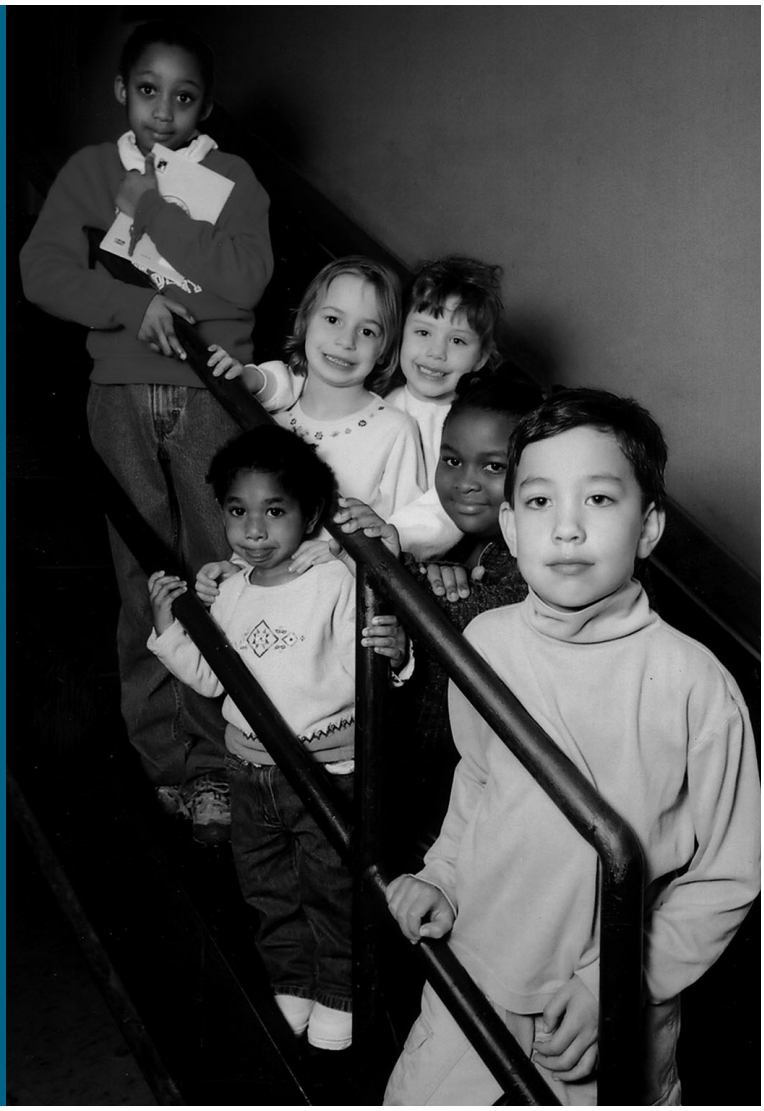
Schools Taxes and Jobs

Is it time for a new social contract between Yale and the community?



THE CONNECTICUT CENTER FOR A NEW ECONOMY

The Connecticut Center for a New Economy (CCNE) is a statewide non-profit organization dedicated to improving the economic and social well being of working families in Connecticut's urban centers by initiating and supporting efforts to raise wages of the working poor, improve public education and training, and preserve affordable housing.

To that end, we are demanding responsible economic development in the urban centers of Connecticut. We are reducing working poverty by advocating for those who seek self-determination and the right to bargain with their employers for better wages and working conditions. We are initiating public policy to preserve affordable housing and build strong communities for Connecticut's working families.

CCNE brings together various institutional partners, including faith-based organizations, labor unions, civil rights organizations and immigrant advocacy groups.

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Executive Summary

Yale University and the New Haven community share an inextricably intertwined future. Yale has found that it cannot simply wall itself off from the struggles of New Haven. As one thrives, so too should the other.

There cannot be a strong partnership if one of the partners is weak. A new social contract between Yale and New Haven could enable New Haven to break the cycle of poor jobs, weak communities and struggling public schools. A new social contract could bring New Haven and Yale together to build good jobs, strong communities, and top-notch public schools. This would be a true partnership of equals.

In November 2001, CCNE published "Good Jobs, Strong Communities" (available at www.ctneweconomy.org), which analyzed Connecticut's shift from unionized manufacturing jobs to predominantly non-union service sector jobs, and the resulting economic polarization between our state's haves and have-nots. That report studied the positive impact that unionization can play in closing the gap, creating broad-based prosperity and building strong communities.

This report—"Schools, Taxes and Jobs"—focuses on another important step to building strong communities: public education. Without strong public schools, local graduates are forced into jobs that pay poverty wages, families lose hope and communities fracture. Strong communities require strong schools.

This report reaches the conclusion that in order to strengthen New Haven's public schools we must identify additional long-term sources of funding. New Haven and Connecticut taxpayers are already contributing their share to public education. However, this report finds that due to Yale's tax-exempt status the City loses potential revenue that could support our schools. In 2001, Yale would have needed to pay an additional $12.5 million to the City in order for its contribution, together with the current state PILOT payment, to equal the revenue that the City would receive if Yale's property were taxable.

Yale University's endowment grows an average of $5.4 million / day. One day of endowment growth would go a long way towards addressing New Haven's need for an additional source of long-term school funding, which could be used to reduce class size across the district. Studies show this would raise overall student performance and help close the performance gap between white and minority students. Additional revenue could also help expand some current programs—such as pre-K, Head Start and intervention programs like "Reading Recovery"—being promoted by the Board of Education.

These improvements would not only help strengthen the community, but would also help Yale solve some of its own internal problems. For example, better schools would produce a more skilled workforce available to for work at Yale. Currently, Yale's employment pattern concentrates New Haven residents in lower labor grades. Better schools, combined with greater access, training and promotion opportunities, would also allow Yale's Latino and African-American workers (who are also concentrated in lower labor grades) to spread the strength of diversity throughout the entire staff.

Yale has a unique opportunity to strengthen New Haven's public school system by making a fair-share contribution that would provide additional long-term funding for New Haven's public schools.

Public Education in New Haven

There is a vicious cycle at work in New Haven: Below-average public schools fail to prepare a skilled workforce. Lacking skills for current high-wage jobs, New Haven's workers are underpaid and often work 2-3 different jobs, making it harder for parents to support their own children's education. A social environment that hinders parental involvement forces the public schools to shoulder a heavier burden than most other Connecticut school districts. The schools then produce another generation of under-prepared, under-skilled workers, and the cycle begins anew. To break this cycle and create lasting change, we need better jobs in New Haven, and we need to jump-start significant improvements to the city's public schools.

Although there is no easy, universally accepted way to "measure" a school system, student performance on standardized tests is an obvious place to start. Figure 1 shows the sixth grade Connecticut Mastery Test (CMT) index scores from 2000-01. The "CMT index" measures the overall level of achievement.

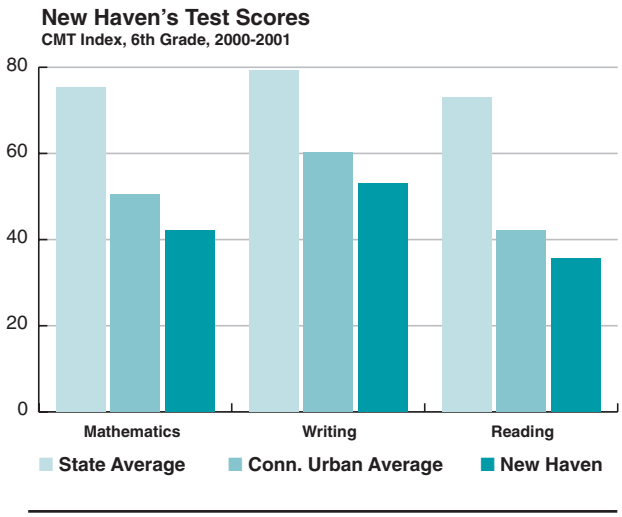


Figure 1.
Source: Strategic School Profile, District of New Haven (2000-01)

Not only is New Haven significantly below the state average, but New Haven also falls below the Connecticut urban average: an average of New Haven's socio-economic peer group, including Bridgeport, Hartford, New Britain, New London, Waterbury, and Windham. In many of these categories, New Haven's children performed more poorly than both Hartford's and Bridgeport's. We can also see a performance gap in mathematics, an area in which basic skills are most important for the burgeoning science jobs on New Haven's horizon.

(It should be noted, however, that testing among special education students may skew these scores. New Haven's special education students have a slightly lower participation rate than other urban districts. However, unlike other urban districts, New Haven and New London test their special education students at grade level; most others test more of their special education students using a test below their actual grade level.)[1]

The State of Connecticut has identified 28 "priority" schools statewide, based on their poor performance. Of those schools, 10 are in New Haven (while 3 are in Bridgeport, and 11 in Hartford). There are five elementary schools in the Hill neighborhood, and four of them are on the list: Hill Central, Truman School, Vincent Mauro School and Prince School. The other elementary schools on the list are: Lincoln-Bassett (Newhallville), Quinnipiac (Quinnipiac East), and Clinton Avenue (Fair Haven). Also on the list are Clemente, Jackie Robinson, and Fair Haven middle schools.

The Board of Education should be congratulated for doing a good job with limited resources. The magnet school program has attracted significant federal and state funding. The school construction program has attracted additional state funding. New Haven's average spending per student exceeds the state average, but it is in the same ballpark as Connecticut's other urban districts.[2] It is simply more expensive to run an urban school district, because more parents are working multiple jobs or burdened by excessive debt, diminishing their ability to actively participate in their children's education.

In addition, the Board of Education has implemented intervention programs such as "Reading Recovery" in 12 schools and has expanded pre-K opportunities to give

our children a head start. These are important initiatives, and they need to be expanded. For parents who have difficulty affording child care (on average $650/month), pre-K can provide a learning environment for the kids and financial relief for overworked parents. We need to join with the Board of Education to expand these programs. Most recently, the City has implemented an innovative plan for school accountability, which holds teachers, administrators, and parents accountable for their students' success.

School construction and accountability plans can be elements of a successful school district. However, New Haven's schools need resources to reduce crowded classrooms and hire additional teachers. Otherwise, the accountability plan will only set up the schools for failure and begin a crossfire of finger-pointing. We need to equip our excellent teachers and our caring parents with the tools to make broader success possible.

Class Size in New Haven

New Haven's classrooms are more crowded than those in Connecticut's other urban centers. Figure 2 shows that, in the crucial primary grades, New Haven's class size not only exceeds the state average, but even exceeds the Connecticut urban average (which includes Bridgeport and Hartford).

New Haven's crowded kindergarten classrooms should be viewed as nothing short of a citywide crisis. Studies have shown that the benefits of smaller classes do not appear until classes are reduced below 20 (see below). Kindergarten classes statewide average about 18, and, in Connecticut's urban centers, average about 19. As Figure 2 shows, in New Haven they average 22.5. Table 1 (next page) shows that fully 25 of New Haven's elementary schools have kindergarten classes more crowded (and only two less crowded) than the average Connecticut urban kindergarten class. New Haven has seven schools in which the average kindergarten class is filled with 25 children or more.

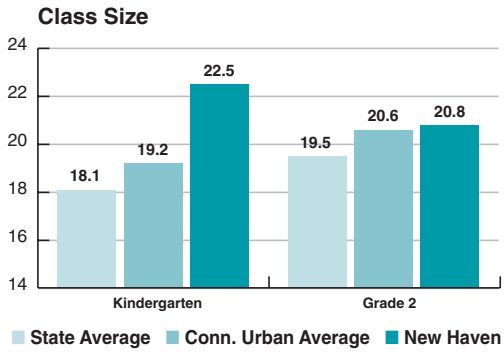


Figure 2:
Source: Strategic School Profile, District of New Haven (2000-01)

Large classes are most damaging within those schools that the State of Connecticut has identified as at-risk "priority" schools. These schools need more than any to feel the benefits of class size reduction. However, none of the kindergartens in New Haven's "priority" schools average less than the threshold 20 students per classroom. With the exception of Prince (see below), none of the 2nd grade classes in these schools average fewer than 20 students per classroom. In fact, the average 2nd grade classroom in New Haven's 5 most at-risk schools (except Prince) holds 23.5 students.

Prince School (2-5) has an average 2nd grade class size of 14, but will soon be combined with Welch Annex (PK-2), whose kindergartens average 24. The planned move explains why enrollment in Prince has dropped recently. The class size in the new Prince-Welch annex remains an open question.

The Impact of Class Size

Class size is not an absolute measure of a school's quality. In fact, many of New Haven's best schools have the largest classes, precisely because they attract so many more students. However, when a school is troubled, lowering the size of its classes is

Table 1: Class Size in New Haven's Elementary Schools

Neighborhood	School	Kindergarten	Grade 2
Newhallville	**Martin Luther King**	28	18.5
Hill	✔**Hill Central**	27	20.2
Magnet	**Strong Transitional Magnet**	26.7	23
West River	**Barnard**	26.5	25
Magnet	**Edgewood Magnet**	26	24
Hill	✔**Vincent E. Mauro**	25.7	25.3
Magnet	**Davis Street Magnet**	25	19.3
Hill	✔**Truman**	24.7	24.7
Magnet	**East Rock Magnet**	24.3	25.7
Hill	**Welch Annex**	24	15.6
Quinnipiac East	**Bishop Woods**	23.5	24.5
Magnet	**Conte-West Hills Magnet**	23.3	23.3
Dwight	**Timothy Dwight**	23	25
Fair Haven	**Columbus Family Academy**	23	14.2
West Rock	**Katherine Brennan**		22.5
	DISTRICT-WIDE AVERAGE	**22.5**	**20.8**
Magnet	**Benjamin Jepson Magnet**	22	22
Quinnipiac East	**Woodward**	21.5	23.5
East Rock	**Worthington Hooker**	21.5	22
Dixwell	**Helene Grant**	21.5	18.3
Fair Haven	✔**Clinton Avenue School**	21	23.8
West Rock	**Clarence Rogers**	21	
Magnet	**The Museum Lab School**	21	16
Quinnipiac East	✔**Quinnipiac**	20	24
Special	**Celentano School** (Special Ed)	20	16
Newhallville	**Lincoln-Bassett**	19.8	19.8
East Shore	**Nathan Hale**	19.5	24.5
	CONN. URBAN AVERAGE	**19.2**	**20.6**
West Rock	**Beecher**	19	23.3
	CONN. STATE AVERAGE	**18.1**	**19.5**
Dixwell	**Isadore Wexler**	15.3	15.7
Hill	✔**Prince**		14
	✔Indicates state-identified at-risk "priority" schools		

Source: Strategic School Profiles, by school (2000-01).

usually the most direct way to improve its performance. Similarly, when a school district is troubled, lowering its average class size can improve its performance. As the U.S. Department of Education observes:

> Class size reduction changes numerous features of the classroom situation. There are fewer students to distract each other. Each student in a reduced class size gets more attention on average from the teacher, and more time to speak while the others listen. Reduced class size also reduces the level of noise in a class. One theory offered to explain the positive effects of class size reduction on student achievement simply argues that in small classes each student receives a larger portion of the educational resources represented by the teacher's instructional time, and consequently learns more. Other researchers have drawn attention to the quality of teaching in smaller classes, rather than the quantity.…The teachers know each of their students better, and can keep track of how each student is doing on the learning task of the moment. This knowledge enables the teacher to intervene more effectively to help the individual student make progress. Researchers have also suggested that smaller classes are more likely to be "friendlier" places, where students develop better relationships with their classmates and with the teacher, encouraging students to become more engaged in classroom learning activities. The smaller the class, the harder it is to escape the positive influence of the classroom educational experience.…*It may be that class size reduction improves student achievement because there is more time for learning and more individualized attention and a better introduction to classroom routine*.[3]

The State of Tennessee has demonstrated the enormous, positive effect of reducing class size, especially in low-income, predominantly minority districts. Begun in 1985, the Tennessee STAR project did an impact study of class size reduction.[4] As Table 2 shows, the study found significant improvements when primary class sizes

Table 2: Findings from Tennessee STAR Project
Reducing K-3 class sizes to 13-17 students had the following results:

Overall Improvement	"Smaller class students substantially outperformed larger class students on both standardized (Stanford Achievement Tests) and curriculum-based tests (Basic Skills First). This was true for both white and minority students in smaller classes, and for smaller class students from inner city, urban, suburban, and rural schools."
Impact on Minorities	"The positive achievement effect of smaller classes on minority students was double that for majority students initially, and then was about the same."
Retention and Special Education	"A smaller proportion of students in the smaller classes was retained in-grade, and there was more early identification of students' special educational needs."
Positive Effect Lasts for Years	"In fourth grade, students from the smaller classes still outperformed and were better behaved than the students from the larger classes in all academic subjects…At least through eighth grade, a decreasing but still significant higher academic achievement level for the students from the smaller classes persists."
Aides Had No Measureable Effect	"There were no significant differences in academic achievement for students in the larger classes with or without an additional instructional aide."

Source: U.S. Dept. of Education. "Reducing Class Size: What Do We Know?" (1999)

(K-3) were reduced to a range of 13-17 students. Test scores improved in every category for all students, and the gap between white and minority students also narrowed. Fewer students were held back at the end of the year.

The study found that the benefits were less noticeable in grades 4-12 and that improvements occurred only after the class size got well below the threshold of 20. Teacher / student ratio was found not to be a relevant factor; adding a teacher or teacher's aide had little effect. The key factor is the number of students in a classroom. These findings have been corroborated by other data.[5]

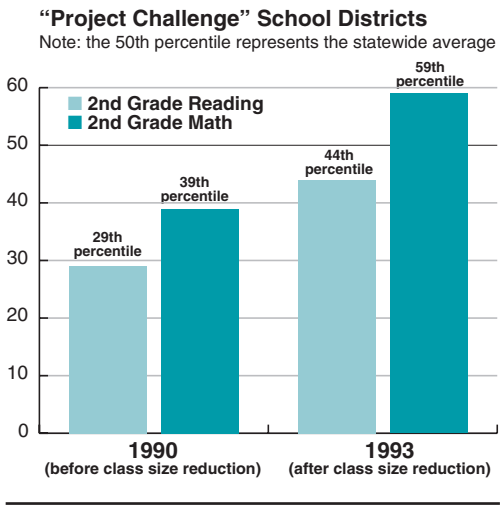


Figure 3
Source: U.S. Dept. of Education, "Reducing Class Size: What Do We Know?"

Tennessee did more than simply study the issue. After seeing the results of their research, the state created "Project Challenge", aimed at reducing class sizes in 16 of the poorest school districts. The results were dramatic and fast. These districts went from ranking well below the state average in 1990, to meeting or exceeding it by 1993 in certain categories (see Figure 3). Within just three years, "The Project Challenge districts moved from near the bottom of school district performance in Tennessee to near the middle in both reading and mathematics for second grade."

Following this model, there is a straightforward way to improve the performance of New Haven's schools: reduce class size. If reducing class size in Tennessee's poorest districts could raise their rankings to the state average, imagine what doing the same in New Haven could mean. The U.S. Department of Education report reaches the following overall conclusion: "Reducing class size to below 20 students leads to higher student achievement. However, class size reduction represents a considerable commitment of funds."[6]

This, of course, is the one major barrier to reducing class size: money.

Two Needs: More Classrooms and More Teachers

New Haven's public schools are funded primarily from two sources: local property tax revenue and state grants. There are two major costs associated with class size reduction: hiring more teachers and building more classrooms.

The current administration already has expansion and renovation programs underway at seven different K-8 schools, with additional plans for school construction on the horizon. A targeted program of K-3 class size reduction could be integrated into these construction plans. This additional construction would indeed add to the cost of these projects. However, the state is already committed to funding $860 million of the $1 billion of planned school construction in New Haven.

In Tennessee the state shouldered the cost of class size reduction in targeted low-income districts. Although it might be unrealistic to expect the same in Connecticut, it might not be unrealistic to expect the state to build the extra classrooms, once the City had secured a commitment from an institutional partner to hire the extra teachers.

Can New Haven afford to hire more teachers? Can we afford not to?

The feasibility of hiring additional teachers depends upon the answers to three questions: Are they available? Can New Haven attract them? Can New Haven pay them?

Regarding availability, New Haven has something working in its favor. Despite recent publicity surrounding a "teacher shortage", there is currently a statewide surplus of elementary school teachers. A study by Connecticut's Department of Education finds an average annual surplus of over 900 elementary schoolteachers (over and above the average 1030 elementary vacancies) for the period 1999-2003.[7] Reducing class sizes in the primary grades takes advantage of the surplus that we have, by hiring additional K-3 teachers into additional K-3 classrooms.

Attracting urban schoolteachers often requires an incentive; offering lower class sizes would be precisely that. Teachers love to work in classrooms that are not crowded and that allow them to spend more time with each child. It is more rewarding for the teacher, as well as for the child. However, New Haven's entry-level salary is currently lower than in Connecticut's other urban centers. An entry-level teacher with a bachelors degree in 2001-02 was paid $29,700 in New Haven, $33,100 in Hartford, $34,200 in Waterbury, $33,300 in New Britain, $35,400 in Bridgeport and $33,800 in New London (see www.cea.org). New Haven's salary/benefits package must become more competitive so that the incentive of smaller classes is not offset by the disincentive of lower pay. This is not a problem that can be solved simply by the administration or by the teachers union; it requires an additional source of funding for the district, not just a different way of dividing up the same funding.

"We're competing against other cities and especially suburban districts that have higher teacher salaries."
—Reginald Mayo, New Haven Superintendent of Schools
New Haven Register, 12/15/01

How much would it cost the city to hire these new teachers? Assume that New Haven raises the entry-level salary by 10%, bringing it to $33,000, and add about 10% for payroll taxes and 32% for benefits. Table 3 shows the number and the cost of additional teachers needed to reduce New Haven class sizes district-wide.[8]

The cost of additional teacher salaries would be somewhere between $2–6.4 million. This program could be phased-in over time, starting with the poor-performing "priority" schools and schools where the physical classrooms are available. As more money is allocated, more teachers are recruited and more classrooms are built, classes could achieve the optimal size of 15 students for only $6.4 million in annual salaries and benefits for the new teachers.

Table 3: Cost of Hiring New Teachers to Reduce Class Size (2000 enrollment)

Reduced K-3 Class Size	Number of New Teachers Needed	Annual Cost (in 2001 dollars)
19	43	$2.02 million
18	63	$2.93 million
17	84	$3.95 million
16	109	$5.10 million
15	137	$6.40 million

Analysis using data from New Haven SSP, NHFT salary data and Conn. Department of Education enrollment data. The cost findings assume a 10% raise for entry-level teacher salaries, plus 10% payroll tax and 32% for benefits.

The payoff would be impressive. The schools' performance would skyrocket: Remember Tennessee, where similar districts approached or surpassed the state average within only 3 years. Over time, we could even attract private school students (and their parents) back into the public school system, strengthening both overall student performance and parental involvement.

There would also be additional cost savings. A study based on the Tennessee STAR project points out that with smaller class sizes, 2.5% fewer students were held back at the end of the school year.[9] This reduced student retention rate would decrease the district's overall costs, since every student retained means more crowding and another year of school, which costs the district $10,895 per student per year.

Improved performance in the schools would ripple throughout the entire city, and would have a noticeable impact on Yale University. The local workforce would be prepared to take the higher-skilled jobs at Yale and any Yale biotech spin-offs. A more skilled workforce, holding better jobs, would create an even stronger New Haven community.

Yale and Taxes

Unless the city could convince the state or federal governments to grant a few million dollars for new teacher hiring, New Haven's property owners will have to shoulder the burden. Raising the property tax rate is not a solution, because that would only further New Haven's economic deterioration.

Yale is New Haven's largest property owner. If Yale wpartnered with the city to fund class size reduction, everyone—including Yale—would benefit.

Yale University and its teaching hospital, Yale-New Haven Hospital, currently own about $1.1 billion of tax exempt real and personal property in the City of New Haven. If this property were taxed, Yale would contribute $38.9 million a year into the City's budget. Instead, Yale makes a "voluntary contribution for fire services" that totaled $2.1 million in the year 2001 (or 5.4% of what they would pay without an exemption). Connecticut taxpayers pay to partially reimburse cities for revenue lost from the tax exemption of colleges and hospitals, through the State's PILOT (Payment In Lieu Of Taxes) program.[10] In 2001, the loss to New Haven due to Yale's tax exemption equaled $38.9 million. Of that figure, the state PILOT program reimbursed the city $24.3 million and Yale made a $2.1 million voluntary contribution for "fire services," leaving $12.5 million unreimbursed. State taxpayers pay over 10 times the amount that Yale does.

When the design of the PILOT program was discussed throughout the 1980s, it was suggested that tax-exempt institutions should contribute together with the state's taxpayers. For example, in 1985 a mayor-appointed New Haven Revenue Commission recommended that tax-exempt institutions should pay that portion of their tax burden that was not reimbursed by the state PILOT program.[11] Ultimately, the state's PILOT program was implemented without any provision for fair share contributions from tax-exempt institutions. However, in 1990 Yale signed an agreement in which it gained control of two city streets and also agreed to pay its voluntary contribution for "fire services."

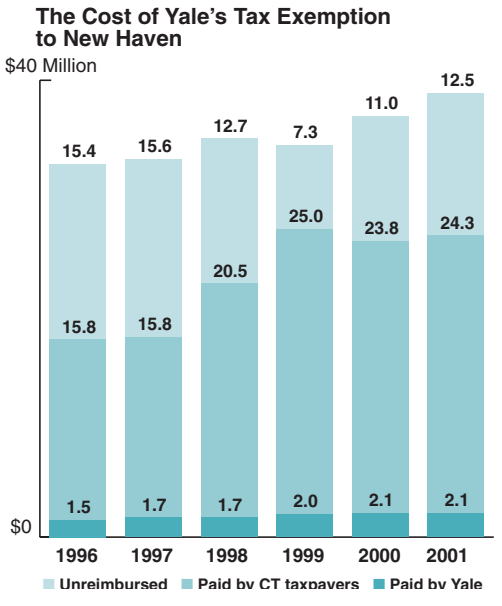


Figure 4
Source: City of New Haven Grand List and Annual budget

Although the PILOT program is supposed to reimburse cities for 77% of lost tax revenue, in reality this full amount rarely survives the state budgetary process. For example, the PILOT program only reimbursed the city for 65% of lost tax revenue in 2001, and 67% in 2000. Now, the recession and the disappearance of the state budget surplus might bring even more political pressure to reduce future appropriations for PILOT payments.

The total potential tax bill ($38.9 million in 2001) described in Figure 4 is almost certainly too low, because most of Yale's equipment—medical, laboratory, computer equipment, and other personal property—is not even assessed by the city. The State PILOT program does not reimburse the city for taxes lost on exempt personal

property, so the Tax Assessor ignores it (it was last assessed in 1984). Equipment owned by Yale is tax-exempt; however, equipment leased by Yale is taxable. Soon, even this could change: In January 2002, local legislation was proposed to make even Yale's leased property exempt.

Yale does pay property taxes on its $61 million of commercial property. As a result, Yale often advertises itself as "New Haven's third largest tax payer." These commercial properties function effectively as part of Yale's huge real estate investment portfolio. In fact, in 2001 Yale paid more commercial taxes to New York City than to New Haven (see Figure 5). To put this into perspective: Yale's tax payments to New Haven and to New York City are both less than Yale's business meal or telephone expenses.

The $1.9 million of taxes that Yale does pay on its commercial property would be $2.8 million if Yale had not removed $24 million of formerly-taxable property from the tax rolls between 1997-2000 (see Table 4). Before Yale removed these properties, the city received over $850,000 of tax revenue annually for them.

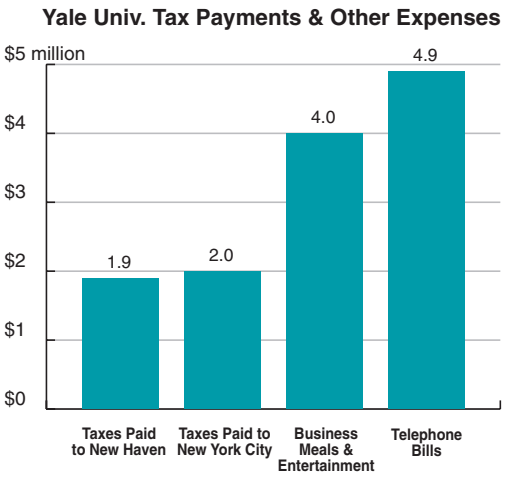


Figure 5
Source: IRS Form 990 for Yale University (1999), documents from NYC tax assessor and www.yale.edu/onhsa.

Table 4: Yale Properties Removed from the Tax Rolls

Address	Description	Year Removed	Assessed Value Lost($)	Annual Taxes Lost($)
1156 Chapel	Theater and new Arts Building	1998	886,000	31,000
246 Church St.	Office Building	1997	1,500,000	52,450
35 College St.	Two-story office building	1997	2,757,000	96,350
370 Congress Ave.	Medical Research	1997	2,100,000	73,400
313 Crown; 139 York	Apartments	2000	615,000	21,500
353 Crown	Arts and Printing	1997	323,000	11,300
120 East St.	Facilities Building	1997	1,073,000	37,500
746 Fountain St.	Addition to Golf Course "nature preserve"	2000	152,000	5,300
31 Hillhouse Ave.	Luce Hall	2000	434,000	15,150
780 Howard Ave.	YPB Parking Garage	1998	4,308,000	150,550
184 Liberty	Psychiatric Hospital	1999	*1,229,000	42,950
205 Park St.	Single parking space	2000	2,660	100
459 Prospect St.	Apartments	2000	146,000	5,100
2 Whitney / Grove	Office tower	1999	*4,350,000	152,000
215 Whitney Ave.	Parking	2000	156,000	5,450
221 Whitney Ave.	ITS Building	2000	3,979,000	139,000
194 York St.	Slated for demolition for A&A Bldg	2000	295,000	10,300
60, 64 Ashmun St; 14 Prospect Pl.; 103, 109, 111 Davenport	Surface parking lots	2000	103,000	3,600
TOTAL	**Total of 24 Properties**		**$24,094,000**	**$853,000**

*These properties are partially taxable and partially exempt. In 1999 the taxable portion of their assessment decreased by the listed amount.

(Through the PILOT program, state taxpayers still contribute a portion of this to the city. Yale, however, makes no fair share contribution.)

Yale also scores poorly in comparison to Harvard University. Yale's voluntary payments to its host city amount to less than a third of what Harvard has agreed to pay to Cambridge and Boston (see Figure 6). Because Yale owns less local commercial property than Harvard, Yale's local property tax bill is also less than one third of Harvard's.

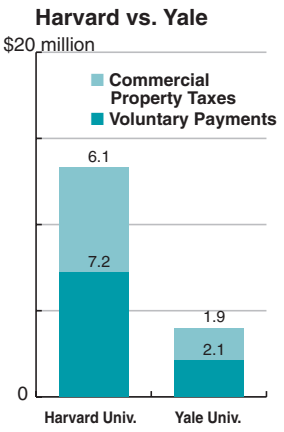


Figure 6
Source: "Investing in the Future: Harvard's Contribution to the Boston metropolitan area economy" (1998)

It bears noting that during the year 2001, Yale's endowment grew by $600 million, while Harvard's endowment dropped $800 million (Harvard's endowment is $18.3 billion to Yale's $10.7 billion). Over the past 10 years, Yale's endowment has boasted an average annual growth rate of 18.3%. Based on its decade-long average growth, Yale's endowment now grows by approximately $5.4 million a day.

Yale could well afford to partner with the City of New Haven to fund salaries to pay new teachers in order to reduce the number of students packed into the classrooms of New Haven's public schools. The unreimbursed portion of Yale's tax exemption costs the city more than the total cost for the new teachers' salaries, who could be hired for no more than one or two average days of growth for Yale's endowment (see Table 5).

Yale has both a responsibility and an interest in improving the local schools. The quality of New Haven's public schools directly affects the quality of Yale's local workforce. In addition to improving Yale's own workforce, better schools will also help Yale to expand in one of its key targeted growth areas: biotechnology. Today, most biotech companies leave New Haven before they reach the production stage, citing the lack of a prepared workforce as a main reason.[12] Yale has also embarked on $1 billion of new science construction of its own, which will undoubtedly increase Yale's own need for qualified laboratory technicians and research assistants.

Table 5: Facts about Yale's Endowment

Total size of Yale's endowment (2001)	**$10,7000,000,000**
Average annual growth for Yale endowment (past 10 years)	**+18.3%**
Average daily growth for Yale endowment	**+$5.4 million per day**
Cost of Yale's tax exemption to the city	**$12.5 million per year**
Approx. cost of new salaries to fund class size reduction	**$2-6.4 million per year**

Source: Yale Endowment Update (2001).

Improved public schools could help ensure that New Haven's workforce is prepared to benefit from the expansion of biotech and Yale research positions.

Yale has shown some interest in working with the public schools. It has joined with others in Connecticut to support a touring "BioBus" to pique children's interest in biotechnology. Yale's "New Haven Teachers Institute" puts Yale professors together with local schoolteachers to develop innovative curricula. These efforts are helpful, but a strong partnership requires strong action. Fundamental change is required. Now is the time for Yale to put its shoulder to the wheel and join with the rest of the community to help turn things around.

The Impact on Yale

The impact of New Haven's struggling public schools can be seen directly within Yale's own workforce. Yale tends to hire New Haven residents to fill positions that require few skills and have the lowest wages. Figure 7 shows that, in the service and maintenance staff, New Haven residents fill 71% of unskilled positions, but only 15% of skilled trade positions. In the university's clerical and technical staff (C&T), 46% of the lowest-grade positions are filled by New Haven residents, but only 26% of the highest grade positions are. (These data are not available for management, faculty, or hospital staff.)

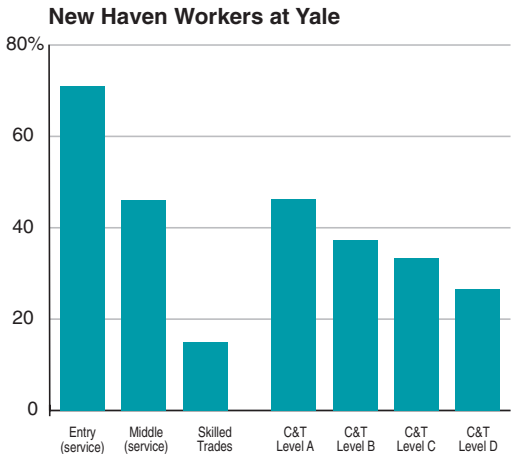


Figure 7
Source: Yale University Human Resources Department (December 2001)

The trend is even more dramatic when one considers Yale's hiring of African-Americans and Latinos in general. Yale's current hiring practices keep minorities in lower-wage, entry-level jobs. Blacks and Latinos together make up 54% of Yale's service and maintenance staff (Local 35) and 23% of Yale's clerical and technical staff (Local 34); on the other hand, blacks and Latinos make up only 7% of Yale's managerial and professional staff, and 3% of tenured faculty (from whom deans and top administrators are selected). The higher you go, the fewer people of color you find.

Latino workers face slightly different problems at Yale than African-American workers. As Figure 8 shows, Latino workers, who make up over 21% of the New Haven population, are poorly represented in every labor grade (averaging 3-4% of the workforce). African-American workers, on the other hand, face a glass ceiling in every sector of the workforce. Well-represented in the unskilled custodial and food service staff (see Figure 8), their representation declines steadily as one goes up the ladder to higher wage, higher skilled jobs: 72% of entry-level service and maintenance workers are black, as opposed to 16% in the highest grade. Similarly, 29% of entry-level clerical workers are black, as opposed to 13% in the highest grade.

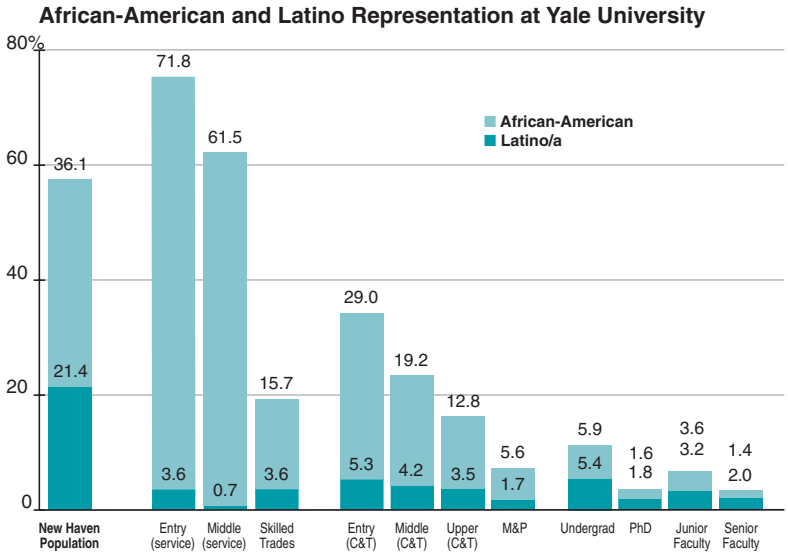


Figure 8
Source: IPED (1995-2000) and Yale Affirmative Action Office (October 2001).

The unavailability of training and Yale's general failure to promote from within contribute to the segregated nature of job placement at Yale. Workers hired into low-level jobs get stuck with little hope of advancement or promotion. For example, clerical and technical workers in the bottom two labor grades have been stuck in their present position an average of 8 years, while those in the upper two labor grades have been in their present position an average of only 5 and 6 years, respectively. If Yale could provide training that pre-qualified a worker for a higher skilled position, and if Yale emphasized internal promotion as a direct reward for such training, then the diversity of Yale's workforce could spread to all sectors and skill levels.

"I took a test ten years ago and qualified to enter the trades helper program, but Yale never followed through. I never got the training. If I had, I'd be in a top job now instead of stuck in the middle."
—Michael López

Interestingly, the same problem exists along the academic pipeline. Yale has drawn praise for its recruitment of minority college students. In 2000 around 30% of bachelor degrees go to U.S. minorities, including 5.4% to Latinos, and 5.9% to African-Americans. Over the past 5 years an average of 7.5% of Yale's PhD degrees went to U.S. minorities, with an average 1.6% to African-Americans and 1.8% to Latinos. Yale is training a future academic workforce even less diverse than its current faculty. Among faculty, the promotion problem reappears. Yale has no formal "tenure-track" from junior to senior faculty. In order to advance, a junior faculty member must apply for a "new" open senior position and compete against other applicants. If a fair internal promotions process were in place, we might not see the proportion of African-American and Latino faculty drop from 6.8% in the junior ranks to 3.4% in the tenured ranks. A 2001 study found that, over the past quarter century, the percentage of black faculty at Yale has actually declined; among the black faculty who have left Yale are Toni Morrison, Cornel West, and Henry Louis Gates Jr.[13]

In 2002, the "Business-Higher Education Forum" released a report emphasizing the connection between diversity on college campuses and our national workforce.[14] The report used data from the 2000 national census to calculate our nation's future workforce needs, and found that today's universities are not preparing a diverse workforce that will be both prepared and available to meet those needs.

Yale President Richard Levin has spoken eloquently about the strength that diversity could bring to Yale:

> By reaching out to ensure that we bring into our student body and into our workforce women and individuals of underrepresented minority groups, we aid the University in achieving its mission and benefit the nation as well.…Along with my fellow Officers of the University, I am dedicated to seeing that Yale, for reasons of principle and for the sake of its own internal strength, works vigorously through its affirmative action policies to ensure a vital and diverse community.[15]

Strengthening the diversity of Yale's entire workforce will require a concerted and sustained effort on the part of the university. Improving the local schools is a crucial stage in spreading Yale's diversity throughout all levels of its staff, as is improving hiring practices, training opportunities, and promotion policies. But this alone will not be enough. Access to Yale's entry-level jobs must also be opened up. Yale needs to make an extra effort to recruit and hire from New Haven's Latino population. Yale should commit to hire its entry-level clerical workers directly from New Haven based training programs. In particular, the new biotech training program at Gateway could feed directly into Yale's hundreds of entry-level laboratory jobs, a category that will see enormous growth once Yale's $1 billion of new science construction opens.

Conclusion

Yale is an integral part of the fabric of New Haven, just as New Haven is an inextricable part of Yale's own future.

Yale University and its teaching hospital are together New Haven's dominant employer. As such, Yale stands to benefit the most from public school improvements that produce a more highly skilled local workforce.

Yale University and its teaching hospital are New Haven's dominant property owner, but the city does not receive tax revenue from Yale's $1.1 billion of tax-exempt property. A fair share contribution from Yale of $12.5 million would ensure the city is fully reimbursed for Yale's exemption.

Yale has both a self-interest and a responsibility to make direct contributions to our city's public schools. The most proven, effective way to do this is to reduce class size across the district. The city could hire the required new teachers for a few million dollars a year, which could be paid through the approximately $5.4 million a day growth of the endowment of Yale University. Just one or two days of endowment growth, invested in the public schools, would produce long-term gains beyond our imaginings, bringing Yale and the local community together into a strong partnership of equals.

Notes

1 For example, on the Math CMT, special education students had an average participation rate of 86.7% in New Haven, 87.1% in Hartford, 88.3% in Bridgeport, 90.2% in New Britain, 92.1% in New London and 92.2% in Waterbury. However, in Hartford, Bridgeport, New Britain and Waterbury, the district used a below-grade test to evaluate most special education students, unlike in New Haven, New London and Windham. See Connecticut State Board of Education, Connecticut Mastery Test Statewide Results, 2000-01, "Participation Rates," pp. 363ff.

2 New Haven spends $10,895 per pupil per year. The Connecticut urban average spending is $10,022 per pupil per year. See Strategic School Profile for New Haven School District (2000-01).

3 Emphasis added. U.S. Department of Education, *Reducing Class Size: What do we Know?* (March, 1999), available at: www.ed.gov/pubs/ReducingClass/Class_size.html.

4 The Tennessee project compared students in three learning environments: (1) Classes of 13-17 students, (2) Classes of 22-26 students, and (3) Classes of 22-26 students, with a teachers aide. The students' achievement was monitored not only for the four years in which these conditions were maintained (K-3), but also for the ensuing years, when both sets of students were thrown together into the same classrooms. The U.S. Dept. of Education reports "The Tennessee studies have been viewed as landmark research. Finn concluded that 'this research leaves no doubt that small classes have an advantage over larger classes in school performance in the early primary grades.' Mosteller, Light, and Sachs called it '... one of the great experiments in education in U.S. History.' Krueger, in an external re-analysis of the *Project STAR* data, re-confirmed the original finding that 'students in small classes scored higher on standardized tests than students in regular classes' even when the data analysis took into account adjustments for school effects, attrition, re-randomization after kindergarten, nonrandom transitions, and variability in actual class size. *Project STAR* and the associated Tennessee studies provide the strongest evidence available to date regarding the positive effects of class size reduction." See U.S. Department of Education, *Reducing Class Size: What Do We Know?* (revised 1999). Available online at: www.ed.gov/pubs/edpubs.html

5 For example, North Carolina studied K-3 classes with a size of 15 students, finding that the percentage of time devoted to non-instructional activities such as discipline decreased from 20% to 14%. In Wisconsin, a similar study focused on school districts serving students from low-income families; in addition to across-the-board benefits to smaller classes, the Wisconsin study found that "the achievement gap lessened between white and African-American students in the smaller classes in the first grade, in contrast to a widening of the gap between white and African-American students in the larger classes of the comparison schools."

6 U.S. Department of Education, *Reducing Class Size: What do we Know?* (March, 1999), available at: http://www.ed.gov/pubs/ReducingClass/Class_size.html.

7 "Public School Educator Supply and Demand in Connecticut," *Table 1: Projected Educator Supply and Demand by Assignment Area, 1999-2003* (page 5). The primary shortage affects high school specialists. See: www.state.ct.us/sde/der/publications/teacher_publications/demand.pdf.

8 The teachers' future raises would presumably be borne through increases to the program's cost. For example, since both Yale's endowment and the assessment of Yale's tax-exempt property steadily increases, we can assume that any payments linked to them would also increase.

9 Helen Pate-Bain, B. DeWayne Fulton, and Jayne Boyd-Zaharias, "Effects of Class-Size Reduction in the Early Grades (K-3) on High School Performance," April 1999, www.nea.org/issues/class-size/bain.html.

10 It is sometimes claimed that the state grant originating from payments by the Mashantucket Pequot and Mohegan Fund Grant is also a "PILOT" or payment in lieu of taxes. This is not true. In New Haven's city budget, this revenue is listed under "Other State Grants", and not under "State Grants: Payments in Lieu of Taxes". Although some PILOT formulas are used to calculate the disbursement of the casinos' funds, the total amount of these grants is fixed and does not increase in proportion to increased property tax assessment. For example, in 2001, the value of Yale's assessed property went up, the total college & hospital PILOT payment to New Haven went up, but the Pequot/Mohegan grant to New Haven went down in value. It is worth noting,

however, that even the Mashantucket Pequots and Mohegans make an annual "voluntary payment" to New Haven that is eight times larger than Yale's.

11 New Haven Revenue Commission, Final Report (February 4, 1985), part I, page A-4.

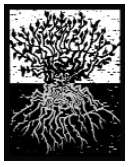
12 For more details on the challenges facing biotech growth in New Haven, see the report *Incubating Biotech: Yale Prospers, New Haven Waits*, available at www.ctneweconomy.org.

13 Journal of Blacks in Higher Education, 8/31/2001. Data on faculty, students and staff is available from IPED.

14 The Business-Higher Education Forum, *Investing in People: Developing all of America's Talent on Campus and in the Workplace,* January 2002. Available at www.bhef.com.

15 Statement by President Levin, *Yale University Affirmative Action and Equal Opportunity Policies,* 2000.

On the cover, from left: Willina Housley, Jubilee Dugdale, Sophia O'Brien-Udry, Charis Parsons Jones, Shannell Morrison and Andrew Suzuki. Photos by Virginia Blaisdell



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