# Staffing Levels in Des Moines Public Schools 

An Analysis of Personnel and Expenditures
By the Council of the Great City Schools

2012

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# Staffing Levels in the Des Moines <br> Public Schools: An Analysis of Personnel and Expenditures <br> By the <br> Council of the Great City Schools 

## Introduction

Des Moines Public Schools is the largest public school system in Iowa, serving a diverse enrollment of over 30,000 students. About 17 percent of these students are African American, 21 percent are Hispanic, 15 percent are English learners, 15 percent have an Individualized Education Plan (IEP), and about two thirds are eligible for a free or reduced-price lunch. The district employs nearly 5,000 teachers and staff and operates over 60 schools throughout the community.

Des Moines Public Schools provides the largest variety of educational programs in the state of Iowa, including the state's only International Baccalaureate programs and the wide array of training courses offered by its Career \& Tech Institute. Many of these programs have been nationally recognized for their achievements, and several schools in the district offer innovative approaches such as continuous calendars throughout the year.

Over the last decade, a comprehensive and ongoing capital improvements campaign has renovated and updated many district schools, 44 of which have now earned the Energy Star designation for energy efficiency.

The school district is administered by a superintendent who has been in the position since July 1, 2006, but who will be leaving the district in the summer of 2012.

And the school system is governed by the Des Moines School Board, whose seven members are elected for four year terms. In addition to overseeing district governance, school board members serve on a variety of district committees, represent Des Moines Public Schools on a variety of local, state and national organizations, and maintain relationships with both national organizations and local governmental bodies.

Data compiled each year by the Council of the Great City Schools in its Beating the Odds reports indicate that the district has seen uneven progress in the academic achievement of its students. For example, while the district has made strong gains over the past few years across almost all student groups in math at the eighth grade level, outpacing state gains, math scores at the fourth grade level have fallen since 2007. Similarly, overall reading scores have risen at the eighth grade level, but not the fourth grade level.

## Purpose of Report

The Board of Education and Superintendent of the Des Moines Public Schools asked the Council of the Great City Schools, the nation's primary coalition of large urban school systems, to examine the staffing levels of the school system to determine whether the numbers of staff members employed were appropriate for a district serving as many students as Des Moines does. The Council was not asked to examine the organizational structure of the district itself but to focus on staffing levels.

The Council has conducted nearly 220 studies and reviews in over 50 major urban school systems over the last 12 years in areas ranging from organizational structure to curriculum, financial systems to transportation, and food services to personnel operations. A list of reviews conducted by the organization is presented in the appendix to this report.

## Methodology

The question the Board of Education of the Des Moines Public Schools asked was, "Are we overstaffed, understaffed or appropriately staffed?" This is an important question that local policymakers do not always ask when they are attempting to meet a goal of increased organizational effectiveness and efficiency.

As important as the question is, however, it is not an easy one to answer with complete confidence. In attempting to address the board's query, the Council of the Great City Schools relied on data from the National Center for Education Statistics (NCES) of the U.S. Department of Education. These data come from the Common Core of Data, a survey conducted by NCES, for 2009-10 (staffing levels) and 2008-09 (expenditure levels). (Both sets of data are the most recent available and were published by NCES in 2011 as Revision C NCES report.)

The NCES has an extensive array of data on every school district in the nation, including data on staffing levels by category and personnel expenditures. The Council chose to focus on district (LEA) administrators and their support staff, school administrators and their support staff, teachers, and total staff members. Each variable is presented on a per-student basis in order to correct for variations in district enrollment size. The NCES variables are defined as follows-

* LEA administrator and support: Chief executive officers of education agencies, including superintendents, deputies, associate and assistant superintendents, and other persons with districtwide responsibilities, such as business managers. The count excludes instructional supervisors or student support staff, such as social workers and psychologists. LEA support staff includes individuals who provide direct support to LEA administrators, including secretarial and clerical staff.
* School administrator and support: Staff members, whose activities are concerned with directing and managing the operation of a particular school, including principals, assistant principals, and other assistants; and those who supervise school operations, assign duties to staff members, supervise and maintain the records of the school, and coordinate school instructional activities with those of the education agency, including
department chairpersons. School support staff includes personnel who provide direct support to school administrators and teachers, including secretarial and clerical staff.
* Teacher: An individual who provides instruction to prekindergarten, kindergarten, grade $1-12$, or ungraded classes; or individuals who teach in an environment other than a classroom setting and who maintain daily student attendance records.
* Student: An individual for whom instruction is provided in an elementary or secondary education program that is not an adult education program and is under the jurisdiction of a school, school system, or other education institution.

The Council analyzed the data by comparing Des Moines with-

- All urban school members of the Council of the Great City Schools; and
- All school districts in the country with enrollments at or above 15,000 .

The Council also placed each of these groups along a single scale composed of all school districts in the nation with enrollments of at least 15,000 in order to determine the position of each of the comparison groups in relation to one another. This "Fixed National Ranking Measure" is further explained in the Analysis and Results Section.

Finally, the Council compared Des Moines with a number of selected large urban school systems from across the country similar to Des Moines in size. The districts chosen were-

- Buffalo
- Cincinnati
- Indianapolis
- Little Rock
- Minneapolis
- Norfolk
- Pittsburgh
- Portland
- Rochester


## ANALYSIS AND RESULTS

The Council analyzed data from the National Center for Education Statistics, which provides a national bank of staffing figures for 18,439 school districts in the nation. The Council used the data to compare Des Moines with two "comparison groups":

- The 65 urban school members of the Council of the Great City Schools; and
- The 537 school systems in the nation with enrollments of at least 15,000 students (called the 15 K National Group).

The analysis involved extracting enrollment data, total staff from the staffing categories reported, total teachers, LEA administrators and their support staff, and school administrators and their support staff. The Council then calculated the total teachers-to-total staff percentage,
the pupils-to-teacher ratio, pupils-to-total staff ratio, and the pupils-to-total-administrator ratio (including LEA administrators and their support staff, and school-based administrator and their support staff ratios). Finally, the Council looked at expenditure levels in each of the major personnel categories.

## a. The Fixed National Ranking Measure

To make the data comparable for each staffing category across all the comparison groups, the Council first defined an inclusive group of school districts-those with enrollments of at least 15,000 students. This 15 K National Group comprised 537 school districts. This group included 65 urban school district members of the Council of Great City Schools. Then, for each staffing category, the Council calculated a "Fixed National Ranking Measure:" the ranking within that category of each district in the 15 K National Group. This is the ranking we use when we plot the data for each staffing category for each of our three comparison groups, and it allows the reader to see where these groups fall in relation to each other and to the nation at large.

The rankings were done so that a rank of one was always an indicator representing the best in that metric. For example, in teachers as a percentage of staff, the highest percentage was ranked number one. In students per teacher, the number one ranking went to the lowest number. All other per-student rankings favored higher numbers.

There were sufficient data on 537 districts nationally to calculate FTE metrics and on 534 districts to calculate expenditure metrics (although some districts did not report data to NCES on all variables).

## b. Staffing Level Results

Exhibit 1, which displays the ratio of students per total staff members (including teachers), shows that Des Moines's total staffing levels were about the same as the median of the Great City School districts and slightly higher than districts nationally with at least 15,000 students:

- Des Moines: One staff member for every 7.21 students, ranking at 422 out of the 537 school districts in the 15 K National Group. (The higher the ranking, the larger the total staff.)
- The Great City Schools median: One staff member for every 7.49 students, placing at 374 out of the 537 schools.
- For all 537 school districts in the 15 K National Group, the median $\left(269^{\text {th }}\right.$ value $)$ is one staff member for every 8.22 students.

Exhibit 2, dealing with the ratio of students per teacher, shows that Des Moines's teacher staffing level was somewhat higher than medians of both the Great City School districts and districts with at least 15,000 students:

- Des Moines: One teacher for every 14.67 students, ranking at 133 out of the 537 school districts in the 15 K National Group. (The higher the ranking, the larger the student teacher ratio.)
- The Great City Schools median: One teacher for every 15.26 students, placing at 199 out of the 537 schools.
- In the 15 K National Group, the median $\left(269^{\text {th }}\right.$ value $)$ was one teacher for every 16.09 students.

Exhibit 3, comparing the percentage of all staff members who were teachers, shows that Des Moines's teacher cadre was proportionally somewhat smaller than that of the median of Great City School districts and the median of districts with at least 15,000 students:

- Des Moines: 49.12 percent of staff members were teachers, for a rank of 382. (The higher the ranking number, the lower the number of teachers in proportion to total staff members.)
- The Great City Schools median: 50.24 percent of total staff members were teachers, for a rank of 338 .
- For all 537 school districts in the 15 K National Group, the median ( $269^{\text {th }}$ value) was 52.19 percent of total staff consisting of teachers.

Exhibit 1. Student-to-Total Staff Ratio in Des Moines and the Great City Schools in 2009-10


Des Moines has 7.21 students per staff member; the median Great City Schools district has 7.49 students per staff member. Note that each blue dot represents a school district. X axis: Districts with $15,000+$ students.

Exhibit 2. Students per Teacher in Des Moines and the Great City Schools in 2009-10


Des Moines has 14.67 students per teacher; the median Great City Schools district has 15.26 students per teacher. Note that each blue dot represents a school district. X axis: Districts with $15,000+$ students.

Exhibit 3. Teachers as a Percentage of Total Staff in Des Moines and Great City School Districts in 2009-10


Some 49.12 percent of Des Moines staff members are teachers; in the median Great City Schools district, 50.24 percent of staff are teachers. Note that each blue dot represents a school district. X axis: Districts with 15,000+ students.

Exhibit 4 deals with the ratio of students to district administrators and support staff and shows that Des Moines's district administrator and support staffing levels were lower than the median district administrator and support levels in both the Great City Schools and districts with at least 15,000 students:

- Des Moines: One district administrator and their support staff member (e.g., administrative assistants, clerical and other support, etc.) for every 334.17 students, for a ranking of 256 among all 537 school districts with at least 15,000 students.
- The Great City Schools median: One district-level administrator and their support staff member (e.g., administrative assistants, clerical and other support, etc.) for every 209.89 students, for a ranking of 371 .
- For all 537 school districts in the 15 K National Group, the median ( $269^{\text {th }}$ value) was one district-level administrator and their support staff member (e.g., administrative assistants, clerical and other support, etc.) for every 309.47 students.

Exhibit 5 compares the percentages of school-level administrators and support staff and shows that Des Moines also had fewer school-level administrators and support staff than did the median Great City Schools district, but more than the median of districts with at least 15,000 students:

- Des Moines: One school-level administrator and support staff member for every 120.58 students for a ranking of 304 among all 537 school districts with at least 15,000 students.
- The Great City Schools median: One school-level administrator and support staff member for every 110.46 students, for a ranking of 372 .
- For all 537 school districts in the 15 K National Group, the median $\left(269^{\text {th }}\right.$ value $)$ was one school-level administrator and support staff member for every 127.17 students.

Overall, the total number of administrators and support staff-district-level and schoollevel combined-in Des Moines is identical to the median of districts with at least 15,000 students, but smaller than the total number of administrators in the median Great City Schools district:

- Des Moines had one district and school-based administrator and support staff member for every 88.61 students for a ranking of 269 -the median for all 537 school districts in the 15K National Group as well.
- The Great City Schools median: One administrator and support staff for every 68.61 students, for a ranking of 402.

Exhibit 4. Students per District Administrator and Support Staff Member in Des Moines and the Great City Schools in 2009-10


Des Moines has 334.17 students per district administrator and support staff member; the median Great City School district has 209.89 students per district administrator and support staff member. Note that each blue dot represents a school district. X axis: Districts with $15,000+$ students.

Exhibit 5. Students per School-level Administrator and Support Staff Member in Des Moines and the Great City Schools in 2009-10


Des Moines has 120.58 students per school administrator and support staff member; the median Great City Schools district has 110.46 students per school administrator and support staff member. Note that each blue dot represents a school district. X axis: Districts with $15,000+$ students.

The analysis also entailed using the NCES database to compare staffing levels in Des Moines with those in selected other urban school systems across the country. The Council selected urban school systems similar in size to Des Moines-around 30,000 students, although the demographic characteristics and program configurations of the comparison districts-a variable that can affect staffing patterns-varied. The comparison districts included Buffalo, Cincinnati, Indianapolis, Little Rock, Minneapolis, Norfolk, Pittsburgh, Portland, and Rochester (Exhibit 6).

Exhibit 6. Demographic Characteristics of Comparison Districts

|  | Buffalo | Cincinnati | Des Moines | Indianapolis | Little Rock |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Enrollment | 34,526 | 33,449 | 31,463 | 33,372 | 25,837 |
| \% Black | 56 | 67 | 17 | 55 | 68 |
| \% Hispanic | 15 | 2 | 21 | 16 | 8 |
| \% ELLs | 9 | 3 | 14 | 12 | 7 |
| \% FRPL | 77 | 62 | 64 | 83 | 70 |
|  | Minneapolis | Norfolk | Pittsburg | Portland | Rochester |
| Enrollment | 34,441 | 34,011 | 27,945 | 43,673 | 32,516 |
| \% Black | 38 | 63 | 57 | 14 | 64 |
| \% Hispanic | 18 | 4 | 1 | 15 | 22 |
| \% ELLs | 21 | 2 | 1 | 11 | 9 |
| \% FRPL | 65 | 61 | 74 | 45 | 85 |

In general, the results of these comparisons are consistent with those already described. Des Moines had:

- A higher student to total-staff ratio, meaning fewer total staff per student than most other selected comparison districts (Exhibit 7);
- A slightly lower number of teachers per student than in the selected comparison districts (Exhibit 8);
- A high proportion of teachers as a percentage of total staff compared to other selected districts (Exhibit 9);
- A lower number of central office or district administrators and their support staff member (e.g., administrative assistants, clerical and other support, etc.) per student than most comparison districts (Exhibit 10); and
- The lowest number of school-based administrators and support staff per student among the comparison districts (Exhibit 11).

Exhibit 7. Student-to-Total Staff Ratio in Des Moines and Selected Other School Districts in 2009-10


Exhibit 8. Students per Teacher in Des Moines and Selected Other School Districts in 2009-10


Exhibit 9. Teachers as a Percentage of Total Staff in Des Moines and Selected Other School Districts in 2009-10


Exhibit 10. Students per District Administrator and Support Staff Member in Des Moines and Selected Other School Districts in 2009-10


Exhibit 11. Students per School Administrator and Support Staff Member in Des Moines and Selected Other School Districts in 2009-10


Finally, we analyzed the NCES data bank to determine what staffing categories contributed most to the patterns we see in the previous exhibits. The data indicate that, while the district had a somewhat larger number of teachers per student than the median of the Great City School districts and districts with at least 15,000 students, teachers made up a somewhat smaller proportion of total district staff. This may be due to the fact that the district had relatively larger percentages of instructional aides, instructional coordinators and supervisors, library and media support staff, student support services (related services) staff, and other support services staff than the median Council district or districts in the 15 K national group. When compared to districts of similar size, however, teachers made up a larger percentage of total staff. (Exhibit 12)

Exhibit 12. Staffing Categories as a Percentage of Total Staff in Des Moines, the Great City Schools, and school districts with 15,000 or more students

|  | Des Moines | Great City <br> Schools | LEAs w/15K+ <br> students | Selected <br> LEAs |
| :--- | :---: | :---: | :---: | :---: |
| Total Teachers | $49.12 \%$ | $50.24 \%$ | $52.19 \%$ | $46.19 \%$ |
| Instructional Aides | $11.36 \%$ | $10.76 \%$ | $10.75 \%$ | $12.96 \%$ |
|  <br> Supervisors | $0.59 \%$ | $0.43 \%$ | $0.44 \%$ | $1.05 \%$ |
| Guidance Counselors | $1.68 \%$ | $1.67 \%$ | $1.66 \%$ | $1.30 \%$ |
| Librarians \& media specialists | $0.18 \%$ | $0.83 \%$ | $0.87 \%$ | $0.79 \%$ |
| Library \& media support | $0.80 \%$ | $0.09 \%$ | $0.18 \%$ | $0.75 \%$ |
| LEA Administrators | $0.31 \%$ | $0.59 \%$ | $0.68 \%$ | $0.42 \%$ |
| LEA Administrative Support | $1.85 \%$ | $2.84 \%$ | $1.89 \%$ | $2.10 \%$ |
| School Administrators | $2.40 \%$ | $2.79 \%$ | $2.73 \%$ | $2.39 \%$ |
| School administrative support | $3.58 \%$ | $3.97 \%$ | $3.56 \%$ | $4.24 \%$ |
| Student Support Services Staff | $6.82 \%$ | $4.30 \%$ | $4.23 \%$ | $5.44 \%$ |
| All Other Support Services Staff | $21.32 \%$ | $19.04 \%$ | $17.71 \%$ | $20.85 \%$ |
| Total Staff | $100.00 \%$ | $100.00 \%$ | $100.0 \%$ | $100.0 \%$ |

## c. Functional and Personnel Expenditures

The Council also compared Des Moines's functional and personnel expenditures to the same categories we used in the previous sections. Unlike the previous section that used data for the 2009-10 school year, this section uses data from the 2008-09 school year because these are the most recent data available on expenditures in the NCES database. The database has data on 16,563 school districts or LEAs, including 534 districts with enrollments of at least 15,000 students and the 65 Great City School districts.

Exhibits 13 through 18 summarize the functional expenditure data. The results indicate that Des Moines had a total expenditure per pupil that was lower than the Great City Schools median and much lower than the median of the selected comparison districts of similar size, but higher than school systems nationally with enrollments of at least 15,000 students.

The district's instructional expenditures were higher (in raw dollars) than the medians of Great City School districts and districts with at least 15,000 students, but lower (in raw dollars) than selected districts of similar size. Its operational expenses per pupil, meanwhile, were lower than any of the comparison groups. Despite the lower central-office staffing levels showed in Exhibit 12, Des Moines had somewhat higher district administration costs per pupil (in raw dollars) than the median Great City School district or districts with at least 15,000 students. However, when compared to districts of similar size, it had a much lower district administration cost per pupil (in raw dollars).

Finally, Des Moines spent less per pupil (in raw dollars) on school administration than the median Great City School district or selected Council districts of similar size, but more than the median of all districts with at least 15,000 students and more as a percent of total expenditures.

Exhibit 13. Median Functional Expenditures by Category

| Median Expenditures | Des Moines | Great City <br> Schools | 15K LEAs | Selected <br> LEAs |
| :--- | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| Total expenditures per pupil | $\mathbf{\$ 1 2 , 0 7 4}$ | $\mathbf{\$ 1 3 , 1 5 4}$ | $\mathbf{\$ 1 0 , 8 8 6}$ | $\mathbf{\$ 1 6 , 2 4 4}$ |
| Percent of total | $\mathbf{1 0 0 . 0 0 \%}$ | $\mathbf{1 0 0 . 0 0 \%}$ | $\mathbf{1 0 0 . 0 0 \%}$ | $\mathbf{1 0 0 . 0 0 \%}$ |
|  |  |  |  |  |
| Instructional expenditures per pupil | $\$ 6,937$ | $\$ 5,980$ | $\$ 5,394$ | $\$ 7,147$ |
| Percent of total | $57.45 \%$ | $45.46 \%$ | $49.55 \%$ | $44.00 \%$ |
|  |  |  |  |  |
| Operations, business services, and other <br> expenditures per pupil | $\$ 4,368$ | $\$ 6,399$ | $\$ 4,883$ | $\$ 8,181$ |
| Percent of total | $36.18 \%$ | $48.65 \%$ | $44.86 \%$ | $50.37 \%$ |
|  |  |  |  | $\$ 73$ |
| District administration costs per pupil | $\$ 149$ | $\$ 137$ | $\$ 248$ |  |
| Percent of total | $1.23 \%$ | $1.04 \%$ | $0.67 \%$ | $1.53 \%$ |
|  | $\$ 620$ | $\$ 638$ | $\$ 535$ | $\$ 667$ |
| School administration costs per pupil | $5.13 \%$ | $4.85 \%$ | $4.91 \%$ | $4.11 \%$ |
| Percent of total |  |  |  |  |

Exhibit 14. Median Expenditures by Functional Category


Exhibit 15. Total Expenditures per Student in Des Moines and the Great City Schools


Exhibit 16. Total Instructional Expenditures per Student in Des Moines and the Great City Schools


Exhibit 17. Total Administrative and Administrative Support Expenditures per Student in Des Moines and the Great City Schools


Exhibit 18. Total School-based Administrative and Administrative Support Expenditures per Student in Des Moines and the Great City Schools


We also looked at the portion of total expenditures per pupil that were dedicated to salaries and benefits in each category (Exhibit 19), as well as the percentage of total personnel expenditures that were dedicated to salaries and benefits in each category (Exhibit 20).

The results shown in Exhibit 19 suggest that Des Moines devotes a greater share of its total expenditures to personnel, i.e., salaries and benefits, than any of the comparison groups. Des Moines dedicates 79.73 percent of its total expenditures to salaries and benefits, compared with medians of 67.49 percent in the Great City Schools districts, 68 percent in the 15 K national group, and 64.89 percent in the comparison urban school systems.

In addition, Des Moines devotes the highest portion of its total expenditures to instructional personnel salaries and benefits, compared with other groups. Des Moines dedicates 54.93 percent of its total expenditures per pupil to instructional personnel, compared with medians of 42.51 percent in the Great City Schools, 44.95 percent in the 15 K national group, and 41.77 percent in the selected urban districts.

The data from Exhibit 20 also indicate that, of its total personnel expenditures, Des Moines devotes a greater percentage to instructional personnel costs ( 68.90 percent) than comparison groups, and the lowest ( 23.72 percent) to operations and business services among the comparison groups. Des Moines spends a higher percentage on district administration than the median of Council districts or the 15 K national group, but a lower percentage than selected districts of similar size. And the district devotes a smaller share of its personnel expenditures on school administration, except when compared to those selected districts. (Exhibit 20)

Exhibits 19-24 show the breakdown of personnel costs per pupil in Des Moines and selected districts.

Exhibit 19. Median Personnel Expenditures as a Share of Total Expenditures by Category

| Median Personnel Expenditures | Des Moines | Great City <br> Schools | 15 K <br> LEAs | Selected <br> LEAs |
| :--- | :---: | :---: | :---: | :---: |
| Total expenditures per pupil | $\$ 12,074$ | $\$ 13,154$ | $\$ 10,886$ | $\$ 16,244$ |
| Total personnel expenditures per pupil | $\$ 9,626$ | $\$ 8,879$ | $\$ 7,403$ | $\$ 10,541$ |
| Percent of total expenditures | $79.73 \%$ | $67.49 \%$ | $68.00 \%$ | $64.89 \%$ |
|  |  |  |  |  |
| Total expenditures per pupil | $\$ 12,074$ | $\$ 13,154$ | $\$ 10,886$ | $\$ 16,244$ |
| Instructional personnel costs per pupil | $\$ 6,633$ | $\$ 5,591$ | $\$ 4,893$ | $\$ 6,785$ |
| Percent of total expenditures | $54.94 \%$ | $42.51 \%$ | $44.95 \%$ | $41.77 \%$ |
|  | $\$ 12,074$ | $\$ 13,154$ | $\$ 10,886$ | $\$ 16,244$ |
| Total expenditures per pupil | $\$ 2,284$ | $\$ 2,605$ | $\$ 1,952$ | $\$ 2,946$ |
| Operations, business services, and other <br> personnel costs per pupil | $18.92 \%$ | $19.80 \%$ | $17.93 \%$ | $18.14 \%$ |
| Percent of total expenditures |  |  |  |  |
|  | $\$ 12,074$ | $\$ 13,154$ | $\$ 10,886$ | $\$ 16,244$ |
| Total expenditures per pupil | $\$ 94$ | $\$ 67$ | $\$ 40$ | $\$ 149$ |
| District administration costs per pupil | $0.78 \%$ | $0.51 \%$ | $0.36 \%$ | $0.92 \%$ |
| Percent of total expenditures | $\$ 12,074$ | $\$ 13,154$ | $\$ 10,886$ | $\$ 16,244$ |
|  | $\$ 616$ | $\$ 615$ | $\$ 518$ | $\$ 661$ |
| Total expenditures per pupil | $5.10 \%$ | $4.68 \%$ | $4.76 \%$ | $4.07 \%$ |
| School administration costs per pupil |  |  |  |  |

Exhibit 20. Median Personnel Expenditures by Category

| Median Personnel Expenditures | Des Moines | Great City <br> Schools | 15K LEAs | Selected <br> LEAs |
| :--- | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| Total personnel expenditures per pupil | $\mathbf{\$ 9 , 6 2 6}$ | $\mathbf{\$ 8 , 8 7 9}$ | $\mathbf{\$ 7 , 4 0 3}$ | $\mathbf{\$ 1 0 , 5 4 1}$ |
| Percentage of total | $\mathbf{1 0 0 . 0 0 \%}$ | $\mathbf{1 0 0 . 0 0 \%}$ | $\mathbf{1 0 0 . 0 0 \%}$ | $\mathbf{1 0 0 . 0 0 \%}$ |
|  | $\$ 6,633$ | $\$ 5,591$ | $\$ 4,893$ | $\$ 6,785$ |
| Instructional personnel costs per pupil | $68.90 \%$ | $62.98 \%$ | $66.10 \%$ | $64.37 \%$ |
| Percentage of total personnel costs | $\$ 2,284$ | $\$ 2,605$ | $\$ 1,952$ | $\$ 2,946$ |
|  | $23.73 \%$ | $29.34 \%$ | $26.37 \%$ | $27.95 \%$ |
| Operations, business services, and other <br> personnel costs per pupil | $\$ 94$ | $\$ 67$ | $\$ 40$ | $\$ 149$ |
| Percentage of total personnel costs | $0.98 \%$ | $0.76 \%$ | $0.53 \%$ | $1.41 \%$ |
|  |  |  |  |  |
| District administration costs per pupil | $\$ 616$ | $\$ 615$ | $\$ 518$ | $\$ 661$ |
| Percentage of total personnel costs | $6.40 \%$ | $6.92 \%$ | $6.99 \%$ | $6.27 \%$ |
|  |  |  |  |  |

Exhibit 21. Total Personnel Compensation per Student in Des Moines and Selected Districts


Exhibit 22. Total Instructional Personnel Compensation per Student in Des Moines and Selected Districts


Exhibit 23. Total Administrative Personnel Compensation per Student in Des Moines and Selected Districts


Exhibit 24. Total School-level Administrative Personnel Compensation per Student in Des Moines and Selected Districts


## Synopsis and DIScuSSION

The Council of the Great City Schools attempted in this report to answer the Board of Education and Superintendent's main question, "Are we overstaffed?" We have used federal data sources and a number of statistical comparisons in order to answer the question. The results should be viewed cautiously, however, because (1) there are anomalies in the NCES data, (2) the data lagged two years behind the current school year, and (3) the database has no way to take into account the differing needs and unique circumstances of each school district, including Des Moines. Still, a number of conclusions can be drawn.

* It appears that the Des Moines Public Schools is somewhat understaffed when it came to the number of administrators and support staff at the central office level. The district has fewer district administrators and support staff per student and a lower percentage of its staff devoted to district administration than the median of Council districts, districts with at least 15,000 students, and selected comparison districts of similar size.
* The district also has low numbers of school administrators and support staff compared to other Council districts and selected LEAs of similar size, although it has more school administrators per student than the median of the 15 K national group.
* The district has a higher number of total staff per student, and a higher number of teachers per student, than the median Council district or district with at least 15,000 students, but it has a lower number of total staff-- and a lower number of teachers-compared to districts of similar size. Given its low number of school and district administrators, however, teachers still make up a higher percentage of the total district staff than almost all of the selected comparison districts except one.
* Des Moines had a higher proportion of staff who were devoted to student support services and other support services staff than the comparison groups.
* Des Moines has lower total expenditures per pupil than the median of Council districts and districts of similar size, but spends more per pupil than the median district with at least 15,000 students.
* Des Moines devotes a relatively greater share of its total expenditures to personnel costs than the comparison groups of Council districts, selected LEAs, and the 15 K national group.
* Compared to all comparison groups, Des Moines devotes the greatest share of its total expenditures to instruction- and instructional personnel costs in particular.
* Despite its low district administrator staffing levels, Des Moines had higher district administration costs per pupil than the median Council district and median district in the 15 K national group. However, it spends substantially less per pupil on district administration than selected districts of similar size.
* Des Moines had school administration expenditures per pupil that were lower than selected districts of similar size, about equal to the median for other Great City Schools districts, and higher than the median of districts with at least 15,000 students.

The reader should keep in mind that all comparisons are imprecise, even when the numbers are as comparable as any national database can provide. School districts, including the selected urban school systems in this report, have differing mixes of students, which result in varying program and staffing requirements. In addition, each city and community has differing economies and industries that shape their schools' program requirements and staffing needs. For instance, the degree to which a school district is decentralized, allowing for greater school decision-making autonomy, will affect the number of both its district-level and school-based administrative staff. Likewise, the proportion of students with disabilities and various state requirements will affect the student support or related-services personnel levels. Whether a district is responsible for funding its own pension system affects total personnel costs. The types of industries in and career aspirations of the community will affect career and technical education program configurations and staffing. Consequently, there is no precise way to determine what the "right" number of staff members are for any individual school system. Because of that substantial caveat, this report is best used as a point of discussion rather than as a last word on staffing issues.

The Des Moines Public Schools and the students it serves have made substantial strides over the last several years. Des Moines has garnered substantial academic and extracurricular recognition across the state and nationwide. The district has clearly faced substantial challenges over the years, but it is also poised for significantly greater progress in the future. The Council of the Great City Schools hopes that this review of staffing levels in the district contributes to that movement.

## Appendices

## A. Technical Notes on Analysis

The Des Moines analysis is based upon the NCES Common Core of Data for school years 200809 and 2009-10. The finance data are based on school year 2008-09, and FTE data are based on school year 2009-10. Both sets of data were published by NCES in 2011. This is the Revision C NCES report.

A number of issues about the data are worthy of note. The first deals with the term "Unions." NCES "unions" place multiple LEA IDs (independent districts) into a single supervisory LEA. For example, New York City has 34 unique LEA IDs, each with its own records. These were rolled up into a single record to properly represent the district.

Three districts made it into 15 k because they were part of a union and certain data was reported as an accumulation on one of the union. These districts were Modesto City School District, Santa Rosa City Schools, and Santa Barbara City Schools. The issue of Unions is not applicable to the financial data since they are already aggregated in that data set.

Two additional districts-Dayton and New Orleans- made it into 15k because they are Council member districts and it simplified doing the rankings consistently.

In order to do the FTE analysis, some data needed to be computed-
Total Staff (TOTSTAFF) is the sum of Total Teachers (TOTTCH), Instructional Aides (AIDES), Instructional Support (CORSUP), Total Guidance Counselors (TOTGUI), Library and Media Specialists (LIBSPE), Library and Media Support (LIBSUP), LEA Administrators (LEAADM), LEA Support (LEASUP), School Administrators (SCHADM), School Support (SCHSUP), Student Support (STUSUP), and all Other Support Staff (OTHSUP).

Total Administrators (TOTADM) is the sum of LEA Administrators and LEA Support.
Percent Teachers (PCTTCH) is Total Teachers divided by Total Staff.
NCES refers to student enrollment as "Member" (MEMBER).
Pupils per Teacher (PUPTCH) is Member divided by Total Teachers.
Pupils per Staff (PUPSTF) is Member divided by Total Staff.
Pupils per Administrator (PUPADM) is Member divided by Total Administrators.
Pupils per LEA (PUPLEA) is Member divided by LEA Administrators.
Pupils per School Administrator (PUPSCH) is Member divided by School Administrator.

The median was calculated for each universe of data ( 15 K , Council, and selected districts). The ranking was calculated on the 15 K universe. This procedure allowed comparisons of the moving median to be made while holding Des Moines statistically steady. The rankings were done so
that a rank of one was always an indicator representing the best in that metric. For example, in teachers as a percentage of staff, the highest percentage was ranked number one. In students per teacher, the number one ranking went to the lowest number. All other-per student rankings favored higher numbers.

In the FTE data, there were 537 districts at 15 K and over. In the FIN data the count was 534 .
In order to do the FIN analysis, some data needed to be computed:
Total Compensation (TOTCMP) is the sum of Total Salaries (Z32) and Total Employee Benefits (Z34).

Instructional Compensation (INSCMP) is the sum of Instructional Salaries (Z33) and Instructional Employee Benefits (V10).

General Administration Compensation (LEACMP) is the sum of General Administration Support Services Salaries (V15) and General Administration Support Services Employee Benefits (V16).

School Administration Compensation (INSCMP) is the sum of School Administration Support Services Salaries (V17) and School Administration Support Services Employee Benefits (V18).

Total Compensation per Pupil (DOLTOT) is Total Compensation divided by Member. The highest number is ranked number one.

Instructional Compensation per Pupil (DOLINS) is Instructional Compensation divided by Member. The highest number is ranked number one.

General Administration Compensation per Pupil (DOLLEA) is General Administration Compensation divided by Member. The lowest number is ranked number one.

School Administration Compensation per Pupil (DOLSCH) is School Administration Compensation divided by Member. The lowest number is ranked number one.

## B. About the Council and History of Strategic Support <br> Team Reviews

## Council of the Great City Schools

The Council of the Great City Schools is a coalition of 67 of the nation's largest urban public school districts. Its board of directors is composed of the superintendent of schools and one school board member from each member city. An executive committee of 24 individuals, equally divided in number between superintendents and school board members, provides regular oversight of the 501(c)(3) organization. The mission of the Council is to advocate for urban public education and assist its members in the improvement of leadership and instruction. The Council provides services to its members in the areas of legislation, research, communications, curriculum and instruction, and management. The group convenes two major conferences each year, conducts studies on urban school conditions and trends, and operates ongoing networks of senior school district managers with responsibilities in areas such as federal programs, operations, finance, personnel, communications, research, and technology. The Council was founded in 1956 and incorporated in 1961 and has its headquarters in Washington, D.C.

History of Strategic Support Teams Conducted by the
Council of the Great City Schools

| City | Area | Year |
| :---: | :---: | :---: |
| Albuquerque |  |  |
|  | Facilities and Roofing | 2003 |
|  | Human Resources | 2003 |
|  | Information Technology | 2003 |
|  | Special Education | 2005 |
|  | Legal Services | 2005 |
|  | Safety and Security | 2007 |
| Anchorage |  |  |
|  | Finance | 2004 |
|  | Communications | 2008 |
|  | Math Instruction | 2010 |
|  | Food Services | 2011 |
|  | Organizational Structure | 2012 |
| Atlanta |  |  |
|  | Facilities | 2009 |
|  | Transportation | 2010 |
| Austin |  |  |
|  | Special Education | 2010 |
| Baltimore |  |  |
|  | Information Technology | 2011 |
| Birmingham |  |  |
|  | Organizational Structure | 2007 |
|  | Operations | 2008 |
|  | Facilities | 2010 |
| Boston |  |  |
|  | Special Education | 2009 |
| Bridgeport |  |  |
|  | Transportation | 2012 |
| Broward County (FL) $\quad$ ( |  |  |
|  | Information Technology | 2000 |
|  | Food Services | 2009 |
|  | Transportation | 2009 |
|  | Information Technology | 2012 |
| Buffalo |  |  |
|  | Superintendent Support | 2000 |
|  | Organizational Structure | 2000 |
|  | Curriculum and Instruction | 2000 |
|  | Personnel | 2000 |
|  | Facilities and Operations | 2000 |
|  | Communications | 2000 |
|  | Finance | 2000 |
|  | Finance II | 2003 |
|  | Bilingual Education | 2009 |


| Caddo Parish (LA) |  |  |
| :---: | :---: | :---: |
|  | Facilities | 2004 |
| Charleston |  |  |
|  | Special Education | 2005 |
| Charlotte-Mecklenburg |  |  |
|  | Human Resources | 2007 |
| Cincinnati |  |  |
|  | Curriculum and Instruction | 2004 |
|  | Curriculum and Instruction | 2009 |
| Chicago |  |  |
|  | Warehouse Operations | 2010 |
|  | Special Education | 2011 |
| Christina (DE) |  |  |
|  | Curriculum and Instruction | 2007 |
| Cleveland |  |  |
|  | Student Assignments | 1999, 2000 |
|  | Transportation | 2000 |
|  | Safety and Security | 2000 |
|  | Facilities Financing | 2000 |
|  | Facilities Operations | 2000 |
|  | Transportation | 2004 |
|  | Curriculum and Instruction | 2005 |
|  | Safety and Security | 2007 |
|  | Safety and Security | 2008 |
|  | Theme Schools | 2009 |
| Columbus |  |  |
|  | Superintendent Support | 2001 |
|  | Human Resources | 2001 |
|  | Facilities Financing | 2002 |
|  | Finance and Treasury | 2003 |
|  | Budget | 2003 |
|  | Curriculum and Instruction | 2005 |
|  | Information Technology | 2007 |
|  | Food Services | 2007 |
|  | Transportation | 2009 |
| Dallas |  |  |
|  | Procurement | 2007 |
|  | Staffing Levels | 2009 |
| Dayton |  |  |
|  | Superintendent Support | 2001 |
|  | Curriculum and Instruction | 2001 |
|  | Finance | 2001 |
|  | Communications | 2002 |
|  | Curriculum and Instruction | 2005 |
|  | Budget | 2005 |
|  | Curriculum and Instruction | 2008 |
| Denver |  |  |
|  | Superintendent Support | 2001 |


|  | Personnel | 2001 |
| :---: | :---: | :---: |
|  | Curriculum and Instruction | 2005 |
|  | Bilingual Education | 2006 |
|  | Curriculum and Instruction | 2008 |
| Des Moines |  |  |
|  | Budget and Finance | 2003 |
| Detroit |  |  |
|  | Curriculum and Instruction | 2002 |
|  | Assessment | 2002 |
|  | Communications | 2002 |
|  | Curriculum and Assessment | 2003 |
|  | Communications | 2003 |
|  | Textbook Procurement | 2004 |
|  | Food Services | 2007 |
|  | Curriculum and Instruction | 2008 |
|  | Facilities | 2008 |
|  | Finance and Budget | 2008 |
|  | Information Technology | 2008 |
|  | Stimulus planning | 2009 |
| Fresno |  |  |
|  | Curriculum and Instruction | 2012 |
| Guilford County |  |  |
|  | Bilingual Education | 2002 |
|  | Information Technology | 2003 |
|  | Special Education | 2003 |
|  | Facilities | 2004 |
|  | Human Resources | 2007 |
| Hillsborough County (FL) |  |  |
|  | Transportation | 2005 |
|  | Procurement | 2005 |
| Houston |  |  |
|  | Facilities Operations | 2010 |
|  | Capitol Program | 2010 |
|  | Information Technology | 2011 |
|  | Procurement | 2011 |
| Indianapolis |  |  |
|  | Transportation | 2007 |
|  | Information Technology | 2010 |
| Jackson (MS) |  |  |
|  | Bond Referendum | 2006 |
|  | Communications | 2009 |
| Jacksonville |  |  |
|  | Organization and Management | 2002 |
|  | Operations | 2002 |
|  | Human Resources | 2002 |
|  | Finance | 2002 |
|  | Information Technology | 2002 |
|  | Finance | 2006 |


| Kansas City |  |  |
| :---: | :---: | :---: |
|  | Human Resources | 2005 |
|  | Information Technology | 2005 |
|  | Finance | 2005 |
|  | Operations | 2005 |
|  | Purchasing | 2006 |
|  | Curriculum and Instruction | 2006 |
|  | Program Implementation | 2007 |
|  | Stimulus Planning | 2009 |
| Little Rock |  |  |
|  | Curriculum and Instruction | 2010 |
| Los Angeles |  |  |
|  | Budget and Finance | 2002 |
|  | Organizational Structure | 2005 |
|  | Finance | 2005 |
|  | Information Technology | 2005 |
|  | Human Resources | 2005 |
|  | Business Services | 2005 |
| Louisville |  |  |
|  | Management Information | 2005 |
|  | Staffing study | 2009 |
| Memphis |  |  |
|  | Information Technology | 2007 |
| Miami-Dade County |  |  |
|  | Construction Management | 2003 |
|  | Food Services | 2009 |
|  | Transportation | 2009 |
|  | Maintenance \& Operations | 2009 |
|  | Capital Projects | 2009 |
| Milwaukee |  |  |
|  | Research and Testing | 1999 |
|  | Safety and Security | 2000 |
|  | School Board Support | 1999 |
|  | Curriculum and Instruction | 2006 |
|  | Alternative Education | 2007 |
|  | Human Resources | 2009 |
| Minneapolis |  |  |
|  | Curriculum and Instruction | 2004 |
|  | Finance | 2004 |
|  | Federal Programs | 2004 |
| Newark |  |  |
|  | Curriculum and Instruction | 2007 |
|  | Food Service | 2008 |
| New Orleans |  |  |
|  | Personnel | 2001 |
|  | Transportation | 2002 |
|  | Information Technology | 2003 |
|  | Hurricane Damage Assessment | 2005 |


|  | Curriculum and Instruction | 2006 |
| :---: | :---: | :---: |
| New York City |  |  |
|  | Special Education | 2008 |
| Norfolk |  |  |
|  | Testing and Assessment | 2003 |
|  | Curriculum and Instruction | 2012 |
| Orange County |  |  |
|  | Information Technology | 2010 |
| Philadelphia |  |  |
|  | Curriculum and Instruction | 2003 |
|  | Federal Programs | 2003 |
|  | Food Service | 2003 |
|  | Facilities | 2003 |
|  | Transportation | 2003 |
|  | Human Resources | 2004 |
|  | Budget | 2008 |
|  | Human Resource | 2009 |
|  | Special Education | 2009 |
| Pittsburgh |  |  |
|  | Curriculum and Instruction | 2005 |
|  | Technology | 2006 |
|  | Finance | 2006 |
|  | Special Education | 2009 |
| Portland |  |  |
|  | Finance and Budget | 2010 |
|  | Procurement | 2010 |
|  | Operations | 2010 |
| Providence |  |  |
|  | Business Operations | 2001 |
|  | MIS and Technology | 2001 |
|  | Personnel | 2001 |
|  | Human Resources | 2007 |
|  | Special Education | 2011 |
|  | Bilingual Education | 2011 |
| Richmond |  |  |
|  | Transportation | 2003 |
|  | Curriculum and Instruction | 2003 |
|  | Federal Programs | 2003 |
|  | Special Education | 2003 |
| Rochester |  |  |
|  | Finance and Technology | 2003 |
|  | Transportation | 2004 |
|  | Food Services | 2004 |
|  | Special Education | 2008 |
| San Diego |  |  |
|  | Finance | 2006 |
|  | Food Service | 2006 |
|  | Transportation | 2007 |


|  | Procurement | 2007 |
| :--- | :--- | :---: |
| San Francisco | Technology | 2001 |
|  |  | 2003 |
| St. Louis | Special Education | 2004 |
|  | Curriculum and Instruction | 2004 |
|  | Federal Programs | 2004 |
|  | Textbook Procurement | 2005 |
|  | Human Resources | 2011 |
|  |  | 2008 |
| St. Paul | Special Education | 2008 |
|  |  | 2008 |
| Seattle | Human Resources | 2008 |
|  | Budget and Finance | 2008 |
|  | Information Technology | 2008 |
|  | Bilingual Education | 2008 |
|  | Transportation | 2008 |
|  | Capital Projects | 2008 |
|  | Maintenance and Operations | 2005 |
|  | Procurement | 2098 |
|  | Food Services | 1998 |
|  |  | 1998 |
| Toledo | Curriculum and Instruction | 1998 |
| Washington, D.C. |  | 1998 |
|  | Finance and Procurement | 1998 |
|  | Personnel | 1998 |
|  | Communications | 1998 |
|  | Transportation | 2003 |
|  | Facilities Management | 2005 |
|  | Special Education | 2005 |
|  | Legal and General Counsel | 2007 |
|  | MiS and Technology | 2009 |
|  | Curriculum and Instruction | 2 |
|  | Budget and Finance | 2 |
|  | Transportation | 2 |
|  | Curriculum and Instruction | 2 |
|  | Common Core Standards | 2 |
|  |  | Transportation |

