

# GEMS For Everyday Use

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OPI Data and Assessment Conference  
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# What first steps do researchers take in a study

- They come to research with a question, sometimes ill defined, that defines the scope of the investigations and what data is needed.
- It helps, as a second step, to understand the data available to you.
  - GEMS is a frequently used data source for district users and the general public.
  - School level and Student level data is provided to OPI by schools. GEMS provides that data back to schools in a way that helps you better understand the data available to you.
- To get secure access to student level data (district users), email Robin Clausen @ [robin.clausen@mt.gov](mailto:robin.clausen@mt.gov).
- If you already have secure access feel free to follow along on your laptop or tablet. <https://gems.opi.mt.gov>.



This is the main menu. Select Data to get to each domain's overview page. Select Find Schools for school profile and comparison tool.



- [DATA](#)
- [FIND SCHOOLS](#)
- [HOW TO USE GEMS](#)
- [CONTACT US](#)

search our site [magnifying glass icon]



# Early Warning System

The Montana EWS model uses readily available school, student, and other live data to identify students who are at risk of dropping out of school. Students are identified as early as 6th grade so that action may be taken by school officials.

[Early Warning System](#)



## GEMS

### Montana's Statewide Longitudinal Education Data System

Welcome! This data reporting system provides access to multiple years of data and interactive reports on student achievement,

## Resources

We provide schools, policy makers, parents and the public with unprecedented access to data and reports regarding Montana's public education system. Here are some resources to help guide you through GEMS. Please visit our [Training Center](#) for a complete set of our helpful resources.



Sign in with your organizational account

Password

Sign in

If you experience access problems contact the [security administrator](#).  
To change your password click [Here](#)





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- DATA DEFINITIONS & EXPLANATIONS
- USER MANUAL
- FAQ'S
- TRAINING DOCUMENTS



# Early Warning System

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- MAP OF MONTANA SCHOOLS
- SIDE-BY-SIDE COMPARISON
- SCHOOL DIRECTORY
- SCHOOL PROFILE
- SCHOOL DISTRICT PROFILE
- NON-PUBLIC SCHOOLS

# Free Electronic Transcripts

As part of the OPI's K20 Data Project, the Montana e-Transcript Initiative establishes data linkages between...

[Free Electronic Transcripts](#)

...secondary partners.



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GEMS > Side-by-Side Comparison



Side-by-Side Comparison

[Data Definitions & Explanations](#)

You can compare any schools or districts throughout the entire state of Montana. To begin, just select a school or district from the dropdown list and click 'Add'. To remove any school or district, just click 'Remove'. To clear your list (i.e., start over) or return to the map tool, click on the appropriate link below:

**Pine Creek 6-8**  
Livingston, MT  
[View Profile](#)  
[Remove](#)

**Sleeping Giant Middle Sch**  
Livingston, MT  
[View Profile](#)  
[Remove](#)

**Add a School/District** [Remove](#)  
items from list to switch between schools / districts  
 School  District  
  
[Add](#)

[Clear Your List](#)      [Return to the Map](#)

- [CRT Assessment Status](#)
- [School/District Characteristics](#)
- [Program & Course Offerings](#)
- [Financial](#)

**Information about School/District Programs and Courses**

	<i>Pine Creek 7-8</i>	<i>Sleeping Giant Middle Sch</i>
Does this school offer a 4-day class week?	No	No
Is this school a middle school?	No	Yes
Does this school offer a 7-8 grade program?	Yes	No
List of grades offered by the school?	7 - 8	6 - 8



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GENERAL SCHOOL & DISTRICT INFORMATION	STUDENT SERVICES	STUDENT CHARACTERISTICS
PROGRAM & COURSE OFFERINGS	SCHOOL FINANCE	STUDENT ENGAGEMENT
STUDENT ACHIEVEMENT	SCHOOL STAFFING	COLLEGE READINESS

# FAFSA Comple

The FAFSA Completion Report provides secure access to school counselors and other authorized school personnel to view the status of each high school senior's completion status on the Free Application for Federal Student Aid (FAFSA) in each school year.

[FAFSA Completion Report \(login required\)](#)



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This is the data menu.  
By selecting the icon  
you will be given a list  
of available datasets in  
the School Finance  
Domain.



## School Finance

Here you'll find demographic and financial information about public school districts in Montana. You'll also find county fiscal data and grant information.

School Budget Reports include data compiled from annual final budgets, including: mill levies by fund, anticipated revenues by fund, and adopted budgets for each school district.

Trustees Financial Summary Reports includes annual revenues and expenditures reported by school districts.

Per Pupil Information Reports includes per student revenues and expenditures as defined by the state of Montana.

County Finances Reports includes revenues and disbursements from the countywide funds for schools, including the county equalization funds, county transportation fund, and the county retirement funds.

Frequently-viewed reports include:

- School Budget Dashboard
- Reported Revenues by School District
- Reported Expenditures by School District
- Per Pupil Revenues
- Per Pupil Expenditures
- County Transportation and Retirement Mills Levied





- Overview
  - School Finance Overview
  - List of Quick Facts
- School Budget Reports
  - School Budget Dashboard
  - Year to Year Budget Comparison
  - General Fund Recap
  - Count of School Districts by Equity Status
  - List of School Districts by Equity Status
  - Fund Balances Limitation
  - Flexibility Fund Balance Limitation
- Trustees Financial Summary Reports
- Per Pupil Information Reports
- County Finances Reports
- State & Federal Grants

Information about public school districts in Montana. You'll also find county fiscal data and grant information.

Derived from annual final budgets, including: mill levies by fund, anticipated revenues by fund, and adopted budgets for each

Includes annual revenues and expenditures reported by school districts.

Includes student revenues and expenditures as defined by the state of Montana.

Includes revenues and disbursements from the countywide funds for schools, including the county equalization funds, county general funds.

District  
School District

Property Tax  
Mills Levied





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GEMS > School Finance > Year To Year Budget Comparison

Parameter Based Report Help



Year To Year Budget Comparison

Beginning Fiscal Year: FY2016 | Ending Fiscal Year: FY2017 | View Report

State/Legal Entity: State

1 of 1 | Find | Next | Save icon

This is the page counter. It helps give you an idea of the size of the dataset.

This is the save icon – it looks like a floppy disk. This allows you to save the dataset to pdf, csv, Excel.

After selecting the parameters you must press run for the data to display. This applies to each time you select a parameter.



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GEMS > *Student Achievement*



# Student Achievement

Here you'll find a variety of information that measures Montana student achievement. This includes statewide annual assessment data, National Assessment of Education Progress (NAEP) scores, ACT scores, high school equivalency information and English language proficiency data.

Frequently-viewed reports include:

- Student Achievement Dashboard
- Statewide Assessment
- National Assessment of Educational Progress (NAEP)
- ACT Test Scores





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Menu

- Overview
  - Student Achievement Overview**
  - Student Achievement Dashboard
  - List of Quick Facts
- Accountability
- Statewide Assessment
  - Smarter Balanced Assessment Proficiency Levels
  - MontCAS (CRT) Proficiency Comparisons by Subgroup
  - MontCAS (CRT) Proficiency Trends
- National Assessment
- ACT
  - ACT Test Scores
  - ACT College Readiness

# Student Achievement Overview

Student Achievement Overview is the primary tool that measures Montana student achievement. This includes statewide annual assessment scores, National Educational Progress (NAEP) scores, ACT scores, high school equivalency information and English Language Proficiency scores.

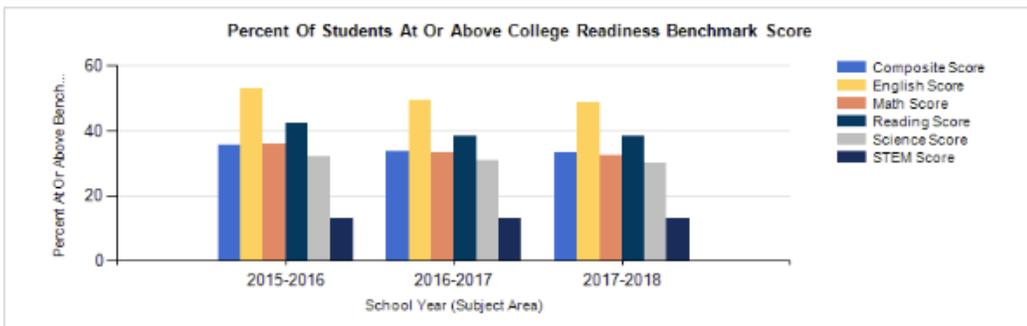
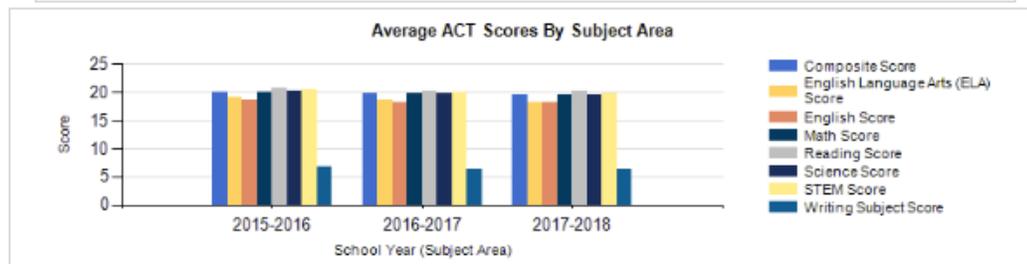
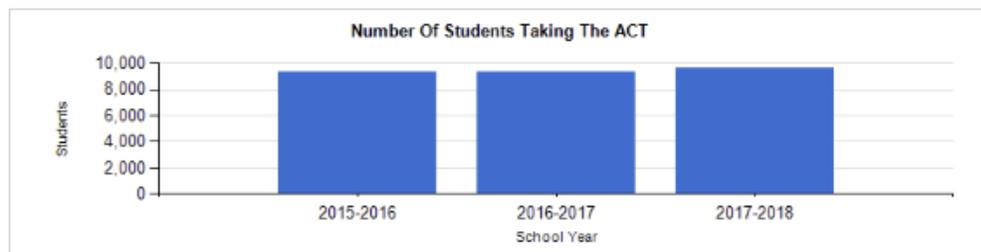




## ACT Dashboard

Year:  Test Group:   
 District/School:  [View Report](#)  
 1 of 1 Find | Next

[Data Definition & Explanations](#)





# ACT Test Scores Dashboard

## ACT Test Scores

### Help Links:

- Dashboard Features and Printing
- View a Dashboard Demo
- Data Definitions & Explanations

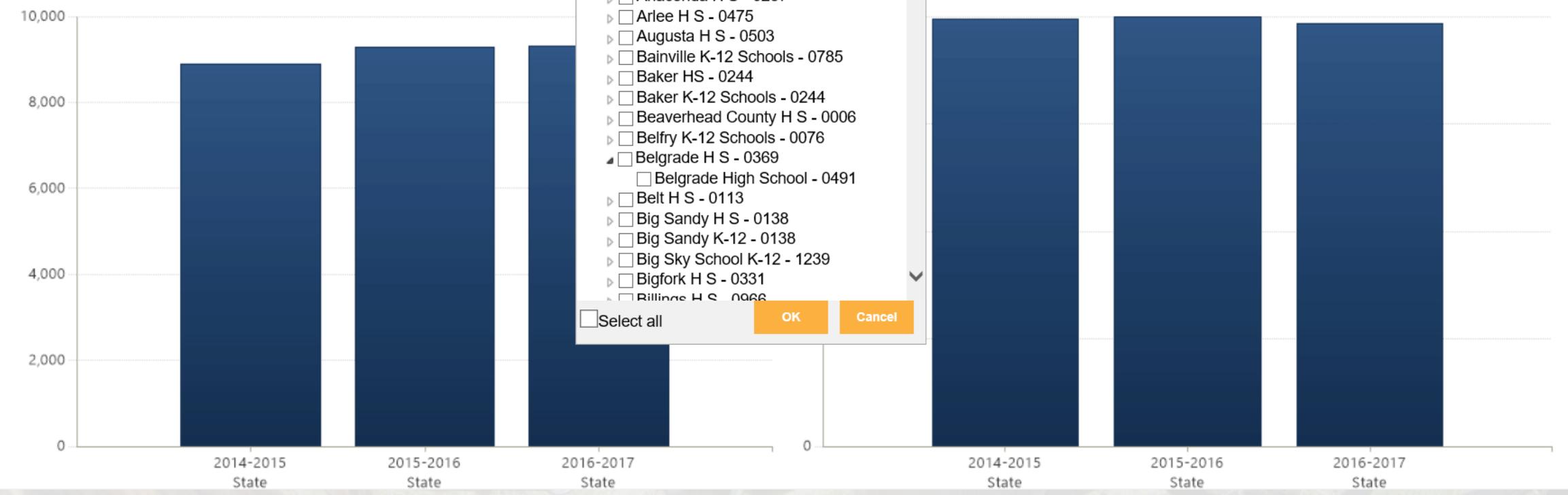
School Year : 2016-2017

Districts And Schools :

Criteria Selection for Menu Below is by LE (LEA) and School. The number for each are the LE Number and School Code.

Administration : Junior Test Administration

Number Of Students Taking The ACT



Search this Filter

- State
  - Absarokee H S - 0862
  - Alberton K-12 Schools - 0577
  - Anaconda H S - 0237
  - Arlee H S - 0475
  - Augusta H S - 0503
  - Bainville K-12 Schools - 0785
  - Baker HS - 0244
  - Baker K-12 Schools - 0244
  - Beaverhead County H S - 0006
  - Belfry K-12 Schools - 0076
  - Belgrade H S - 0369
    - Belgrade High School - 0491
  - Belt H S - 0113
  - Big Sandy H S - 0138
  - Big Sandy K-12 - 0138
  - Big Sky School K-12 - 1239
  - Bigfork H S - 0331
  - Billings H S - 0066

Select all



# ACT College Readiness Dashboard

## ACT College Readiness

### Help Links:

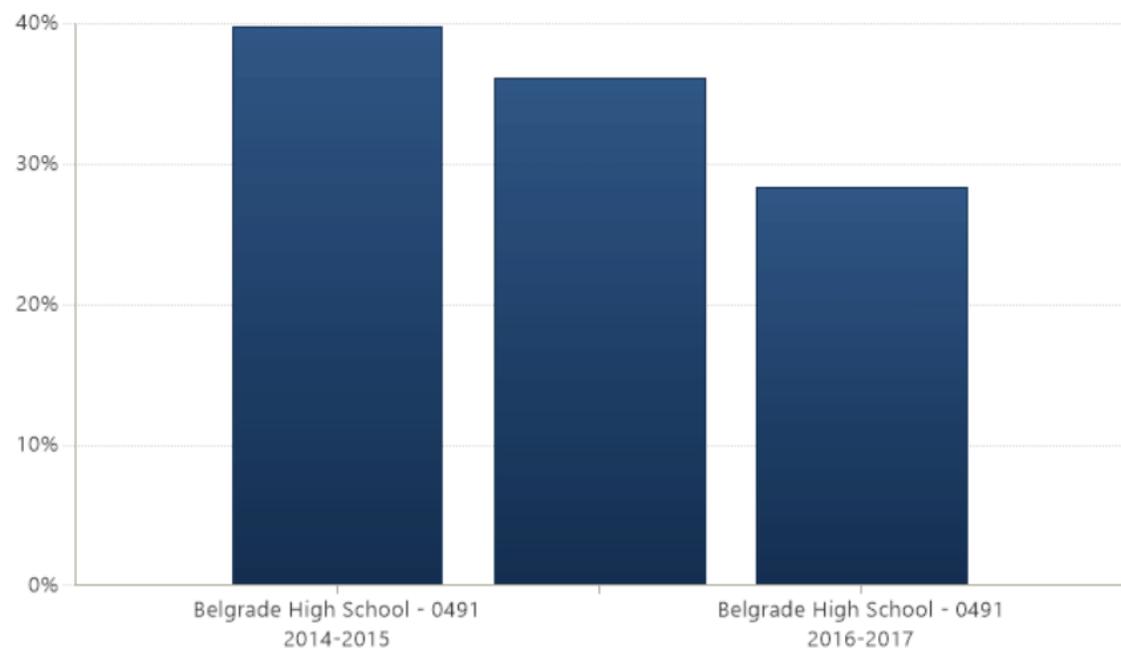
- Dashboard Features and Printing
- View a Dashboard Demo
- Data Definitions & Explanations

School Year :

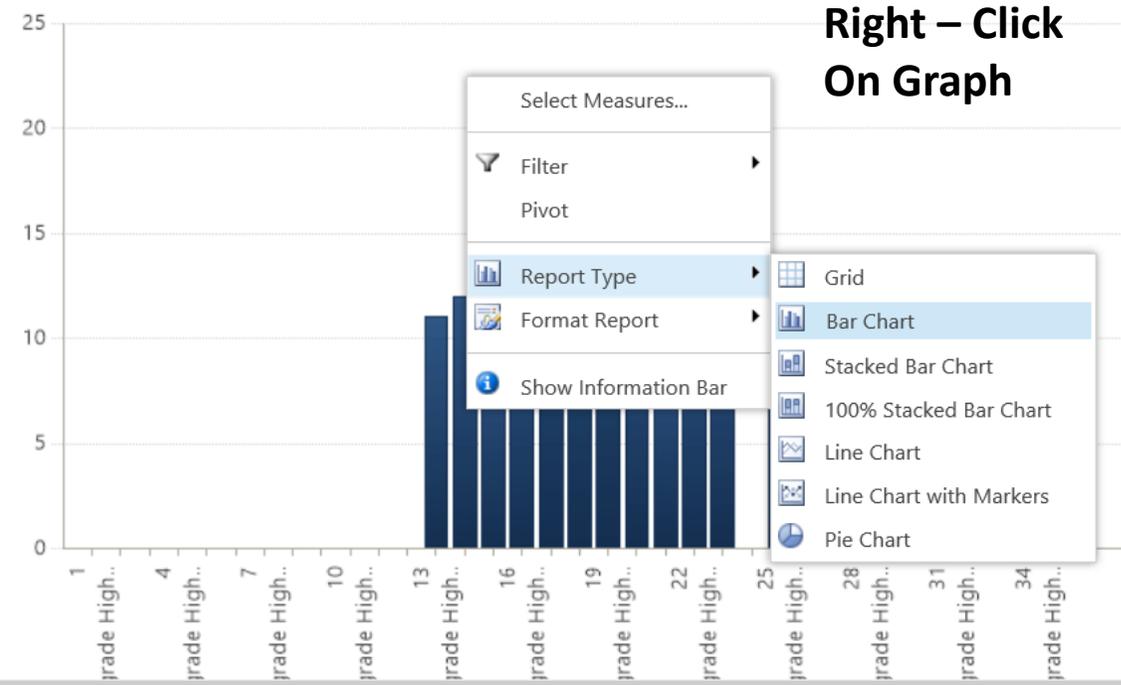
Districts And Schools :

Test Administration :

**Percent Of Students At Or Above College Readiness Benchmark Of 22 Using Composite Score**



**Distribution Of Composite ACT Scores**





# ACT College Readiness Dashboard

## ACT College Readiness

School Year : 2016-2017

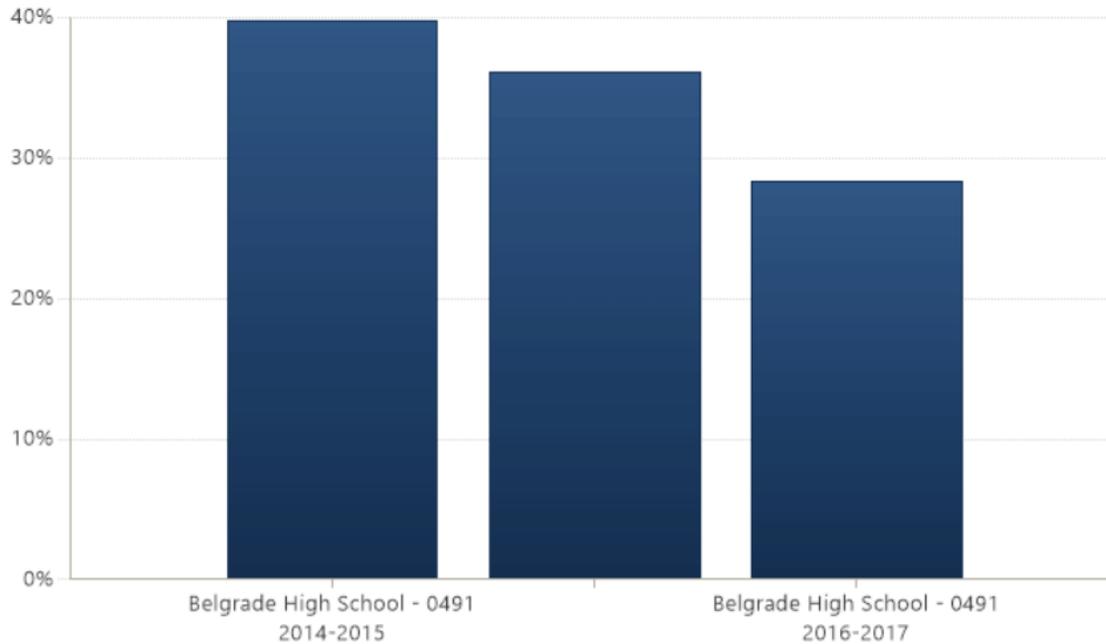
Districts And Schools : Belgrade High School - 0491

Test Administration : Junior Test Administration

### Help Links:

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### Percent Of Students At Or Above College Readiness Benchmark Of 22 Using Composite Score

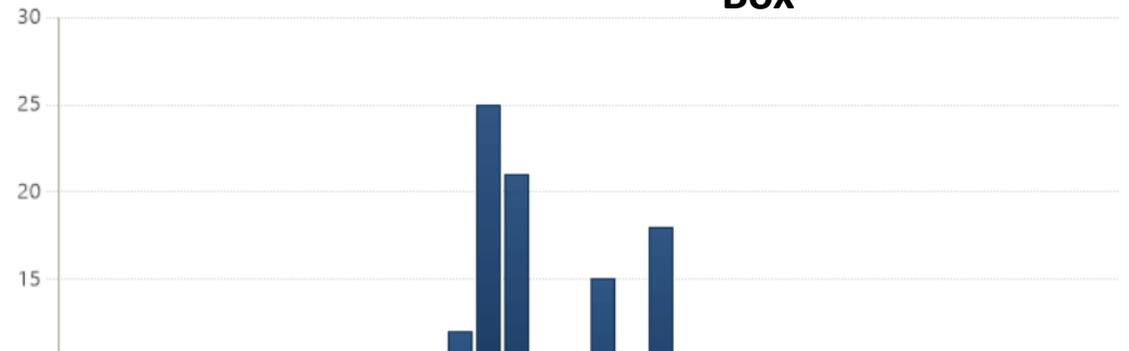


### Distribution Of Composite ACT Scores

	1	2	3
Measures	Belgrade Hig...	Belgrade Hig...	Belgrade Hig...
ACT Test Scores Coun...			

- Open in New Window
- Reset View
- Export to PowerPoint
- Export to Excel

### Distribution Of English ACT Scores



Right Click on Tiny Box



## Student Characteristics

Here you'll find data on Montana's graduation and dropout rates by school or district over time. You can also search through enrollment data by school or grade.

You'll find information on special education students, which includes district performance reports and trends.

Including disaggregation for Migrant Students, Limited English Proficient Students, and Homeless, Neglected, and Delinquent Students.

Frequently-viewed reports include:

- Student Characteristics Dashboard
- Graduation Dashboard
- Dropout Dashboard
- Graduation Matters Montana: Your Community Fact Sheet
- Special Education Child Count Dashboard
- Indian Education Enrollment

### Facts & Publications

- 2017 Facts about Montana Education



- Libraries
- Overview
- Student Characteristics Overview**
  - Student Characteristics Dashboard
  - List of Quick Facts
- Enrollment
  - Enrollment Map
  - Summary Enrollment Report
  - Montana Public School Enrollment by Grade - Elementary
  - Montana Public School Enrollment by Grade - High School
- Graduation and Dropout
- Homeless Students
- Graduation Matters Montana
- Special Education
- Indian Education

# Characteristics

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students, which includes district performance reports and trends.

nts, Limited English Proficient Students, and Homeless, Neglected, and

board

Your Community Fact Sheet  
at Dashboard



GEMS > Student Characteristics > Student Characteristics Dashboard



# Student Characteristics Dashboard

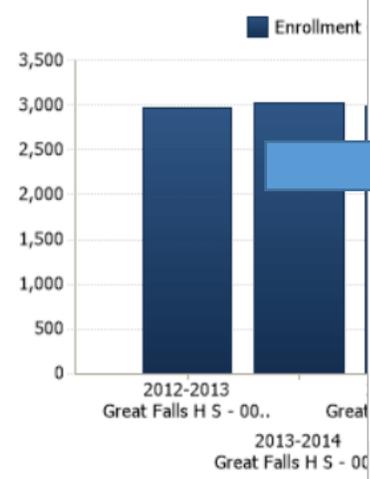
## Help Links:

- Dashboard Features and Printing
- View a Dashboard Demo
- Data Definitions & Explanations



Counties, Districts, and Schools : Great Falls H S - 0099

### Enrollment Count



Search this filter

- State
  - Beaverhead - 01
  - Big Horn - 02
  - Blaine - 03
  - Broadwater - 04
  - Carbon - 05
  - Carter - 06
  - Cascade - 07
    - Belt Elem - 0112
    - Belt H S - 0113
    - Cascade Elem - 0101
    - Cascade H S - 0102
    - Centerville Elem - 0104
    - Centerville H S - 0105
    - Deep Creek Elem - 1195
    - Great Falls Elem - 0098
    - Great Falls H S - 0099
    - Mont Sch for Deaf Blind - 9258
    - Simme H S - 0118

Select all

### Enrollments by Race-Ethnicity

	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
	Enrollment Count - Masked				
Characteristics Federal Race- Ethnicity					
▶ Great Falls H S - 0099	2,975	3,029	2,982	2,963	2,944
Indian or Alaskan Native	341	353	332	340	328
African American	29	33	32	38	43
Hispanic or Latino	72	74	87	68	66
White	83	107	97	100	121
Other	10	41	53	69	71
Hawaiian or Other Pacific Islander	16	18	19	18	15
	2,424	2,403	2,362	2,330	2,300



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### Summary Enrollment Report

Years	2014 - 2018	County/District/School	Belgrade H S - 0369	<a href="#" style="background-color: #f4a460; color: white; padding: 5px 10px; text-decoration: none;">View Report</a>
Grades	All	Race/Ethnicity	All	
Gender	All	Economic Disadvantage	All	
Special Education	All	English Learner	All	

1 of 1 Find | Next

[Data Definition & Explanations](#)

		<u>2013-2014</u> <u>Enrollments</u>	<u>2014-2015</u> <u>Enrollments</u>	<u>2015-2016</u> <u>Enrollments</u>	<u>2016-2017</u> <u>Enrollments</u>	<u>2017-2018</u> <u>Enrollments</u>
<b>Total State Enrollment</b>		144129	144532	145316	146371	146772
<u>School District</u>	<u>School</u>	<u>2013-2014</u> <u>Enrollments</u>	<u>2014-2015</u> <u>Enrollments</u>	<u>2015-2016</u> <u>Enrollments</u>	<u>2016-2017</u> <u>Enrollments</u>	<u>2017-2018</u> <u>Enrollments</u>
Belgrade H S - 0369	-	854	857	826	860	900
	Belgrade High School - 0491	854	857	826	860	900

Data as of: 08/31/2018



ACT Test Scores

Year: 2017-2018 | District/School: State  
 Race/Ethnicity: All | Gender: All  
 Economically Disadvantaged: All | Special Education: All  
 Test Administration: 11th Grade Test Tak | English Language Learner: All  
 Homeless: All

1 of 2 ? Find | Next

[Data Definition & Explanations](#)

Economic Disadvantage contains data on free and reduced lunch

		Composite Score	English Language Arts (ELA) Score	English Score	Math Score	Reading Score	Science Score	STEM Score	Writing Subject Score
<b>State Totals</b>		19.56	18.28	18.27	19.57	20.24	19.63	19.85	
District Name	School Name	Average Composite Score	Average English Language Arts (ELA) Score	Average English Score	Average Math Score				
<b>Absarokee H S - 0862</b>		15.45	15.15	14.95	15.40				
	<b>Absarokee High School - 1126</b>	15.45	15.15	14.95	15.40	15.75	15.30	15.55	
<b>Alberton K-12 Schools - 0577</b>		*	*	*	*	*	*	*	*
	<b>Alberton High School - 0766</b>	*	*		*	*	*	*	*

An asterisk signifies that student data is masked for privacy reasons (< 10 cell count). Data is not masked on secure GEMS.



# Questions?

- This presentation touches the surface as to what's in GEMS. It shows you how to use it well. You can discover what GEMS offers. For example, has anyone thought of a research question?
- If not, Questions?



# GEMS For Everyday Use

## Contact Information

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