Members Brief

An informational brief prepared by the LSC staff for members and staff of the Ohio General Assembly

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Volume 135
November 12, 2024

Base Cost Model

The base cost represents the cost of educating a typically-developing student. The base cost model uses an inputs-based approach, mainly student to staff ratios and staff compensation amounts for certain types of district and school staff, to calculate this cost in five components that are summed to determine a district's total base cost. The base cost for traditional school districts totaled $12.10 billion in FY 2024. The model yields a unique base cost per pupil for each district. The statewide average base cost per pupil is $8,262.

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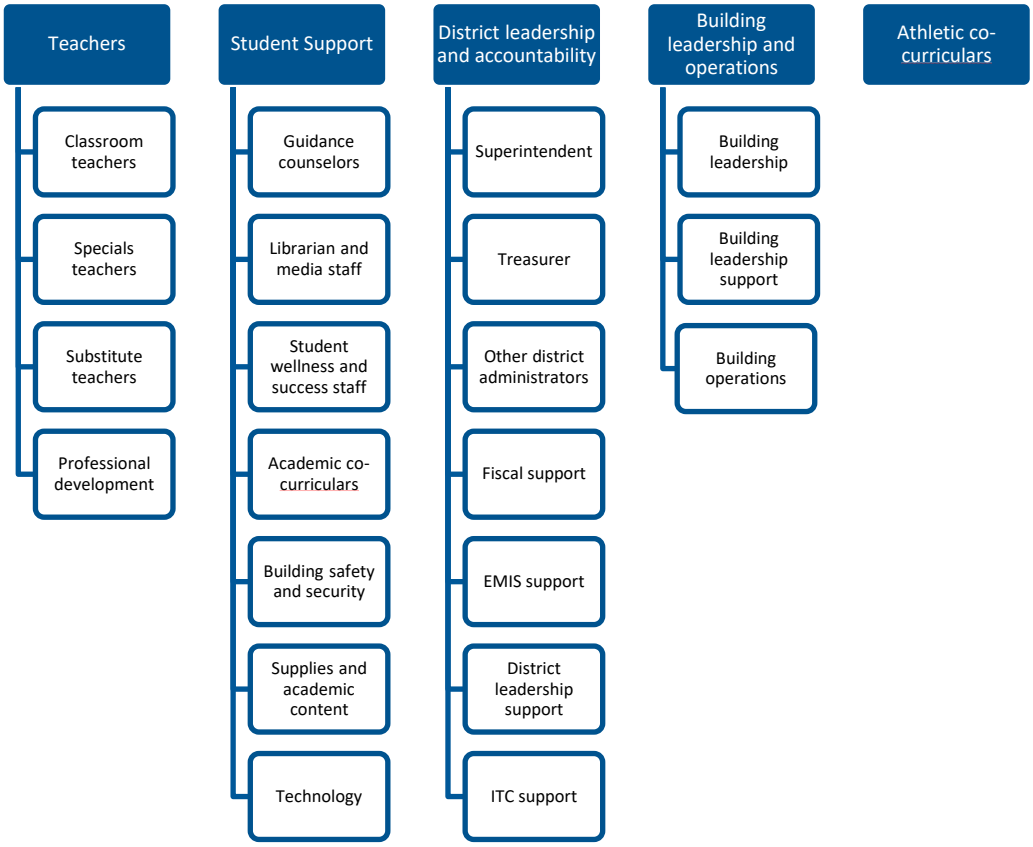
Overview

The base cost represents the cost of educating a typically-developing student in a regular education program. Such a student is one who does not receive special, career-technical, or gifted education and who is not economically disadvantaged or an English learner. In FY 2024 and FY 2025, the base cost model relies on various inputs, mainly student-to-staff ratios and staff compensation amounts, for certain types of district and school staff, including teachers, counselors, librarians, and district and building leadership staff. The base cost groups these inputs in five components: (1) the teacher base cost, (2) student support base cost, (3) district leadership and accountability base cost, (4) building leadership and operations base cost, and (5) athletic co-curricular activities base cost. Each component generally includes a number of elements that comprise its cost (see graphic below). The five components are added together and then divided by a measure of a district's enrollment to determine a unique base cost per pupil for each district. The enrollment measure, base cost enrolled ADM, is used for factors paid on a per-pupil basis in the base cost computation. A district's base cost enrolled ADM equals the greater of the district's

enrolled ADM for the prior fiscal year or the average of the district's enrolled ADM for the three prior fiscal years. This smooths out the base cost calculation for districts with declining enrolled ADM. The average salaries and costs in the base cost computation are calculated using FY 2022 data. The base cost is supported by a combination of state and local revenues. The state share of this cost is the largest component of state foundation aid. A separate *Members Brief*, Base Cost – Distribution of State Funds, discusses the formula for distributing the base cost between the state and school districts.



Teacher base cost

The bulk of the cost of the model lies in the teacher base cost component. This component is made up of funding for three types of teachers: classroom teachers, special teachers (for classes in art, music, physical education, dance, drama, visual arts, etc.) and substitute teachers. The classroom and special teacher cost is calculated by multiplying an average teacher cost, including salary, benefits, and insurance, by a student-to-teacher ratio. The average teacher cost totals to $96,058, as shown in the table below. The formula specifies that benefits are equal to 16% of average salary. The insurance cost represents the statewide weighted average employer-paid premiums reported by traditional districts to the State Employment Relations Board for its Cost of Health Insurance in Ohio's Public Sector survey. In practice, the average insurance cost includes premiums for medical, dental, vision, and prescriptions. It is used throughout the base cost model.

Calculation of Average Teacher Cost	
Component	**FY 2024 Value**
Average teacher salary*	$68,022
Benefits (16% of average salary)	$10,884
Average district-paid insurance costs	$17,153
Total	**$96,058**

*Average statewide salary of teachers with salaries between $30,000 and $95,000

The student to classroom teacher ratios vary depending on grade level while a lower ratio is used for career-technical education classes, as shown in the following table. The student-to-special teacher ratio is 150 to 1, with a minimum of six special teachers per district. In FY 2024, the model calculated a statewide total of 60,066 classroom teachers and 10,061 special teachers. The model cost for classroom and special teachers in FY 2024 totaled $6.74 billion.

Student to Teacher Ratios	
Teacher Category	**Ratio**
Kindergarten	20 to 1
Grades 1 through 3	23 to 1
Grades 4 through 8	25 to 1
Grades 9 through 12	27 to 1
Career-technical education programs or classes	18 to 1
Special teachers*	150 to 1

*Minimum of six special teachers per district

The substitute teacher cost is calculated using a daily rate of $104, which is equal to $90 plus 16% for benefits, for five substitute teacher days for every classroom and special teacher. The teacher base cost also includes funding for four professional development days for these teachers at a rate of $438 per day. The substitute teacher and professional development costs totaled $36.6 million and $123.0 million, respectively. The calculation of the teacher base cost for each district is summarized below. The teacher base cost for FY 2024 totaled $6.90 billion.

Teacher Base Cost
Kindergarten teachers = Kindergarten base cost enrolled ADM / 20
Grades 1 to 3 teachers = Grades 1 to 3 base cost enrolled ADM / 23
Grades 4 through 8 teachers = Grades 4 through 8 base cost enrolled ADM / 25
Grades 9 through 12 teachers = Grades 9 through 12 base cost enrolled ADM / 27
CTE teachers = CTE base cost enrolled ADM / 18
Classroom teachers = Kindergarten teachers + Grades 1 to 3 teachers + Grades 4 to 8 teachers + Grades 9 to 12 teachers + CTE teachers
Special teachers = Greater of 6 or (Base cost enrolled ADM / 150)
Substitute teacher cost = (Classroom teachers + special teachers) x 5 x $104
Professional development cost = (Classroom teachers + special teachers) x 4 x $438
Teacher base cost = (Classroom teachers + special teachers) x $96,058 + Substitute teacher cost + Professional development cost

Student support base cost

The student support base cost is composed of costs related to nonacademic areas that contribute to student success. It funds school counselors and librarian and media staff in a manner similar to the classroom and special teachers as well as academic co-curricular activities, building safety and security, supplies and academic content, and technology costs based on per-pupil amounts generally derived from district spending in those areas reported to the Ohio Department of Education and Workforce (DEW). Each element of student support base cost is discussed below.

Guidance counselor cost

The guidance counselor cost is calculated by multiplying the average guidance counselor compensation by a high school student to counselor ratio of 360 to 1 with a minimum of one counselor per district. The average guidance counselor compensation is the average statewide salary of guidance counselors with salaries between $30,000 and $95,000 ($68,713 in FY 2022) plus 16% for benefits and $17,153 for insurance (total of $96,859). In FY 2024, the model calculated a statewide total of 1,319 high school guidance counselors at a cost of $127.8 million.

Guidance Counselor Cost
High school guidance counselors = Greater of one or (High school base cost enrolled ADM / 360)
Guidance counselor cost = High school guidance counselors x $96,859

Librarian and media staff cost

The librarian and media staff cost is calculated by multiplying the average librarian and media staff compensation by a student to staff ratio of 1,000 to 1. The average librarian and media staff compensation is the statewide average salary of librarian and media staff with salaries between $30,000 and $95,000 ($74,064 in FY 2022) plus 16% for benefits and $17,153 for insurance (total of $103,067). In FY 2024, the model calculated a statewide total of 1,468 librarian and media staff at a cost of $151.3 million.

Librarian and Media Staff Cost
Librarians and media staff = Base cost enrolled ADM / 1,000
Librarian and media staff cost = Librarians and media staff x $103,067

Student wellness and success staff cost

The student wellness and success staff cost is calculated by multiplying the average guidance counselor compensation ($96,859, as described above) by a student to staff ratio of 250 to 1 with a minimum of five staff members per district. In FY 2024, the model calculated a statewide total of 6,323 student wellness and success staff at a cost of $612.4 million.

Student Wellness and Success Staff Cost
Student wellness and success staff = Greater of five or (Base cost enrolled ADM / 250)
Student wellness and success staff cost = Student wellness and success staff x $96,859

Academic co-curricular activities cost

The academic co-curricular activities cost is calculated by multiplying the average per-pupil spending for academic co-curricular activities ($48.09 in FY 2022) by the district's base cost enrolled ADM. The academic co-curricular activities cost in FY 2024 totaled $70.6 million.

Academic Co-Curricular Activities Cost
Academic co-curricular activities cost = Base cost enrolled ADM x $48.09

Building safety and security cost

The building safety and security cost is calculated by multiplying the average per-pupil spending for building safety and security ($36.20 in FY 2022) by the district's base cost enrolled ADM. The building safety and security cost in FY 2024 totaled $53.2 million.

Building Safety and Security Cost
Building safety and security cost = Base cost enrolled ADM x $36.20

Supplies and academic content cost

The supplies and academic content cost is calculated by multiplying the average per-pupil spending for supplies and academic content, excluding supplies for transportation and maintenance ($243.81 in FY 2022) by the district's base cost enrolled ADM. The supplies and academic content cost in FY 2022 totaled $358.0 million.

Supplies and Academic Content Cost
Supplies and academic content cost = Base cost enrolled ADM x $243.81

Technology cost

The technology cost element is intended to support digital devices for students. The model calculates this cost by multiplying a per-pupil amount of $37.50 by the district's base cost enrolled ADM. The technology cost in FY 2024 totaled $55.1 million.

Technology Cost
Technology cost = Base cost enrolled ADM x $37.50

Student support base cost

The student support base cost is the total of the eight cost elements described above. The student support base cost in FY 2024 totaled $1.43 billion.

Student Support Base Cost
Student support base cost = High school guidance counselor cost + Librarian and media staff cost + Student wellness and success staff cost + Academic co-curricular activities cost + Building safety and security cost + Supplies and academic content cost + Technology cost

District leadership and accountability base cost

The district leadership and accountability base cost supports funding for six types of district-level administrative staff: a superintendent, a treasurer, other district administrators, fiscal support, Education Management Information System (EMIS) support, and district leadership support. It also provides a per-pupil amount for information technology center (ITC) support. These elements are described in more detail below.

Superintendent cost

The model supports a district's cost for a superintendent by providing a scaled amount of salary, ranging from $80,000 for districts with no more than 500 students to $160,000 for districts with at least 4,000 students, plus 16% for benefits and $17,153 for insurance. The superintendent cost in FY 2024 totaled $88.6 million.

Superintendent Cost

Superintendent cost =
If base cost enrolled ADM ≤ 500, then $109,953; else
If base cost enrolled ADM ≥ 4,000, then $202,753; else
Scaled amount between $109,953 and $202,753

Treasurer cost

The model supports a district's cost for a treasurer in a manner similar to the superintendent cost. It provides a scaled amount of salary, ranging from $60,000 for districts with no more than 500 students to $130,000 for districts with at least 4,000 students, plus 16% for benefits and $17,153 for insurance. The treasurer cost in FY 2024 totaled $71.8 million.

Treasurer Cost

Treasurer cost =
If base cost enrolled ADM ≤ 500, then $86,753; else
If base cost enrolled ADM ≥ 4,000, then $167,953; else
Scaled amount between $86,753 and $167,953

Other district administrator cost

The other district administrator cost supports costs associated with assistant superintendents and directors. The model calculates this cost based on (a) the district's superintendent cost, (b) the ratio of the average statewide salary of all assistant superintendents and directors with salaries between $50,000 and $135,000 to the average salary of superintendents with salaries between $60,000 and $180,000 (81.2% in FY 2022), and (c) a student to staff ratio of 750 to 1, with a minimum of two administrators per district. In FY 2024, the model calculated a statewide total of 2,201 administrators at a cost of $307.2 million.

Other District Administrator Cost
Other district administrators = Greater of two or (Base cost enrolled ADM / 750)
Other district administrator cost = Other district administrators x {[(District superintendent cost - $17,153) x 81.2%] + $17,153}

Fiscal support cost

The fiscal support cost funds bookkeeping and accounting employees. It is calculated by multiplying the average bookkeeping and accounting employee compensation by a student to staff ratio of 850 to 1 with a minimum of two and maximum of 35 staff per district. The average bookkeeping and accounting employee compensation is the statewide average salary of bookkeeping and accounting employees with salaries between $20,000 and $80,000 ($49,697 in FY 2022) plus 16% for benefits and $17,153 for insurance (total of $74,801). In FY 2024, the model calculated a statewide total of 1,996 fiscal support staff at a cost of $149.3 million.

Fiscal Support Cost
Fiscal support staff = Greater of two or [the lesser of 35 or (Base cost enrolled ADM / 850)]
Fiscal support cost = Fiscal support staff x $74,801

Education Management Information System (EMIS) support cost

EMIS is DEW's primary system for collecting student, staff, course, program, and financial data from districts and schools. The data is used to produce report cards and calculate state aid, among other purposes. The base cost model funds EMIS coordinators that assist with data collection and reporting. The EMIS support cost is calculated by multiplying the average EMIS coordinator compensation by a student to staff ratio of 5,000 to 1 with a minimum of one coordinator per district. The average EMIS coordinator compensation is the average statewide salary of accounting employees with salaries between $30,000 and $90,000 ($55,973 in FY 2022) plus 16% for benefits and $17,153 for insurance (total of $82,081). In FY 2024, the model calculated a statewide total of 666 EMIS coordinators at a cost of $54.7 million.

EMIS Support Cost
EMIS coordinators = Greater of one or (Base cost enrolled ADM / 5,000)
EMIS support cost = EMIS coordinators x $82,081

District leadership support cost

The district leadership support cost funds administrative assistants for district administrators. It is calculated by multiplying the average district leadership support compensation by an administrator to staff ratio of 3 to 1 with a minimum of one assistant per

district. The average district leadership support compensation is the statewide average salary of administrative assistants with salaries between $20,000 and $65,000 ($45,333 in FY 2022) plus 16% for benefits and $17,153 for insurance (total of $69,739). In FY 2024, the model calculated a statewide total of 937 assistants at a cost of $65.3 million.

District Leadership Support Cost
Leadership support staff = Greater of one or [(Superintendent + Other district administrators) / 3]
Leadership support cost = Leadership support staff x $69,739

Information technology center (ITC) support cost

ITCs provide computer support, software products, information services, EMIS data collection and administration, and Internet connectivity to member districts and schools. The ITC support cost is intended to fund ITC services and maintenance and replacement of access points and network switches. The model calculates this cost by multiplying a per-pupil amount of $31 by the district's base cost enrolled ADM. The technology cost in FY 2024 totaled $45.5 million.

ITC Support Cost
ITC support cost = Base cost enrolled ADM x $31

District leadership and accountability base cost

The district leadership and accountability base cost is the total of the seven cost elements described above. This cost amounted to $782.4 million in FY 2024.

District Leadership and Accountability Base Cost
District leadership and accountability base cost = Superintendent cost + Treasurer cost + Other district administrator cost + Fiscal support cost + EMIS support cost + District leadership support cost + ITC support cost

Building leadership and operations base cost

The building leadership and operations cost consists of three components: (1) the building leadership cost, (2) building leadership support cost, and (3) building operations cost. These elements are described in more detail below.

Building leadership cost

The building leadership cost supports costs associated with principals and other building-level leadership in a manner similar to the "other district administrator cost." The model calculates the building leadership cost based on (a) the district's superintendent cost, (b) the ratio of the average statewide salary of principals with salaries between $50,000 and $120,000 to the average salary of superintendents with salaries between $60,000 and $180,000 (79.0% in

FY 2022), and, (c) a student to staff ratio of 450 to 1. In FY 2024, the model calculated a statewide total of 3,671 building leadership staff at a cost of $460.9 million.

Building Leadership Cost
Building leadership = Base cost enrolled ADM / 450
Building leadership cost = Building leadership x {[(District superintendent cost - $17,153) x 79.0%] + $17,153}

Building leadership support cost

The building leadership support cost funds clerical personnel. It is calculated by multiplying the average building leadership support compensation by a student to staff ratio of 400 to 1 with a minimum of one position per school building in the district and maximum of three positions per building. The average building leadership support compensation is the statewide average salary of clerical employees with salaries between $15,000 and $50,000 ($34,356 in FY 2018) plus 16% for benefits and $17,153 for insurance (total of $57,006). In FY 2024 the model calculated a statewide total of 3,658 clerical employees at a cost of $223.2 million.

Building Leadership Support Cost
Building leadership support staff = Greater of (Number of buildings) or {the lesser of [(Number of buildings) x 3] or [(Base cost enrolled ADM) / 400]}
Building leadership support cost = Building leadership support staff x $57,006

Building operations cost

The building operations cost is calculated by multiplying the six-year statewide average building square feet per student by the six-year statewide average cost per square foot for those buildings, less the district's building safety and security cost, ($1,418 per pupil in FY 2022) by the district's base cost enrolled ADM. The building operations cost in FY 2024 totaled $2.03 billion.

Building Operations Cost
Building operations cost = Base cost enrolled ADM x $1,106

Building leadership and operations base cost

The building leadership and operations base cost is the total of the three cost elements described above. This cost amounted to $2.71 billion in FY 2024.

Building Leadership and Operations Base Cost

Building leadership and operations base cost = Building leadership cost + Building leadership support cost + Building operations cost

Athletic co-curricular activities base cost

The athletic co-curricular activities base cost is provided if the district either (1) is a member of an organization that regulates interscholastic athletics or (2) has teams in at least three different sports that participate in an interscholastic league. A district's cost is calculated by multiplying the average statewide per-pupil spending reported for athletic co-curricular activities ($192.21 in FY 2022) by the district's base cost enrolled ADM. All but two island districts qualified for this component in FY 2024. That year, the athletic co-curricular activities base cost amounted to $282.2 million.

Athletic Co-Curricular Activities Base Cost

If district either:
(1) is a member of an organization that regulates interscholastic athletics or
(2) has teams in at least three different sports that participate in an interscholastic league,
Athletic co-curricular activities base cost = Base cost enrolled ADM x $192.21;
Else, athletic co-curricular activities base cost = $0

Total base cost

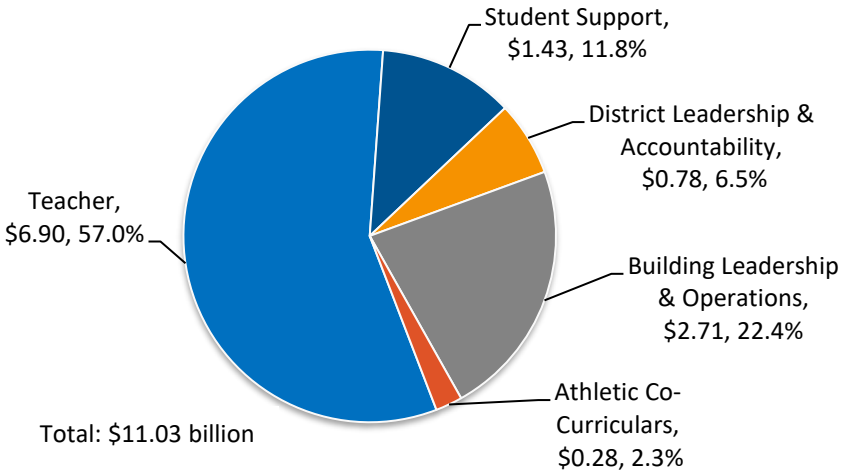
The total base cost amount for each district equals the sum of the five base cost components. This calculation is summarized below.

Total Base Cost

Total base cost = Teacher base cost + Student support base cost + District leadership and accountability base cost + Building leadership and operations base cost + Athletic co-curricular activities base cost

The total base cost amounted to $12.10 billion in FY 2024. Chart 1 below illustrates the proportion each of the five main components represent of the total base cost. The teacher base cost is the largest element, comprising $6.90 billion (57%).

Chart 1: Base Cost Components for Traditional Districts ($ in billions), FY 2024



Base cost per pupil

A district's total base cost is divided by the district's base cost enrolled ADM to calculate its base cost per pupil, which is used to calculate a district's state share of the base cost.

District Base Cost Per Pupil
District's base cost per pupil = District's total base cost / District's base cost enrolled ADM

This formula results in a unique base cost per pupil for each district. While it ranged from about $7,900 to over $19,400 (excluding a few small outliers), the base cost per pupil was between $7,900 and $9,000 for about 505 districts (83%). The statewide average base cost per pupil, which is used in the calculation of a number of other formula components, is $8,242 in FY 2024. The formula specifies that the statewide average base cost per pupil for FY 2025 will remain fixed at the FY 2024 amount. Districts with larger base cost per pupil amounts tend to be those with smaller enrollment that benefit from the various staffing minimums included in the base cost calculations. As illustrated in Chart 2 below, the base cost per pupil for the smallest districts (those with less than 500 students) averaged $11,514 in FY 2024. The average base cost per pupil decreases progressively as enrollment increases until enrollment reaches about 1,000 students. The average base cost per pupil for districts with over 1,000 students is very near to the statewide average base cost per pupil.

Chart 2: Average Base Cost Per Pupil by District Enrollment, FY 2024

