

1990 Census Measures
Year 5

Fast Track Project Technical Report Update
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Citation

Report

Malone, P. S. (2000). 1990 Census Measures: Year 5 (Technical Report) [On-line]. Available: <http://www.fasttrackproject.org/>

Variable Definitions

Sampson, R. J., Raudenbush, S. W., & Earls, F. (1997). Neighborhoods and violent crime: A multilevel study of collective efficacy. Science, 277, 918-924.

Census Data

U.S. Census Bureau. (1992). Census of Population and Housing, 1990: Summary Tape File 3 on CD-ROM [Electronic data files]. Washington, DC: Author.

I. Scale Description

Target child home addresses from the Family Information Form (FIF, PxB) in each study year have been coded with respect to state, county, and tract/block numbering area codes from the U.S. Census, and can thereby be linked to summary information from the Census on households and individuals in the respective areas (see Addendum to this report for details). Ten selected variables have been derived at the level of Census tract¹ from the 1990 Census summary files for each student in each study year. These variables were drawn from Sampson, Raudenbush, and Earls (1997), and are intended to reflect concentrated disadvantage, immigrant concentration, and residential stability. Variable values are proportions of individuals (or households, as applicable) in a census tract that meet defined criteria (e.g., individuals below poverty line, individuals born outside the U.S., households occupied by the owner).

II. Report Sample

This report is based on 1990 Census data for Year 5 addresses for all cohorts, including both high-risk ($n = 891$) and normative samples ($n = 387$ including overlap, total $N = 1199$). Address matches to the Census data were unsuccessful for 120 students (10% of sample), including 33 normative students (9%) and 94 high-risk students (11%). The non-matches included 8 students (3%) from the Durham site, 31 students (11%) from Nashville, 47 students (15%) from Pennsylvania, and 34 (12%) students from Seattle. The 1,079 matched addresses were located in 280 tracts in 22 states (see Table 1). The unit of analysis in this dataset is the census tract; analyses are based on the tract-level sample, except where otherwise noted. Also, because the variables are measured at the level of tract, and because the data are from a fixed point in time (1990), analyses are based on the entire sample (treatment, high-risk control, and normative students), except where otherwise noted.

Among students with coded addresses in Year 4 ($n = 1079$), 219 (20%) had addresses in different tracts

¹ Typically, Census tracts have only been identified for relatively urban counties. A block numbering area [BNA] is analogous to a census tract in rural counties. This report uses the term "tract" for either.

in Year 5, and 43 (4%) had no valid coded address in Year 5 (total = 262; 24%). Among students with coded addresses in Year 1 ($n = 1188$), 657 (55%) had addresses in different tracts or no valid coded address in Year 5. These are estimates of the number of participants who moved between FIF collections: participants who moved within Census tract are not included, and it is possible that the lack of a Year 5 address is due to other reasons than a move. Also, the possibility of an individual student moving more than once between years is not reflected.

Table 1. Matches to Tracts

	All Sites	DURH	NASH	PENN	WASH
Number of Addresses	1079	300	269	260	250
Number of Tracts	280	65	74	46	95
Number of States	22	11	5	5	6
Addresses/Tract					
Mean	3.85	4.57	3.57	5.70	2.69
SD	5.61	6.48	5.88	7.32	3.00
Min	1	1	1	1	1
Mdn	1	2	2	1	1
Max	35	34	35	29	16
Proportion Moved					
Vs. Year 4	.243	.283	.260	.154	.268
Vs. Year 1	.553	.609	.588	.419	.599

IV. Differences Between Groups

Differences in neighborhood between normative and high-risk control groups were tested by a mixed logistic regression model in SAS PROC NL MIXED, in which tract was modeled as a predictor of group membership at the level of the individual child. Census tract was not associated with significant variance in predicting high-risk status, $p > .20$

Among non-treatment participants, the likelihood of moving (as defined above) between Year 4 and Year 5 was not related to high-risk status, $p > .09$; high-risk students were more likely to have moved ($p(\text{move}) = .57$) between Year 1 and Year 5 than were non-high-risk normative students ($p(\text{move}) = .50$), $p < .04$.