

Navigating with GPS:

*Using Indiana's Education & Workforce Data System
to Drive Towards Enrollment, Employment, &
Enlistment*

April 2023



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GPS - POWERED BY INDIANA'S EDUCATION & WORKFORCE DATA

- Increase the quantity and quality of data in Indiana's **Education & Workforce Data System** managed by MPH.
- Increase data access beyond researchers through development of dashboards utilizing cross-agency datasets.
- Increase access to record level data for government sector employees to support better service and policy development.

INDIANA GPS GUIDING PRINCIPLES

- Foster **learner-centered, future-focused** systems that prioritize individual student growth and development
- Create **access to pathways and opportunities** that prepare students for **employment, enrollment, or enlistment leading to service**
- Encourage **strategic partnerships** between schools, communities, and the state leading to improved outcomes for students
- Develop a dashboard that is **transparent and nimble** as the global marketplace continues to change and as technology continues to advance

GPS - KEY DRIVERS

- **Transparency - P.L.211-2021, SEC.23 (IC 20-31-8-5.5)**
- **Student Outcomes - Looking beyond HS graduation, continuum building to enrollment, employment, enlistment**

Attendance (All Grades)

Post K12

Pre-K - Grade 2

*Kindergarten Readiness
PK-12 Literacy Progress*



Grades 3-8

3rd Grade Literacy
6th grade Math Proficiency
21st Century Scholars Enrollment
Adv Coursework before 9th Grade
.....
Math Growth & Proficiency
ELA Growth & Proficiency



Grades 9-12

Graduation Pathways Completion
College & Career Credentials
SAT Performance
College & Career Coursework
FASFA Completion Rate
Diploma Strength (Core 40 or Higher)



Graduation & Beyond

Employment & Enrollment
Sustained Employment
Median Income per Capita

INDIANA CODE DASHBOARD CITATION

IC 20-31-8-5.5

Establish **compilation of longitudinal data; Internet dashboard; posting data on school's Internet web site; custom indicators**

Sec. 5.5. (a) Not later than July 1, 2024, the state board shall do the following:

- (1) Establish a compilation of longitudinal data indicating school performance success in various selected and enumerated program areas.
- (2) Present the data described in subdivision (1) for each school in a manner that:
 - (A) can be conveniently and easily accessed from a single web page on the state board's Internet web site; and
 - (B) is commonly known as an Internet dashboard.

(b) The dashboard must include the following:

- (1) Indicators of student performance in elementary school, including schools for grades 6 through 8, and high school.
- (2) The school's graduation rate, as applicable.
- (3) The percentage of high school graduates who earned college credit before graduating, as applicable.
- (4) The pass rate of the statewide assessment program tests (as defined in [IC 20-32-2-2.3](#)), as applicable.
- (5) The growth data of the statewide assessment program tests (as defined in [IC 20-32-2-2.3](#)), as applicable.
- (6) The attendance rate.
- (7) State, national, and international comparisons for the indicators, if applicable.

(c) The dashboard **may include any other data indicating school performance success that the state board determines is relevant.**

(d) Each school shall post on a web page maintained on the school's Internet web site the exact same data and in a similar format as the data presented for the school on the state board's Internet web site. However, the school may include custom indicators on the web page described in this subsection.

As added by P.L.211-2021, SEC.23.

INDIANA GPS DATA SOURCES (CURRENT)

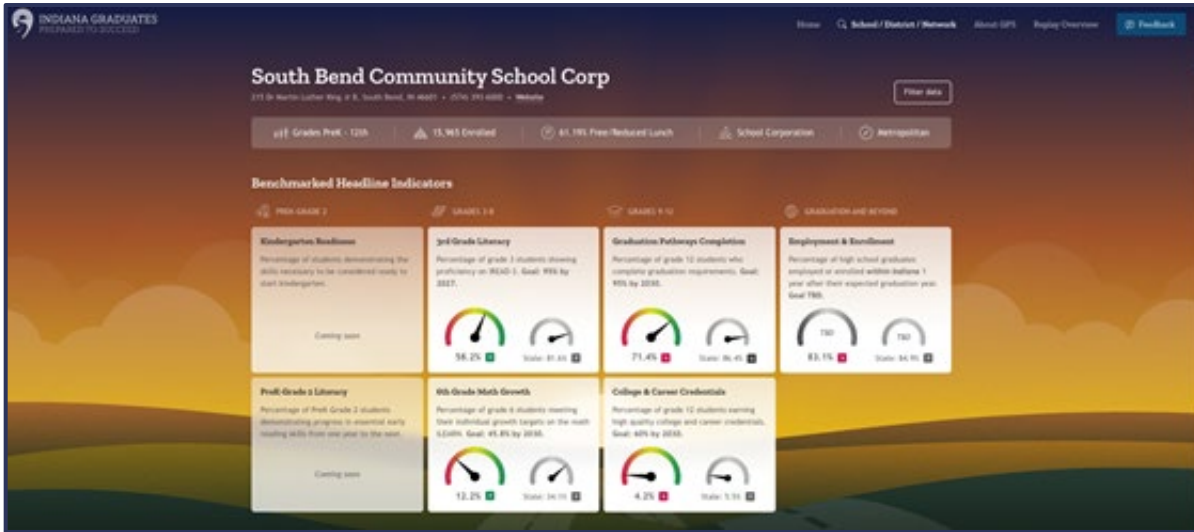
Data Element	Source	Data Element	Source
Student Attendance	DOE	SAT Performance	DOE / College Board
3rd Grade Literacy	DOE/Cambium	FASFA Completion Rate	DOE/CHE
6th Grade Math Growth	DOE/Cambium	Diploma Strength	DOE
21st Century Scholars Enrollment	DOE/CHE	Employment & Enrollment	DOE/DWD/CHE
Advanced Coursework Prior to 9th Grade	DOE	Sustained Employment	DOE/DWD
Graduation Pathways Completion	DOE	Median Income	DOE/DWD
College & Career Credentials	CHE/GWC/DWD	ILEARN Performance (4 metrics)	DOE/Cambium

Where applicable, MPH played a key role in chartering and managing data necessary for agency contributions to GPS.

Release 1.0
11.1.2022 - 12.14.22

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GRADUATES PREPARED TO SUCCEED (GPS)



<http://indianagps.doe.in.gov>

Where is Indiana today?

3RD GRADE LITERACY



1 out of every 5 third graders

in Indiana is not proficient in key literacy skills.

[Explore >](#)

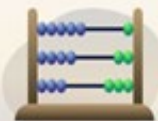
COLLEGE & CAREER CREDENTIALS



Today, **64%** of high school students earn college credit, placing them one step closer to completing a credential beyond a high school diploma. **Almost 5%** of these students earn a college or career credential before graduation, opening doors of future opportunity.

[Explore >](#)

6TH GRADE MATH GROWTH



33% of Indiana sixth graders

are meeting their math growth goals.

[Explore >](#)

GRADUATION PATHWAYS COMPLETION



86%

of Indiana students complete their graduation requirements.

[Explore >](#)

EMPLOYMENT & ENROLLMENT

Over the course of a lifetime, Hoosiers with education beyond high school are likely to earn

\$1,000,000



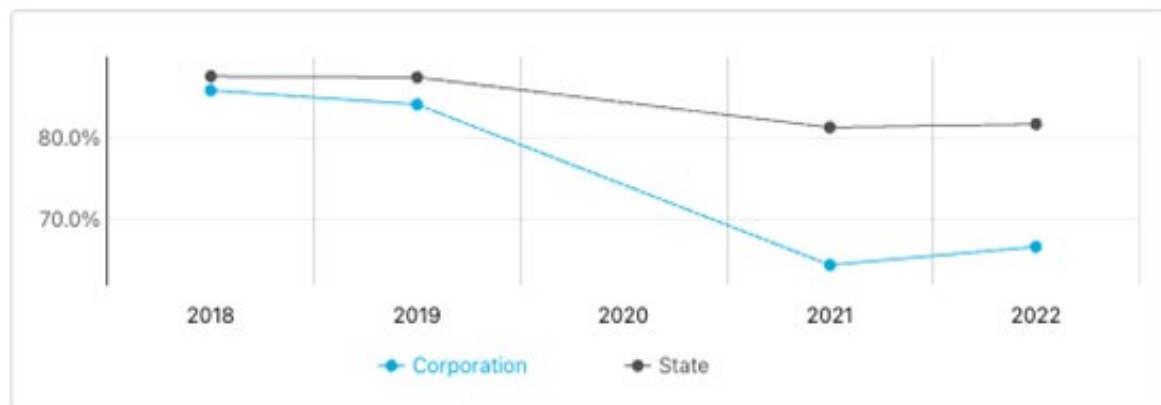
more than those with only a high school diploma.

[Explore >](#)

▾ 3rd Grade Literacy

66.7% ▲ 2.2%

Number of grade three students who demonstrate proficiency on either the spring or summer administration of IREAD-3 divided by the total number of grade three students.



All Students	66.7%	▲ 2.2%
White	73.5%	▲ 6.5%
Black	55.6%	▲ 4.2%
Hispanic	56.0%	▼ 5.2%
English Learner	58.3%	▼ 2.8%
Economically Disadvantaged	64.5%	▲ 2.1%

 162-day enrollment filter off

About

Full Report

> 6th Grade Math Growth

19.3% ▲ 4.8% State: 34.1%

> 21st Century Scholars Enrollment

30.4% State: 32.6%

> Advanced Coursework Prior to 9th Grade

60.2% ▼ 28.2% State: 35.2%

FIRST ITERATION: EMBARGOED RELEASE FOR SCHOOLS

- **Indiana GPS “Scrollytelling” Landing Page** introducing user to Indiana GPS and providing a level set that begins to tell the data story and *why* each indicator matters
- **State Infographic Page** displaying the contextual statistics from the scrollytelling experience along with state benchmarks and goals
- **District and School Landing Pages** displaying district and school performance in headline indicators along with their progress toward meeting benchmarks

FIRST EMBARGOED RELEASE **BY THE NUMBERS**

The embargoed pre-release of Indiana GPS was made available to all **2,222 schools** and **290 districts**.

A feedback form was shared to allow schools and districts to ask questions and make suggestions for future iterations of Indiana GPS. In total, we received **over 200** inquiries.

Based on this feedback from our local partners, IDOE logged **70 enhancements** for future iterations of Indiana GPS.

ADDITIONAL **DATA REVIEW** WITH SCHOOLS

- In conjunction with the embargoed pre-release, IDOE worked with a number of schools to **review each indicator and the underlying student-level data.**
- This review took a sampling of schools and cross-referenced their local data with Indiana GPS data to ensure a thorough understanding of the **methods of calculation and stress-test the system** prior to the public release.
- This additional data review affirmed the importance of **accurate local data collection.**

KEY TAKEAWAYS FROM FIRST EMBARGOED RELEASE

Understanding the methods of calculation

- New ways of measuring school and student performance
 - Example - Advanced Coursework Prior to 9th Grade
- New uses of data
 - Example - Attendance Data

External data quality

- Ensuring data obtained from external sources is complete and accurate
 - Example - College Board data - need to resolve unmatched students

Business rules for extra-agency data elements

- Understanding nuances of partner data
 - When are degrees conferred?

Business Rules:

<https://media.doe.in.gov/news/gps-indicators-and-business-rules-final.pdf>



Methods of Calculation	Indiana GPS Characteristic(s)	Data Source
21ST CENTURY SCHOLARS ENROLLMENT		
HISTORICALLY MEASURED UPDATED ANNUALLY BETWEEN OCTOBER AND DECEMBER		
<p>Number of students enrolled in the 21st Century Scholars program by June 30 of their grade eight year divided by the total number of grade eight students eligible* for the 21st Century Scholars program.</p> <p>The data displayed on Indiana GPS reflects data collected from the Indiana Commission for Higher Education for the 2021-2022 academic year.</p> <p>*To be eligible for the 21st Century Scholars program, students must qualify for Free and Reduced Price Lunch.</p>	<ul style="list-style-type: none"> Career & Postsecondary Readiness: Credentials & Experiences Civic, Financial, & Digital Literacy 	<p>Attendance data reported to IDOE by schools.</p> <p>Students enrolled in 21st Century Scholars reported to IDOE by Indiana Commission for Higher Education.</p>
ADVANCED COURSEWORK PRIOR TO 9TH GRADE		
NEW FOR INDIANA GPS UPDATED ANNUALLY BETWEEN OCTOBER AND DECEMBER		
<p>Number of grade eight students who earned high school credit during their sixth, seventh, or eighth grade year (including summer school), divided by the total number of students enrolled in grade eight.</p> <p>The data displayed on Indiana GPS reflects data collected by IDOE from schools via their student information system for the 2020-2021 academic year.</p> <p>Students are assigned to the school where they attended the majority of the school year based on the number of instructional days. Advanced coursework completion data is only available for students who remain enrolled in an Indiana school for high school.</p>	<ul style="list-style-type: none"> Academic Mastery Career & Postsecondary Readiness: Credentials & Experiences Work Ethic 	<p>Attendance data and Cohort Data reported to IDOE by schools.</p>
GRADUATION PATHWAYS COMPLETION		
HISTORICALLY MEASURED UPDATED ANNUALLY BETWEEN OCTOBER AND DECEMBER		
<p>Number of students in the grade 12 cohort completing all graduation requirements prior to September 30 of their expected graduation year divided by the total number of students in the grade 12 cohort. This is also referred to as the State Graduation Rate.</p> <p>The data displayed on Indiana GPS reflects data collected by IDOE from schools. Students are assigned to their cohort school. Cohort data prior to 2022, was collected through the STN Application Center via the DOE-RT/EM report. Beginning in 2022, this data was collected through a combination of the STN Application Center and through the connection between Data Exchange and local student information systems.</p>	<ul style="list-style-type: none"> Academic Mastery Career & Postsecondary Readiness: Credentials & Experiences Work Ethic 	<p>Cohort data reported to IDOE by schools.</p> <p>Graduate data reported to IDOE by schools.</p>

POST VERSION 1.0 ENHANCEMENTS DELIVERED

- ✓ **Clarifying the methods of calculation** - Ensuring the methods of calculation are clear and easy to understand
- ✓ **Adding additional clarity around the attendance indicator** - Separating attendance from the Grade 3-8 grade band.
- ✓ **Updating the ILEARN graph to be more intuitive** - Below, Approaching, At, Above Proficiency
- ✓ **Refactoring trend arrows** to capture goal attainment and magnitude of change.
- ✓ **Make the methods of calculation** easily accessible on the summary pages

Release 2.0

12.21.22 - 1.17.23

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EMBARGOED RELEASE FOR SCHOOLS

- **District and School Drill Down Pages** displaying student performance data over multiple years with the ability to filter by key student populations
 - English learner, high ability, homeless, race and ethnicity, socioeconomic, and special education status
- This is the *first time ever* that users are able to view student population data, longitudinally





Data

Details

All Students

English Learners

High Ability

Homelessness

Race and Ethnicity

Socio-Economic Status

Special Education

NOTE: Grad Pathway completion requirement takes effect in 2023.

All Students in 2021 Cohort

83,036

Graduates in 2021 Cohort

71,780

Students Completing Grad Pathways in 2021 Cohort

71,780

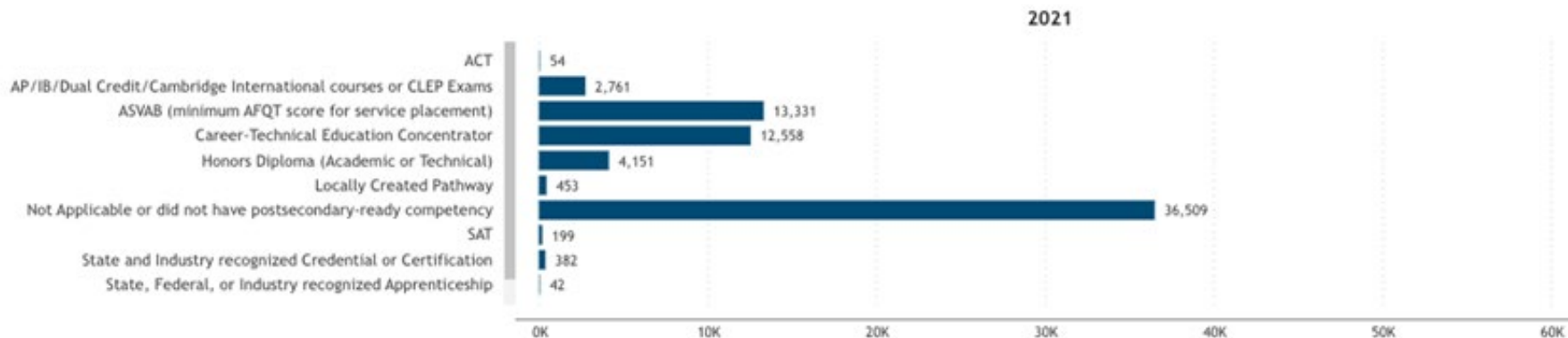
Percent Completing Grad Pathways in 2021 Cohort

86.4%

Students Completing Grad Pathways with Waivers

1,337

Graduation Pathways Completion by Postsecondary Competency



Graduation Pathways Completion by Competency and Diploma Type

● Core 40
 ● Core 40 - Academic and Technical Honors
 ● Core 40 - Academic Honors
 ● Core 40 - Technical Honors
 ● General
 ● International Baccalaureate

2021

ACT

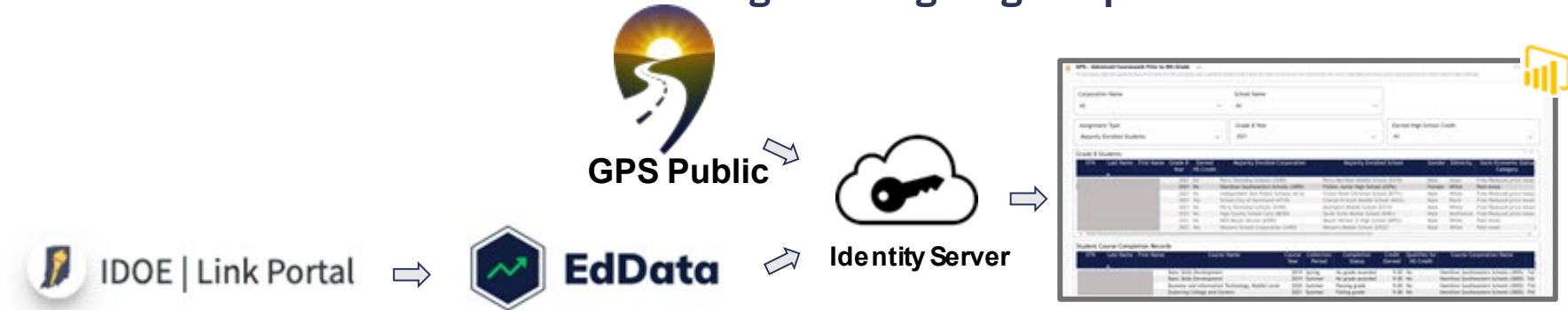
Release 3.0

4.20.23

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AUTHENTICATED DASHBOARDS

- Underlying data for most GPS indicators now available to school personnel with defined roles.
- User roles are defined by IDOE.
- User roles are assigned locally.
- Authentication occurs from GPS or through our single-sign-on portal.



PowerBI - Student-Level Dashboards



EdData

Business Dashboard - Authenticated

TECHNOLOGY

Readiness Dashboard - Authenticated version provides the public information about how technology learning within Indiana schools. This report also includes information about IT Cybersecurity.

Explore >



All

Favorites

Public

Agency

Information Technology

GPS



GPS - 3rd Grade Literacy

GPS

This report displays student data regarding the 3rd Grade Literacy indicator, which is calculated by taking the number of grade three students...



GPS - 6th Grade Math Growth

GPS

This report displays student data regarding the 6th Grade Math Growth indicator, which is calculated by taking the number of grade six...



GPS - Advanced Coursework Prior to 9th Grade

GPS

This report displays student data regarding the Advanced Coursework Prior to 9th Grade indicator, which is calculated by taking the...



GPS - College & Career Coursework

GPS

This report displays student data regarding the College & Career Coursework indicator, which is calculated by taking the number of students in...



GPS - Diploma Strength (Core 40 or Higher)

GPS

This report displays student data regarding the Diploma Strength indicator, which is calculated by taking the number of graduates in the grade...



GPS - Graduation Pathways Completion

GPS

This report displays student data regarding the Graduation Pathways Completion indicator, which is calculated by taking the number of...



GPS - ILEARN

GPS

This report displays student performance across ILEARN indicators, including proficiency and/or growth, by grade(s). ILEARN Proficiency is...



GPS - SAT Performance

GPS

This report displays student data regarding the SAT Performance indicator, which is calculated by taking the number of grade 11 students wh...



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Corporation Name

All

School Name

All

Assignment Type

Majority Enrolled Students

Grade 8 Year

2021

Earned High School Credit

All

Grade 8 Students

STN	Last Name	First Name	Grade 8 Year	Earned HS Credit	Majority Enrolled Corporation	Majority Enrolled School	Gender	Ethnicity	Socio-Economic Status Category
			2021	No	Perry Township Schools (5340)	Perry Meridian Middle School (5319)	Male	Asian	Free/Reduced price meals
			2021	No	Hamilton Southeastern Schools (3005)	Fishers Junior High School (2476)	Female	White	Paid meals
			2021	No	Independent Non-Public Schools (N/A)	Crown Point Christian School (8771)	Male	White	Free/Reduced price meals
			2021	Yes	School City of Hammond (4710)	Charles N Scott Middle School (4433)	Male	Black	Free/Reduced price meals
			2021	No	Perry Township Schools (5340)	Southport Middle School (5315)	Male	White	Free/Reduced price meals
			2021	No	Vigo County School Corp (8030)	Sarah Scott Middle School (8481)	Male	Multiracial	Free/Reduced price meals
			2021	No	MSD Mount Vernon (6590)	Mount Vernon Jr High School (6953)	Male	White	Paid meals
			2021	Yes	Western School Corporation (3490)	Western Middle School (2922)	Male	White	Paid meals

Student Course Completion Records

STN	Last Name	First Name	Course Name	Course Year	Collection Period	Completion Status	Credit Earned	Qualifies for HS Credit	Course Corporation Name
			Basic Skills Development	2019	Spring	No grade awarded	9.00	No	Hamilton Southeastern Schools (3005)
			Basic Skills Development	2019	Summer	No grade awarded	9.00	No	Hamilton Southeastern Schools (3005)
			Business and Information Technology, Middle Level	2020	Summer	Passing grade	9.00	No	Hamilton Southeastern Schools (3005)
			Exploring College and Careers	2021	Summer	Failing grade	9.00	No	Hamilton Southeastern Schools (3005)

Next Steps

FILTER-DRIVEN STUDENT COUNT

**NOTE: DATA DISPLAYED
HERE HAVE BEEN MODIFIED
TO PROTECT PII**

Corporation Name
All

School Name
All

1.13M
Distinct Student Count

Assignment Type
Majority Enrolled Students

Year
2022

Met Criteria
All

Overall Annual Attendance Rates

Student_Id_Demo	Year	Met Criteria	Annual Student Attendance Rate	Majority Enrolled Corporation	Majority Enrolled School	Gender	Ethnicity	Socio-Economic Status Category
1	2022	Did Not Meet Criteria	90.9%	Independent Non-Public Schools (N/A)	Kingsway Christian School (8295)	Unknown	Unknown	Unknown
8760	2022	Did Not Meet Criteria	71.4%	Excel Center - Kokomo (9355)	Excel Center - Kokomo (2976)	Female	White	Free/Reduced price meals
9863	2022	Did Not Meet Criteria	17.8%	Excel Center - Richmond (9305)	Excel Center - Richmond (9012)	Female	Hispanic	Paid meals
10383	2022	Did Not Meet Criteria	35.5%	Excel Center - Richmond (9305)	Excel Center - Richmond (9012)	Female	White	Paid meals
11858	2022	Did Not Meet Criteria	29.0%	Excel Center - Hammond (9055)	Excel Center - Hammond (2018)	Female	Black	Paid meals
14939	2022	Did Not Meet Criteria	73.5%	Excel Center - Anderson (9750)	Excel Center - Anderson (4904)	Female	White	Paid meals
16240	2022	Did Not Meet Criteria	38.8%	Excel Center for Adult Learners (9910)	Excel Center For Adult Learners (5669)	Female	Multiracial	Free/Reduced price meals
17116	2022	Did Not Meet Criteria	57.7%	Excel Center - Anderson (9750)	Excel Center - Anderson (4904)	Female	Black	Free/Reduced price meals

Student Attendance Record by School

Student_Id_Demo	Year	Attended Corporation	Attended School	Days Attended	Days Enrolled	Attendance Rate
1	2022	Independent Non-Public Schools (N/A)	Kingsway Christian School (8295)	60	66	90.9%
8760	2022	Excel Center - Kokomo (9355)	Excel Center - Kokomo (2976)	17	24	70.8%
9863	2022	Excel Center - Richmond (9305)	Excel Center - Richmond (9012)	18	101	17.8%
10383	2022	Excel Center - Richmond (9305)	Excel Center - Richmond (9012)	44	124	35.5%
11858	2022	Excel Center - Hammond (9055)	Excel Center - Hammond (2018)	31	107	29.0%
14939	2022	Excel Center - Anderson (9750)	Excel Center - Anderson (4904)	68	92	73.9%
16240	2022	Excel Center for Adult Learners (9910)	Excel Center For Adult Learners (5669)	9	24	37.5%
17116	2022	Excel Center - Anderson (9750)	Excel Center - Anderson (4904)	52	91	57.1%
17399	2022	Excel Center for Adult Learners (9910)	Excel Center For Adult Learners (5669)	8	72	11.1%

[Go to Indiana Department of Education GPS website](#)



SCATTERPLOT (ILEARN) AND DEMOGRAPHIC SELECTIONS

NO ZOOM ON ILEARN SCATTERPLOT

Corporation Name: Brownsburg Community School Corp (3305) | School Name: All

Assignment Type: Majority Enrolled Students | Test Year: 2022 | Proficiency Level: All

Grade Level: All | Subject: Math | Growth Level: All

4,564 Distinct Student Count

Demographic Selections: Ethnicity: All, Gender: All, Socio-Economic Status: All, Special Ed Status: All, English Learner Status: All, Homeless Status: All, High Ability Status: All

STN	Last Name	First Name	ILEARN Proficiency Level
			At Proficiency
			Below Proficiency
			Above Proficiency
			At Proficiency
			Approaching Proficiency
			At Proficiency
			At Proficiency
			At Proficiency
			Above Proficiency
			Approaching Proficiency
			Above Proficiency
			At Proficiency
			At Proficiency
			At Proficiency
			At Proficiency
			Below Proficiency
			At Proficiency
			Approaching Proficiency

ILEARN Score and Growth by Student

Legend: Above Proficiency (blue), At Proficiency (green), Approaching Proficiency (yellow), Below Proficiency (orange)

[Go to Indiana Department of Education GPS website](#)



ASSESSMENT - ILEARN ZOOM

ZOOMED TO ILEARN SCORE >6550

Corporation Name: Brownsburg Community School Corp (3305) | School Name: All

Assignment Type: Majority Enrolled Students | Test Year: 2022 | Proficiency Level: All

Grade Level: All | Subject: Math | Growth Level: All

4,563 Distinct Student Count

Demographic Selections: Ethnicity: All, Gender: All, Socio-Economic Status: All, Special Ed Status: All, English Learner Status: All, Homeless Status: All, High Ability Status: All

STN	Last Name	First Name	ILEARN Proficiency Level
			At Proficiency
			Below Proficiency
			Above Proficiency
			At Proficiency
			Approaching Proficiency
			At Proficiency
			At Proficiency
			At Proficiency
			Above Proficiency
			Approaching Proficiency
			Above Proficiency
			At Proficiency
			At Proficiency
			At Proficiency
			Below Proficiency
			At Proficiency
			Approaching Proficiency

ILEARN Score and Growth by Student

Legend: Above Proficiency (blue), At Proficiency (teal), Approaching Proficiency (yellow), Below Proficiency (orange)

[Go to Indiana Department of Education GPS website](#)



ASSESSMENT - ILEARN ZOOM

ZOOMED TO ILEARN SCORE >6800 AND ILEARN GROWTH >80TH PERCENTILE – HOVER OVER TOP PERFORMING STUDENT

Corporation Name: Brownsburg Community School Corp (3305)

School Name: All

Assignment Type: Majority Enrolled Students

Test Year: 2022

Proficiency Level: All

Grade Level: All

Subject: Math

Growth Level: All

4,563

Distinct Student Count

Demographic Selections

Ethnicity: All

Gender: All

Socio-Economic Status: All

Special Ed Status: All

English Learner Status: All

Homeless Status: All

High Ability Status: All

STN	Last Name	First Name	ILEARN Proficiency Level
			At Proficiency
			Below Proficiency
			Above Proficiency
			At Proficiency
			Approaching Proficiency
			At Proficiency
			At Proficiency
			At Proficiency
			Above Proficiency
			Approaching Proficiency
			Above Proficiency
			At Proficiency
			At Proficiency
			At Proficiency
			Below Proficiency
			At Proficiency
			Approaching Proficiency

ILEARN Score and Growth by Student

[Go to Indiana Department of Education GPS website](#)



ASSESSMENT - ILEARN ZOOM

ZOOMED TO ILEARN SCORE >6800 AND ILEARN GROWTH >80TH PERCENTILE

Corporation Name: Brownsburg Community School Corp (3305) | School Name: All

Assignment Type: Majority Enrolled Students | Test Year: 2022 | Proficiency Level: All

Grade Level: All | Subject: Math | Growth Level: All

4,563
Distinct Student Count

Demographic Selections:
Ethnicity: All
Gender: All
Socio-Economic Status: All
Special Ed Status: All
English Learner Status: All
Homeless Status: All
High Ability Status: All

STN	Last Name	First Name	ILEARN Proficiency Level
			At Proficiency
			Below Proficiency
			Above Proficiency
			At Proficiency
			Approaching Proficiency
			At Proficiency
			At Proficiency
			At Proficiency
			Above Proficiency
			Approaching Proficiency
			Above Proficiency
			At Proficiency
			At Proficiency
			At Proficiency
			At Proficiency
			Below Proficiency
			At Proficiency
			Approaching Proficiency

ILEARN Score and Growth by Student

Legend: Above Proficiency (blue), At Proficiency (green), Approaching Proficiency (yellow), Below Proficiency (orange)

[Go to Indiana Department of Education GPS website](#)



FUTURE DEVELOPMENT

- **Prioritize backlog** of additional features - there are many
- Merge federal requirements with GPS to provide a **single point of entry** to accountability information
- Work through **record level access** for all metrics as appropriate.
- Continue to collaborate with stakeholders to **bring together pertinent data** and develop **additional approved indicators**
- Work with stakeholders, including educators, parents/families, community leaders, and the General Assembly to determine **how schools are best measured in the future**



THANK YOU!

John Keller

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Chief Information Officer

Indiana Department of Education