# Does Gentrification Increase Employment Opportunities in Low-Income Neighborhoods?

Rachel Meltzer (The New School)\*
Pooya Ghorbani (The New School)

Updated March 24, 2015

<sup>\*</sup>Corresponding author: 72 Fifth Avenue, Room 616, New York, NY 10011, meltzerr@newschool.edu.

## Abstract

Gentrification is a term often associated with displacement and other negative byproducts of affluent in-movers altering the economic and demographic composition of a neighborhood. Empirical research on neighborhood change, however, has produced no conclusive evidence that incumbent residents are in fact displaced under circumstances of gentrification. The question is then, do these incumbent residents benefit from the economic and social changes that accompany gentrification? In this paper, we focus on low-income neighborhoods undergoing economic transitions (i.e. gentrification) and test whether or not the potential benefits from these changes stay within the community, in the form of employment opportunities for local residents. Our preliminary results suggest that gentrifying neighborhoods on average do not experience consistent, meaningful gains in local employment, compared to other comparable low-income neighborhoods that are not undergoing economic upgrading. In fact, there is some evidence that, as a share of all jobs in the census tract, the number of local jobs decreases under circumstances of gentrification; this appears to be driven by neighborhoods with higher shares of newer residents. That said, businesses that stay in place do tend to hire locally, compared to new businesses. At larger geographies (i.e. ZIP codes), however, the number of jobs going to local residents increases, and these jobs are primarily going to service sector, low-earners. Stratified models indicate that any local job gains are concentrated in larger neighborhoods with initially longer commute times for their workers (for both tract and ZIP analyses) and are weakly associated with higher unemployment rates; both of these findings suggest that gentrification is perhaps helping to fill an initial employment gap.

# I. Introduction

Gentrification is a term often associated with displacement and other negative byproducts of affluent in-movers altering the economic and demographic composition of a neighborhood. Indeed, new investment in a community can bring increased pressure on rents and prices and niche services that cater more to the relatively new residents than the incumbent ones; these kinds of outcomes do not always bode well for longstanding community members. However, there is another side to gentrification, and one that can bring opportunity and quality of life to areas that were otherwise neglected (either by the market or public sector). These upsides have become increasingly more relevant, as the empirical research has produced no conclusive evidence that incumbent residents are in fact displaced under circumstances of gentrification. The question is then, do these incumbent residents benefit from the economic and social changes In this paper, we focus on low-income neighborhoods that accompany gentrification? undergoing economic transitions (i.e. gentrification) and test whether or not the potential benefits from these changes stay within the community, in the form of employment opportunities. The findings from this research can inform local economic development strategies on how to grow small businesses, generate accessible employment opportunities for local residents and ensure that the benefits of neighborhood change reach incumbent, often lower-income, households.

The theoretical impact on employment opportunities for local residents is ambiguous. In the case where economic change brings in new and/or more local businesses, nearby existing residents will have the benefit of more information and lower search costs. All else equal, they should see more local employment opportunities—essentially a reversal of the spatial mismatch phenomenon. On the other hand, should neighborhood economic upgrading bring in new retailers that more productively use the existing commercial space or who exploit farther-reaching hiring networks (chains, for example), local existing residents, with potentially lower skill sets and smaller networks, will not be as competitively positioned for these jobs.

In order to test these predictions, we build a dataset that tracks the universe of neighborhoods in New York City for nearly a decade (2002-2011) with information on retail turnover and contraction/expansion over time, demographic, economic, fiscal and built environment

characteristics, and employment and demographics of the local resident labor pool. We compare changes in local employment across low-income neighborhoods experiencing gentrification and those that are more stagnant or economically declining. Preliminary results suggest that gentrifying neighborhoods on average do not experience consistent, meaningful gains in local employment, compared to other comparable low-income neighborhoods that are not undergoing economic upgrading. In fact, there is some evidence that, as a share of all jobs in the census tract, the number of local jobs decreases under circumstances of gentrification. At larger geographies (i.e. ZIP codes), however, the number of jobs going to local residents increases (by between 52 and 77 per year), and these jobs are primarily in service sectors and going to lowand moderate-earners (i.e. those earning less than \$3,333 per month). Stratified models indicate a more pronounced negative effect on local jobs in neighborhoods with newer resident populations and more business churn. There is weak evidence to suggest that local jobs increase in the presence of businesses that stay in place and within the context of larger ZIP neighborhoods, perhaps suggesting stronger ties to the community and/or the ability to find jobs within a larger proximate market (and not immediately close to home). Local job gains are also concentrated in ZIP neighborhoods with initially longer commute times for their workers and are weakly associated with higher unemployment rates; both of these findings suggest that gentrification is perhaps helping to fill an initial employment gap.

The paper proceeds in the following way. Section II sets up the theoretical framework for the analysis and Section III summarizes the relevant empirical work to date. Section IV describes the data for the analysis and Section V the empirical strategy. Section VI presents the preliminary results from the analysis. Finally, Section VII concludes and discusses next steps in the analysis.

## II. Theoretical motivation

While the entry of new money and investment into a community can "price out" incumbent, typically lower-income residents, this increased economic activity can also bring new opportunities for local residents. One potential upside to gentrification is increased local employment opportunities; the extent of this benefit will depend on whether or not and to what degree these new jobs actually go to local residents. However, the impact of neighborhood

economic upgrading on employment opportunities for local residents is theoretically ambiguous. Here we assume that both potential outcomes, of increased or decreased/stagnant opportunity, rely on the baseline assumption of some degree of spatial mismatch (holding all else equal). Specifically, lower-income communities, prior to any gentrification processes, should be experiencing either social or spatial isolation from job opportunities and the question is how an injection of affluence and overall investment can help to localize those employment opportunities.

Economic upgrading not only brings in a different, more affluent and educated, resident profile, but it also ushers in services that did not previously enter those markets (Meltzer and Schuetz 2012; Meltzer and Capperis 2014). Both of these additions to the community can facilitate access to localized employment opportunities. First, it is possible that the residential integration of relatively more affluent and educated households could impose both direct and indirect positive externalities on incumbent residents, who also tend to be lower-income and less educated. Indirect effects, akin to peer effects, would come simply out of exposure to this new population, whether or not any direct interaction took place (Ellen and Turner 1997). More likely is the employment opportunity that comes out of direct contact with a new, perhaps more networked or more enterprising neighbors (Ioannides and Loury 2004). Both would result in a positive impact on access to employment opportunities, the direct more significantly than the indirect. Whether or not the employment opportunity is local remains ambiguous, unless the new neighbor is also more likely to personally hire in his or her home.

A perhaps more convincing scenario is where economic change brings in new and/or more local business establishments, i.e. those entities that actually hire. The hiring of local residents by these businesses may be more likely for various reasons. First, the likelihood to hire locally will depend on the type of business. More service-oriented businesses, or those that do not require technical or more advanced skill training, will more likely be able to hire from a local pool that may not have higher or more technical levels of educational attainment. Second, the search costs for both the businesses and local residents are lower; information about the employment opportunities is accessible and transparent (i.e. local residents can see when a new business is opening up) and advertising for available positions can penetrate the local community immediately. Finally, government policies may require local hiring for new businesses,

especially those in brand new developments or renovations (that are also more likely to receive public subsidies or permitting). All else equal, these mechanisms predict increased local employment opportunities—essentially a reversal of the spatial mismatch phenomenon.

On the other hand, physical integration may not translate to economic integration. Should neighborhood economic upgrading bring in new retailers that more productively use the existing commercial space (i.e. hire those with more technical training) or who exploit farther-reaching hiring networks (chain establishments, for example), local existing residents, with potentially lower skill sets and smaller networks, will not be as competitively positioned for these jobs. In addition, local businesses may simply discriminate against potential local hires, based on race or class, which would lower the chances of local employment (Lang and Lehmann 2012).

# III. Empirical Literature Review

The literature on spatial mismatch and the geography of employment is rich and documents, for various races and ethnicities, the importance of not just spatial proximity to employment (for example, Kain 1968; Holzer 1991; Ihlanfeldt and Sjoquist. 1998; Raphael and Stoll 2002; Liu and Painter 2011), but social proximity (i.e. networks) as well (see Ioannides and Loury 2004 for a comprehensive critical summary). Fewer studies, however, have examined these relationships over time and, in particular, under circumstances of dramatic economic and demographic change. We discuss here the small body of work that relates directly to the current analysis.

# The localized effects of gentrification

Gentrification, typically characterized as the arrival of relatively more affluent and educated households into neighborhoods that have historically been occupied by lower income and often minority households. This process is also usually accompanied by investment in the housing stock and local infrastructure. These physical changes, however, are usually not apace with the increased demand for occupying the space, placing pressure on prices and making it attractive for landlords to increase rents. Incumbent residents are immediately at risk of displacement, especially those who are renting, and this threat has been the focus of most of the gentrification literature thus far. Earlier investigations, whether they relied on case studies or microdata

(Vigdor 2002; Freeman and Braconi 2004), found no evidence of displacement for poor or minority households. Studies that were able to exploit even more comprehensive micro-level panel data corroborated these findings. McKinnish et. al. (2008) find no evidence of displacement of non-white households and that a disproportionate number of black householders, with no college education, remain in upgrading low-income neighborhoods. Ellen and O'Regan (2011) account for both in- and out-flows of residents, and still find no evidence of negative displacement effects. In fact, incumbent residents, under certain circumstances, experienced gains in income and reported higher levels of satisfaction with their neighborhoods, compared to other non-gentrifying low-income neighborhoods. This is also consistent with the findings from Sullivan and Shaw's (2011) study of retail gentrification in Portland, Oregon: black residents of the studied gentrifying neighborhood appreciated the convenience of the nearby retail (even though the satisfaction with the type of services provided was less enthusiastic).

# Localized economic opportunity and gentrification

Even though the empirical evidence indicates that incumbent residents tend to stay in their gentrifying neighborhoods, we know very little about how they experience the potential opportunities that accompany neighborhood change. Do existing residents benefit from local gains in services and employment opportunities? A handful of studies focus on changes in commercial services (i.e. retail), in neighborhoods undergoing economic and demographic transitions. The economically upgrading neighborhoods tend to experience higher growth rates in local retail establishments and employment (Meltzer and Schuetz 2012; Schuetz, Kolko and Meltzer 2012). In their case-study analysis of gentrifying neighborhoods in New York City, Zukin et al. (2009) also observe retail growth, but moreso for independently owned establishments compared to chain ones. Immergluck (1999) finds that neighborhoods that are relatively more minority and less affluent experience declines in commercial investment, as measured by changes in permit activity. Chapple and Jacobus (2009) observe retail revitalization most significantly in middle-income neighborhoods that are economically upgrading. Therefore, the literature implies that gentrifying neighborhoods do tend to witness an increase in retail services, likely due to the changing consumer population and the (perceived) increase in demand for goods and services in areas that were not previously seen as viable investments (Carree and Thurik 1996).

Other studies have taken a different perspective, focusing instead on the production side of these Curran (2004) conducts a case-study analysis in the Williamsburg economic outcomes. neighborhood of Brooklyn, a historically manufacturing and blue-collar neighborhood that has, in recent years, undergone extensive gentrification. She finds evidence of gentrification-induced industrial displacement that has degraded local blue-collar work and forced much of it into the informal sector. Lester and Hartley (2014) also observe industrial restructuring in gentrifying neighborhoods, such that jobs in restaurants and retail services tend to replace those in goods producing industries. Furthermore, gentrifying neighborhoods experienced both more rapid employment growth and more rapid industrial restructuring than other, non-gentrifying neighborhoods. While Lester and Hartley conclude that gentrification is itself a catalyst for localized industrial restructuring, Kolko (2009) raises the important point that gentrification is also induced (and perpetuated) by the influx of affluent households who are presumably following higher paying jobs. In his study, Kolko focuses on neighborhoods located in or near the central business district and estimates the impact of changes in job pay on the average neighborhood income (his proxy for gentrification). His analysis sheds light on the influence of "newcomers" on local labor markets and how they too might be competing for neighborhoodbased employment opportunities. No study to date tests whether or not these employment benefits are realized by incumbent residents, and how access to employment might vary by job type or broader neighborhood conditions. This link is crucial, as it more directly measures how the benefits of gentrification are retained by local community members, or simply exported to those without any longstanding community ties.

## IV. Data

The data for this project are compiled from a number of sources. The core component is derived from the LEHD Origin-Destination Employment Statistics (LODES) dataset, which is publicly available from the Census Bureau. The LODES data contains information on the employment counts and live-work patterns of employees for every census block in New York City dating from 2002 to 2011. Since the census block is quite small and not consistent with a neighborhood's span, we aggregate up this information into census tract and ZIP code counts for the analysis. We supplement this data with two other datasets. First, we attach neighborhood

(operationalized as either the census tract or ZIP code) characteristics from the Neighborhood Change Database. Geolytics' Neighborhood Change Database provides data for 1970 through 2010, normalized to consistent census tracts as defined in the 2010 census. We supplement these data with indicators from the Census and the American Community Survey's three-year estimates for larger geographies. Second, we plan to merge in information from a proprietary data set, the National Establishment Time Series (NETS), which allows us to follow the universe of business establishments in New York City (including their sales revenues, employment and organizational structure) over two decades until the present time. This database is constructed by Walls and Associates, using information from the Dun & Bradstreet business register. Unlike publicly available government data on employment, the NETS dataset includes no suppression of employment in small industry or geographic cells and provides full street address information for each establishment. We geocode these businesses' addresses to tax parcels so that we can accurately attach census tracts and ZIP codes and then aggregate establishment and employment counts to obtain census tract and ZIP totals. In addition, industry is reported at the 6-digit North American Industry Classification System (NAICS) level to allow for a fine-grained distinction across retail and food services, and several variables, including one that indicates establishments as headquarters, branches, or standalone outlets, permit classification of establishments according to firm structure. Finally, because the NETS data are longitudinal and establishmentspecific, we can measure gross changes in the number of establishments and their employment (versus just net employment changes, which is what the publicly available ZIP code aggregates provide). We note that this data is not going to pick up informal hires and employment opportunities that are not recorded by the business establishment (and therefore by the government). Therefore, any count of employment or business enterprise is admittedly an undercount. We hope to mitigate any systematic tendency of such activity, i.e. across gentrifying neighborhood compared to those not upgrading as rapidly or at all, by controlling for other socioeconomic characteristics at the neighborhood level that are likely correlated with the likelihood of these informal activities.

We identify our study area as the New York-Newark, NY-NJ-CT-PA Combined Statistical Area and run analyses on both census tracts and ZIP codes that are populated as of 2000 and with

\_

<sup>&</sup>lt;sup>1</sup> Since the LODES data and Census data do not line up exactly with respect to timing, we assign proximate values as best as possible. For example, any LODES data point between 2006 and 2011 would be assigned to Census or

valid income values throughout the study period. Ultimately, we end up with 50,889 tract-year observations and 11,079 ZIP-year observations, which span 10 years (2002-2011) and over 800 municipalities. This larger sample includes both low- and moderate/high-income neighborhoods, while we restrict the sample for the analysis to low-income neighborhoods only. This process is described in the next section.

## V. Empirical Strategy

Identification of gentrifying neighborhoods

In our analysis, we operationalize neighborhoods in two ways: as census tracts and as ZIP codes. The intuition behind using these two geographies is that they will constitute both smaller and larger definitions of live-work markets. We imagine that the ability to find work in the immediate neighborhood will vary by distance, and the implementation of both geographies is an attempt to capture this variation.<sup>2</sup> All of the results from the analysis will be presented for census tract and ZIP code geographies.

We prioritize the economic dimension of gentrification in our measurement of it, and identify neighborhoods as gentrifying if they improve in their relative economic position over the course the of the study period. This is consistent with previous implementations (see Ellen and O'Regan 2008; McKinnish et.al. 2010; Meltzer and Schuetz 2012). We also note here that we will include other variables, such as education, housing values and housing production, which have been used to proxy for gentrifying neighborhoods in prior studies (see Freeman 2005; Lester and Hartley 2014), as covariates in our analysis; therefore, while they are not instrumental in identifying the gentrifying neighborhoods, they are accounted for as important correlates of neighborhood change. Specifically, we (i) identify neighborhoods as "low-income" if they have average household incomes that are in the bottom quintile of the neighborhood income distribution in 2000 (ii) out of those low-income neighborhoods, identify those whose relative average household income (compared to the broader MSA) has increased by the end of the study

\_

<sup>&</sup>lt;sup>2</sup> Ideally, we would construct a more flexible definition of "neighborhood" by drawing rings around the census tract centroids to pick up employment activity in geographically proximate tracts. We intend to do this in the next analytical iterations, but opted for the more crude approach presented here to see if any variation exists in the first place.

period, 2008.<sup>3</sup> We also replicate all analyses with a less stringent definition of "low-income" and retain all neighborhoods with average household incomes in the bottom two quintiles of the sample distribution. We rely on relative measures of income, and how those change over time, to account for costs of living in a particular locality and the fact that macro metro area economic shifts may or may not be reflected equally at the neighborhood level (this is consistent with other studies such as Rosenthal 2008 and Ellen and O'Regan 2008). Out of all of the census tracts in the study area, just under 880 are designated as very low-income (i.e. bottom 20<sup>th</sup> percent) and 1,756 are low-income (i.e. bottom 40<sup>th</sup> percent); out of those low-income tracts, about 40 percent are identified as gentrifying over the study period. For ZIPS, 122 are designated as very lowincome (i.e. bottom 20<sup>th</sup> percent) and 244 are low-income (i.e. bottom 40<sup>th</sup> percent); out of those low-income tracts about 74 percent are identified as gentrifying over the study period. We also see that this income-based designation reflects other demographic disparities across low- and moderate/high-income neighborhoods. For example, in Table 1, we display demographics for low-income tracts against those same variables for higher-income tracts, as of 2000. Using the very low-income tracts as an example, we see that relatively higher income tracts have more local jobs, which is consistent with a spatial mismatch narrative for lower-income tracts. The higher income tracts also have more educated and older populations, fewer non-white households, fewer residents in poverty, lower unemployment rates and newer housing stock that tends to be owner-occupied. The residential population was more stable as of 2008 (with a lower share that had moved in the previous five years) and a workforce that tends to commute slightly less than that in the poorer neighborhoods. While the relatively higher income tracts experienced more growth in population between 2000 and 2008, the lower income neighborhoods saw higher rent and housing value increases over that same time period. Relatively higher income tracts tend to have more retail establishments and fewer non-retail establishments (like, professional services or goods-producing enterprises); they also have more businesses that stay in place over the course of the study period. The movement of businesses into and out of the neighborhoods is comparable, however. These are all characteristics that will be controlled for, at baseline, in the regression analyses that follow.

<sup>&</sup>lt;sup>3</sup> We opt for average-income metrics, instead of median-income ones, for two main reasons: (1) unlike median income, average income for the ZIP code can be constructed from the census tract components in the NCDB database; since we want to compare results from models using census tracts to those using ZIP codes, this feature is important; (2) due to the normalized boundaries in the NCDB database, median values are constructed through a series of interpolations, introducing additional noise into that metric.

## Estimation

We run regressions only on those neighborhoods designated as "low-income" (based on their relative household income position in 2000) and our estimation model generally takes the following form:

$$Local\_Jobs_{i,t} = \beta_0 + \beta_1 (Gentrify_i) + \beta_2 (Business_{i,t}) + \beta_3 (Nhood_i)$$
  
  $+ \beta_4 (Nhood\ 00\ 08_i) + d_m + d_{s,t} + \varepsilon_{it}$ 

Here, Local Jobs measures the extent to which jobs in neighborhood i go to residents who live in that same neighborhood i at time t and is specified in two ways: (i) a count of the number of local jobs, Total Local Jobs, (in this specification, we also include on the right-hand-side a measure of total jobs, including those occupied by local and non-local residents, to control for overall employment activity); and (ii) local jobs as a share all of neighborhood jobs, Local Jobs Share. 4 Gentrify takes on the value of 1 if neighborhood i experiences an increase in relative income between 2000 and 2008 and 0 otherwise.<sup>5</sup> **Business**<sub>i,t</sub> controls for changes in local business activity, including the number of establishments that, over the prior 5-year period, have stayed in the neighborhood (Stay), have moved into the neighborhood (Inmove), and have left the neighborhood either due to permanent shutdown or relocation (Outmove). We also control for the number of total establishments at the start of the study period, to distinguish among neighborhoods that may be generally more or less likely to house commercial establishments (and therefore experience such changes). The vector, *Nhood*, includes a number of variables to control for the demographic and economic conditions at the start of the study period, 2000. Specifically, we include baseline population, poverty rate, share of the population with a college degree or higher, share non-Hispanic black, white and Asian, share Hispanic,

<sup>&</sup>lt;sup>4</sup> We also run models using a dependent variable which calculates local jobs as a share of the local residential population; the results are persistently insignificant and do not offer any additional insight. This is likely due to the fact that population is no reported regularly during the study period and is therefore interpolated across intercentennial years.

<sup>&</sup>lt;sup>5</sup> We also run specifications where we control for gentrification during the prior decade, 1990-2000, and the results for the *Gentrify* coefficient are substantively the same. Furthermore, the coefficient on the covariate *Gentrify* 90\_00 is never significant, with the exception of a marginally significant, negative coefficient in the model estimating *Total Local Jobs*.

unemployment rate, age and share foreign born to capture other resident characteristics that could be correlated with income and employment-readiness. We also include indicators of housing investment and tenures, such as age of the housing stock and share of the units occupied by renters, and mobility of the local population, such as the share of the working population whose travel time to work is more than 25 minutes and the share of residents that have not moved in the past five years. Likewise, *Nhood\_00\_08i* controls for changes between 2000 and 2008 for a subset of neighborhood characteristics (relative to changes in those same variables at the MSA level), such as education, median housing values and rents, poverty rate, population and housing units. Again, we include these to control for other neighborhood changes that could be correlated with economic upgrading and changes in localized employment opportunities. Finally, we also include MSA and state-year dummy variables to control for unobserved heterogeneity across metro areas and any macro changes over time that could be correlated with neighborhood economic shifts and employment activity.

## VI. Preliminary Results

Comparing "low-income" definitions

Recall that we define "low-income" in two ways: once based on whether or not the neighborhood has an average household income in the bottom quintile of the sample distribution and once based on whether or not the neighborhood's income is in the bottom two quintiles. To provide some context for the importance of this difference, the average tract in the bottom quintile of our sample distribution has an income that is .63 of its MSA average income at the start of the study period, 2000. This same ratio for the average tract in the bottom  $40^{th}$  percentile is .78. These amount to about \$64,000 and \$79,400, respectively—a meaningful difference. Otherwise, the differences across neighborhoods classified in either way are generally slight (and this pattern is consistent across tract- and ZIP-level analyses). The very low-income

<sup>&</sup>lt;sup>6</sup> We also run similar models that are more parsimoniously specified, to avoid multicollinearity across some of the covariates. The correlations are not strong and the results are substantively the same; these are available from the authors upon request.

<sup>&</sup>lt;sup>7</sup> We also run models with county dummies, instead of MSA dummies, and the results are substantively the same. Ideally, we would like to include finer controls at the neighborhood level, but since the Census-based variables do not vary across the inter-census years, we would lose those covariates in the presence of neighborhood-level fixed effects.

neighborhoods tend to be occupied by fewer white households and more renters. The very low-income neighborhoods also tend to have slightly more jobs overall, but fewer jobs employed to local residents; and this ratio is persistent over the course of the study period. The very low-income neighborhoods also tend to have slightly more non-retail establishments, in the case of tracts. However, the two low-income samples are otherwise comparable with respect to business activity and the other baseline characteristics (see Table 2).

# Regressions: Baseline

For all of the regression models, we display results for each of the "low-income" definitions (i.e. those neighborhoods in the bottom quintile versus two quintiles of the distribution), and for tractlevel and ZIP-level analyses. We will address both the consistencies and discrepancies across the findings for these sub-samples. First, we discuss the results from the baseline specification; we display results for the three dependent variables separately, for tract- and ZIP-level models. Table 3 displays the results for tract level analyses using Total Local Jobs as the dependent variable. The first column is the most parsimonious model, controlling only for total overall jobs in the tract (since the number of jobs going to local residents will no doubt be a function of the number of job opportunities overall). We see that in low-income neighborhoods that gentrify (i.e. experience an increase in their relative average household income), the number of local jobs increases, by about 7 jobs on average over the course of the study period. However, when we add in tract-level neighborhood controls (for both baseline characteristics and changes over the study period) the magnitude on the Gentrify coefficient goes down by about one-third and loses significance. When we add in year dummies and state-year controls, the sign on the coefficient changes to negative and shrinks down under 1, although it remains insignificant. Finally, we include three variables to capture annual changes in business activity (i.e. the nature of employment opportunities), Stay, Inmove and Outmove. While the coefficient on Gentrify remains insignificant, the magnitude increases substantially. A similar pattern emerges when the regression sample relies on a more inclusive definition of "low-income"; these results are displayed in the next panel and, once again, when neighborhood, business and temporal-spatial controls are included, the coefficient on Gentrify reduces in magnitude and loses any significance (it does not, however, flip to a negative sign).

We turn our attention for a moment to the coefficients on the business activity variables, and observe that for both low-income samples, the coefficient on *Stay* is positive, while the coefficients on *Inmove* and *Outmove* are negative (the coefficients are generally more significant for the more inclusive definition of low-income, displayed in the right-hand vertical panel). These findings suggest that the number of local jobs increases in cases where more businesses stay, as compared to a loss in local jobs under conditions of both business exit and entry. This evidence is consistent with the expectation that incumbent businesses will either already have hired local residents or be more likely to have ties to the community and therefore hire locally. Businesses that close obviously also take with them jobs, and new businesses are either hiring fewer people more generally or looking elsewhere to fill positions.

Table 4 displays the results from ZIP-level models and we see that, not surprisingly, the magnitudes on *Gentrify* are much larger. This makes sense, as the live-work market is defined as a larger area. The fully specified models, displayed in the fourth and eighth columns, show significant coefficients on *Gentrify*. This indicates that for neighborhoods undergoing gentrification, the number of jobs going to local residents increases by between 52 and 77 per year, depending on the definition of "low-income." Based on the mean number of local jobs per ZIP, this amounts to between a 12.5 and 19 percent increase.

Next we turn to results for models using the alternative dependent variable. Table 5 displays results for tract-level analyses using *Local\_Jobs\_Share* as the dependent variable; this dependent variable measures the degree of local jobs relative to overall employment activity. As a share of all jobs, those going to local residents consistently declines over time; the coefficient on *Gentrify* is initially highly significant, and becomes even more significant and slightly larger in magnitude in the fully specified model. This result indicates that for very low-income neighborhoods (i.e. those in the lower 20<sup>th</sup> percentile of the income distribution) undergoing gentrification, the share of jobs going to local residents goes down by about .01). While negative, the coefficient on *Gentrify* for the models using the more inclusive definition of low-income is not significant and is smaller in magnitude. This suggests that any reduction in the share of localized jobs is concentrated in the very low-income neighborhoods. The parallel results for the ZIP-level models are displayed in Table 6, and the *Gentrify* coefficient is positive and insignificant in the fully specified model. Therefore, the results so far suggest that, once controlling for extensive

neighborhood and temporal-spatial factors, the effect of gentrification on local employment opportunities is present, but inconsistently identified. There is some evidence that at larger geographies the number of local jobs increases under circumstances of gentrification, and that local jobs, as a share of total jobs, goes down in tracts undergoing gentrification.

Regressions: Type of Job

We have information not just on the aggregate number of local jobs, but also on the types of jobs that make up this total. We have information on the type of job with respect to sector (specifically goods producing or service-based) and to earnings (low are those earning \$1,250 per month or less; moderate are those earning \$1,251 to \$3,333 per month; high are those earning more than \$3,333 per month) We hypothesize that most local residents in lower-income neighborhoods will have access to jobs that require less high-skill or technical training; therefore, estimating the impact of gentrification on different types of jobs will provide a better sense of who is getting the jobs (based on their sector and earnings bracket). Tables 7(a) and 7(b) display these results for both tract- and ZIP-level analyses; we display only models for the low-income neighborhoods classified as the bottom quintile.<sup>8</sup> In very low-income tracts, there is a loss in local jobs for both goods producing and service jobs, but the magnitude of the drop in gentrifying areas is larger for service jobs (by nearly six fold). The decrease in local jobs is also most profound for lower-wage positions; jobs with higher wages did not see any significant change under conditions of gentrification (although the coefficient is negative like the others). For the ZIP-level analyses, gentrifying neighborhoods see a significant increase in service jobs, but not goods producing jobs. And while local jobs of all earnings levels see an increase under conditions of ZIP-wide gentrification, the magnitude of the gain is largest for moderate- and lowearning jobs. These would more likely go to incumbent lower-income households than more affluent or well-educated in-movers.

Regressions: Stratifications

<sup>&</sup>lt;sup>8</sup> We run similar regressions on the more inclusive low-income sample (based off of the bottom two quintiles) and the results are substantively the same with the exception of the positive and significant coefficients for gentrification's effect on goods-producing jobs and moderate-income jobs. These results are available from the authors upon request.

We stratify the models in several ways to check whether or not the overall average effects are obscuring more fine-grained patterns of employment change. For these models, we only display the results for the dependent variable, Local Jobs Share, and for the more restrictive lowincome sample (i.e. those neighborhoods with average household incomes in the bottom quintile of the distribution); we do run the same models for the more inclusive low-income sample and the results are substantively the same. First, in order to test whether or not any effect on employment is driven by incumbent versus new (perhaps more affluent or more educated) inmovers, we stratify the model by the share of residents, as of 2008, that had, since 2000, moved into their current housing. Specifically, we separate the sample into those neighborhoods with more or less than the 75<sup>th</sup> percentile share of households that had moved into their unit since 2000; the results for this are displayed in the first two columns of Table 8(a). While the coefficients on Gentrify for all of the strata are negative, it is significant only for the sub-sample with predominantly new residents. Therefore, any loss in employment (as exhibited in the unstratified baseline regressions) is concentrated in neighborhoods with relatively fewer incumbent residents. This indicates that the newer residents are not getting hired locally and that, in neighborhoods with more longtime residents, there are no significant employment effects in either direction (although the sign on the coefficient is negative as well). The opposite pattern holds for ZIP neighborhoods with predominantly incumbent residents: these areas see significant gains in local jobs. Together, these results might suggest that incumbent residents are not necessarily gaining jobs in their immediate residential vicinity, but within the larger ZIP code area.

We also test to see if the gentrification effect might differ based on baseline workforce differences. To do this we stratify the models by (i) the initial share of workers who commute more than 25 minutes, and (ii) the initial unemployment rate. These results are displayed in the subsequent four columns of Table 8(a). They show that any positive employment effect for local residents is driven by ZIP neighborhoods with initially long-distance commuters; this coefficient is positive and significant, whereas the coefficient on *Gentrify* for neighborhoods with households that predominantly travel less than 25 minutes to work is negative and highly significant. Neither coefficient is significant for the tract-level strata. This evidence weakly

<sup>&</sup>lt;sup>9</sup> We replicate the stratified analyses for models with the *Total Local Jobs* dependent variable, and there are no meaningful differences across the strata that add insight to the non-stratified regression results.

suggests that gentrification could be making economic opportunity more accessible for neighborhoods that were otherwise more physically removed from employment; alternatively, those with jobs close by could be moving to these neighborhoods (perhaps to be closer to their pre-existing employment). However, at the same time, neighborhoods where residents initially had shorter commute times are losing localized jobs under conditions of gentrification. Since the business activity data shows only increases in activity in areas undergoing gentrification, this is more likely due to non-neighborhood residents obtaining the local jobs. At the tract level, there is no differential pattern in local job access across neighborhoods of relatively higher and lower unemployment rates. At the ZIP level, neighborhoods with relatively lower initial unemployment rates experience more pronounced local job gains, although high unemployment neighborhoods also see job gains (by about half as many per year). The ZIP level results weakly suggest that gentrification could contribute to bringing jobs to areas that had previously been physically and economically isolated.

# VII. Conclusion and policy implications

Since the dark days of the 1970's and 1980's, urban cores have, in general, experienced a dramatic resurgence. This turn around has brought economic prosperity to places that had not tasted it in quite some time, as well as concern over those who could not afford to sustain the rising rents and costs of living that tend to accompany gentrification. The empirical research on neighborhood change, however, has not supported the displacement hypothesis and in fact shows that some residents stay and benefit from improved quality of life. With gentrification comes increased investment and economic activity more generally, and in this paper we test whether or not local residents, in low-income neighborhoods undergoing economic upgrading, benefit from newly-created nearby employment opportunities.

We find that, in these preliminary results, gentrifying neighborhoods on average do not experience consistent, meaningful gains in local employment, compared to other comparable low-income neighborhoods that are not undergoing economic upgrading. In fact, there is some evidence that, as a share of all jobs in the census tract, the number of local jobs (particularly those in the service sector and low- and moderate-earnings tiers) decreases under circumstances of gentrification. At larger geographies (i.e. ZIP codes), however, the number of jobs going to

local residents increases (by between 52 and 77 per year), and these jobs are primarily in service sectors and going to low- and moderate-earners (i.e. those earning less than \$3,333 per month). This is consistent with the expectation that the number of job opportunities will increase as the live-work market grows. In an attempt to better understand whether or not incumbent residents are experiencing the job losses or gains, we stratify the sample by the prevalence of new residents and find a more pronounced negative effect in neighborhoods with less established resident populations and more business churn. Therefore, local jobs are likely lost to both residential and business exits, and those residents who stay in the neighborhood don't seem to experience job effects in either direction. There is weak evidence to suggest that local jobs increase in the presence of businesses that stay in place and within the context of larger ZIP neighborhoods, perhaps suggesting stronger ties to the community and/or the ability to find jobs within a larger proximate market (and not immediately close to home). Stratified models indicate that any local job gains are concentrated in ZIP neighborhoods with initially longer commute times for their workers and are weakly associated with higher unemployment rates; both of these findings suggest that gentrification is perhaps helping to fill an initial employment gap.

One of the most significant take-aways from the analysis thus far is the importance of defining the geographic span of the live-work market. It appears that either the tract is too small to pick up (or expect) variation in localized employment or that opportunities are indeed eluding local incumbent residents in areas undergoing gentrification. The fact that we observe (mostly) job gains at the ZIP code level suggests that a larger radius for work-live markets picks up different employment patterns; we interpret this to mean that a more flexible measure of distance-to-work would improve the precision of our estimates. The findings do indicate that where job gains occur, they tend to be in larger neighborhoods that initially are more removed from the workforce (both spatially, in terms of longer commute times, and economically, in terms of unemployment rates); this is encouraging in that any change in local economic conditions could be a remedy for employment mismatches. The lack of consistent positive effects, however, raises concerns that incumbent lower-income residents are not reaping enough benefits from changing economic circumstances.

This analysis is a first step in trying to disentangle the relationship between gentrification and employment opportunities, and we plan to refine the empirics to better isolate the nature and cause of any localized employment shifts. We acknowledge that the geographies for this analysis are crude and we intend to tailor the neighborhood definition to comprise a collection of census tracts that are within one mile (or thereabouts) of one another. This should broaden the live-work market beyond the restrictively small singular census tract, but keep it fine-grained enough to pick up localized variations that the ZIP code is likely obscuring. This strategy will go a long way in better identifying whether or not the incumbent residents are actually the ones who are benefitting (or missing out) from changes in local economic conditions.

## VIII. References

Carree, Martin, and Roy Thurik. 1996. "Entry and exit in retailing: incentives, barriers, displacement and replacement." *Review of Industrial Organization*, 11(2): 155-172.

Chapple, Karen and Rick Jacobus. 2009. "Retail Trade as a Route to Neighborhood Revitalization" In H. Wial, N. Pindus, & H. Wolman (Eds.), *Urban and Regional Policy and its Effects*. Washington D.C.: Brookings Institution-Urban Institute.

Curran, Winifred. "Gentrification and the nature of work: exploring the links in Williamsburg, Brooklyn." *ENVIRONMENT AND PLANNING A.* 36 (2004): 1243-1258.

Freeman, L., 2005. "Displacement or succession?" Urban Affairs Review, 40(4): 463–491.

Freeman, Lance, and Frank Braconi. 2004. "Gentrification and displacement New York City in the 1990s." *Journal of the American Planning Association*, 70(1): 39-52.

Ellen, Ingrid Gould and Katherine O'Regan. 2008. "Reversal of Fortunes: Low Income Neighborhoods in the 1990s." *Urban Studies*, 45: 845-869

Ellen, Ingrid Gould, and Katherine M. O'Regan. 2011. "How low income neighborhoods change: Entry, exit, and enhancement." *Regional Science and Urban Economics*, 41(2): 89-97.

Ellen, Ingrid Gould, and Margery Austin Turner. 1997. "Does neighborhood matter? Assessing recent evidence." *Housing Policy Debate*, 8(4): 833-866.

Holzer, H. J. 1991. The spatial mismatch hypothesis: What has the evidence shown? Urban Studies, 28(1), 105-122.

Ihlanfeldt, K. R., & Sjoquist, D. L. 1998. "The spatial mismatch hypothesis: a review of recent studies and their implications for welfare reform." *Housing Policy Debate*, 9(4): 849-892.

Immergluck, Daniel. 1999. "Neighborhoods, Race, and Capital The Effects of Residential Change on Commercial Investment Patterns." *Urban Affairs Review*, 34(3): 397-411.

Ioannides, Yannis M., and Linda Datcher Loury. 2004. "Job information networks, neighborhood effects, and inequality." *Journal of Economic Literature*: 1056-1093.

Kain, John F. 1968. "Housing segregation, negro employment, and metropolitan decentralization." *The Quarterly Journal of Economics*: 175-197.

Kolko, J., 2009. *Job Location, Neighborhood Change, and Gentrification*. Public Policy Institute of California working paper.

Lang, Kevin and Jee-Yeon K. Lehmann. 2012. "Racial Discrimination in the Labor Market: Theory and Empirics." *Journal of Economic Literature*, 50(4): 1-48.

Lester, T. William, and Daniel A. Hartley. 2014. "The long term employment impacts of gentrification in the 1990s." *Regional Science and Urban Economics*, 45: 80-89.

Liu, Cathy Yang, and Gary Painter. 2011. "Immigrant settlement and employment suburbanisation in the US: Is there a spatial mismatch?." *Urban Studies*: 0042098011405695.

Meltzer, Rachel and Sean Capperis. 2014. *Neighborhood Differences in Retail Turnover: Evidence from New York City*. Working paper.

McKinnish, T., Walsh, R., White, K.T. 2010. Who gentrifies low-income neighborhoods? *Journal of Urban Economics*, 67(2), 180–193.

Meltzer, R., Schuetz, J., 2012. Bodegas or Bagel Shops? Neighborhood Differences in Retail & Household Services. *Economic Development Quarterly* 26: 0891242411430328.

Raphael, S., and M. A. Stoll. 2002. *Modest Progress: The Narrowing Spatial Mismatch between Blacks and Jobs in the 1990s*. The Brookings Institution, Living Cities Census Series.

Rosenthal, Stuart S. 2008 "Old homes, externalities, and poor neighborhoods. A model of urban decline and renewal." *Journal of Urban Economics*, 63(3): 816-840.

Schuetz, Jenny, Jed Kolko and Rachel Meltzer. 2012. "Are Poor Neighborhoods 'Retail Deserts'?" *Regional Science and Urban Economics*, 42(1): 269-285.

Sullivan, Daniel Monroe, and Samuel C. Shaw. 2011. "Retail gentrification and race: The case of Alberta Street in Portland, Oregon." *Urban Affairs Review*, 47(3): 413-432.

Vigdor, Jacob L., Douglas S. Massey, and Alice M. Rivlin. 2002. "Does gentrification harm the poor? [with Comments]." *Brookings-Wharton Papers on Urban Affairs*: 133-182.

Zukin, S., Trujillo, V., Frase, P., Jackson, D., Recuber, T., Walker, A., 2009. New retail capital and neighborhood change: boutiques and gentrification in New York City. *City and Community*, 8(1): 47–64.

Table 1. Summary Statistics by Low- vs. Mod/High-Income

Variable	Mo	od-High-Incom (Top 80 Pc			Low-Income (Bottom 20		Sig. Diff.
	Obs	Mean	Std.Dev.	Obs	Mean	Std.Dev.	
All Jobs	42068	1906	4437	8772	1339	3926	***
Total Local Jobs	42068	64.31	73.89	8772	30.70	45.83	***
Total Population	42068	4224	1844	8772	4215	1892	
Poverty Rate	42052	0.0958	0.0874	8772	0.303	0.129	***
Prop. Adults w/ a College Degree or More	42052	0.324	0.179	8772	0.115	0.0768	***
Prop. Non-Hispanic Black	42052	0.131	0.228	8772	0.377	0.311	***
Prop. Non-Hispanic Asian	42052	0.0784	0.0985	8772	0.0483	0.105	***
Prop. Non-Hispanic White	42052	0.646	0.306	8772	0.201	0.257	***
Prop. Hispanic	42052	0.138	0.162	8772	0.365	0.252	***
Prop. Foreign-Born	42052	0.235	0.170	8772	0.296	0.166	***
Prop. of Units Built Before 1970	42052	1161	729.8	8772	1198	616.3	***
Prop. Renters	42052	0.371	0.256	8772	0.731	0.179	***
Unemployment Rate	42052	0.0587	0.0514	8772	0.146	0.0732	***
Prop. Commuting Longer than 45 mins to Work	42051	0.547	0.149	8772	0.597	0.178	***
Prop. Living in the Same Unit for 5+ Years	42052	0.617	0.102	8772	0.581	0.101	***
Prop. Younger than 18	42052	0.236	0.0625	8772	0.290	0.0769	***
Prop. Older than 65	42052	0.133	0.0615	8772	0.109	0.0990	***
Relative Change in College Grads 2000-2008	30057	0.243	0.392	8099	0.603	0.915	***
Relative Change in Median Housing Value 2000-2008	29122	3.076	119.6	7015	7.916	154.3	***
Relative Change in Median Gross Rent 2000-2008	30027	0.161	0.267	8119	0.224	0.201	***
Relative Change in Poverty Rate 2000-2008	30047	0.142	0.850	8119	-0.00549	0.466	***
Prop. Housing Units Built 2000-2010	30067	103.7	171.9	8119	94.70	139.1	***
Relative Change in Total Population 2000-2008	30057	0.0943	0.811	8119	0.0123	0.175	***
Employees per Establishment, Retail	37451	5.810449	5.245651	7778	4.458996	6.46203	***
Employees per Establishment, Non-Retail	37196	7.295351	10.19404	7730	10.66445	36.78539	***

Prop. Establishments Stayed over the Past 5 Years	35934	0.720214	0.6863655	7446	0.6973652	0.1879222	***
Prop. Establishments Moved In during the Past 5 Years	40407	0.9099488	7.003499	8390	0.8187428	0.488483	
Prop. Establishments Closed/ Moved Out during the past 5 Years	40407	0.196699	1.564084	8390	0.1689067	0.1042067	

Variable	Ν	Mod-High-Income ZIPs (Bottom 20 Pctl)			Low-Income (Bottom 20		Sig. Diff.
	Obs	Mean	Std.Dev.	Obs	Mean	Std.Dev.	
All Jobs	9847	8630	15701	1220	4855	6988	***
Total Local Jobs	9859	755.7	1028	1220	405	411.8	***
Total Population	8703	19906	18552	1220	11655	7244	***
Poverty Rate	5352	0.0453	0.0308	1220	0.118	0.0972	***
Prop. Adults w/ a College Degree or More	5352	0.406	0.159	1220	0.199	0.119	***
Prop. Non-Hispanic Black	5352	0.0387	0.0720	1220	0.165	0.224	***
Prop. Non-Hispanic Asian	5352	0.0509	0.0588	1220	0.0447	0.0678	***
Prop. Non-Hispanic White	5352	0.851	0.129	1220	0.625	0.309	***
Prop. Hispanic	5352	0.0550	0.0535	1220	0.174	0.167	***
Prop. Foreign-Born	5352	0.123	0.0890	1220	0.185	0.125	***
Prop. of Units Built Before 1970	5352	2479	2122	1220	3544	2260	***
Prop. Renters	5352	0.204	0.145	1220	0.389	0.208	***
Unemployment Rate	5342	0.0373	0.0252	1220	0.0780	0.0971	***
Prop. Commuting Longer than 45 mins to Work	5342	0.486	0.101	1220	0.468	0.181	***
Prop. Living in the Same Unit for 5+ Years	5352	0.633	0.0886	1220	0.603	0.144	***
Prop. Younger than 18	5352	0.245	0.0452	1220	0.245	0.0563	
Prop. Older than 65	5352	0.134	0.0515	1220	0.142	0.0641	***
Relative Change in College Grads 2000-2008	3093	0.153	0.165	720	0.291	0.266	***
Relative Change in Poverty Rate 2000-2008	3093	0.131	0.838	720	0.125	0.451	
Prop. Housing Units Built 2000-2010	8703	546.7	659.9	1110	309.6	369.6	***
Relative Change in Total Population 2000-2008	3093	-0.1000	0.448	720	-0.0601	0.204	**
Employees per Establishment, Retail	8532	6.232097	5.349024	1098	6.560924	3.52583	**

Employees per Establishment, Non- Retail	8159	8.916173	34.16012	1066	8.079621	5.249776	
Prop. Establishments Stayed over the Past 5 Years	7827	0.6802789	0.0553133	1062	0.6717079	0.0496938	***
Prop. Establishments Moved In during the Past 5 Years	8972	0.6692538	0.3195911	1188	0.6594964	0.2855166	
Prop. Establishments Closed/ Moved Out during the past 5 Years	8972	0.1694618	0.0765898	1188	0.1753175	0.0746199	**

**Table 2. Summary Statistics by Low Income Definition** 

Variable		Low-Income 1 (Bottom 20 1			Low-Income T (Bottom 40 P	
	Obs	Mean	Std. Dev.	Obs	Mean	Std. Dev.
All Jobs	8772	1339	3926	17569	1264	3222
Total Local Jobs	8772	30.70	45.83	17569	37.56	53.82
Total Population	8772	4215	1892	17569	4216	1908
Poverty Rate	8772	0.303	0.129	17569	0.228	0.131
Prop. Adults w/ a College Degree or More	8772	0.115	0.0768	17569	0.155	0.0930
Prop. Non-Hispanic Black	8772	0.113	0.0708	17569	0.133	0.0930
Prop. Non-Hispanic Asian	8772	0.0483	0.105	17569	0.292	0.300
Prop. Non-Hispanic White	8772	0.0483	0.103	17569	0.0708	0.114
Prop. Hispanic	8772	0.365	0.252	17569	0.332	0.239
Prop. Foreign-Born	8772	0.296	0.166	17569	0.315	0.180
Prop. of Units Built Before 1970	8772	1198	616.3	17569	1221	638.5
Prop. Renters	8772	0.731	0.179	17569	0.637	0.216
Unemployment Rate	8772	0.146	0.0732	17569	0.112	0.0693
Prop. Commuting Longer than 45 mins to Work						
Prop. Living in the Same Unit for 5+ Years	8772 8772	0.597 0.581	0.178 0.101	17569 17569	0.588 0.585	0.173 0.0934
Prop. Younger than 18			0.101		0.363	
Prop. Older than 65	8772 8772	0.290 0.109	0.0709	17569 17569	0.118	0.0717 0.0843
Employees per Establishment, Retail	7778	4.458996	6.46203	15625	4.662688	5.143249
Employees per Establishment, Non-Retail	7730	10.66445	36.78539	15558	8.800557	26.47163
Prop. Establishments Stayed over the Past 5 Years	7446	0.6973652	0.1879222	15085	0.6884355	0.1738526
Prop. Establishments Moved In during the Past 5 Years	8390	0.8187428	0.488483	16953	0.8079267	0.4721724
Prop. Establishments Closed/Moved Out during the past 5 Years	8390	0.1689067	0.1042067	16953	0.1705207	0.1005457

Variable		Low_Income (Bottom 20			Low_Income (Bottom 40	
	Obs	Mean	Std.Dev.	Obs	Mean	Std.Dev.
All Jobs	1220	4855	6988	2447	4756	6762
Total Local Jobs	1220	405	411.8	2447	416.8	433.0

Total Population	1220	11655	7244	2447	10366	6874
Poverty Rate	1220	0.118	0.0972	2447	0.0878	0.0791
Prop. Adults w/ a College Degree or More	1220	0.199	0.119	2447	0.229	0.104
Prop. Non-Hispanic Black	1220	0.165	0.224	2447	0.109	0.183
Prop. Non-Hispanic Asian	1220	0.0447	0.0678	2447	0.0419	0.0602
Prop. Non-Hispanic White	1220	0.625	0.309	2447	0.726	0.265
Prop. Hispanic	1220	0.174	0.167	2447	0.124	0.137
Prop. Foreign-Born	1220	0.185	0.125	2447	0.150	0.112
Prop. of Units Built Before 1970	1220	3544	2260	2447	3160	2170
Prop. Renters	1220	0.389	0.208	2447	0.316	0.188
Unemployment Rate	1220	0.0780	0.0971	2447	0.0620	0.0736
Prop. Commuting Longer than 45 mins to Work	1220	0.468	0.181	2447	0.468	0.146
Prop. Living in the Same Unit for 5+ Years	1220	0.603	0.144	2447	0.619	0.113
Prop. Younger than 18	1220	0.245	0.0563	2447	0.242	0.0463
Prop. Older than 65	1220	0.142	0.0641	2447	0.139	0.0547
Employees per Establishment, Retail	1098	6.560924	3.52583	2188	6.308049	3.418425
Employees per Establishment, Non-Retail	1066	8.079621	5.249776	2157	8.434451	14.43981
Prop. Establishments Stayed over the Past 5 Years	1062	0.6717079	0.0496938	2141	0.6760515	0.0471604
Prop. Establishments Moved In during the Past 5 Years	1188	0.6594964	0.2855166	2393	0.6543791	0.2768929
Prop. Establishments Closed/Moved Out during the past 5 Years	1188	0.1753175	0.0746199	2393	0.1725621	0.074474

 Table 3. Regression Results: Baseline Model, Total Local Jobs, Tract Level

		Low-Inco (Bottom	me Tracts 20 Pctl)				me Tracts 40 Pctl)	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
VARIABLES	Total Local Jobs	Total Local Jobs	Total Local Jobs	Total Local Jobs	Total Local Jobs	Total Local Jobs	Total Local Jobs	Total Local Jobs
Gentrify 2000-2008	6.967**	2.368	-0.290	-4.567	13.18***	3.175	3.220	1.647
All Jobs	(2.918) 0.00444* **	(2.557) 0.00735* **	(2.465) 0.00693* **	(3.142) 0.00199	(2.348) 0.00666*	(2.115) 0.00986* **	(2.306) 0.00952* **	(2.690) 0.00502*
Total Donaldian	(0.00118)	(0.00245) 0.00831*	(0.00229) 0.00476*	(0.00144) 0.00392*	(0.00153)	(0.00227) 0.00598*	(0.00224) 0.00360*	(0.00214) 0.00455*
Total Population		**	**	*		**	*	*
D ( D (		(0.00145)	(0.00150)	(0.00152)		(0.00157)	(0.00173)	(0.00185)
Poverty Rate		-10.03	12.95	2.784		-26.22	-26.39	-27.34
Prop. Adults w/ a College Degree		(17.73)	(18.23)	(21.22)		(18.54)	(17.62)	(17.05)
or More		-0.320	0.944	4.709		-2.845	-7.650	-5.603
		(28.08)	(29.13)	(27.07)		(21.86)	(22.19)	(21.54)
Prop. Non-Hispanic Black		-83.23	-58.07	-25.45		-53.51	-65.31	-45.06
		(143.1)	(147.1)	(169.4)		(62.59)	(64.32)	(71.21)
Prop. Non-Hispanic Asian		-100.1	-68.86	-30.23		-63.18	-67.13	-36.39
		(147.6)	(149.3)	(168.7)		(70.34)	(71.60)	(75.60)
Prop. Non-Hispanic White		-42.32	-25.14	3.503		-11.55	-30.21	-15.22
		(141.5)	(145.2)	(167.6)		(61.18)	(62.82)	(70.13)
Prop. Hispanic		-87.54	-62.34	-20.48		-49.78	-63.66	-41.09
		(143.9)	(147.7)	(170.0)		(62.81)	(64.46)	(71.62)
Prop. Foreign-Born		7.703	15.67	7.761		-1.901	-2.974	-3.620
		(10.09)	(10.09)	(9.961)		(7.629)	(7.536)	(8.550)
Prop. of Units Built Before 1970		-0.00318	0.00378	0.00494		0.0100**	0.0155**	0.0136**
		(0.00459)	(0.00465)	(0.00447)		(0.00496)	(0.00483)	(0.00460)
Prop. Renters		-9.141	8.447	-21.21		-12.36	-0.960	-20.71*
		(17.15)	(16.61)	(18.59)		(10.90)	(10.51)	(11.68)
Unemployment Rate		-31.75	-22.64	8.441		-26.69	-7.471	18.85
		(19.47)	(18.32)	(24.65)		(19.94)	(20.28)	(25.59)
Prop. Commuting Longer than 25 mins to Work		- 44.64***	- 47.60***	-22.48		33.27***	- 48.93***	-33.61**
		(12.44)	(16.70)	(15.04)		(9.543)	(14.86)	(16.53)
Prop. Living in the Same Unit for 5+ Years		2.248	1.618	-1.767		-1.999	-4.882	-9.922
		(13.87)	(16.23)	(19.48)		(12.44)	(12.99)	(14.85)
Prop. Younger than 18		-9.430	5.680	65.71**		66.73**	65.20**	103.2***
		(28.10)	(28.66)	(31.50)		(31.13)	(29.55)	(30.60)
Prop. Older than 65		-55.50**	-23.46	4.203		-15.89	-7.494	24.40

		(24.68)	(26.22)	(27.25)		(24.61)	(26.35)	(30.02)
Relative Change in College Grads 2000-2008		0.910	0.356	1.288		0.708	0.0871	0.982
2000-2000		(0.723)	(0.702)	(0.847)		(0.832)	(0.865)	(1.014)
Relative Change in Median Housing Value 2000-2008		0.00302*	0.00365*	-6.81e-05		- 0.000694	0.000309	0.00232*
		(0.00129)	(0.00166)	(0.00130)		(0.00093 0)	(0.00125)	(0.00118)
Relative Change in Median Gross Rent 2000-2008		1.633	6.308	6.580		-9.014*	-10.39*	-9.754
		(5.315)	(4.685)	(6.348)		(5.333)	(5.475)	(5.998)
Relative Change in Poverty Rate 2000-2008		-0.492	0.273	2.316		-1.322	0.323	0.969
		(3.083)	(2.908)	(2.929)		(1.494)	(1.545)	(1.542)
Prop. Housing Units Built 2000- 2010		0.0432**	0.0375**	0.0254**		0.0541**	0.0481**	0.0442**
		(0.0131)	(0.0110)	(0.0114)		(0.0165)	(0.0156)	(0.0161)
Relative Change in Total Population 2000-2008		-14.74**	-13.03**	-10.92		-6.129	-2.445	-0.542
		(6.697)	(5.800)	(7.971)		(4.680)	(4.180)	(4.421)
Establishments Stayed over the Past 5 Years				0.159*				0.182**
				(0.0955)				(0.0822)
Establishments Moved In during the Past 5 Years				-0.122**				- 0.161***
				(0.0538)				(0.0463)
Establishments Closed/Moved Out during the Past 5 Years				-0.147				- 0.174***
				(0.101)				(0.0557)
Total Establishments in 2002				0.154				0.131**
				(0.0965)				(0.0539)
Constant	21.98***	107.6	79.70	-8.941	23.62***	45.60	92.24	41.39
	(1.572)	(138.5)	(139.1)	(157.6)	(1.648)	(62.66)	(64.21)	(67.65)
Clustered S.E.'s?	Y	Y	Y	Y	Y	Y	Y	Y
MSA and State-Yr Dummies?	N	N	Y	Y	N	N	Y	Y
Observations	8,772	7,005	7,005	4,553	17,569	14,458	14,458	10,149
R-squared	0.158	0.498	0.577	0.688	0.186	0.533	0.570	0.625

<sup>\*\*\*</sup> p<0.01, \*\* p<0.05, \* p<0.1

Table 4. Regression Results: Baseline Model, Total Local Jobs, ZIP Level

			ome ZIPs 20 Pctl)				ome ZIPs 40 Pctl)	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
VARIABLES	Total Local Jobs	Total Local Jobs	Total Local Jobs	Total Local Jobs	Total Local Jobs	Total Local Jobs	Total Local Jobs	Total Local Jobs
Gentrify 2000-2008	240.6***	72.00*	87.42*	77.21**	204.8***	34.65	70.36*	52.26*
	(50.39)	(42.16)	(51.52)	(30.39)	(37.80)	(31.51)	(39.96)	(27.72)
All Jobs	0.0186**	0.0260***	0.0265***	-0.0207**	0.0244***	0.0239***	0.0247***	-0.0207**
	(0.00804)	(0.00275)	(0.00305)	(0.00859)	(0.00711)	(0.00347)	(0.00376)	(0.0101)
Total Population		0.0226***	0.0239***	0.0241***		0.0164**	0.0228***	0.0140
		(0.00735)	(0.00649)	(0.00493)		(0.00769)	(0.00723)	(0.00971)
Poverty Rate		-569.0	-180.1	56.28		1,210	1,926*	448.9
		(674.3)	(636.0)	(547.2)		(1,062)	(1,059)	(695.1)
Prop. Adults w/ a College Degree or More		144.9	372.3	-261.3		477.8	693.3**	-345.6*
		(254.8)	(230.4)	(202.4)		(373.3)	(344.2)	(203.2)
Prop. Non-Hispanic Black		5,088*	6,929**	8,122**		-11,062**	-9,740**	1,149
		(2,919)	(3,199)	(3,374)		(4,918)	(4,608)	(3,411)
Prop. Non-Hispanic Asian		3,467	5,220	7,228**		-12,818**	-11,835**	175.6
		(2,939)	(3,183)	(3,385)		(4,918)	(4,596)	(3,453)
Prop. Non-Hispanic White		5,539*	7,307**	8,289**		-10,608**	-9,367**	1,193
		(2,891)	(3,201)	(3,383)		(4,918)	(4,598)	(3,365)
Prop. Hispanic		5,082*	6,878**	8,212**		-11,155**	-9,921**	899.1
		(2,851)	(3,177)	(3,408)		(4,885)	(4,553)	(3,367)
Prop. Foreign-Born		567.7**	765.0***	431.2*		902.9***	1,083***	715.2***
		(238.2)	(258.5)	(216.4)		(312.7)	(331.8)	(247.1)
Prop. of Units Built Before 1970		0.00486	-0.00629	-0.031***		0.0489*	0.0313	0.00546
		(0.0190)	(0.0154)	(0.0102)		(0.0271)	(0.0233)	(0.0218)
Prop. Renters		-10.48	-133.5	-182.3		-447.9*	-567.6**	-412.1***
		(202.7)	(167.4)	(115.7)		(244.7)	(244.6)	(156.7)
Unemployment Rate		878.1	707.4	37.74		-681.7	-1,204	-707.3
		(658.3)	(609.6)	(704.0)		(1,062)	(979.0)	(664.9)
Prop. Commuting Longer than 25 mins to Work		-287.3*	-260.0	-69.05		-669.5**	-858.4**	-298.6
		(159.9)	(259.9)	(177.9)		(294.1)	(354.2)	(188.4)
Prop. Living in the Same Unit for 5+ Years		-80.16	-150.0	425.9		164.8	26.34	-15.97
		(225.0)	(351.3)	(267.7)		(338.2)	(336.3)	(260.3)
Prop. Younger than 18		1,893***	1,627**	-656.6		474.6	131.7	-645.5
		(708.7)	(815.8)	(720.0)		(679.8)	(851.4)	(599.0)
Prop. Older than 65		584.5	561.4	-4.600		-516.7	-390.0	-78.78
		(488.8)	(612.3)	(488.7)		(690.7)	(779.5)	(535.6)

Relative Change in College Grads 2000-2008		-22.55	62.44	84.55*		72.07	142.8**	81.52*
		(48.10)	(53.59)	(46.42)		(54.14)	(71.05)	(43.46)
Relative Change in Poverty Rate 2000-2008		-5.396	14.60	16.80		-17.08	2.849	23.47
		(48.32)	(52.35)	(31.44)		(22.24)	(20.02)	(16.02)
Prop. Housing Units Built 2000-2010		0.128***	0.131***	0.0985***		0.177*	0.190*	0.146**
		(0.0377)	(0.0471)	(0.0310)		(0.0962)	(0.0980)	(0.0579)
Relative Change in Total Population 2000-2008		-180.7	-234.6*	-92.23		38.31	35.06	39.02***
		(149.0)	(136.0)	(78.58)		(24.27)	(24.33)	(14.87)
Establishments Stayed over the Past 5 Years				0.734**				1.059***
				(0.330)				(0.261)
Establishments Moved In during the Past 5 Years				-0.422***				-0.533***
				(0.128)				(0.134)
Establishments Closed/Moved Out during the Past 5 Years				-0.621***				-1.340***
				(0.211)				(0.233)
Total Establishments in 2002				0.558***				0.672***
				(0.207)				(0.160)
Constant	135.3***	-5,876**	-7,641**	-8,230**	142.5***	10,643**	9,512**	-769.0
	(42.26)	(2,927)	(3,207)	(3,414)	(33.86)	(4,904)	(4,554)	(3,246)
Clustered S.E.'s?	Y	Y	Y	Y	Y	Y	Y	Y
MSA and State-Yr Dummies?	N	N	Y	Y	N	N	Y	Y
Observations	1,220	720	720	617	2,447	1,468	1,468	1,250
R-squared	0.179	0.656	0.740	0.863	0.196	0.630	0.683	0.841

<sup>\*\*\*</sup> p<0.01, \*\* p<0.05, \* p<0.1

Table 5. Regression Results: Baseline Model, Local Jobs Share, Tract Level

	Low_Income Tracts (Bottom 20 Pctl)					Low_Inco (Bottom	me Tracts 40 Pctl)	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
VARIABLES	Local Jobs	Local Jobs	Local Jobs	Local Jobs	Local Jobs	Local Jobs	Local Jobs	Local Jobs
VARIABLES	Share	Share	Share	Share	Share	Share	Share	Share
Gentrify 2000-2008	-0.011***	-0.0064**	-0.00602*	-0.004***	-0.00319	-0.00481*	-0.00135	-0.00112
Senany 2000 2000	(0.00303)	(0.00325)	(0.00345)	(0.00324)	(0.00250)	(0.00289)	(0.00324)	(0.00297)
Total Population	(,	4.69e- 06***	4.07e- 06***	4.35e- 06***	(,	-7.09e-07	-1.03e-06	-5.16e-08
		(1.38e-06)	(1.52e-06)	(1.60e-06)		(1.23e-06)	(1.27e-06)	(1.33e-06)
Poverty Rate		-0.0178	-0.0266	0.0214		-0.00933	-0.0165	0.00503
,		(0.0276)	(0.0307)	(0.0273)		(0.0202)	(0.0207)	(0.0202)
Prop. Adults w/ a College Degree or		-0.0117	-0.0133	-0.0273		0.00257	0.00919	0.00631
More		(0.0288)	(0.0317)	(0.0263)		(0.0198)	(0.0206)	(0.0187)
Prop. Non-Hispanic Black		0.0666	0.0113	0.0186		0.106	0.0928	0.107
110p. 1von 1115punie Black		(0.151)	(0.160)	(0.169)		(0.0827)	(0.0835)	(0.0764)
Prop. Non-Hispanic Asian		0.0433	-0.0169	-0.00610		0.108	0.0908	0.109
		(0.150)	(0.158)	(0.167)		(0.0852)	(0.0860)	(0.0797)
Prop. Non-Hispanic White		0.0875	0.0279	0.0389		0.140*	0.120	0.148*
		(0.153)	(0.162)	(0.170)		(0.0837)	(0.0843)	(0.0766)
Prop. Hispanic		0.0610	0.00403	0.00237		0.114	0.0978	0.102
		(0.149)	(0.158)	(0.166)		(0.0822)	(0.0830)	(0.0760)
Prop. Foreign-Born		0.00648	0.00368	0.0163		0.0150	0.0153	0.0263**
		(0.0162)	(0.0168)	(0.0143)		(0.0114)	(0.0121)	(0.0106)
Prop. of Units Built Before 1970		5.87e-06	7.40e-06	1.26e- 05**		1.45e- 05***	1.56e- 05***	2.00e- 05***
		(4.76e-06)	(5.28e-06)	(5.21e-06)		(4.02e-06)	(3.97e-06)	(3.94e-06)
Prop. Renters		-0.0338**	-0.0378**	-0.0377**		0.0444***	0.0453***	0.0354***
		(0.0164)	(0.0168)	(0.0166)		(0.0120)	(0.0125)	(0.0116)
Unemployment Rate		-0.0184	-0.00447	-0.0374		-0.0207	-0.00718	-0.0117
		(0.0378)	(0.0390)	(0.0317)		(0.0302)	(0.0312)	(0.0279)
Prop. Commuting Longer than 25 mins to Work		0.0561***	0.0331*	0.0135		0.0588***	0.0365**	0.0147
		(0.0131)	(0.0200)	(0.0186)		(0.00978)	(0.0144)	(0.0145)
Prop. Living in the Same Unit for 5+		0.00651	-0.000947	-0.0287		0.0144	0.0142	-0.0197
Years		(0.0201)	(0.0235)	(0.0224)		(0.0174)	(0.0188)	(0.0173)
Prop. Younger than 18		0.0928**	0.0672	0.0130		0.126***	0.106***	0.0777**
		(0.0420)	(0.0419)	(0.0398)		(0.0343)	(0.0342)	(0.0347)
Prop. Older than 65		-0.00413	-0.0352	-0.0654**		-0.00570	-0.0343	-0.0548**
		(0.0452)	(0.0459)	(0.0297)		(0.0350)	(0.0344)	(0.0249)
Relative Change in College Grads		-0.00137	-0.00202	-0.00149		-0.000925	-0.00162	-0.001000
2000-2008		(0.00130)	(0.00126)	(0.00126)		(0.00155)	(0.00152)	(0.00143)
		(0.00130)	(0.00126)	(0.00126)		(0.00155)	(0.00152)	(0.00143)

Relative Change in Median Housing Value 2000-2008		-4.07e-06*	-2.84e-06	-2.72e-06		-6.71e- 06***	-5.54e- 06***	-7.33e- 06***
		(2.35e-06)	(2.57e-06)	(1.90e-06)		(1.56e-06)	(1.59e-06)	(1.51e-06)
Relative Change in Median Gross Rent 2000-2008		0.00696	0.00301	0.0109		-0.0117	-0.0166**	-0.0142*
		(0.00947)	(0.0100)	(0.00978)		(0.00756)	(0.00782)	(0.00774)
Relative Change in Poverty Rate 2000-2008		-0.00320	-0.00242	-0.00187		-0.00283	-0.00163	-0.00164
		(0.00298)	(0.00283)	(0.00241)		(0.00184)	(0.00185)	(0.00169)
Prop. Housing Units Built 2000-2010		-2.28e- 05**	-2.19e- 05**	-5.99e-06		2.05e-05	1.64e-05	3.81e- 05***
		(9.48e-06)	(9.66e-06)	(9.22e-06)		(1.40e-05)	(1.37e-05)	(1.42e-05)
Relative Change in Total Population 2000-2008		0.00527	0.00610	0.00376		0.0189	0.0201*	0.0202
		(0.00747)	(0.00763)	(0.00851)		(0.0122)	(0.0119)	(0.0142)
Establishments Stayed over the Past 5 Years				1.21e-06				1.60e-05
				(5.92e-05)				(4.80e-05)
Establishments Moved In during the Past 5 Years				-6.24e-05				-5.48e- 05**
				(3.96e-05)				(2.79e-05)
Establishments Closed/Moved Out during the Past 5 Years				-8.22e-06				-3.42e-05
				(4.17e-05)				(3.37e-05)
Total Establishments in 2002				-3.88e-06				-3.92e-05
				(3.81e-05)				(2.62e-05)
Constant	0.0565***	-0.0703	0.00770	0.0337	0.0596***	-0.121	-0.0912	-0.0794
	(0.00212)	(0.152)	(0.164)	(0.169)	(0.00147)	(0.0823)	(0.0835)	(0.0762)
Clustered S.E.'s?	Y	Y	Y	Y	Y	Y	Y	Y
MSA and State-Yr Dummies?	N	N	Y	Y	N	N	Y	Y
Observations	8,772	7,005	7,005	4,553	17,569	14,458	14,458	10,149
R-squared	0.009	0.083	0.107	0.163	0.001	0.081	0.102	0.187

<sup>\*\*\*</sup> p<0.01, \*\* p<0.05, \* p<0.1

Table 6. Regression Results: Baseline Model, Local Jobs Share, ZIP Level

			ome ZIPs 20 Pctl)		Low_Income ZIPs (Bottom 40 Pctl)			
VARIABLES	(1) Local Jobs Share	(2) Local Jobs Share	(3) Local Jobs Share	(4) Local Jobs Share	(5) Local Jobs Share	(6) Local Jobs Share	(7) Local Jobs Share	(8) Local Jobs Share
Gentrify 2000-2008	0.0416***	0.000355	0.00458	0.00138	0.0192	-0.0108	0.00792	0.00139
	(0.0145)	(0.0155)	(0.0179)	(0.0189)	(0.0135)	(0.0143)	(0.0152)	(0.0138)
Total Population		1.86e-06	3.65e-06*	6.59e-06**		-2.19e-06	4.90e-07	3.75e-06
		(2.22e-06)	(1.98e-06)	(2.98e-06)		(2.41e-06)	(2.43e-06)	(3.25e-06)
Poverty Rate		-0.0342	0.118	0.340		0.0455	0.327	0.385
		(0.284)	(0.289)	(0.358)		(0.290)	(0.292)	(0.334)
Prop. Adults w/ a College Degree or More		0.152	0.263**	0.285**		0.0872	0.209**	0.182**
		(0.111)	(0.119)	(0.129)		(0.0928)	(0.0974)	(0.0892)
Prop. Non-Hispanic Black		1.208	0.959	1.412		-1.151	-1.186	-0.272
		(1.043)	(1.337)	(1.514)		(0.839)	(0.868)	(1.014)
Prop. Non-Hispanic Asian		0.641	0.359	0.926		-1.561*	-1.757**	-0.704
		(1.087)	(1.400)	(1.601)		(0.823)	(0.867)	(1.029)
Prop. Non-Hispanic White		1.385	1.115	1.585		-0.972	-1.051	-0.138
		(1.038)	(1.334)	(1.514)		(0.833)	(0.868)	(1.011)
Prop. Hispanic		1.085	0.814	1.403		-1.184	-1.232	-0.257
		(1.036)	(1.347)	(1.530)		(0.821)	(0.849)	(0.998)
Prop. Foreign-Born		0.243***	0.276***	0.159		0.147	0.225**	0.178**
		(0.0893)	(0.0872)	(0.107)		(0.106)	(0.0921)	(0.0872)
Prop. of Units Built Before 1970		9.66e-06	4.33e-06	2.95e-07		2.18e-05***	1.40e-05*	8.50e-06
		(7.03e-06)	(6.46e-06)	(6.99e-06)		(8.15e-06)	(8.27e-06)	(9.21e-06)
Prop. Renters		-0.0814	-0.0611	-0.0890		-0.0683	-0.133*	-0.139*
		(0.0775)	(0.0699)	(0.0652)		(0.0803)	(0.0769)	(0.0733)
Unemployment Rate		0.472	0.421	0.304		0.0163	-0.204	-0.266
		(0.313)	(0.331)	(0.416)		(0.285)	(0.311)	(0.347)
Prop. Commuting Longer than 25 mins to Work		0.0610	0.0002	0.0447		0.0255	0.0221	0.0217
WOIK		-0.0618	-0.0683	-0.0447		0.0255	0.0331	0.0317
D 11.1.1.1.1.0.5.14		(0.0605)	(0.0836)	(0.0892)		(0.0613)	(0.0798)	(0.0769)
Prop. Living in the Same Unit for 5+ Years		-0.118	-0.0932	0.0153		-0.165	-0.166	-0.127
D V		(0.101)	(0.128)	(0.133)		(0.101)	(0.121)	(0.128)
Prop. Younger than 18		0.717**	0.748*	0.366		0.644**	0.761**	0.502
		(0.332)	(0.391)	(0.460)		(0.284)	(0.312)	(0.306)
Prop. Older than 65		0.183	0.226	0.0459		0.0180	0.200	0.0473
Relative Change in College Grads 2000-		(0.274)	(0.314)	(0.339)		(0.262)	(0.293)	(0.285)
2008		0.00318	0.0184	0.0373		0.00517	0.0103	0.0165

		(0.0221)	(0.0275)	(0.0286)		(0.0242)	(0.0268)	(0.0267)
Relative Change in Poverty Rate 2000-2008		-0.0394**	-0.0391**	-0.0432**		-0.0180*	-0.0122	-0.0138
		(0.0167)	(0.0171)	(0.0163)		(0.00998)	(0.00878)	(0.00878)
Prop. Housing Units Built 2000-2010		3.91e-05*	3.47e-05*	3.46e-05		3.83e-05	3.64e-05*	3.71e-05*
		(2.13e-05)	(2.05e-05)	(2.08e-05)		(2.40e-05)	(2.04e-05)	(2.02e-05)
Relative Change in Total Population 2000- 2008		-0.00299	-0.00243	0.0116		-0.00776	-0.00946	-0.00553
		(0.0393)	(0.0408)	(0.0412)		(0.00858)	(0.00825)	(0.00732)
Establishments Stayed over the Past 5 Years				0.000229				0.000369**
				(0.000151)				(0.000109)
Establishments Moved In during the Past 5 Years				-3.03e-05				-8.81e-05*
				(6.09e-05)				(5.19e-05)
Establishments Closed/Moved Out during the Past 5 Years				-0.000133				-0.000245**
				(0.000105)				(0.000107)
Total Establishments in 2002				-0.000109				0.000148**
				(7.14e-05)				(4.92e-05)
Constant	0.0877***	-1.381	-1.235	-1.673	0.113***	1.026	0.980	0.113
	(0.0115)	(1.040)	(1.333)	(1.516)	(0.0120)	(0.822)	(0.837)	(1.004)
Clustered S.E.'s?	Y	Y	Y	Y	Y	Y	Y	Y
MSA and State-Yr Dummies?	N	N	Y	Y	N	N	Y	Y
Observations	1,220	720	720	617	2,447	1,468	1,468	1,250
R-squared	0.048	0.548	0.639	0.665	0.009	0.353	0.436	0.477

<sup>\*\*\*</sup> p<0.01, \*\* p<0.05, \* p<0.1

Table 7.a. Regression Results: By Job Type, Tract Level

TRACT	Low-Income Tracts (Bottom 20 Pctl)							
	(1)	(2)	(4)	(5)				
	Jobs:	Jobs:	Low	Mod	High			
VARIABLES	Goods	Services	Earnings	Earnings	Earnings			
Gentrify 2000-2008	-0.455**	-2.986***	-1.669***	-1.511***	-0.0791			
	(0.215)	(0.832)	(0.368)	(0.428)	(0.396)			
Constant	-47.06***	36.76	70.13**	-74.62***	-25.42***			
	(6.493)	(42.19)	(35.22)	(11.25)	(9.767)			
Clustered S.E.'s?	Y	Y	Y	Y	Y			
MSA and State-Yr Dummies?	Y	Y	Y	Y	Y			
Observations	5,820	5,820	5,820	5,820	5,820			
R-squared	0.653	0.613	0.649	0.625	0.547			

Clustered standard errors in parentheses

Table 7.b. Regression Results: By Job Type, ZIP Level

ZIP	Low-Income ZIPs (Bottom 20 Pctl)								
	(1)	(1) (2) (3) (4)							
	Jobs:	Jobs:	Low	Mod	High				
VARIABLES	Goods	Services	Earnings	Earnings	Earnings				
Gentrify 2000-2008	3.687	36.49***	22.32***	24.50***	18.65***				
	(3.513)	(10.30)	(5.399)	(5.867)	(4.239)				
Constant	-1,778***	-4,038***	-2,132***	-3,975***	-2,103***				
	(393.6)	(1,122)	(574.1)	(545.6)	(475.0)				
Clustered S.E.'s?	Y	Y	Y	Y	Y				
MSA and State-Yr Dummies?	Y	Y	Y	Y	Y				
Observations	621	621	621	621	621				
R-squared	0.731	0.826	0.832	0.801	0.823				

Clustered standard errors in parentheses

<sup>\*\*\*</sup> p<0.01, \*\* p<0.05, \* p<0.1

<sup>\*\*\*</sup> p<0.01, \*\* p<0.05, \* p<0.1

Table 8.a. Regression Results: Stratified Models, Tract Level

TRACT	Low-Income Tracts (Bottom 20 Pctl)											
		ntly Moved Since 2000)		Prop. Commuting Longer than 25 mins to Work		Unemployment Rate		ocal Jobs				
	Below 75 Pctl	Above 75 Pctl	Below Median	Above Median	Below Median	Above Median	Below 75 Pctl	Above 75 Pctl				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)				
VARIABLES	Local Jobs Share	Local Jobs Share	Local Jobs Share	Local Jobs Share	Local Jobs Share	Local Jobs Share	Local Jobs Share	Local Jobs Share				
Gentrify 2000-2008	-0.002	-0.011**	-0.0047	-0.0026	-0.0080	-0.0034	-0.0019321	-0.0075303				
	(0.005)	(0.005)	(0.0037)	0.0059	(.0049)	(.0057)	0.0038538	0.0058833				
Constant	0.013	0.5483	0.0068	0.2819	0.1508	0.0480	0.1600457	0.1253098				
	(0.15)	(0.73)	(0.127)	0.2628	(.2386)	(.213)	0.2289277	0.162709				
Observations	4,078	1,742	3,122	2,698	3,191	2,629	4,227	1,593				
R-squared	0.1268	0.2576	0.3068	0.2024	0.191	0.1485	0.1669	0.4172				

Robust standard errors in parentheses

Table 8.b. Regression Results: Stratified Models, ZIP Level

ZIP	Low-Income ZIPs (Bottom 20 Pctl)											
	Prop. Recently Moved into Unit (Since 2000)		Prop. Commuting Longer than 25 mins to Work		Unemploy	ment Rate	Total Local Jobs					
	Below 75 Pctl	Above 75 Pctl	Below Median	Above Median	Below Median	Above Median	Below 75 Pctl	Above 75 Pctl				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)				
VARIABLE S	Local Jobs Share	Local Jobs Share	Local Jobs Share	Local Jobs Share	Local Jobs Share	Local Jobs Share	Local Jobs Share	Local Jobs Share				
Gentrify 2000-2008 Constant	0.017*** (.006) -1.884	0613*** (.013) 0.0550	-0.0654*** 0.0112 -5.7502	0.0568*** 0.0103 -11.1459	0.114*** (.035) 5.9600	0.055*** (0.01) -2.3603	-0.0104884 0.0146693 -1.843159	-0.003041 0.0486804 0.3115151				
	(0.784)	(0.017)	1.7429	1.8325	(4.47)	(1.72)	1.393973	0.1562715				
Observations	450	162	297	297	315	306	548	73				
R-squared	0.7859	0.9731	0.9549	0.9306	0.85	0.9247	0.6999	0.9899				

<sup>\*\*\*</sup> p<0.01, \*\* p<0.05, \* p<0.1

<sup>\*\*\*</sup> p<0.01, \*\* p<0.05, \* p<0.1