



District Analysis and Review Tools (DART)

User Guide for DART Detail: Success After High School

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Commissioner

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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: Success After High School*** provides reports on secondary and postsecondary education, and career development data with trends and school comparisons. They include some data that has not previously been publicly available.
- ***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.mass.gov/ese/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	One district Compare eight districts	5 years 1 year
	Staffing FTEs and student/staff ratios by category for all staff, by program area and by subject for teachers, by category for special education	Compare four districts and the state	3 years
	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 four districts and the state	5 years 3 years
<i>DART Detail: Success After High School</i>	Selected indicators on high school indicators, high school performance, programs of study, postsecondary education outcomes, and career development education. Included: all schools containing grades 9 to 12	Compare two schools and the state	5 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

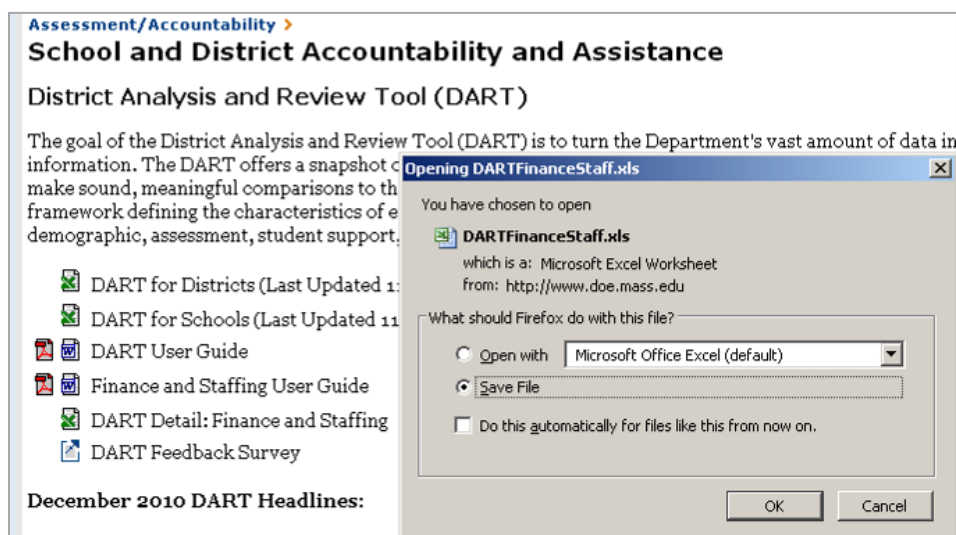
DART files work better if they are downloaded to your computer; *however, DARTs are updated periodically, so check the website and download new versions.*

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.

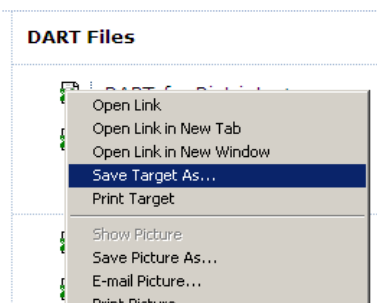
You can download the file two ways:

1) Go to the DART webpage—<http://www.mass.gov/ese/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.

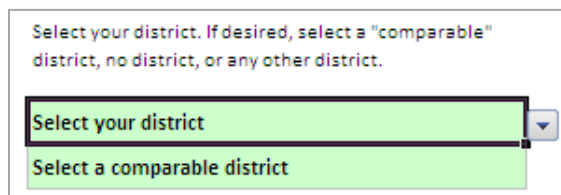


Select districts to populate DART reports with data

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

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: Success After High School all comparisons are on the school level.

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
District Context	Aligned with District Standards and Indicators
Curriculum, Instruction and Assessment	User Guide
Achievement Gap	DART for Schools
Leadership, Human Resources, and Professional Development	DART Detail: English Language Learners
Student Support	DART Detail: Staffing and Finance
Finance and Asset Management	DART Webpage

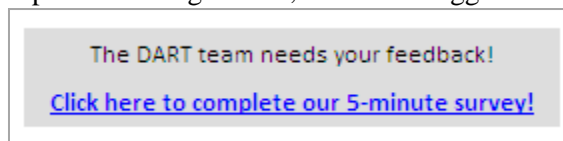
OR

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

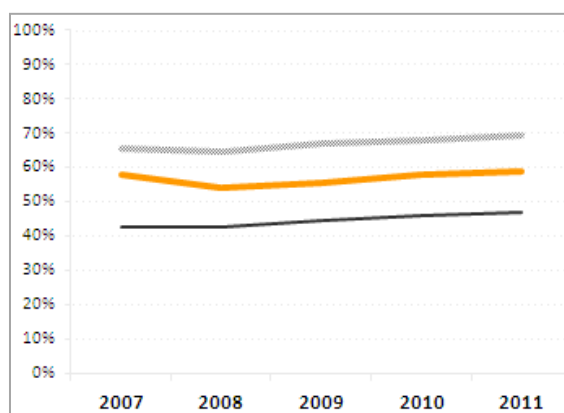
[Home](#) / [Context](#) / [HS_Indicators](#) / [HS_Performance](#) / [Program of Study](#) / [Postsecondary Outcomes](#) / [CareerDevelopment](#)

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, and 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, economically disadvantaged, 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 economically disadvantaged status with district performance, minimizing economically disadvantaged 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 economically disadvantaged 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 economically disadvantaged 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, economically disadvantaged, 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 economically disadvantaged 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.

Update: Because of the recent change to the low income collection, we replaced the low income status to economically disadvantaged.

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 two 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.

Contents of the DART Detail: Success After High School

DART Detail: Success After High school is a tool that may be used to support the self-evaluation process for whole districts as well as individual schools, as it contains a powerful set of data elements that, taken as a whole, provide an indication of the overall condition of a district or school's efforts to ensure all students are ready for their next steps as productive and contributing members of society.

This tool contains data elements that cover a range of school, district, post-secondary and career readiness information including demographics, high school indicators, programs of study, high school performance, postsecondary education outcomes, and career development education.

DART Detail: Success After High School is available in a Microsoft Excel file. The tool displays an array of graphs and charts that include mostly school level data, as well as some regional and state-level information. The Success After High School DART also provides a method for including data from comparable schools in the displays (see Comparing Similar Schools).

The following section includes brief descriptions of each indicator as well as important considerations for examining the data. Note that some descriptive information is summarized from the Massachusetts Department of Elementary and Secondary Education website, and users should refer to the website links listed in the footnotes for further information.

High School Context

Users may filter these graphs by the following groups: All Students, Low Income or Economically Disadvantaged, Students with Disabilities, English Language Learner, African American, Asian, Hispanic/Latino, Multi-Race/Non-Hispanic/Latino, Native American, Native Hawaiian, and White.

Enrollment (both total number and percentage)

Source: [Student Information Management System \(SIMS\)](#)

The enrollment indicator displays two line graphs. The first line graph and table provide information on the total number of students enrolled in a school, while the second line graph and table provide information on the percentage of students enrolled in a selected subgroup. Lines in the upward direction indicate a positive enrollment change; downward lines indicate a negative enrollment change. The state enrollment numbers are provided in a small line graph above to put the school enrollment changes into context.

Note that due to the wide variations across the state in terms of enrollment, the scale of the graph will change depending on how large or small the selected schools are. Sharp rises or drops in enrollment from year to year may suggest shifts in systemic district or school practices and/or myriad other contextual factors (e.g., economic climate impact, immigration trends, etc.).

Due to some districts using a district wide eligibility for free and reduced price lunch, low income will be treated differently starting in 2015. Results are forthcoming.

Stability rate (enrolled all year)

Source: [SIMS](#)

Mobility refers to the rates of students transferring into or out of a school or district. This DART displays the school's stability rate, which answers the question "Of the students who started the year with us, how many stayed the entire school year?" To measure this, we compare the student enrollment in a school from the October 1st SIMS data collection, to the student enrollment throughout the full school year, as reported in the March and End of Year SIMS data collections. Specifically, the numerator includes each student who was enrolled in any public school in all three SIMS data collections. Each student is counted only once. The denominator includes each student reported as enrolled in a public school in the October 1st SIMS data collection. The final calculation also excludes students who are reported as having less than the standard days in membership, according to their grade level. For more information on mobility, see the mobility page¹ on the ESE website.

The stability rate is useful for general audiences because the measure is intuitive. Of the students who started the year, the stability rate is simply the percentage of students who stayed for the whole year. The state's stability rate is not included because the rate measures students' movement in and out of the state.

Students to school counselor ratio

Source: [EPIMS](#)

This measure is a ratio of high school students to educational personnel designated as guidance counselors in the state Education Personnel Information Management System (EPIMS). The Department of Elementary and Secondary Education has no specific requirement of these ratios. As a point of comparison, The American School Counselor Association (ASCA, 2005) recommends a ratio of 1 counselor to 250 students.

¹ <http://www.doe.mass.edu/infoservices/reports/mobility/>

Sharp rises or drops in data from year to year may suggest shifts in systemic district or school practices and/or myriad other contextual factors (e.g., economic climate impact, immigration trends, enrollment growth, staffing decisions, etc.). These ratios can be subject to sharp dips or rises based on relatively small numbers of staff change.

High School Indicators

Users may filter this section by the following groups: All Students, Low Income, Students with Disabilities, English Language Learner, African American\Black, Asian, Hispanic/Latino, and White.

Student attendance

[Source: SIMS](#)

There are two separate measures of student attendance in this section. These calculations include both excused and unexcused absences.

One is a measure of absolute attendance, which is the number of days of student attendance divided by the total number of student's day of membership in the school.

One is a measure of student attendance that is the percent of enrolled students that are absent 10 or more days per year).

One is a measure of student attendance that is the percent of students who are absent 10% or more of their total number of student's days of membership in the school. For example: A student who enrolled in a school for 50 days and missed 5 days, the student is counted as absent 10% or more that year.

The state calculation has been revised to include out-of-district placement students.

Research has shown that, when controlling for other factors associated with student performance, students who have higher attendance rates tend to perform better in school. This element may be an indication of the climate in a school or district and could be related to the performance in that school or district.

Percentage of students suspended out-of-school at least once

[Source: School Safety and Discipline Report \(SSDR\)](#)

The measure displayed in this line graph is the percentage of enrolled students who received one or more out-of-school suspensions. Starting in 2013, DART's calculation displayed students reported with out-of-school suspensions in School Safety and Discipline Report (SSDR) and not in SIMS.

Discipline measures are indications of school climate and environment. However, one major limitation of this indicator lies in the fact that it is focused on the number of students and not the number of incidents or how severe those incidents were. All school suspensions are counted equally, regardless of how severe the infraction. In other words a 9-day suspension and a 1-day suspension are counted equally, because the focus is on the number of students suspended, not the duration of the suspension. Furthermore, because the measure looks at the number of students suspended and not the number of times a student was suspended, students who were suspended multiple times count equally to students who were suspended only once. This indicator is best used in conjunction with the following two discipline indicators, which do include the number of incidents (rather than the number of students).

9th to 10th grade promotion rate (First-time 9th graders only)

[Source: SIMS](#)

The line graph shows the proportion of all first-time 9th grade students who progressed to the 10th grade from year to year. As an example, if 90% were reported for a school in 2008, this indicates that 90% of all first-time grade 9 students in the 2007–2008 school year were promoted to the 10th grade in the 2008–2009 school year.

Rates of 9th to 10th promotion may indicate a ninth graders' readiness to complete upper level, college preparatory coursework and graduate on time.

Annual dropout rate

[Source: SIMS](#)

A dropout rate is the frequency that a dropout occurs within a defined population. ESE calculates the annual dropout rate as the number of students who drop out of school over a one-year period, minus the number of returned dropouts, divided by the October 1st grade 9 through 12 enrollment, and multiplied by 100.

This element may be indicative of the culture within a school, and perhaps the school's ability to intervene with at-risk students.

Number of dropouts re-engaged in school (All students only)

[Source: SIMS](#)

The dropout re-engagement number is the count of high school dropouts that re-enroll in school for two consecutive SIMS collection periods or graduate or obtain a certificate of high school completion. This new metric is a calculation of the official high school dropouts from the previous four school years who returned to school in a given school year. The re-engaged student is credited to the school that re-enrolls/graduates them regardless of which school the student originally dropped out from.

Students may count as re-engaged multiple times over the course of several years. For example, if a student dropped out in 2008 and re-enrolled in school in 2009 for two SIMS collection periods, that student would count as a re-engaged student in 2009. If that student dropped out again in 2010 and then re-enrolled in school in 2011, s/he would also count as a re-engaged student in 2011.

This metric aims to highlight the positive results of efforts by the school, district, and partners to reach out, recover, re-engage, retain and graduate students who have prematurely left school. This indicator captures only those students who were officially reported as a dropout and may not fully indicate the strong efforts on the part of schools and districts to recover and re-engage other students who have left school. The Department will continue to study the calculation of this metric to ensure the quality, accuracy and usefulness of this measure.

Dropout re-engagement number is only available in the aggregate and not by subgroups.

4-year cohort graduation rate

Graduation cohort

A graduation cohort is defined as a group of students that enter 9th grade for the first time in the same school year. Each graduation cohort is identified by their expected graduation year (i.e., four years after they begin 9th grade for the first time). For example, the graduation cohort of 2014 includes students that were first time 9th graders in the 2010-11 school year. Students that transfer out are removed from the cohort and students that transfer into the school (from out of state or another Massachusetts school) are added to the cohort. These students are assigned to the same cohort based on the grade/year they enter a Massachusetts public school.

The 4-year cohort graduation rate displayed in the line graph reflects the percent of a cohort of students entering grade 9 in the same year who graduated within a four-year (or shorter) span of time, starting from the year in which they entered grade 9. To compare the annual dropout rate and cohort graduation rate calculations, see the ESE website².

This element may be indicative of the culture within a school or district, and perhaps the district's or school's ability to intervene with at-risk students.

These data also represent an academic outcome of the Department's Early Warning Indicator System (EWIS) <http://www.doe.mass.edu/edwin/analytics/ewis.html> for grades 10 through 12.

5-year cohort graduation rate

The five-year cohort graduation displayed in the line graph reflects the percent of a cohort of students entering grade 9 in the same year who graduated within a five-year span of time, starting from the year in which they entered grade 9. This indicator adds an additional dimension to the four-year cohort graduation rate by combining the number of a cohort of students graduating on time (in four years or less) with the number of the same cohort of students who graduated one year later (i.e., within 5 years of beginning grade 9).

This element may be indicative of the culture within a school or district, and perhaps the district's or school's ability to intervene with at-risk students. This indicator reflects that some students, particularly those with disabilities and/or students who are limited English proficient may need sufficient time to complete their high school requirements.

High School Program of Study

Users may filter this section by the following groups: All Students, Low Income or Economically Disadvantaged, Students with Disabilities, English Language Learner, African American\Black, Asian, Hispanic\Latino, and White.

² <http://www.doe.mass.edu/infoservices/reports/gradrates/dropoutvsgrad.html>

Percentage of high school graduates who completed MassCore

[Source: End of Year SIMS](#)

The line graph and chart display the percentage of high school graduates (with a Competency Determination) who successfully completed the Massachusetts Recommended Program of Study (MassCore). The recommended program of study includes: four years of English, four years of Math, three years of a lab-based Science, three years of history, two years of the same foreign language, one year of an arts program and five additional "core" courses. MassCore also includes additional learning opportunities including AP classes, dual enrollment, a senior project, online courses for high school or college credit, and service or work-based learning.

This element is useful in determining whether high school graduates have completed a rigorous course-load so that they are prepared to enroll in credit-bearing coursework in college or the academic demand of the workforce. These data are as reported in SIMS by school districts.

Percentage of 9th graders completing and passing all courses

[Source: End of Year SCS](#)

This measure indicates percentage of 9th grade students taking and passing all of their coursework in the ninth grade. Students were considered passing a course if they received a letter mark of D- or higher; a categorical mark of passing, minimally acceptable, acceptable, good or outstanding; a numeric mark of 59.5 or higher; or received full credit in a credit bearing course. Only courses that a student completed and where a determination of passing/failing was possible were included (ungraded/non-credit bearing courses were not included in the analysis).

Passing all ninth grade coursework is an important indicator of student being on-track to graduate on time and complete a rigorous course of study such as MassCore during their high school career. These data also represent an academic outcome of the Department's Early Warning Indicator System (EWIS) <http://www.doe.mass.edu/edwin/analytics/ewis.html> for grades 7 through 9.

A small number of schools do not have results in this section due to some short-term data quality issues. Those results have been suppressed.

Percentage of 12th graders passing a full year of mathematics coursework

[Source: End of Year SCS](#)

This measure indicates the percentage of 12th grade students taking and passing a full year (or equivalent) of mathematics coursework in their senior year. The length of the mathematics courses taken and passed were aggregated for each student to determine if they took and passed a full year equivalent (e.g. a semester and two quarters of math equals a full year). Students were considered passing a course if they received a letter mark of D- or higher; a categorical mark of passing, minimally acceptable, acceptable, good or outstanding; a numeric mark of 59.5 or higher; or received full credit in a credit bearing course.

Four years of mathematics is a requirement for admissions to Massachusetts four year public institutions beginning with the class of 2016 and a solid foundation of mathematics content and skills is necessary for college and career readiness.

Percentage of 12th graders passing a full year of science, technology and engineering coursework

[Source: End of Year SCS](#)

This measure indicates the percentage of 12th grade students taking and passing a full year (or equivalent) of science, technology and engineering (STE) coursework in their senior year. The length of the science courses taken and passed were aggregated for each student to determine if they took and passed a full year equivalent (e.g. a semester and two quarters of science equals a full year). Students were considered passing a course if they received a letter mark of D- or higher; a categorical mark of passing, minimally acceptable, acceptable, good or outstanding; a numeric mark of 59.5 or higher; or received full credit in a credit bearing course.

Science, technology and engineering coursework at the high school level can provide a solid for college and career readiness. STE careers continue to be a growing field in the Massachusetts economy.

A small number of schools do not have results in this section due to some short-term data quality issues. Those results have been suppressed.

High School Performance

Users may filter this section by the following groups: All Students, Low Income, Students with Disabilities, English Language Learner, African American/Black, Asian, Hispanic/Latino, and White.

Percentage of grade 10 students scoring proficient or higher in ELA, mathematics, and science and technology/engineering

[Source: Massachusetts Comprehensive Assessment System \(MCAS\)](#)

The four MCAS Achievement Levels for those taking the standard MCAS are Warning/Failing, Needs Improvement, Proficient, and Above Proficient/Advanced.

Grade 10 Science and Technology/ Engineering (STE) results are reported based on students' best performance on any STE test taken in grade 9 or grade 10; only students continuously enrolled in Massachusetts public schools from fall of grade 9 through spring of grade 10 are included.

The line graph displays the trends in the percentage of students whose 10th grade MCAS scores reached proficient or higher. The indicator includes all students who took the MCAS or MCAS-Alt Reading test and received a corresponding proficiency level. MCAS tests are tied to the Massachusetts curriculum frameworks, and thus they provide a good indicator of grade-level attainment in literacy and numeracy. They may be good indicators of the effectiveness of the literacy or numeracy programming in a school or district.

Median student growth percentiles (SGP) in ELA and mathematics

[Source: MCAS](#)

A student growth percentile (SGP) is a measure of student progress that compares changes in a student's MCAS scores to changes in MCAS scores of other students with similar achievement histories. The model establishes cohorts of students with similar performance profiles by identifying all students with the same (or very similar) MCAS scores in prior years. To report student growth at the subgroup, grade, school, or district level, individual student growth percentiles are aggregated, and the median student growth percentile is reported for that group. Student growth percentiles range from 1 to 99, where higher

numbers represent relatively higher growth and lower numbers represent relatively lower growth. Because student growth percentiles are normative (they describe how each student changed relative to what was normal), the medians for all districts, schools, and subgroups are centered at 50. Therefore, statewide, as many districts, schools, and subgroups will have median student growth percentiles above 50 as below, and this will be true even if achievement levels rise³.

The line graph displays the median SGP in ELA and mathematics for each year of available data starting from the first release in 2008. Also, the table lists the number of students included in this calculation; at least 20 students must be included for a median SGP to be reported.

Student growth percentiles describe how a school or district is changing, regardless of how well that school or district has been achieving. Median SGPs of less than 40 are unusually low, and those 60 and above are unusually high; these should be examined further. When examining year-to-year changes in median SGP, it is important to consider that differences in medians of less than 10 points are not likely to be educationally meaningful. Therefore, a difference of 10 or more median SGPs between years warrants further investigation. Also, SGP information for high schools is only available beginning in 2009 and should be interpreted differently given that it represents student growth from grade 8 to grade 10 (there is no grade 9 MCAS test in English language arts or mathematics). Finally, SGPs are not available for grade 3, as this is the first year of MCAS test administration. For more information on the growth model, download the Interpretive Guide⁴ on the ESE website.

Advanced coursework for 11th and 12th grade students

Source: [College Board](#) and [End of Year SCS](#)

This indicator has three parts: the percentage of students enrolled in advanced coursework, Advanced Placement (AP)⁵ and International Baccalaureate (IB)⁶ courses, the percentage of students who took AP courses and participated in one or more AP examinations, and the percentage of students who scored a 3 or better on AP examinations.

The first indicator measures percentage of students in grades 11 and 12 who enrolled in AP or IB courses in that particular school. AP coursework and tests are offered in over 30 different subject areas with a variety of opportunities in different schools. This element may indicate a district's or school's ability or commitment to provide AP or IB programming for their high school student population. Note that most AP courses are offered in 11th and 12th grade as opposed to 9th and 10th grade, therefore, if this indicator were to include grades 9 and 10, then percentages would be likely to drop. The drop would be artificial because the offerings are relatively scarce in those grades.

Advanced Placement coursework and tests are offered in over 30 different subject areas with a variety of opportunities in different schools. AP coursework is offered in the vast majority of Massachusetts public high schools. International Baccalaureate, specifically late high school program known as the ***The Diploma Programme*** is currently offered in only a few schools across the Commonwealth. ***The Diploma Programme*** is designed for students aged 16 to 19 and is a two-year curriculum leading to final examinations and a qualification that is welcomed by leading universities around the world.

The second indicator shows the percentage of 11th and 12th grade students who enrolled in AP coursework taking at least one AP exam for the subject area they took an AP course. This data element

³ <http://www.doe.mass.edu/mcas/growth/StateReport.doc>

⁴ Interpretive Guide at <http://www.doe.mass.edu/mcas/growth/InterpretiveGuide.pdf>

⁵ <http://apcentral.collegeboard.com/>

⁶ <http://www.ibo.org/>

measures the level of AP test participation and provides an indication of the frequency with which students in a school are taking the AP exam after participating in AP coursework in that particular subject.

The third indicator shows the percentage of 11th and 12th grade students who took an AP course and test scoring a 3 or better on an AP examination. Students may earn college credit for their AP examinations depending on their scores. The range for AP examination scores is 1 to 5; requirements for college credit vary by higher education institution but is typically given for scores 3 or higher. This data element provides an indication of the frequency with which students in a school or district are taking the AP exam and what proportion of those students are scoring at higher levels that may earn them college credit.

Advanced Placement (AP) performance

[Source: College Board](#)

This indicator displays the percentage of all students, not only 11th and 12th grade students, taking Advanced Placement (AP) tests who score a 3 or better. AP examinations are offered in over 30 different subject areas that can be categorized into English Language Arts, Math and Computer Science, Science/Technology, History and Social Science, Foreign Languages and the Arts. The tables include the total number of students who took the AP examination in the school by category and the exact number of students who scored 3 or higher. These data elements provides an indication of the frequency with which students in a school are taking the AP exam and what proportion of those students are scoring at higher levels that may earn them college credit.

SAT average score (reading, mathematics, writing)

[Source: College Board](#)

These data indicate the average scores and participation of high school students on the SAT. Averages are given in all three subject areas tested. The SAT includes three sections: the **reading** section includes reading passages and sentence completions, the **writing** section includes a short essay and multiple-choice questions on identifying errors and improving grammar and usage, and the **mathematics** section includes questions on arithmetic operations, algebra, geometry, statistics and probability.

The SAT is used by many colleges and universities as one of the factors for admission.

SAT distribution of scores (reading, mathematics, writing)

[Source: College Board](#)

These data represent the range and distribution of scores of high school students on the SAT. Distributions are given in all three subject areas tested. The SAT includes three sections: the **reading** section includes reading passages and sentence completions, the **writing** section includes a short essay and multiple-choice questions on identifying errors and improving grammar and usage, and the **mathematics** section includes questions on arithmetic operations, algebra, geometry, statistics and probability. The SAT score bands presented in the DART are 200-390, 400-440, 450-490, 500-540, and 600-800.

The SAT is used by many colleges and universities as one of the factors for admission. This measure indicates the percentage of students scoring in a particular score band on the SAT at the high school level.

Post secondary Education Outcomes

Users may filter this section by the following groups: All Students, Low Income, Students with Disabilities, English Language Learner, African American\Black, Asian, Hispanic\Latino, and White.

Graduation cohort

A graduation cohort is defined as a group of students that enter 9th grade for the first time in the same school year. Each graduation cohort is identified by their expected graduation year (i.e., four years after they begin 9th grade for the first time). For example, the graduation cohort of 2014 includes students that were first time 9th graders in the 2010-11 school year. Students that transfer out are removed from the cohort and students that transfer into the school (from out of state or another Massachusetts school) are added to the cohort. These students are assigned to the same cohort based on the grade/year they enter a Massachusetts public school.

Students progression from high school through second year of postsecondary education

Source: [End of Year SIMS](#) and [Edwin Analytics \(National Clearinghouse Data\)](#)

This data element illustrates a cohort of high school students and their progression through high school graduation, college enrollment and persistence in higher education to a second year. Instead of showing trends over time with different groups of students, the line chart follows one group of students and tracks their progression through educational milestones.

The line chart starts at 100% and represents a cohort of first time 9th grade students in 2008-09 and/or were part of the 2013 graduation cohort (see graduation cohort)

The second data point is the percent of those students who graduated high school within 5 years. The third data point is the percent of those students who graduated high school within 5 years and enrolled in a postsecondary institution (2-year or 4-year) the fall following graduation. The final data point is the percent of those students who graduated high school within 5 years, and seamlessly enrolled in a postsecondary institution and persisted to the second year of their postsecondary studies. The table includes the percent and number for each data point.

Students progression from high school through postsecondary degree completion

This data element is similar to the previous indicator, "students' progression from high school through the second year of postsecondary education". However, it follows an older group of students who first entered high school in 2004-05 and/or were part of the graduation cohort of 2008(see graduation cohort) and includes an additional milestone.

This indicator tracks students who graduated high school within 5 years, seamlessly enrolled in a postsecondary institution the following fall, persisted to the second year of postsecondary study, and finally, obtained any postsecondary degree within 6 years of high school graduation.

Postsecondary enrollment and degree completion

This data element tracks the cohort of students who first entered high school in 2004-05 and/or were part of the 2008 graduation cohort (see graduation cohort), their enrollment in a postsecondary institution (2-year or 4-year) and whether they obtained any postsecondary degree by the end of 2014-15. A student is

considered to be attending any postsecondary institution if enrolled in at least one postsecondary course. To be considered as obtaining a degree, a student must obtain a certification, associate, bachelor, or any other postsecondary degree by end of 2014-15.

Percentage of students enrolled in postsecondary education within 16 months of high school graduation

[Source: End of Year SIMS](#) and [Edwin Analytics \(National Clearinghouse Data\)](#)

The reported students include all public high school graduates who first enrolled in postsecondary public or private education within 16 months of graduating high school, regardless of when they graduated.

Percentage of high school graduates enrolled in 2 or 4-year postsecondary education

[Source: End of Year SIMS](#) and [Edwin Analytics \(National Clearinghouse Data\)](#)

This indicator shows the percentage of high school graduates enrolling at public and private two year and four year institutions of higher education within 16 months of graduating high school.

The chart displays the percentage of graduates enrolled in postsecondary education and the proportion of students enrolled in a two or four year institutions of higher education.

Percentage of college students persistently enrolled in postsecondary education for the first two years

[Source: End of Year SIMS](#) and [Edwin Analytics \(National Clearinghouse Data\)](#)

This indicator measures percentage of students who enrolled in and continued (persisted) in higher education for the first two years after high school graduation.

Persistence at any institution refers to students who enrolled (full-time or part-time) one year and returned the next year, whether at the same institution or another public, private, or out-of-state institution. The reported students include all public high school graduates who first enrolled in postsecondary public or private education within 16 months of graduating high school.

Percentage of students at Massachusetts public colleges enrolled in one or more developmental (remedial) courses [Source: Edwin Analytics \(Massachusetts Higher Education Information Resource System \(HEIRS\)\)](#)

This indicator illustrates the number and percentage of students in a graduating class attending Massachusetts public colleges and universities who enrolled in developmental subjects in reading, writing or mathematics in their first term. Developmental classes are non-credited, “remedial” college coursework and courses are designed to prepare students for college level work. Developmental course credits do not count toward a degree. Students generally enroll in these courses based on their performance on placement exams. The percentage of students taking developmental coursework can be an indicator of the preparation at the high school level for college level coursework including the rigor, amount and sequence of high school coursework completed.

The reported students include all public high school graduates who first enrolled in Massachusetts public colleges and universities within 16 months of graduating high school, regardless of when they graduated. This data is only available for students who enroll in Massachusetts public colleges. If the proportion of graduates who enrolled in Massachusetts public colleges is low, this may not accurately reflect the level of preparation for the students who went on to college as a whole.

Career Development Education

Career Development Education (CDE) offers students a framework for gaining the knowledge, skills, and experiences necessary to navigate the myriad options available for postsecondary success. In an exemplary CDE model, students will participate in a well-designed sequence of CDE activities that become progressively deeper and more intense as the students gain skills and maturity. CDE encompasses three stages that help students move from the definitive to the experiential: career awareness, exploration, and immersion. Current data collected in this area is limited, the Department is working to help define and collect these data in a more holistic and complete fashion.

In this report, the data are reported by district of the selected school and by Workforce Investment Board (WIB) region.

Local Workforce Investment Board (WIB) lead the workforce development system through regional policy and oversight responsibilities for multiple funding streams and programs associated with all aspects of workforce development. These business-led Boards are charged with creating a more cohesive demand driven workforce development system, reflective of their region's specific needs and resources, indicated by local market factors. WIB conduct labor market studies to identify trends and develop innovative partnerships and strategies to address those trends, so that business and labor stay ahead of the curve to remain competitive. For information concerning Massachusetts workforce investment boards please visit <http://www.massworkforce.com/>.

Connecting activities and Work-Based Learning Plans

Source: Massachusetts Connecting Activities Database

Connecting Activities is a Department of Elementary and Secondary Education initiative designed to drive and sustain the statewide school-to-career system. Working in partnership with the Executive Office of Labor and Workforce Development, it establishes public-private partnerships through the 16 local workforce investment boards to connect schools and businesses to provide structured work-based learning experiences for students that support both academic and employability skill attainment.

These data report the number of career development activities as reported through the Connecting Activities database and provide a baseline for the number of career development education activities across the Commonwealth. This number does not encompass all students participating in statewide career awareness, exploration and immersion activities, the only data currently available statewide is through this mechanism.

Among these data reported are the number of work-based learning plans (WBLP) completed. The WBLP focuses on a set of basic foundation skills that are common to all jobs and on additional workplace- and career-specific skills that are germane to the participant's internship placement.

These data are reported by district and by workforce investment board region.

Career Vocational Technical Education (CVTE) participation by occupational cluster

These data include information about student participation in chapter 74 and non-chapter 74 career vocational education programming. A Chapter 74–approved vocational technical education program is a career/vocational technical education program that meets the approval criteria in Massachusetts General Law Chapter 74 and the Vocational Technical Education Regulations and has been approved by the Department of Elementary and Secondary Education.

A non-Chapter 74 career and technical education program is a career/vocational technical education program that is not a Chapter 74–approved vocational technical education program, but that does meet the new Carl D. Perkins Career and Technical Education Improvement Act of 2006 (Perkins IV) definition of career and technical education.

These data are broken down by specific occupational cluster to show CVTE enrollment in different vocational areas and by workforce investment board to indicate vocational preparation by particular geographic region.

Links to career and workforce development resources

We have provided a number of links to additional data and Internet resources that are not controlled by the Department but that can provide significant planning information of schools, districts and community partners in the design of career development education activities.

How to Use Trend Analysis

OVERVIEW

Trend Analysis was intended to allow user additional flexibility in analyzing and comparing college and career readiness data across multiple schools and districts. With this new section within the District Analysis and Review Tool for Success After High School (DART for SAHS), users are able to compare up to ten schools / districts, either from a pre-defined or user-defined districts and/or schools.


Below are instructions that provide simple steps on how to use the Trend Analysis worksheet.

TREND ANALYSIS WORKSHEET LAYOUT

The Trend Analysis worksheet is divided into two sections. The upper section is for setting criteria to display the data. The lower section displays the data in a table and line chart.

The default view shows the enrollment data for the target school selected (*screenshot 1.1*) on the main page and the ten comparable schools (*screenshot 1.2*).

Screenshot 1: Upper section



Trend Analysis

The purpose of this worksheet is to provide another level of flexibility in analyzing college and career readiness data across both high schools and districts.

School from home page: **District 1 - School 1** **1.1**

Schools / Districts
Select other schools or districts by using drop down list in the green-shaded

☒ Comparable schools **1.2** ☐ Select other schools or districts

User option (Select one or more schools or districts):

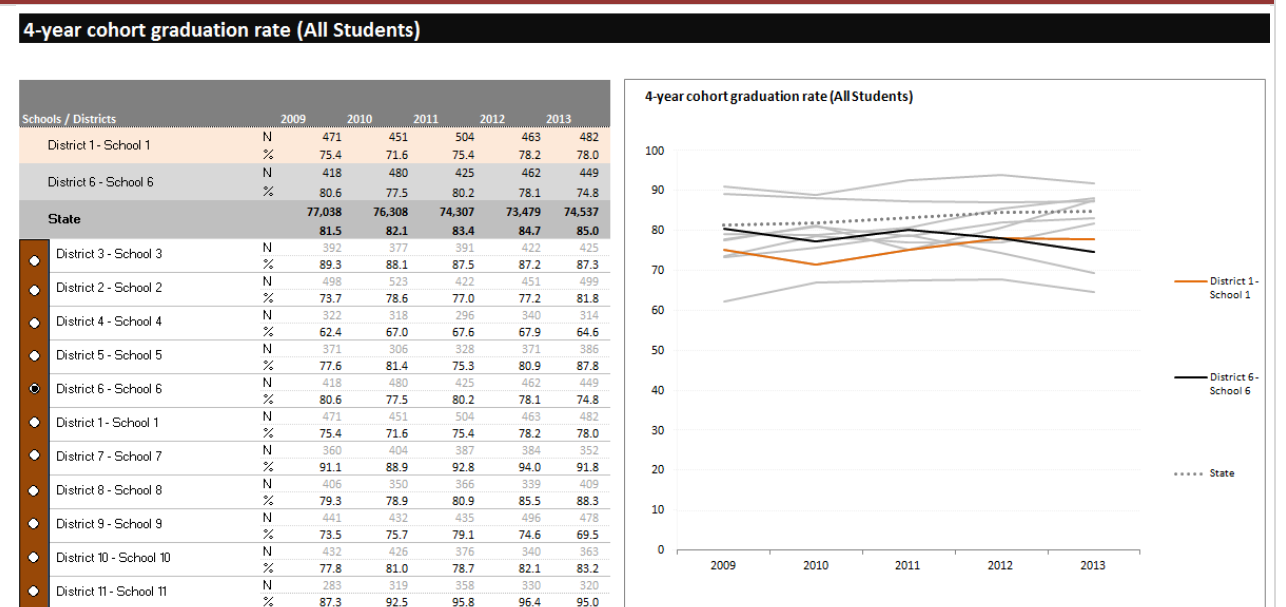
SELECT A CATEGORY AND AN INDICATOR

CATEGORY **Show All Indicators**

INDICATOR **4-year cohort graduation rate**

SUBGROUP **All Students**

Screenshot 2: Lower section



STEP 1: MAKING SELECTIONS

You may compare or analyze the data using the default selection or choose other criteria.

The choices include:

- Pre-defined or user-defined schools
- Indicator
- Subgroup

PRE-DEFINED SCHOOLS / USER-DEFINED SCHOOLS

To compare trends using the pre-defined ten comparable schools, make sure that ‘Comparable schools’ option is selected under ‘Schools / Districts’.

To select schools of your choice, follow the steps below.

Selecting schools:

- 1) Click on ‘Select other schools or districts’ under ‘Schools / Districts’
- 2) Place your cursor in the green-shaded texts
- 3) Click on the down arrow for a list of high schools in MA
- 4) Select a high school or district in each cell (up to ten schools / districts)

Table 1: School Selection

School from home page: **Malden - Malden High**

Schools / Districts
Select other schools or districts using drop down list in the green-shaded cells.

☐ Comparable schools ☒ Select other schools or districts

User-defined schools / districts:

Fairhaven - Fairhaven High	
Fall River - Durfee HS	
Fall River - Resiliency Prep	
Falmouth - Falmouth High	
Fitchburg - Fitchburg High	
Fitchburg - Goodrich Academy	
Four Rivers Charter	

Note that you can switch back to the default 10 comparable schools anytime.

To the upper right of the worksheet, there are three additional selections: Category, Indicators, and Subgroup.

CATEGORY

The ‘Category’ text box is optional for filtering the indicators. For example: By selecting *Program of Study* in the ‘Category’, the values in the ‘Indicator’ drop down box will be limited to indicators related to *Program of Study*. Leave as *Show All Indicators* to display a full list of available indicators.

INDICATOR

Select an indicator of your choice from the drop down list to continue.

The list is indicators available in DART for Success After High School with a few exceptions.

CATEGORY AND INDICATOR

SELECT A CATEGORY TO FILTER THE INDICATOR

CATEGORY

Show All Indicators

INDICATOR

Show All Indicators
Context
Indicators
Program of Study
High School Performance (MCAS)
High School Performance (AP)
High School Performance (SAT)
Postsecondary Education Outcomes

SUBGROUP

SELECT A CATEGORY TO FILTER THE INDICATOR

CATEGORY

Program of Study

INDICATOR

Enrollment (percentage)

SUBGROUP

Percentage of high school graduates who completed MassCore
Percentage of 9th graders completing and passing all courses
Percent of 12th graders passing a full year of mathematics coursework
Percent of 12th graders passing a full year of science and technology/engineering coursework

SUBGROUP

Select a subgroup of your choice from the drop down list to continue.

SUBGROUPS

SELECT A CATEGORY AND AN INDICATOR

CATEGORY

Show All Indicators

INDICATOR

Enrollment (percentage)

SUBGROUP

All Students
All Students
Low Income
Students with Disabilities
English Language Learner
African American/Black
Asian
Hispanic/Latino
Multi-Race - Non Hispanic

STEP 2: UNDERSTANDING TABLE AND CHART

In the example below, we will use the following scenario:

- School1 as the target school
- Ten schools most comparable to School1
- 4-year cohort graduation rate

The second half of the worksheet contains a table and a chart with data based on the selection above. In this case, the data is showing a list of ten schools most comparable to School1.

Screenshot:

1.1 Header

The header shows the indicator and subgroup selected.

1.2 Table

The target school will always appear in the orange-shaded area.

The light grey-shaded cell will update based on the selection. (see 2.2 below).

State is represented in the darker shaded row.

2.1 Chart

Although there are ten school lines and the state on the chart, eight schools will always be in light gray with no legend or school name associated with the line.

However, you have the option to highlight the school of interest in one of two ways:

2.2 Select a different school using the option button in the table. This option will highlight the selected school with a black trend line.

2.3 Click on one of the line to highlight all data points. This will also highlight the data points in the table.

Screenshot 1.1 and 1.2

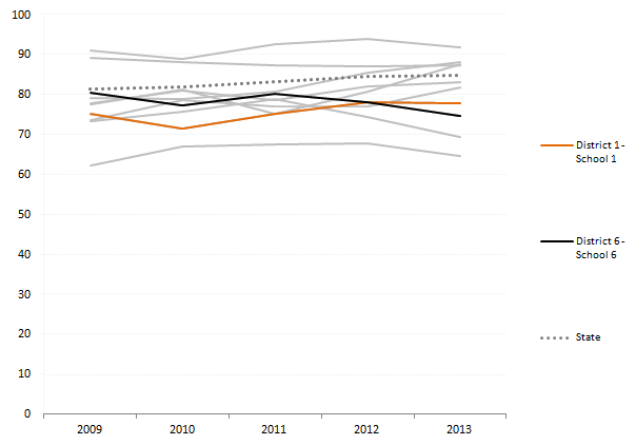
4-year cohort graduation rate (All Students)

1.1

1.2

Schools / Districts		2009	2010	2011	2012	2013
District 1 - School 1	N	471	451	504	463	482
	%	75.4	71.6	75.4	78.2	78.0
District 6 - School 6	N	418	480	425	462	449
	%	80.6	77.5	80.2	78.1	74.8
State		77,038	76,308	74,307	73,479	74,537
		81.5	82.1	83.4	84.7	85.0
District 3 - School 3	N	392	377	391	422	425
	%	89.3	88.1	87.5	87.2	87.3
District 2 - School 2	N	498	523	422	451	499
	%	73.7	78.6	77.0	77.2	81.8
District 4 - School 4	N	322	318	296	340	314
	%	62.4	67.0	67.6	67.9	64.6
District 5 - School 5	N	371	306	328	371	386
	%	77.6	81.4	75.3	80.9	87.8
District 6 - School 6	N	418	480	425	462	449
	%	80.6	77.5	80.2	78.1	74.8
District 1 - School 1	N	471	451	504	463	482
	%	75.4	71.6	75.4	78.2	78.0
District 7 - School 7	N	360	404	387	384	352
	%	91.1	88.9	92.8	94.0	91.8
District 8 - School 8	N	406	350	366	339	409
	%	79.3	78.9	80.9	85.5	88.3
District 9 - School 9	N	441	432	435	496	478
	%	73.5	75.7	79.1	74.6	69.5
District 10 - School 10	N	432	426	376	340	363
	%	77.8	81.0	78.7	82.1	83.2
District 11 - School 11	N	283	319	358	330	320
	%	87.3	92.5	95.8	96.4	95.0

4-year cohort graduation rate (All Students)



Screenshot 2.1, 2.2, 2.3

4-year cohort graduation rate (All Students)

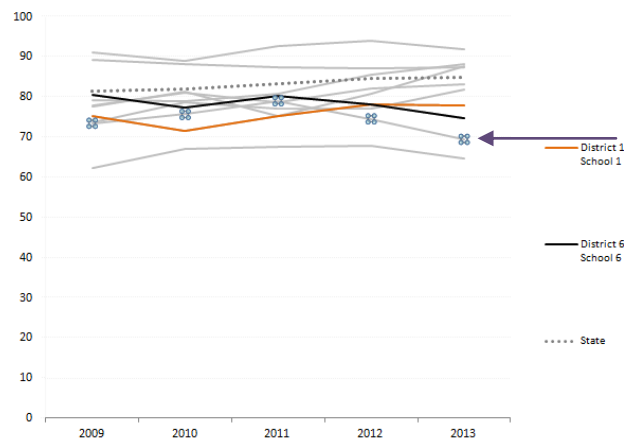
2.2

Schools / Districts		2009	2010	2011	2012	2013
District 1 - School 1	N	471	451	504	463	482
	%	75.4	71.6	75.4	78.2	78.0
District 6 - School 6	N	418	480	425	462	449
	%	80.6	77.5	80.2	78.1	74.8
State		77,038	76,308	74,307	73,479	74,537
		81.5	82.1	83.4	84.7	85.0
District 3 - School 3	N	392	377	391	422	425
	%	89.3	88.1	87.5	87.2	87.3
District 2 - School 2	N	498	523	422	451	499
	%	73.7	78.6	77.0	77.2	81.8
District 4 - School 4	N	322	318	296	340	314
	%	62.4	67.0	67.6	67.9	64.6
District 5 - School 5	N	371	306	328	371	386
	%	77.6	81.4	75.3	80.9	87.8
District 6 - School 6	N	418	480	425	462	449
	%	80.6	77.5	80.2	78.1	74.8
District 1 - School 1	N	471	451	504	463	482
	%	75.4	71.6	75.4	78.2	78.0
District 7 - School 7	N	360	404	387	384	352
	%	91.1	88.9	92.8	94.0	91.8
District 8 - School 8	N	406	350	366	339	409
	%	79.3	78.9	80.9	85.5	88.3
District 9 - School 9	N	441	432	435	496	478
	%	73.5	75.7	79.1	74.6	69.5
District 10 - School 10	N	432	426	376	340	363
	%	77.8	81.0	78.7	82.1	83.2
District 11 - School 11	N	283	319	358	330	320
	%	87.3	92.5	95.8	96.4	95.0

2.3

4-year cohort graduation rate (All Students)

2.1



STEP 3: INTERPRETING THE DATA

CONSIDERATIONS FOR DATA ANALYSIS

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 in the source data. Other factors that affect data include:

Small student population

When comparing multiple schools, it is important to understand that smaller schools may have a wider range of spikes and dips from year to year, whereas, larger schools may see smaller differences. Before making a conclusion of the data, consider the size of the student population.

Schools or districts with suppressed data versus 0%

Due to the limitations of Excel charts, suppressed data may resemble zero percent or zero. Refer to the table that contains results for each school to clarify the reason for the dip.

New data collection

When the Department requires a new data collection (e.g., course schedules, school safety disciplinary report), data is more inconsistent for the first year or two.

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. Multiple sources of data and information are always the best route for key decision making.