ONLINE APPENDIX

Place-Based Drivers of Mortality: Evidence from Migration

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A Empirical Bayes Adjustment

Our Empirical Bayes adjustment follows Chetty and Hendren (2018). This appendix describes the approach in more detail.

Let γ_j be the true life expectancy treatment effects with mean 0. Let M be the average causal place effect which, by construction, is also 0. There is no measurement error in M. We assume that γ_j is a normally distributed random variable, so that

$$\gamma_j = M + \eta_j \tag{A.1}$$

with $\eta_j \sim N\left(0, \chi^2\right)$.

Further, assume that the unbiased estimates of γ_j are subject to idiosyncratic measurement error:

$$\hat{\gamma}_j = \gamma_j + \upsilon_j \tag{A.2}$$

where the estimation error $\upsilon_j \sim N\left(0, s_j^2\right)$ and s_j is the standard error of γ_j from the bootstrap.

Combining equations (A.1) and (A.2) implies:

$$\hat{\gamma}_j = M + \eta_j + \upsilon_j \tag{A.3}$$

and using OLS we are able to estimate $\operatorname{Var}\left(\eta_j + \upsilon_j\right)$ as $\operatorname{Var}\widehat{\left(\eta_j + \upsilon_j\right)}$. Note that in our setting, $\operatorname{Var}\widehat{\left(\eta_j + \upsilon_j\right)} = \operatorname{Var}\left(\hat{\gamma}_j\right)$.

With these assumptions, we are able to compute:

$$\chi^2 = \operatorname{Var}\left(\eta_j\right) = \operatorname{Var}\left(\eta_j + \upsilon_j\right) - E\left[s_j^2\right] \tag{A.4}$$

Optimal linear predictions We compute forecasts γ_j^{EB} of each CZ's true causal effect γ_j that minimize the mean squared prediction error:

$$\sum_{j=1}^{J} \left(\gamma_j^{EB} - \gamma_j\right)^2 \tag{A.5}$$

Note that the (unobserved) true causal effect of moving to j can be written as:

$$\gamma_j = \beta_{1,j} \cdot M + \beta_{2,j} \cdot \hat{\gamma}_j \tag{A.6}$$

A hypothetical OLS regression across the 563 CZs to estimate the 563 $\beta_{1,j}$ coefficients and the 563 $\beta_{2,j}$ coefficients allows us to form predictions of the true causal effects, γ_j, using M and $\hat{\gamma}_j$, which we call γ_j^{EB}.

$$\gamma_j^{EB} = \hat{\beta}_{1,j} \cdot M + \hat{\beta}_{2,j} \cdot \hat{\gamma}_j \tag{A.7}$$

Note that these predictions, γ_j^{EB}, would minimize the objective function in equation (A.5). Given a way to estimate these coefficients, we can directly compute the optimal forecasts. However, because γ_j is unobserved, we cannot simply estimate the coefficients in an OLS regression. Instead, we use the derivation of these coefficients as in Chetty and Hendren (2018):

$$\gamma_j^{EB} = \frac{\chi^2}{\chi^2 + s_j^2} \cdot \hat{\gamma}_j + \frac{s_j^2}{\chi^2 + s_j^2} M \tag{A.8}$$

Because in our setting $M = 0$, this simplifies to:

$$\gamma_j^{EB} = \frac{\chi^2}{\chi^2 + s_j^2} \cdot \hat{\gamma}_j \tag{A.9}$$

Lastly, again following Chetty and Hendren (2018), we calculate the mean-squared error, e_j^2, of the optimal prediction, $\hat{\gamma}_j^{EB}$, as:

$$e_j^2 = E[\hat{\gamma}_j^{EB} - \gamma_j]^2 = \frac{1}{\frac{1}{\chi^2} + \frac{1}{s_j^2}}$$

and compute the 95% credible interval as $\hat{\gamma}_j^{EB} \pm 1.96 \cdot e_j$.

B Microfoundation for Assumptions 1 and 2

In this section, we show a natural set of assumptions on the selection process under which Assumptions 1 and 2 are guaranteed to hold with constants $\varphi_1 = \varphi_2 = 1$. The key condition is that selection works only through the single index of overall health capital.

We begin with an underlying population of movers with health capital $\theta_i = h_i + \eta_i$, where h_i and η_i are observed and unobserved components respectively. For simplicity, we ignore the role of demographics and set $X_i\psi = 0$. Following the approach of Section I, we define η_i to be a residual orthogonal to h_i, so that any unobserved determinants of health capital correlated with the observed measures are absorbed in h_i, and η_i only includes the components not predictable from observables. We go beyond the structure imposed above to assume h_i and η_i are independently normally distributed in the population, with $h_i \sim N(0, \sigma_h)$ and $\eta_i \sim N(0, \sigma_\eta)$. We assume $\mathrm{E}(\eta_i | o(i), j(i)) = \eta^{orig}_{o(i)} + \eta^{dest}_{j(i)}$ and $\mathrm{E}(h_i | o(i), j(i)) = h^{orig}_{o(i)} + h^{dest}_{j(i)}$.

There is an unmodeled selection process under which each mover i is assigned an origin $o(i) \in \mathscr{J}$ and a destination $d(i) \in \mathscr{J}$. These assignments are potentially correlated with health capital. Such correlation could arise because health capital changes the relative appeal of living in different locations, because determinants of location choices are correlated with determinants of health capital, and/or because origin locations exert a causal effect on health capital as of the time of move.

The key assumption we impose on the selection process is that all such correlation operates only through overall health capital index $\theta_i = h_i + \eta_i$ and not differentially through h_i or η_i on their own. Formally, we assume that once we condition on overall health capital θ_i, origin and destination locations provide no further information about the values of h_i and η_i.

Assumption 1. *(Single index)* $\mathrm{E}(h_i | \theta_i, o(i), j(i)) = \mathrm{E}(h_i | \theta_i)$

Note that since $\eta_i = \theta_i - h_i$, Assumption 1 implies $\mathrm{E}(\eta_i | \theta_i, o(i), j(i)) = \mathrm{E}(\eta_i | \theta_i)$. This single index assumption naturally constrains the selection on h_i to be tightly related to selection on η_i.

Proposition 1. *Assumption 1 implies Assumptions 1 and 2 hold with* $\varphi_1 = \varphi_2 = 1$.

Proof. Normality of h_i and η_i as well as the fact that $\theta_i = h_i + \eta_i$ imply

$$\theta_i | h_i \sim N(h_i, \sigma_\eta).$$

Standard conjugate prior results for the normal distribution with known variance imply

$$\begin{aligned}\mathrm{E}(h_i | \theta_i) &= \frac{\frac{1}{\sigma_h}}{\frac{1}{\sigma_h} + \frac{1}{\sigma_\eta}} \cdot 0 + \frac{\frac{1}{\sigma_\eta}}{\frac{1}{\sigma_h} + \frac{1}{\sigma_\eta}} \cdot \theta_i \\ &= \frac{\sigma_h}{\sigma_h + \sigma_\eta} \theta_i.\end{aligned}$$

It then follows that for any $o(i)$ and $j(i)$,

$$\begin{aligned}
h^{orig}_{o(i)} + h^{dest}_{j(i)} &= \mathrm{E}\left(h_i | o(i), j(i)\right) \\
&= \mathrm{E}_{\theta_i}\left[\mathrm{E}\left(h_i | \theta_i, o(i), j(i)\right) | o(i), j(i)\right] \\
&= \mathrm{E}_{\theta_i}\left[\mathrm{E}\left(h_i | \theta_i\right) | o(i), j(i)\right] \\
&= \mathrm{E}_{\theta_i}\left[\frac{\sigma_h}{\sigma_\eta + \sigma_h}\theta_i | o(i), j(i)\right] \\
&= \frac{\sigma_h}{\sigma_\eta + \sigma_h}\left(h^{orig}_{o(i)} + h^{dest}_{j(i)} + \eta^{orig}_{o(i)} + \eta^{dest}_{j(i)}\right),
\end{aligned}$$

where the third line uses Assumption 1. We therefore have $h^{orig}_{o(i)} + h^{dest}_{j(i)} = \frac{\sigma_h}{\sigma_\eta}\left(\eta^{orig}_{o(i)} + \eta^{dest}_{j(i)}\right)$. The fact that this must hold for all $o(i)$ and $j(i)$ implies

$$\begin{aligned}
h^{orig}_{o(i)} &= \frac{\sigma_h}{\sigma_\eta}\eta^{orig}_{o(i)} \\
h^{dest}_{j(i)} &= \frac{\sigma_h}{\sigma_\eta}\eta^{dest}_{j(i)}.
\end{aligned}$$

We therefore have $\frac{\mathrm{StDev}\left(h^{orig}_{o(i)}\right)}{\mathrm{StDev}\left(\eta^{orig}_{o(i)}\right)} = \frac{\mathrm{StDev}\left(h^{dest}_{j(i)}\right)}{\mathrm{StDev}\left(\eta^{dest}_{j(i)}\right)} = \frac{\sigma_h}{\sigma_\eta}$, which implies Assumption 2 with $\varphi_2 = 1$. We also have $\frac{\mathrm{StDev}\left(h^{dest}_{j(i)}\right)}{\mathrm{StDev}\left(\eta^{dest}_{j(i)}\right)} = \frac{\sigma_h}{\sigma_\eta} = \frac{h^{dest}_{j(i)}}{\eta^{dest}_{j(i)}}$, so Assumption 1 with $\varphi_1 = 1$ follows by Proposition 1. $\square$

C Sample Restrictions, Mover Definition, and Characteristics of Moves

Appendix Table A.10 details the number of observations excluded by each of our sample criteria. Our analysis sample consists of almost 69 million Medicare enrollees whom we observe between the ages of 65 and 99. Of these, almost 62 million are non-movers; their zip code of residence does not change at any point over the years we observe them. The remaining 7 million are "potential movers," in that their zip code of residence changes at least once. To the extent possible, we impose a parallel set of restrictions to the non-mover and mover samples.

Non-mover sample

To define our non-mover sample, we begin with the 62 million enrollees whose CZ of residence does not change over the years we observe them. We make several further restrictions that bring the non-mover sample down to just over 43 million. For each non-mover, we need to be able to define a year t_i^* as a counterfactual move year. Most importantly, this requires that they have a year $t_i^* - 1$ in which the non-mover was enrolled in Traditional Medicare, so that we can measure their healthcare utilization in year $t_i^* - 1$. We also exclude non-movers who do not have a $t_i^* - 1$ in which they are younger than 98 and that is before 2012. These restrictions decrease the number of eligible non-movers from 62 million to 52 million. We exclude non-movers who do not have a year $t_i^* - 1$ such that they survive through the end of year t_i^*, so that we are able to observe their mortality in year $t_i^* + 1$. This eliminates another 9 million non-movers. Finally, we exclude the small number of non-movers who do not have a remaining year $t_i^* - 1$ with data on controls of health utilization and chronic conditions. For the remaining non-movers, t_i^* is defined as their second year in the sample. In all of our analyses we work with a random 10% sample of these remaining 43 million non-movers.

Mover sample

To define our mover sample, we begin with the 7 million "potential movers" - i.e. individuals whose zip code of residence changes at least once. We make several further restrictions to the mover sample that bring the number of movers down to just over 2 million. First, we exclude individuals whose CZ residence changes more than once; this brings the 7 million potential movers down to 5.6 million. Second, we exclude movers who are enrolled in Medicare Advantage (MA) the year before move $(t_i^* - 1)$ or the year after move $(t_i^* + 1)$ since, as discussed, we cannot observe healthcare claims for MA enrollees and we need to observe the location of healthcare claims to define movers. Following the approach of Finkelstein et al. (2016), we exclude "movers" for whom the ratio of the number of claims located in their destination to the number located in either their origin or their destination does not increase by at least 0.75 in their post-move years relative to their pre-move years; these are individuals who, despite having a change of official address on file, do not appear to have really changed CZs based on their claims pattern.[1]

[1] The change in claim share is not defined for movers who do not have at least one claim both pre- and post-move. Following Finkelstein et al. (2016), we exclude these cases if: (i) they have no post-move claims and a pre-move destination claim share greater than 0.05; (ii) they have no pre-move claims and a post-move destination claim share less than 0.95.

The exclusion of movers who are on MA in $(t_i^* - 1)$ or $(t_i^* + 1)$ brings the number of movers down from 5.6 million to 4.2 million. The exclusion of "false" movers (i.e. those whose claim share does not increase by at least 0.75), further reduces the number of movers to 2.6 million. A few other exclusions for data reasons bring our final mover sample down to 2 million movers. Of the 2 million movers in our final sample, about 18% of them are on MA in at least one year. Given the number of total enrollee-years we observe, we estimate an average annual cross-CZ move rate for Medicare enrollees of about 0.5 percent.

Appendix Figure A.7 shows a mover's claims in her destination CZ, as a share of those in either her origin or her destination, by relative year. There is a sharp change in the year of the move, and only a very small share of claims in the destination pre-move or in the origin post-move. The share of claims in the destination in the year of the move (relative year 0) is close to 0.5, suggesting that moves are made roughly uniformly throughout the year.

Characteristics of moves

We examined some of the characteristics of moves. The average distance between origin and destination zip code centroids of movers in our sample is 547 miles, with a median of 305 miles and a standard deviation of 601 miles. Roughly 66 percent of moves cross state boundaries, and 48 percent cross census division boundaries. Moves to Florida account for 12 percent of all moves, and moves to Arizona or California account for an additional 10 percent.

In our previous work (Finkelstein et al. 2016), we also used data from the Health and Retirement Survey to explore some of the time-varying correlates of moving in the Medicare population; widowhood and retirement were significant predictors of moving, and the most common self-reported rationale for moving was to be near one's children.

D Data and Definitions for Place Characteristics

Here we describe the data and definitions used for the place characteristic measures that we correlate with treatment effects in Figure 6. Summary statistics for all of these measures can be found in Appendix Table A.11.

D.1 Healthcare Utilization

We follow Finkelstein et al. (2016) to construct our health care utilization measures. The utilization measure we use as a pre-period control in our estimation is created by aggregating care provided to Medicare beneficiaries as recorded in the inpatient and outpatient claims data. For the healthcare place characteristics in Figure 6, we use a 20% random sample of data from the inpatient, outpatient, and carrier files from Medicare year 2010. See Finkelstein et al. (2016) Online Appendix for more details on how utilization is computed. Our definitions of diagnostic tests and imaging tests also follow directly from Finkelstein et al. (2016) and detailed definitions of these variables can also be found in that paper's Online Appendix.

D.2 Other Healthcare Characteristics

Share of hospitals that are non-profit and Hospital beds per capita are defined as in Finkelstein et al. (2016) using the 1998-2008 American Hospital Association's annual survey of hospitals.

Specialists per thousand residents and PCPs per thousand residents are also defined as in Finkelstein et al. (2016) using counts of physicians from the 2011 AMA Physician Masterfile. CZ populations are computed by first aggregating county-level populations from the 2000 Census and 2007-2011 ACS, and then taking the simple average across the two.

Hospital Compare Score, a measure that reports the quality of hospitals, is derived from "process of care" measures that are publicly reported by CMS and uses quarterly data from 2005 to 2011. For a given measure (e.g., share of heart attack patients given aspirin at arrival or share of pneumonia patients given oxygenation assessment), we standardize the score by first taking a simple average across the quarterly measures within a year for a given hospital to get an annual measure. We then construct z-scores for each measure across hospitals in a given year. Lastly, for each hospital we take the simple average of the z-scores across measures within a year and then the simple average over years.

D.3 Non-healthcare Characteristics

Measures derived from Centers for Disease Control (CDC) data Many of our CZ-level measures of non-healthcare characteristics are derived from data downloaded from the CDC (`https://wonder.cdc.gov/`) and cover the years 2001-2011 (except pollution, for which records are only available beginning in 2003).

• Homicides and Auto Deaths are defined by the National Center for Health Statistics using ICD-9 and ICD-10 mortality codes and are reported per 100,000 people from 2001-2011 at the county level. We take the population-weighted average across counties to aggregate to the CZ level, with county populations based on an average from the 2000 Census and 2007-2011 ACS.

• Pollution is a measure of fine particulate matter and is reported in micrograms per cubic meter. For each county we have the daily average across all days from 2003-2011. We aggregate these single county-level measures to the CZ level by taking the population-weighted average across counties within each CZ, with county populations constructed as described above.

• Average Winter Temperature is defined as the average daily minimum air temperature during the months of January, February, and March for each county. For each county we take a simple average across all winter months from 2001-2011, and then aggregate these single county-level measures to the CZ level by taking the population-weighted average across counties within each CZ, with county populations constructed as described above.

• Average Summer Temperature is defined similarly to Average Winter Temperature, but uses the average daily maximum air temperature during the months of June, July, and August.

Measures derived from Chetty et al. (2016) data Our health behavior measures are derived from the health behavior data posted by Chetty et al. (2016) (`https://healthinequality.org/data`), as originally drawn from the Behavioral Risk Factor Surveillance Survey (BRFSS). The data cover 1996-2008 and are reported at the CZ level separately for each income quartile. We take the simple average of the four quartiles to get the average measure in each CZ.

• Smoking is the fraction of respondents who report currently smoking in each CZ of the pooled BRFSS sample over years 1996-2008.

• Obesity is the fraction of respondents who are obese (BMI$\geq$30) in each CZ of the pooled BRFSS sample over years 1996-2008.

• Exercise is the fraction of respondents who have exercised in the past 30 days in each CZ of the pooled BRFSS sample over years 1996-2008.

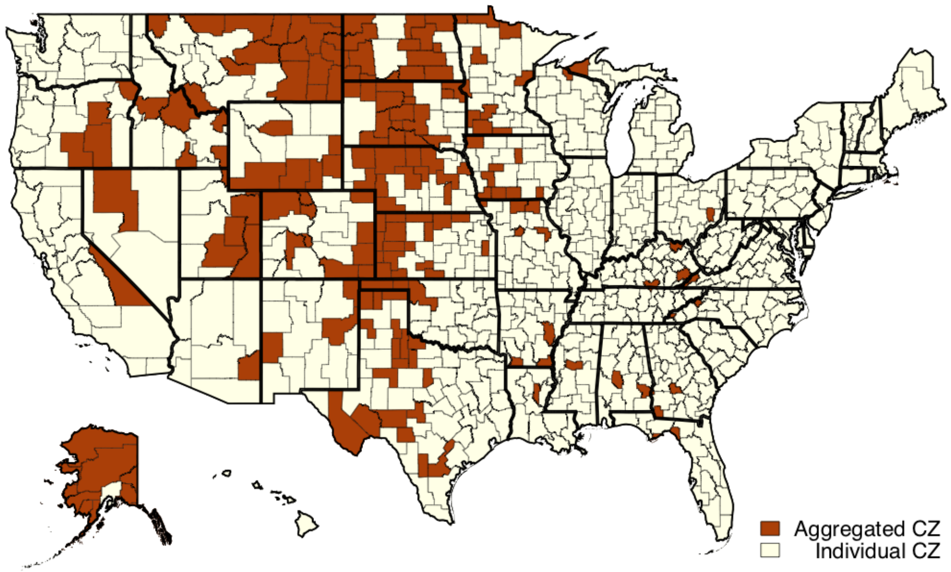
Measures derived from Census data Our other CZ level measures of non-healthcare characteristics are derived from Census data.

• Share Urban is derived from the 2000 and 2010 Census data. Urban and total populations are available at the county level, and we aggregate these values within each CZ and compute the share of that population that is urban. We then take the simple average of these values across the two census surveys.

• Share over 60, Median household income, and High school graduation rate are computed similarly using the 2000 Census survey and 2007-2011 American Community Survey. Median household income and high school graduation rates are computed for people 25 and older.

Appendix Figures

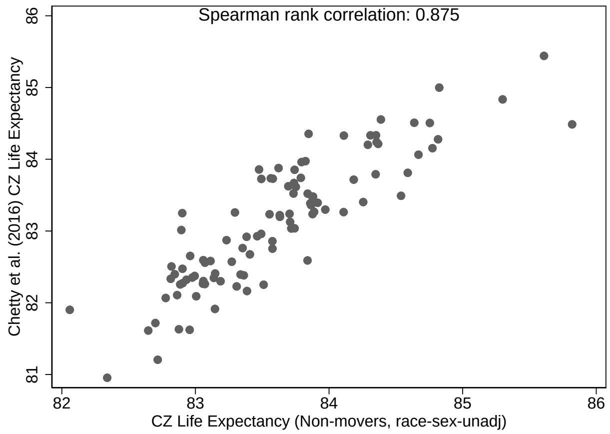
Figure A.1: Location of Small CZs



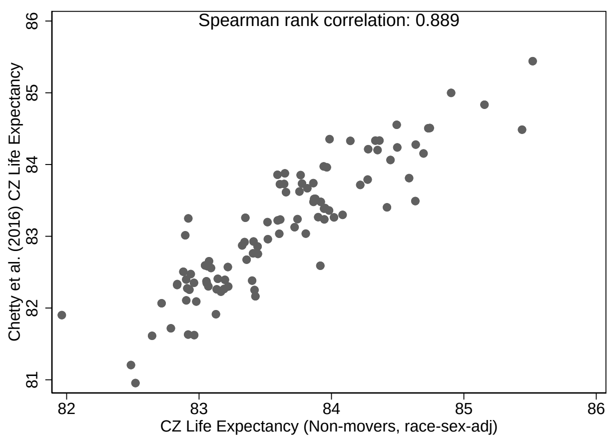
Notes: Figure shows the location of small CZs. Small CZs within the same state are combined and considered a single location, resulting in 35 aggregated CZs. The specific CZ labels are presented in Table A.12 for states with greater than one CZ in the bottom quartile of incoming movers.

Figure A.2: Life Expectancy Correlations with Chetty et al. (2016)

(a): Unadjusted Life Expectancy

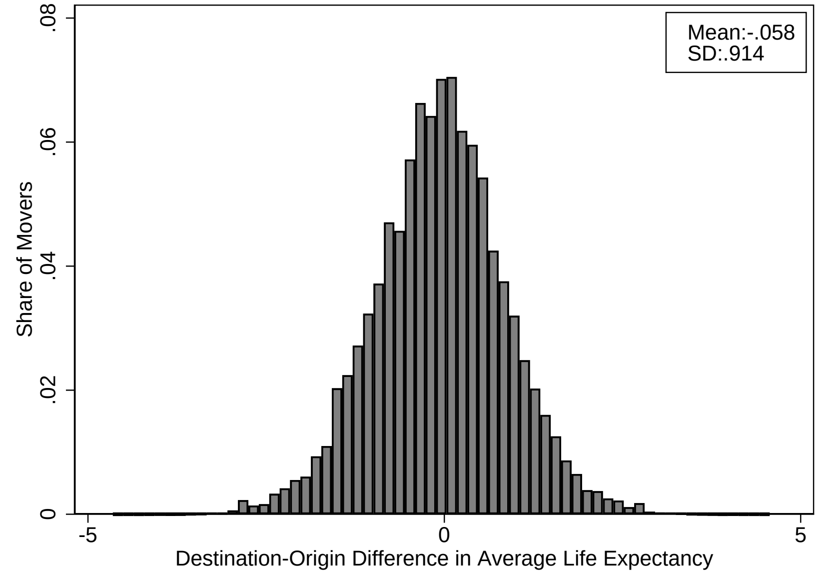


(b): Race-Sex Adjusted Life Expectancy (L_j)



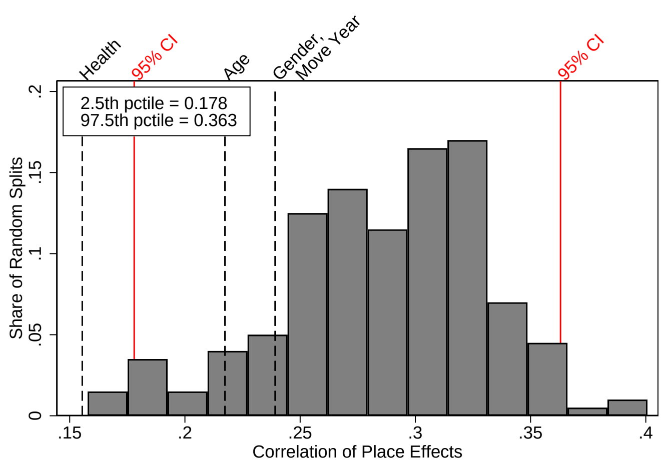
Notes: These figures compare our non-mover life expectancy at age 65 (L_j) to life expectancy estimates at age 40 from Chetty et al. (2016), among the 100 largest CZs by population in 2000. Panel (a) uses a version of L_j that is not adjusted for race and sex; specifically in panel (a), we set the elements of the vector associated with race and sex to the CZ average rather than the national average for each CZ. Panel (b) uses our race- and sex-adjusted L_j from Figure 1. These figures use the life expectancies from Chetty et al. (2016) that are not adjusted based on race or sex. Since their life expectancies are based on CZs as of 1990, we convert their estimates to CZs as of 2000 by taking an average of the 1990 CZ life expectancies, weighted by the proportion of the population in each CZ in 2000 who lived in the CZ in 1990. Correlation coefficients are based on the Spearman rank correlation, although results are similar when comparing life expectancies using the Pearson correlation coefficient.

Figure A.3: Distribution of Destination-Origin Difference in Average Life Expectancy



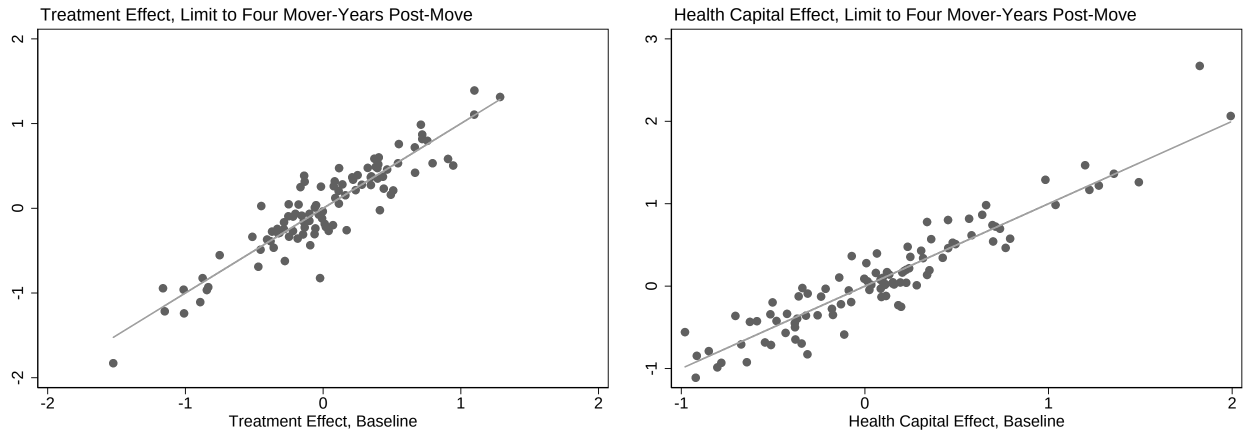
Notes: Figure shows the distribution across movers of the difference in average non-mover life expectancy at age 65 (L_j) between their origin and destination CZs. The sample is all movers (N = 2,033,263 movers).

Figure A.4: Heterogeneity in Place Effects



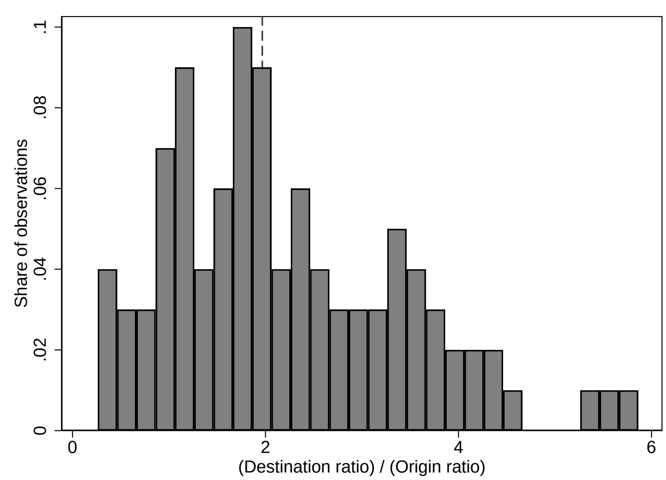
Notes: This histogram shows the distribution of correlation coefficients between place effects (γ_j) resulting from 200 random partitions that split the data into two equally sized groups, with separate estimation of the Gompertz model for each group. The place effects are corrected using the selection correction procedure. Red lines indicate the locations of the 2.5th and 97.5th percentiles; for values outside of this range, we reject the null hypothesis that the place effects are equal in the two groups.

Figure A.5: Constant Health Capital Assumption, Treatment and Health Effects Comparison



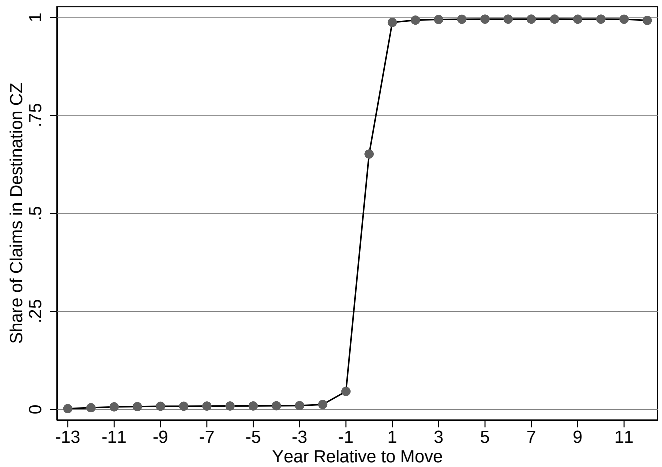
Notes: The left figure plots treatment effects from the sample that includes a maximum of four years post-move for each mover against the treatment effects from the baseline sample, using the 100 largest CZs by total population in 2000. The right figure plots health capital effects. Each point is one CZ. Solid lines indicate the 45-degree line.

Figure A.6: Histogram of (Destination ratio)/(Origin ratio)



Notes: This histogram plots the distribution of the ratio $\left(\frac{\text{StDev}\left(\eta^{dest}_{j(i)}\right)}{\text{StDev}\left(h^{dest}_{j(i)}\right)}\right) / \left(\frac{\text{StDev}\left(\eta^{orig}_{j(i)}\right)}{\text{StDev}\left(h^{orig}_{j(i)}\right)}\right)$ for 100 different subsets H^k_i of chronic conditions, using the same subsets as in Figure 7. For each k, H^k_i includes log(overall utilization) and a random subset of thirteen of the twenty-seven chronic conditions. The dotted line shows the median of the distribution. All standard deviations are computed using the split-sample approach.

Figure A.7: Claims Share Graph



Notes: This figure shows the share of a mover's claims located in their destination CZ, among those in either their origin or their destination CZ. The sample is all enrollee-years ($N = 17,443,789$) in the 100% Denominator file for all movers in our baseline sample.

Appendix Tables

Table A.1: Predicting Mortality from Observables

	(1) Coefficient	(2) (s.e.)	(3) Average
Log(Utilization + 1)	0.028	(0.000)	3.67
Chronic Conditions:			
Acquired Hypothyroidism	-0.008	(0.003)	0.03
Acute Myocardial Infarction	-0.069	(0.009)	0.00
Alzheimer's	0.214	(0.008)	0.01
Alzheimer's and Related Disorders or Senile Dementia	0.474	(0.005)	0.03
Anemia	0.152	(0.002)	0.09
Asthma	-0.054	(0.005)	0.02
Atrial Fibrillation	0.222	(0.004)	0.03
Benign Prostatic Hyperplasia	-0.214	(0.004)	0.03
Breast Cancer	0.087	(0.005)	0.01
Cataract	-0.095	(0.002)	0.15
Chronic Kidney Disease	0.413	(0.005)	0.02
Chronic Obstructive Pulmonary Disease	0.484	(0.003)	0.05
Colorectal Cancer	0.048	(0.007)	0.01
Depression	0.188	(0.003)	0.04
Diabetes	0.342	(0.002)	0.08
Endometrial Cancer	0.115	(0.017)	0.00
Glaucoma	-0.063	(0.003)	0.05
Heart Failure	0.327	(0.003)	0.06
Hyperlipidemia	-0.221	(0.002)	0.15
Hypertension	0.042	(0.002)	0.25
Hip/Pelvic Fracture	0.042	(0.009)	0.00
Ischemic Heart Disease	0.099	(0.002)	0.13
Lung Cancer	0.772	(0.014)	0.00
Osteoporosis	0.032	(0.004)	0.03
Prostate Cancer	0.035	(0.005)	0.02
Rheumatoid Arthritis	-0.066	(0.003)	0.08
Stroke / Transient Ischemic Attack	0.205	(0.004)	0.02
N	6,345,989		

Notes: This table reports the coefficients of the components of H_i in our main estimating equation, equation (3). Standard errors are computed with 100 replications of the bootstrap. Column (3) reports the sample mean of log(Utilization + 1) in row (1) and, for all other rows, the share of beneficiaries with the indicated chronic condition in year $t_i^* - 1$. Utilization excludes physician services ("carrier files") because these files are only available for a 20 percent subsample. As in the estimation, when computing the sample-wide shares, non-movers are upweighted by ten to account for our sampling procedure.

Table A.2: Number of Movers Received by CZ or Aggregate CZ

Statistics	# Movers to CZ
Minimum	48
10th Percentile	468
25th Percentile	781
Median	1,522
75th Percentile	3,534
90th Percentile	9,241
Maximum	45,360

Notes: This table summarizes the number of movers received by each of the 563 CZs or aggregated CZs.

Table A.3: Summary Statistics on Estimation Sample

	(1) Movers	(2) Non-movers
Age:		
65-74	0.48	0.75
75-84	0.35	0.19
85+	0.18	0.06
Female	0.60	0.55
White	0.90	0.85
Region:		
Northeast	0.19	0.20
South	0.41	0.38
Midwest	0.21	0.25
West	0.19	0.17
On Medicaid	0.10	0.11
Avg. # of chronic conditions	3.05	1.33
1-year mortality	0.09	0.04
4-year mortality	0.27	0.15
Life expectancy at age 65	82.10	83.65
Number of individuals	2,033,263	4,312,726

Notes: These summary statistics are computed on all movers and non-movers in our Gompertz estimation sample. The reference year for movers is their move year, and the reference year for non-movers is set to be their second year in the sample. Rows for female, white, age, and region report the shares of individuals with the given characteristics. The life expectancy measure is conditional on surviving until age 65, and is calculated for 1,000 random 65-year-old enrollees within the sample indicated by each column. Time-varying characteristics are measured in the year prior to each enrollee's reference year.

Table A.4: Transition Matrix of Moves

Origin Decile	Destination Decile										
	1	2	3	4	5	6	7	8	9	10	Origin total
1	10%	13%	16%	17%	13%	12%	6%	5%	4%	4%	74,983
2	7%	10%	11%	14%	14%	13%	8%	8%	7%	9%	110,370
3	7%	9%	10%	16%	14%	14%	9%	8%	6%	6%	107,716
4	5%	7%	9%	12%	15%	13%	10%	9%	9%	10%	159,424
5	3%	6%	6%	12%	17%	14%	11%	11%	9%	10%	219,967
6	3%	6%	6%	9%	13%	14%	12%	14%	11%	13%	238,606
7	2%	4%	5%	8%	12%	15%	9%	16%	14%	15%	184,239
8	1%	4%	4%	7%	11%	12%	12%	14%	18%	17%	220,596
9	1%	3%	3%	6%	9%	11%	12%	21%	14%	19%	305,532
10	1%	4%	2%	6%	9%	10%	11%	15%	16%	27%	411,830

Notes: Table reports the percentage of moves in each row to each destination. The “origin total” column reports the total number of moves in each row. Each row is a (population-weighted) decile of CZ origin life expectancy. Each column is decile of CZ destination life expectancy. Q1 is the lowest life expectancy and Q10 is the highest. The sample is all movers (N = 2,033,263 movers).

Table A.5: Heterogeneity in Place Effects

Sample		
Baseline Standard Deviation of γ_j	0.054	[0.040, 0.069]
Move Year		
Standard Deviation of γ_j		
(i) Late	0.064	[0.000, 0.096]
(ii) Early	0.056	[0.034, 0.071]
Gender		
Standard Deviation of γ_j		
(i) Female	0.056	[0.031, 0.073]
(ii) Male	0.068	[0.034, 0.100]
Age		
Standard Deviation of γ_j		
(i) Young Movers	0.075	[0.050, 0.099]
(ii) Old Movers	0.038	[0.000, 0.067]
Individual Health		
Standard Deviation of γ_j		
(i) Good Health	0.101	[0.074, 0.117]
(ii) Poor Health	0.058	[0.024, 0.081]

Notes: The first row replicates baseline results (See Table 3) and the rest of the table summarizes splits of the main sample that approximately divide the number of movers into two equal groups. Each group includes all non-movers and the Gompertz estimation for each group controls for the same covariates as in the main estimation. "Late movers" includes all movers with a move year of 2005 or later (N = 909,901) and "early movers" includes all movers with a move year before 2005 (N = 1,123,362). There are 1,229,235 female movers and 804,028 male movers. Young movers move when they are 75 or younger (N = 1,038,585) and old movers move when they are older than 75 (N = 994,678). Movers with good health have a value of $\hat{h}_i$ less than or equal to the median value among all movers (N = 1,016,631) and movers with poor health have a value of $\hat{h}_i$ greater than the median value among all movers (N = 1,016,632). Standard deviations are calculated using the split-sample approach. Brackets show the 95% confidence intervals computed via 100 iterations of the Bayesian bootstrap. Since standard deviations cannot be negative, any split-sample approach that produces a negative result we set to 0.000.

Table A.6: Constant Health Capital Assumption

		Limit to Mover-Years:		
	Baseline (Large CZs)	≤2 Years Post-move	≤4 Years Post-move	≤6 Years Post-move
(1) Number of movers	710,990	710,990	710,990	710,990
Cross-CZ standard deviation of:				
(2) Life expectancy (L_j)	0.66 [0.64, 0.68]	0.66 [0.64, 0.67]	0.66 [0.64, 0.68]	0.66 [0.64, 0.68]
(3) Treatment effects ($L_j^* - \bar{L}$)	0.47 [0.40, 0.53]	0.54 [0.40, 0.67]	0.47 [0.36, 0.56]	0.47 [0.37, 0.54]
(4) Health capital effects	0.53 [0.44, 0.59]	0.60 [0.43, 0.73]	0.56 [0.44, 0.64]	0.56 [0.46, 0.63]

Notes: This table assesses the constant health capital assumption with the specifications indicated in each column among the 100 largest CZs by total population in 2000. Columns for "Limit to Mover-Years" only include the indicated years for movers after the move year. Row (2) shows the cross-CZ standard deviation of life expectancy at 65 among non-movers in the indicated sample. All standard deviations are computed using the split-sample approach, giving equal weight to each CZ. 95% confidence intervals are computed using 100 iterations of the Bayesian bootstrap.

Table A.7: Panel vs. Cross-Section

	(1) Any hospital admission	(2) Any emergency room visit	(3) Any outpatient visit
(1) Mean of outcome	0.196	0.263	0.617
Cross-section standard deviations:			
(2) Outcome	0.027 [0.026, 0.028]	0.031 [0.031, 0.032]	0.098 [0.098, 0.099]
(3) Place effect, unadjusted (τ_j^{dest})	0.028 [0.025, 0.030]	0.029 [0.026, 0.031]	0.084 [0.083, 0.085]
(4) Place effect, adjusted (γ_j)	0.024 [0.021, 0.026]	0.026 [0.023, 0.029]	0.086 [0.085, 0.087]
(5) Panel standard deviation: place effect (γ_j)	0.020 [0.018, 0.021]	0.023 [0.021, 0.025]	0.101 [0.100, 0.102]

Notes: Each column reports results for a different outcome. Row (1) reports the mean of the dependent variable. Row (2) reports the cross-CZ standard deviation of the outcome. The estimates are reported in rows (3) through (5). All estimates are linear probability models; for the cross-sectional estimates (rows 3 and 4) we estimate equation (3) on the outcome one-year post-move. For the panel (row 5) we estimate the panel equation (7). The sample is different from our baseline sample ($N = 5,258,502$ enrollees instead of $6,345,989$) because, to be consistent with our panel analysis, we exclude enrollees who do not have 12 months of Parts A and B coverage in relative year 1. For the panel estimation, we further exclude all enrollee-year observations for which an enrollee does not have 12 months of Parts A and B coverage as well as relative year 0 for movers. We also restrict our analysis to years 1999-2011. These exclusions together ensure that each outcome variable in this analysis always includes twelve months of Parts A and B coverage. In column (1), any hospital admission is defined as non-zero inpatient utilization. In column (2), any emergency room visit is defined as non-zero emergency room utilization. In column (3), any outpatient visit is defined as non-zero outpatient utilization. Each of these utilization measures is defined as in Finkelstein et al. (2016), except emergency room utilization, which is defined using only the inpatient and outpatient files (rather than the measure that includes the carrier files in Finkelstein et al. 2016).The mean of the outcome is the average over all enrollee-years in the sample. We compute the CZ level measure by first taking the average over non-movers within each CZ, then the simple average over years. 95% confidence intervals are computed using 100 iterations of the Bayesian bootstrap.

Table A.8: Alternative Selection Assumptions

	(1) $\frac{1}{\varphi}$	(2) StDev of Place Effects (γ_j)	(3) StDev of Treatment Effects ($L_j^* - \bar{L}$)
(1) Baseline	1.00	0.054 [0.040, 0.069]	0.44 [0.32, 0.55]
(2) Conceptual minimum	1.26	0.054 [0.039, 0.070]	0.43 [0.31, 0.56]
(3) Empirical median	1.97	0.064 [0.047, 0.083]	0.52 [0.37, 0.67]
Adjusted based on panel:			
(4) Any ER visit	1.75	0.059 [0.042, 0.077]	0.48 [0.34, 0.62]
(5) Any hospital admission	2.70	0.088 [0.069, 0.109]	0.71 [0.56, 0.89]
(6) Any outpatient visit	7.10	0.279 [0.247, 0.321]	2.27 [2.00, 2.62]
(7) Minimum difference across outcomes	2.80	0.091 [0.073, 0.113]	0.74 [0.60, 0.92]

Notes: This table reports the cross-CZ standard deviations of our place effects and treatment effects for various values of $\frac{1}{\varphi} = \frac{1}{\varphi_1 \varphi_2}$ as defined in equation (6). Row (1) corresponds to the baseline results where $\frac{1}{\varphi} = 1$. Row (2) shows results for the value of $\frac{1}{\varphi}$ that minimizes the implied standard deviation of γ_j. Row (3) uses the median value of $\frac{1}{\varphi}$ from Figure A.6. Rows (4)-(6) use the values of $\frac{1}{\varphi}$ that minimize the absolute difference between the standard deviation of the place effects estimated via the panel approach and via the adjusted cross-sectional approach from Table A.7, for each of the indicated outcomes. Row (7) uses the value of $\frac{1}{\varphi}$ that minimizes the average of this absolute difference across all three outcomes from rows (4)-(6). 95% confidence intervals are computed using 100 iterations of the Bayesian bootstrap.

Table A.9: Robustness Checks

Specification	(1) Movers	(2) StDev of life expectancy (L_j)	(3) StDev of treatment effects ($L_j^* - \bar{L}$)	(4) $Corr(L_j^* - \bar{L}$, baseline)	(5) $Corr(L_j^* - \bar{L}, L_j)$
(1) Baseline (Large CZs)	710,990	0.66	0.47	1.00	0.41
		[0.64, 0.68]	[0.40, 0.53]		[0.35, 0.47]
(2) Heterogeneity by mover status	710,990	0.66	0.47	0.98	0.43
		[0.64, 0.67]	[0.41, 0.52]	[0.97, 0.98]	[0.37, 0.50]
(3) Interacting H components with age	710,990	0.63	0.42	0.99	0.38
		[0.61, 0.65]	[0.35, 0.47]	[0.97, 0.99]	[0.31, 0.45]
(4) Interacting gender with age	710,990	0.66	0.47	1.00	0.41
		[0.64, 0.68]	[0.40, 0.53]	[1.00, 1.00]	[0.34, 0.47]
(5) Controlling for origin county mortality rates	710,990	0.67	0.49	0.98	0.45
		[0.65, 0.68]	[0.43, 0.55]	[0.97, 0.99]	[0.38, 0.51]
(6) Move distance greater than 100 miles	558,367	0.67	0.45	0.96	0.41
		[0.65, 0.68]	[0.36, 0.53]	[0.92, 0.97]	[0.33, 0.48]
(7) Movers age 70 or older moving after 2003	347,055	0.66	0.44	0.87	0.33
		[0.64, 0.67]	[0.29, 0.55]	[0.76, 0.89]	[0.20, 0.46]
Destination-origin difference in L_j:					
(8) Greater than median difference	341,469	0.66	0.53	0.91	0.48
		[0.64, 0.68]	[0.39, 0.64]	[0.83, 0.90]	[0.37, 0.58]
(9) Less than median difference	369,521	0.67	0.49	0.84	0.42
		[0.64, 0.68]	[0.00, 0.89]	[0.59, 0.83]	[0.11, 0.74]
Excluding moves to:					
(10) Adjacent CZs	554,420	0.67	0.48	0.97	0.41
		[0.65, 0.68]	[0.40, 0.56]	[0.93, 0.97]	[0.34, 0.49]
(11) Florida, Arizona, and California	485,389	0.61	0.47	1.00	0.37
		[0.59, 0.63]	[0.35, 0.54]	[0.99, 1.00]	[0.29, 0.46]
(12) Years 1999-2003	325,041	0.61	0.46	0.92	0.44
		[0.59, 0.63]	[0.36, 0.55]	[0.83, 0.92]	[0.32, 0.54]
(13) Years 2004-2012	385,949	0.69	0.48	0.86	0.34
		[0.67, 0.73]	[0.36, 0.61]	[0.57, 0.76]	[0.20, 0.44]

Notes: Table reports results for alternative specifications. Estimates in all rows are computed on the 100 largest CZs by total population in 2000. The first row reports the baseline estimates, and each additional row represents a single deviation from the baseline, which are described in Section VI. All treatment effects are treatment effects on life expectancy, and are not adjusted using an empirical Bayes correction. Column (1) shows the number of movers who remain in each specification. In all rows, we estimate treatment effects for 100 CZs, other than Row (11) (79 CZs). Columns (2) and (3) show cross-CZ standard deviations of age-65 non-mover life expectancy and treatment effects, computed using the split-sample. Column (4) shows the cross-CZ correlation between treatment effects and the baseline treatment effects. The cross-CZ correlation of treatment effects and life expectancy in column (5) is computed as the coefficient of the regression of the non-adjusted treatment effect on age-65 non-mover life expectancy. 95% confidence intervals are computed using 100 iterations of the Bayesian bootstrap.

Table A.10: Sample Restrictions

	(1) Enrollees	(2) Enrollee-years
Original sample	80,708,181	665,131,064
Excluding enrollee-years with age < 65 or age > 99	69,330,956	560,057,853
Excluding enrollee-years with incomplete data[1]	68,935,110	556,340,988
Number of non-movers after sample-wide drops	61,899,201	
Excluding non-movers without a valid relative year -1 with Traditional Medicare	52,448,582	
Excluding non-movers without a relative year -1 with 1-year mortality observed	43,147,931	
Excluding non-movers without a relative year -1 with pre-period controls[2]	43,145,670	
Number of movers after sample-wide drops	7,035,909	
Excluding movers with more than one move	5,609,064	
Excluding movers on MA during relative years -1 or 1	4,204,679	
Excluding "false" movers[2]	2,564,376	
Excluding movers for whom we cannot observe 1-year mortality	2,033,333	
Excluding movers with missing pre-period controls	2,033,263	

Notes: (1) Data is incomplete if the CZ is missing for an enrollee-year, or an enrollee has gaps in the years they are observed. (2) Pre-period controls consist of health utilization and chronic conditions. (3) False movers are those movers for whom the ratio of the number of claims located in their destination to the number located in either their origin or their destination does not increase by at least 0.75 in their post-move years relative to their pre-move years.

Table A.11: CZ Summary Statistics

	(1) Mean	(2) S.D.	(3) N
Healthcare Characteristics:			
Hospital Compare Score	-0.13	0.50	559
Specialists per capita	1.47	1.08	563
PCPs per capita	0.90	0.30	563
Hospital beds per capita	2.70	1.17	560
Share non-profit hospitals	0.82	0.20	560
Imaging tests	1.84	0.92	563
Diagnostic tests	4.12	2.82	563
Mean utilization	4150.60	1396.57	563
Non-healthcare Characteristics:			
Pollution (μg per cubic meter)	11.84	1.71	559
Summer Temperature($^{\circ}F$)	84.70	6.79	559
Winter Temperature($^{\circ}F$)	30.72	10.11	559
Auto Deaths (per 100,000)	19.46	7.07	563
Homicides (per 100,000)	5.50	3.18	490
Smoking	0.20	0.04	557
Obesity	0.27	0.05	557
Exercise	0.75	0.05	557
High School Graduation Rate	0.82	0.06	563
Household Income	40,724	7,950	563
Share 60+	0.20	0.04	563
Share Urban	0.56	0.22	563

Notes: This table reports the simple average across the (aggregated) CZs of the place characteristics in Figure 6. See Appendix D for detailed definitions of these place characteristics.

Table A.12: Aggregated CZ Definitions

Aggregated CZ State	State FIPS	CZs Included in Aggregation
Alabama	01	20, 458
Alaska	02	378, 638, 639, 649, 667, 679, 692, 696, 701, 706, 707
Arkansas	05	422, 553, 602
Colorado	08	414, 500, 571, 613, 626, 633, 663, 691, 693, 697
Florida	12	670, 678
Geogria	13	20, 341, 347
Idaho	16	132, 201, 460, 529, 654
Iowa	19	295, 478, 504, 509, 526, 561, 597, 621
Kansas	20	243, 379, 449, 502, 576, 580, 582, 598, 604, 607, 643, 648, 650, 652, 653, 672, 687
Kentucky	21	319, 372, 472
Massachusetts	25	704, 705
Minnesota	27	375, 437, 479, 496, 537, 555, 563, 591, 614, 683
Missouri	29	253, 295, 469, 629, 671
Montana	30	487, 521, 540, 543, 544, 595, 600, 623, 631, 661, 664, 674, 685, 686, 698, 703
Nebraska	31	293, 329, 461, 510, 514, 532, 546, 547, 550, 578, 603, 636
New Mexico	35	37, 656, 665
North Carolina	37	402, 682
North Dakota	38	131, 326, 360, 390, 474, 521, 537, 540, 570, 577, 599, 605, 622, 624, 681
Oklahoma	40	370, 379, 444
Oregon	41	673, 694, 695, 699
South Dakota	46	6, 260, 326, 335, 459, 474, 479, 556, 599, 620, 642, 646, 675, 680, 684
Texas	48	37, 226, 299, 444, 453, 481, 483, 490, 512, 541, 557, 585, 592, 606, 610, 627, 632, 634, 644, 690
Utah	49	274, 377, 394, 530, 617
Wyoming	56	394, 618, 651, 663, 666, 676

Notes: Table lists the CZ identifier underlying the aggregated CZs presented for the 24 states with greater than one CZ in the bottom quartile of incoming movers. State FIPS codes are listed in the second column for convenience.

References

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Treatment Effect Estimates

Estimates of CZ-level treatment effects and associated confidence intervals are available in pdf form in the pages that follow, or as an Excel spreadsheet in the AEA data and code archive for this paper: `https://www.openicpsr.org/openicpsr/project/125381/`

CZ name	State	2000 CZ ID	Adjusted Treatment Effect	Lower 95% CI	Upper 95% CI	Age 65 LE
Aggregated Alaska CZs	AK	NA	0.25	-0.39	0.89	84.07
Anchorage	AK	103	0.02	-0.56	0.60	83.96
Aggregated Alabama CZs	AL	NA	0.16	-0.56	0.88	81.79
Atmore	AL	380	-0.11	-0.81	0.59	82.65
Birmingham	AL	21	-0.01	-0.35	0.32	82.72
Demopolis	AL	312	-0.25	-0.98	0.48	82.35
Dothan	AL	188	0.38	-0.14	0.90	83.24
Florence	AL	140	-0.02	-0.65	0.62	82.68
Gadsden	AL	558	0.12	-0.40	0.64	81.88
Huntsville	AL	120	0.00	-0.34	0.33	82.93
Jasper	AL	462	-0.68	-1.27	-0.08	81.71
Mobile	AL	254	-0.07	-0.46	0.31	82.53
Montgomery	AL	60	-0.34	-0.77	0.09	82.63
Talladega	AL	190	0.07	-0.57	0.71	81.83
Tuscaloosa	AL	216	-0.54	-1.08	0.00	82.42
Aggregated Arkansas CZs	AR	NA	-0.02	-0.71	0.66	81.72
Batesville	AR	430	0.02	-0.58	0.62	82.42
Blytheville	AR	520	-0.75	-1.44	-0.06	81.25
El Dorado	AR	92	-0.05	-0.74	0.63	81.81
Fayetteville	AR	240	0.37	-0.03	0.76	83.40
Forrest City	AR	413	-0.02	-0.76	0.73	82.19
Fort Smith	AR	49	-0.04	-0.57	0.49	82.50
Harrison	AR	185	-0.30	-0.90	0.31	83.21
Hope	AR	265	-0.01	-0.73	0.71	83.02
Hot Springs	AR	411	-0.03	-0.46	0.39	82.35
Jonesboro	AR	259	-0.18	-0.76	0.40	82.08
Little Rock	AR	71	0.05	-0.31	0.40	83.13
Mountain Home	AR	321	-0.09	-0.59	0.41	83.05
Mountain View	AR	628	0.12	-0.53	0.76	83.05
Pine Bluff	AR	225	-0.25	-0.88	0.39	82.29
Russellville	AR	200	0.02	-0.61	0.66	82.95
Searcy	AR	568	-0.04	-0.63	0.55	82.58
Aggregated Arizona CZs	AZ	NA	-0.27	-1.01	0.48	83.46
Flagstaff	AZ	438	-0.27	-0.61	0.07	84.02
Phoenix	AZ	158	0.02	-0.14	0.18	83.98
Tucson	AZ	476	0.23	-0.04	0.49	83.88
Yuma	AZ	658	-0.51	-0.94	-0.08	83.96
Aggregated California CZs	CA	NA	0.03	-0.71	0.77	83.36
Bakersfield	CA	903	-0.74	-1.15	-0.32	82.90
Crescent City	CA	615	-0.18	-0.78	0.41	82.87
Eureka	CA	612	-0.54	-1.07	0.00	83.06
Fresno	CA	187	-0.15	-0.50	0.20	83.86

Los Angeles	CA	323	0.39	0.24	0.55	85.29
Modesto	CA	484	-0.19	-0.56	0.19	83.74
Redding	CA	348	0.07	-0.29	0.44	83.39
Sacramento	CA	93	0.51	0.26	0.76	84.22
San Diego	CA	902	0.44	0.22	0.65	84.73
San Francisco	CA	294	0.74	0.54	0.94	85.16
San Jose	CA	218	0.71	0.44	0.97	85.52
Santa Maria	CA	584	0.74	0.38	1.10	84.90
Stockton	CA	211	-0.12	-0.47	0.23	83.64
Susanville	CA	635	-0.02	-0.72	0.68	83.24
Ukiah	CA	641	-0.40	-0.93	0.13	83.22
Aggregated Colorado CZs	CO	NA	-0.16	-0.74	0.42	84.44
Alamosa	CO	264	-0.01	-0.75	0.74	84.02
Colorado Springs	CO	153	-0.24	-0.63	0.14	84.16
Denver	CO	5	-0.23	-0.46	0.00	84.49
Durango	CO	423	0.31	-0.36	0.97	85.40
Fort Collins	CO	515	0.37	0.02	0.73	85.00
Fort Morgan	CO	579	-0.23	-0.93	0.47	83.57
Glenwood Springs	CO	183	-0.06	-0.69	0.58	86.53
Grand Junction	CO	677	-0.03	-0.52	0.45	83.98
Montrose	CO	381	0.17	-0.39	0.74	84.52
Pueblo	CO	159	0.06	-0.44	0.56	83.37
Bridgeport	CT	78	0.90	0.68	1.11	84.33
Washington	DC	74	0.65	0.47	0.83	84.64
Dover	DE	180	0.63	0.31	0.94	83.51
Wilmington	DE	196	0.59	0.16	1.02	83.23
Aggregated Florida CZs	FL	NA	0.00	-0.76	0.76	82.23
Cape Coral	FL	307	0.63	0.42	0.84	84.42
Deltona	FL	277	0.57	0.30	0.84	83.74
Gainesville	FL	205	0.16	-0.06	0.38	83.19
Jacksonville	FL	64	0.50	0.24	0.76	83.14
Lake City	FL	374	-0.31	-0.80	0.18	82.84
Lakeland	FL	522	0.22	-0.09	0.54	82.79
Miami	FL	410	0.40	0.17	0.64	84.45
North Port	FL	334	1.00	0.78	1.22	84.08
Orlando	FL	75	0.55	0.38	0.72	83.92
Palm Bay	FL	601	0.64	0.40	0.89	83.90
Panama City	FL	306	-0.02	-0.50	0.46	83.04
Pensacola	FL	143	-0.22	-0.54	0.11	83.06
Port St. Lucie	FL	237	1.04	0.86	1.22	84.63
Tallahassee	FL	62	-0.14	-0.62	0.34	83.05
Tampa	FL	325	0.17	0.01	0.33	83.13
Aggregated Georgia CZs	GA	NA	0.01	-0.72	0.75	82.04

Albany	GA	8	0.24	-0.43	0.90	82.09
Americus	GA	79	0.11	-0.59	0.81	81.96
Atlanta	GA	141	0.29	0.13	0.44	83.52
Brunswick	GA	165	-0.62	-1.17	-0.07	83.01
Carrollton	GA	303	-0.59	-1.06	-0.12	82.03
Columbus	GA	22	-0.22	-0.71	0.26	82.30
Dublin	GA	252	-0.20	-0.87	0.47	81.95
Ellijay	GA	562	0.07	-0.59	0.74	83.13
Gainesville	GA	310	0.66	0.31	1.01	83.65
Griffin	GA	247	-0.14	-0.77	0.49	82.02
Macon-Bibb County	GA	67	0.36	-0.10	0.82	82.57
Milledgeville	GA	194	0.20	-0.45	0.86	82.55
Newnan	GA	409	-0.50	-1.00	0.00	82.46
Rome	GA	90	-0.26	-0.72	0.20	82.33
Savannah	GA	61	-0.26	-0.65	0.12	82.35
Statesboro	GA	424	-0.43	-1.09	0.22	82.03
Thomasville	GA	382	0.10	-0.54	0.73	82.16
Tifton	GA	197	0.07	-0.60	0.74	82.14
Toccoa	GA	371	-0.06	-0.67	0.55	82.48
Valdosta	GA	19	-0.01	-0.60	0.58	82.55
Vidalia	GA	119	-0.18	-0.84	0.48	81.84
Washington	GA	278	-0.20	-0.88	0.49	82.87
Watkinsville	GA	41	0.46	-0.07	0.99	83.56
Waycross	GA	137	-0.24	-0.88	0.40	81.90
Honolulu	HI	290	0.20	-0.25	0.65	85.44
Kapaa	HI	702	-0.14	-0.85	0.57	85.67
Aggregated Iowa CZs	IA	NA	-0.35	-0.86	0.16	84.14
Burlington	IA	192	0.15	-0.44	0.75	83.20
Cedar Rapids	IA	161	0.20	-0.20	0.61	84.27
Davenport	IA	229	0.21	-0.23	0.64	83.95
Decorah	IA	507	0.19	-0.50	0.89	84.47
Des Moines	IA	15	0.11	-0.22	0.44	83.95
Dubuque	IA	344	-0.14	-0.73	0.45	84.29
Fort Dodge	IA	401	-0.11	-0.75	0.54	83.41
Marshall	IA	455	-0.17	-0.76	0.43	84.33
Mason City	IA	304	-0.07	-0.73	0.59	83.97
Ottumwa	IA	393	0.05	-0.58	0.67	84.03
Sioux City	IA	4	-0.48	-1.06	0.09	83.51
Spencer	IA	518	0.41	-0.27	1.08	84.58
Storm Lake	IA	564	-0.29	-0.94	0.36	84.53
Waterloo	IA	230	0.06	-0.52	0.65	84.00
Aggregated Idaho CZs	ID	NA	-0.51	-1.11	0.08	84.27
Boise City	ID	52	0.25	-0.12	0.61	84.22

Coeur d'Alene	ID	501	0.41	-0.05	0.86	83.87
Idaho Falls	ID	88	0.00	-0.51	0.50	83.01
Lewiston	ID	46	0.64	0.06	1.22	84.16
Sandpoint	ID	498	-0.26	-0.86	0.34	83.77
Twin Falls	ID	124	-0.14	-0.70	0.43	83.87
Bloomington	IL	320	0.30	-0.23	0.82	83.90
Carbondale	IL	384	-0.44	-0.97	0.09	82.83
Champaign	IL	224	-0.09	-0.56	0.38	83.95
Chicago	IL	58	0.55	0.37	0.73	84.02
Decatur	IL	235	0.45	-0.05	0.95	83.52
Galesburg	IL	280	-0.07	-0.76	0.63	83.22
Granite City	IL	221	-0.50	-0.95	-0.05	83.46
Harrisburg	IL	343	-0.25	-0.96	0.47	82.42
Jacksonville	IL	122	0.30	-0.43	1.04	83.67
Kankakee	IL	440	0.13	-0.49	0.75	83.41
Macomb	IL	548	0.11	-0.57	0.79	82.99
Mount Vernon	IL	349	-0.12	-0.72	0.48	83.55
Olney	IL	471	0.06	-0.60	0.71	83.25
Ottawa	IL	145	0.08	-0.58	0.74	83.85
Peoria	IL	127	-0.01	-0.46	0.44	83.29
Quincy	IL	85	-0.09	-0.65	0.46	83.31
Rockford	IL	115	0.08	-0.29	0.46	83.49
Springfield	IL	66	0.15	-0.34	0.64	83.39
Bloomington	IN	272	0.05	-0.41	0.52	83.42
Carmel	IN	25	0.24	-0.01	0.49	82.91
Columbus	IN	383	-0.18	-0.72	0.36	82.37
Evansville	IN	50	-0.11	-0.62	0.40	83.09
Fort Wayne	IN	191	0.17	-0.29	0.62	83.51
Greensburg	IN	181	-0.03	-0.66	0.60	83.65
Hammond	IN	236	-0.14	-0.56	0.28	82.96
Jeffersonville	IN	26	0.06	-0.27	0.40	82.98
Kokomo	IN	285	0.04	-0.57	0.66	82.93
Lafayette	IN	202	-0.10	-0.66	0.47	83.01
Madison	IN	463	0.17	-0.59	0.92	82.40
Muncie	IN	448	-0.29	-0.82	0.23	82.80
Richmond	IN	337	-0.10	-0.73	0.54	82.83
South Bend	IN	408	-0.03	-0.39	0.33	83.43
Terre Haute	IN	242	-0.42	-0.94	0.09	82.14
Vincennes	IN	443	0.00	-0.70	0.69	82.25
Warsaw	IN	587	0.32	-0.28	0.92	83.57
Aggregated Kansas CZs	KS	NA	-0.02	-0.50	0.46	84.04
Arkansas City	KS	594	-0.06	-0.78	0.65	82.07
Chanute	KS	456	-0.22	-0.94	0.49	83.00

Dodge City	KS	406	0.05	-0.65	0.76	83.74
Emporia	KS	287	-0.70	-1.37	-0.03	83.78
Great Bend	KS	505	-0.48	-1.16	0.20	83.88
Hays	KS	535	0.22	-0.50	0.94	83.67
Hutchinson	KS	549	0.07	-0.45	0.60	83.82
Leavenworth	KS	616	0.27	-0.38	0.92	82.59
Manhattan	KS	125	-0.10	-0.65	0.45	84.55
Salina	KS	155	-0.28	-0.88	0.32	83.41
Topeka	KS	133	0.06	-0.38	0.51	83.72
Wichita	KS	82	-0.15	-0.51	0.21	83.75
Aggregated Kentucky CZs	KY	NA	-0.10	-0.74	0.55	81.79
Bards	KY	523	-0.27	-0.96	0.42	83.61
Bowling Green	KY	157	0.30	-0.30	0.90	82.71
Campbellsville	KY	468	0.18	-0.53	0.89	83.29
Danville	KY	266	0.21	-0.47	0.90	82.58
Elizabeth	KY	176	0.17	-0.43	0.78	82.89
Glasgow	KY	228	0.00	-0.68	0.68	82.40
Henderson	KY	331	-0.64	-1.23	-0.06	82.13
Lexington-Fayette	KY	72	0.31	-0.07	0.68	83.04
London	KY	351	-0.14	-0.79	0.51	81.76
Middles	KY	450	-0.07	-0.77	0.62	81.94
Mount Sterling	KY	311	-0.07	-0.76	0.62	82.57
Owensboro	KY	63	0.09	-0.52	0.71	83.09
Paducah	KY	128	-0.05	-0.58	0.48	82.87
Pikeville	KY	302	-0.09	-0.74	0.56	80.93
Richmond	KY	336	0.30	-0.36	0.96	82.71
Somerset	KY	531	0.22	-0.39	0.83	82.70
Winchester	KY	439	-0.16	-0.85	0.54	82.16
Aggregated Louisiana CZs	LA	NA	-0.41	-1.17	0.34	81.76
Alexandria	LA	114	-0.68	-1.23	-0.12	82.07
Baton Rouge	LA	16	-0.27	-0.65	0.11	82.83
Houma	LA	338	-0.23	-0.86	0.40	82.78
Lafayette	LA	168	-0.07	-0.57	0.43	82.96
Lake Charles	LA	154	-0.71	-1.29	-0.14	82.05
Monroe	LA	313	0.03	-0.55	0.62	82.84
New Orleans	LA	56	-0.61	-1.06	-0.16	81.96
Ruston	LA	314	-0.04	-0.72	0.65	82.01
Shreveport	LA	23	-0.68	-1.17	-0.19	82.56
Aggregated Massachusetts CZs	MA	NA	0.22	-0.51	0.96	85.09
Boston	MA	76	0.82	0.61	1.03	84.36
Pittsfield	MA	630	0.36	-0.18	0.90	83.83
Springfield	MA	239	0.33	-0.05	0.71	83.77
Baltimore	MD	36	0.22	-0.01	0.46	83.44

Cumberland	MD	152	0.04	-0.59	0.66	83.19
Easton	MD	355	0.29	-0.21	0.78	83.79
Frederick	MD	418	0.28	-0.07	0.63	83.61
Bangor	ME	339	0.45	-0.02	0.92	83.34
Portland	ME	94	0.10	-0.23	0.43	83.59
Presque Isle	ME	689	0.00	-0.67	0.68	83.14
Aggregated Michigan CZs	MI	NA	-0.07	-0.83	0.69	83.55
Alpena	MI	322	0.03	-0.54	0.61	83.53
Ann Arbor	MI	513	0.14	-0.23	0.51	83.92
Big Rapids	MI	172	-0.42	-0.97	0.13	82.82
Caro	MI	583	-0.02	-0.67	0.63	83.82
Detroit	MI	232	0.10	-0.14	0.34	83.42
Grand Rapids	MI	249	0.09	-0.22	0.41	83.82
Houghton	MI	13	0.05	-0.70	0.79	83.96
Kalamazoo	MI	284	-0.23	-0.64	0.17	83.65
Lansing	MI	53	0.03	-0.33	0.38	83.41
Ludington	MI	574	0.32	-0.38	1.02	83.66
Marquette	MI	519	-0.42	-1.03	0.19	83.84
Petoskey	MI	395	0.27	-0.30	0.83	83.69
Saginaw	MI	352	0.23	-0.15	0.61	83.47
Sault Ste. Marie	MI	508	0.10	-0.59	0.80	83.89
Traverse City	MI	104	0.22	-0.21	0.65	84.29
West Branch	MI	388	-0.11	-0.70	0.47	82.99
Aggregated Minnesota CZs	MN	NA	-0.22	-0.72	0.27	84.59
Alexandria	MN	451	0.28	-0.39	0.95	85.16
Austin	MN	590	0.27	-0.44	0.98	84.43
Bemidji	MN	356	-0.14	-0.80	0.52	84.16
Brainerd	MN	305	0.52	-0.03	1.06	84.04
Duluth	MN	179	0.24	-0.29	0.76	83.59
Fergus Falls	MN	415	0.24	-0.37	0.86	84.69
Hutchinson	MN	499	0.03	-0.67	0.73	84.60
Mankato	MN	83	0.09	-0.49	0.67	84.78
Minneapolis	MN	47	0.44	0.18	0.70	84.74
Owatonna	MN	566	0.05	-0.60	0.70	84.81
Rochester	MN	144	0.80	0.28	1.32	85.52
St. Cloud	MN	12	0.16	-0.33	0.65	84.79
Willmar	MN	491	-0.34	-1.01	0.33	85.27
Aggregated Missouri CZs	MO	NA	-0.21	-0.81	0.40	83.03
Aurora	MO	317	-0.11	-0.75	0.54	82.28
Branson	MO	353	0.27	-0.28	0.82	83.04
Cameron	MO	368	-0.10	-0.75	0.56	83.78
Cape Girardeau	MO	209	-0.06	-0.62	0.49	82.95
Chillicothe	MO	492	-0.21	-0.93	0.52	84.29

Columbia	MO	126	0.28	-0.18	0.73	83.90
Eldon	MO	376	-0.56	-1.09	-0.03	82.56
Farmington	MO	399	-0.28	-0.91	0.34	82.19
Joplin	MO	101	-0.69	-1.16	-0.22	82.51
Kansas City	MO	121	0.06	-0.19	0.32	83.52
Moberly	MO	554	-0.16	-0.87	0.54	83.06
Nevada	MO	542	0.25	-0.45	0.95	83.06
Poplar Bluff	MO	350	0.01	-0.65	0.67	82.18
Rolla	MO	493	0.13	-0.51	0.76	82.53
Sedalia	MO	464	0.09	-0.44	0.62	82.80
Springfield	MO	44	0.23	-0.13	0.59	83.21
St. Joseph	MO	55	-0.28	-0.86	0.31	83.00
St. Louis	MO	2	-0.04	-0.27	0.20	83.22
West Plains	MO	364	-0.29	-0.88	0.29	82.54
Aggregated Mississippi CZs	MS	NA	-0.03	-0.80	0.74	82.66
Columbus	MS	446	0.20	-0.43	0.83	82.86
Corinth	MS	494	-0.12	-0.69	0.46	82.13
Greenville	MS	275	-0.35	-1.01	0.31	81.98
Greenwood	MS	156	0.11	-0.58	0.80	82.05
Gulfport	MS	255	-0.73	-1.16	-0.30	82.06
Hattiesburg	MS	34	-0.28	-0.80	0.23	82.40
Jackson	MS	45	-0.06	-0.49	0.36	82.98
Laurel	MS	257	-0.21	-0.89	0.46	82.69
McComb	MS	345	0.34	-0.35	1.03	82.44
Meridian	MS	268	0.11	-0.46	0.69	82.55
Natchez	MS	289	0.01	-0.68	0.71	82.30
New Albany	MS	389	-0.15	-0.86	0.55	82.92
Oxford	MS	416	-0.25	-0.89	0.39	82.36
Tupelo	MS	166	0.03	-0.60	0.66	82.93
Vicksburg	MS	258	0.10	-0.64	0.83	81.86
Aggregated Montana CZs	MT	NA	-0.25	-0.75	0.26	83.31
Anaconda-Deer Lodge County	MT	495	-0.04	-0.76	0.67	81.71
Billings	MT	300	0.02	-0.50	0.54	83.60
Bozeman	MT	539	-0.24	-0.80	0.32	84.37
Great Falls	MT	503	0.34	-0.31	0.99	83.26
Helena	MT	95	-0.19	-0.74	0.36	83.56
Kalispell	MT	609	0.01	-0.52	0.54	84.50
Missoula	MT	365	-0.18	-0.71	0.35	83.84
Aggregated North Carolina CZs	NC	NA	0.08	-0.68	0.84	83.13
Andrews	NC	357	0.22	-0.30	0.74	83.75
Asheville	NC	91	0.90	0.56	1.24	83.56
Boone	NC	482	0.06	-0.53	0.65	83.44
Charlotte	NC	138	0.41	0.17	0.64	83.06

Elizabeth City	NC	147	-0.14	-0.69	0.41	82.98
Fayetteville	NC	162	0.02	-0.42	0.46	82.33
Franklin	NC	123	0.01	-0.54	0.55	82.93
Goldsboro	NC	559	-0.04	-0.60	0.52	82.07
Greensboro	NC	248	0.54	0.21	0.86	83.06
Greenville	NC	298	0.05	-0.41	0.50	82.47
Hickory	NC	246	-0.05	-0.50	0.41	83.02
Jacksonville	NC	182	-0.43	-0.84	-0.02	83.13
Pinehurst	NC	528	0.58	0.08	1.07	83.78
Raleigh	NC	87	0.43	0.21	0.64	83.66
Roanoke Rapids	NC	261	0.08	-0.57	0.73	82.21
Wilmington	NC	110	0.88	0.52	1.24	83.59
Wilson	NC	146	0.35	-0.21	0.91	82.64
Winston-Salem	NC	112	0.19	-0.22	0.59	82.84
Aggregated North Dakota CZs	ND	NA	-0.11	-0.65	0.43	84.20
Bismarck	ND	43	0.36	-0.28	1.01	84.32
Fargo	ND	33	0.16	-0.39	0.71	84.75
Grand Forks	ND	271	-0.19	-0.82	0.43	84.37
Minot	ND	276	-0.38	-1.11	0.35	84.48
Aggregated Nebraska CZs	NE	NA	-0.35	-0.86	0.15	84.27
Falls City	NE	516	0.01	-0.74	0.77	84.21
Grand Island	NE	206	-0.11	-0.77	0.56	84.38
Hastings	NE	267	-0.30	-1.01	0.41	84.30
Kearney	NE	241	-0.14	-0.88	0.60	84.51
Lexington	NE	244	-0.17	-0.89	0.55	83.82
Lincoln	NE	245	-0.16	-0.61	0.28	84.30
Norfolk	NE	57	0.13	-0.59	0.85	84.35
North Platte	NE	292	-0.41	-1.10	0.28	84.10
Omaha	NE	24	-0.20	-0.57	0.17	83.81
Scottsbluff	NE	210	-0.11	-0.80	0.58	82.86
Berlin	NH	195	0.18	-0.45	0.81	83.85
Claremont	NH	398	-0.12	-0.55	0.30	84.05
Keene	NH	486	0.47	-0.05	1.00	84.00
Manchester	NH	281	0.37	0.10	0.65	83.94
Camden	NJ	308	0.05	-0.24	0.33	83.34
Long Branch	NJ	427	0.74	0.53	0.96	83.87
Newark	NJ	250	0.42	0.23	0.61	84.28
Aggregated New Mexico CZs	NM	NA	-0.50	-1.23	0.22	83.75
Alamogordo	NM	619	-0.42	-1.06	0.21	83.12
Albuquerque	NM	17	-0.37	-0.72	-0.03	83.86
Clovis	NM	405	0.20	-0.48	0.88	82.88
Deming	NM	647	0.02	-0.65	0.69	83.52
Farmington	NM	363	-0.05	-0.62	0.53	83.83

Gallup	NM	552	-0.71	-1.24	-0.17	83.78
Hobbs	NM	533	-0.10	-0.78	0.58	82.64
Las Vegas	NM	315	0.13	-0.62	0.89	84.48
Roswell	NM	655	-0.12	-0.76	0.52	82.76
Santa Fe	NM	175	-0.35	-0.91	0.21	84.69
Aggregated Nevada CZs	NV	NA	-0.26	-1.01	0.49	82.63
Elko	NV	3	-0.18	-0.90	0.53	82.34
Las Vegas	NV	297	-0.73	-0.94	-0.53	82.52
Reno	NV	80	-0.20	-0.52	0.12	83.04
Albany	NY	96	0.49	0.16	0.81	83.61
Amsterdam	NY	385	0.48	-0.20	1.16	82.86
Binghamton	NY	169	0.35	-0.18	0.89	83.52
Buffalo	NY	164	0.33	-0.09	0.75	82.92
Elmira	NY	431	0.24	-0.34	0.81	83.44
New York	NY	134	1.07	0.83	1.30	84.70
Oneonta	NY	466	-0.06	-0.60	0.47	83.53
Plattsburgh	NY	527	0.01	-0.56	0.57	83.41
Rochester	NY	184	0.68	0.34	1.01	83.35
Syracuse	NY	214	1.05	0.67	1.43	83.95
Utica	NY	198	0.25	-0.25	0.74	83.23
Yonkers	NY	151	1.25	1.00	1.50	84.59
Aggregated Ohio CZs	OH	NA	0.06	-0.71	0.82	83.11
Athens	OH	442	-0.33	-0.97	0.31	82.99
Canton	OH	148	-0.21	-0.60	0.19	83.33
Chillicothe	OH	327	0.39	-0.19	0.97	82.27
Cincinnati	OH	89	0.22	-0.06	0.50	83.07
Cleveland	OH	170	0.05	-0.23	0.33	83.36
Columbus	OH	10	-0.19	-0.45	0.07	83.09
Dayton	OH	38	0.27	-0.03	0.58	83.22
Defiance	OH	432	-0.02	-0.66	0.63	83.74
Findlay	OH	536	0.11	-0.46	0.68	83.25
Lima	OH	404	-0.08	-0.62	0.46	83.00
Lorain	OH	417	0.09	-0.37	0.55	83.38
Mansfield	OH	391	0.28	-0.22	0.77	83.24
Steubenville	OH	213	0.04	-0.66	0.75	82.51
Toledo	OH	77	0.00	-0.40	0.39	82.84
Washington Court House	OH	400	-0.10	-0.74	0.54	82.85
Youngs	OH	296	-0.13	-0.57	0.31	83.40
Ada	OK	497	-0.02	-0.72	0.67	82.46
Aggregated Oklahoma CZs	OK	NA	-0.34	-1.04	0.36	83.36
Altus	OK	425	-0.46	-1.21	0.30	82.18
Ardmore	OK	269	-0.30	-0.84	0.24	82.27
Bartlesville	OK	428	-0.65	-1.16	-0.14	83.11

Elk City	OK	397	-0.56	-1.24	0.11	82.60
Enid	OK	435	-0.21	-0.86	0.44	83.22
Lawton	OK	369	-0.22	-0.82	0.39	81.90
McAlester	OK	473	-0.19	-0.83	0.45	82.45
Miami	OK	572	-0.39	-0.95	0.17	81.86
Muskogee	OK	426	0.02	-0.55	0.59	82.10
Oklahoma City	OK	28	-0.31	-0.58	-0.04	82.92
Shawnee	OK	452	-0.49	-1.08	0.10	82.01
Stillwater	OK	407	-0.21	-0.79	0.37	83.28
Tulsa	OK	40	-0.57	-0.89	-0.25	82.65
Aggregated Oregon CZs	OR	NA	0.04	-0.65	0.74	84.14
Bend	OR	373	0.18	-0.24	0.60	84.18
Eugene	OR	109	0.24	-0.04	0.52	83.78
Hermiston	OR	174	-0.12	-0.74	0.50	83.64
Klamath Falls	OR	637	-0.33	-0.90	0.24	82.99
La Grande	OR	657	-0.01	-0.66	0.65	83.79
Medford	OR	488	0.32	-0.03	0.66	83.44
Newport	OR	662	0.10	-0.50	0.70	82.41
Ontario	OR	208	-0.19	-0.86	0.47	83.53
Portland	OR	129	0.47	0.24	0.69	83.97
Roseburg	OR	659	0.09	-0.40	0.58	82.88
The Dalles	OR	362	0.03	-0.59	0.64	83.31
Allen	PA	231	0.49	0.17	0.81	83.76
Altoona	PA	420	-0.04	-0.52	0.44	83.17
Bloomsburg	PA	113	-0.06	-0.61	0.49	83.21
DuBois	PA	332	-0.03	-0.72	0.66	83.37
Erie	PA	215	-0.22	-0.64	0.20	83.08
Lancaster	PA	251	0.86	0.62	1.10	83.94
Philadelphia	PA	316	0.56	0.38	0.74	83.61
Pittsburgh	PA	203	0.10	-0.22	0.41	82.90
Scranton	PA	309	-0.54	-0.87	-0.20	82.90
St. Marys	PA	524	0.40	-0.29	1.10	83.26
State College	PA	565	0.45	-0.10	0.99	83.57
Williamsport	PA	358	-0.67	-1.24	-0.10	83.08
Providence	RI	73	0.26	-0.10	0.61	83.65
Aiken	SC	30	0.10	-0.27	0.47	82.54
Charleston	SC	98	0.29	-0.05	0.62	83.19
Columbia	SC	84	0.31	0.00	0.62	83.17
Florence	SC	220	-0.32	-0.76	0.12	82.32
Greenville	SC	282	0.46	0.13	0.78	83.05
Hilton Head Island	SC	142	-0.01	-0.44	0.43	84.57
Myrtle Beach	SC	238	-0.06	-0.40	0.29	83.24
Orangeburg	SC	212	0.11	-0.52	0.74	82.47

Rock Hill	SC	346	-0.02	-0.48	0.44	82.99
Spartanburg	SC	361	-0.11	-0.56	0.33	82.56
Aberdeen	SD	324	0.02	-0.71	0.74	84.82
Aggregated South Dakota CZs	SD	NA	0.20	-0.44	0.83	84.34
Brookings	SD	467	0.17	-0.54	0.89	83.47
Mitchell	SD	135	0.09	-0.59	0.77	84.77
Rapid City	SD	107	0.35	-0.15	0.85	84.66
Sioux Falls	SD	11	0.26	-0.27	0.79	84.82
Water	SD	301	0.03	-0.71	0.78	83.65
Yankton	SD	429	0.16	-0.54	0.87	85.26
Aggregated Tennessee CZs	TN	NA	-0.03	-0.84	0.79	82.84
Chattanooga	TN	106	0.09	-0.33	0.51	82.72
Clarksville	TN	108	0.21	-0.34	0.76	82.36
Cleveland	TN	217	-0.10	-0.65	0.44	83.05
Columbia	TN	457	0.26	-0.26	0.79	82.69
Cookeville	TN	199	0.07	-0.48	0.63	82.77
Crossville	TN	573	0.68	0.10	1.26	83.56
Dickson	TN	480	-0.15	-0.82	0.52	82.28
Dyersburg	TN	117	0.19	-0.45	0.84	82.36
Jackson	TN	189	-0.38	-0.90	0.13	82.67
Johnson City	TN	167	-0.03	-0.39	0.33	82.60
Knoxville	TN	65	0.03	-0.32	0.38	82.88
Memphis	TN	1	-0.19	-0.54	0.15	82.49
Morris	TN	328	-0.22	-0.67	0.23	82.44
Murfreesboro	TN	54	0.02	-0.25	0.29	82.96
Paris	TN	560	-0.06	-0.71	0.59	82.25
Shelbyville	TN	177	-0.36	-0.94	0.21	82.56
Abilene	TX	86	-0.24	-0.75	0.27	82.73
Aggregated Texas CZs	TX	NA	-0.47	-0.93	-0.01	82.49
Amarillo	TX	7	-0.47	-0.97	0.03	82.97
Austin	TX	27	0.38	0.15	0.61	84.14
Beaumont	TX	118	-0.75	-1.18	-0.33	82.48
Brenham	TX	588	0.10	-0.46	0.66	84.04
Brownsville	TX	291	0.84	0.45	1.23	84.70
Brownwood	TX	511	-0.32	-0.95	0.31	82.41
College Station	TX	160	0.43	-0.12	0.98	83.41
Corpus Christi	TX	99	0.03	-0.41	0.46	83.18
Dallas	TX	42	0.18	-0.02	0.37	83.59
Del Rio	TX	392	-0.37	-1.05	0.32	83.96
Denton	TX	447	0.08	-0.31	0.48	83.25
Eagle Pass	TX	506	-0.19	-0.87	0.50	84.32
El Paso	TX	288	-0.70	-1.07	-0.32	84.27
Fort Worth	TX	102	0.06	-0.15	0.27	82.94

Graham	TX	608	0.13	-0.63	0.89	82.15
Houston	TX	9	-0.11	-0.27	0.05	83.41
Huntsville	TX	387	0.12	-0.55	0.79	82.77
Kerrville	TX	569	0.35	-0.13	0.82	83.94
Killeen	TX	35	0.00	-0.48	0.48	82.83
Laredo	TX	538	0.10	-0.59	0.78	84.78
Longview	TX	163	-0.13	-0.61	0.34	82.57
Lubbock	TX	270	0.16	-0.33	0.65	83.00
Lufkin	TX	551	0.08	-0.51	0.67	82.47
Mexia	TX	485	0.01	-0.65	0.67	82.30
Midland	TX	333	-0.44	-0.97	0.10	82.62
Mount Pleasant	TX	286	0.13	-0.37	0.62	82.65
Odessa	TX	97	-0.10	-0.69	0.48	82.69
Pampa	TX	273	-0.21	-0.88	0.45	81.91
Paris	TX	386	-0.41	-1.00	0.19	82.56
Plainview	TX	419	0.17	-0.57	0.91	83.21
San Angelo	TX	193	-0.34	-0.90	0.22	82.76
San Antonio	TX	69	0.25	0.02	0.47	83.90
Sherman	TX	433	-0.12	-0.57	0.33	82.76
Stephenville	TX	534	-0.34	-0.97	0.28	82.03
Texarkana	TX	29	0.14	-0.43	0.72	82.26
Tyler	TX	475	0.02	-0.36	0.40	83.35
Victoria	TX	149	0.01	-0.55	0.57	83.57
Waco	TX	283	0.03	-0.41	0.48	82.85
Wichita Falls	TX	68	-0.16	-0.73	0.42	82.74
Aggregated Utah CZs	UT	NA	-0.49	-1.07	0.10	82.74
Logan	UT	227	0.12	-0.45	0.69	84.68
Provo	UT	262	-0.27	-0.71	0.16	83.72
Salt Lake City	UT	139	-0.69	-1.04	-0.34	83.99
St. George	UT	581	0.70	0.24	1.16	84.97
Aggregated Virginia CZs	VA	NA	0.17	-0.57	0.91	82.41
Charlottesville	VA	31	0.58	0.18	0.97	83.87
Chincoteague	VA	173	-0.16	-0.85	0.53	82.64
Colonial Beach	VA	330	0.29	-0.27	0.84	83.31
Farmville	VA	434	-0.43	-1.13	0.26	83.36
Fredericksburg	VA	219	0.21	-0.20	0.62	83.75
Galax	VA	150	0.21	-0.49	0.91	82.68
Harrisonburg	VA	454	0.97	0.39	1.55	83.66
Lynchburg	VA	51	0.35	-0.13	0.82	83.58
Martinsville	VA	421	0.38	-0.30	1.06	83.47
Richmond	VA	14	0.52	0.22	0.81	83.44
Roanoke	VA	32	0.31	-0.10	0.73	83.23
South Boston	VA	403	0.46	-0.20	1.12	82.27

Staunton	VA	441	0.35	-0.16	0.85	83.41
Virginia Beach	VA	39	0.19	-0.07	0.46	83.20
Winchester	VA	178	-0.30	-0.73	0.12	83.79
Burlington	VT	105	0.47	0.05	0.89	83.92
Aggregated Washington CZs	WA	NA	0.24	-0.52	1.01	86.27
Bremerton	WA	596	0.45	0.06	0.84	84.10
Kennewick	WA	18	0.46	0.03	0.89	84.31
Longview	WA	354	0.04	-0.43	0.51	83.11
Moses Lake	WA	489	0.04	-0.61	0.69	83.60
Olympia	WA	412	0.29	-0.11	0.69	83.47
Pullman	WA	477	-0.28	-0.94	0.38	84.56
Seattle	WA	171	0.43	0.21	0.65	84.35
Spokane	WA	340	0.04	-0.32	0.40	83.78
Wenatchee	WA	48	0.40	-0.12	0.91	84.32
Yakima	WA	640	-0.17	-0.70	0.36	83.80
Aggregated Wisconsin CZs	WI	NA	0.10	-0.70	0.90	83.38
Amery	WI	567	-0.01	-0.70	0.68	83.38
Antigo	WI	263	0.27	-0.29	0.82	84.34
Ashland	WI	279	-0.29	-1.01	0.43	84.12
Eau Claire	WI	204	0.41	-0.11	0.93	84.37
Green Bay	WI	100	0.71	0.22	1.19	84.32
Janesville	WI	545	-0.07	-0.56	0.43	83.98
La Crosse	WI	186	-0.07	-0.61	0.48	84.01
Madison	WI	223	0.34	-0.03	0.70	84.50
Marinette	WI	111	0.28	-0.37	0.93	83.82
Milwaukee	WI	70	0.15	-0.12	0.42	83.72
Oshkosh	WI	233	-0.05	-0.43	0.33	83.88
Platteville	WI	470	-0.21	-0.87	0.45	84.25
Rice Lake	WI	517	-0.08	-0.66	0.50	84.18
Sheboygan	WI	586	0.04	-0.55	0.62	84.07
Wausau	WI	366	0.29	-0.19	0.76	84.86
Beckley	WV	359	-0.03	-0.65	0.59	82.50
Bluefield	WV	342	0.24	-0.38	0.87	82.51
Buckhannon	WV	367	0.17	-0.49	0.83	82.43
Charleston	WV	59	0.17	-0.36	0.71	82.39
Elkins	WV	436	0.12	-0.59	0.84	82.43
Huntington	WV	116	-0.30	-0.85	0.25	82.14
Morgan	WV	136	-0.01	-0.59	0.56	82.43
Parkersburg	WV	81	-0.36	-0.95	0.24	82.72
Wheeling	WV	222	0.16	-0.46	0.78	82.82
Aggregated Wyoming CZs	WY	NA	-0.80	-1.33	-0.27	83.55
Casper	WY	465	-0.14	-0.76	0.47	83.74
Cheyenne	WY	625	-0.31	-0.92	0.29	84.26

Cody	WY	525	0.55	-0.12	1.22	83.65
Gillette	WY	445	-0.20	-0.93	0.53	83.20
Jackson	WY	234	-0.01	-0.72	0.69	85.07
Riverton	WY	669	-0.12	-0.79	0.55	82.42
Sheridan	WY	611	0.33	-0.40	1.07	83.78