



## **District Analysis and Review Tools (DART)**

### **User Guide for DART Detail: Staffing and Finance**

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# Introduction

The Department of Elementary and Secondary Education provides a framework for both accountability and assistance for the 400 districts in the Commonwealth of Massachusetts. As part of that system, the Department seeks to make the data it receives from districts available to policymakers, parents, the public and the Department to use in assessing effectiveness and monitoring improvement in teaching and learning. From the vast amount of data available, reports offering comparisons and trends for a limited number of indicators can be a good starting point for self-assessment, inquiry, or district and school review. The Department has been developing a suite of tools called the [District Analysis and Review Tools \(DART\)](#) to provide such reports.

DARTs provide a snapshot of school and district trends in various kinds of data and allow users to:

- Look at trends over several years
- View school and district data in charts that are easy to interpret
- Evaluate and reflect on districts and schools and their progress
- Find comparable districts and schools based on demographic characteristics
- Make comparisons with a similar district(s) that has shown promising trends.

***DART for Districts*** and ***DART for Schools*** provide data and trends charts on a wide range of indicators suggested by a number of stakeholder groups around the state. Taken together, these indicators offer a snapshot of a district's overall effectiveness across key areas including curriculum and instruction, leadership and governance, human resources, professional development, student support, and finance and asset management.

***DART Detail*** tools support targeted inquiries in specific areas.

- ***DART Detail: Staffing and Finance*** provides reports on finance and staffing data with trends and district comparisons. They include some data that has not previously been publicly available.
- ***DART Detail: English Language Learners*** provides detailed information on English language learners in districts and their schools, including some data that has not previously been publicly available.

## Overview of DART Tools

DART tools are Excel files on the Department’s website at <http://www.doe.mass.edu/apa/dart/> (see below for detailed instructions on downloading and using them.)

### DART Tools

DART Tool	Data included	Comparisons	Years
<i>DART for Districts</i>	Selected indicators on curriculum and instruction, leadership and governance, human resources, professional development, student support, and finance and asset management  Included: all districts	Compare two districts and the state	5 years
<i>DART for Schools</i>	Selected indicators on curriculum and instruction, leadership and governance, human resources, professional development, student support  Included: all schools and single school districts	Compare two schools and the state	5 years
<i>DART Detail: Staffing and Finance</i>	Overview reports—enrollment, performance, staff and finance highlights  Staffing FTEs and student/staff ratios by category for all staff, by program area and by subject for teachers, by category for special education  Finance data for per pupil expenditures, dollar expenditures, state aid, out-of-district, revolving funds, Chapter 70 program, tax levies  Included: municipal and regional districts*	One district Compare eight districts  Compare four districts and the state  One district Compare four districts and the state	5 years 1 year  3 years  5 years 3 years
<i>DART Detail: English Language Learners</i>	Selected indicators specific to English language learner students and programming, including enrollment and demographics, curriculum and assessment, English language proficiency (MEPA), staffing, and federal grants.  Included: all districts, including single school districts	Compare ten districts and the state, and all schools in one	Most recent 5 years

*\* Because comparable financial data is not available for charter schools, this DART does not include these districts, and the DART state-wide finance comparisons do not include charter data.*

# Using DART Files

## Download DART Files to Your Computer

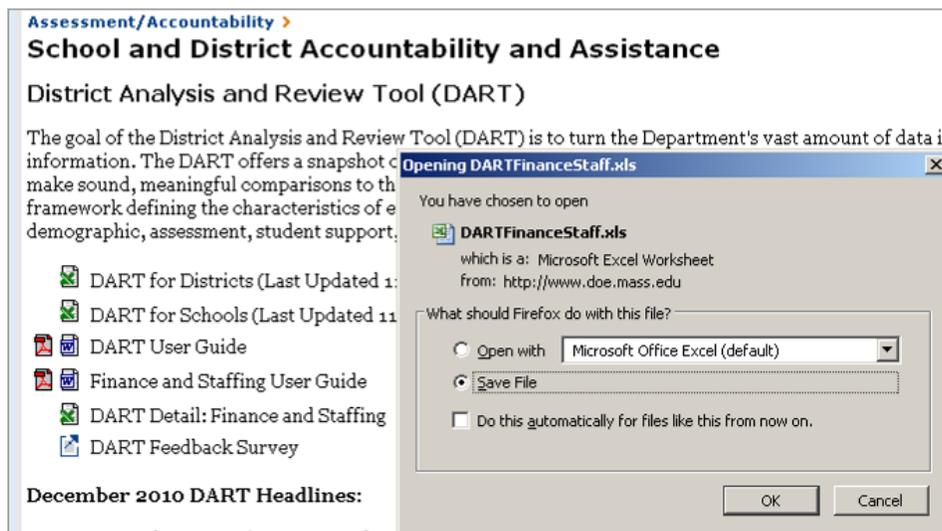
DART files work better if they are downloaded to your computer; *however, DARTs are updated periodically, so check the website and download new versions.*

DART files are very large and cannot be emailed. To share them, send a link to the website.

*Note for Mac users: DARTs for Districts and Schools and DART Detail: English Language Learners have separate files for the Mac that will function better. The DART Detail: Staffing and Finance file works for both PCs and Macs, but Mac users cannot open this file directly from the website. Download it before opening it.*

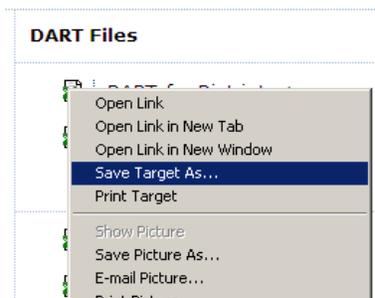
You can download the file two ways:

1) Go to the DART webpage—<http://www.doe.mass.edu/apa/dart/>—and click on the Excel file icon for any DART. Select “Save File” and OK; choose a folder.



OR

2) Right-click on the download icon and select *Save Target As* or *Save Link As*, as shown below.

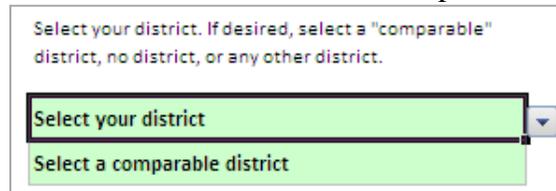


## Select Districts to Populate DART Reports with Data

Once you have downloaded the file to your computer and opened it, you will see the Home page. To select a district or school, click on the first green box and make your selection from the dropdown menu. Note that throughout the DARTs, you may make selections to customize reports anywhere you see a green shaded area.

*Screenshots used in this section are from DART for Districts. Other DART tools may look a little different but will function in the same way; for instance DART Detail: Staffing and Finance allows the user to select more comparison districts.*

Click on the first green box and select a district from the dropdown list.



When you make a selection, a list of ten possible comparison districts will appear below, with the selected district in orange, and the highest performing of the other districts in blue. Highest performance is based on achievement and growth in ELA, math, and science / technology over the past four years.

		2012 District Assistance Level									
Malden		Level 3									
Select a comparable district											
*Districts most similar to your district in terms of grade span, total enrollment, and special populations. Orange-shaded row: Your district Blue-shaded row: Highest performing of the other 10 districts in 2011 and 2012.											
Comparable Districts Overview		Grade span	2011-12 October Enrollment				2012 MCAS % Proficient or Higher			2012 MCAS Growth median SGP	
			Total Enrollment	Low Income	SPED	ELL	ELA	Math	Science	ELA	Math
Boston*	PK - 12	55,027	69.5	18.7	30.6	46%	40%	25%	45.0	52.0	
Brockton*	PK - 12	16,162	70.8	12.8	20.1	49%	36%	29%	52.0	50.0	
Chelsea*	PK - 12	5,692	78.1	12.3	18.1	44%	41%	26%	41.0	46.0	
Chicopee*	PK - 12	7,844	59.5	16.8	4.1	60%	44%	32%	46.0	41.0	
Everett*	PK - 12	6,371	76.1	15.6	12.2	55%	42%	24%	51.0	41.0	
Lowell*	PK - 12	13,548	75.1	15.3	31.8	48%	44%	27%	48.0	55.0	
Lynn*	PK - 12	13,731	82.4	16.5	19.6	50%	39%	34%	46.0	43.0	
Malden*	PK - 12	6,572	62.6	14.2	16.3	58%	51%	44%	54.0	55.0	
Pittsfield*	PK - 12	5,981	55.2	16.6	3.5	64%	54%	43%	45.0	43.0	
Quincy*	PK - 12	9,236	46.5	15.5	12.8	68%	56%	54%	51.0	47.0	
Revere*	PK - 12	6,519	74.9	16.0	11.0	61%	50%	48%	47.0	42.0	

Select another district if you choose (or several districts in the *Staffing and Finance* tool.) You are not limited to the comparable districts.

*Note: if a district seems to be missing from drop-down lists for comparison districts, go to the top of the list – it will be in the first ten districts which are from the comparison list.*

*Note: in the DART Detail: Staffing and Finance tool, a link is provided to the School Finance Unit's comparison generator based on district wealth and size, providing an alternate way of finding comparison districts.*

The file may freeze for a moment while data is populated in all the reports (check for a message at the bottom left of the screen.)

You can go to various reports either by clicking on the links in the Table of Contents on the Home page;

Table of Contents	Resources
<a href="#">District Context</a>	<a href="#">Aligned with District Standards and Indicators</a>
<a href="#">Curriculum, Instruction and Assessment</a>	<a href="#">User Guide</a>
<a href="#">Achievement Gap</a>	<a href="#">DART for Schools</a>
<a href="#">Leadership, Human Resources, and Professional Development</a>	<a href="#">DART Detail: English Language Learners</a>
<a href="#">Student Support</a>	<a href="#">DART Detail: Staffing and Finance</a>
<a href="#">Finance and Asset Management</a>	<a href="#">DART Webpage</a>

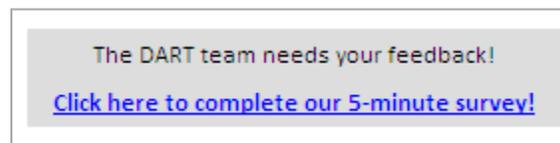
OR

by clicking on the worksheet tabs on the bottom of the screen.

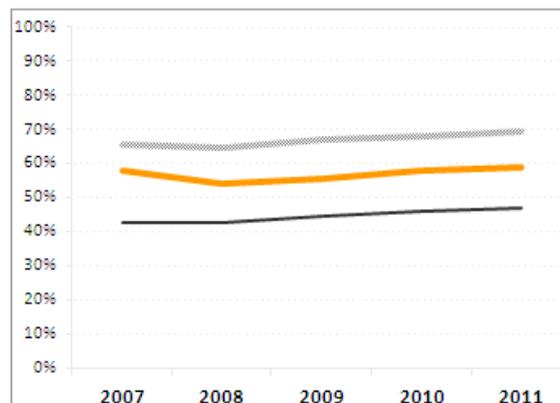


Links to additional resources, including other DART tools, are included.

Also on the Home page is a link to an anonymous, 5-minute [DART survey](#), where you can provide feedback to ESE about your experience using DART, and make suggestions for new indicators.



DART reports are designed to be as clear as possible. When charts are provided, the selected district is represented by an orange line, the Commonwealth by a gray line, and a comparable district by a dark charcoal line.



## Print Reports

Reports are formatted in 8.5” x 11” for easy printing to a desktop printer or to an Adobe pdf file. High quality black and white printing will also allow you to distinguish between the lines, but color prints are preferable.

If you want to share reports you’ve set up with others, print to Adobe Acrobat to create a pdf file. The DART file itself is too large to email.

## Create Your Own Reports Using DART Data

You can copy data from the DART and manipulate it in your own reports. However, you need to do the copying carefully because the DART has large hidden data sheets and formulas to populate the reports. If you just copy and paste, all cells will be linked to the DART file, and/or you will get zeroes and errors in each cell. You need to copy the data in such a way that it is no longer based on formulas and is not linked in any way to the DART file, as follows:

*To copy and paste data cleanly from DART reports:*

- Select all the data
- Copy and Paste Special into a new workbook
- Use Paste Special / Paste as **Values**
- Paste Special again, Paste as **Formats**
- Close the DART file and save your new file.

**Warning about copying:** *be sure to use Paste Special and paste as values.* If you just copy and paste, your new file will have cumbersome formulas linked to the original DART file and won’t work well.

## Use the RSS Feed for Updates

You can sign up for notification of DART updates by subscribing to our RSS feed. On the DART home page there is an RSS icon just above the title bar. Click on the icon, then select the DART RSS feed from the list. When you click on it, you will be invited to subscribe.

## Comparing Similar Districts and Schools

While districts often compare themselves to neighbors, it may be useful to see whether similar districts or schools are struggling or succeeding in a variety of areas—districts from around the state may be relevant. When the user selects a district, DART tools generate a list of ten comparable districts based on enrollment characteristics. Districts are compared within their grade-span group (K-12, elementary, secondary, vocational-technical/agricultural.) You are not limited to these districts in selecting a comparison district.

An internal ESE study showed that the percentage of low income students enrolled was by far the strongest predictor of district and school performance, and this variable is weighted strongly in the algorithm of the comparison model. The other four variables included in the algorithm are total enrollment (size), percentage of English Language Learner students enrolled, percentage of special education students enrolled, and district or school type (e.g., elementary school, middle school.)

### District Comparison Methodology Details

To build the components of the comparison methodology, all districts in the Commonwealth are assigned percentile ranks (1 to 99) for total enrollment, percentage of low income students, percentage of ELL students, and percentage of students with disabilities. Higher percentile ranks (closer to 99) indicate that the district enrolls more students or higher percentages of low income students, ELL students, or students with disabilities relative to districts with lower percentiles (closer to 1).

Districts are also categorized by district type: elementary, high school, or K–12. In order to simplify the definition of district types, districts that serve elementary and middle school grades are classified as elementary districts, and districts that serve middle and high school grades are classified as high school districts.

The comparison methodology matches districts by district type and minimizes the total absolute difference in enrollment, low income, ELL, and students with disabilities percentiles from the selected district. The formula sums the absolute differences between percentiles from the selected district and identifies the 10 districts with the smallest total differences. To reflect the strong correlation of low income status with district performance, minimizing low income differences is weighted more than minimizing differences in enrollment, ELL, or students with disabilities.

Each district has a fixed comparison group in any given year, but the next year's enrollment data may generate a slightly different group. Among districts, comparison groups are not static; districts comparable to your selected district will have their own comparison groups that may not completely overlap.

### School Comparison Methodology Details

The school comparison methodology works the same way as the district one. To build the components of the comparison methodology, all operating schools are assigned percentile ranks

(1 to 99) for total enrollment, percentage of low income students, percentage of ELL students, and percentage of students with disabilities. Higher percentile ranks (closer to 99) indicate that the district enrolls more students or higher percentages of low income students, ELL students, or students with disabilities relative to districts with lower percentiles (closer to 1).

Schools are also categorized by type: early elementary, elementary, elementary middle, middle, middle high, and high schools; vocational schools; and alternative and public day schools. This is the same school categorization method that is used by ESE's data reporting unit.

The comparison methodology matches schools by type and minimizes the total absolute difference in enrollment, low income, ELL, and students with disabilities percentiles from the selected school. The formula sums the absolute differences between percentiles from the selected school and identifies the 10 schools with the smallest total differences. To reflect the strong correlation of low income status with district performance, minimizing low income differences is weighted more than minimizing differences in enrollment, ELL, or students with disabilities.

Like the district comparison, each school has a fixed comparison group in any given year, but the next year's enrollment data may generate a slightly different group. Among schools, comparison groups are not static; schools comparable to your selected school will have their own comparison groups that may not completely overlap.

### **Wealth-based Comparison Methodology**

Finance analysts sometimes select comparison districts using a tool provided by ESE's School Finance Office. Its methodology uses enrollment and wealth measures (property valuation and household income) to select comparable districts. The most current wealth comparison tool available is in the 2008 per pupil expenditures file, and a link to this file is provided on the Home page of the *Staffing and Finance* DART.

# Considerations in Using DART Data

## **Remember: DARTs are a snapshot.**

The DARTs provide a gauge of the overall condition of a district or school, but do not have all available information. They should be treated as a good starting point for exploring the data and identifying areas of focus for further inquiry. The ESE website, especially [School and District Profiles](#), provides additional detail and should be referenced for deeper analysis. Local data is a powerful addition tool for inquiry.

DART charts, when available, allow visual comparisons between local and state trends, but observed differences may not be statistically or educationally meaningful. For instance, annual change of about 2.5 points in CPI is potentially meaningful, but 10 SGP percentile points meets the same threshold. Users are cautioned to view the data provided in DARTs as a starting point for further investigation of relative differences and data outliers.

## **DART files do not automatically update.**

About three times a year, new data become available and the DART excel files are updated and posted to the website. This means that files previously downloaded to local computers may not be current; they will *not* automatically update. Check the website periodically and download the newest files.

## **Considerations for Data Analysis**

Districts put great effort into providing a lot of data to the Department, which is used for district self-assessment, Department reviews, legislative and grants reporting, public posting, and research. The data supports analysis and decision-making, but it is not perfect. Some healthy skepticism is appropriate when, for instance, there is a real outlier in the data. The data collection process is subject to difficulties of several kinds, including simple keying errors. Other factors that affect data include:

- Without being in error, district staff may interpret the Department's codes differently, so comparison at the detail level may make less sense than comparison at the subtotal level.
- When the Department requires a new data collection (e.g., EPIMS, course schedules), data is more inconsistent for the first year or two.
- Department coding is not perfectly aligned across different areas (e.g., staffing and finance.)

Ultimately, if data raises questions relevant to a decision-making process it is wise to follow up with other districts directly or to contact the Department for further information.

# DART Detail: Staffing and Finance

## **Data Used in Reports**

Data from: End of Year Financial Reports (EOYRs), the Chapter 70 program, the Department of Revenue (DOR), the Educational Personnel Information Management System (EPIMS), the Student Information Management System (SIMS) and the Massachusetts Comprehensive Assessment System (MCAS)

## **Overview Reports**

These reports provide summary data about enrollment, performance, staffing, and finance.

### **District at a Glance**

Sources: SIMS, MCAS, EPIMS, EOYR

Description:

- Five year trends of data highlights from enrollment, performance, staffing and finance
- State comparison for most recent data year

Uses:

District at a Glance provides an overall picture of a district and recent trends in key areas.

### **District Comparison**

Sources: SIMS, MCAS, EOYR, Chapter 70, DOR

Description:

- Eight districts' data highlights from enrollment, performance, staffing, and finance
- Most recent finance data year

Uses:

The District Comparison report provides helpful information for benchmarking.

## **Staffing Reports**

Staffing reports provide full-time-equivalents (FTEs) and student to staff ratios for various staffing categories, and compare four districts over three years. Year-to-year FTEs show hiring trends while student-to-staff ratios show relative staffing levels, allowing comparison across districts. State student-to-staff ratios are provided as another point of comparison.

### **District Staffing**

Sources: SIMS (Oct); EPIMS (Oct)

Description:

Staff is grouped in categories related to administration and instructional leadership, instruction, student support, and clerical/technical support. The jobs included in each category are listed in Appendix A and in the *Staffing Definitions* worksheet in the DART file. Student-to-staff ratios in this report are based on all students.

Uses:

Use FTEs to see hiring trends over three years, and to see the impact of relative district size (for instance, lesser or greater specialization among administrators based on absolute numbers of staff.) Use student-to-staff ratios to compare relative staffing levels across districts and the state.

## **Teachers**

Sources: SIMS (Oct); EPIMS (Oct)

Description:

Teachers are grouped by program area (general education, students with disabilities, vocation-technical, and English language learners.) General education teachers are further broken out by subject categories (ELA/reading/math/science/social studies, arts and languages, and other.) EPIMS assignment codes are used for program area, and course numbers for subject (see Appendix A, or the *Staffing Definitions* worksheet in the DART file.) For students with disabilities, English language learner, and vocation-technical teachers, student-to-staff ratios in this report are based on the relevant student group. Only in-district students with disabilities are included. For general education teachers, all students are counted in the ratio because, for example, many students with disabilities are in regular education classes for most of the day.

Uses:

Use FTEs to consider trends in hiring over three years and to see the impact of relative district size (for instance, lesser or greater specialization among administrators based on absolute numbers of staff.) Use student-to-staff ratios to compare relative staffing levels across districts and the state. Comparisons show the way different districts deploy their teaching workforce to cover all subjects, and to meet the needs of selected populations (students with disabilities and English language learners.)

Student-to-staff ratios are useful guides, but where student populations are heavily weighted (e.g., large vocational-technical or English language learner enrollment) the general education ratio may seem unusual because these teachers provide less services to vocational-technical or ELL students. Data anomalies also occur in vocational-technical data because there is inconsistency in assignment coding (for instance, some vocational-technical schools report all their teachers as general education.) Common sense should guide analysis and questions when data seems highly unusual.

## **Staff for Students With Disabilities**

Sources: SIMS (Oct); EPIMS (Oct)

Description:

Staff for students with disabilities (SWD) is reported here with student-to-staff ratios based on *in-district* students. SWD paraprofessionals are included in this report.

Uses:

Use FTEs to consider trends in hiring over three years, and to see the impact of relative district size (for instance, lesser or greater specialization among administrators based on absolute numbers of staff.) Use student-to-staff ratios to compare relative staffing levels across districts and the state.

Staff for students with disabilities is deployed in ways that cannot be decoded from the data in this report; for example, one cannot distinguish between a district using an inclusion approach for virtually all such students from one providing pull-out and separate classroom services to a higher degree.

## **Finance Reports**

DART finance reports generally compare data for four districts over three years. Some of the data is available on the website but is presented here with trends and district comparisons; some data provided here is not available on the website, e.g. dollar expenditures from the complete EOYR.

### **District Finance Summary**

Sources: EOYR, Chapter 70 Program, Department of Revenue (DOR)

Description:

- Five year trends of finance data including per pupil expenditures, all dollar expenditures from local appropriations and grants/revolving funds, state aid, out-of-district expenditure details, Chapter 70 details, and tax levy data (for municipal districts but not regional districts)
- State comparison for most recent year of data, where applicable

Uses:

The District Finance Summary integrates finance data from several sources into one report with five year trends for an overview of district finances.

### **Expenditure by Source**

Source: EOYR

Description:

- Expenditure by category from school committee, municipal, grant, and revolving funds, with percentages compared to the state
- Expenditures for all categories; those included in per pupil expenditures plus capital, debt, and community services expenditures

Uses:

The Expenditure by Source report is a comprehensive summary of a district's total expenditures from major funding streams, and allows comparison of spending patterns to the state by source

of funds. It also allows a quick comparison of the percentage of overall spending in those areas to state trends in categories where municipal expenditures are reported.

## **Per Pupil Expenditures: Summary and Details**

Sources: EOYR; SIMS (End of Year); *student:teacher ratio from SIMS (Oct) and EPIMS (Oct)*

### Description:

- Three years of per pupil expenditures for four districts and the state
- Full-time-equivalent (FTE) pupils, which are calculated from SIMS (End of Year) as all students' days in membership divided by 180 days
- Per pupil expenditure totals for in-district (enrolled pupils), out-of-district—tuition paid for charter, choice, tuition agreements, special education out-placements, and all pupils
- All sources of funding included—local appropriations, local revolving funds and grants
- Expenditures for administration, instruction and student support, pupil services, operations, benefits and fixed charges, and out-of-district tuitions and transportation
- Expenditures on regional assessments, community services, fixed assets, and debt not included
- Comparison of expenditures per in-district pupil to the median among similar size districts with the same grade-span (K-12, elementary, secondary, voc/tech/ag)

### Uses:

The summary report's category totals are a good starting point for comparison. To drill down further, use the detail reports, but be aware that detail lines may differ across districts for reasons that may not be directly related to level of resources. For instance, reporting may reflect different finance coding by districts rather than a different deployment of staff, particularly because definitions of staff roles in EOYR and EPIMS are not perfectly consistent. For example, a teaching role might be coded as a classroom teacher (2305) in one district and as a specialist teacher (2310) in another. Curriculum supervision might be done by an assistant superintendent or by several directors of curriculum areas. *Note that there is no one right way to allocate resources. For instance, districts may have different approaches to providing instructional leadership and supervision that may be equally effective.*

Analyze in-district, out-of-district and all totals separately because they have different denominators (different FTE pupils.) In-district expenditures are decided by the policy and program decisions of the school committee and superintendent—how to staff schools and the central office, provide pupil services, and so on. Out-of-district expenditures are driven by factors largely out of the district's control, such as families choosing charter schools or using the school choice option to attend another district, and by the incidence of high-needs special education students. Further detail on out-of-district costs is available in another report.

Note that in-district pupils include both those resident in the district and those who tuition in—a few districts have a substantial percentage of tuitioned-in students. Those tuitioned-in through the choice program bring about \$5,000 tuition, while those tuitioned-in by agreement typically bring a higher amount that is closer to the cost per pupil in the receiving district.

Total costs per pupil are a measure of overall spending, but because out-of-district costs vary so much, comparable total costs may not indicate comparable resources allocated to in-district students.

Per pupil expenditures data allows the user to benchmark and compare typical costs for educating locally enrolled students. Total dollars spent on schools may be considerably larger than indicated by per pupil expenditures. Regional assessments, indirect cost transfers, community services, fixed assets (capital investment) and debt service are not included because they vary widely across districts and across years, but are paid for with local appropriations and sometimes other funding sources. For example, one district may pay regional assessments to send some students to a regional vocational-technical school while another may provide vocational-technical education in its own schools. Towns and districts make decisions to build or renovate school buildings based on particular circumstances such as aging facilities or expanding enrollment.

## **Median Expenditure Per In-district Pupil by District Type and Size**

Sources: EOYR; SIMS (Oct)

### Description:

This report groups districts of similar grade-span and enrollment size and provides each group's median, minimum and maximum expenditure per in-district pupil over three years. SIMS enrollment data (essentially in-district pupils) is used to group districts.

### Uses:

District costs vary systematically by size and grade-span, so these groups provide relevant comparison information. For instance, K-12 district costs are typically lower than those of vocation-agricultural districts, and the lowest K-12 in-district per pupil expenditures are in the 1,000-3,000 enrollment range.

This report provides medians instead of averages to prevent distortions caused by high-cost outliers. The range of expenditures within each group from low to high can be very wide.

## **Out-of-district Expenditures**

Sources: EOYR; SIMS End of Year (previously Schedule 11)

### Description:

- Three years of expenditures for four districts for specific out-of-district tuition lines
- FTEs and average tuition costs for charter and choice out-of-district students
- State aid that supports out-of-district tuitions

### Uses:

The Out-of-district Expenditures report helps the public understand very different levels of average cost. If a district has many choice students enrolled in other districts, its average expenditure per out-of-district pupil will be low. These tuitions are about \$5,000, which is less than the cost to educate a student in-district. If there are no choice or charter options (or few students exercising these options) average expenditure per out-of-district pupil will typically be

much higher, as the tuitions will be mostly for placements of high needs students with disabilities. The report includes the percentage of out-of-district students in the lower-cost choice and charter tuition categories as a rough benchmark to help analyze and compare average costs.

## **Revolving Funds**

Source: EOYR

### Description:

- Three years of revenues and expenditures for revolving funds as reported in the EOYR for four districts
- Annual net amount (revenues minus expenditures)

### Uses:

The Revolving Funds report provides a snapshot of a district's revolving funds. Revolving funds are different from local appropriations or grants because the district can roll over balances from one year to the next. While expenditures must be for specific designated purposes, the rate of expenditure can be managed by the district, with negative cash flow one year and positive cash flow another year.

## Appendix A: Staffing Definitions

A complete description of EPIMS codes is on the ESE website in *Appendix A-G of the Data Handbook*: <http://www.doe.mass.edu/infoservices/data/epims/> The following tables show how DART staffing reports group EPIMS codes into staff categories, teaching areas, and teaching subjects.

<b>Staff Categories by EPIMS Job Code</b>	<b>Code</b>
<b>District Administrators</b>	
Superintendent	1200
Asst/Assoc/Vice Superintendent	1201
School Business Official	1202
Other District Administrator	1205
Supervisor/Director: Technology	1224
School Nurse Leader	1226
<b>Other Instructional Leaders</b>	
Supervisor/Director of Guidance	1210
Supervisor/Director of Pupil Personnel	1211
Special Education Administrator	1212
Supervisor/Director: Arts	1213
Supervisor/Director of Assessment	1214
Supervisor/Director: Curriculum	1215
Supervisor/Director: English Language Learner	1216
Supervisor/Director: English	1217
Supervisor/Director: Foreign Language	1218
Supervisor/Director: History/Social Studies	1219
Supervisor/Director: Library/Media	1220
Supervisor/Director: Mathematics	1221
Supervisor/Director: Reading	1222
Supervisor/Director: Science	1223
Supervisor/Director: Professional Development	1225
<b>School Administrators</b>	
Principal	1305
Asst/Vice Principal	1310
Other School Administrator	1320
<b>Instructional Coaches</b>	2330
<b>Teachers</b>	
Teacher	2305
Teacher - support content instruction	2310
<b>Substitutes (Long-term)</b>	2325
<b>Paraprofessionals</b>	4100
<b>Tutors</b>	3323
<b>Instructional Support</b>	
Educational Interpreter	3324
Diagnostic and Evaluation Staff	3325
Recreation Specialist	3326
Rehabilitation Counselor	3327
Work Study Coordinator	3328
Guidance Counselor	3329
Librarian	3330

<b>Staff Categories by EPIMS Job Code</b>	<b>Code</b>
Junior ROTC	3340
School Adjustment Counselor - Non-SPED	3350
School Psychologist - Non-SPED	3360
School Social Worker - Non-SPED	3370
Other Professional Support (DSSR)	3381
<b>SPED Instructional Support</b>	
School Adjustment Counselor - SPED	3351
School Psychologist - SPED	3361
School Social Worker - SPED	3371
<b>SPED Related Staff</b>	
Audiologist	3411
Occupational Therapist	3421
Physical Therapist	3431
Peripatologist	3441
Speech Pathologist	3451
Other Related SPED Staff	3461
<b>Medical/Health Services</b>	
Physician	5010
Psychiatrist	5015
School Nurse - Non-SPED	5020
School Nurse - SPED	5021
<b>Clerical</b>	
Administrative Aides	6100
Administrative Clerks/Secretaries	6110
SPED Administrative Aides	6120
SPED Clerks/Secretaries	6130
Other Administrative Support	6150
<b>Tech Support</b>	
Information Services and Technical Support	6140

Teaching Areas by EPIMS Assignment Code	Code
<b>General education</b>	
Not available	000
Core Subject: Non-Secondary Level Classroom Teacher	001
Core Subject: Secondary Level Classroom Teacher	002
Core Support Content General Education	012
Core Subject: Reading Teacher	017
Non-Core Subject: Non-Secondary Level Classroom Teacher	212
Non-Core Subject: Secondary Level Classroom Teacher	213
Non-Core Support Content General Education	215
<b>Vocational-technical</b>	
Non-Core Subject: Career and Technical Education	208
<b>Special education</b>	
Core Subject: Mild/Moderate Disabilities Sole Content	003
Core Subject: Severe Disabilities Sole Content	004
Core Subject: Mild/Moderate Disabilities Consultative	005
Core Subject: Severe Disabilities Consultative	006
Core Subject: Vision Impairments	007
Core Subject: Deaf/Hard of Hearing	008
Non-Core Subject: Vision Impairments	209
Non-Core Subject: Speech/Language/Hearing Disorder	210
Non-Core Subject: Deaf/Hard of Hearing	211
Non-Core Subject: Other Special Education Instruction	214
Special Ed: Shared Physical Education at Non-Secondary	301
Special Ed: Shared Physical Education at Secondary	302
Special Ed: Shared Vocational Education	303
Special Ed: Other Shared Instructional Staff	304
<b>English as a second language</b>	
Core Subject: Non-Secondary Level ESL Teacher	010
Core Subject: Secondary Level ESL Teacher	011
Non-Secondary Content Support ESL Teacher	014
Secondary Content Support ESL Teacher	020
<b>Sheltered content/bilingual</b>	
Core Subject: Sheltered Content Teacher > or = 50%	009
Core Subject: Other Bilingual Education	016
Core Subject: Sheltered Content Teacher < 50%	019

Teaching Subjects by EPIMS Course Code		Code
<b>ELA/Reading/Math/Science/Social Studies</b>		
English		01
Mathematics		02
Science		03
History, Social Studies, Social Sciences		04
Reading		74
All Subjects		99
<b>Arts/Languages</b>		
Arts		05
Foreign Languages		06
<b>Other</b>		
Not Available		00
Religion		07
Physical, Health and Safety Education		08
Military Science		09
Computer and Information Sciences		10
Communications and A/V Technology		11
Business and Marketing		12
Manufacturing		13
Health Care Sciences		14
Public, Protective and Government Service		15
Hospitality and Tourism		16
Architecture and Construction		17
Agriculture, Food and Natural Resources		18
Human Services		19
Transport, Distribution and Logistics		20
Engineering and Technology		21
Miscellaneous		22
SPED Services		24
CVTE (Chapter 74) courses		CIP

## Appendix B: Financial Definitions

Definitions and further explanations of financial data are available on the School Finance section of the Department's website: <http://finance1.doe.mass.edu/>

Chapter 70	State aid to public school districts based on community wealth and resident students
Community activities	Includes costs of citizen meetings, PTO activities, school councils, public forums and lectures, advisory council meetings
Debt and BANs	Payments for debt service or Bond Anticipation Notes
Federal/state grants	All grants from federal or state agencies (some administered through the Department of Elementary and Secondary Education)
Fixed assets	Includes purchase of land and buildings, equipment, capital technology, and motor vehicles; payments on loan principal, lease/purchase agreements, local school construction projects, and payments from aid provided by the MA School Building Authority
FTE pupils	Full-time equivalent pupils; calculated from the SIMS (End of Year) total of students' days in membership (enrollment) divided by 180 days
Functions	Finance codes for functional categories, e.g. instructional equipment, assistant superintendents, psychological services, food services
In-district pupils	Pupils enrolled in a district and receiving educational services there (includes students who enroll through the choice program, tuition agreements, etc.)
In-district expenditures	Costs included in per pupil calculations: administration, instruction and student support, pupil services, operations, benefits and fixed charges
Local appropriations	Local general funds committed to the annual budget (includes state aid but not state grants)
MA School Building Authority	State agency that provides aid for construction projects, using criteria to prioritize which communities and projects receive aid
Median per pupil expenditure	Medians (the middle of a group of numbers) instead of averages reduce the impact of high outliers and are sometimes more useful benchmarks
Other district expenditures	Expenditures not included in per pupil calculations: indirect cost transfers, cCommunity activities, fixed assets, debt and BANs
Out-of-district pupils	Resident students for whom a district is financially responsible, but who are enrolled in other districts or programs such as charter schools, school choice, SPED out-placements, tuition agreements with other districts
Out-of-district transportation	Some out of district pupils are eligible for transportation, such as SPED students
Pupil transportation	Transportation is reported in Schedule 1 of the EOYR as one number; some of this total is assigned to out-of-district transportation costs based on Schedule 7.
Regional assessments	Payments by municipalities to regional districts including vocational-technical districts, and regional secondary or elementary districts (these are not included under municipalities' expenditures because they are reported as expenditures by the regional district; a separate

	report is needed on the expenditure by municipalities in order to fully understand the cost of education for local taxpayers)
Revenues	Revenues reported in Schedule 1 of the EOYR; does not include local tax levy appropriations. Expenditures are also reported in terms of revenue sources, but there is not always a direct correlation of revenues and expenditures. Local revolving funds do not have to be spent in the year received, for example. Local appropriations are reported as school committee and municipal expenditures without differentiating state aid, tax levies and any other revenues that go directly to general funds.
Revolving funds	Revolving funds are local accounts for fees and payments received by the district such as lunch or athletic fees; unlike appropriations, revolving fund revenues do not have to be expended in the year they are received.
SFSF (State Fiscal Stabilization Fund)	The State Fiscal Stabilization Fund was created with American Recovery and Reinvestment Act (ARRA) funds in FY09; SFSF funds were used by the state in FY09 in lieu of some Chapter 70 payments. Expenditures of these funds were reported as federal grant expenditures instead of as local appropriations, which changed Chapter 70 aid totals and Net School Spending (federal grants do not count toward Net School Spending.) Districts used these funds for expenses that would have been covered by local appropriations if Chapter 70 aid had been paid in full.
SPED out-placements	Some special education needs cannot be met in a district's own educational program, particularly if the district is small. These students have a right to publicly-supported education, and the district is responsible for their tuition at another districts, a collaborative, a non-public special education school or an out-of-state school. These students take the MCAS and their performance is included in the district's performance ratings.
State aid	State aid such as Chapter 70, charter school reimbursements, and regional transportation is paid by various state budget line items through the "cherry sheet" to local general funds, then appropriated to the school budget by the school committee and municipality
State-wide average per pupil expenditure	For each category, all costs are totaled and then divided by the total of in-district, out-of-district and all full-time equivalent pupils