013 five-year ACS.

Notes: TOD refers to transit neighborhoods. Calculations by C. Pech and P. Ong.

\* $p < .10$ , \*\* $p < .05$ , \*\*\* $p < .01$ .

**Table A.5**

Changes in affordable housing, linear regressions

	$\Delta$ Affordable rental units (2000–2013)	$\Delta$ Section 8 (2000–2013)	$\Delta$ Federally subsidized (2000–2014)
Intercept	-142.541***	34.043***	96.232***
Median household income, 2000	14.112***	-3.880***	-14.105***
Income squared, 2000	-0.365***	0.086*	0.472***
% Non-Hispanic black, 2000	92.624***	14.739*	-18.857
% Asian, 2000	40.256***	36.249***	3.703
% Hispanic, 2000	95.357***	16.762**	43.516***
Downtown TOD, 2000	-2.978	-0.964	21.084***
Non-downtown TOD, 2000	-6.507	-2.744	-23.961***
% Renters, 2000	-119.277***	-0.453	11.843
Adj. <i>R</i> -squared	0.189	0.184	0.082
<i>n</i>	1,579	1,579	1,579

Sources: 2000 decennial census, 2006–2010 and 2009–2013 five-year ACS, 2000 and 2013 HUD Picture of Subsidized Households, CHPC.

Notes: Downtown refers to the entirety of Oakland, San Francisco, and San Jose. TOD refers to transit neighborhoods. Calculations by M. Zuk.

\* $p < .10$ , \*\* $p < .05$ , \*\*\* $p < .01$ .

**Table A.6**

Changes in affordable housing, linear regressions (Los Angeles)

	$\Delta$ Affordable rental units (2000–2013)	$\Delta$ Section 8 (2000–2013)	$\Delta$ LIHTC (2000–2013)
Intercept	-2.353**	3.284***	4.071***
Median household income (/10,000)	0.634***	-0.494***	-0.664***
Income squared	-0.028***	0.017***	0.023***
% Non-Hispanic black	0.027***	0.013***	0.003
% Hispanic	0.021***	-0.008***	-0.002
% Asian	0.008	-0.005*	0.001
Downtown TOD	-18.966***	-0.678	12.945***
Non-downtown TOD	-2.551***	-0.365***	0.392*
Adj. <i>R</i> -squared	0.091	0.112	0.147
<i>n</i>	2,316	2,316	2,316

Sources: 2000 decennial census, 2006–2010 and 2009–2013 five-year ACS, 2000 and 2013 HUD Picture of Subsidized Households, CTCAC, Housing Authority of the City of Los Angeles.

Notes: Ellis Act eviction data are only for the city of Los Angeles; all other data are for Los Angeles County. TOD refers to transit neighborhoods. Calculations by C. Pech and P. Ong.

\* $p < .10$ , \*\* $p < .05$ , \*\*\* $p < .01$ .

**Table A.7**

Evictions and condominium conversions, linear regressions, San Francisco

	Fault eviction rate (2010–2015)	No fault eviction rate (2010–2015)	All eviction rate (2010–2015)	Condo conversion rate (2010–2015)
Intercept	0.018***	0.002	0.021**	0.029***
Median household income, 2010	0.000	0.001	0.001	0.002***
Income squared, 2010	0.000	0.000	0.000	0.000**
% Non-Hispanic black, 2010	-0.006	-0.003	-0.009	-0.042***
% Asian, 2010	-0.014***	-0.002	-0.016*	-0.058***
% Hispanic, 2010	0.027***	0.018***	0.045***	-0.009
TOD	0.004**	0.001	0.005*	-0.001
Adj. <i>R</i> -squared	0.071	0.001	0.043	0.287
<i>n</i>	576	576	576	578

*Sources:* 2019 decennial census, San Francisco Rent Board, San Francisco Department of Public Works.

*Notes:* This analysis differs from previous analyses in that transit (TOD) neighborhoods are defined as census block groups rather than census tracts, and we look at the quarter-mile buffer around the rail station rather than the half-mile buffer. Calculations by M. Zuk.

\* $p < .10$ , \*\* $p < .05$ , \*\*\* $p < .01$ .

**Table A.8**

Condo conversions and Ellis Act evictions, linear regressions (Los Angeles)

	Condo conversions (2003–2013)	Ellis Act evictions (2007–2014)
Intercept	1.556***	1.137***
Median household income (/10,000)	-0.055	-0.100***
Income squared	-0.001	0.002**
% Non-Hispanic black	-0.010***	-0.008***
% Hispanic	-0.015***	-0.008***
% Asian	-0.008**	-0.003
Downtown TOD	4.486***	-0.290*
Nondowntown TOD	0.341***	0.050
Adj. <i>R</i> -squared	0.052	0.070
<i>n</i>	2,317	993

*Sources:* 2000 decennial census, 2006–2010 and 2009–2013 five-year ACS, 2000 and 2013 HUD Picture of Subsidized Households, CTCAC, Housing Authority of the City of Los Angeles.

*Notes:* Ellis Act eviction data are only for the city of Los Angeles; all other data are for Los Angeles County. TOD refers to transit neighborhoods. Calculations by C. Pech and P. Ong.

\* $p < .10$ , \*\* $p < .05$ , \*\*\* $p < .01$ .

Table A.9

Change in low-income households, linear regression

	Change in low-income households (2000–2013)
Intercept	-33.829
Median household income (/10,000), 2000	9.850*
Income squared, 2000	-0.326*
% Non-Hispanic black, 2000	14.670
% Hispanic, 2000	234.995***
% Asian, 2000	108.805***
Downtown TOD, 2000	17.886
Non-downtown TOD, 2000	-44.087***
% Renters, 2000	-74.772***
Adj. <i>R</i> -squared	0.065
<i>n</i>	1,569

Sources: 2000 decennial census, 2009–2013 five-year ACS.

Notes: TOD refers to transit neighborhoods. Calculations by M. Zuk.

\* $p < .10$ , \*\* $p < .05$ , \*\*\* $p < .01$ .

