

Education Baseline Topic Report

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1 Introduction

For almost four decades the importance of the socioeconomic status (SES) of a student and the student's classmates has been officially recognized by the New Jersey Department of Education (NJDOE).

In 1975, NJDOE developed its system of District Factor Groups (DFG) “for the purpose of comparing students’ performance on statewide assessments across demographically similar school districts.”¹ The DFG served to provide a community context for assessing the performance of different school districts.²

In 2013, NJDOE replaced the municipality-based DFG with a student enrollment-based Peer School Performance (PSP) methodology by which “each school that receives a performance report with valid student outcome data will also be paired with a list of approximately 30 other, similar peer schools. The underlying premise of the selection of these peer schools is based on the demographic characteristics of the students assigned to the school building.” Within schools of a similar grade span the demographic factors used are:

- Percentage of students that are economically disadvantaged and qualified for Free And Reduced-price Meals (“FARM”);
- Percentage of students that are limited English proficient (LEP); and
- Percentage of students that are in special education (SpEd).

Public elementary and secondary education in America is organized primarily on the neighborhood school concept: where students live usually determines what schools they will attend. This is particularly true in “little boxes” states with multiple school districts like New Jersey (625 districts; average enrollment: 2,219 students) by comparison with “Big Box” states like Maryland (24 districts; average enrollment: 35,333). School officials in “Big Box” districts have many more opportunities to promote school attendance across neighborhood boundaries through magnet schools, integrative pupil assignment policies, etc. than do school officials in “little boxes” school districts where school districts are often coterminous with “little boxes” municipalities.³

To build an understanding of key educational trends in North Jersey, Chapter 2 will summarize, first, racial and economic trends in housing patterns (i.e. where different students live), second, racial and economic trends in

¹ NJDOE, “Peer School Methodology White Paper,” (March 2013), p. 6. See <http://education.state.nj.us/pr/> under Data > NJ School Performance > Peer Methodology White Paper

² The DFG methodology used six variables “that are closely related to socio-economic status:” (1) percent of adults with no high school diploma, (2) percent of adults with some college education, (3) occupational status of adults, (4) unemployment rate, (5) percent of individuals in poverty, and (6) median family income. *Ibid.* from p.6 and subsequent quotation from p.5.

³ Of North Jersey’s 342 elementary school districts, 308 (or 90%) are single-municipality school districts. For example, with 783,969 residents within its 126 sq. m., “little boxes” Essex County is divided into 20 schools districts covering 22 municipalities; its 20 school districts enrolled 119,035 students in 2010-11. Newark Public Schools, North Jersey’s largest school district, still serves only a single city of 277,140 residents living within 24 sq. mi.; it enrolled 33,379 students in its 73 schools in 2010-11. By contrast, in the Raleigh-Cary NC metro area, the unified, county-wide Wake County Public Schools serves the entire county (including all 12 cities and towns) of 900,993 residents living within 834 sq. mi. A national leader in strategies to achieve greater racial and economic integration, Wake County Public Schools enrolled 142,351 students in its 167 schools in 2010-11.

school enrollments (i.e. what schools different students attend) and, third, analyze how demographic factors (i.e. “community inputs”) interact with selected factors such as expenditures per student and student-teacher ratio (i.e. “school inputs”) to shape educational outcomes (standardized test scores at elementary and secondary levels and high school graduation rates).

Chapter 3 will cite key national research to provide a framework for linking New Jersey’s school trends with state educational policy initiatives.

Chapter 4 will address the current context of educational policy in New Jersey (the *Abbott v Burke* case, the School Funding Reform Act of 2008, educational proposals of the Christie Administration). These deal largely with “school inputs.”

Chapter 5 will address the current context of land use planning and housing policy (the *Mount Laurel* doctrine, the Fair Housing Act of 1985, the Housing Reform Act of 2008, current housing initiatives of the Christie Administration, etc.). These affect the “community inputs.”

Chapters 6 and 7 will identify long-term outcomes and techniques for measuring them.

This regional baseline assessment on education of the Regional Plan for Sustainable Development (RPSD) focuses exclusively on public elementary and secondary education and not on public and private post-secondary education (i.e. community colleges and technical schools, colleges and universities).⁴

⁴ The reasons for limiting this baseline assessment to public elementary and secondary education are, first, residential neighborhood patterns are substantially shaped by land use planning and zoning policies; transportation planning and public investment; housing policies (including subsidized housing policies); and environmental protection regulations – all key decision areas of state government and of local governments acting under the authority delegated by state government. Second, these policy topics are also potential levers for reform exercised by the three federal Partners for Sustainable Communities (HUD, DOT and EPA) that both funded the Together North Jersey planning grant and, in FY 2010, provided almost \$3.8 billion in annual grants-in-aid to state and local governments in New Jersey. Post-secondary education (i.e. colleges, universities, community colleges and vocational schools) does not meet either test. Post-secondary educational institutions are neither as location-dependent upon SCI-targeted policies nor are they influenced significantly by the SCI federal partners’ grants-in-aid. Moreover, post-secondary education is not dominated by public institutions to the degree that elementary and secondary education is; 89% of all school aged children (i.e. K-12) in New Jersey attend public schools, whereas almost one-third (32.5%) of adult students in New Jersey attend private, post-secondary institutions.

2 Trends

2.1 Socioeconomic Housing Trends in North Jersey Metro Areas

At the end of World War II, urban America was still the inner cities. There were hardly any outer cities. The suburban movement was just starting. The country's biggest cities were booming and bursting at the seams. Drawn by the war industries, millions had left farms and small towns to pack into the cities.

In 1950 almost 70 percent of the population of 168 metropolitan areas lived in 193 central cities. By mid-century, North Jersey already had its plethora of suburban smaller cities, boroughs, towns, and townships in place but, though to a lesser degree, its major cities still were the dominant centers of population and jobs. Within the amalgamated New York-Northeastern New Jersey, NY-NJ metro area, Newark (438,776) was still 48 percent of Essex County (1950 population: 905,949); Jersey City (299,017) was 46 percent of Hudson County (647,437); Paterson (139,336) was 41 percent of Passaic County (337,091); and Elizabeth (112,897) was 28 percent of Union County (398,138).

Today the national picture is reversed. By 2010 almost 68 percent of the population of 383 metropolitan areas lived in suburbs. Equally as important, suburbs no longer simply served as bedroom communities for workers with city-based jobs. By 2010 a majority of jobs in metro areas were located in suburbs as well.

In the post-war Age of Sprawl, middle-class families fanned out from core city neighborhoods into new subdivisions. In the “Big Box” South and West, cities were able to capture a share of regional growth through annexation (or, very rarely, city-county consolidation). But in “little boxes” North Jersey, for example, with its fixed-boundary municipalities, for decades all net growth occurred outside central cities into ever outward-radiating rings of suburbs.

Newark is the epitome of a “zero-elastic” city. (Its last annexation was in 1905.) Between 1950 and 2010, Newark lost over one-third of its population, dropping to 277,140 residents. By 1970, Jersey City had lost one-quarter of its population before Yuppy and Buppy commuters into Lower Manhattan slowly began to reverse its population decline. Buoyed by new immigrants, Paterson and Elizabeth managed to record small net population increases (+5 percent and +11 percent, respectively) over the six decades.⁵ Overall, however, the cities’ share shrank while suburban population growth boomed, drawing new counties (Sussex, Middlesex, Somerset, Hunterdon, Monmouth and Ocean) into the North Jersey metroplex. Maintaining an apples-to-apples comparison, by 2010, Newark (277,140) was 34 percent of Essex County (783,969); Jersey City (247,597) was 39 percent of Hudson County (634,266); Paterson (146,199) was 29 percent of Passaic County (501,266); and Elizabeth (124,969) was 23 percent of Union County (536,499).

⁵ Nationally, average household size shrunk by one-quarter between 1950 and 2010 because of smaller average family size and more young adults and seniors living independently. Thus, trends in numbers of households (that is, residential tax payers) in the USA’s “inelastic” cities were less dramatic. Over the six decades Newark lost -22% of its households, but Paterson (+5%) and Jersey City (+14%) notched modest gains and Elizabeth a significant increase (+31%) in households. Such increases, however, rarely represented families with children to be enrolled in the city public schools.

Everyone knows these trends ... and everyone knows that these trends are color-coded (though the pace and extent of racial change may not be fully recognized). In 1950, only 5.8 percent of the population of North Jersey's 13 counties was "non-white."⁶ By 2010, North Jersey's (non-Hispanic) Blacks doubled to 11.7 percent and Latinos leaped to 19.4 percent of the total regional population.

However, the minority population was not evenly distributed. As African Americans migrated from the South to the North, or Black immigrants came from the Caribbean and Africa, or as Hispanics emigrated from the Caribbean (notably, Puerto Rico), Mexico, Central America and northern South America, they were concentrated in North Jersey's major cities. Thus, between 1950 and 2010, Newark went from 17 percent "non-white" to 84 percent Black and Hispanic; Jersey City, from 7 percent "non-white" to 51 percent Black and Hispanic; Paterson from 6 percent "non-white" to 86 percent Black and Hispanic; and Elizabeth from 7% "non-white" to 78 percent Black and Hispanic.

Successive waves of both minority city dwellers and newcomers to the region also moved into close-in suburbs. Within Essex County, for example, the City of Orange township's minority population grew from 18 percent in 1950 to 92 percent in 2010; East Orange city's from 11 percent to 95 percent; and Irvington township's from just 0.2 percent to 94 percent. By contrast, Millburn township and Essex Fells borough, Essex County's two highest income suburbs, were just 5.0 percent and 2.9 percent minority, respectively, in 2010.

How do North Jersey's metro areas compare with other large metro areas in the country? Tables 1.1 through 1.4 track trends in housing segregation for North Jersey's metropolitan areas. New Jersey metro area trends are compared with the nearby New York City and Long Island areas, 24 "little boxes" regions of over 1,000,000 residents (including all of North Jersey's metro areas), and 37 "Big Box" regions of over 1,000,000 residents.

The common units of analysis are not municipalities but census tracts that typically average about 4,000 persons. The first three tables use common dissimilarity indices in which 100 = total apartheid and 0 = equal distribution of the target group among all neighborhoods (i.e. census tracts).

Table 2.1 Black/White Residential Segregation 1970-2010

Metropolitan Region⁷	1970	1980	1990	2000	2010
Average - 37 Big Box MSAs	80	68	60	56	53
Average – 24 little boxes MSAs	84	76	73	70	66
New York-North Jersey-Long Island	na	82	82	81	79

⁶ "Non-whites" is the 1950 census were overwhelmingly "Negro;" for example, 99% of Essex County's non-whites were Negro. The Census Bureau did not try to single out Hispanics until the 1970 census, reporting on "Persons of Spanish language" and "other persons of Spanish surname," with sub-sets reported of "Persons of Spanish mother tongue" and "Persons of Puerto Rican birth or heritage." Not until the 1980 census did the Census Bureau differentiate between "Hispanics (of any race)" and "non-Hispanic whites," "non-Hispanic Blacks," etc.

⁷ After Census 2000, the federal Office of Management and Budget substantially redefined Metropolitan Statistical Areas (MSAs). Tables 1a to 8d substantially follow the revised definitions, including for Metropolitan Divisions (MDs). However, this study retains some historic sub-divisions. Thus, the New York City PMSA contains New York City, Putnam, Rockland, and Westchester counties, and the Jersey City PMSA is Hudson County.

New York NY PMSA	81	82	82	82	na
Nassau-Suffolk NY MD.	na	77	76	74	68
Newark-Union NJ MD.	81	83	83	80	78
Bergen-Passaic NJ PMSA	na	80	78	73	68
Jersey City NJ PMSA	na	77	72	67	64
Edison-New Brunswick MD	na	65	60	58	53
Average - 37 Big Box MSAs	80	68	60	56	53

* Black segregation indices were calculated for only 20 Big Box regions and 16 little boxes regions for 1970

Nationally, Black segregation began in 1970 at hyper-segregation levels (80% or above) with little difference between the “little boxes” regions (largely in the Northeast and Midwest) and “Big Box” regions (largely in the South and West). However, desegregation was faster in “Big Box” regions (80 to 53) than in “little boxes” regions (84 to 66). Little progress occurred in the New York City and Newark areas, in part, because of immigrant flows of Blacks from the Caribbean and Africa that tend initially to “pond” together in immigrant neighborhoods; a calculation limited strictly to African Americans would probably show more progress. However, all New Jersey metro areas remained in the “high segregation” category (i.e. 60 to 79) except largely suburban Edison-New Brunswick (53) that had relatively few Blacks concentrated in its only traditional central city (New Brunswick). By contrast, by 2010, Big Box regions were mostly in the medium segregation category (40 to 59).

Among 383 metro areas, with regard to Black segregation in 2010 Newark-Union NJ ranked 3rd worst, Bergen-Passaic NJ 15th worst, and Jersey City 28th worst.

Table 2.2 Hispanic/White Residential Segregation 1980-2010

Metropolitan Region	1970	1980	1990	2000	2010
Average - 37 Big Box MSAs	na	35	35	43	43
Average – 24 little boxes MSAs	na	51	51	53	51
New York-North Jersey-Long Island	na	67	66	66	62
New York NY PMSA	na	65	66	67	na
Nassau-Suffolk NY MD.	na	37	42	47	48
Newark-Union NJ MD.	na	67	67	65	63
Bergen-Passaic NJ PMSA	na	61	59	58	55
Jersey City NJ PMSA	na	49	44	45	49
Edison-New Brunswick NJ MD	na	49	45	49	47
Average - 37 Big Box MSAs	na	35	35	43	43

Nationally, Hispanic segregation began 25 to 35 points below the level of Black segregation in 1980. Trends since have varied. In regions with long-standing (that is, as of 1980) but relatively stable Hispanic populations (such as in the Northeast and in the West), segregation indices have been stable or declined. In regions with major immigration (such as in parts of the South excluding South Florida), segregation indices have increased as new immigrants (from abroad or domestic migrants) have “ponded” together. Though North Jersey’s Hispanic population has grown, it

hasn't been the explosive growth seen in some other regions.⁸ Thus, Hispanic segregation indices have either been stable (e.g. Jersey City) or have declined slightly (e.g. Newark, Bergen-Passaic, and Edison-New Brunswick).

By 2010, of 380 metro areas, in terms of Hispanic segregation, Newark-Union NJ ranked 5th worst, Bergen-Passaic NJ 16th worst, and Jersey City NJ 46th worst.

Table 2.3 Poor/Non-poor Residential Segregation 1970-2000

Metropolitan Region	1970	1980	1990	2000	2010
average - 37 Big Box MSAs	34	33	36	35	na
average – 24 little boxes MSAs	36	39	42	40	na
New York-North Jersey-Long Island	na	na	na	Na	na
New York NY PMSA	38	41	42	36	na
Nassau-Suffolk NY MD.	27	29	31	29	na
Newark-Union NJ MD.	42	48	47	46	na
Bergen-Passaic NJ PMSA	39	43	38	39	na
Jersey City NJ PMSA	24	24	25	23	na
Edison-New Brunswick NJ MD	na	33	37	38	na
average - 37 Big Box MSAs	34	33	36	35	na

By contrast with Black segregation, economic segregation grew almost everywhere between 1970 and 1990 before dipping slightly in 2000 as a consequence of sustained prosperity in the mid- to late-1990s. (Economic segregation indices for 2010 have not yet been calculated.) Economic segregation indices are substantially lower than Black segregation indices and many Hispanic segregation indices because the White poor (the largest group of poor people) are not as notably residentially segregated as racial and ethnic groups. Like racial and ethnic segregation, however, Big Box regions are less economically segregated than little boxes regions.

By 2000, among the 104 most populous metro areas, in term of economic segregation, Newark NJ was the 5th highest while Bergen-Passaic NJ was 34th and New Brunswick NJ was 40th.

⁸ Two examples: in the Charlotte NC area, between 1980 and 2010, the Hispanic population increased 26-fold, growing from less than 1% to 10% of the regional population; the Hispanic segregation index increased from 29 to 48. In the Raleigh NC area, the Hispanic population increased 38-fold, similarly growing from less than 1% to 10% of the regional population, with an increase in the Hispanic segregation index from 20 to 37.

Table 2.4 Economic Polarization by Residential Segregation 1970-2000

Metropolitan Region	1970	1980	1990	2000	2010
Average - 37 Big Box MSAs	31	30	36	35	37
Average – 24 little boxes MSAs	31	33	40	33	40
New York-North Jersey-Long Island	35	41	47	45	50
New York NY PMSA	na	na	na	Na	na
Nassau-Suffolk NY MD.	30	29	28	27	28
Newark-Union NJ MD.	37	42	44	45	47
Bergen Passaic NJ PMSA	na	na	na	Na	na
Jersey City NJ PMSA	na	na	na	Na	na
Edison-New Brunswick NJ MD	27	28	32	32	33

Table 2.4 introduces a new metric: an economic polarization index.⁹ It measures the degree to which the “Poor” and the “Affluent” live in different communities. Table 2.4 shows a steady rise in economic polarization in both Big Box regions (31 to 37) and little boxes regions (31 to 40) with a brief dip in the upward trend of economic polarization during the 1990s. By 2010, for example, economic polarization had increased in 90% of all metro areas and in all but three of metro areas of more than 1,000,000 residents. (The exceptions are Atlanta GA, Nassau-Suffolk NY, and Raleigh NC). Again, Big Box regions are somewhat less economically polarized (37) than little boxes regions (40).¹⁰ However, North Jersey’s regions dominate the list of the most economically polarized with the New York MSA (including Bergen-Passaic NJ and Jersey City NJ) being second (50) only to another major New York suburb, Bridgeport-Stamford-Norwalk CT (55); Newark-Union NJ was the fourth (47) most economically polarized.

Jim Crow by income is replacing Jim Crow by race.

2.2 Socioeconomic School Trends in North Jersey

In a society that organizes public education through neighborhood schools, school demographics will reflect neighborhood demographics – only more so – with a major regional exception: federal court-ordered desegregation plans.

⁹ The US2010 project at Brown University (<http://www.s4.brown.edu/us2010/>) has developed separate indices to measure the degree of residential segregation both of the “Poor” (the lowest 10% of the income scale) from everyone else and of the “Affluent” (the wealthiest 10% of the income scale) from everyone else. Because US2010’s definition of the “Poor” includes fewer families than the federal poverty level (about 15% of the population), it is not equivalent to the Poor/Non-Poor dissimilarity index used in Table 8c. However, this study combines both US2010 project indices to create an “economic polarization index.”

¹⁰ For New Jersey, the original calculations folded the New York City NY PMSA, Bergen-Passaic PMSA and Jersey City NJ PMSA into one New York-White Plains-Wayne NY-NJ MSA (and the federal OMB has done). The calculations for the combined area are presented on the New York-North Jersey-Long Island line although Long Island is reported separately.

Though the US Supreme Court’s decision in *Brown v. Board of Education* (1954) overturned legal segregation, desegregation did not begin in earnest in the South until after the Court’s decision in *Swann v. Charlotte-Mecklenburg Board of Education* (1970). *De facto* segregation also was initially challenged successfully in some Northern regions. However, the Court held in *Milliken v. Bradley* (1974) that school systems were not responsible for desegregation across district lines unless it could be shown that they had deliberately engaged in a policy of segregation. Thus, in the North, suburban “little boxes” school districts were effectively shielded from engaging in desegregation plans with central city school districts. By contrast, in the South, federal desegregation orders within “Big Box,” often county-wide districts had substantial regional impact.

During the 1970s and 1980s, under federal court desegregation orders, Southern schools were much more integrated than Southern neighborhoods.¹¹ However, with the advent of a more conservative federal court system, during the 1990s and 2000s, courts have been declaring many Southern school districts as “unitary” and have been removing federal desegregation orders. Most districts reverted to neighborhood schools, increasing their indices of school segregation.

All of these factors are reflected in black/white school segregation trends as shown in table 2.5. The units of analysis are all public elementary schools in each metro area. The 70 regions shown are those with public elementary school enrollments over 100,000 in their public schools districts, collectively, to which Jersey City PMSA has been added.¹²

Table 2.5 Black/White School Segregation 1970-2010

Metropolitan Region	1970	1980	1990	2000	2010
Average - 44 Big Box MSAs	82	58	56	57	na
Average – South (29)	84	57	57	60	na
Average – West (15)	76	58	53	53	na
Average – 26 little boxes MSAs	78	75	74	75	na
New York NY PMSA	73	79	80	81	na
Nassau-Suffolk NY PMSA.	75	71	70	71	na
Newark-Elizabeth NJ PMSA.	82	85	85	82	na
Bergen-Passaic NJ PMSA	84	86	84	83	na
Jersey City NJ PMSA	72	81	82	77	na
New Brunswick NJ PMSA	67	66	57	57	na
Monmouth-Ocean NJ PMSA	65	71	70	70	na

¹¹ For example, between 1970 and 1980, on a metropolitan basis, the Black/White school segregation index in Charlotte NC-SC dropped from 67 to 35, Jacksonville FL from 87 to 39, Louisville KY-IN from 84 to 42, and Raleigh-Durham NC from 82 to 21.

¹² These 69 regions are defined geographically as they were for Census 2000 before the substantial reordering of some regions for Census 2010 (see footnote 7).

Table 2.5 tracks Black elementary school segregation from 1970 to 2000. Big Box regions show a big improvement in the 1970s (from 82 to 58) followed by slight retrogression in the South (57 to 60) and slow progress in the West (from 58 to 53). Little boxes regions show a modest step down in black-white school segregation in the 1970s (from 78 to 75) and then stagnation thereafter (75 to 74). Nonetheless, in 2000, schools in Big Box regions (57) were substantially less segregated than were schools in little boxes regions (74).

Comparison of Table 2.5 and in Table 2.1 for 2000 (the latest common year) shows that Black school segregation was higher than residential segregation in every North Jersey metro area except New Brunswick by 2 to 10 index points.¹³ Why? First, a significant proportion of white households in heavily Black neighborhoods are households without children. Residential segregation rates for Black youth (18 years or younger) are typically two or three points higher than segregation rates for Blacks of all ages.¹⁴ Second, a higher proportion of Black school age children will be in the public schools than will White school age children whose parents (in high poverty school districts) may seek out Catholic, Evangelistic or private, non-sectarian alternatives.¹⁵

In 2000, for Black children, out these 70 large metro areas the Bergen-Passaic region's elementary schools were the 3rd most segregated; Newark's 4th most segregated; Jersey City's 10th most segregated; and Monmouth-Ocean's 29th most segregated, and New Brunswick's (Middlesex-Somerset-Hunterdon) the 49th most segregated (that is, 21st least segregated).

For Hispanics, the patterns are similar. Neighborhood segregation indices for Hispanic youth are higher than for Hispanics of all ages¹⁶ and, despite their strong Catholicism, Hispanics depend more on public schools than do Whites. In 2000, for Hispanic children, out of 70 large metro areas the Newark region's elementary schools were the 4th most segregated; Bergen-Passaic 12th most segregated; Monmouth-Ocean 18th most segregated; Jersey City 29th most segregated; and New Brunswick 47th most segregated.

Table 2.6 Hispanic/White School Segregation 1970-2010

Metropolitan Region	1970	1980	1990	2000	2010
Average - 44 Big Box MSAs	64	53	49	50	na
Average – South (29)	70	56	50	50	na
Average – West (15)	52	48	47	52	na
Average – 26 little boxes MSAs	68	67	64	62	na

¹³ The New Brunswick “exception” may just be the result of a significant apples-to-oranges comparison. The Edison-New Brunswick NJ Metropolitan Division used in table 1.1 is composed of Middlesex, Somerset, Monmouth and Ocean counties. The New Brunswick PMSA (Primary Metropolitan Statistical Area) used in table 2.1 is composed of just Middlesex, Somerset, and Hunterdon counties.

¹⁴ In 2000, the Newark metro area's Black segregation index for all ages was 80 compared to 84 for Black youth; Bergen-Passaic, 73 to 76; Jersey City, 67 to 75; and Trenton 63 to 71.

¹⁵ In Census 2000, for New Jersey statewide, 85.6% of White elementary school students were enrolled in public schools compared with 89.1% of Black children and 89.5% of Hispanic children.

¹⁶ In 2000, for example, the Newark metro area's Hispanic segregation index for all ages was 65 compared to 68 for Hispanic youth; and Bergen-Passaic, 58 to 62.

New York NY PMSA	79	75	73	72	na
Nassau-Suffolk NY PMSA.	55	53	54	56	na
Newark-Elizabeth NJ PMSA.	80	83	78	73	na
Bergen-Passaic NJ PMSA	82	81	74	68	na
Jersey City NJ PMSA	62	60	56	53	na
New Brunswick PMSA	75	75	65	62	na
Monmouth-Ocean NJ PMSA	61	59	54	50	na

In terms of economic school segregation (that is closely related to racial school segregation), calculations covering four decades are not available. Table 2.7 presents two sets of figures: the first set from a report done for the Century Foundation and the second set from Brown University's US2010 project.¹⁷ Based on the second set of figures, in 2000, of the 66 large metro areas reporting FARM data,¹⁸ the Bergen-Passaic region had *the most economically segregated schools in the nation*, followed by Newark as 2nd most economically segregated. New Brunswick was the 21st and Monmouth-Ocean the 41st. Jersey City was tied with Greensboro-Winston Salem-High Point NC in 61st place (that is, the 5th least economically segregated schools. (As of 2000, none of Hudson County's dozen municipalities was a racially exclusive, high income/low poverty community which accounts for Jersey City MSA's good showing. However, by 2010, gentrification was driving Hoboken and Weehawken up the income scale, possibly increasing somewhat the degree of economic school segregation.)

Table 2.7 FARM/Non-FARM School Segregation 1989-91 & 1997-99

Metropolitan Region	1989-91	1997-99
Average - 41 Big Box MSAs	45 (na)	47 (na)
Average – 25 little boxes MSAs	57 (na)	58 (na)
New York NY PMSA	na (na)	na (58)
Nassau-Suffolk NY PMSA.	50 (na)	51 (54)
Newark-Elizabeth NJ MD.	66 (70)	67 (71)
Bergen Passaic NJ PMSA	69 (72)	65 (73)
Jersey City NJ PMSA	37 (35)	36 (38)
New Brunswick NJ PMSA	55 (55)	56 (55)
Monmouth-Ocean NJ PMSA	48 (na)	46 (49)

The US2010 Project combined measures of segregation by race with measures of segregation by income to calculate the percentage of FARM students in the average elementary school attended by the average White, Black,

¹⁷ Both studies drew their data from the National Center for Education Statistics (NCES). However, the reporting of FARM data by state education agencies is inconstant and subject to much greater variations than racial enrollment data. For example, for 1989, FARM data were missing almost half of the metro areas (163 of 330) while reporting had substantially improved for 1999 (only 21 of 330 were missing data). To establish more reliable trends for the 1990s The Century Foundation study averaged three years' data at the beginning of the decade and three years' data at the end of the decade.

¹⁸The Chicago, Nashville, Phoenix and Seattle MSAs did not report FARM data. The Chicago area was possibly more economically segregated than the Bergen-Passaic region.

Hispanic, and Asian student in 2000. The results are foreseeable as White and Asian families have much higher average incomes, much lower poverty rates, and higher adult educational attainment levels than do Black and Hispanic families.¹⁹

Table 2.8 FARM percentage in School Attended by Average Student by Race in 2000

Metropolitan Region	White	Black	Hispanic	Asian
Average - 41 Big Box MSAs	33%	60%	54%	39%
Average - South (29)	33%	62%	52%	37%
Average - West (15)	33%	55%	60%	42%
Average - 25 little boxes MSAs	22%	63%	57%	33%
Average without 4 suburban MSAs	24%	66%	58%	36%
New York NY PMSA	40%	77%	78%	70%
Nassau-Suffolk NY PMSA	13%	49%	42%	14%
Newark-Elizabeth NJ PMSA	13%	69%	64%	18%
Bergen-Passaic NJ PMSA	13%	64%	63%	16%
Jersey City NJ PMSA	51%	80%	71%	69%
Middlesex-Somerset-Hunterdon NJ PMSA	11%	34%	53%	14%
Monmouth-Ocean NJ PMSA	15%	52%	40%	11%

Being somewhat less racially and economically segregated, in “Big Box” regions the average White and Asian student had somewhat higher percentages of FARM classmates (33 percent and 39 percent, respectively) than did the average White and Asian student in “little boxes” regions (22 percent and 33 percent, respectively). Correspondingly, in “Big Box” regions the average Black and Hispanic student had somewhat lower percentages of FARM classmates (60 percent and 54 percent, respectively) than did the average Black and Hispanic student in “little boxes” regions (63 percent and 57 percent, respectively). The contrast is greater if the four essentially suburban regions without their own significant central cities (Nassau-Suffolk NY; and Bergen-Passaic, Middlesex-Somerset-Hunterdon, and Monmouth-Ocean NJ) are factored out.²⁰

The next sections explore enrollment trends for North Jersey school districts and how these disparities in school demographics may affect educational outcomes.

¹⁹ In 2010, Whites had a median family income of \$70,462, family poverty rate of 6.3%, and 90.0% of adults 25 years or more had a high school diploma or better and 30.9% had a bachelor’s degree or better. For Asian families the corresponding statistics were \$79,332 median income, 8.4% poverty rate, 85.2% high school diploma; and an astounding 50.0% with college degrees. For Black families, \$41,745 median income; 21.5% poverty rate; 81.0% high school diploma and 17.1% college degrees. For Hispanic families, \$42,900 median income; 20.0% poverty rate; 61.5% high school diploma and 13% college degree.

²⁰ In practical terms, New York City is the central city of these four suburban regions ... but it is not the central city statistically in all the tables presented.

2.3 Enrollment Trends in North Jersey School Districts

There are 382 cities, boroughs, towns and townships in North Jersey. Most have their own stand-alone school districts. There are, however, sufficient municipalities that share multi-municipal school districts at the elementary school level that the number of districts examined reduces to 341. For these 341 public school districts in North Jersey (covering grades K-6, K-8, or K-12²¹), Building One New Jersey (BONJ) has examined the relationship between SES, school-based factors, and standardized test scores at the district level.²² In addition, BONJ has examined the relationship between SES, school-based factors and both graduation rates and standardized test scores at the level of 249 individual high schools, including 54 in regional high school districts.

The school districts: Of these 341 school districts, in 2010-11

- Category 1: 86 are single elementary school districts, varying in enrollment from 41 pupils (Stockton Borough SD) to 790 pupils (Oradell Borough SD) but averaging only 340 pupils. Though one-quarter of all school districts, collectively, single-school districts constitute only 3.2% of North Jersey's pupils. They vary greatly at the extremes in terms of minority enrollment;²³ East Newark SD has 90% minority students whereas Sea Girt SD has less than 1% minority students. However, these 86 districts are overwhelmingly White; only three are majority-minority and 62 of the 86 have 80% or more White enrollment. Most pupils come from middle-class families; collectively, only 15% are classified as "low-income" qualifying for "FARM" (Free And Reduced-price Meals). That is less than half of North Jersey's average (33%). None of the 86 one-school districts were *Abbott* districts and, at most, a half dozen qualify for federal Title 1 aid so aside from FARM subsidies, local tax base plays a larger role in funding these one-school districts. However, because of wide variations in local tax base, there are great disparities in expenditures per pupil and, consequently, pupil-teacher ratios – at the low end, \$9,566 and 13.6 to 1 for East Newark School District and, at the high end, \$23,893 and 7.9 to 1 for the Alpine School District (with expenditures per pupil being a four year-average from 2008 to 2012).
- Category 2: Another 56 districts support more than one school (typically, one or two elementary schools and a middle school²⁴) but enroll less than 1,000 pupils. (They average 702 students.) Their demographics are almost identical to the one-school districts' demographics; they are nearly as dominantly White and middle-class; and feature wide disparities in expenditures per pupil and pupil-teacher ratio. Collectively, they educate 4.4% of North Jersey's public school pupils.
- Category 3: Finally, 199 districts with over 1,000 students enroll 92.4% of North Jersey's public school students,²⁵ including 98.4% of Black students, 96.5% of Hispanic students, and 96.9% of FARM students. They include all of North Jersey's 21 former *Abbott* districts. For methodological reasons explained below,

²¹ Thus, this portion of the study excludes 30 regional high school districts for which multiple elementary school districts serve as feeders; incorporating them would double-count their demographics that are already reflected in their feeder school districts.

²² A more comprehensive analysis on a school-by-school basis of North Jersey's 1,191 public elementary schools cannot be undertaken at this time with the level of resources available.

²³ As explained on page 27, this study will confine the term "minority" to Blacks and Hispanics.

²⁴ Only six of these 56 districts contain a high school.

²⁵ Always excluding those enrolled in the 30 multi-municipal, regional high school districts

our analysis will focus on these 199 districts (though statistical results for all 341 districts will be presented in the appendix²⁶).

2.4 Enrollment Trends by Category of School District

Income: As set forth in the introduction and as will be developed in the statistical analysis below, a crucial community-based input regarding school performance is the income level of a student's family and of classmates' families.

Such information is usually available only through school records collected to establish student eligibility for the federal **Free And Reduced-price Meals**, or FARM, program. Uniform income eligibility standards are established nationwide by the U.S. Department of Agriculture and are based on the uniform poverty income guideline calculated nationwide by the U.S. Department of Health and Human Services. For 2013, the poverty ceiling for a family of four is \$23,550. The FARM eligibility for a family of four is 130% of the federal poverty level, or \$30,615, for a free meal, and 185% of the federal poverty level, or \$43,567, for a partially subsidized meal (on a sliding scale).

A major problem is that neither the federal poverty level nor the FARM eligibility standards based on the federal poverty level reflect different costs of living and income levels in different regions of the country. As a result, in high cost/high income regions, the extent of poverty is understated (and hence the percentage of students qualifying for FARM is reduced) and in low cost/low income regions, the extent of poverty is overstated (and hence the percentage of students qualifying for FARM is magnified).

Bearing in mind this caveat – that poverty and need for FARM are understated in North Jersey – Table 2.9 tracks percentage of FARM students among the three categories by size of school districts. Category 3 is further broken down into high FARM/*Abbott* school districts; high FARM/*non-Abbott* districts (in which FARM students had increased from 1993-94 to surpass a minimum 40% FARM threshold by 2010-11); medium-high FARM districts (25-40% FARM); medium-low FARM districts (10-25% FARM); low FARM districts (2-10% FARM); and ultra-low FARM districts (less than 2% FARM).

²⁶ Test score data for three one-school districts (Beach Haven, Seaside Park Borough, and Stockton Borough) were not reported for 2010-11 so these have been omitted from the analysis.

Table 2.9 North Jersey Trends in FARM Enrollment, 1993 to 2010

	Unweighted average in 1993-94	Unweighted average in 2000-01	Unweighted average in 2008-09	Unweighted average in 2010-11	Unweighted average in 2010-11
Class 3 (>1,000 students)	15%	16%	22%	25%	35%
21 high FARM/Abbott	63%	64%	72%	73%	79%
23 high Farm/non-Abbott	30%	34%	53%	59%	57%
31 medium/high FARM (25-40%)	16%	17%	28%	32%	32%
45 medium/low FARM (10-25%)	8%	8%	13%	16%	17%
50 low FARM (2-10%)	3%	3%	5%	5%	6%
29 ultra-low FARM (<2%)	1%	1%	1%	1%	1%
Class 2 (<1,000 students)	8%	7%	11%	13%	13%
Class 1 (1-school districts)	9%	8%	13%	15%	14%

Table 2.9 shows common trends across most groupings.²⁷ First, the mid-to-late 1990s (the longest sustained period of economic growth without a recession in US history) were a period of relative FARM stability; the FARM percentage only increased significantly in the 23 high FARM/non-Abbott districts from 1993 to 2000. What followed was a short national recession (March-November 2001) followed by a “jobless recovery” and relative income stagnation; FARM percentages jumped dramatically for all categories but the low- and ultra-low FARM districts (by 2008-09). With The Great Recession (December 2007-July 2009), FARM moved upward about 1% per year in all but the poorest class (the *Abbott* districts) and the wealthiest class (the ultra-low FARM districts).

Looking within the different classes

- The 21 *Abbott* districts began with very high average FARM enrollment (63%) and saw it increase in the past decade (to 73%, or 77% weighted average). Among the largest districts (more than 10,000 students), FARM increased in Newark (75% to 87%), Patterson (76% to 86%), Elizabeth (71% to 88%), and Passaic (63% to 86%). However, FARM was stable in gentrifying Jersey City (75% to 75%) and dropped in Hoboken, the USA’s poster child for gentrification (77% to 69%). FARM dropped as well in Perth Amboy (80% to 61%), Asbury Park (88% to 79%) and the City of Orange (74% to 60%) – all from very high levels to somewhat less, but still high, levels.
- The 23 high FARM (i.e. by 2010-11)/non-*Abbott* districts cumulatively began at a medium FARM level (30%), but every district except Weehawken experienced double-digit increases in FARM.²⁸ Of the largest districts (more than 4,000 students), FARM increased in Bayonne (25% to 58%), North Bergen (35% to 53%), Linden (30% to 51%), Lakewood (44% to 90%), Hackensack (38% to 52%), Belleville (23%

²⁷ Income eligibility for FARM is based on family income for the previous year so eligibility for FARM for the 2000-01 school year, for example, would be based on a family’s income in 1999; for 2008-09, in 2007, etc.

²⁸ Weehawken began at a higher rate than any other district in this group, but, positioned across from Lower Manhattan like Hoboken and Jersey City, it has been re-gentrifying, dropping its FARM rate from 55% to 49%

to 45%) and Clifton (17% to 43%). The most stunning FARM increase occurred in 1,141-student Fairview (10% to 76%).

- The 31 districts in the medium/high FARM group (25-40% FARM) doubled its FARM percentage (16% to 32%). FARM increased in every district except Somerville (27% to 25%). Of the largest districts (more than 5,000 students) FARM increased in Woodbridge (9% to 31%), Franklin-Somerset (21% to 37%), Union-Union (10% to 32%), West Orange (9% to 36%), North Brunswick (10% to 29%), Bloomfield (15% to 34%), Sayreville (13% to 29%), and Kearny (15% to 37%).
- The 45 districts in the medium/low FARM group (10-25%) also doubled its FARM percentage (8% to 16%). FARM increased in every district except Sussex-Wantage Regional (23% to 20%) and Stafford (21% to 15%). Of the larger districts (more than 6,000 students) FARM increased in Toms River Regional (10% to 21%), Edison (7% to 16%), Brick (10% to 21%), Jackson (9% to 15%), Old Bridge (11% to 20%), East Brunswick (4% to 11%), Parsippany-Troy Hills (5% to 11%), Piscataway (12% to 24%), Howell (8% to 11%), Montclair (15% to 18%), and South Orange-Maplewood (7% to 18%).
- The 50 districts in the low FARM group (2% to 10%) increased their FARM percentage almost imperceptibly (3% to 5%). Of the larger districts (more than 7,000 students) FARM inched upward in Middletown (5% to 9%), Bridgewater-Raritan Regional (4% to 7%), Wayne (4% to 7%), South Brunswick (3% to 7%), and Hillsborough (3% to 7%).
- Finally, the FARM percentages of the 29 districts in the ultra-low FARM group (less than 2%) just varied a few tenths of a percent around one percent. The largest districts in this group are Livingston (5,709 students), Ridgewood (5,653), Bernards (5,622), Millburn (4,917), and Montville (4,231).

Race and ethnicity: Over the past two decades racial and ethnic minorities accounted for all of New Jersey's population growth. The White population (that is, non-Hispanic whites) declined 9%, dropping from 74.2% to 59.3% of the state's population between 1990 and 2010. While New Jersey's Black population (that is, non-Hispanic blacks) maintained its 12.8% share, the Hispanic population almost doubled its share (from 9.3% to 17.7*) and the Asian population more than doubled its share (from 3.4% to 8.2%). *If these demographic trends continue, in another two decades (if not before), New Jersey will be a majority-minority state.*

That transition has already occurred in North Jersey's public schools. By 2010-11 Anglo students accounted for only 49.7% of North Jersey's public school enrollment. Though minority enrollment has increased in almost all school districts, there are great disparities.

Table 2.10 tracks the combined percentage of minorities (i.e. Blacks and Hispanics) among the three categories by size of school districts and the subcategories for Class 3 districts.

Table 2.10 North Jersey Trends in Minority (i.e. Black and Hispanic) Enrollment, 1993 to 2010

District Category	[A] Unweighted average in 1993-94	[B] Unweighted average in 2000-01	[C] Unweighted average in 2008-09	[D] Unweighted average in 010-11	[E] Unweighted average in 2010-11
Class 3 (>1,000 students)	20%	24%	30%	31%	42%
21 high FARM/Abbott	74%	77%	81%	82%	88%
23 high Farm/non-Abbott	46%	58%	76%	73%	70%
31 medium/high FARM (25-40%)	18%	26%	36%	38%	43%
45 medium/low FARM (10-25%)	10%	13%	18%	19%	19%
50 low FARM (2-10%)	5%	6%	10%	10%	10%
29 Ultra-low FARM (<2%)	3%	4%	6%	6%	6%
Class 2 (<1,000 students)	6%	9%	14%	15%	15%
Class 1 (1-school districts)	5%	6%	12%	14%	13%

Looking within the different classes

- The 21 former *Abbott* districts began with very high average minority enrollment (74%) and saw it grow larger (82%, or 88% weighted); minority enrollment increased in every district except Jersey City (78% to 72%). Hoboken (78% to 74%), and Asbury Park (98% to 97%).
- As a group, 23 other districts would now qualify as *Abbott*-type, poverty-impacted districts with their minority enrollment growing from 46% to 73%. Minority enrollment expanded in all districts except Englewood (89% to 85%) and Weehawken (74% to 67%). However, many experienced major racial change, such as Belleville (25% to 64%), Linden (45% to 70%), Rahway (43% to 76%), North Plainfield (33% to 78%), and Lakewood (57% to 91%). (Fairview went from 33% to 73%.) Somewhat more stable but also seeing a replacement of higher income minorities with lower income minorities were Bayonne (26% to 44%), North Bergen (63% to 83%) and Hackensack (67% to 80%)
- The 31 districts in the medium/high FARM group (25-40% FARM) more than doubled their minority enrollment (18% to 38%, or 43% as a weighted average). Minority enrollment increased in all 34 districts except for a marginal reduction in Hopatcong (37.0% to 36.6%). Among the largest districts (i.e. over 5,000 students) the increases were Woodbridge (14% to 33%), Franklin -Somerset (46% to 62%), Union-Union (18% to 62%), West Orange (21% to 67%), North Brunswick (21% to 44%), Bloomfield (18% to 59%), Sayreville (13% to 31%), and Kearny (23% to 55%).
- The 45 districts in the medium/low FARM group (10-25% FARM) almost doubled their minority percentage (10% to 19%). Minority enrollment declined slightly in Montclair (46% to 42%), and Tinton Falls (26% to 22%). Of the larger districts (more than 6,000 students) minority enrollment increased in Toms River Regional (3% to 15%), Edison (11% to 18%), Brick (5% to 14%), Jackson (6% to 13%)

13%), Old Bridge (11% to 20%), East Brunswick (4% to 11%), Parsippany-Troy Hills (12% to 24%), Piscataway (32% to 49%), Howell (7% to 12%), and South Orange-Maplewood (33% to 46%).

- The 50 districts in the low FARM group (2% to 10%) increased their minority percentage modestly (5% to 10%). Of the larger districts (more than 7,000 students) minority enrollment increased modestly in Middletown (4% to 6%), Bridgewater -Raritan Regional (7% to 11%), Wayne (5% to 9%), South Brunswick (11% to 15%), and Hillsborough (6% to 12%).
- Finally, minorities were rarely found in the 29 districts in the ultra-low FARM group (less than 2%), growing from just 3% to 6%. Trends in minority enrollment in the largest districts in this group were Livingston (4% to 6%), Ridgewood (4% to 7%), Bernards (3% to 5%), Millburn (3% to 4%), and Montville (3% to 6%).

2.5 Minorities and FARM

These tables suggest that increases in minority percentage and increase in FARM percentage go hand in hand. The published and on-line data sources do not allow for cross-coding (i.e. White/FARM, Black/FARM, Hispanic/FARM, etc.); undoubtedly, the raw data would allow for such cross-coding.

However, such a close relationship would be expected based on the wide economic disparities among racial groups reported by the Census Bureau (Table 2.11).

Table 2.11 New Jersey: Income and Poverty by Race in 2010

	White	Asian	Black	Hispanic
Percent of White median family income	100%	106%	57%	51%
Percent of families under \$40,000	14%	14%	35%	39%
Families with children poverty rate	5.7%	6.2%	24.2%	23.4%
Poor families with children	32,200	6,200	30,100	47,000

The first two measures regarding median family income and distribution of family income include families without children so it is only an approximate characterization of the median income of families with school age children. It shows that whereas Black and Hispanic median family incomes were barely half of White median family income in 2010, Asian median family income was 6% higher than White median family income. Whites and Asians had the same 14% of families below \$40,000 (roughly the income cut-off for FARM) whereas Blacks (35%) and Hispanics (39%) had two and one half and almost three times, respectively, the proportion of families under the FARM income eligibility level.

The next measures, however, refer specifically to families with children. While the White and Asian poverty rate for families with children were roughly equal (5.7% and 6.2%, respectively), the Black rate (24.2%) and the Hispanic rate (23.4%) were four times higher. Though the poverty level accounts for only a portion of FARM eligible incomes, families below poverty typically account for two-thirds of all FARM students. Thus, the final measure suggests that Hispanic students account for about 40% of FARM recipients, White and Black students about 27-28% each, and Asian students about 5%.

Because family incomes, poverty rates, and actual test outcomes show that, as a whole, Asian students perform at (or above) the level of White students, this analysis will define “minorities” as only Blacks and Hispanics. (The number of Native American students is negligible.)

How close is the relationship between percentage of minority students and the percentage of FARM students? For North Jersey, very, very close. For the 199 school districts over 1,000 students the correlation between the two factors is 0.862 – in effect, the minority percentage “explains” about 86% of the district-to-district variation in FARM percentage.²⁹ Which is the dominant factor regarding test score outcomes?

2.6 Statistical Analysis of 199 School Districts

The factors examined: This analysis examines seven “inputs” and one “outcome” for each school district. The inputs may be further divided into community-based inputs and school-based inputs. Community-based inputs³⁰ are

- Percentage of students eligible for free meals for 2012-13
- Percentage of students eligible for reduced-price meals for 2012-13
- Percentage of Hispanic students for 2010-11
- Percentage of Black students for 2010-11

School-based inputs are

- Total expenditures per pupil in 2008-12 (four year averages are used since there is a high degree of variability from year to year)
- Instructional expenditures per pupil in 2008-12
- Pupil-teacher ratio for 2010-11

The single outcome factor requires greater explanation. The New Jersey Department of Education requires all pupils in grades 3, 4, 5, 6, and 8 to take state exams in language arts literacy and math plus science in grades 4 and 8 (NJASK) and all students in grade 11 to take state exams in language arts literacy and math (HSPA). The key metric is to reach or exceed proficiency levels in such exams and the proficiency percentage is reported on district-by-district and school-by-school report cards.

²⁹ The correlation for all 341 North Jersey school districts is .828. By comparison, the correlation between the percentage of FARM students and the percentage of Black and Hispanic students for 37 school districts in the Fort Worth-Arlington TX area is .482 though it rises to .676 when calculated for all 326 elementary schools. Either way, these correlations indicate that there is a much higher proportion of low-income White students that qualify for FARM in the Fort Worth area than is the case in North Jersey.

³⁰ NOTE WELL: Unlike the previous discussion of enrollment trends, the FARM percentage has been divided into its component Free Meals percentage and Reduced-price Meals percentage while the minority percentage has been divided into its component Hispanic percentage and Black percentage.

There is a wide variability in test score performance, particularly at the youngest grades.³¹ Hence, the more test scores that can be averaged for multiple subjects, multiple grade levels, and multiple years, the more such variability tends to even out and central tendencies and influences emerge.

Thus, this analysis has used the assessment developed by a private, non-profit, on-line service www.greatschools.org (“GreatSchools”) that provides information on over 200,000 public and private schools nationwide. Since each state has its own standardized tests and sets its own performance levels, GreatSchools evaluates each school’s test results (all grades, subjects, and for multiple years) against statewide performance levels within that state. GreatSchools divides its ranking into ten deciles with “10” being the top rated decile and “1” being the lowest rated decile. Decile ratings are assigned to each school and, on an enrollment-weighted basis, each school district. This study averages GreatSchools’ latest district level ratings (i.e. for 2010-11 and 2011-12). Averaging two years of ratings both smooths out a degree of variability and creates a potentially finer-toothed rating scale (19 deciles and half-deciles rather than ten deciles). Though the study refers to “test scores,” for the 199 school districts, this means “test score decile ranking.”

Analytical methodology and findings: The study utilizes multi-variable, least-squares regression analysis to assess the interaction of the seven “inputs” (or “independent variables”) with the “outcome” (or “dependent variable”). For the body of the report, the statistical results will simply be characterized in layman’s terms. The actual analysis will be presented in a technical Appendix A.

First, however, we examine the explanatory value *standing alone* of each of the seven inputs on the outcome (test scores) (see Appendix A-1).

- Free Meal percentage has the highest individual explanatory value. Standing alone, it explains 84% of the variation in test scores among 199 school districts. If one knew nothing more than a district’s Free Meal percentage, one could accurately estimate a district’s test scores almost three-quarters of the time. Its sign is negative, meaning that the higher the Free Meal percentage, the lower that school’s test scores and vice versa. This is a highly statistically significant result.
- Reduced-price Meal percentage (61%), Hispanic percentage (58%) and Black percentage (42%) also all have strong explanatory value and are highly statistically significant results. All signs are negative, meaning the higher the percentage of Reduced-price Meal students or Hispanic students or Black students, the lower that school’s test scores and vice versa.
- There is *no* statistically significant relationship between total expenditures per student and instructional expenditures per student and test scores. How much is being spent per student has minimal or no explanatory value (9% and 0.7%, respectively) on test scores. Moreover, both signs are marginally negative, suggesting that the more money being spent per student, the lower the test scores. (This negative relationship has shown up in many similar studies.)
- How can this be? When school A and school B have equal student demographics, spending more money on educating students in School A rather than school B may result in better test scores in

³¹ A study of the 1,108 pupils from public housing families in the Albuquerque Public Schools found only a 0.51 correlation between 3rd grade math and reading scores and 5th grade math and reading scores *for the same children*.

School A. However, when there are wide socioeconomic disparities between School A and School B, extra expenditures cannot overcome the academic consequences of those disparities. As will be shown below, 13 of the 25 highest expenditure school districts in New Jersey are high-FARM former *Abbott* districts that, by court order, expended about 35% more per student than the statewide average; in fact, all 21 *Abbott* districts fall within the top 40% of the 199 districts in expenditures per student. In effect, with the negative relationship found above, expenditures per student act simply as a proxy for FARM percent.

- The seventh input – pupil-teacher ratio (only a 2% explanatory value) – loosely tracks the pattern of total expenditures per student and the relationship (though not statistically significant) is positive, but “positive” has a reverse meaning in this case. In other words, the *higher* the pupil-teacher ratio (i.e. the *larger* the number of students in the classroom), the higher the test scores. That would certainly send shutters through the education profession, but, once again, since the lowest pupil-teacher ratios are tilted towards the high expenditure per student former *Abbott* districts, pupil-teacher ratio serves once again as a proxy for the FARM percentage.

In summary, standing alone, each of the four community inputs individually has a high explanatory value regarding test scores, is highly statistically significant, and carries a negative sign. Each of the three school inputs individually has minimal or no explanatory value regarding test scores, is not statistically significant, and carries a negative sign (that is, by re-interpreting the student-teacher ratio’s reverse English.)

Appendix A-2 summarizes the technical information for the multi-variable regression analysis that assesses the collective impact on test scores of the seven inputs taken together. In a multi-variable regression analysis, each input acts as a “control” on the others. A more powerful variable may absorb much of the explanatory value of a weaker variable; indeed, in such combinations, the signs of weaker variables may even change.

Collectively, the seven inputs account for 0.867 (or 87 percent) of the variation in test scores among the 199 school districts (that is, those having more than 1,000 students). This is a very, very high correlation, particularly for any phenomena involving social phenomena and institutions.

Of the seven inputs (as above, the FARM percentage is split into its component Free Meals percentage and Reduced-Price Meals percentage and the minority percentage is split into its component Hispanic percentage and Black percentage³²):

- Free Meal percent is totally dominant and completely overshadows the other six factors. Free Meal percent is the only factor that has a statistically significant impact and at a very high level of confidence. Moreover, the relationship is negative – that is, the higher the Free Meal percent, the lower the test score ranking and vice versa.

³² In earlier five-factor regression analyses conducted as part of this study with the FARM percentage and combined minority percentage as the two “community inputs,” the five factors accounted for 80% of the variation in inter-district test scores. FARM percentage was totally dominant, almost completely subsuming the minority percentage. The sign for both combined factors was negative. Splitting these two factors into their components raised the explanatory weight by almost 7 percentage points.

- Interestingly, however, it is only the percentage of students eligible for Free Meals (i.e. those with family incomes up to 130 percent of the federal poverty threshold) that exerts the powerful negative impact. While not statistically significant, the percentage of slightly higher income students who qualify for Reduced-price Meals (from 130% to 185% of the federal poverty threshold) has a slightly positive effect on test scores.
- Interestingly, also, while the percentage of Hispanic students is almost totally subsumed by the collective FARM-related percentages and is not statistically significant, the influence of the Hispanic percent is positive.
- By contrast, while also almost totally subsumed by the collective FARM percentages and not statistically significant, the sign of the Black percent is negative (and slightly more on the negative side than Hispanic percent is on the positive side: thus, the effect when combined in five input regressions is negative).
- There is *no* statistically significant relationship between total costs per student or instructional costs per students and test scores. However, within the context of the multi-variable regression, their signs are split. Total expenditures per student has a marginally positive sign, and instructional expenditures per student carries a marginally negative sign.
- Finally, the seventh input – pupil-teacher ratio – is not statistically significant and continues its “reverse English” positive sign.

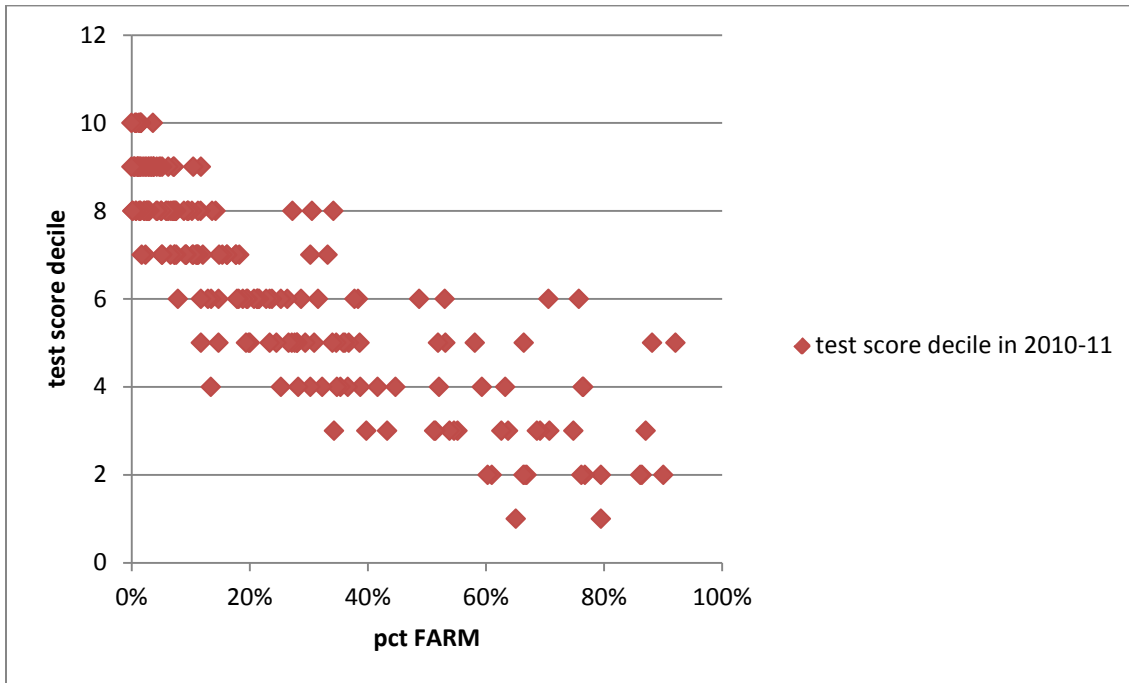
Looking at the relative contributions of the seven inputs (Appendix A-3), of the 0.867 correlation, Free Meals status accounts for a totally dominant 0.837. In all, the four community inputs account for 0.855. The three school inputs raise the correlation by only 0.012 points.

Of course, 0.133 of the variation in test scores remains unexplained (and some proportion will never be explained because of the random variability of student performance on tests). Undoubtedly, there are other unexamined school inputs and additional community inputs but are unlikely to change the overall picture of the dominant importance of socioeconomic status.³³

Focusing just on the dominant FARM percent, Figure 2.1 visually illustrates the interrelationship between FARM percent and test score rankings.

³³ As additional school inputs, the state education department provides attendance rates, suspension and expulsion rates, percentage of certified teachers, student-computer ratios and internet connectivity; as additional community inputs it provides percentage of students with disabilities (IEP), Limited English Proficiency (LEP), migrant status, and language diversity in the home. While LEP might seem a very relevant input, LEP students only constitute 1.4% of the statewide student population and are often excused from taking the language arts tests. In fact, only 13 of North Jersey’s 341 districts enroll students in LEP programs – almost two-thirds just in the Paterson School District.)

Figure 2.1 Test Score Decile and FARM pct in 2010-2011



Visual inspection suggests that the relationship is not linear (a straight line), but curvilinear. The highest scoring districts (10, 9, and 8) are tightly clumped among districts averaging 0-15% FARM with a few outliers scoring in the 8th decile around 30- 40% FARM. The pattern then follows a concave curve from the upper left (low FARM/high scores) to the lower right (high FARM/low scores).

What districts are the outliers – that is, what districts perform significantly better or worse than the seven-input analysis would predict? The outliers can be identified as those that perform more than one decile above or below their predicted test score decile. Table 2.12 lines up the outliers beginning with the better than expected performers (“overachievers”) and ending with the worse than expected performers (“underachievers”) in rough order of over- or under-achievement. There are 57 such districts that score at least one standard deviation better or worse than projected ; the other 142 districts score right about where projected based on these seven inputs (overwhelmingly, based on the percentage of Free Meals students). (Table 2.12 lists only districts with more than 5,000 students. Decile rankings are rounded off to the nearest half integer.)

Table 2.12 Predicted and actual test deciles for over and underachieving districts

	Predicted Test Decile	Actual Test Decile	Free Meals Pct
School District			
Overachievers			
Woodbridge Township	6.0	7.5	27%
Elizabeth*	3.0	4.5	88%
North Bergen	4.0	5.0	56%
Bayonne	3.5	4.5	53%
Newark*	2.0	3.0	82%
South Orange-Maplewood	6.0	7.0	16%
Underachievers			
Union (Union County)	5.0	4.0	32%
New Brunswick*	3.0	2.0	86%
Linden	4.0	3.0	42%
Clifton*	4.5	3.0	43%
Passaic City*	3.5	2.0	86%
Monroe Township	9.0	7.0	5%
Perth Amboy	4.0	2.0	61%

*former Abbott district

2.7 Statistical Analysis of 245 North Jersey High Schools

We have analyzed the impact on both high school graduation rates and on HSPA pass rates of the same seven inputs for 245 North Jersey High Schools for which full data are available. Of the total, 193 high schools are part of city, borough, town or township-based districts along with their elementary and middle schools; 52 are members of multi-municipal regional high school-only districts.

Collectively, these seven inputs “explain” 0.664 (or 64%) of the variation in graduation rates³⁴ among the 245 high schools (Appendix B-2).

Collectively, these seven inputs “explain” 0.734 (or 73%) of the variation in HSPA rates among the 245 high schools (Appendix C-2).

Again, as with the analysis of test scores by school districts, community inputs are overwhelmingly dominant, accounting for over nine-tenths of the explained variation in both graduation rates (Appendix B-3) and HSPA pass rates (Appendix C-3).

³⁴ The average of the “cohort-adjusted graduation rate” for 2010-11 and 2011-12.

Most interesting, however, whereas Free Meal percentage almost totally absorbed any effect of the Reduced-price Meals percentage and the Black and Hispanic percentages at the school district level, at the individual high school level

- The Reduced-Price Meals percentage makes a major contribution independent of the Free Meal percentage, accounting for 18% and 21% of the explained variations in graduation rates and HSPA pass rates, respectively, and with a *positive* sign; *within the context of the multi-variable regression*, a higher percentage of Reduced-price Meal students contributes to higher graduation rates and HSPA pass rates; and,
- The percentage of Black students becomes a more negative factor, particularly with regard to HSPA pass rates, than is the percentage of Hispanic students.

A probable explanation for why such is the case will be addressed below after a discussion of the impact of specialized high schools in larger city school districts.

2.8 Specialized High Schools: Success Stories (with a big asterisk*)

At first glance American History High School in Newark is doing fabulously well. With an enrollment of 89% FARM students and 95% African American and Hispanic students, American History High is projected by the 245 high school model to graduate only 77% of its students. Yet over the past two years the graduation rate from University High School was 96%!

In fact, six other Newark high schools all had significantly higher graduation rates than would be projected based on their high-FARM/ high-minority student bodies.

Yet, counterbalancing that record of achievement, two of Newark's high schools had significantly worse graduation rates than projected based on their student body characteristics. In fact, with a projected graduation rate of 66% Barringer High did worse – a 44% actual graduation rate – than American History High did better.³⁵

That pattern is repeated (as shown in Table 5) in each of North Jersey's city school districts large enough to maintain multiple high schools.

- Jersey City's excellent Dr. Ronald McNair Academy High School is counterbalanced by Henry Snyder High School;
- Paterson's exceptional International High School is more than offset by Academy High School;
- Elizabeth's Alexander Hamilton Preparatory Academy is offset by the John E Dwyer Tech Academy.
- The graduation rates of 22 of these 30 schools, or 73%, are at least one standard deviation (SE) better or worse than projected; in other words, barely one-quarter of these four city's high schools perform as expected. By contrast, 88% of the other 215 high schools (excluding these 30 schools)

³⁵ For the statistically minded, American High performed a little short of 3 standard deviations (or standard errors/SE) better while Barringer High performed over 3 standard deviations (or standard errors/SE) worse than projected.

have graduation rates within one standard deviation of their projected level; almost nine out of ten perform as expected.

- It is certainly possible that the “specialized” high schools (e.g. Newark’s American History, Arts, University, et al.) have much more effective faculty than the “regular” high schools (e.g. Newark’s West Side and Barringer). Given the “barbell” pattern that is evident within the four big city districts, however, (13 overachieving high schools, 9 underachieving high schools with only 8 high schools in the middle), it is probable that the more motivated, more academically skilled students are systematically drawn to the “specialized” high schools and not attending the “regular” high schools regardless of the socioeconomic backgrounds of these better students. Most telling, within Newark, for example, the FARM rate of the seven overachieving high schools is higher (84%) than is the FARM rate of the two underachieving high schools (73%).
- Thus, in light of the “barbell” pattern, we might consider the four big city school districts as “bifurcated school districts.”
- Table 2.13 lists the results for all 30 high schools in the four big city school districts. Overachieving high schools are italicized (e.g. *University (Newark)*) while underachieving high schools are boldfaced (e.g. **West Side (Newark)**).

Table 2.13 FARM, Minority, and graduation results for all 30 high schools in the four big city school districts. Overachieving high schools are italicized (e.g. *University (Newark)*) while underachieving high schools are boldfaced (e.g. **West Side (Newark)**)

High school	Percent FARM	Percent Minority	Projected Grad Rate	Actual Grad Rate	Statistical status
<i>American History (Newark)</i>	89%	95%	77%	96%	2 SE better
<i>Arts (Newark)</i>	75%	92%	79%	95%	2 SE better
<i>University (Newark)</i>	81%	97%	80%	95%	2 SE better
<i>Vocational (Newark)</i>	89%	99%+	71%	84%	1 SE better
<i>Technology (Newark)</i>	90%	89%	81%	94%	1 SE better
<i>Central (Newark)</i>	87%	99%+	69%	80%	1 SE better
<i>Science (Newark)</i>	75%	75%	88%	97%	1 SE better
Weequahic (Newark)	85%	100%	71%	77%	within SE
Malcolm X Shabazz (Newark)	75%	100%	65%	68%	within SE
East Side (Newark)	73%	66%	75%	76%	within SE
West Side (Newark)	77%	99%+	70%	57%	1 SE worse
Barringer (Newark)	69%	99%	66%	44%	3 SE worse
<i>McNair Academy (Jersey City)</i>	44%	42%	86%	99%	1 SE better
<i>James J Ferris (Jersey City)</i>	59%	79%	67%	78%	1 SE better
Liberty (Jersey City)	65%	84%	74%	78%	within SE
William L Dickinson (Jersey City)	67%	63%	70%	70%	within SE
Lincoln (Jersey City)	65%	95%	65%	52%	1 SE worse

Henry Snyder (Jersey City)	74%	92%	65%	51%	1 SE worse
<i>International (Paterson)</i>	72%	95%	68%	91%	3 SE better
<i>Rosa Parks Arts (Paterson)</i>	85%	98%	74%	97%	3 SE better
<i>Government & Public Admin (Paterson)</i>	76%	99%	68%	75%	1 SE better
<i>Information Technology (Paterson)</i>	73%	99%	69%	67%	within SE
<i>Hospitality & Culinary Arts (Paterson)</i>	73%	99%	65%	60%	within SE
Academy High (Paterson)	75%	92%	68%	32%	5 SE worse
<i>Alexander Hamilton Preparatory (Elizabeth)</i>	88%	87%	75%	96%	3 SE better
Elizabeth (Elizabeth)	82%	81%	92%	86%	within SE
T A Edison Career Tech (Elizabeth)	88%	94%	71%	62%	1 SE worse
Adm. W F Halsey Leadership (Elizabeth)	87%	93%	68%	57%	2 SE worse
T Jefferson Arts Academy (Elizabeth)	85%	92%	68%	53%	2 SE worse
John E Dwyer Tech Academy (Elizabeth)	89%	93%	68%	52%	2 SE worse

Eliminating these 30 sharply “bifurcated” high schools in the four big city districts and just running our regressions against the remaining 215 high schools throughout the rest of North Jersey produces the following results:

- The explanatory factor is raised from 0.664 (or 66%) to 0.748 (or 75%) for graduation rates.
- The explanatory factor is raised from 0.734 (or 73%) to 0.790 (or 79%) for HSPA pass rates (and would undoubtedly be higher if more than a single year’s test scores were available).
- Free meals percentage continues to be the primary, but negatively signed, influence on both graduation rates and HSPA pass rates.
- Reduced-price Meals continues to be an important, but, within the context of the seven-input regression, positively signed, influence on both outcomes. It verges on statistical significance.
- Hispanic percentage is not statistically significant but, within the context of the seven-input regression, it is positively signed for both outcomes.
- Black percentage is negatively signed for both outcomes and just misses statistical significance with regard to HSPA pass rates. This suggests that there may be a “blackness factor” somewhat independent of the other community inputs.
- The four community inputs account for 0.730 of the 0.748 correlation for graduation rates and 0.777 of the 0.790 correlation for HSAP pass rates. The contribution of the three school inputs is almost negligible.

2.9 Charter Schools and County Vocational Schools

- This pattern of probable self-selection of more motivated, more academically skilled students gravitating towards certain schools of choice probably helps explain excellent results for two groups of high schools not covered in the 245 high school sample
- Eight charter high schools in Newark, Hoboken, Jersey City, Paterson, Plainfield and Middlesex and Monmouth counties. As a group, they average 58% FARM and 91% minority and would be projected to graduate 77% of their students. However, these eight graduated an average of 90% of their students. (No expenditure per student data are available; however, the charter schools did have somewhat smaller class sizes [12.4 students per teacher] compared with the 245 public high schools [14.1 students per teacher]).
- Thirty-two (32) vocational high schools in the 12 county-wide vocational school districts (all except Hunterdon County). These county vocational high schools command considerably more resources, averaging \$17,297 per student compared with \$14,479 for the 30 regional high school districts and \$13,110 for the 199 class 3 local school districts. However, within this group are great disparities. Bergen County allocates \$24,697 per student compared with Union County's allocation of \$10,948. Their student bodies are similarly disparate. Eleven of the schools have less than 10% FARM students while four have more than 75% FARM. Similarly, though vocational schools generally have more racially mixed enrollments than the typical "regular" high school, eleven have less than 10% minority students while seven have more than 75% minority students. These schools clearly offer very specialized curricula and are attended only by those students who want to be there. Thus, as a group, these county vocational schools graduate almost 97% of their student bodies; only Middlesex County Vocational in East Brunswick (82%) and in Piscataway (77%) and Essex County Vocational in West Caldwell (83%) fall significantly short of that standard.
- Thus, self-selection by more highly motivated, more academically skilled students (or by their parents) probably accounts substantially for the higher than projected graduation rates of the specialized city high schools, charter high schools, and county vocational schools. There may also be factors of faculty excellence, superior curriculum, etc. that are beyond the resources of this report to assess. However, what could account for the emergence of minority status, particularly the percentage of Black students, as a more prominent factor at the high school level than at the district level (which is dominated by elementary and middle schools)?

2.10 The Relevance of Race and Ethnicity

- Numerous studies have shown that students are more influenced by their peer groups as they enter adolescence than at earlier ages. (For example, this phenomenon seems to appear in Dr. Heather Schwartz's research as discussed below.) Also, many sociologists have postulated so-called "oppositional cultures" among a significant portion of African American and Hispanic teenagers.

However, setting aside such speculation, the key to the "blackness factor" may lie in two facts:

- Many educators know that test scores for very low-income students who qualify for “free” lunches (up to 130% of the federal poverty level) are measurably lower than test scores for slightly better off, low income students who qualify for “reduced-price” lunches (from 130% to 185% of the federal poverty level). However, state education departments rarely distinguish between the two groups, particularly in reporting test scores and graduation rates by sub-group.
- There is probably a greater proportion of Black school children in extreme poverty circumstances than there is of Hispanic children – or certainly without the support of two parents.

Table 2.14 examines family structure by race statewide in New Jersey.

Table 2.14 New Jersey: Income and Poverty by Race in 2010

	White	Asian	Black	Hispanic
Families with children poverty rate	5.7%	6.2%	24.2%	23.4%
Percent of families with children – married couples	82.2%	91.3%	41.5%	58.3%
Percent of families with children – single mothers	13.3%	6.2%	49.6%	31.5%

While the poverty rate of Black and Hispanic families with children are very similar, there is a much higher proportion of Black single mothers with children (49.6% of all Black families with children) than of Hispanic single mothers with children (31.5%). Being the child of a single mother is likely to place a child within the lowest income groups even below the poverty threshold.

Moreover, the odds are five out of nine that the Black school child has only a mother at home (or at least another female relative without a husband present) whereas the odds are almost two to one that the Hispanic school child will have both parents present. That generally assures a somewhat higher income (though often still below the FARM threshold) and the support and encouragement of two parents for the student.

These conditions suggest that, with the seven-input analysis, Hispanic students are more likely to be more proportionally represented in the Reduced-price Meal category (which has a positive influence) than Black students. Conversely, Black students are more likely to be more overrepresented in the Free Meal category (which has a negative influence) than Hispanic students.

These two factors may account for the “blackness factor” as it shows up in the analyses of school district and high school performance.

2.11 Does Money Matter?

All the regression analyses above show that total expenditures per student and instructional costs per student (and the related student-teacher ratios) have no statistically significant effect on test score decile rankings (for school districts) and graduation rates and HSPA pass rates for high schools? Does money matter at all?

2.11.1 The case for “Yes:”

Education is about much more than can be measured by standardized state multiple choice exams in math, language arts, and science. “Our national leaders,” Richard Rothstein writes, “seem consistently to have wanted public education to produce satisfactory outcomes in eight broad categories [for which] we should hold public schools and other institutions of youth development accountable.” (The parentheses reports the relative importance attached by the general public, school board members, and state legislators, respectively, to each goal):³⁶

- *Basic academic knowledge and skills*: basic skills in reading, writing and math, and knowledge of science and history (19%, 22%, 24%).
- *Critical thinking and problem solving*: the ability to analyze information, apply ideas to new situations, and develop knowledge using computers (15%, 18%, 18%).
- *Appreciation of the arts and literature*: participation in and appreciation of musical, visual, and performing arts as well as a love of literature (8%, 9%, 9%).
- *Preparation for skilled employment*: workplace qualification for students not pursuing college education (11%, 11%, 11%).
- *Social skills and work ethic*: communication skills, personal responsibility, and the ability to get along with others from varied backgrounds (14%, 12%, 11%).
- *Citizenship and community responsibility*: public ethics, knowledge of how government works; and participation by voting, volunteering, and becoming active in community life (10%, 11%, 12%).
- *Physical health*: good habits of exercise and nutrition [including participation in individual and team sports] (12%, 9%, 9%).
- *Emotional health*: self-confidence, respect for others, and the ability to resist peer pressures to engage in irresponsible personal behavior (11%, 8%, 7%).

Though learning the Three R’s is the top ranked goal of the general public, school board members, and legislators alike, there are many other skills that public schools are expected to impart. Yet social studies and science, art and music, and physical education – above all, to the extent that they involve participation in extracurricular activities – are the topics most often sacrificed by school districts that are fiscally-stressed or, as high FARM school districts, struggle to meet the goals set by standardized tests in reading, writing, and math.

Table 2.15 summarizes the findings of study examining the impact on the allocation of instructional time within school districts with at least one school sanctioned by the federal No Child Left Behind (NCLB) between 2001 and 2007.³⁷

³⁶ Richard Rothstein et al. *Grading Education: Getting Accountability Right*. Economic Policy Institute/Teachers College Press: Washington, DC and New York (2008), pp.13-14, 43.

³⁷ Rothstein, op. cit., p. 49, based on Jennifer McMurrer. *Choices, Changes, and Challenges: Curriculum and Instruction in the NCLB Era*. Center on Education Policy: Washington, DC (December 2007), table 4.

Table 2.15 Allocation of instructional time within school districts with at least one school sanctioned by the federal No Child Left Behind (NCLB) between 2001 and 2007

Subject Area	Average weekly change in instructional time (minutes)
English	+ 183
Math	+ 86
Social Studies	- 90
Science	- 94
Arts and Music	- 61
Physical education	- 57
Recess	- 60

In a “little boxes” state like New Jersey, in particular, high FARM school districts would also be severely fiscally stressed if dependent entirely on their local tax base. Appendix D lists, in 2009, the assessed valuation per capita of the 28 highest FARM districts (i.e. above 60% FARM) – which include 18 of the 21 former *Abbott* districts – and the 29 lowest FARM districts (i.e. those under 20% FARM). The highest FARM group averaged \$91,549 and of the lowest FARM group, \$276,705 – three times as much! As a consequence, in their struggle to meet needs, the poorest communities have tax rates about twice the tax rates of the wealthiest communities. Even in making twice the local effort, many such districts could barely keep their schools open within minimum offerings.³⁸

With the extra challenges that high FARM school districts face, the federal and state aid received – even when targeted on basic classroom instruction and supportive services for FARM students – allows these fiscally challenged school districts to provide art and music, physical education and sports and other extracurricular activities that are a vital part of the educational experience.

Thus, more money is vital for fiscally-stressed, poverty-impacted school districts’ ability to provide a balanced and complete educational experience – one that is hardly measured by the current standardized tests.

2.11.2 The case for “No:”

To repeat, in none of the multi-variable regressions conducted on North Jersey’s schools do the school inputs ever have a statistically significant effect on standardized test scores or high school graduation rates. It’s a hard notion for educators, legislators, and parents to grasp that money may not matter too much or, at least, that money cannot overcome concentrated poverty in public schools. As an alternative to statistical analyses that many cannot relate to, Appendix E lists the 25 North Jersey school districts with the highest total expenditures

³⁸ For the 2011-12 school year Camden City School District received \$7,449,009 from the local tax levy or 2.2% of its total revenues of \$332,782,051, sufficient for *four days’* operations in a minimum 180-school day year. State government provided 84.9% of the revenues and the federal government 7.1% with the balance from various fees generated and inter-fund transfers. Camden City is the extreme case in New Jersey of abandonment of a former thriving industrial city by industry and middle-class residents.

per student (13 of which were *Abbott* districts) and the 25 districts with the lowest total expenditures per student, their accompanying FARM percentages and test score deciles. The results are summarized in Table 2.16.

Table 2.16 FARM percentages by expenditure level

	Average total dollars per student 4-yr average	Average FARM percent in 2010-11	Average test score decile 2-year average
25 highest expenditure districts	\$16,705	50.0%	4.5
25 lowest expenditure districts	\$10,716	36.5%	5.2
index: highest districts to lowest districts	156	137	87

In short, the 25 highest expenditure districts spent over 50% more than the lowest expenditure districts spent per student but got lower test results. The difference was that the highest expenditure districts had substantially more FARM students than the lowest expenditure districts had. Examining Appendix C just reinforces the conclusions drawn from the analyses in Parts 2.6 and 2.7.

2.12 New Jersey in Multi-State Context

How do North Jersey's school district trends measure up against schools in other states and metropolitan areas? Unfortunately, up-to-date school segregation indices have not yet been calculated for school districts across the nation. We must use decade-old data. One study calculated segregation indices treating all elementary schools as if they were all part of one statewide system for every state. Table 2.17 summarizes the rankings of the five most segregated "statewide" school systems.

Table 2.17 Most Segregated "Statewide" School Systems in 1999 (segregation index: 100 = total apartheid; 0 = total integration)

Black/White segregation index		Hispanic/White segregation index		FARM/non-FARM segregation index	
Michigan	84.4	New York	78.9	New Jersey	62.4
Illinois	81.6	Illinois	75.1	New York	59.4
Wisconsin	80.8	Rhode Island	73.4	Connecticut	57.9
New York	80.0	Pennsylvania	73.3	Michigan	55.2
New Jersey	77.3	New Jersey	72.7	Rhode Island	53.5

Thus, a decade ago, New Jersey ranked as the 5th most segregated state for Black students, the 5th most segregated for Hispanic students, and *the* most segregated by income (FARM vs. non-FARM). It should be noted that each of the most segregated states listed is a "little boxes" state – that is, states that are divided into myriads of cities, villages or boroughs, towns and townships and myriads of school districts (despite the fact that several contain very large principal cities, such as New York City, Chicago, and Philadelphia). Table 2.18 shows

the number of school districts and their average enrollment for the little boxes states in table 2.17 and for selected “Big Box” states (often with county-wide school districts).

There are two key consequences of being a little boxes state. First, the governance structure intensifies racial, ethnic, and economic school segregation; the generally unspoken mission of most little boxes school boards and little boxes town councils is “to keep our schools (or our town) just the way they are for people just like us” – whoever “us” happens to be. By contrast, the leadership of Big Box school districts and Big Box cities (usually expanding through annexation or city-county consolidation) tend to be more inclusionary in policies and practices because they represent broader, more diverse constituencies.

Table 2.18 School Districts and Average Enrollment in Selected States

State	Districts	Students	Average
Little Boxes			
New Jersey	625	1,387,000	2,219
Connecticut	166	564,000	3,398
Illinois	912	2,097,000	2,299
minus Chicago	911	1,724,000	1,892
Michigan	579	1,618,000	2,794
New York	716	2,766,000	3,863
minus New York City	715	1,724,000	2,411
Pennsylvania	515	1,762,000	3,421
minus Philadelphia	514	1,584,000	3,082
Rhode Island	36	144,000	4,000
Wisconsin	444	872,000	1,963
Big Box			
Florida	66	2,635,000	27,737
Maryland	24	848,000	35,333
North Carolina	100	1,477,000	14,770

Second, in little boxes states each local school board and local town council has too limited an arena for action to affect multi-jurisdictional trends by actions solely within its jurisdictional boundaries. Newark Public Schools, North Jersey’s largest school district, represents only 11% of the students of its five-county metro area with its 119 independent school districts. By contrast, Wake County (NC) Public Schools represents 78% of the students in its three-county metropolitan area and WCPS has only two neighboring, county-wide districts to deal with.

Thus, in Big Box regions, education reform movements can focus productively on their Big Box school districts. In little boxes regions like New Jersey’s, to have any regional impact, reformers must target state government (state legislatures, state courts, or state education departments).

2.13 Summing Up Chapter on Trends

The New Jersey Department of Education has long recognized the importance for school performance of “what the community is” (the District Factor Group, or DFG, system) or “who the kids are” (the Peer School Performance, or PSP system). School-by-school student profiles are determined primarily by neighborhood housing patterns. As in most states, in North Jersey residential segregation of Blacks has been declining steadily, but economic segregation has been increasing. Though North Jersey’s Hispanic population has grown substantially, residential segregation for Hispanics has decreased slightly. For all three groups, however, the degree of segregation remains among the nation’s highest.

These housing patterns are mirrored by school enrollment patterns. Indeed, school segregation, abetted by North Jersey’s fragmentation into 341 “little boxes” school districts, is more acute than residential segregation for all three groups. Great disparities exist, however, in enrollment patterns. Over the past two decades, among 199 school districts with more than 1,000 students, the 21 high FARM-*Abbott* districts experienced relatively small increases in FARM students (63% to 73%) and minority students (74% to 82%). However, another 23 districts experienced such rapid increases in FARM students (30% to 59%) and minority students (46% to 73%) that they would be classified as *Abbott* districts today if that court-designated status still was operative. Diversity increased substantially in another 76 more inclusive districts where their FARM and minority percentages basically doubled to 23% and 27%, respectively. However, little racial or economic change is seen in 79 more exclusive districts where by 2010-11 the FARM enrollment averaged 4% and minority enrollment averaged 9%. Smaller districts (less than 1,000 students) were similarly not very diverse, averaging 14% FARM and 15% minority students.

These patterns are vitally important because of the close correlation between test scores and graduation rates and “community inputs” as contrasted with “school inputs.” At the school district level community inputs account for 84% of the variation in test scores (FARM and minority percentages) and school in-puts (total expenditures and classroom expenditures per student, student-teach ratio) account for only 3%.

The correlation ranges from 0.87 at the school district level, 0.66 to 0.74 for 245 high schools, and 0.75 to 0.79 for 215 high schools (eliminating 30 high schools in four “bifurcated” big city districts). These are all very high correlations for anything dealing with social phenomena and institutions. However, that leaves from 0.13 to 0.34 of the variation in test scores or graduation rates “unexplained.” What might explain the gaps?

First, there are undoubtedly other relevant influences that aren’t covered by the seven factors provided by our data sources.

Second, having more multi-year data available to average would smooth out variability and establish more central tendencies. For example, for 199 school districts, averaging test score deciles for two years rather than just using 2010-11 scores increased the correlation from 0.806 to 0.841.

Finally, as noted above in footnote 30, a high degree of variability characterizes individual student test scores. Most probably, no set of independent variables would ever produce a correlation exceeding 0.95 with student test scores.

3. Key National Educational Research

Part II will present three research studies to provide a framework for examining various state policy initiatives:

- The “Coleman Report (1966)” a path-breaking study carried out by Dr. James Coleman, a famed sociologist, for the U.S. Office of Education;
- “Housing Policy *Is* School Policy (2010)” by Dr. Heather Schwartz, considered to be the definitive study of the impact of mixed-income classrooms on the education of very low-income children; and
- “Understanding Virginia’s Report Card: Why Standardized Test Scores Vary from One Community to Another (1997)” by David Wheat for the Thomas Jefferson Institute for Public Policy.

3.1 The Coleman Report

In 1966, sociologist James Coleman released his path-breaking study, *Equality of Educational Opportunity*. Sponsored by the then-US Office of Education, Coleman and his research team examined pupil, family, and school characteristics for over a million public school children in search of factors that were associated with academic success. It was an era when mainframe computers and punch cards (then the cutting edge technology) were permitting ready analysis of vast amounts of data for the first time.

The Coleman Report concluded that the socioeconomic characteristics of a child and of the child’s classmates (measured principally by family income and parental education) were the overwhelming factors that accounted for academic success. Nothing else – expenditures per pupil, pupil-teacher ratios, teacher experience, instructional materials, age of school buildings, etc. – came close. “The educational resources provided by a child’s fellow students,” Coleman summarized, “are more important for his achievement than are the resources provided by the school board.” So important are fellow students, the report found, that “the social composition of the student body is more highly related to achievement, independent of the student’s own social background, than is any school factor.”³⁹

The central role of the Coleman Report in understanding public education in America has been underscored by journalist Joanne Barkan’s review of four decades of educational research.

Research shows that teachers are the most important *in-school* factor determining students’ academic performance. But they are not the only in-school factor: class size and the quality of the school principal, for example, matter a great deal. Most crucially, *out-of-school* factors—family characteristics such as income and parents’ education, neighborhood environment, health care, housing stability, and so on—count for twice as much as all in-school factors. In 1966, a groundbreaking government study—the “Coleman Report”—first identified a “one-third in-school factors, two-thirds family characteristics” ratio to explain variations in student

³⁹ Quoted in Richard D. Kahlenberg. *All Together Now: Creating Middle-Class Schools through Public School Choice*. Brookings Institution Press: Washington, DC. (2001), page 28. Kahlenberg’s 33 pages of footnotes to chapters 3 and 4 catalogue most major studies on the effects of racial and economic school integration.

achievement. Since then researchers have endlessly tried to refine or refute the findings.⁴⁰ Education scholar Richard Rothstein described their results: “No analyst has been able to attribute less than two-thirds of the variation in achievement among schools to the family characteristics of their students” (*Class and Schools*, 2004). Factors such as neighborhood environment give still more weight to what goes on outside school.⁴¹

3.2 Housing Policy /s School Policy

In 2010, Dr. Heather Schwartz published what is, to date, the definitive study of the impact of economic integration on the education of low-income students. Based on her doctoral dissertation for Columbia University, Dr. Schwartz’s report for The Century Foundation summarized her detailed research into the academic performance of public housing children in the Montgomery County (Maryland) Public Schools.⁴²

The USA’s eleventh highest income county located adjacent to the northwest side of Washington D.C., Montgomery County has almost one million residents living within its 495 sq. mi. (140 sq. mi. of which are permanently protected farmland, parks, and natural areas). Over the past four decades, Montgomery County has become very diverse, evolving from a county that was 92% White and 8% minority in 1970 to a county that by 2011 was 48.4% White, 17.5% Hispanic, 17.1% Black, 14% Asian, and 3% mixed race and others.

Montgomery County is the quintessential “Big Box.” There are only three modest-sized cities and a little over a dozen small towns and villages. County government itself is the general local government for over 85% of the county’s population and exercises land use planning and zoning powers over more than 93% of the county’s land area. As throughout Maryland, Montgomery County Public Schools (MCPS) is a unified, county-wide school district. With 146,497 students in 2011-12, MCPS is the USA’s 17th largest school district and one of its most highly rated.⁴³ It is now a majority-minority system with an enrollment that is 34% White, 21% African American, 26% Hispanic, 14% Asian, and 5% other. In 2011, its FARM rate was 33% (about the same as New Jersey’s FARM rate statewide).

Almost at the outset of demographic transformation, the Montgomery County Council adopted the Moderately Price Dwelling Unit (MPDU) policy, the USA’s first inclusionary zoning ordinance. Under the policy any new housing development of a certain minimum size (originally 50 units, now 20 units) was mandated to provide between 12.5% and 15% of its units that would be affordable for families below 65% of the county’s Area Median Income (the bottom one-third of the county’s income scale. Furthermore, the county-wide Housing Opportunities

⁴⁰ See Richard D. Kahlenberg. *All Together Now: Creating Middle-Class Schools through Public School Choice*. Brookings Institution Press: Washington, DC. (2001). Kahlenberg’s 33 pages of footnotes to chapters 3 and 4 catalogue most major studies on the effects of racial and economic school integration.

⁴¹ Joanne Barkan, “Firing Line: the Grand Coalition against Teachers,” in *Dissent: a Quarterly of Politics and Culture* (June 29, 2011), can be accessed at http://www.dissentmagazine.org/online_articles/firing-line-the-grand-coalition-against-teachers

⁴² The report, “Housing Policy Is School Policy,” can be accessed at <http://tcf.org/publications/pdfs/housing-policy-is-school-policy-pdf/Schwartz.pdf>.

⁴³ MCPS received a Malcolm Baldrige National Quality Award in 2010. It reports a 90% graduation rate, 65.9% Advanced Placement participation rate, 1637 average combined SAT score for the class of 2011, and 34 National Blue Ribbon Schools (out of 200 total schools).

Commission was directed to purchase or rent one-third of the MPDUs for public housing eligible families (the bottom quarter of the income scale).

Thus, for almost four decades new housing developments have been 85% market rate, 10% affordable for low-income families, and 5% owned by the public housing authority for very low- and extremely-low income families. As a result, public housing families in Montgomery County don't live in projects but in apartments and townhouses integrated with middle- and upper-middle class neighbors throughout the county.

Dr. Schwartz secured the full cooperation of Montgomery County Public Schools and the Housing Opportunities Commission, collecting detailed information on 858 public housing children's family background, demographics of their fellow students at the classroom level, and standardized test score performance for up to seven years.

Most graphic was the demonstration of results between public housing children who attended "Red Zone" schools and "Green Zone" schools. Several years before, MCPS leadership had recognized that many low-income children in higher FARM schools were not being effectively educated. Though several screening measures were applied to categorize schools, in effect, schools with over 20% FARM were classified as "Red Zone" schools. Schools with under 20% FARM were classified as "Green Zone" schools. MCPS poured additional resources in Red Zone schools: a 20% boost in expenditures per student, full-day kindergarten, smaller class sizes in the early grades, increased teacher training, and a balanced literary curriculum. Green Zone schools received no additional help: public housing children would simply be attending schools surrounded by a greater proportion of classmates from higher income families with more highly educated parents than they would encounter in Red Zone schools.

The results of Dr. Schwartz's exhaustive statistical analyses are summarized by the two graphics in Appendix F. After slightly closing the gap with district-wide performance levels in math and reading in the early years, as the public housing children in Red Zone schools approached their teenage years, they began falling farther and farther behind. After seven years the gaps were greater than when the public housing children in Red Zone schools began in spite of all the extra resources expended by MCPS.

By contrast, the public housing children in Green Zone schools steadily closed the performance gaps in math and reading. In fact, as they approached their teenage years (and were presumably more influenced by peer example), their performance levels soared.

Dr. Schwartz summarized her findings thus:

Although most education research attempts to quantify the effects of various promising school-based reforms for low-income children, many of which Montgomery County has embraced—for example, full-day kindergarten, smaller class sizes in early grades, a balanced literacy curriculum, increased professional development—the results from this study suggest that the efforts to enroll low-income children in low-poverty schools has proven even more powerful. Although the county's inclusionary zoning policy occurs outside the school walls, it has had a powerful educational impact, even as measured by the most demanding but perhaps most meaningful test. Namely, that over the course of elementary school, *highly disadvantaged children with access to the district's*

lowest-poverty neighborhoods and schools began to catch up to their non-poor, high-performing peers, while similar disadvantaged children without such access did not [emphasis added].

3.3 “Understanding Virginia’s Report Card”⁴⁴

“Understanding Virginia’s Report Card” is not important for its findings so much as for its provenance. It was commissioned by the Thomas Jefferson Institute for Public Policy. Organized in 1996, the Institute “at the time, was the only state or local government focused public policy foundation based on a philosophy of limited government, free enterprise and individual responsibility in [Virginia].” In short, the Thomas Jefferson Institute is a libertarian “think tank” – part of a network of “little Cato Institutes” that, affiliated formally with the Washington DC-based State Policy Network, now has 59 members in all 50 states.

The analysis was done by Wheat Resources, Inc., an independent consulting firm whose principal, David Wheat, had received a Master’s Degree in Public Policy from Harvard University’s Kennedy School. The report used standard least-squares linear regression analysis; the statistical procedures are generally solid.

The report covered data for Virginia’s 132 school districts, ranging in size from Highland County Public Schools (205 students in 2011-12) to Fairfax County (180,582 students in 2011-12).⁴⁵ The dependent variable was the average test scores for grades 1, 4, 6 and 8 in several subject matters over six years (1991-96). Thus, a substantial degree of random variability was averaged out.

The independent variables were grouped into two categories:

- “*Factors beyond the control* of school officials include the socio-economic characteristics of the community and student population. These include the general education level of the locality, the economic status of the students, and the community’s cultural diversity as reflected by the percentage of racial and ethnic minorities.... The most statistically significant indicator of the economic conditions in the students’ homes and community was the percentage of students in the division that qualify for free and reduced price lunches.”
- “*Factors within control* [of school officials] are those due to the policies of the school division. A list of such policies would include, for example, teachers’ salaries, pupil-teacher ratios, attendance rates, promotion policies, and course offerings, to cite just a few.”

The findings: “Multiple regression analysis revealed that, together, SES [i.e. socioeconomic status] and spending factors accounted for 77 percent of the variation in test scores between school divisions. When analyzed with spending factors only, *socio-economic differences between localities accounted for 69 percent of the test score variation [emphasis added]. The remaining 8 percent of the explanation was due to differences in spending on instruction and transportation [emphasis in the original].*

⁴⁴ Report can be accessed at http://www.thomasjeffersoninst.org/pdf/articles/va_report_card.pdf

⁴⁵ In “Big Box” Virginia, only 8 of 132 school districts had less than 1,000 students in 2011-12.

Thus, in our terminology, 69 percentage points of the test score variation (which was 0.77, or 77%) were attributable to “community inputs” and 8 percentage points were attributable to “school inputs.” The remaining 0.23, or 23%, of the variation was unexplained (and probably about 0.05, or 5%, is unexplainable because of the degree of random variability in student test scores that cannot be totally averaged out – see page 52 and footnote 30 on page 28).

Moving away from concentrating on expenditures, Wheat found that other school inputs (combined with the community inputs) could push the correlation up to 0.82. These were a measure of higher academic standards that Wheat devised; higher student attendance rates; more teachers with master’s degrees; lower pupil-teacher ratios in 1st grade; and higher proportions of students taking 8th grade algebra.

In summation, Wheat projects that “nearly one third of the variation in test scores was accounted for by factors under the control of state or local officials.”

Implications of national research: Going forward, Together North Jersey must decide if its plans and recommendations should focus on the 69 percent (community inputs) or on the 8 percent (school inputs) – in New Jersey’s context, on the 84 percent or on the 3 percent.

4. Planning, Policy, and Implementation Context

State policies can be largely characterized as targeted on school inputs and community inputs.

4.1 Policies Targeted on School Inputs

School finance: All the regression analyses above show that total expenditures per student and instructional costs per student (and the related student-teacher ratios) have no statistically significant effect on test score decile rankings for school districts and graduation rates and HSPA pass rates for high schools. Does money matter at all?

Yes. As argued in section 2.11 above, education is about much more than can be measured by standardized state exams in math and language arts. Though learning the Three R’s is the top ranked goal of the general public, school board members, and legislators alike, there are many other skills that public schools are expected to impart. Yet social studies and science, art and music, and physical education – above all, to the extent that they involve participation in extracurricular activities – are most often sacrificed by school districts that are fiscally-stressed or, as high FARM school districts, struggle to meet the goals set by standardized tests in reading, writing, and math.

New Jersey’s school districts rely primarily on local property taxes and there are tremendous disparities among school districts. In 2009, the assessed valuation per capita of the highest FARM group averaged \$91,549 and of the lowest FARM group, \$276,705 – three times as much! As a consequence, in their struggle to meet needs, the poorest districts have tax rates about twice the tax rates of the wealthiest districts.

In 2008-09 New Jersey state government provided 35.5% of school district revenues – sixth lowest in the country and far below the 47% average of state school aid nationally. Yet, within New Jersey’s “little boxes” structure, state school aid is the only mechanism that can address fiscal imbalances. Any meaningful, locally-initiated regionalization of local school finance is politically inconceivable in New Jersey at the present time.

In *Abbott v Burke* (1990) the state Supreme Court directed the state to provide hundreds of millions of dollars annually for the operations of 31 high need urban districts and billions of dollars in school construction funds. Over the last two decades, however, several dozen older suburbs experienced major increases in FARM students without receiving any additional state aid.

The School Funding Reform Act of 2008 (SFRA) was designed to provide more compensatory state aid by targeting all funding to the support of FARM students in whatever school district they attended. Though all *Abbott* districts had very high levels of FARM students and would continue to receive major state aid, SFRA “held harmless” the *Abbott* districts for the first three years, guaranteeing that, under the new SFRA formula, the *Abbott* districts would not receive less than they would have received under the court-ordered distribution.

Yet, first, the Great Recession, reducing state revenues, and then interpretations of the SFRA formula by the current NJDOE have underfunded higher FARM districts by millions of dollars a year. Current conditions are best summarized by the Education Law Center, litigants of *Abbott v. Burke*.

“Governor Christie’s proposed FY14 school aid budget drastically underfunds schools by ignoring the essential provisions of the School Funding Reform Act (SFRA). According to the Office of Legislative Services’ previously released estimates of full funding under SFRA, the Governor proposes underfunding schools in FY14 by approximately \$1.2 billion.

“For the second year in a row... the Governor has modified the SFRA by reducing the formula’s “weights,” or the additional funding for at-risk students and English language learners. In addition, the Governor’s budget uses “average daily attendance” (ADA) to adjust enrollment counts, and “phases in” the year-to-year increases many districts are owed. Nearly all districts (545 out of 580) received less state aid under the Governor’s proposal than they would have if the SFRA were fully funded.

The failure to fund the formula affects districts across the state, but falls particularly hard on the state’s low- and middle-income districts. On average, the highest wealth districts have a funding gap of about \$500 per pupil, while the lowest wealth districts’ gap is twice that at \$1,000 per pupil. Similarly, districts with more poor and black and Hispanic students are more affected than wealthy districts and districts serving mostly white students.

The continuous underfunding is also leading to an increase, rather than a reduction, in the number of districts spending below “adequacy,” what the SFRA defines as the resources required to provide a “thorough and efficient” education. Due to increasing costs and the failure to provide districts with their state aid increases, the number of below adequacy districts has grown to 278. That’s 42 more districts than last year, and 79 more than in FY10, the year before Christie took office.

Not surprisingly, the below adequacy districts bear the brunt of the underfunding, losing out on a total of \$867 million, or an average of \$1,000 per pupil. Without the required levels of funding, these districts will be unable to provide the programs and services necessary to provide a quality education, especially for disadvantaged students.

The level of underfunding is staggering in some of the state's largest districts. Newark is underfunded by over \$50 million, while at the same time facing a \$56 million budget gap that will result in massive cuts to schools. Paterson is also losing out on \$50 million. Elizabeth and North Bergen should each be receiving an additional \$32 million in state aid, while Bayonne is entitled to an extra \$23 million.

Other smaller, low-wealth and below adequacy districts are receiving thousands of dollars less per student than SFRA requires. The two districts with the largest funding gaps on a per pupil basis are Woodlynne Borough, which should be receiving an additional \$4,580 per student, and East Newark, which is shortchanged by \$3,978. These two districts have student poverty rates nearing 90%, and have many students learning English or requiring Special Education services."

In all, the Education Law Center reports that SFRA will be underfunded by \$5.2 billion in Fiscal Years 2011, 2012, 2013, and 2014.

School reform: In the words of the NJDOE website,

"Governor Christie has outlined a package of reforms to improve New Jersey public schools by challenging the status quo and transforming a system that has fallen behind." His proposals are focused primarily on teachers with a "Reform Agenda [that] turns the current system inside out and finally puts effective, quality teaching ahead of seniority and lackluster results [by] prohibiting salary schedules or compensation policies that reward seniority alone; prohibiting the use of graduate degree accumulation as a basis, in and of itself, for salary increases, except in areas where graduate degrees have proven to be effective markers of improved teacher performance such as math and science; and granting schools and districts the flexibility to reward excellence in the classroom and to attract high-quality teachers to low-performing schools or hard-to-fill positions."

The Reform Agenda "expands opportunities available to teachers [by]:

"Establishing New Credentials and Career Ladders. "With the designations of 'Master Teacher' and 'Master Principal,' these new credentials will provide the opportunity for highly effective teachers to utilize their skills and experience in a variety of additional ways, including mentoring, professional development of peers, or founding a charter school.

"Expanding Opportunities to Receive Updated Certification. This plan will increase the number of alternate route programs for principals and update certification requirements to align with the attainment of skills needed to be an effective leader.

“Demanding Accountability and Results for New Jersey’s Children. The Christie Reform plan puts an end to policies that reward teachers who fail over teachers who succeed by measuring performance and paying higher salaries for it.

“Improving Teacher and Leader Effectiveness with Data-Supported Evaluations. Through executive order, Governor Christie will convene the Task Force on Teacher Effectiveness to define and evaluate teacher and leader effectiveness based on key guiding principles. The Task Force will be charged with recommending a system that elevates the role of student learning in evaluations and fairly and transparently assesses teacher and principal performance.

- The Task Force will develop a system of evaluations and definition of educator effectiveness based on multiple measurements of student learning that will comprise at least 50% of the evaluation.
- Evaluations will be developed with broad stakeholder input so the unique needs and circumstances of schools and districts are recognized. Evaluations will provide for locally selected, state-reviewed measurements of progress that are widely-recognized as relating directly to improvements in school climate, teacher effectiveness and student learning.
- The Task Force will be given flexibility to consider additional local input of other measurements of effectiveness for use in the evaluations.

“Ensuring Our Children Have Well-Prepared Teachers. Teacher preparation remains a national problem, but is especially serious in New Jersey’s teacher preparation programs. A 2009 study by the well-respected National Council on Teacher Quality gave New Jersey a grade of D for teacher preparation. Elementary teachers who do not possess a minimum knowledge of the subject matter continue to receive teaching certificates.

- Mandating that K-5 and P-3 grade teacher preparation programs administer tests in the science of reading and math knowledge, in addition to the Praxis test, as a requirement for teacher certification.”

Governor Christie appointed the nine-member Education Effectiveness Task Force in October, 2010. The Task Force submitted its 44-page report in March 2011 (<http://www.state.nj.us/education/archive/EE4NJ/report/>).

To the extent that the Governor’s education Reform Agenda requires legislative action, the legislature has not enacted any proposals to date.

Common Core Standards: The Common Core State Standards Initiative is a state-led effort coordinated by the National Governors Association Center for Best Practices and the Council of Chief State School Officers. According to the NJDOE website:

“The standards were developed in collaboration with teachers, school administrators, and experts, to provide a clear and consistent framework to prepare our children for college and the workforce.

“The NGA Center and CCSSO received initial feedback on the draft standards from national organizations representing, but not limited to, teachers, postsecondary educators (including community colleges), civil rights groups, English language learners, and students with disabilities. Following the initial round of feedback, the draft standards were opened for public comment, receiving nearly 10,000 responses.

“The standards are informed by the highest, most effective models from states across the country and countries around the world, and provide teachers and parents with a common understanding of what students are expected to learn. Consistent standards will provide appropriate benchmarks for all students, regardless of where they live.

“These standards define the knowledge and skills students should have within their K-12 education careers so that they will graduate high school able to succeed in entry-level, credit-bearing academic college courses and in workforce training programs. The standards:

- Are aligned with college and work expectations;
- Are clear, understandable and consistent;
- Include rigorous content and application of knowledge through high-order skills;
- Build upon strengths and lessons of current state standards;
- Are informed by other top performing countries, so that all students are prepared to succeed in our global economy and society; and
- Are evidence-based.”

On June, 2010, the New Jersey State Board of Education adopted the Common Core State Standards in Mathematics and English Language Arts. Forty-six states and DC have now adopted the Common Core State Standards.

4.2 Policies Targeted on Community Inputs

4.2.1 School-based programs

Interdistrict Public School Choice Program: According to the NJDOE website

“New Jersey's Interdistrict Public School Choice Program enables approved choice districts to enroll students who do not reside within their districts without cost to their parents. The program increases educational opportunities for students and their families by providing students with school options outside of their district of residence and giving parents the power to select a school program that best serves their child's individual needs.

“District participation in the program is optional. Once approved, the choice district designates the available seats in specific grades and programs that are open to choice students. Where choice options are available, any student who resides in New Jersey is eligible to apply.

“Each August, the NJ Department of Education approves new choice districts for the next school year. There are currently 109 approved Choice Districts for the 2013-14 school year.

“The Public School Choice Program benefits students and parents, as well as the choice districts. Choice programs might have smaller class sizes, increased instructional time, and a school culture more conducive to a student's success in school. Many choice districts have established specialized and innovative programs and courses that focus on areas such as art, music, foreign languages, and technology, and are open to students who demonstrate an interest in the special programs. Opening enrollment to students outside the district can bring in more students interested in taking advantage of these special programs and courses, allowing both the programs and students to grow and flourish.

“The state also has many small districts and schools that sometimes experience population shifts that result in budget crunches. Opening enrollment beyond the district's boundaries can alleviate the effects of these shifts and bring greater stability to operations, since choice students bring additional funding to the district. The addition of students with different backgrounds and perspectives from those of the district's resident students also can enrich the school community.”

The Choice Schools program began in 1992 when the legislature authorized children of school teachers who lived outside the district to attend without paying tuition the districts where their parents taught. In 1999 it was expanded to cover any student as a five-year pilot program that was limited to one Choice School in each county. By the pilot program's expiration, 900 students had been served in 15 of the state's 21 choice districts.

In 2010, the legislature created a permanent program, removing the former one school per county limitation to open the Choice School alternative to all school districts; out-of-district tuition and transportation costs for transferring students are paid by the sending district. Up to 10% of a sending district's students can participate, though covered transportation costs seem to be limited to 20 miles.

According to education blogger Laura of NJ Left Behind (June 6, 2013), “In 2011, 2,131 kids attended choice schools in 56 districts. In 2012, 3,356 kids attended 67 choice schools and crossed those hallowed district boundaries. In September 2013 there will be 6,144 non-resident kids attending 107 choice districts.” About 0.45% of all public school children would be transferring out-of-district.

In the absence of systematic evaluation of the expanded School Choice Program,⁴⁶ it is useful to examine a profile of Choice Districts. Table 4.1 examines the 48 participating elementary school districts in North Jersey as summarized by county.

⁴⁶ *New Jersey's Interdistrict Public School Choice Program: Program Evaluation and Policy Analysis* by the Institute on Education Law and Policy: Rutgers University does evaluate the pilot program. The study's overall assessment was that the program “has had positive results.” Among its findings most relevant for this study were that 71% of the participating students were White or Asian and that 75% of all participating students resided in the three lowest DFG-rated communities.

Table 4.1 North Jersey Elementary School Choice Districts by County

County	Number of Choice Districts	Average Test Score Decile	Average Free Meal Pcnt in 2012
Bergen	3	4.8	38%
Essex	0	na	na
Hudson (Hoboken)	1	3.0	64%
Hunterdon	15	7.3	8%
Middlesex	0	na	na
Monmouth	3	7.7	1%
Morris	8	6.0	24%
Ocean	4	5.0	44%
Passaic (Pompton Lakes)	1	5.5	16%
Somerset (Bound Brook)	1	3.0	58%
Sussex	6	6.6	11%
Union	3	7.0	8%
Warren	3	5.7	7%

Hunterdon, Morris, Sussex and Union counties all deserve credit for effective involvement of a range of Choice Districts, including very high performing districts such as Tewkesbury, Morris Plains, and Westfield. By contrast, Essex and Middlesex counties (where both need and opportunity are great) have no Choice Schools whatsoever. Participation in Hudson and Somerset counties is limited to two high poverty/low performance school districts that must be seeking to fill slowly shrinking districts (Hoboken and Bound Brook, respectively).

Table 4.2 examines the 22 participating high schools in North Jersey (nine of which are regional high schools).

Table 4.2 North Jersey High School Choice Districts by County

County	Number of Choice Districts	Average HSPA Pass Rate in 2010	Average Free Mean pct in 2012
Bergen	3	82%	31%
Essex	0	na	na
Hudson (Hoboken)	1	68%	69%
Hunterdon	2	93%	6%
Middlesex	0	na	na
Monmouth	0	na	na
Morris	5	88%	13%
Ocean (Central Regional)	1	85%	27%
Passaic	2	86%	37%
Somerset (Bound Brook)	1	78%	46%
Sussex	4	89%	10%
Union	3	87%	7%
Warren	0	na	na

Again, Hunterdon (with two regional high schools), Morris, Sussex and Union counties deserve credit for the scope and quality of participation at the high school level. Essex and Middlesex counties are now joined by Monmouth and Warren counties with no participation at the high school level.

Other transfer policies: Charter Schools are open to all students on a space-available basis with preference being given to students from the charter school's district or region of residence. As of September 2012, there were 86 approved charter schools operating in New Jersey with over 30,000 students.

Non-public school subsidies: New Jersey's Chapter 192 and Chapter 193 programs are provided to eligible students enrolled full-time in nonpublic elementary and secondary schools in New Jersey. Chapter 192 programs provide nonpublic school students with auxiliary services such as compensatory education, English as a second language, and home instruction. Chapter 193 programs provide nonpublic school students with remedial services such as evaluation and determination of eligibility for special education and related services, supplementary instruction, and speech-language services. Such subsidies facilitate transfer of children requiring such services from public to private schools and can have a very modest impact on enrollment

The New Jersey Opportunity Scholarship Act (OSA) is a pilot corporate tax credit scholarship bill that will fund scholarships for low-income students attending the state's lowest performing, chronically failing public schools. The scholarships would enable students to attend out-of-district public schools, or non-public schools anywhere in the state, that choose to participate in the program.

Corporations eligible to pay the corporate business tax (CBT) in New Jersey would be allowed to take a 100% tax credit against their CBT obligation for donations made to the OSA scholarship fund.

Eligible students are low-income students (i.e. FARM eligible) attending a chronically failing public school in one of the pilot districts. The pilot districts are Asbury Park, Camden, Elizabeth, Lakewood, Newark, Orange, and Passaic. A chronically failing school is one where 40% or more of students failed both the state's math and language arts assessments for the last two years, or 65% or more of students failed either of these same tests for the last two years. There are 130 of these schools in the pilot districts.

No more than 25% of scholarship dollars can be used by low-income students who live in the pilot districts and currently attend participating non-public schools. The remaining 75% will provide scholarships for students currently attending chronically failing public schools in the pilot districts. If there are any scholarship funds remaining after public school students in chronically failing schools have applied, any low-income student residing in a district with a failing school may apply for a scholarship.

No Child Left Behind: Also, under the federal No Child Left Behind law, students attending a Title I school designated as "in need of improvement" have the right to attend a higher performing school in the district.

4.2.2 Housing market-based programs

Mount Laurel: Ever since the New Jersey Supreme Court decisions in *Mount Laurel I* (1975) and *Mount Laurel II* (1983) New Jersey has been a national leader in promoting more economically integrated housing – though often the policies have been “more honour’d in the breach than the observance.” The *Mount Laurel* doctrine is that municipal land use regulations that prevent affordable housing opportunities for the poor are unconstitutional and that all 565 New Jersey municipalities are ordered to plan, zone for, and take affirmative actions to provide realistic opportunities for their “fair share” of the region’s need for affordable housing for low and moderate-income people.

After eight years, the New Jersey Legislature, in direct response to the Mount Laurel decisions, finally enacted the **Fair Housing Act of 1985**, which created the Council on Affordable Housing (COAH) to assess the statewide need for affordable housing, allocate that need on a municipal fair share basis, and review and approve municipal housing plans aimed at implementing the local fair share obligation.

The state law, however, created several loopholes for wealthy suburbs to avoid their constitutional obligations, most notably, by selling up to half of their COAH-determined obligations to poorer cities and older suburbs through so-called Regional Contribution Agreements (RCAs).

RCA’s impact of RCAs on limiting life opportunities for low-income families and their children was demonstrated in testimony to the legislature in December 2007.

- From 1990-99 the 50 RCA receiving towns lost 12,081 jobs while the 149 RCA sending towns gained 124,057 jobs;
- In 2001, the property tax base per capita of the 50 RCA receiving towns was \$45,989 while it was \$133,461 in the 149 RCA sending towns; RCA sending towns had three times larger tax bases than RCA receiving towns.
- In 2000, 50 RCA receiving towns averaged a median family income of \$49,532 and a family poverty rate of 10.9%; in 149 RCA sending towns median family income averaged \$95,642 and a 2% family poverty rate. RCA receiving towns have half family income level and 5.5 times family poverty rate of RCA sending towns; and, of direct relevance to this education baseline report,
- In 2001, the FARM rate in 50 RCA receiving towns was 44% while the FARM rate in 149 RCA sending towns was only 4% – with all the adverse impact on educational opportunities for low-income students that this study documents.

By Fall 2007, Assembly Speaker Joe Roberts unveiled his comprehensive housing reform plan with the co-sponsorship of Assembly Majority Leader Bonnie Watson Coleman. The Assembly leaders’ 12-point legislation proposed to;

- eliminate Regional Contribution Agreements (RCAs);
- require a 20% set-aside for workforce housing in all state-aided developments;

- establish new school funding formula that provides special state funds for low-income children anywhere;
- allow federal Low Income Housing Tax Credits (LIHTC) to be used in mixed-income, market rate developments in low poverty/high opportunity towns;
- set-aside 25% of affordable units for extremely low-income families (less than 30% Area Median Income);
- require towns to spend municipal housing trust fund dollars on affordable housing within their borders;
- mandate that municipalities provide density bonuses to developers constructing inclusionary developments;
- require COAH to *document* existing affordable housing units it claims when allocating a town's fair share goal ;
- and four additional provisions: create state affordable housing trust fund, require one-for-one replacement of affordable housing lost through redevelopment, create a state Comprehensive Housing Plan, and require COAH to publish affordable housing statistics annually.

The **Housing Reform Act of 2008** was approved by the legislature in June and signed into law by Gov. Jon Corzine in July. (With minor revisions the proposed new school funding formula had been enacted as the School Finance Reform Act of 2008 six months earlier.)

However, the collapse of the homebuilding industry nationally largely placed these requirements on hold for the next several years and, since 2010, the current administration of Gov. Chris Christie has been antagonistic. The legislature turned back the administration's effort to gut the *Mount Laurel* doctrine in 2010, enacting a bill that abolished COAH but reaffirmed *Mount Laurel*. Gov. Christie conditionally vetoed that bill so the *Mount Laurel* doctrine, the Fair Housing Act of 1985 (establishing COAH), and the Housing Reform Act of 2008 (eliminating escape clauses and expanding its coverage) are the "law of the land."

Mount Laurel's frustrated opportunity: Thirty years after the *Mount Laurel II* decision, New Jersey's skewed "geography of opportunity" has not been transformed as fair share housing advocates and the Court once hoped. There are several major reasons for this as illustrated by Appendix G that summarizes statewide compliance with COAH-established goals for fair share affordable housing by 197 towns classified by Building One America as "maximum- and high-opportunity towns."

- "Stonewalling by many wealthy suburbs: 46 maximum- and high-opportunity towns have never submitted any reports to COAH. Their "fair share" obligation was 8,584 affordable units against which goal they built zero. During the same period (1985-2009) the American Community Survey reports that 39,601 new housing units were built in these 46 highly exclusionary communities.

- Playing the “RCA game:”⁴⁷ Another 20 towns saw only 27 new affordable units built against an obligation of 3,660 affordable units. Instead, they shipped out the obligation to build 516 units on-site to poorer cities and boroughs through RCAs. On a larger scale, 35 towns sold off 7,411 RCA units though they did build 5,202 affordable units on-site, meeting 75% of their fair share obligation of 16,837 units.
- Fair share housing ... but mostly for our own people: Another 49 towns should receive a silver star for building far more units on-site (10,073) than they RCA’ed (3,057), meeting 80% of their COAH goal. The gold star would be rewarded to 39 towns that never used the RCA mechanism but built 8,464 units against their obligation of 10,314 (or 82% compliance). However, the impact of even such a stellar record reforming “the geography of opportunity” was minimal. In New Jersey *each municipality has been responsible for administering its own Mount Laurel program, including recruiting and placing tenants or new owners in its affordable units. Thus, absent any kind of state- or non-profit operating regional housing mobility program, municipalities have focused almost exclusively on meeting current residents’ housing needs.*

Assessing Mount Laurel’s potential impact on school segregation: School equity advocates sometimes express skepticism about the efficacy of fair share housing strategies for promoting more economically integrated schools. Certainly the inadequacies of three decades of seeking full Mount Laurel compliance lends credence to such skepticism.

Nevertheless, in 2005, I modeled what would be the longer-term impact on school segregation in the three-county Camden area in South Jersey, as follows:

The state Council on Affordable Housing (COAH) has now promulgated its “growth share” formula; ten percent of all new housing built in every town must be affordable to low-income households. In addition, the growth share formula provides that an additional affordable unit must be built for every 25 new jobs created.

Using a data-based Municipal Opportunity Index, I have divided the Camden area’s 101 municipalities in six categories: 8 maximum opportunity towns, 28 high opportunity towns, 22 medium opportunity towns, 20 low opportunity towns, 22 minimum opportunity towns, and Camden, the central city. COAH projects that over a ten-year period (2005–15) some 3,600 affordable housing units must be built in the maximum-, high-, and medium-opportunity towns in compliance with its growth share formula. I have simulated that one-quarter of those housing units would be occupied by low-income families relocating from Camden and another quarter would be occupied by other low-income families moving out of another 22 poverty-impacted school districts in older, inner suburbs of Camden. (In Camden’s case, I assumed that pupils leaving were not replaced; in the case of the low- and minimum-opportunity communities, I assumed that non-FARM families did indeed move in.)

⁴⁷ Mistaking a group of BONJ leaders for opponents of fair share housing, one town manager was unexpectedly candid. “Litigate, litigate, litigate,” he advised them. “Then build some senior citizen housing, then RCA the rest.”

The result of this simulation is that, combined with each school district's policy of equalizing the socioeconomic profiles of all its schools at the district-wide average, the regional economic school segregation index would drop from 49.3 to 37.6 – a not negligible 24% improvement. In short, *in the “little boxes” Camden region, implementing a mixed income housing strategy would have ten times the impact of achieving greater economic integration within the public schools than would just district-wide socioeconomic balancing policies.*⁴⁸ Re-shaping the community inputs would have a significant impact on improving academic outcomes for low-income students.

5. Desired Long Term Outcomes

The above analyses and discussion are central to the vision of what kind of society New Jersey wants to become.

If the majority of citizens want to live in a society of growing economic and fiscal disparities, then the state's “little boxes” governmental structures and policies and practices of the current administration are well designed to achieve that vision.

If, however, the majority of citizens want to “end the tyranny of the ZIP code” in terms of allocating educational and economic opportunities and opening the door to upward social mobility, then Together New Jersey's Regional Plan for Sustainable Development (RPSD) and Regional Fair Housing and Equity Assessment (FHEA) can be important tools to help achieve that future.

5.1 Five long-term goals and their relationship to the federal partnership's livability principles

Achieving the latter vision would certainly involve at least these 5 goals:

- 1) Reduced social and economic disparities for low-income minority communities and other disadvantaged populations within North Jersey (livability principles 1, 2, 3, 5 & 6)
- 2) Transformation of opportunity-poor areas into diverse neighborhoods offering a mix of housing and access to good schools and jobs, fresh food, and safe/healthy areas to recreate (livability principles 1-6)
- 3) Fewer areas of concentrated poverty and minority segregation (livability principles 3, 4 & 6)
- 4) Increased access to high-quality, economically diverse and well-resourced schools that improve educational outcomes and ensure students graduate from high school and pursue higher education or are otherwise “career ready” (livability principles 3, 4 & 5)
- 5) Aligned federal planning and investment resources that mirror the local and regional strategies for attaining sustainable communities (livability principle 5).

⁴⁸ For the Camden area's 92 “little boxes” school districts, within each district, I replaced FARM pupils with non-FARM pupils, or vice versa, until I had brought each school to the exact district-wide FARM percentage. The result was only a negligible improvement in the region-wide economic school segregation index – from 49.3 to 48.0. In other words, in this “little boxes” region, economic segregation is much greater among school districts than within school districts.

Goals 2 and 3 require special introductory comment. Uplifting poverty-impacted, usually minority neighborhoods has been almost the sole focus of federal urban policy and philanthropic foundation investments since the mid-1960s. With few local exceptions, the long litany of federal initiatives from Model Cities to Choice Neighborhoods has not succeeded except where gentrification of inner city and inner suburb neighborhoods with locational advantages and historic appeal has displaced former low-income minority populations.⁴⁹ The ever-upward concentration of FARM and minority students in *Abbott* communities (the principal targets of federal and foundation dollars) is evidence of such failed efforts. In effect, the almost total focus has been on the “Inside Game.”

What is different about the federal Partnership for Sustainable Communities is its cautious attention to regional strategies – the “Outside Game” – to help achieve goals 2 and 3. In particular, achieving these goals for inner suburbs will be frustrated if inner suburbs continue to be the only available “next rung on the ladder” of opportunity for low-income minority families moving out of inner city neighborhoods. Handholds and footholds on the ladder of opportunity must be created in the outer suburbs as well.⁵⁰ Without implementation of a determined, multi-year, regional “fair share” housing program, inner suburbs and inner cities cannot stabilize (much less reduce) their level of racial and economic segregation nor the racial and economic segregation that characterizes their school districts. Such a regional “fair share” housing program is also the foundation for achieving Goal 4 (increased access to high-quality, economically diverse and well-resourced schools).

5.2. Modeling the Impact of Housing Policy Reforms on North Jersey Schools:

Of all the statistical tables presented by this report the most critical for achieving the Goals 1 to 4 is Table 2.8 (that is, “FARM percentage in School Attended by Average Student by Race in 2000”). In 2012, the FARM percentage for North Jersey schools was 34%.

Nationally, the most notable programs of district-wide economic integration are found in Cambridge, MA; La Crosse, WI; and Wake County (Raleigh-Cary), NC. Each adopted a policy that each school would be no more than 15 percentage points higher nor less than 15 percentage points lower than the district-wide FARM average. The school districts organized their school attendance zones and student assignment policies to achieve that level.

If (largely through region-wide “fair share” housing policies) a similar, *interim*⁵¹ goal were adopted for North Jersey’s school districts, considered as one region, then the likely outcomes would be;

- the average White student would be attending a school with 19% FARM (rather than 14%);
- the average Asian student would be attending a school with 19% FARM (rather than 18%);

⁴⁹ Inner city and inner suburban communities can be roughly equated with the 75 Class 3 school districts in the high FARM and medium-high FARM categories.

⁵⁰ Outer suburban communities can be roughly equated with the 266 Class 1, Class 2, and low-medium, low- and ultra-low Class 3 school districts.

⁵¹ Of course, the long-term, multi-decade goals would be the complete elimination of disparities by race and ethnicity and an almost complete reduction of poverty among families with school age children.

- the average Black student would be attending a school with 49% FARM (rather than 62%); and
- the average Hispanic student would be attending a school with 49% FARM (rather than 60%).

Based on a single-input (i.e. FARM percent) regression, such a reduction in FARM Percentage for the average Black student would move that student's school test score performance up by 1.1 deciles, or a one-third improvement. The closely paralleled reduction in FARM percentage for the average Hispanic student would move that student's school's performance up by 0.9 deciles, or a one-quarter improvement. In effect, the effect for both would be almost exactly one standard deviation improvement (which would place their average schools in the "overachiever" category in Table 4 today).

For the average White Student the difference would be equivalent to moving from the Spotswood School District to the Rockaway Borough School District – a minor 0.38 decile reduction, or about a 5% reduction in school performance. For the average Asian student the reduction would be miniscule – a 0.05 decile reduction, or about 0.8% - the equivalent of moving from Frenchtown Borough School District to the Rockaway Borough School District.

5.3 Specific benchmarks towards achieving RPSD Goals 1-4

Targets for the reduction of residential and school segregation can be set for 2020. The guiding philosophy would be that North Jersey's metropolitan areas should achieve reductions in segregation indices at twice the rate of the past decade's experience of the 26 "little boxes" metro areas of over 1,000,000 people. Doubling the average improvement would begin to move North Jersey's metro areas down the list from being, for example, "among 383 metro areas, with regard to Black segregation in 2010 Newark-Union NJ ranked 3rd worst, Bergen-Passaic NJ 15th worst, and Jersey City 28th worst." (For a less segregated region like Edison-New Brunswick the standard would be to match the rate of improvement of the 26 "little boxes" peer regions.) Achieving such goals is feasible because New Jersey has more state-level integrative housing policies in place than practically any other state ... if state government will only implement them fully.

Table 5.1 Targets for 2020 for Black/White residential segregation (compare to table 2.1)

Metro Area	2010	2020
Newark-Union metro Division	78	70
Bergen-Passaic PMSA	68	60
Jersey City PMSA	64	56
Edison-New Brunswick metro division	53	49

Table 5.2 Targets for 2020 for Hispanic/White residential segregation, assuming no increase in the rate of growth of North Jersey's Hispanic population (compare to table 2.2)

Metro Area	2010	2020
Newark-Union metro division	63	59
Bergen-Passaic PMSA	55	51
Jersey City PMSA	49	45
Edison-New Brunswick metro division	47	43

Economic residential segregation (table 5.3) has probably been growing steadily decade by decade though no calculations were made for 2010. The goal would be to reverse that trend and, for 2020, return each region to the level of economic polarization measured in 2000.

Table 5.3 Goals for Economic Residential Segregation Reduction (refer to table 2.3)

metro area	2010	2020
Newark-Union metro division	na	46
Bergen-Passaic PMSA	na	39
Jersey City PMSA	na	23
Edison-New Brunswick metro division	na	38

Economic polarization (table 5.4 and see table 2.4) – the separation of the “Poor” and the Affluent” into different communities – has been growing steadily decade by decade. As with economic residential segregation (above), the goal would be to reverse that trend and, for 2020, return each region to the level of economic polarization measured in 2000.⁵²

Table 5.4 Goals for Economic Polarization Reduction

Metro Area	2010	2020
Newark-Union metro division	47	44
Bergen-Passaic PMSA	50	47
Jersey City PMSA	50	47
Edison-New Brunswick metro division	33	32

Targets for reducing school segregation by 2020 will assume that the level of school segregation of school children by race, ethnicity and income will be a varying level of points higher than the level of residential segregation of each group for all ages. The gap will be based on the average gap between housing segregation and school segregation in 2000. (Since school segregation indices for 2010 have not been calculated nationally, the indices for 2000 are listed.)

For **Black/White school segregation (table 5.5 and see table 2.5)**, assuming that the level of school segregation for Black children would be five points higher than the level of Black residential segregation for all ages, targets for 2020 would be

⁵² NOTE: The economic polarization indices for Bergen-Passaic and Jersey City (Hudson County) are that calculated for the larger New York-North Jersey-Long Island NY-NJ area of which these three counties are a part. Separate calculations should be made for the North Jersey portions though probably Hudson County should be combined with Bergen and Passaic counties in one region, as the COAH-defined district does. It is possible that such recalculations would result in lower economic polarization indices for 2010 than was calculated for the bi-state Greater New York City region.

Table 5.5 Goals for reduction of Black/White School Segregation

Metro Area	2000	2020
Newark-Elizabeth PMSA	82	75
Bergen-Passaic PMSA	83	65
Jersey City PMSA	77	61
New Brunswick PMSA	57	54
Monmouth-Ocean PMSA	70	59*

*Calculated as the average improvement (2000-2020) of the other four regions

For **Hispanic/White school segregation (table 5.6 and compare to table 2.6)**, assuming no increase in the rate of growth of North Jersey's Hispanic population and that the level of school segregation for Hispanic children would be eight points higher than the level of Black residential segregation for all ages, targets for 2020 would be

Table 5.6 Goals for Hispanic/White School Segregation Reduction

Metro Area	2000	2020
Newark-Elizabeth PMSA	73	67
Bergen-Passaic PMSA	68	59
Jersey City PMSA	53	52
New Brunswick PMSA	62	51
Monmouth-Ocean PMSA	50	43*

*Calculated as the average improvement (2000-2020) of the other four regions

With regard to **economic school segregation (table 5.7 and see table 2.7)**, the calculations of the Century Foundation report are used as a reference point. The level of economic school segregation for 2020 is assumed to be 18 points higher than the level of economic residential segregation for all ages. However, as that would produce goals for "improvement" for Jersey City and New Brunswick that are substantially higher than their economic segregation levels of 2000, we have set restoring the level of economic school segregation of 2000 as the goal for 2020.

Table 5.7 Goals for Economic Segregation Reduction

Metro Area	2000	2020
Newark-Elizabeth PMSA	67	65
Bergen-Passaic PMSA	65	58
Jersey City PMSA	36	36
New Brunswick PMSA	56	56
Monmouth-Ocean PMSA	46	44*

*Calculated as the average improvement (2000-2020) of the other four regions

What these goals suggest is that reducing school segregation by race and ethnicity will be accomplished more readily than reducing school segregation by income. The latter will require policies and programs even more rigorously targeted upon reducing concentrations of poverty than have yet been practiced in New Jersey.

Nevertheless, achieving these targets for 2010 would advance North Jersey substantially towards the interim goal set forth in section 4.2 addressing “the FARM percentage in school attended by average student by race.”

5.4 Policy recommendations for TNJ’s RPSD and FHEA

What policies might Together New Jersey recommend to achieve the five goals and the benchmarks set forth above? Here are a dozen suggestions.

- 1) The FHEA should be based on North Jersey’s “geography of opportunity” as defined by a series of regional Municipal Opportunity Indices (MOI). Strong consideration should be given to adopting the MOI already developed by Building One New Jersey that rates each municipality against its neighbors within COAH-specified regions.⁵³ The rating inputs for each municipality are a) total jobs on-site and job trends over the past two decades, b) FARM percentage and FARM trends over the past two decades, c) assessed valuation per capita for the most recent year available (as a proxy for the level and quality of municipal services), and d) median family income and family poverty rate from the most recent five-year American Community Survey (a measure of a municipality’s overall socioeconomic status). The MOI regions are then broken down into the historic, state plan-designated principal cities (Newark, Jersey City, Paterson, Elizabeth, and New Brunswick) and their suburbs, divided into maximum-, high-, medium-, low-, and minimum opportunity quintiles of as equal population size as possible.
- 2) The RPSD should recommend that the School Finance Reform Act (SFRA) formula be followed as specified in statute and subsequently upheld by the New Jersey courts. The formula should be used to distribute the amount of state school aid that is annually determined by the governor and the legislature within the context of the total budgetary demands upon the state. Though added SFRA funding is unlikely to transform standardized test scores outcomes for low-income children in highly poverty-impacted school districts, additional funding will allow such districts to maintain many other programs that are not reflected in standardized tests but an integral component of a child’s development. Added state subsidies will also ease the property tax burden on residents of fiscally-stressed communities that are already putting forth greater relative effort than more advantaged neighboring communities.
- 3) The RPSD should encourage continued expansion of the Inter-district Public School Choice Program. However, the program should be carefully monitored to assure that it is being used primarily by low-income, Black and Hispanic students and does not substantially serve as a vehicle for other students to move out of impacted districts, thereby increasing the degree of racial and economic segregation in public schools.

⁵³ The COAH regions for North Jersey are #1 (Bergen, Passaic, Hudson); #2 (Essex, Morris, Sussex, Union, and Warren); #3 (Middlesex, Somerset, Hunterdon); and #4 (Monmouth, Ocean, and, finally Mercer County, which TNJ does not consider within its planning area). The geography can be revised to conform to current census definitions or other objectively-based configurations, but BONJ would recommend against a unitary North Jersey region as disparities are too great between North Jersey’s higher cost Bergen County, for example, and lower cost Ocean County.

- 4) The RPSD should urge NJDOE to take the lead in organizing a number of pilot programs in cities with both high-FARM school districts but also a concentration of major institutional employers (e.g. hospitals, universities, state and county government agencies, headquarters of major corporations, etc.). NJDOE would provide the local school district with additional funds to finance high quality magnet elementary schools (with pre-school centers as well) located near such major job centers; the magnet schools would operate for the full work-day (say, 7:30 am to 6:30 pm). No more than half of the enrollment would be children from the immediate neighborhood (who will be predominantly Free Meals pupils); the other half or more of the enrollment would be the children of employees of the nearby institutions (who will be predominantly Reduced-price Meal and non-FARM pupils). The employees (typically single parents or with both parents working) often face child care and “latch key” challenges when they live in suburban communities a substantial distance from their jobs. Many working parents would be attracted to an opportunity to “be the school bus” themselves, drop their children off at a school just a few blocks from their job, know that their child is in a high-quality educational program (even with a more diverse group of classmates) under trained, adult supervision all the work day, and pick their own child up upon leaving work. The neighborhood children would benefit academically from a more economically diverse group of classmates and their own working parents would also have child care needs taken care of. Such a policy is probably the only strategy for economically diversifying an inner city school district’s enrollment – leverage the city’s role as still a major job center while recognizing the changing profile of American families.
- 5) Together New Jersey should urge its sponsoring federal agencies (HUD, DOT and EPA) to recruit the federal Department of Education (USDOE) as a full partner. The three partners understand the pivotal importance of economically integrated communities to achieving the Sustainable Communities Initiative’s (SCI) regional equity goals. USDOE does not. Its much-touted, multi-billion dollar “Race to the Top” program is basically the latest federal educators’ effort to make “separate but equal” work. USDOE must embrace SCI’s philosophy and principles.⁵⁴
- 6) The RPSD should recommend that enrollment and performance data be reported by cross-referenced categories (e.g. Free Meal Whites, Reduce-price Meal Blacks, etc.) to allow finer-grained analysis of trends, relative segregation indices, etc.
- 7) All three branches of state government should be fully committed to full implementation of the *Mount Laurel* doctrine and the Fair Housing Act of 1985 as amended by the Housing Reform Act of 2008 (HRA). These constitute the “law of the land.”

⁵⁴ For example, suppose in its application for Race to the Top funds, New Jersey had proposed that “we are going to take every action to create racially and economically inclusive communities that, in turn, will support racially and economically inclusive schools. To fully implement the *Mt Laurel* doctrine, we will use federal Race to the Top funds to acquire housing units in high opportunity communities with high performance schools and establish regional housing mobility programs to help low-income families with school age children move from low opportunity communities to high opportunity communities – places in which many of their parents are often already working (commuting at substantial cost in money and time). Our standard should be “Anybody good enough to work here is good enough to live here – and their children are good enough to be going to our local schools.”

How would such a Race to the Top application have been graded? *Zero*. In its guidelines, the US Department of Education made no provision whatsoever for strategies to diminish racial and economic segregation – yet that is the central issue confronting American education.

- 8) In carrying out the state's housing policies, the state government or a state-designated, private, non-profit agency should implement region-wide housing mobility programs, thereby assuming responsibility for recruiting and placing qualified families in affordable housing from North Jersey's 382 cities, boroughs, and townships. Municipal-level management has usually intensified the degree of racial and economic segregation. Such regional housing mobility program should be guided by the region's Municipal Opportunity Index, giving priority to placing low-income households (particularly families with school age children) in maximum- and high-opportunity communities, thereby stabilizing medium- and low-opportunity communities, and working to reduce concentrations of poverty in minimum-opportunity suburbs and the central cities.
- 9) In administering the thousands of federal Housing Choice Vouchers assigned it, the state Department of Community Affairs should follow the same priorities as outlined in the preceding recommendation. The federal Department of Housing and Urban Development (HUD) should modify its regulations to facilitate (and not impede) DCA's new direction as consistent with the RPSD and FHEA's goals.⁵⁵ HUD should also modify its regulations to reward local public housing authorities (PHAs) for placing HCV families in high- and maximum-opportunity suburbs and penalize the PHAs for over-concentration of HCV families in central cities and low- and minimum opportunity suburbs.
- 10) As directed by the Housing Reform Act of 2008, the state Housing and Mortgage Finance Agency (HMFA) should allocate the federal Low Income Housing Tax Credits (LIHTC) to emphasize the location of family-oriented affordable housing in higher opportunity suburban communities. The federal tri-agency Partnership for Sustainable Communities should advocate with the U.S. Department of the Treasury to modify its regulations to facilitate (and not impede) HMFA's new priorities that would implement the RPSD.
- 11) The state should require aggressive implementation of the HRA provision that any new housing development assisted by any form of state aid must contain 20% affordable housing units, including 5% for households under 30% of Area Median Income.
- 12) The partnership agencies (HUD, DOT and EPA) collectively provide about \$3.5 billion in annual grants-in-aid to state and local governments and private, non-profits in New Jersey. They should modify (or provide waivers to) all regulations that are inconsistent with the RPSD and FHEA's goal of "ending the tyranny of the ZIP code."

6. Measuring Long Term Outcomes

Chapter 5 outlined seven specific and measurable goals related to the critical "community inputs" that account for 84% of test score outcomes at the district level. Achieving these by 2020 would substantially narrow the disparities in the FARM percentage of the schools attended by the average student of different racial groups and

⁵⁵ An analysis of the distribution of Housing Choice Vouchers (HCVs) in Philadelphia's four suburban counties showed that 89% of HCV families had been placed in low- and minimum opportunity towns and only 4% in high- and maximum opportunity towns – despite the presence of 22,000 rentals that fell within the housing authorities' rental limits in the high- and maximum-opportunity towns.

are projected to result in one decile improvements in the average test scores of the average Black and Hispanic students. This is the over-riding eighth goal.

All data utilized are updated annually either by the American Community Survey of the US Bureau of the Census or by the New Jersey Department of Education. Housing and school segregation indices, enrollment trends for school districts by race and ethnicity, and regression analyses of the relationship between inputs (community and school) and outcomes (test scores and graduation rates) can be updated as frequently as Together New Jersey and its constituent members want.

The only limitation is that providing a national comparative context for either metro areas or school districts must await periodic calculation of the various indices by Brown University's American Communities Project or a similar academic institution. Manipulation of millions of data items is beyond the resources of any TNJ member, including Rutgers University.

Particularly with regard to regression analysis, averaging multi-year data smooths out almost random phenomena and allows central tendencies to emerge. Thus, in assessing school performance, for example, great weight should not be given to results for a single year.

Table 6.1 summarizes the status of the statistical indicators recommended in this education baseline study.

Table 6.1: Indicators for Designated Outcomes and Ancillary Trends

Level	Measurable Outcome	Source	Scale at Which Available	Time Period for Which Available	Ccomment
<u>DESIGNATED OUTCOMES</u>					
National	housing segregation (tables 2.1-2.4)	American Community Survey (Brown University analysis)	metro area by census tract	annual update (five-year averages)	calculations for all metro areas typically done every ten years by Brown University American Communities Project or comparable academic center
North Jersey	housing segregation (tables 2.1-2.4)	American Community Survey	metro area by census tract	annual update (five-year averages)	can be recalculated annually for North Jersey metro areas
National	school segregation (tables 3.1-3.4)	National Center for Education Statistics	individual school	annual update	calculations for all metro areas typically done every ten years by Brown University American Communities Project or comparable academic center
North Jersey	school segregation (tables 3.1-3.4)	New Jersey Department of Education	individual school and school district	annual update	can be recalculated annually for North Jersey school districts
<u>ANCILLARY TRENDS</u>					
North Jersey	enrollment trends by FARM and minority (tables 2.9 & 2.10)	New Jersey Department of Education	individual school and school district	annual update	can be tracked annually for North Jersey school districts
North Jersey	median family income & family poverty rate by race	American Community Survey	statewide, metro area, county & municipality (for MOI calculations)	annual update (one-, three- & five-year averages)	can be tracked annually for any jurisdictional level
North Jersey	for regression analysis: a) outcomes by scores & graduation rates, and b) community & school inputs	New Jersey Department of Education (GreatSchools.org for decile rankings)	individual school and school district	annual update	all regressions can be recalculated as frequently as desired though outcomes and inputs should be multi-year averages

APPENDIX A

Summary of Regressions for 199 School Districts

A.1 Single-variable Curvilinear Regressions

Input	R-Squared	t-stat
Free Meal percent	0.837	- 8.88***
Reduced-price Meal percent	0.612	- 4.49***
Hispanic percent	0.578	- 4.17***
Black percent	0.416	- 3.59***
Student-teacher ratio	0.020	+ 0.29
Total expenditures per student	0.089	- 0.44
Instructional expenditures per student	0.007	- 0.07

*** = 99% confidence factor (threshold: t-stat = 2.57)

** = 95% confidence factor (threshold: t-stat = 1.96)

* = 90% confidence factor (threshold: t-stat = 1.64)

Standing alone, each community input would account for 41.6% to 83.7% of the variation in test scores.

Standing alone, all four community inputs are statistically significant at a 99% confidence level.

Standing alone, student-teacher ratio would account for 2% (but in a “bad” way), total expenditures per student for 8.9% (also in a “bad” way), and instructional expenditures per student for 0.7% (in a “bad” way but really a statistical “wash”).

A.2. Multi-Variable Curvilinear Regression

Input	R-Squared	t-stat
All seven inputs collectively	0.867	na
Free Meal percent	---	- 2.91***
Reduced-price Meal percent	---	+ 0.74
Hispanic percent	---	+ 0.51
Black percent	---	- 0.88
Student-teacher ratio	---	+ 0.49
Total expenditures per student	---	- 0.07
Instructional expenditures per student	---	+ 0.16

Free Meal percent is totally dominant at 99% confidence level. All other inputs are not statistically significant.

A.3. Input Shares of Curvilinear Regression (7 Inputs)

	R-squared	input share of total % explained (86.7%)
explained variation - all 7 inputs	0.867	
pct free meals	0.837	
pct free meals squared	0.700	
explanatory share of above input	80.74%	93.16%
pct reduced price meals	0.843	
pct reduced price meals squared	0.710	
explanatory share of above 2 inputs (or FARM)	81.96%	
value added of pct reduced price meals	1.22%	1.40%
pct FARM + pct Hispanic	0.854	
pct FARM + pct Hispanic squared	0.729	
explanatory share of above 3 inputs	84.09%	
value added of pct Hispanic	2.13%	2.46%
pct FARM, pct Hispanic + pct Black	0.855	
pct FARM, pct Hispanic + pct Black squared	0.732	
explanatory share of above 4 inputs (or SES)	84.43%	
value added of pct Black	0.34%	0.39%
SES + student-teacher ratio	0.864	
SES + student-teacher ratio squared	0.747	
explanatory share of above 5 inputs	86.17%	
value added of pupil-teacher ratio	1.74%	2.01%
Above 5 inputs + total cost/student	0.865	
Above 5 inputs + total cost/student squared	0.748	
explanatory share of above 6 inputs	86.36%	
value added of total cost/student	0.19%	0.22%
Above 6 inputs + classroom cost/student	0.867	
Above 6 inputs + classroom cost/student squared	0.751	
explanatory share of above 7 inputs	86.67%	
value added of classroom cost/student	0.31%	0.36%
percentage of total explained variation		100.00%
unexplained variation	0.133	
unexplained variation as pct of total variation	13.3%	

APPENDIX B

Summary of Regressions for 245 High Schools

Outcome = graduation rates

B.1 Single-variable Curvilinear Regressions

Input	R-Squared	t-stat
Free Meal percent	0.563	- 4.65***
Reduced-price Meal percent	0.185	- 1.64*
Hispanic percent	0.274	- 2.81***
Black percent	0.364	- 3.24***
Student-teacher ratio	0.039	+ 0.28
Total expenditures per student	0.082	- 0.56
Instructional expenditures per student	0.108	- 0.61

*** = 99% confidence factor (threshold: t-stat = 2.57)

** = 95% confidence factor (threshold: t-stat = 1.96)

* = 90% confidence factor (threshold: t-stat = 1.64)

Standing alone, each community input would account for 18.5% to 56.3% of the variation in test scores.

Standing alone, three of the four community inputs are statistically significant at a 99% confidence level and Reduced-price Meals at 90%.

Standing alone, student-teacher ratio would account for 3.9% (but in a “bad” way), total expenditures per student for 8.2% (also in a “bad” way), and instructional expenditures per student for 10.8% (also in a “bad” way).

B.2 Multi-Variable Curvilinear Regression

Input	R-Squared	t-stat
All seven inputs collectively	0.664	na
Free Meal percent	---	- 2.60***
Reduced-price Meal percent	---	+ 2.56***
Hispanic percent	---	+ 0.25
Black percent	---	- 0.25
Student-teacher ratio	---	- 0.09
Total expenditures per student	---	+ 0.62
Instructional expenditures per student	---	- 0.51

Free Meal percent and Reduced-price Meals are co-equal in importance totally dominant at 99% confidence level. Other inputs are not statistically significant.

B.3 Input Shares of Curvilinear Regression (7 Inputs)

	R-squared	Factor share of total % explained (66.4%)
<u>graduation rate</u> explained variation - all 7 inputs	0.664	
pct free meals	0.563	
pct free meals squared	0.317	
explanatory share of above input	47.81%	72.02%
pct reduced price meals	0.632	
pct reduced price meals squared	0.399	
explanatory share of above inputs (or FARM)	60.08%	
value added of reduced price meals	12.27%	18.48%
pct FARM + pct Black	0.633	
pct FARM + pct Black squared	0.400	
explanatory share of above 3 inputs	60.27%	
value added of pct Black	0.19%	0.28%
pct FARM, Black & Hispanic	0.633	
pct FARM, Black & Hispanic squared	0.401	
explanatory share of above 4 inputs (or SES)	60.38%	
value added of pct Hispanic	0.11%	0.17%
SES + student-teacher ratio	0.634	
SES + student-teacher ratio squared	0.402	
explanatory share of above 5 inputs	60.49%	
value added of pupil-teacher ratio	0.11%	0.17%
Above 5 inputs + total cost/student	0.635	
Above 5 inputs + total cost/student squared	0.403	
explanatory share of above 6 inputs	60.76%	
value added of total cost/student	0.27%	0.40%
Above 6 inputs + classroom cost/student	0.664	
Above 6 inputs + classroom cost/student squared	0.441	
explanatory share of above 7 inputs	66.39%	
value added of classroom cost/student	5.63%	8.48%
percentage of total explained variation		100.00%
unexplained variation	0.336	
unexplained variation in pct of total variation	33.6%	

APPENDIX C

Summary of Regressions for 245 High Schools

Outcome = HSPA pass rates in 2012

C. 1 Single-variable Curvilinear Regressions

Input	R-Squared	t-stat
Free Meal percent	0.619	- 5.24***
Reduced-price Meal percent	0.204	- 1.55
Hispanic percent	0.226	- 2.43**
Black percent	0.482	- 4.41***
Student-teacher ratio	0.052	+ 0.36
Total expenditures per student	0.122	- 0.68
Instructional expenditures per student	0.114	- 0.62

*** = 99% confidence factor (threshold: $t\text{-stat} = 2.57$)

** = 95% confidence factor (threshold: $t\text{-stat} = 1.96$)

* = 90% confidence factor (threshold: $t\text{-stat} = 1.64$)

Standing alone, each community input would account for 18.5% to 56.3% of the variation in test scores.

Standing alone, three of the four community inputs are statistically significant at a 99% confidence level and Reduced-price Meals at 90%.

Standing alone, student-teacher ratio would account for 3.9% (but in a “bad” way), total expenditures per student for 8.2% (also in a “bad” way), and instructional expenditures per student for 10.8% (also in a “bad” way).

C.2 Multi-Variable Curvilinear Regression

Input	R-Squared	t-stat
All seven inputs collectively	0.734	na
Free Meal percent	---	- 2.45**
Reduced-price Meal percent	---	+ 2.99***
Hispanic percent	---	- 0.23
Black percent	---	- 1.57
Student-teacher ratio	---	+ 0.03
Total expenditures per student	---	+ 0.20
Instructional expenditures per student	---	- 0.09

Free Meal percent and Reduced-price Meals are co-equal in importance totally dominant at 99% confidence level. Other inputs are not statistically significant.

C.3 Input Shares of Curvilinear Regression (7 Inputs)

	R-squared	factor share of total % explained (73.4%)
<u>HSPA pass rate</u> explained variation - all 7 inputs	0.734	
pct free meals	0.619	
pct free meals squared	0.383	
explanatory share of above input	52.17%	71.12%
pct reduced price meals	0.704	
pct reduced price meals squared	0.495	
explanatory share of above inputs (or FARM)	67.51%	
value added of reduced price meals	15.34%	20.91%
pct FARM + pct Black	0.720	
pct FARM + pct Black squared	0.518	
explanatory share of above 3 inputs	70.67%	
value added of pct Black	3.16%	4.30%
pct FARM, Black & Hispanic	0.722	
pct FARM, Black & Hispanic squared	0.521	
explanatory share of above 4 inputs (or SES)	70.99%	
value added of pct Hispanic	0.32%	0.43%
SES + student-teacher ratio	0.722	
SES + student-teacher ratio squared	0.521	
explanatory share of above 5 inputs	71.03%	
value added of pupil-teacher ratio	0.05%	0.07%
Above 5 inputs + total cost/student	0.727	
Above 5 inputs + total cost/student squared	0.529	
explanatory share of above 6 inputs	72.05%	
value added of total cost/student	1.02%	1.38%
Above 6 inputs + classroom cost/student	0.734	
Above 6 inputs + classroom cost/student squared	0.538	
explanatory share of above 7 inputs	73.36%	
value added of classroom cost/student	1.31%	1.79%
percentage of total explained variation		100.00%
unexplained variation	0.266	
unexplained variation in pct of total variation	33.6%	

APPENDIX D-1: ASSESSED VALUATION PER CAPITA

HIGHEST FARM SCHOOL DISTRICTS IN 2009

School District	Pct FARM in 2010-11	Equalized valuation per capita in 2009
*Union City School District	92.1%	\$59,052
Lakewood Township School District	90.1%	\$114,764
*Elizabeth School District	88.2%	\$68,031
*Newark School District	87.1%	\$66,136
*Passaic City School District	86.4%	\$55,874
*Paterson School District	86.1%	\$60,823
*New Brunswick School District	79.5%	\$66,953
*Asbury Park School District	79.5%	\$79,713
*Long Branch School District	76.8%	\$158,402
*Harrison School District	76.5%	\$82,131
*West New York School District	76.4%	\$59,945
*Plainfield School District	76.2%	\$73,752
Fairview School District	75.7%	\$106,011
Guttenberg School District	75.6%	\$105,866
*Jersey City School District	74.8%	\$91,483
*East Orange School District	70.8%	\$53,612
Dover Town School District	70.6%	\$86,301
*Hoboken School District	69.2%	\$269,059
Roselle Borough School District	68.6%	\$87,340
*Keansburg Borough School District	66.9%	\$74,464
*Irvington Township School District	66.6%	\$56,045
Haledon School District	66.4%	\$78,539
Freehold Borough School District	66.4%	\$104,374
Bound Brook Borough School District	63.8%	\$89,622
*Garfield School District	63.3%	\$89,060
Englewood School District	62.7%	\$188,140
*Perth Amboy School District	61.0%	\$80,425
*Orange (City of) Township School District	60.3%	\$57,462
average of 28 high-FARM districts	74.2%	\$91,549

average without Hoboken

\$84,975

*means former Abbott school district

APPENDIX D-2: ASSESSED VALUATION PER CAPITA

LOWEST FARM SCHOOL DISTRICTS IN 2009

School District	Pct FARM in 2010-11	equalized valuation per capita in 2009
Kinnelon Borough School District	1.8%	\$251,544
Holmdel Township School District	1.7%	\$266,127
Ridgewood Village School District	1.6%	\$277,824
Bernards Township School District	1.5%	\$274,921
Mountain Lakes School District	1.5%	\$334,247
Waldwick School District	1.5%	\$176,333
Tenafly School District	1.5%	\$287,759
Montvale School District	1.5%	\$290,521
Cresskill School District	1.4%	\$290,354
School District of the Chathams	1.4%	\$304,281
Fair Haven Borough School District	1.3%	\$261,068
Berkeley Heights Township SD	1.2%	\$257,179
Warren Township School District	1.1%	\$285,636
Livingston Township School District	1.0%	\$289,624
Montville Township School District	0.9%	\$259,408
Glen Rock School District	0.9%	\$233,589
Hanover Township Public Schools	0.7%	\$303,413
Millburn Township School District	0.6%	\$484,993
Florham Park School District	0.5%	\$268,160
River Vale School District	0.4%	\$224,480
Wyckoff Township School District	0.4%	\$277,436
Jefferson Township School District	0.4%	\$145,914
Closter School District	0.3%	\$256,645
Franklin Lakes School District	0.0%	\$404,364
River Edge School District	0.0%	\$171,161
Upper Saddle River School District	0.0%	\$363,397
Glen Ridge School District	0.0%	\$235,670
Verona School District	0.0%	\$193,248
East Hanover Township School District	0.0%	\$355,151
average of 29 low-FARM districts	0.9%	\$276,705

APPENDIX E-1

TOP 25 DISTRICTS: EXPENDITURES PER STUDENT

School District	actual total cost per student 4-year average	test score decile 2-year average	pct FARM 2010-11	in
Asbury Park School District	\$24,267	1.0	79.5%	
Hoboken School District	\$22,117	3.0	69.2%	
Mountain Lakes School District	\$18,753	10.0	1.5%	
Keansburg Borough School District	\$18,019	2.5	66.9%	
Newark School District	\$17,467	3.0	87.1%	
Teaneck School District	\$17,205	5.0	31.0%	
Englewood School District	\$17,082	3.0	62.7%	
East Orange School District	\$17,004	2.5	70.8%	
Jersey City School District	\$16,973	3.0	74.8%	
Franklin Lakes School District	\$16,742	9.0	0.0%	
Boonton Town School District	\$16,475	6.5	23.4%	
Ridgefield School District	\$16,089	5.5	17.9%	
Plainfield School District	\$16,019	2.0	76.2%	
Morris School District	\$15,985	5.5	28.1%	
New Brunswick School District	\$15,392	2.0	79.5%	
Irvington Township School District	\$15,383	2.0	66.6%	
West Orange School District	\$15,337	5.5	36.2%	
Warren Township School District	\$15,321	9.0	1.1%	
Union City School District	\$15,241	4.0	92.1%	
Orange (City of) Township School District	\$15,240	2.0	60.3%	
Elizabeth School District	\$15,201	4.5	88.2%	
Eatontown Public Schools	\$15,163	6.0	37.7%	
Park Ridge School District	\$15,070	8.5	2.8%	
Paterson School District	\$15,052	2.0	86.1%	
Rockaway Township School District	\$15,040	7.0	11.2%	
average - top 25 in total expenditures per student	\$16,705	4.6	50.0%	

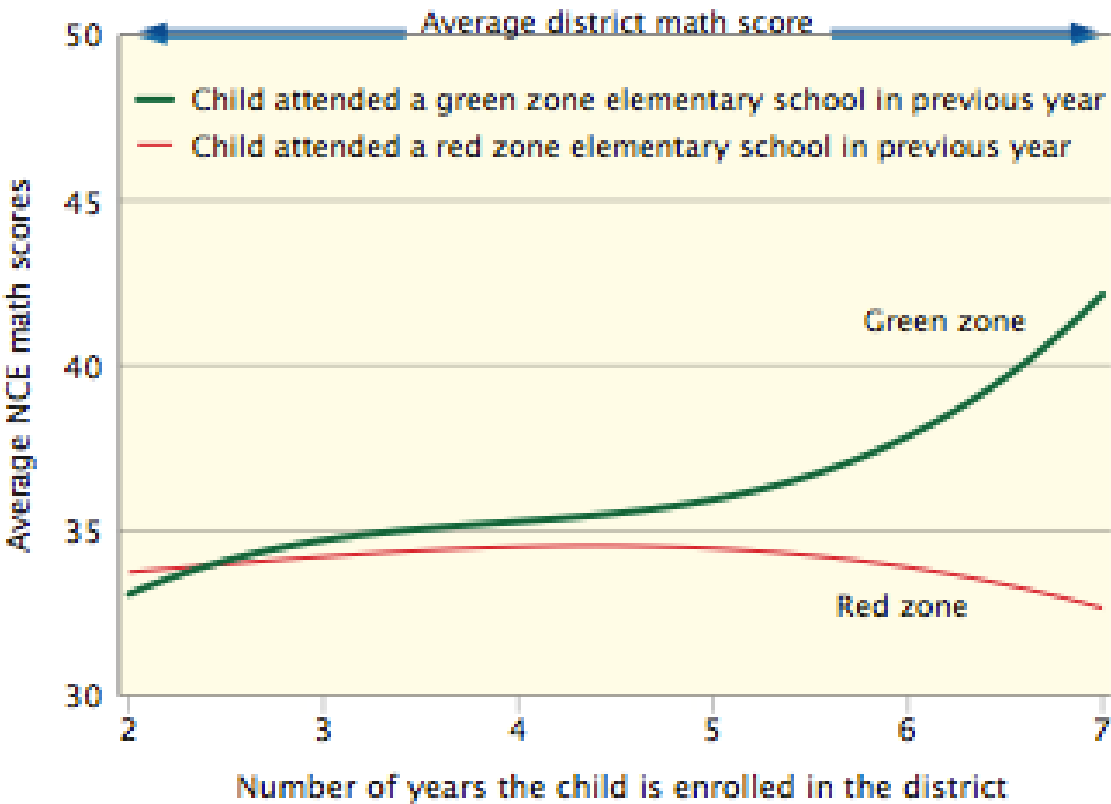
APPENDIX E-2

BOTTOM 25 DISTRICTS: EXPENDITURES PER STUDENT

School District	Actual total cost per student 4- year average	Test score decile 2-year average	Percent FARM in 2010-11
Woodland Park School District	\$11,455	4.5	30.3%
Bayonne School District	\$11,449	4.5	58.1%
Manalapan-Englishtown Regional SD	\$11,360	8.0	7.6%
Fair Haven Borough School District	\$11,341	9.0	1.3%
Roselle Park School District	\$11,321	6.5	33.2%
Plumsted Township School District	\$11,292	6.5	16.1%
North Bergen School District	\$11,196	5.0	53.1%
Belleville School District	\$11,174	4.0	44.7%
Jackson Township School District	\$11,083	6.5	14.8%
Wood-Ridge School District	\$11,066	4.5	13.4%
Clifton School District	\$11,024	3.0	43.3%
Freehold Borough School District	\$10,981	2.0	66.4%
Wallington School District	\$10,973	5.0	27.2%
Carteret Borough School District	\$10,968	4.0	59.3%
South Amboy School District	\$10,966	6.0	38.4%
Dover Town School District	\$10,724	6.5	70.6%
Dunellen School District	\$10,597	5.5	35.9%
<i>Point Pleasant Borough School District</i>	\$10,560	7.5	10.2%
Sayreville School District	\$10,534	6.0	28.7%
Toms River Regional School District	\$10,466	6.0	21.3%
Haledon School District	\$10,274	4.5	66.4%
Elmwood Park School District	\$9,833	4.0	34.8%
Fairview School District	\$9,575	4.5	75.7%
South River School District	\$9,473	4.0	35.4%
Guttenberg School District	\$8,226	3.0	75.6%
average - bottom 25 in total expenditures per student	\$10,716	5.2	38.5%

Appendix F

Figure 6. Effect of Red Zone/Green Zone Designation on the Math Performance of Children in Public Housing



APPENDIX G

Comparison of COAH compliance of maximum- & high-opportunity towns with new homes built 1985-2009

Municipality	No. of maximum- and high-opportunity towns	Total COAH obligation per 1987-99	Total units built/ rehab'd/ underway by 2007	Total RCA units sent by 2003	Percentage of COAH obligation met by 2007	Total housing units in 2009	Housing units built 1985-2009 (ACS 2005-09)	Percentage addition to housing stock from 1985-2009
No activity reported to COAH	46	8,584	0	0	0	179,768	39,601	22%
Zero new units built; few rehab; mostly RCAs	20	3,660	27	516	15%	67,065	18,345	27%
Only rehabs reported	8	1,636	312	0	19%	38,333	8,697	23%
New units built less than RCAs sent	35	16,837	5,202	7,411	75%	258,237	92,698	36%
New units built greater than RCAs sent	49	16,502	10,073	3,057	80%	358,075	129,366	36%
All new units built/no RCAs sent	39	10,314	8,464	0	82%	267,408	70,232	26%
Totals: maximum & high opportunity towns	197	57,533	24,078	10,984	61%	1,168,886	358,939	31%