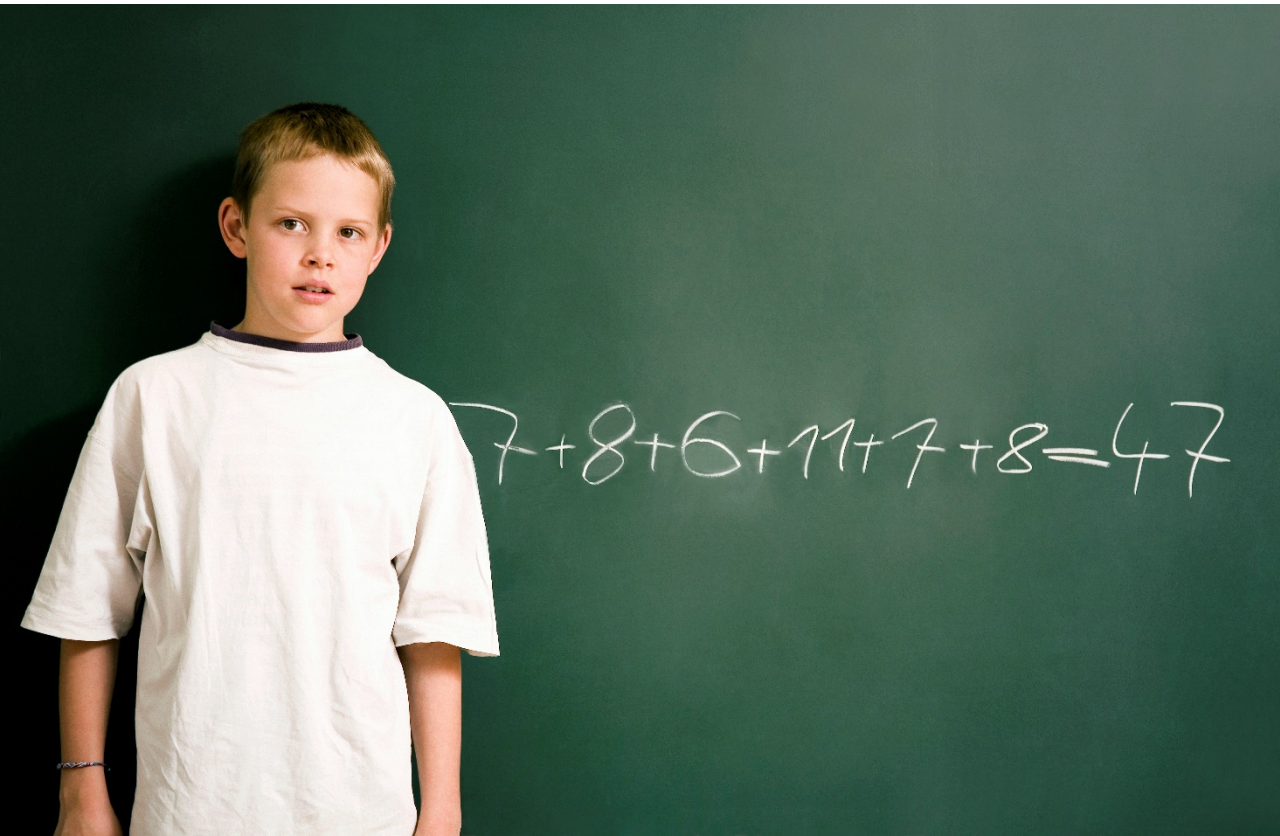


What average doesn't tell you: Making data local and work for you


Shawn Bergman, PhD
Appalachian State University
Vela Institute



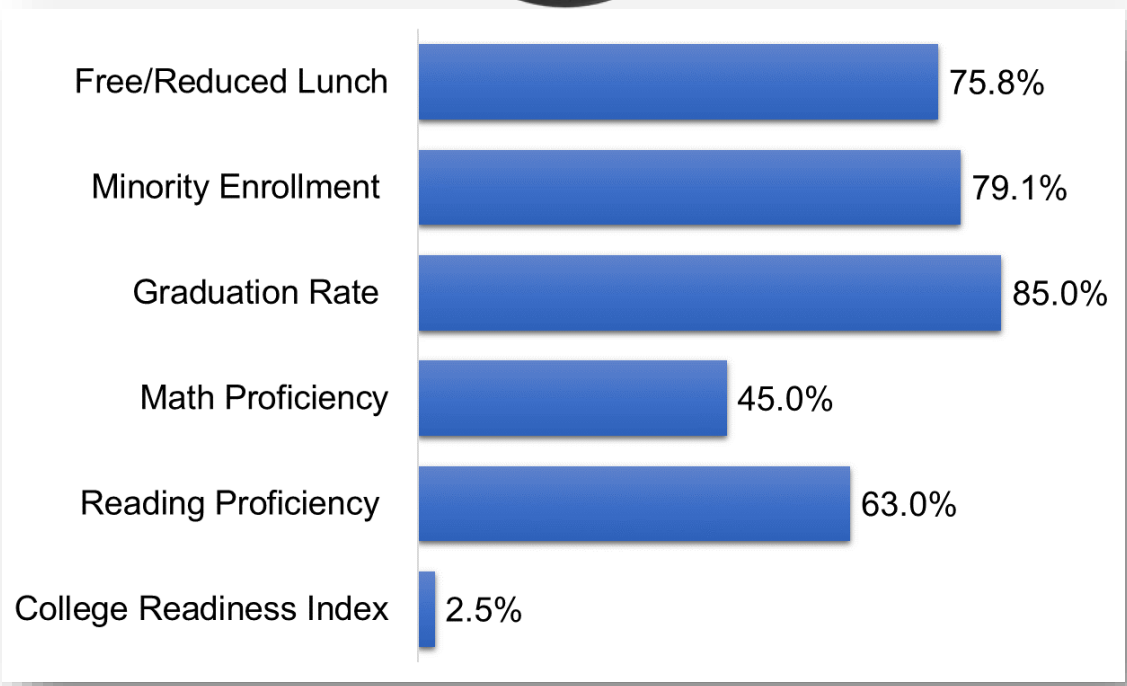
60 by 25 NETWORK
SIXTH ANNUAL 40 BY 25 NETWORK CONFERENCE 2019

**INFORMING ACTION,
IMPROVING OUTCOMES**
DATA, STORYTELLING, AND
COMMUNITY BUILDING

FEBRUARY 5-6, 2019
Collinsville, Illinois



Grandview High School



GHS Class of 1993



Wonder What Happened To...

10%
Did NOT graduate HS

30%
HS Graduate
No college/credentials

40%
Some college or
Associates degree

20%
Bachelors degree or higher

GRANDVIEW SENIOR HIGH SCHOOL
CLASS OF 1993

Jolesch Photography
Des Moines

How Did I Get Here?



Has Grandview Changed?



Demographics

- 49.1% White
- 39% Black/African American
- 8.5% Hispanic/Latino
- 42% Married
- 3.5: Average family size



Economics

\$42,226 median income

Poverty

- 13% White
- 20% Black/African American
- 27% Hispanic/Latino

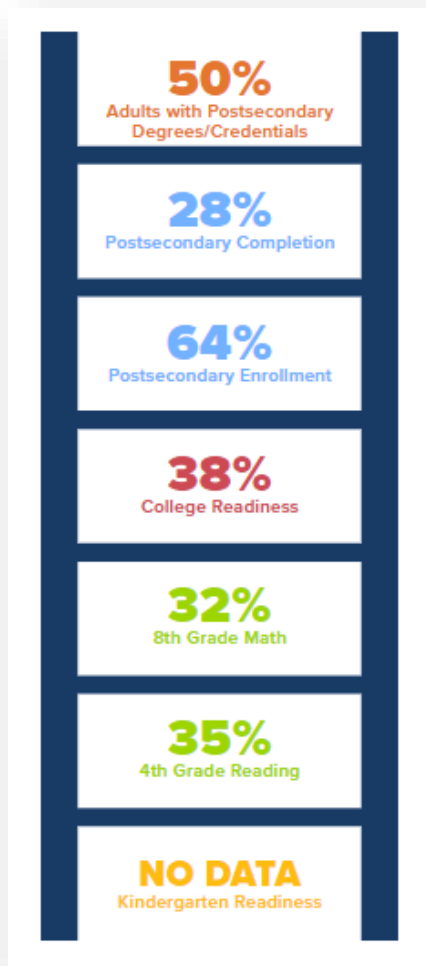


Education



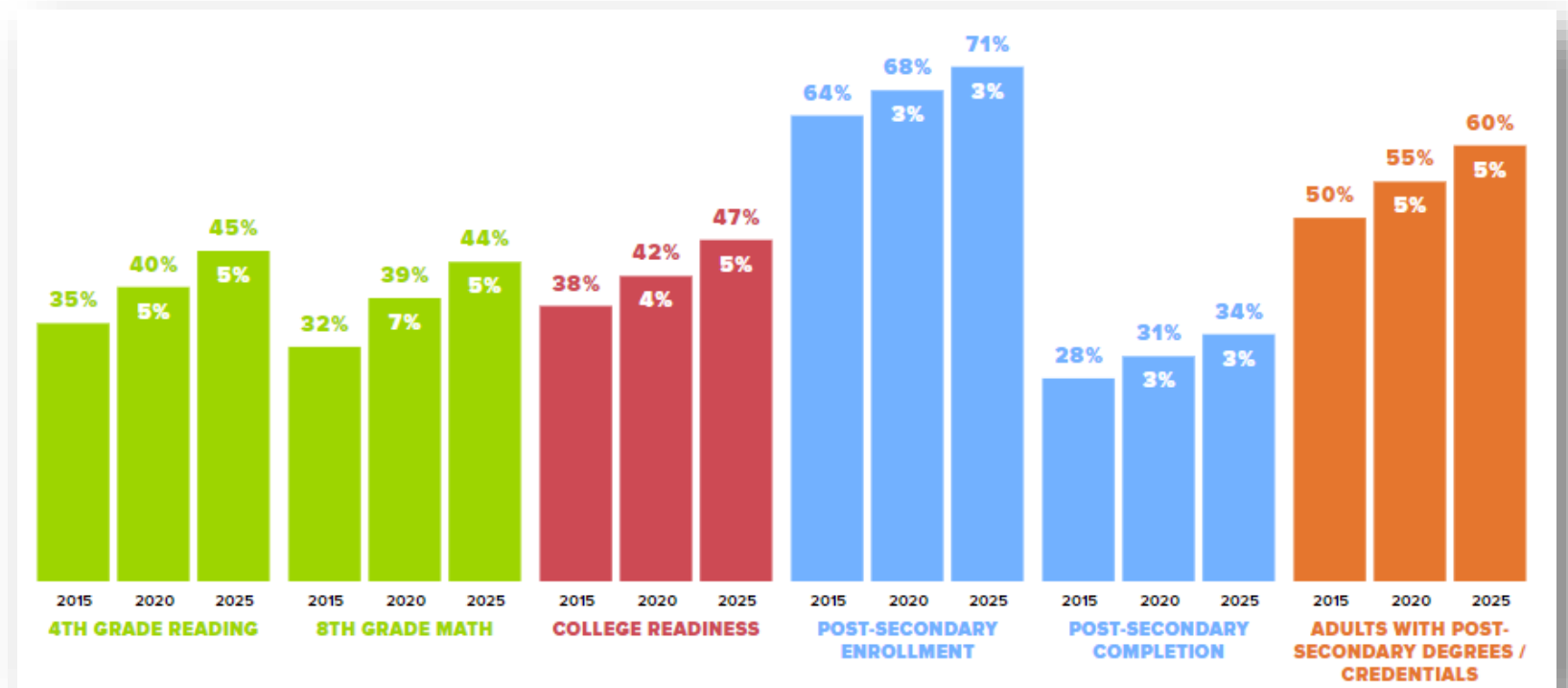
- 10% Less than HS degree
- 31% HS degree or GED
- 37% Some college/associates
- 21% Bachelors degree +

Advance Illinois: 60 x 25



KEY ACADEMIC MILESTONES

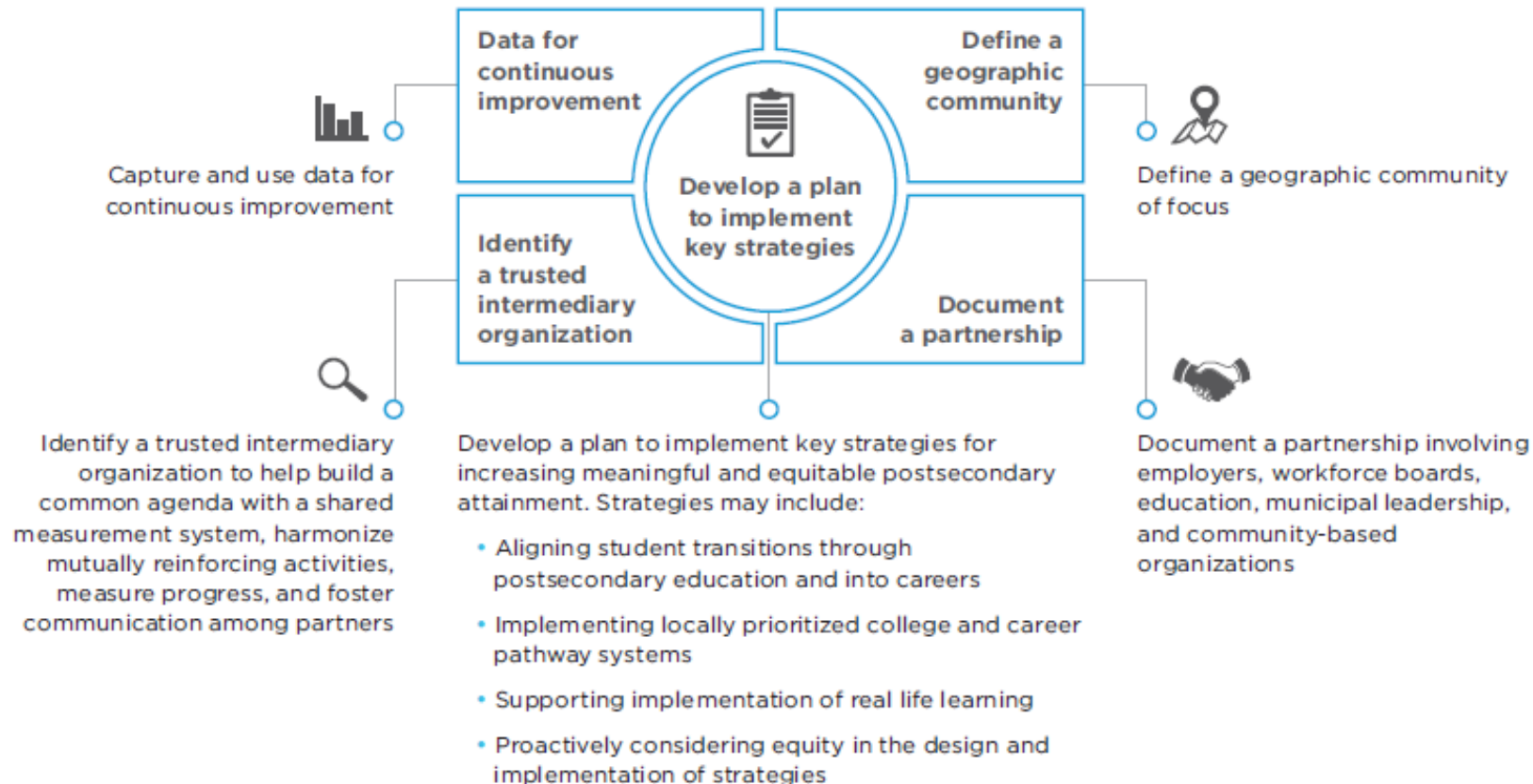
WHERE ILLINOIS STANDS TODAY ON THE STEPS TO 60 BY 25



Advance Illinois: 60 x 25

60 BY 25 LEADERSHIP COMMUNITIES

Communities with systems in place to drive meaningful and equitable postsecondary attainment are eligible for recognition as Leadership Communities. They engage in peer-to-peer learning through the Network and must meet the following criteria:



Things to Keep in Mind

1

Evidence-Base
Practices
and
Analytics

2

It is easy to
fool yourself

3

Important:
Relevant and
localized data

4

Small changes
=
Lasting impact

Let's Get Started...

1

Evidence-Base
Practices
and
Analytics

2

It is easy to
fool yourself

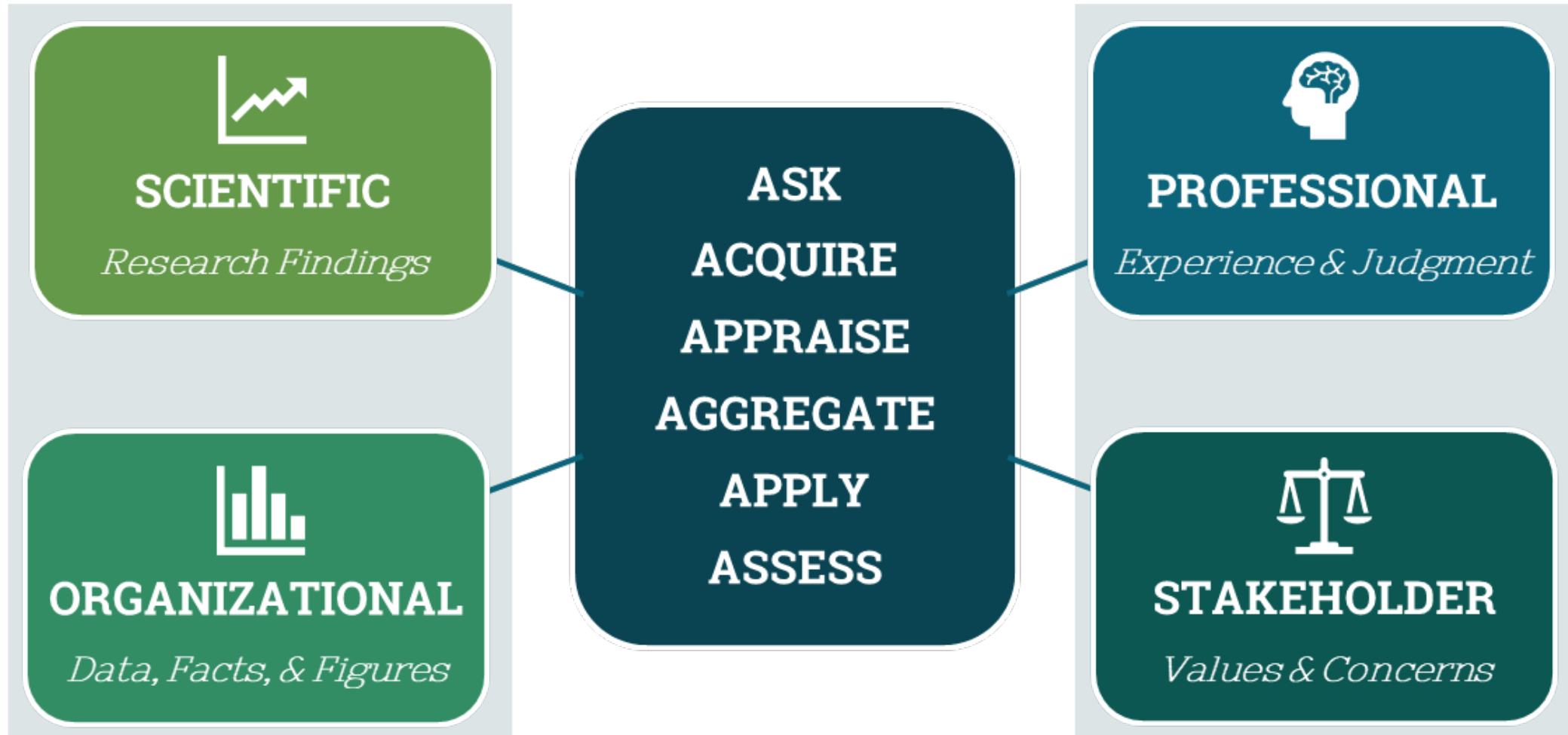
3

Important:
Relevant and
localized data

4

Small changes
=
Lasting impact

Evidence-Based Practices

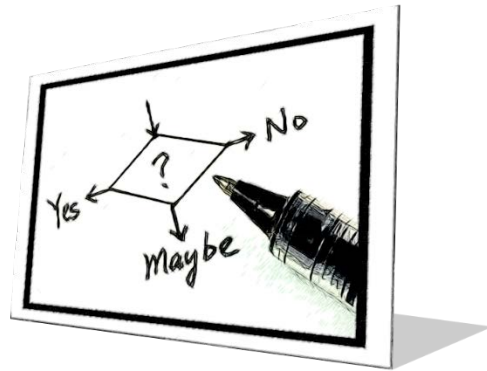


Analytics: What is it?

Scientific process of transforming *data* into *insights* for making *better decisions*



Explore



Visualize



Discover



Communicate

Analytics: Signal and Noise



GRANDVIEW SENIOR HIGH SCHOOL
CLASS OF 1993

Jolesch Photography
Des Moines

Analytics: Signal and Noise





Great!



What could possibly go wrong?

This is a test: This is only a test



the invisible gorilla

Christopher Chabris and Daniel Simons



buy the book
about the book
about the authors
press &
endorsements

videos | gorilla experiment | try it | videos from studies | speaking | other

Demonstrations, videos from our research, videos of us speaking, etc. Dan's **YouTube Channel** includes most of these videos as well as favorites from around the web that are related to or mentioned in our book. You can view more videos on his **personal website**

Where Are We Again?

1

Evidence-Base
Practices
and
Analytics

2

It is easy to
fool yourself

3

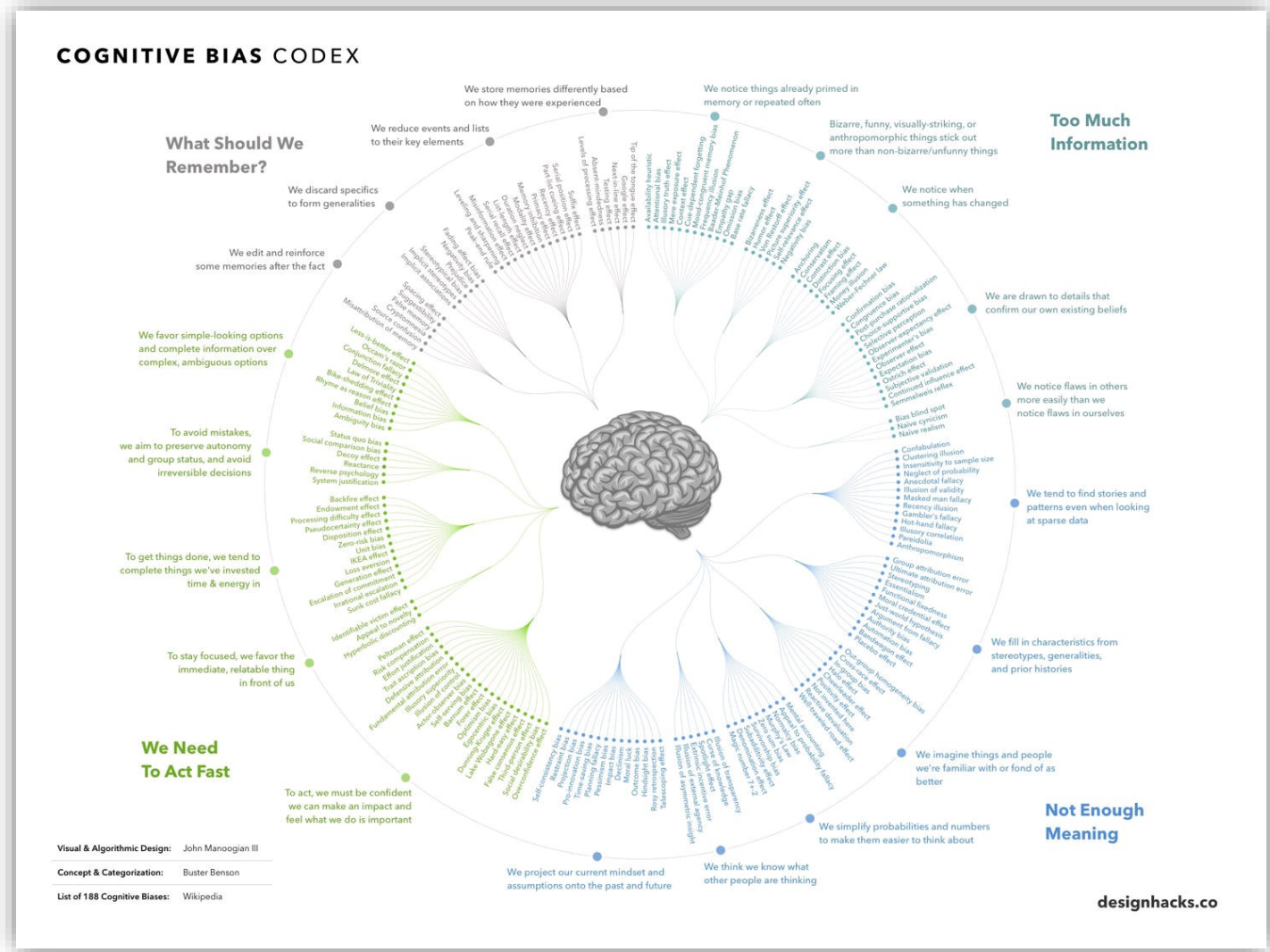
Important:
Relevant and
localized data

4

Small changes
=
Lasting impact



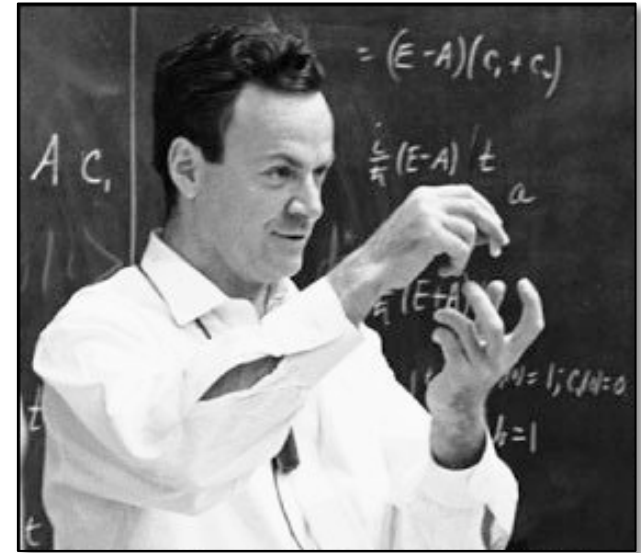
Cognitive Biases



Know Yourself

Be open to new possibilities

“The first principle is that you must not fool yourself – and you are the easiest person to fool.”



Richard Feynman

What Could Happen?



60 x 25

How do we get there?

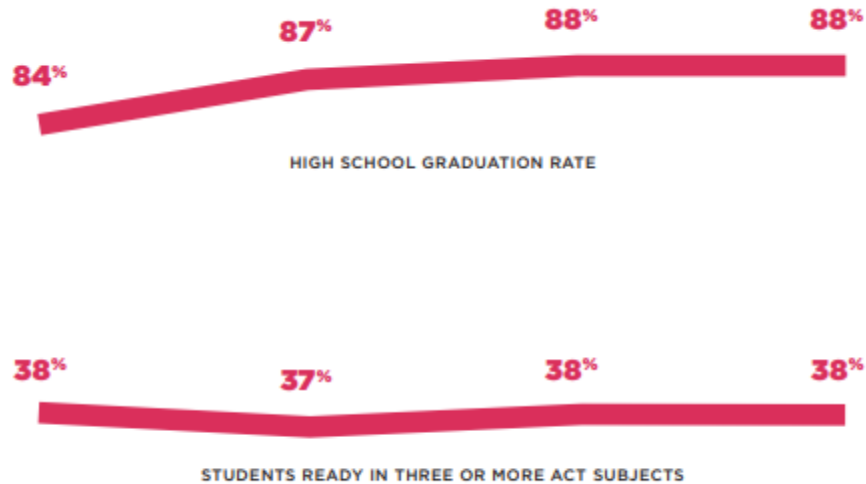
GRADUATE HIGH SCHOOL COLLEGE- AND CAREER-READY

GRADUATION RATES INCREASE, BUT ACT SCORES STAGNANT

The good news is increasing numbers of Illinois students are graduating high school within five years: currently 88% of high schoolers are graduating versus 84% in 2012.¹⁹ The graduation rate has increased for students of all backgrounds, including low-income students and students of color.²⁰ Educators, parents and community members should be commended for coming together to support students in their efforts to earn a diploma.

However, on a key measure of whether students are ready for college—the ACT—only 38% of Illinois high school graduates are scoring as college ready. This figure has not budged since 2012. The gap means too many students are graduating high school but are not college ready.

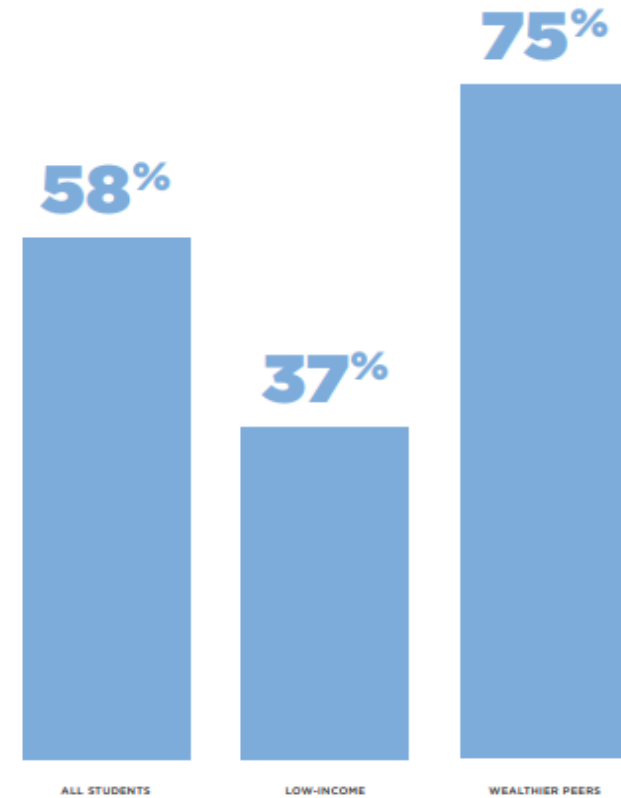
Higher scores on the ACT correlate with college degrees: students who meet three or more ACT college readiness benchmarks have a better than 75% chance of earning a postsecondary degree.²¹



LOW-INCOME STUDENTS LESS LIKELY TO COMPLETE DEGREE

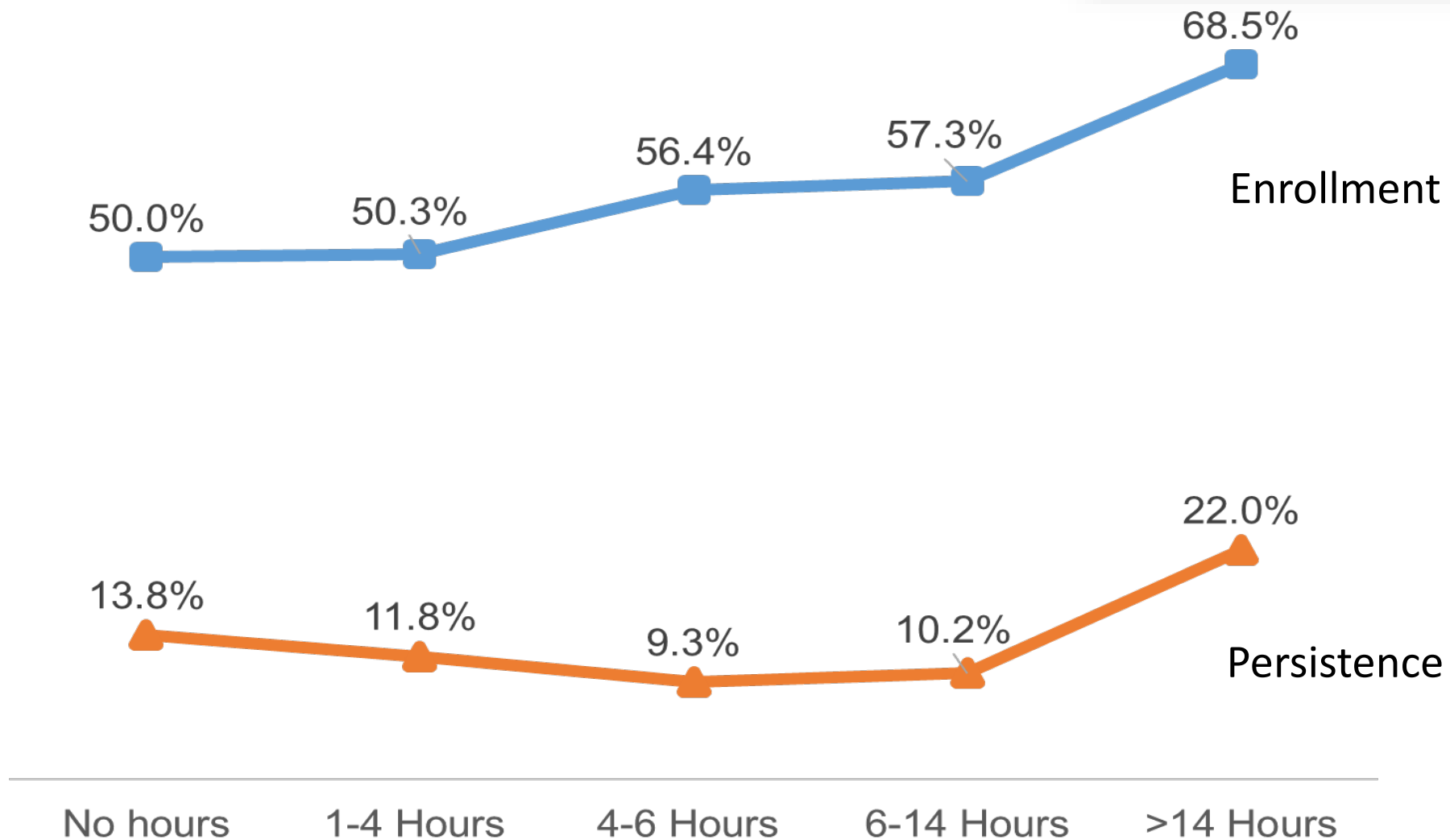
SIX-YEAR POSTSECONDARY COMPLETION RATE FOR STUDENTS WHO ENROLL IN COLLEGE

Sources: National Student Clearinghouse, Illinois Student Assistance Commission



Is That Service Working?

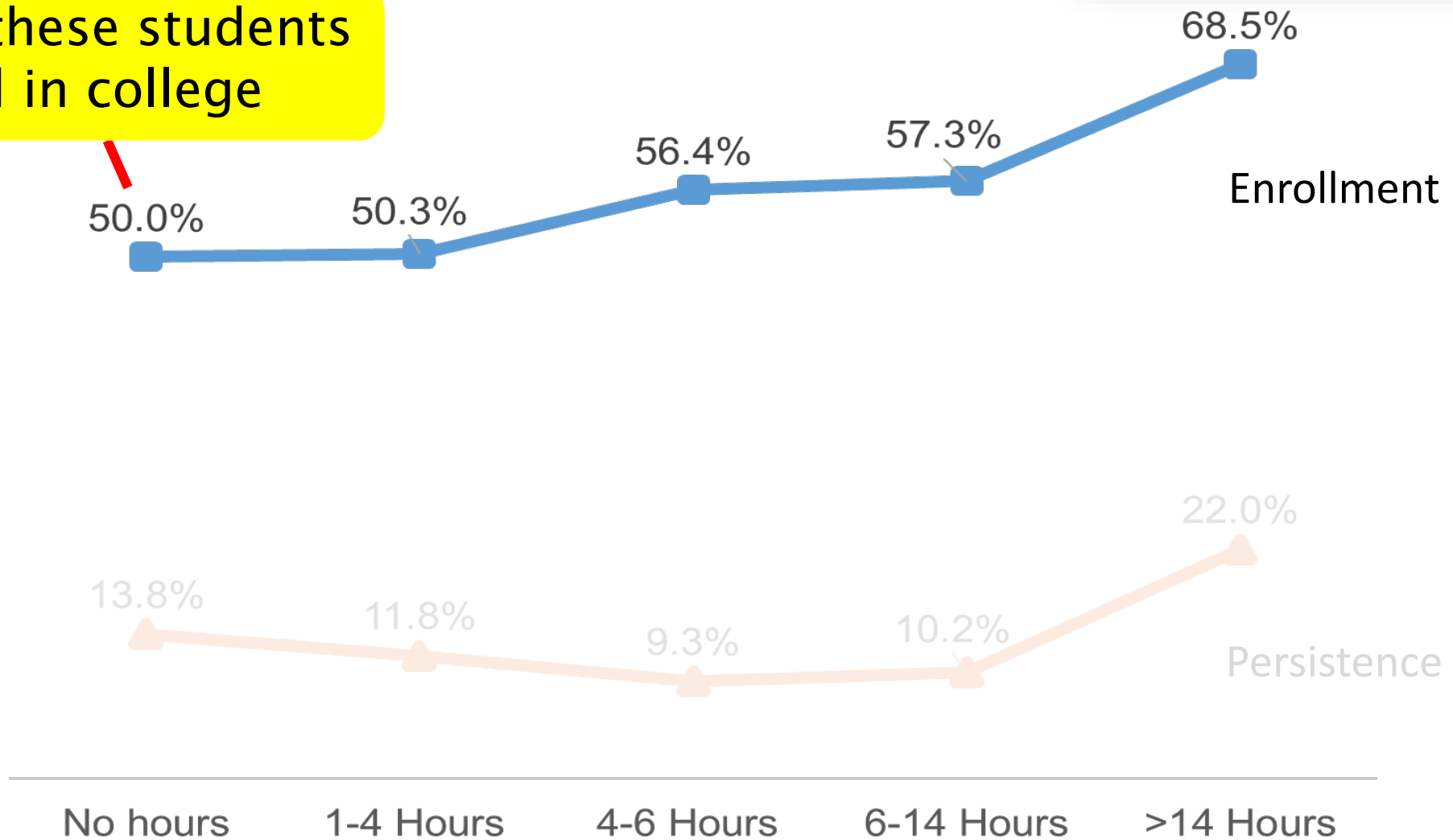
How much is enough (or too much)?



Is That Service Working?

How much is enough (or too much)?

Half of these students enrolled in college

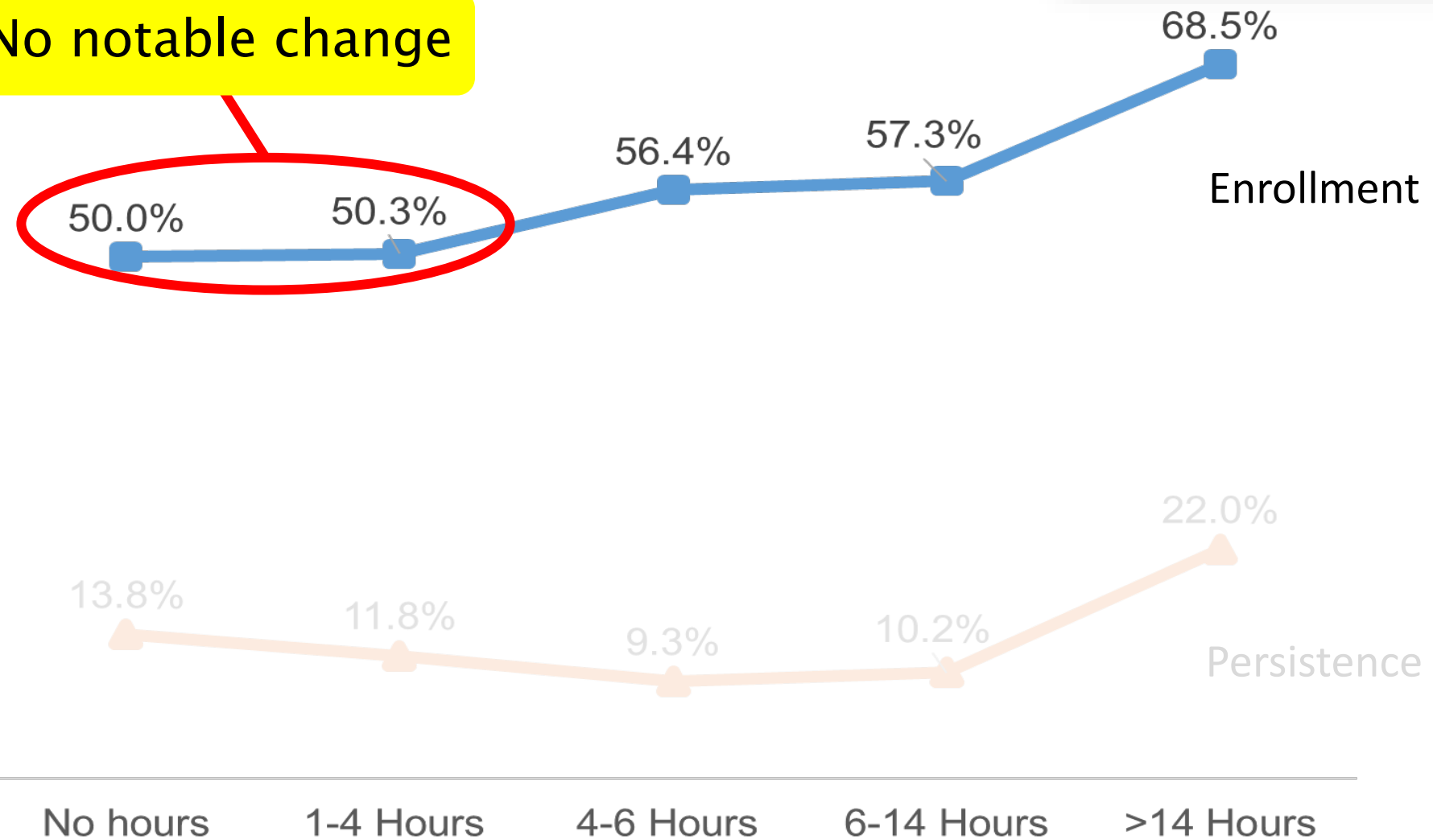


Is That Service Working?

How much is enough (or too much)?



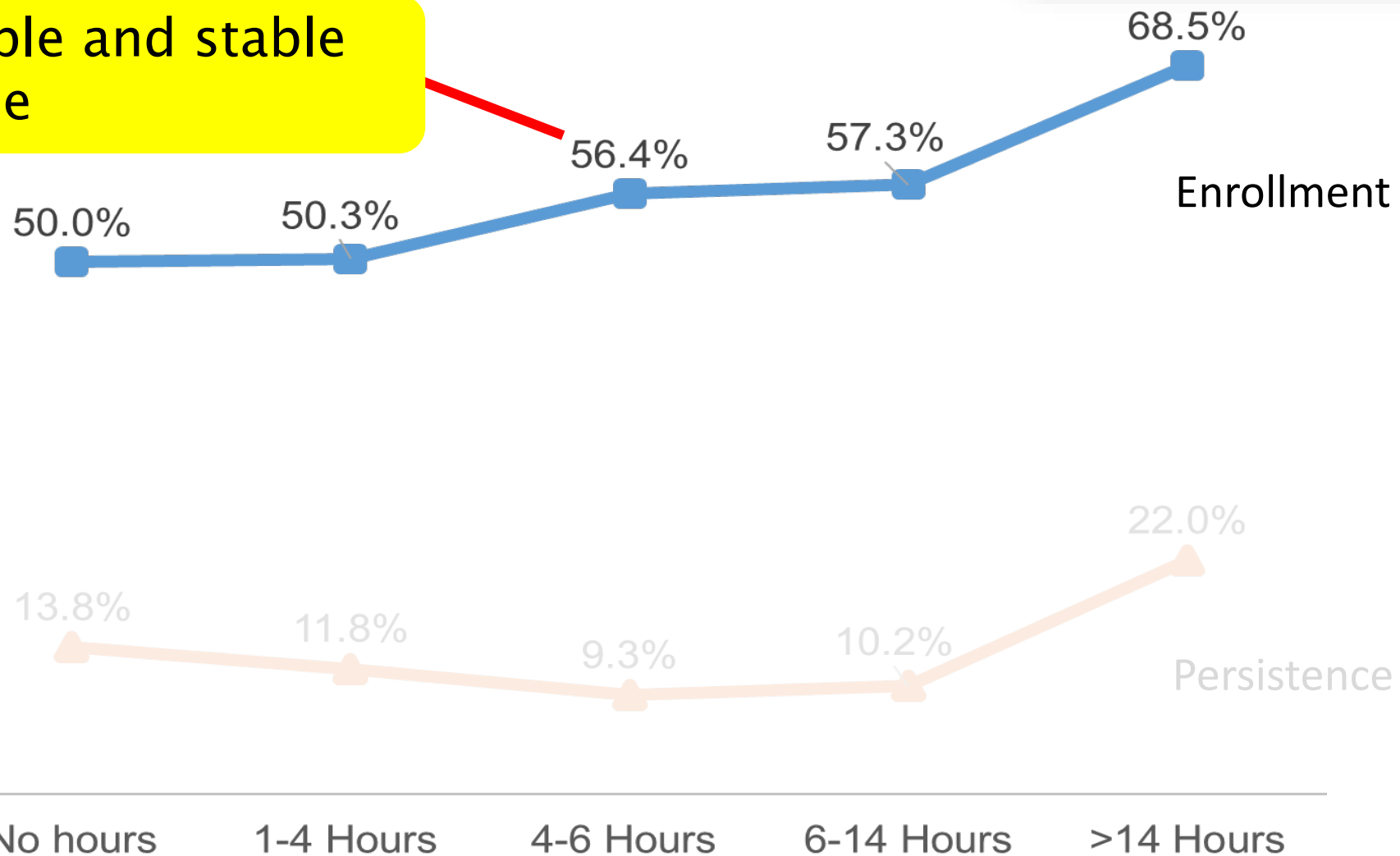
No notable change



Is That Service Working?

How much is enough (or too much)?

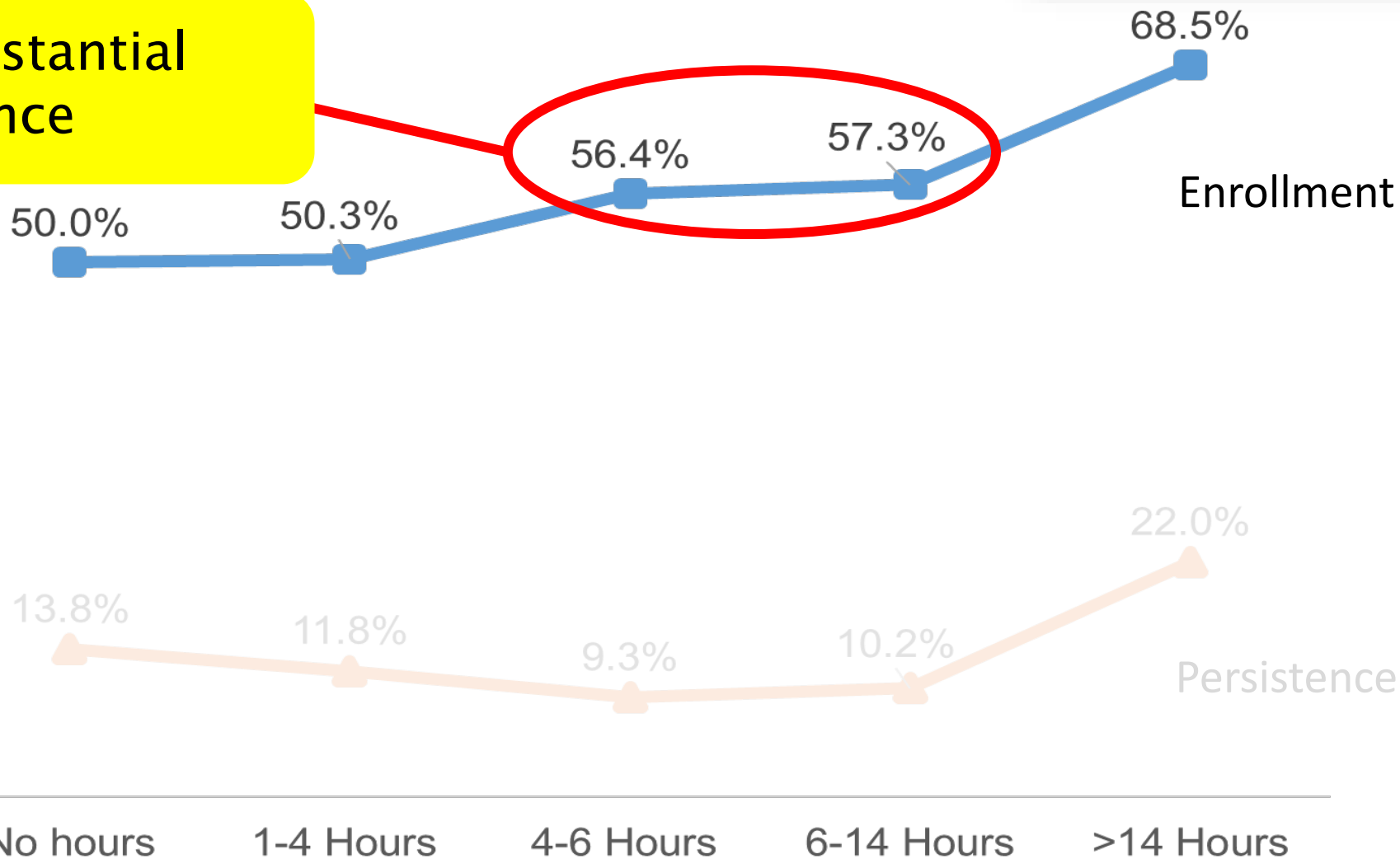
A notable and stable increase



Is That Service Working?

How much is enough (or too much)?

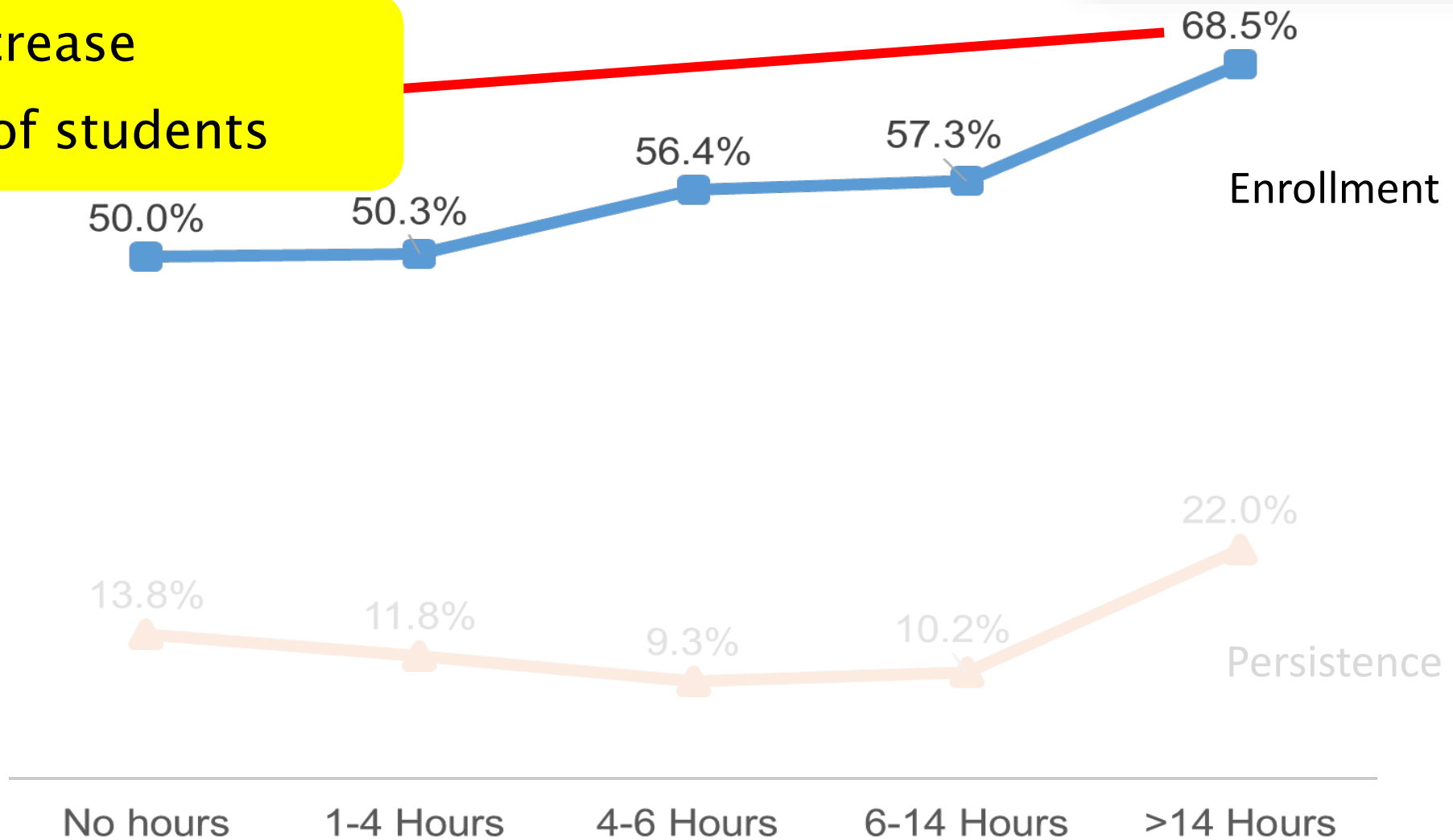
No substantial difference



Is That Service Working?

How much is enough (or too much)?

Noticeable increase
Less than 5% of students

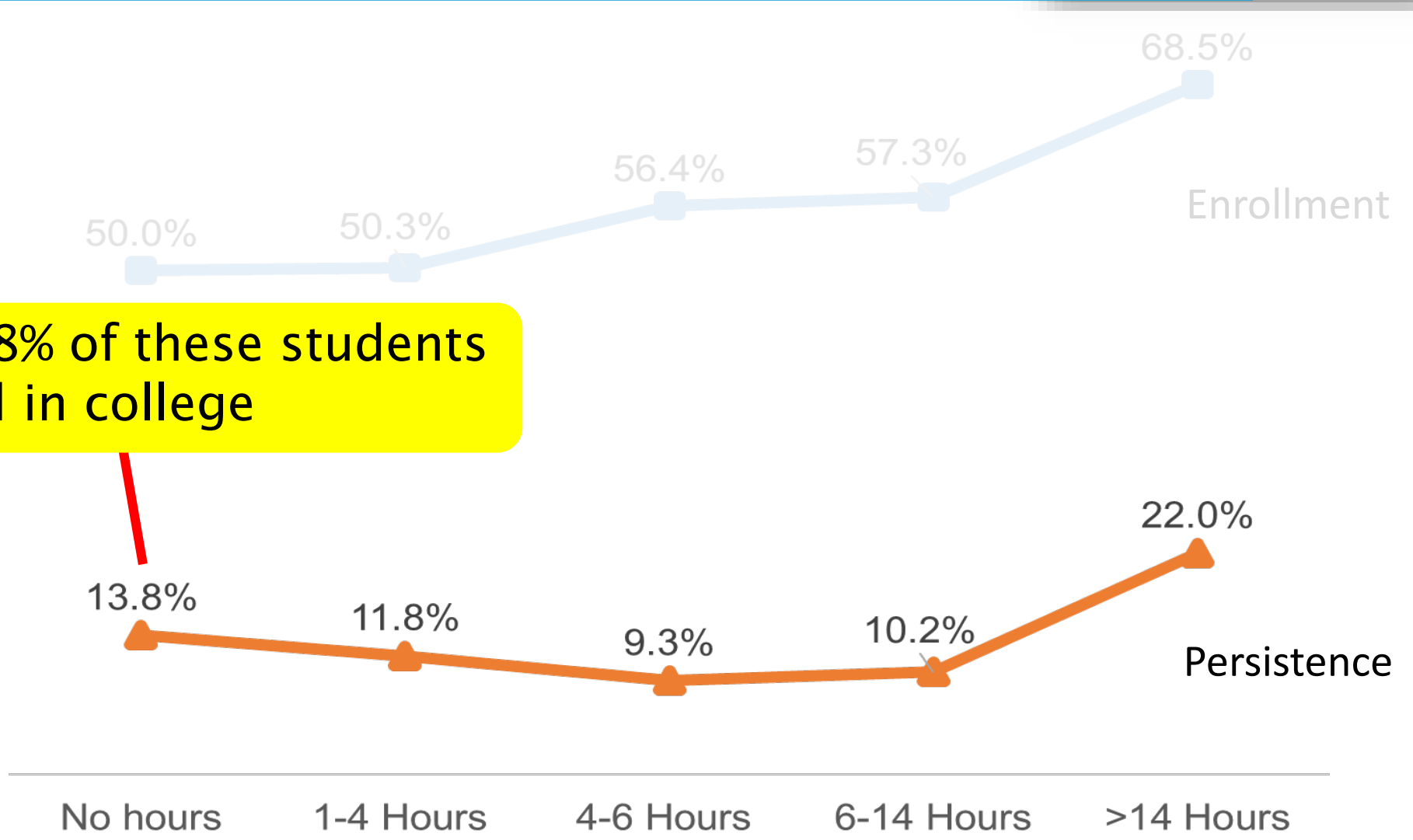


Is That Service Working?

How much is enough (or too much)?

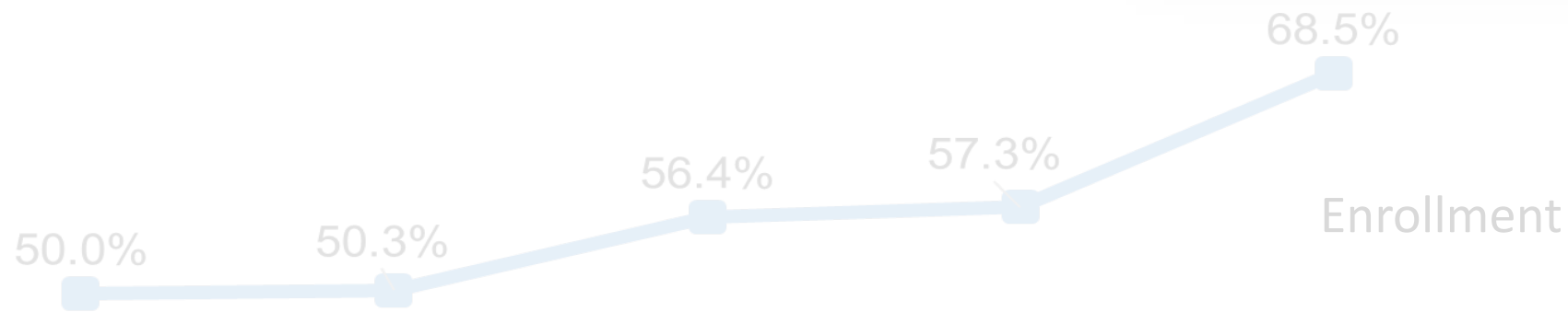


Only 13.8% of these students persisted in college

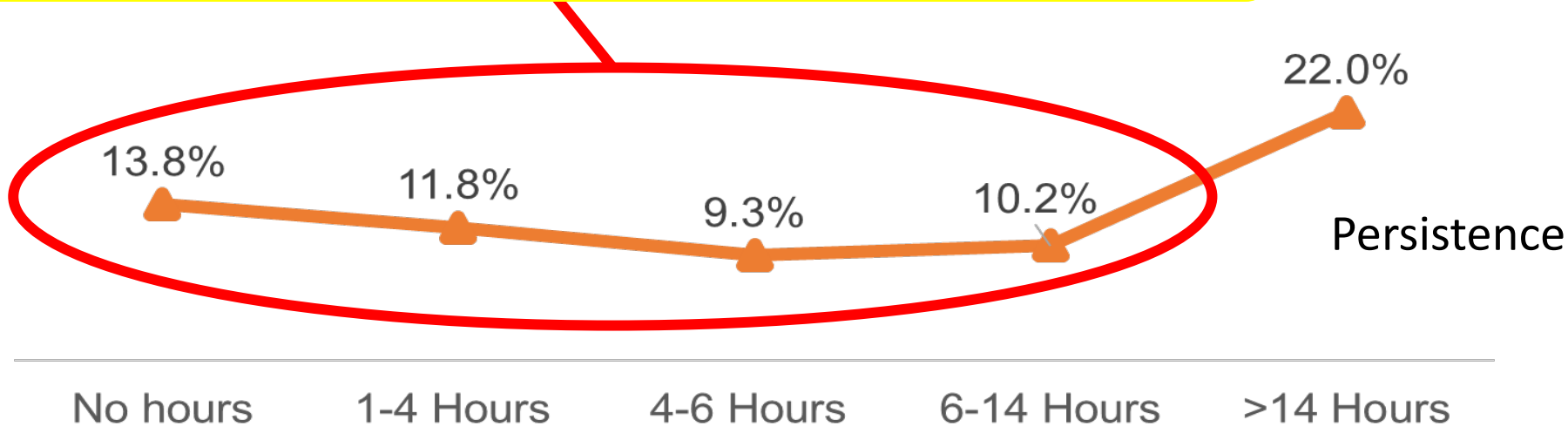


Is That Service Working?

How much is enough (or too much)?

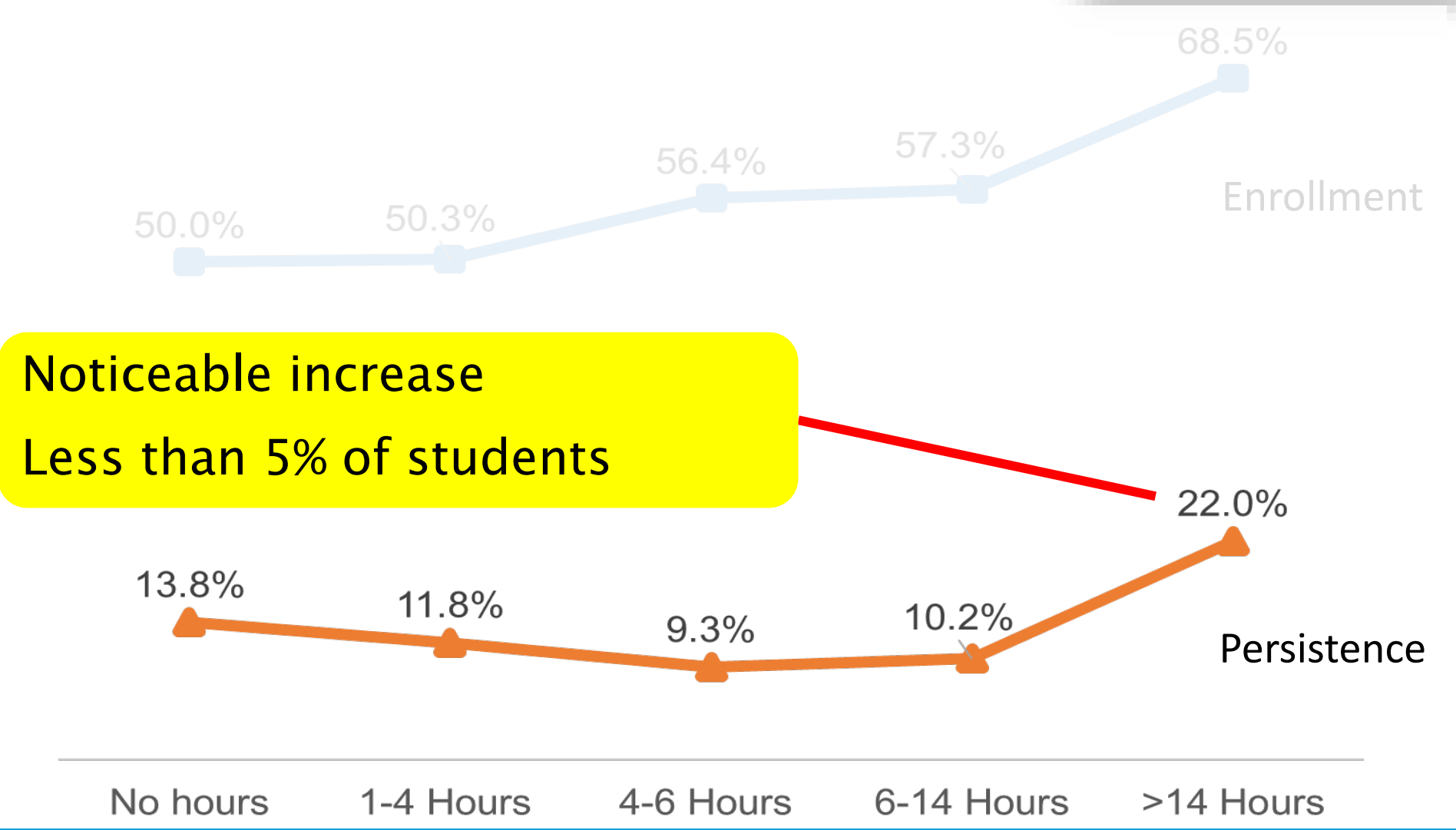


Receiving services was not related to college persistence



Is That Service Working?

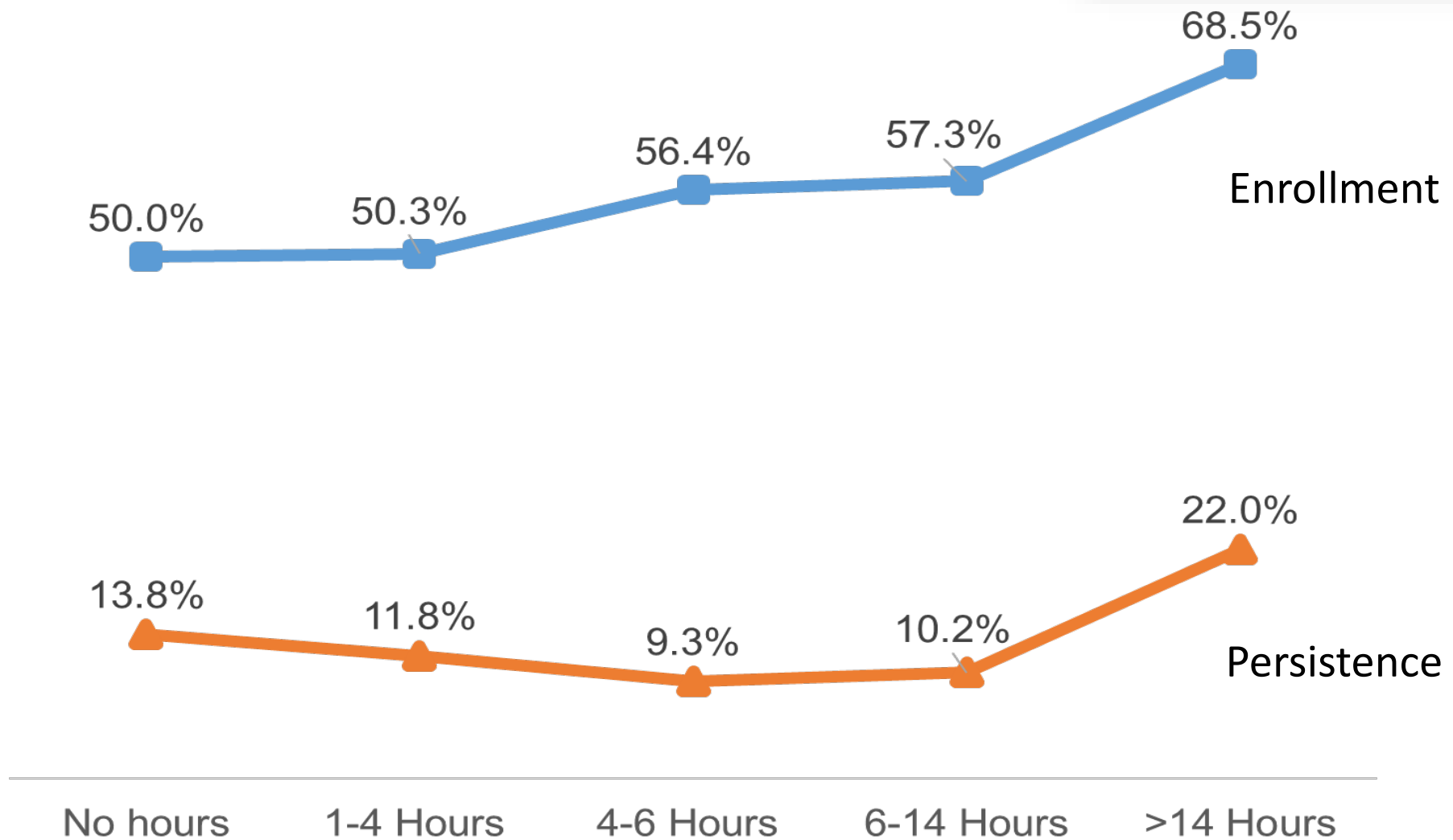
How much is enough (or too much)?



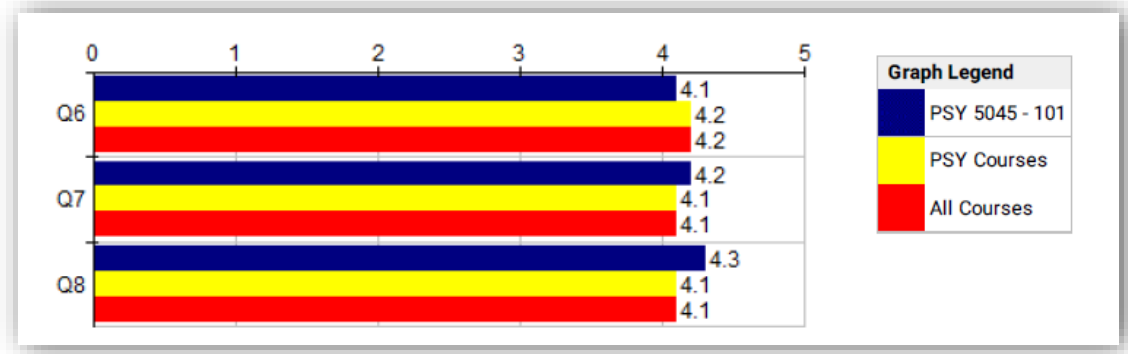
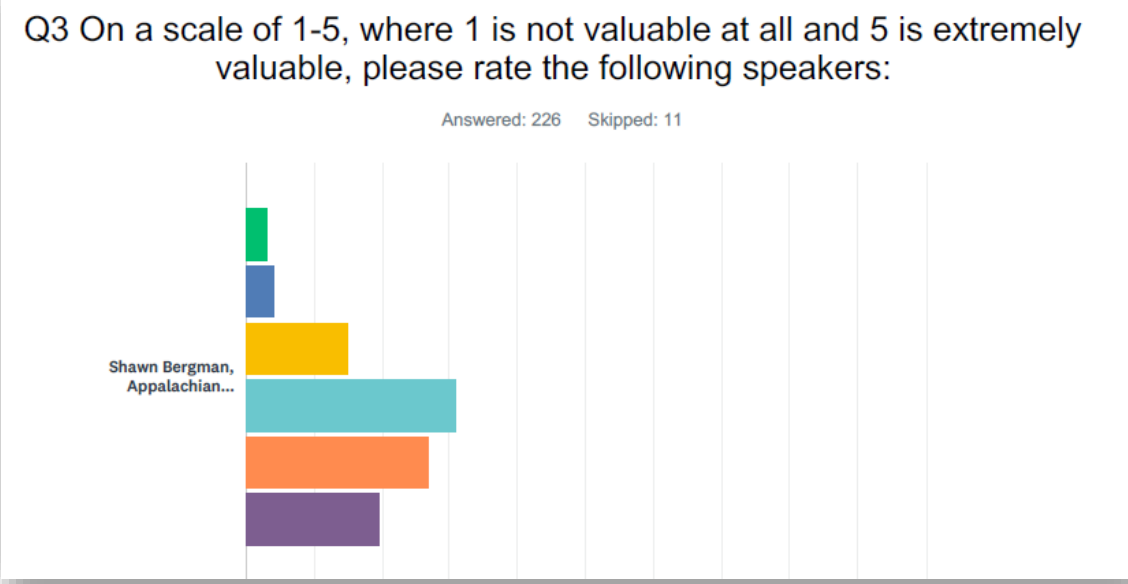
Noticeable increase
Less than 5% of students

Is That Service Working?

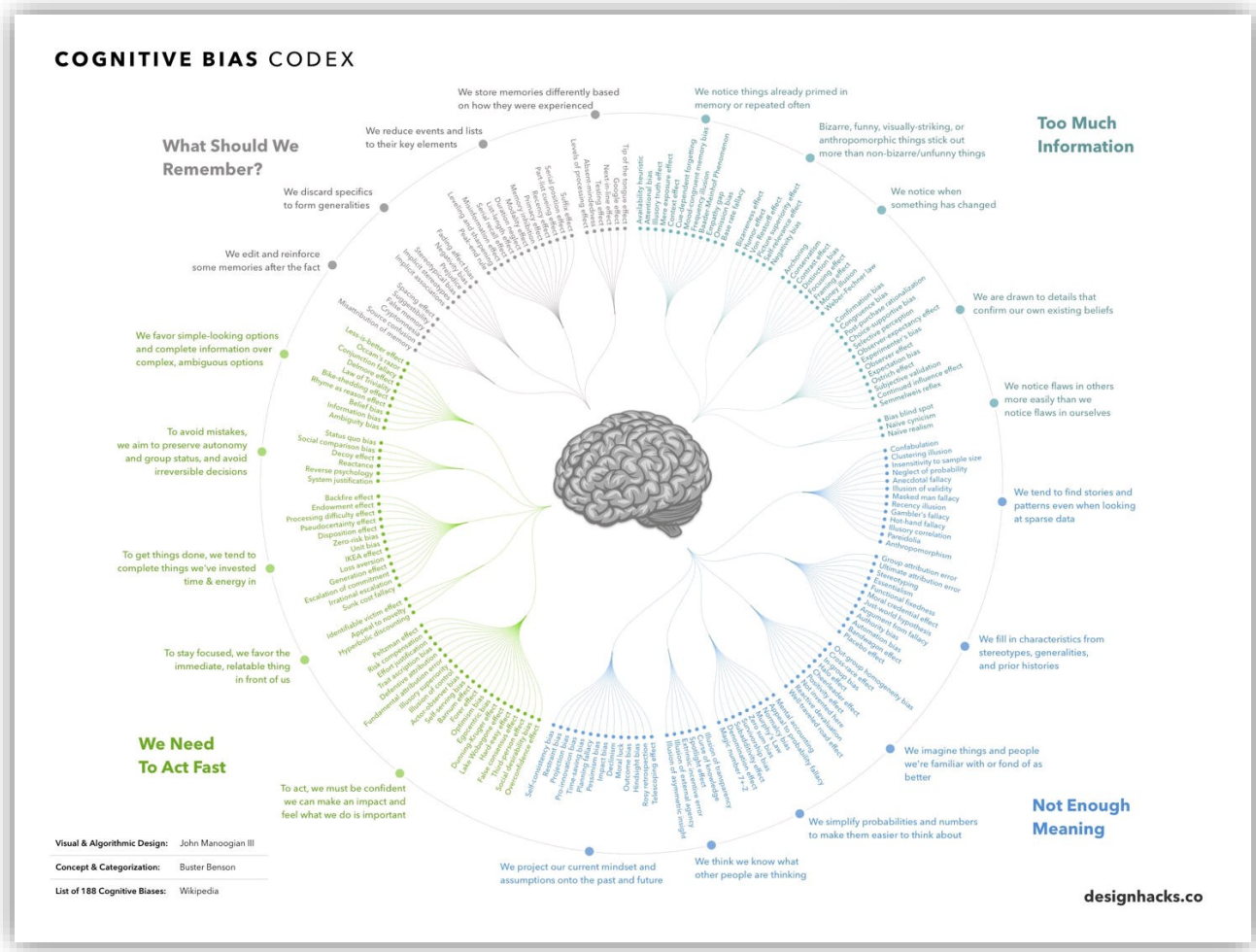
How much is enough (or too much)?



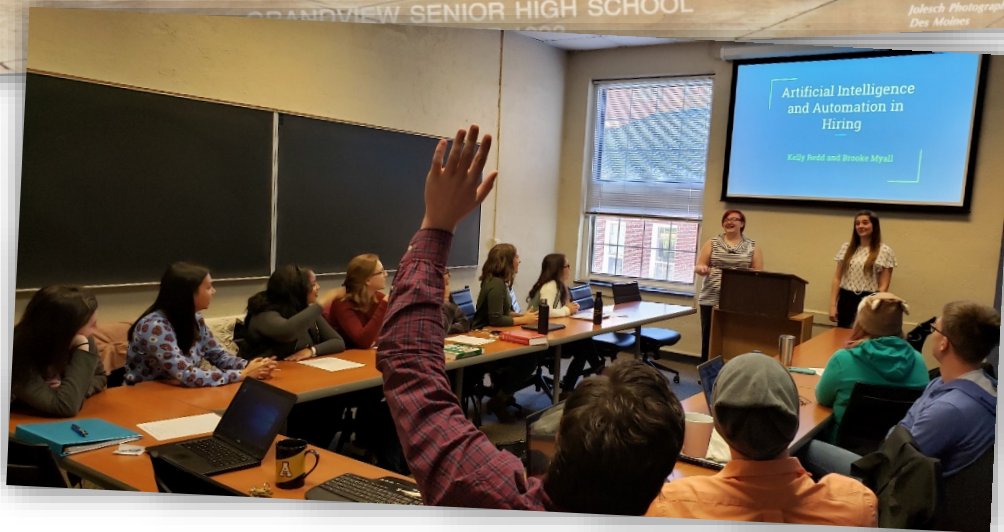
I Do Not Always Like It



Be Honest With Ourselves



Why Do We Do It?



Help Reach Our Goal

GRADUATE HIGH SCHOOL COLLEGE- AND CAREER-READY

TOO FEW HIGH SCHOOL STUDENTS ARE COLLEGE-READY

Year	Percentage
2015	38%
2020	42%
2025	47%

POSTSECONDARY

MANY STRUGGLE TO FINISH THEIR DEGREE

Year	Enrollment	Completion
2015	64%	28%
2020	67%	31%
2025	70%	34%

ADULTS WITH POSTSECONDARY DEGREE/CREDENTIALS

WE NEED TO DO MORE TO BE READY FOR 2025

Illinois needs a strong education system to ensure the economic vitality of the state and our competitiveness nationally and internationally. A strong education system is a fundamental right: every child deserves a high-quality education. As poverty has grown, we are at a critical juncture: the state must invest in its lowest-income and most vulnerable students to prepare the workforce of 2025 and remain competitive. As we show in this report, business as usual will not get us there. We will have to expand current strategies, adopt new ones, hold ourselves accountable and partner with communities to reach our goals for 2025.

Advance Illinois provides this analysis to inform decision-makers at the state and local level. We believe there are three vital steps the state must take now:

- MAKE SURE THE NEEDIEST STUDENTS HAVE THE RESOURCES THEY NEED**
Fix our last-in-the-nation, inequitable K-12 funding formula
- FINISH THE BUILDING BLOCKS FOR OUR K-12 SYSTEM**
Foster a fair, clear and supportive system to report school performance and offer supports to help schools—and students—succeed
- RECOGNIZE AND CELEBRATE COLLABORATIVE EFFORTS OF COMMUNITIES, AND ENCOURAGE OTHERS TO JOIN**
Share models that inspire investment in and expansion of community-driven change

In the next two years, we hope to report real progress toward the 60 by 25 goal. Let's come together to make sure Illinois is on the fast track to educational success by 2025.

Where Are We Again?

1

Evidence-Base
Practices
and
Analytics

2

It is easy to
fool yourself

3

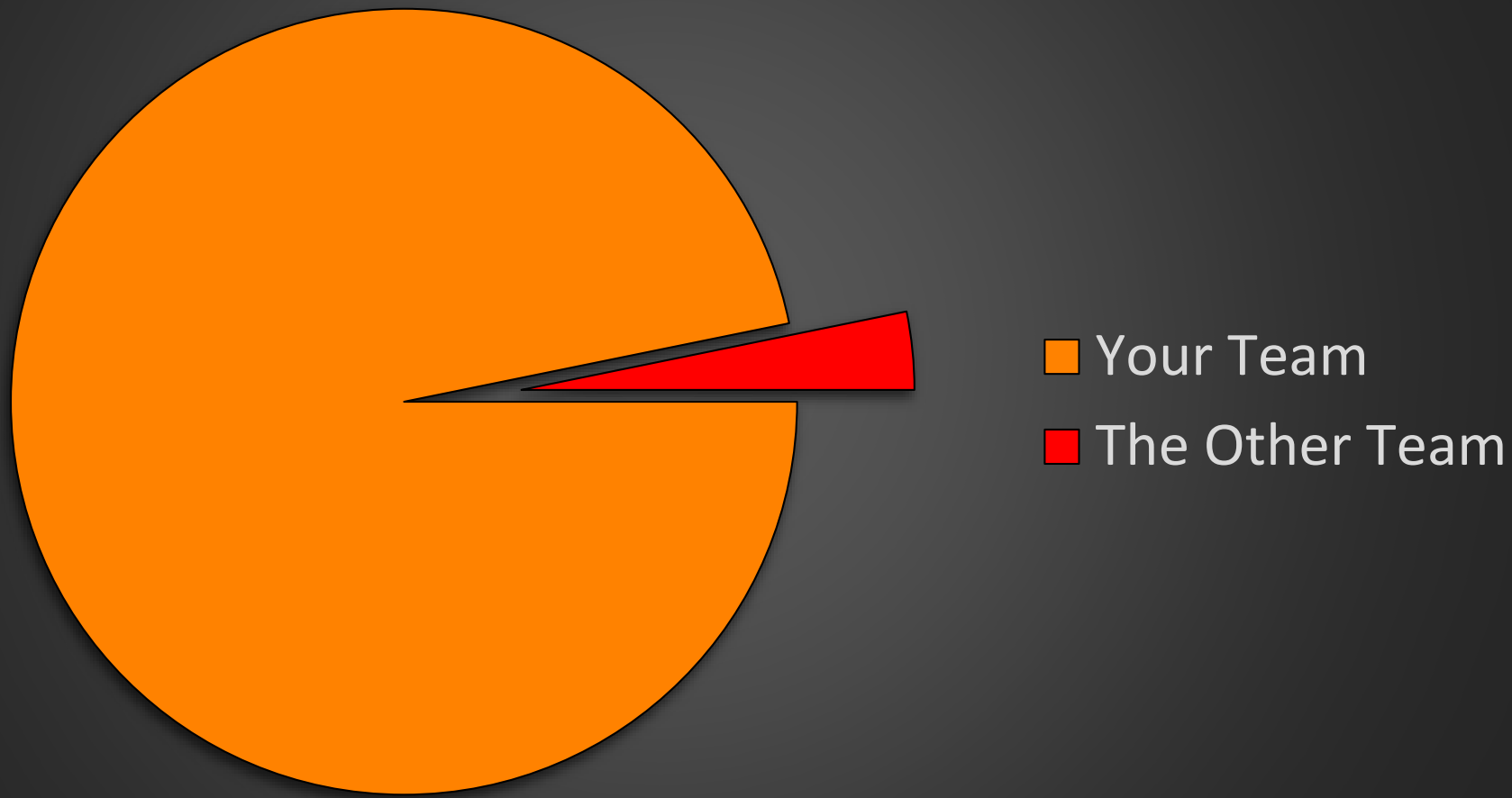
Important:
Relevant and
localized data

4

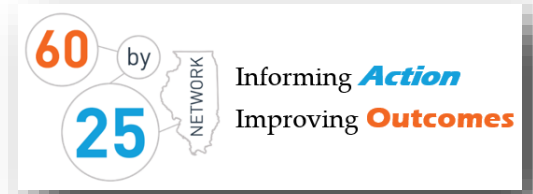
Small changes
=
Lasting impact

Analytics: Signal and Noise

Teams Refs Make Bad Calls Against



Research and Analytics: The Signal and the Noise



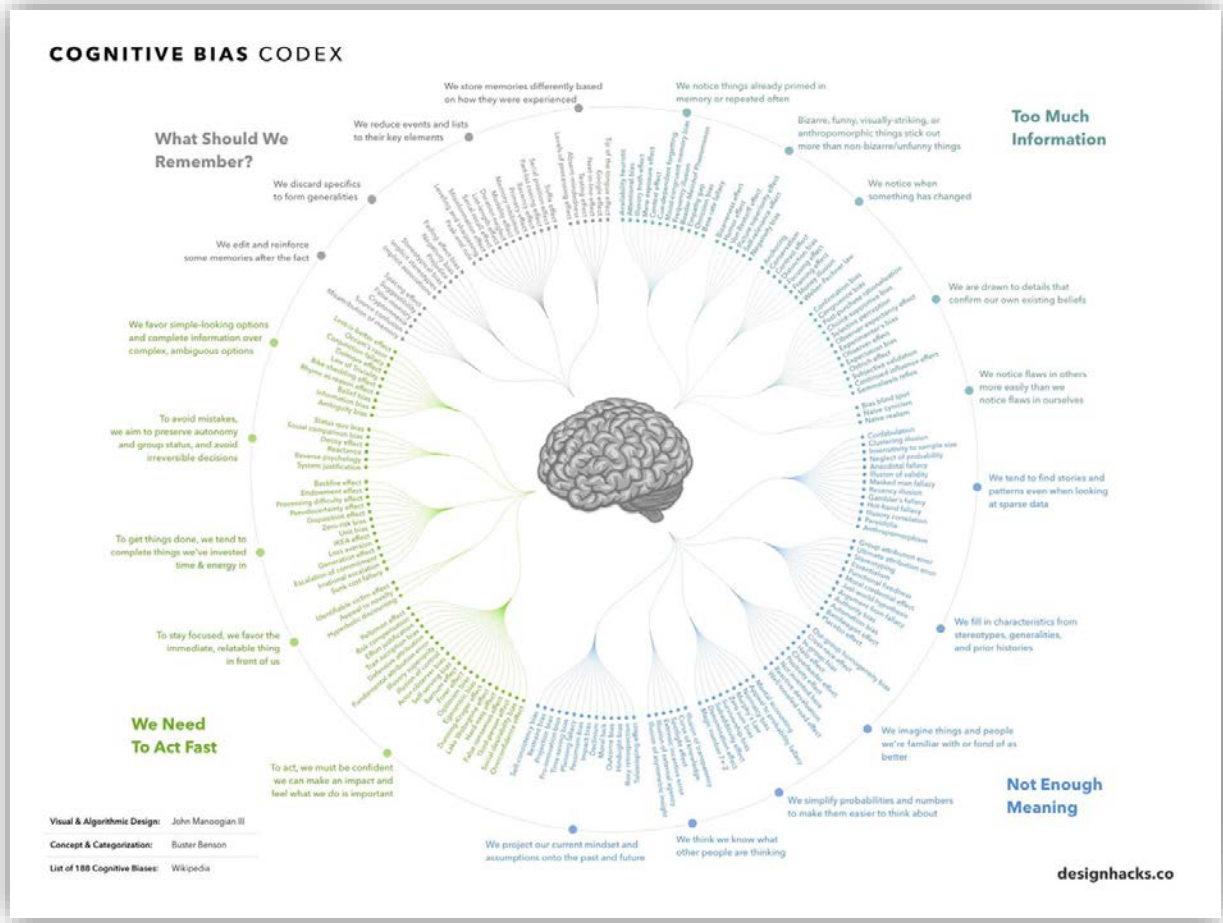
Referee Analytics: Bias in Major College Football Officiating

Rhett Brymer & Tim R. Holcomb
Miami University
Oxford, Ohio, USA 45056
brymerra@miamioh.edu
holcomtr@miamioh.edu

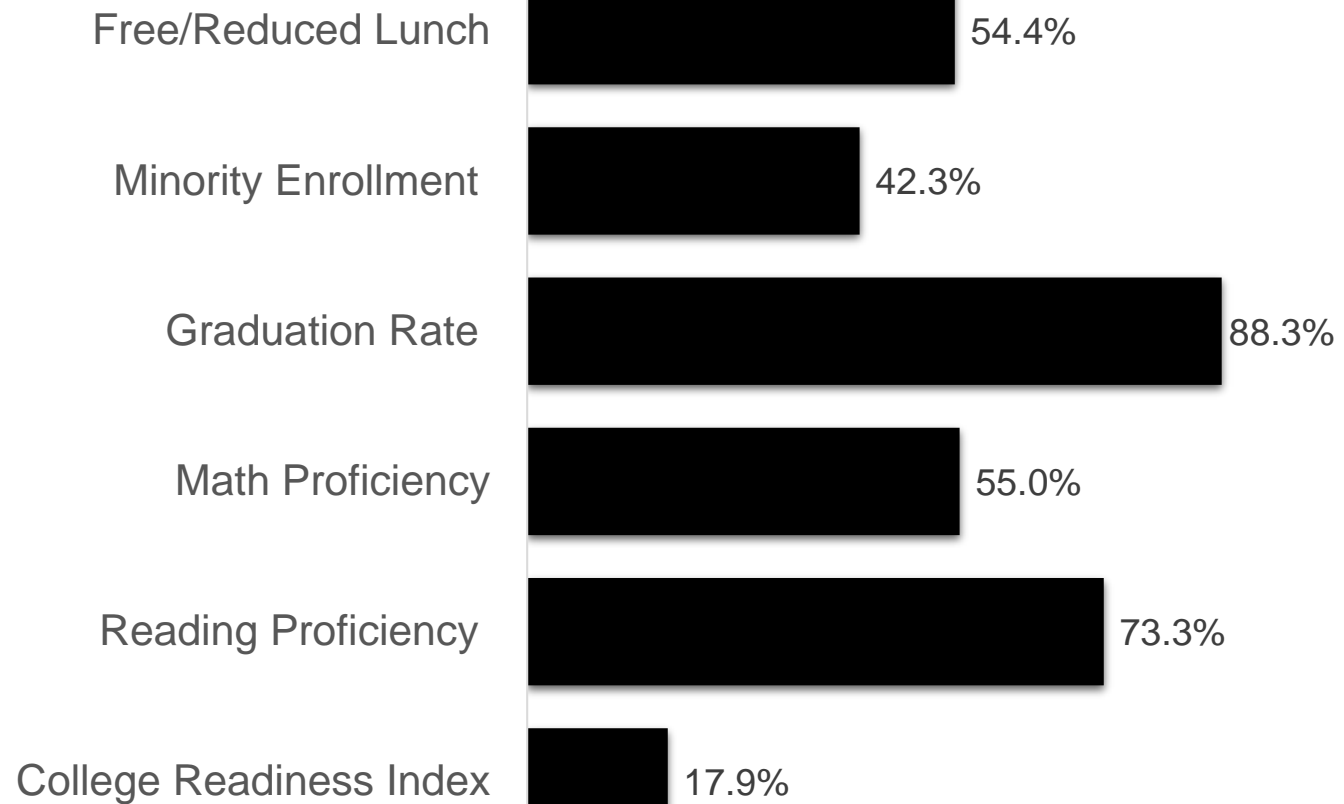
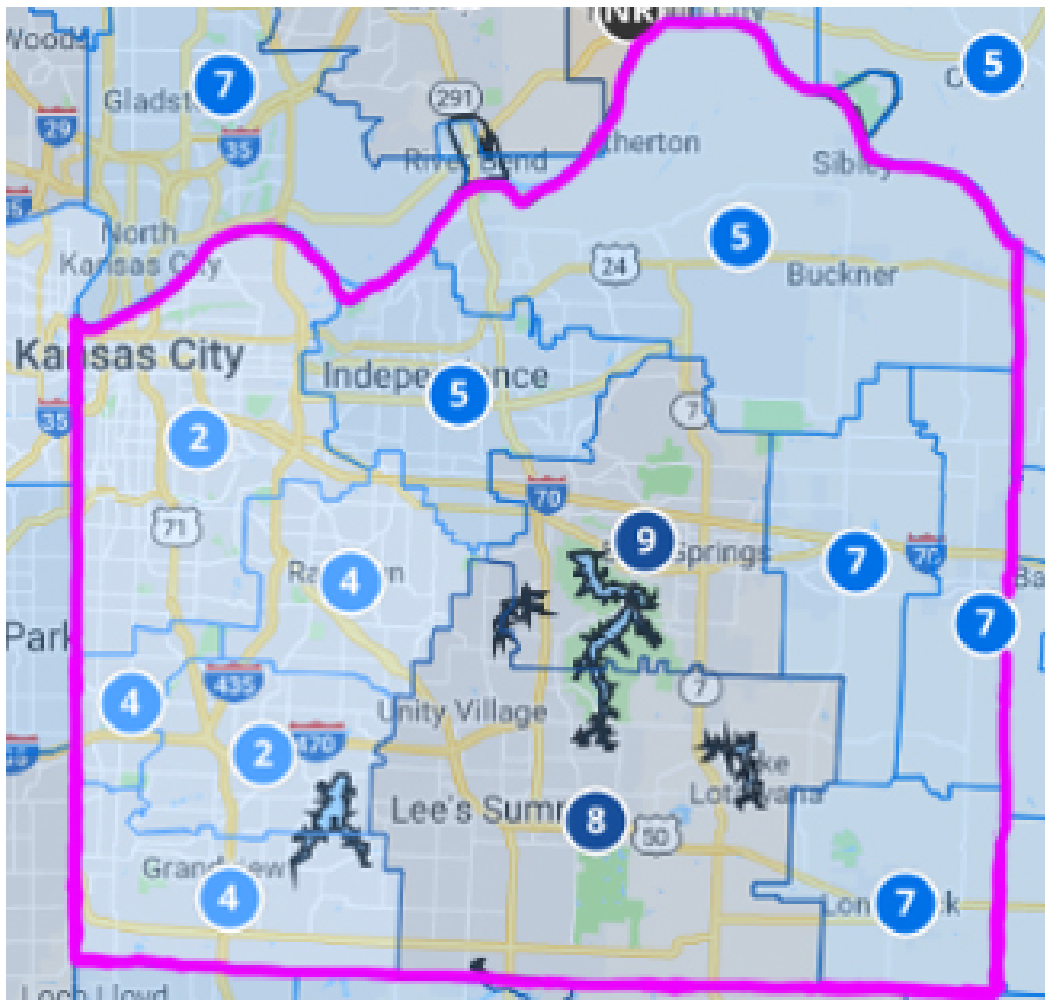
Ryan M. Rodenberg
Florida State University
Tallahassee, Florida, USA 32306
rrodenberg@fsu.edu

- No evidence of bias in favor of top-rated teams
- Found bias in favor of underdogs
 - Bias varied by conference

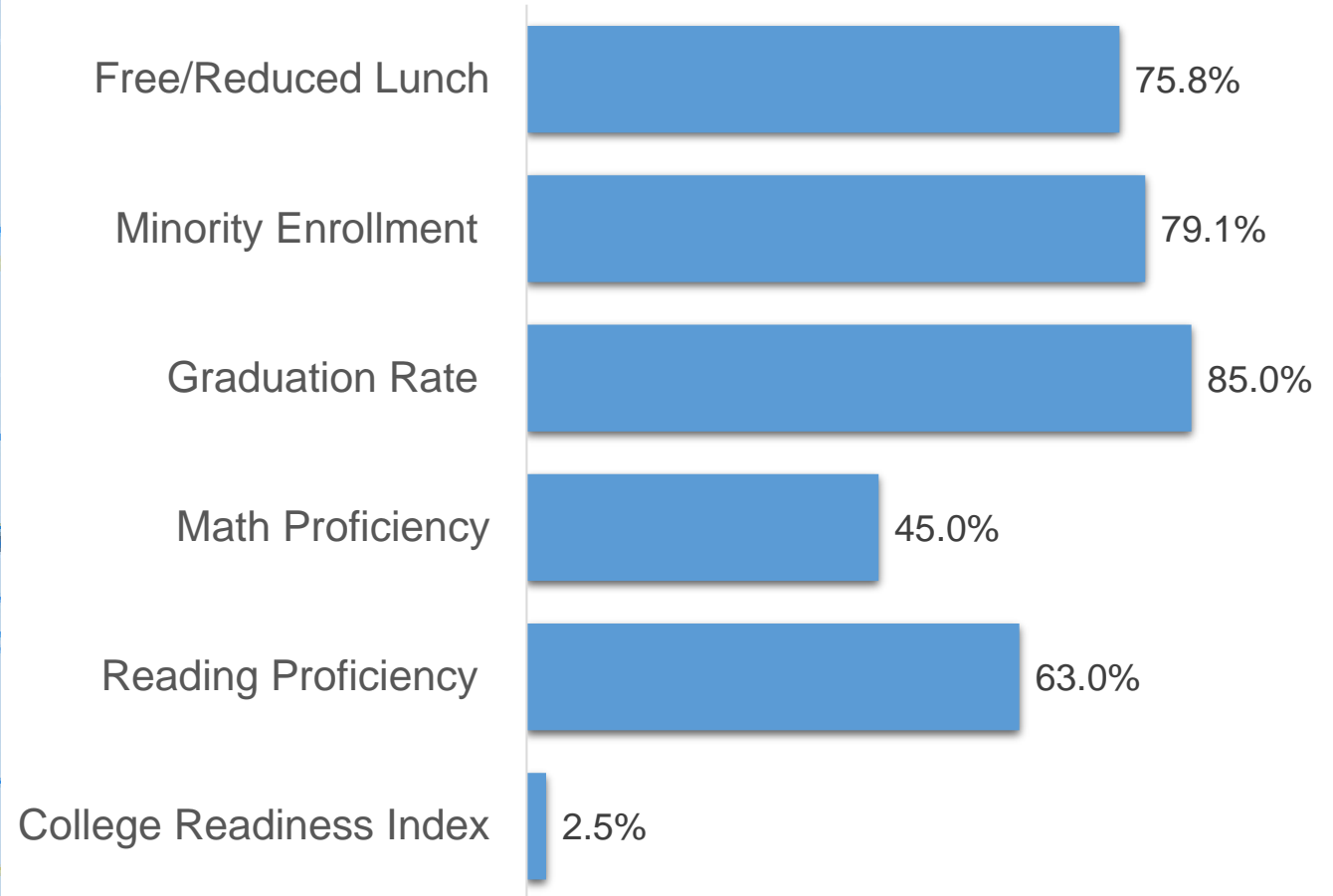
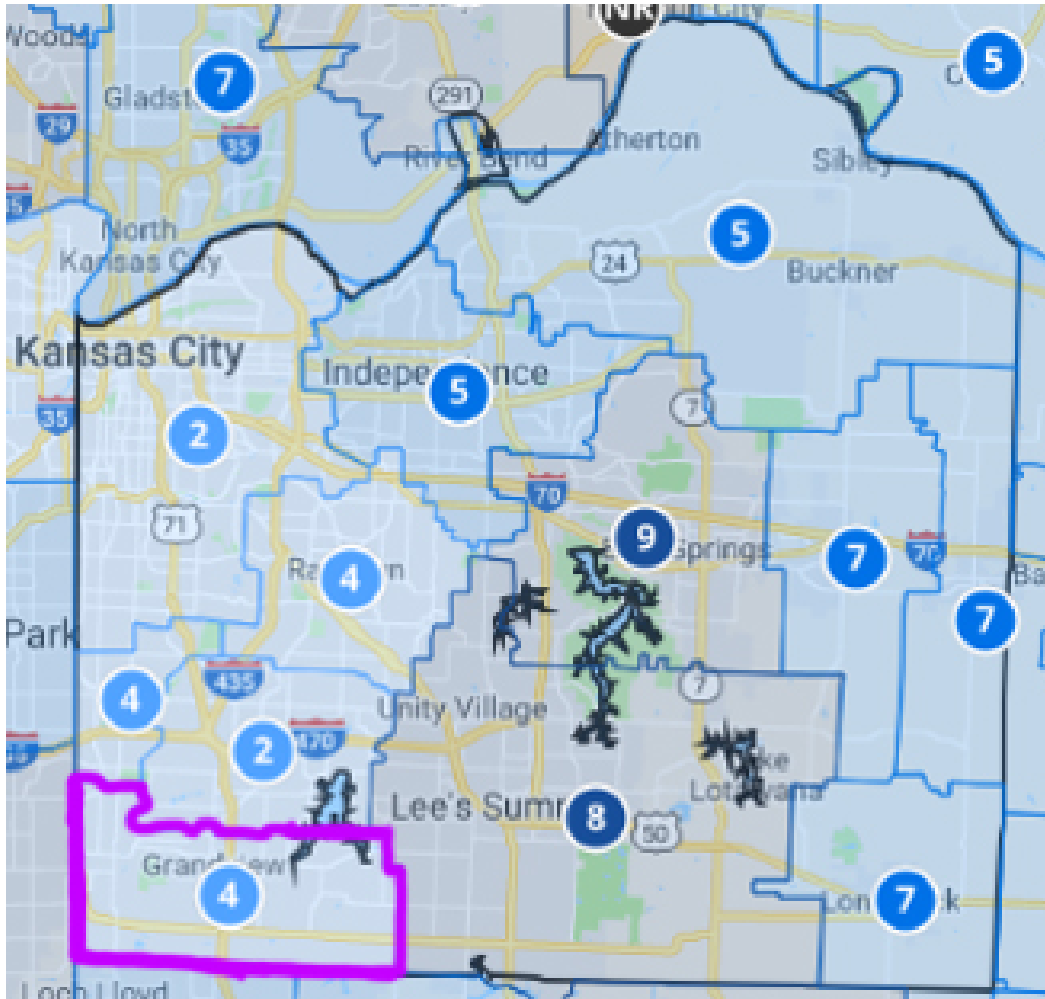
Discounting Bias



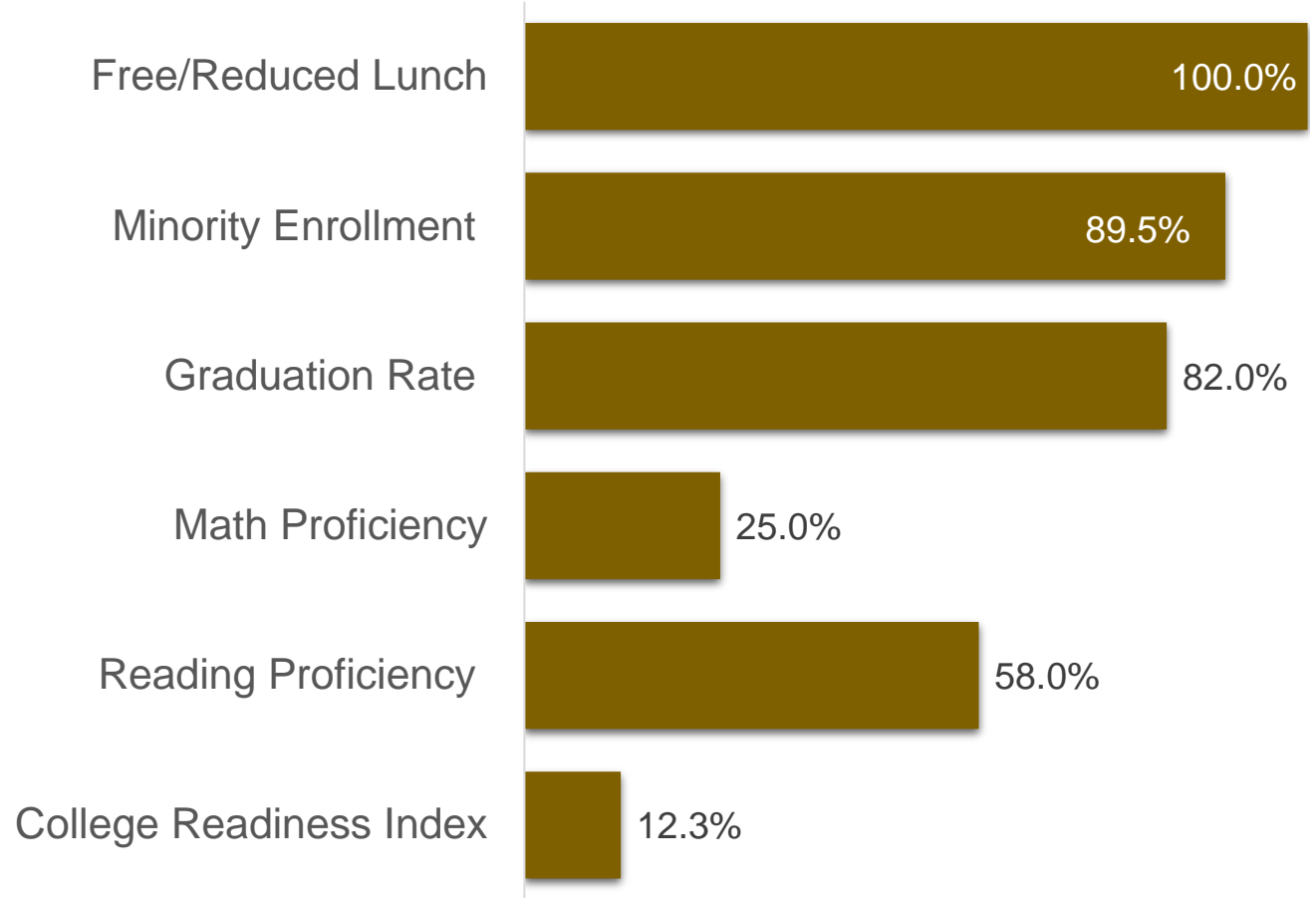
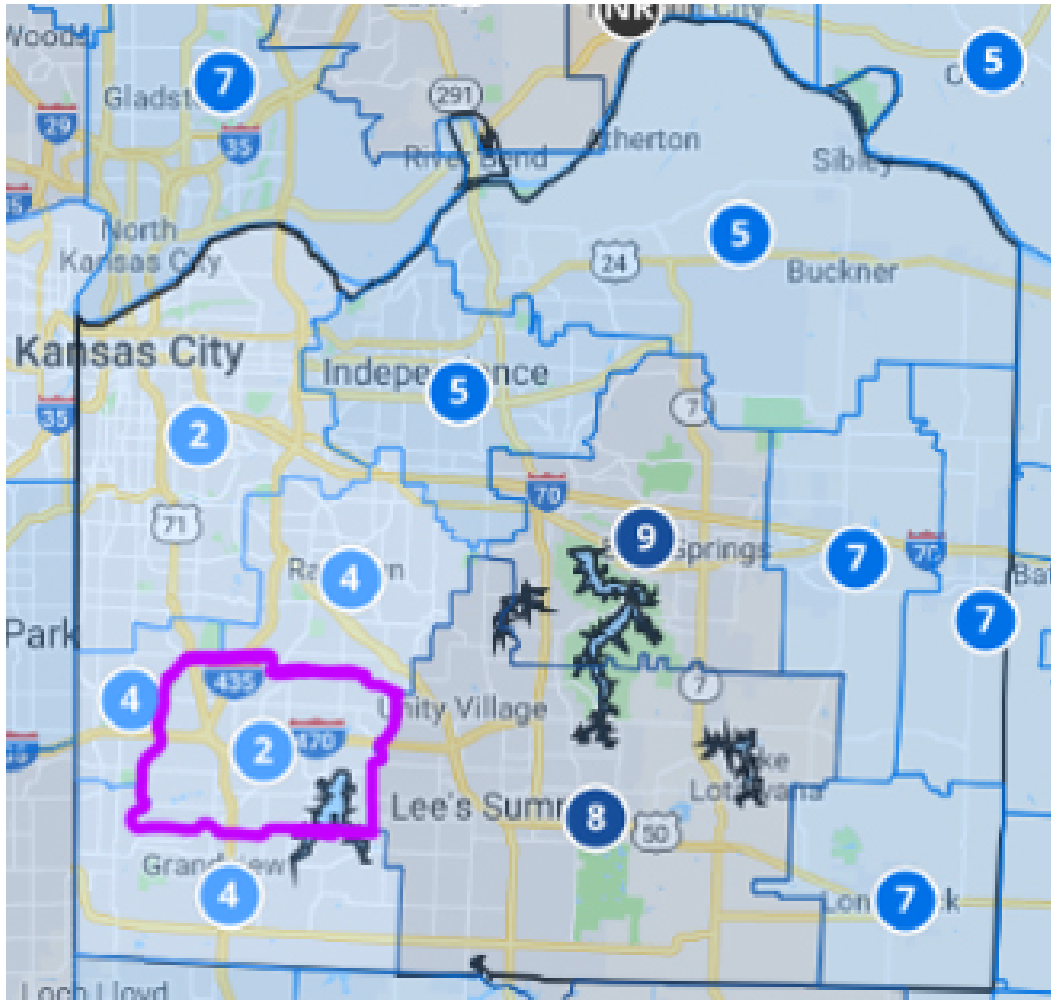
Jackson County Schools



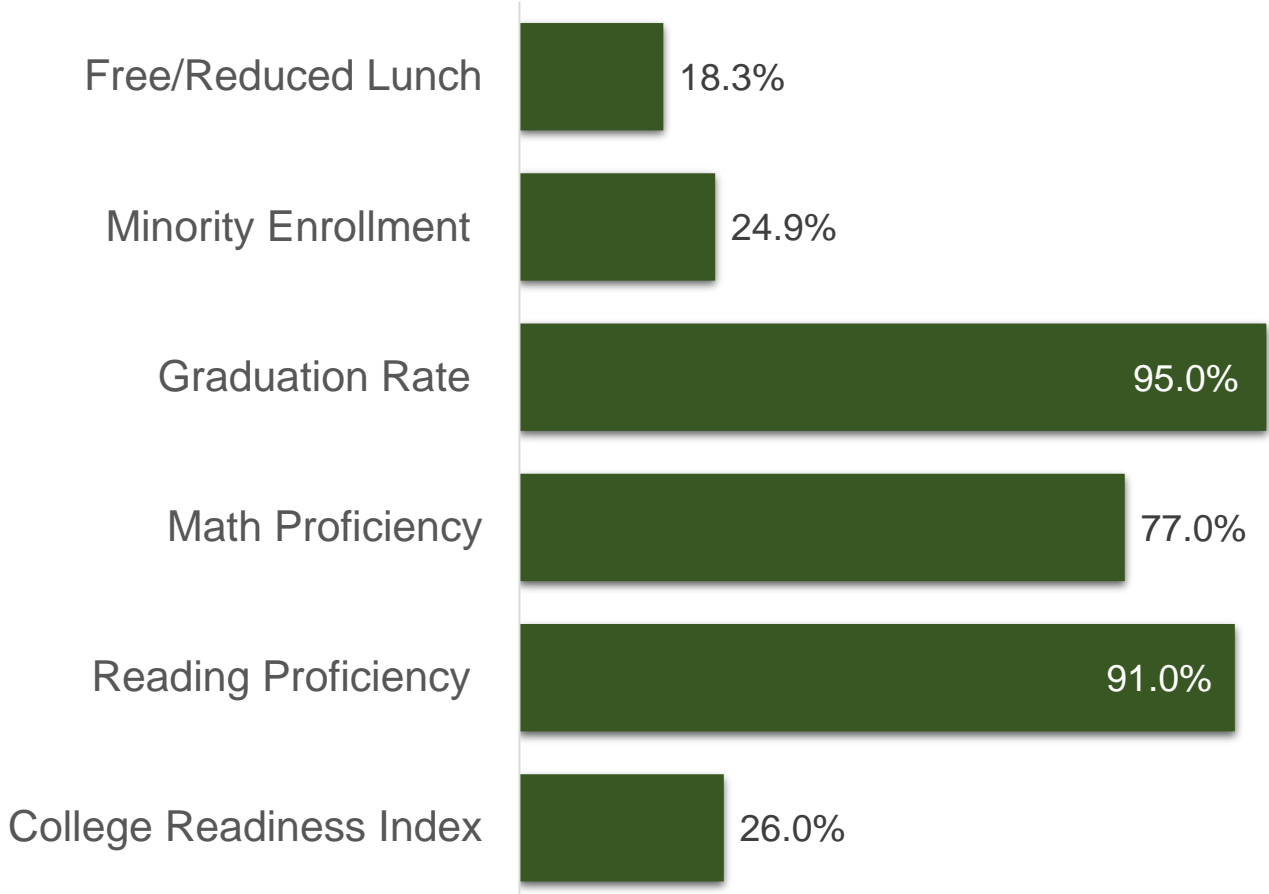
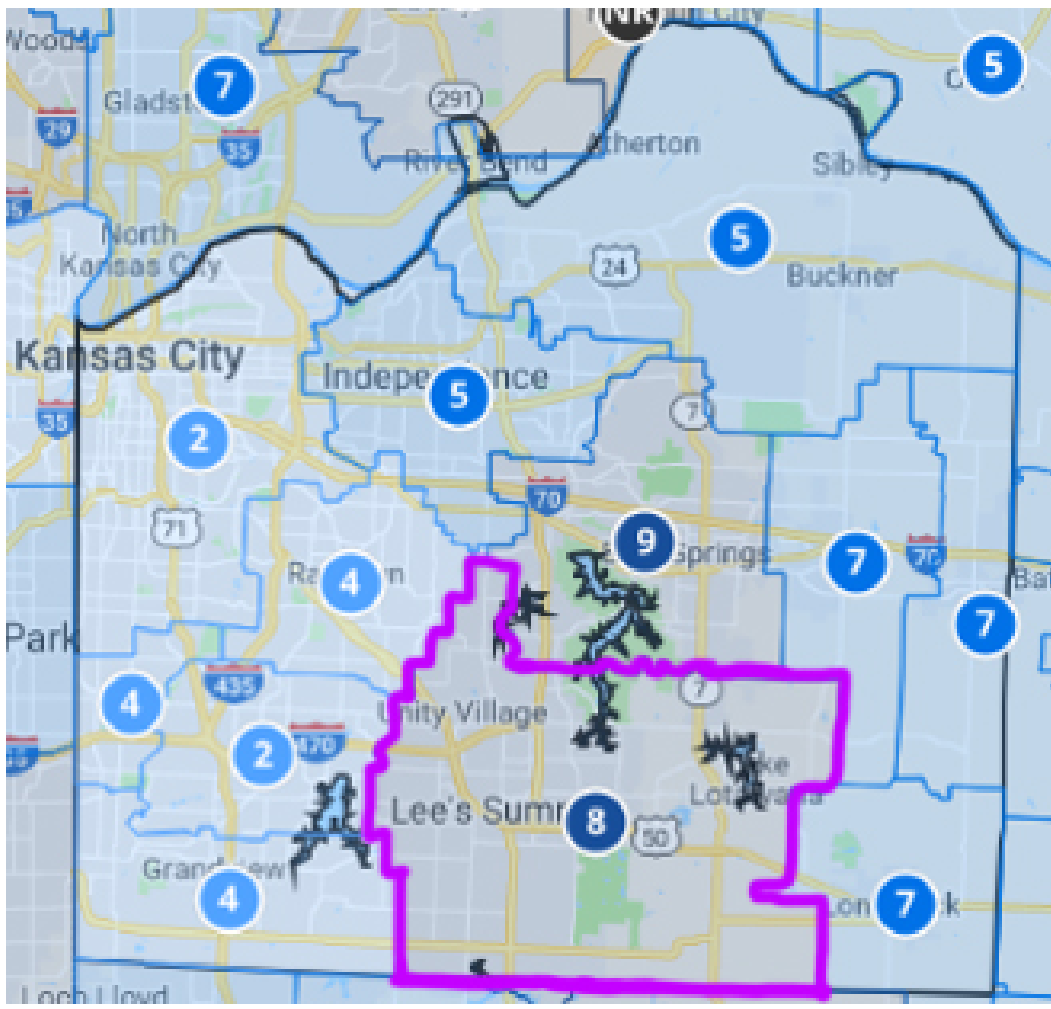
Grandview



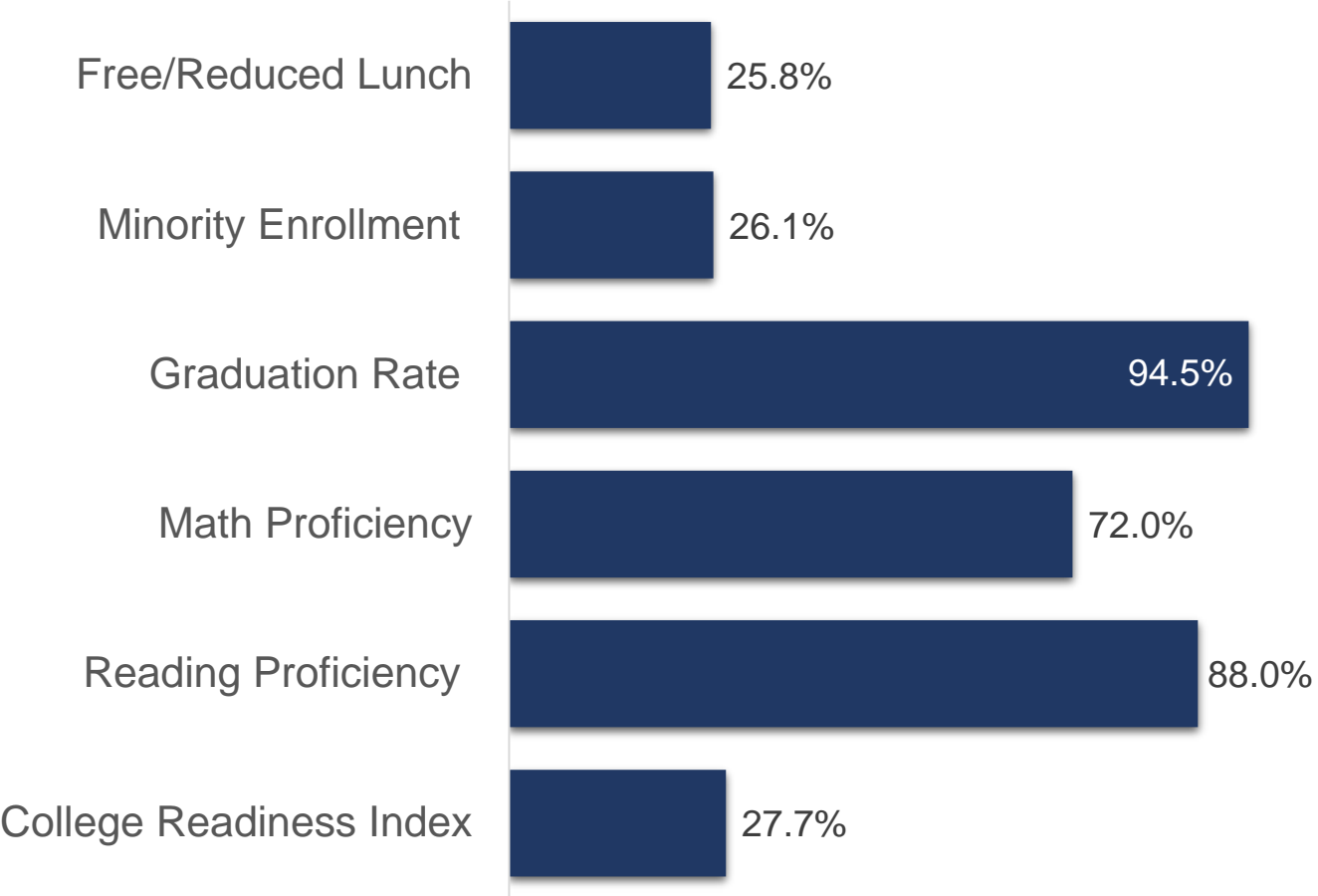
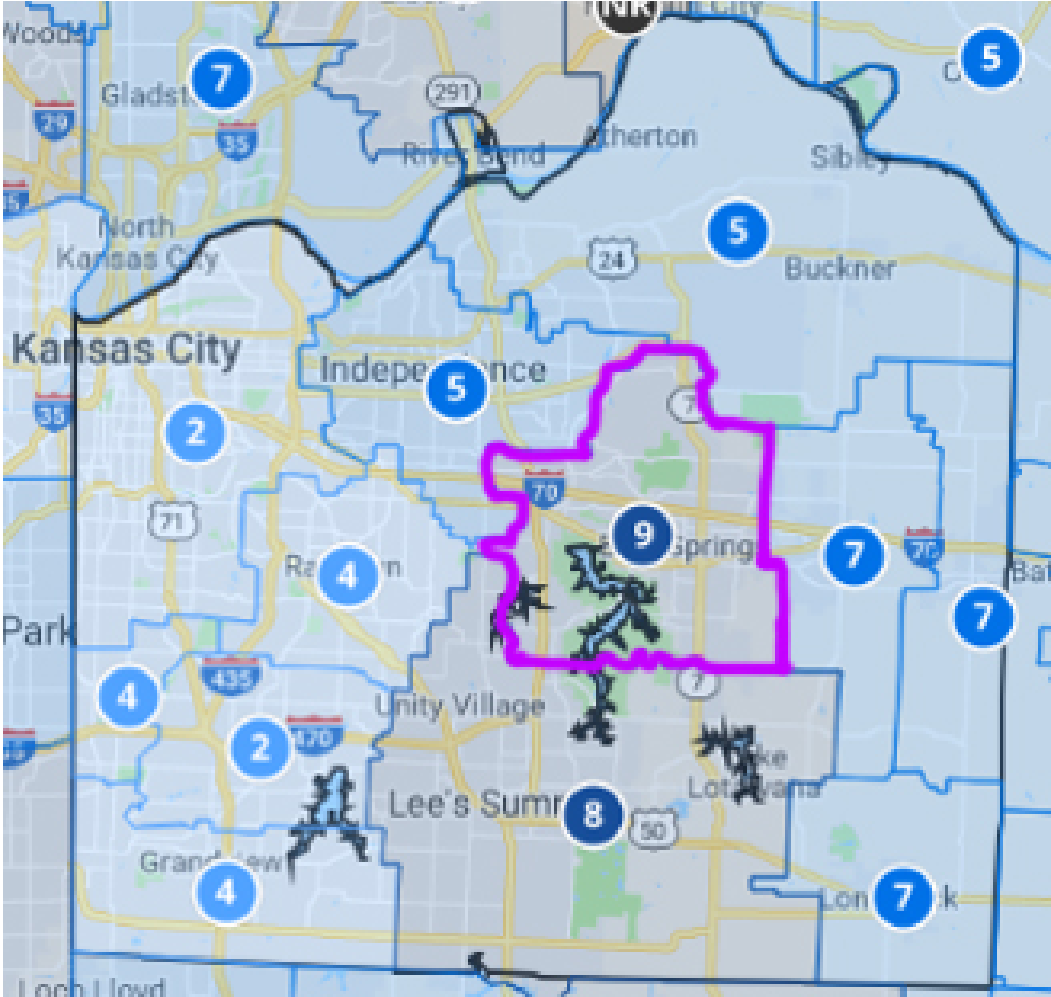
Hickman Mills



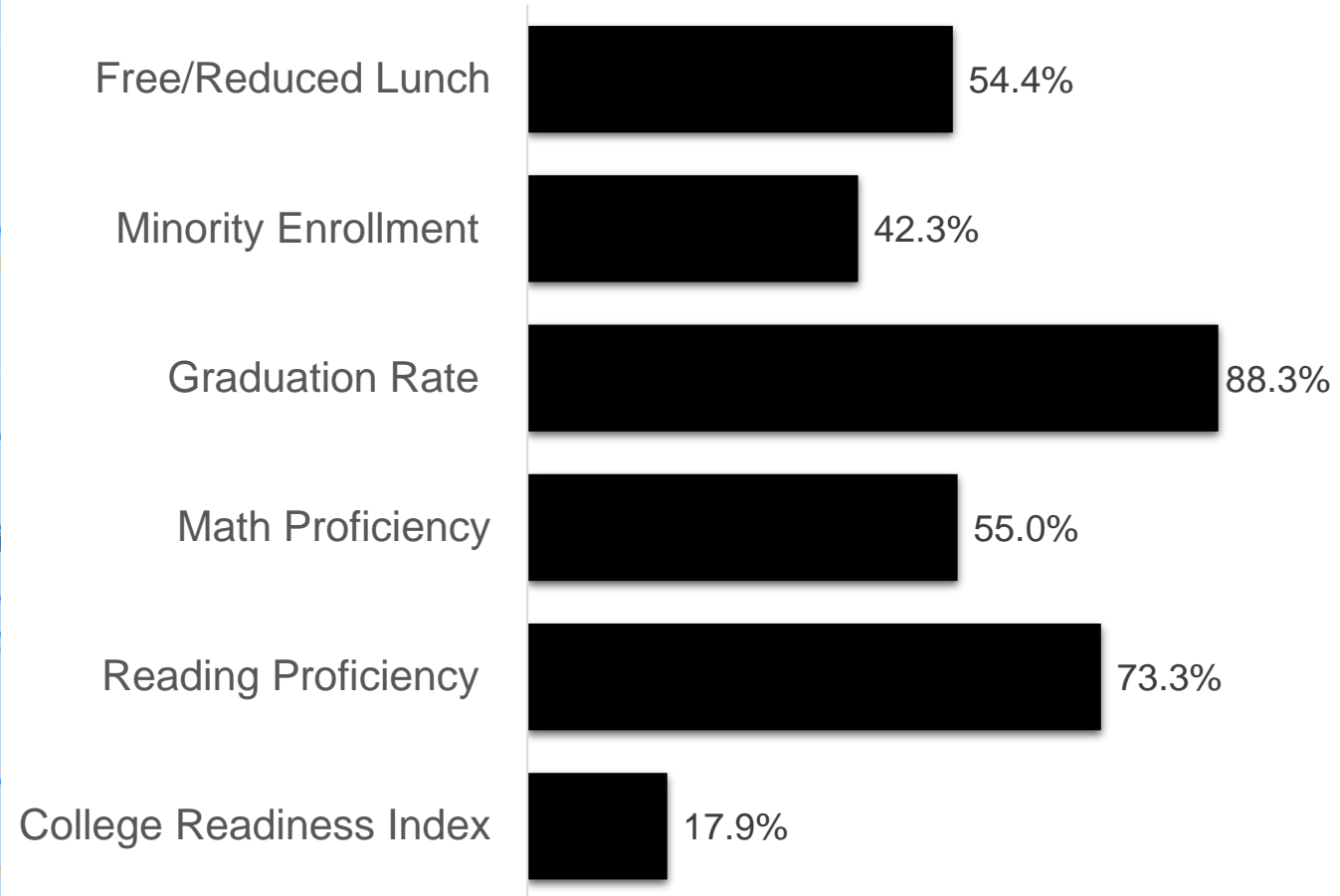
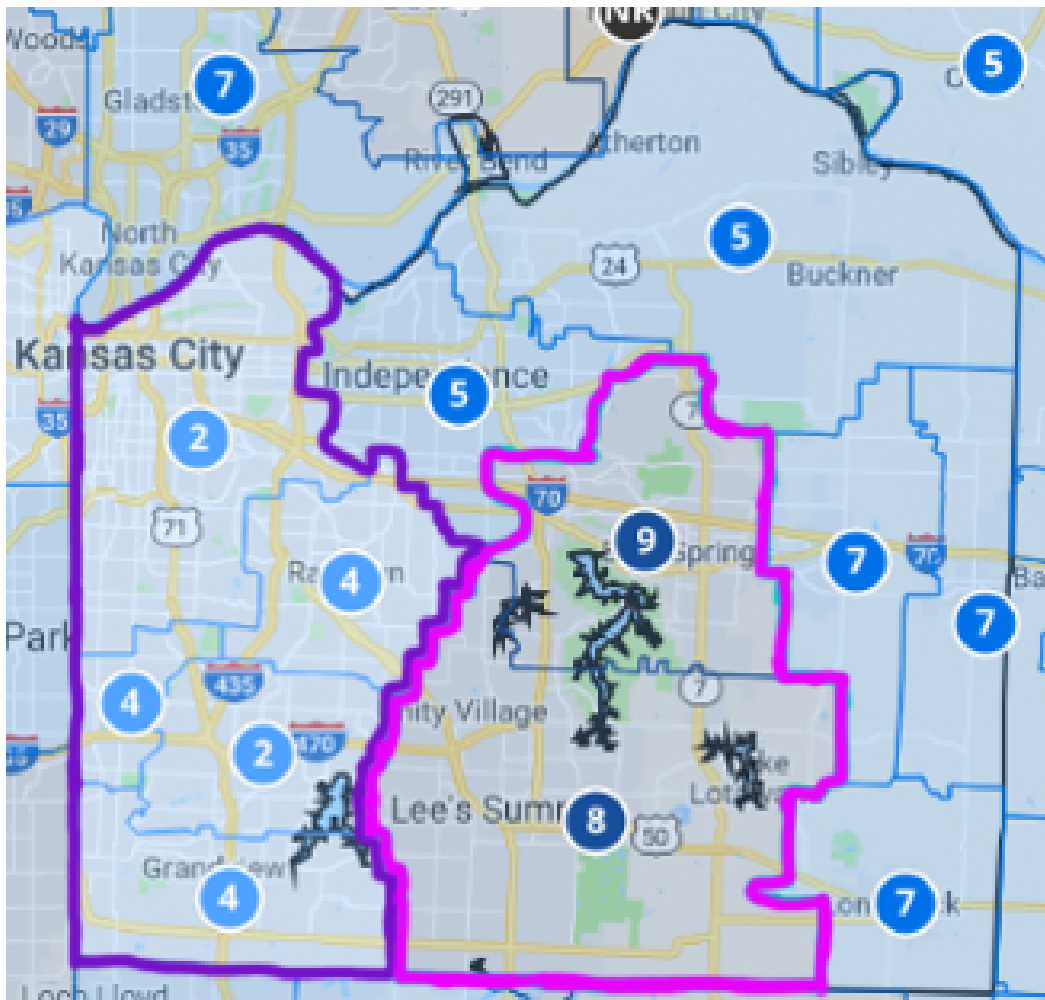
Lee's Summit



Blue Springs



Jackson County Schools



Advance Illinois

CURRENT LEADERSHIP COMMUNITIES

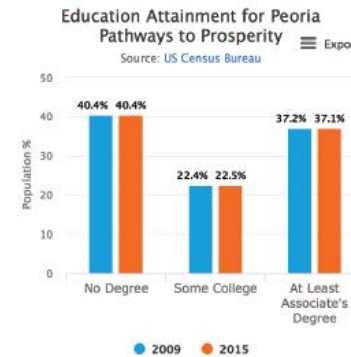
- Aurora Regional Pathways to Prosperity
- East Side Aligned
- Enlace Chicago
- Health Professions Education Consortium (HPEC) of Lake County
- Making Opportunities Real for Everyone (MORE) in the Mississippi and Rock River Regions
- McLean County
- NCI/Starved Rock Region
- Northwest Educational Council for Student Success (NECSS)
- OAI/Rich Township District 227
- Peoria Pathways to Prosperity
- Rockford
- Sangamon County Continuum of Learning
- Thrive Chicago
- Vermilion County

ILLINOIS
 60 BY 25 NETWORK

RESOURCES

- Community and Workforce
 - Community Characteristics
 - Workforce Characteristics
 - Job Listings
 - Commuter Information
- Early Childhood
- Elementary Through 9th Grade
- College Readiness
- Career Readiness

EDUCATION ATTAINMENT



FOCUS INDICATORS



Where Are We Again?

1

Evidence-Base
Practices
and
Analytics

2

It is easy to
fool yourself

3

Important:
Relevant and
localized data

4

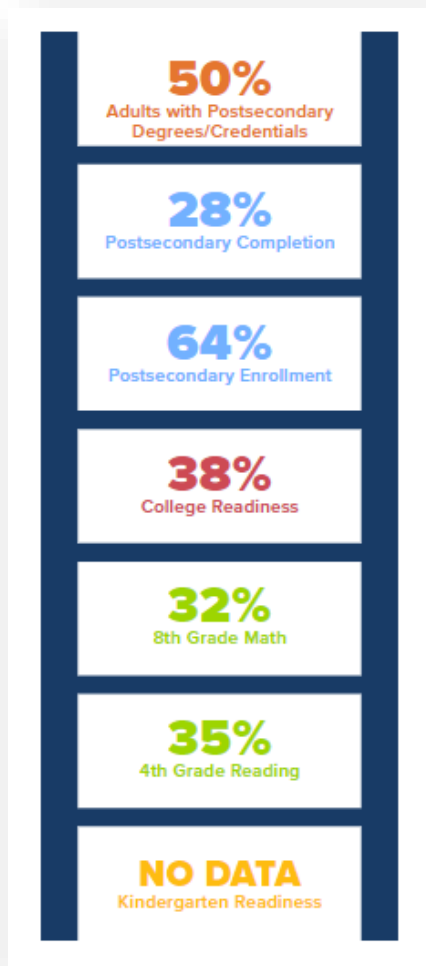
Small changes
=
Lasting impact

What Can I Do?



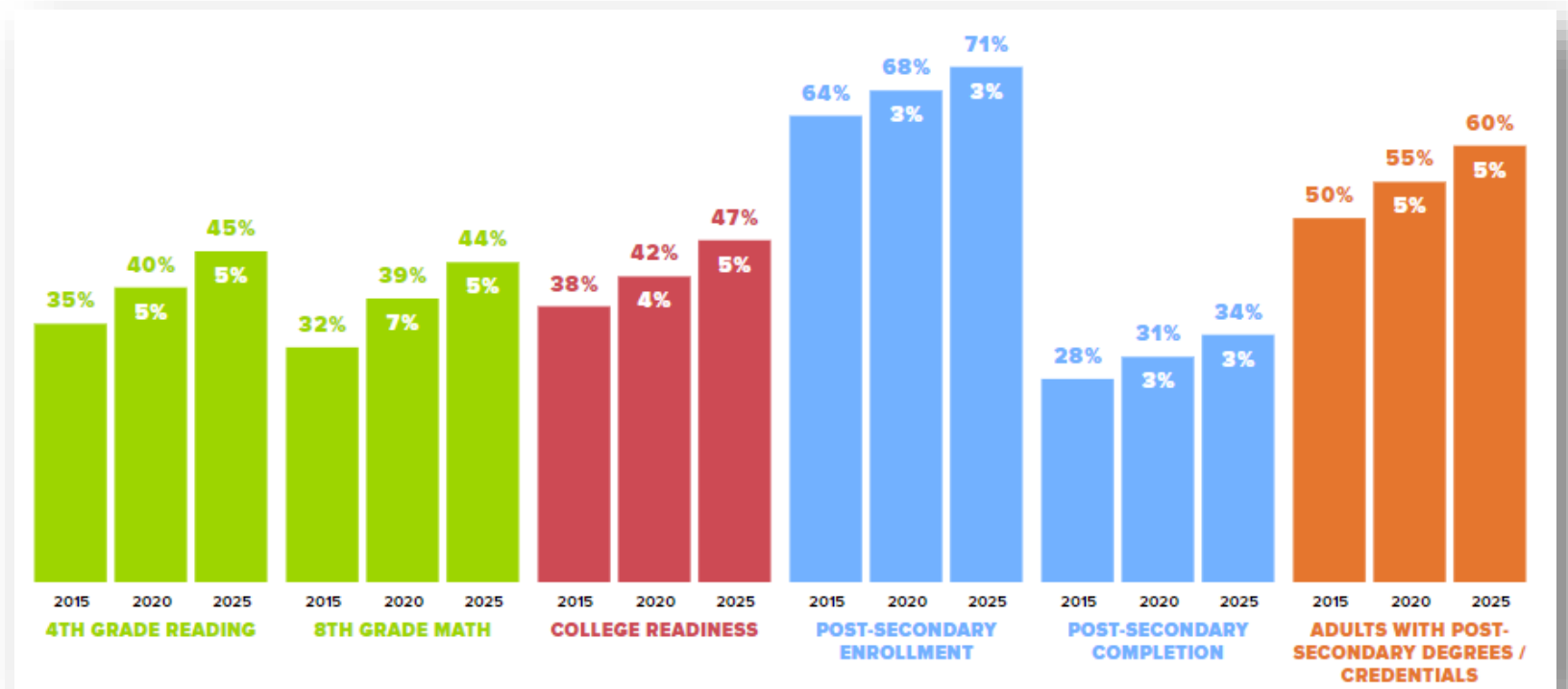
- Be concrete and specific with what you want to examine
- Make small changes that will have lasting impact
- Pilot study and proof of concepts
 - Gain buy-in
 - Build trust

Advance Illinois: 60 x 25



KEY ACADEMIC MILESTONES

WHERE ILLINOIS STANDS TODAY ON THE STEPS TO 60 BY 25



Where Have We Been?

1

Evidence-Base
Practices
and
Analytics

2

It is easy to
fool yourself

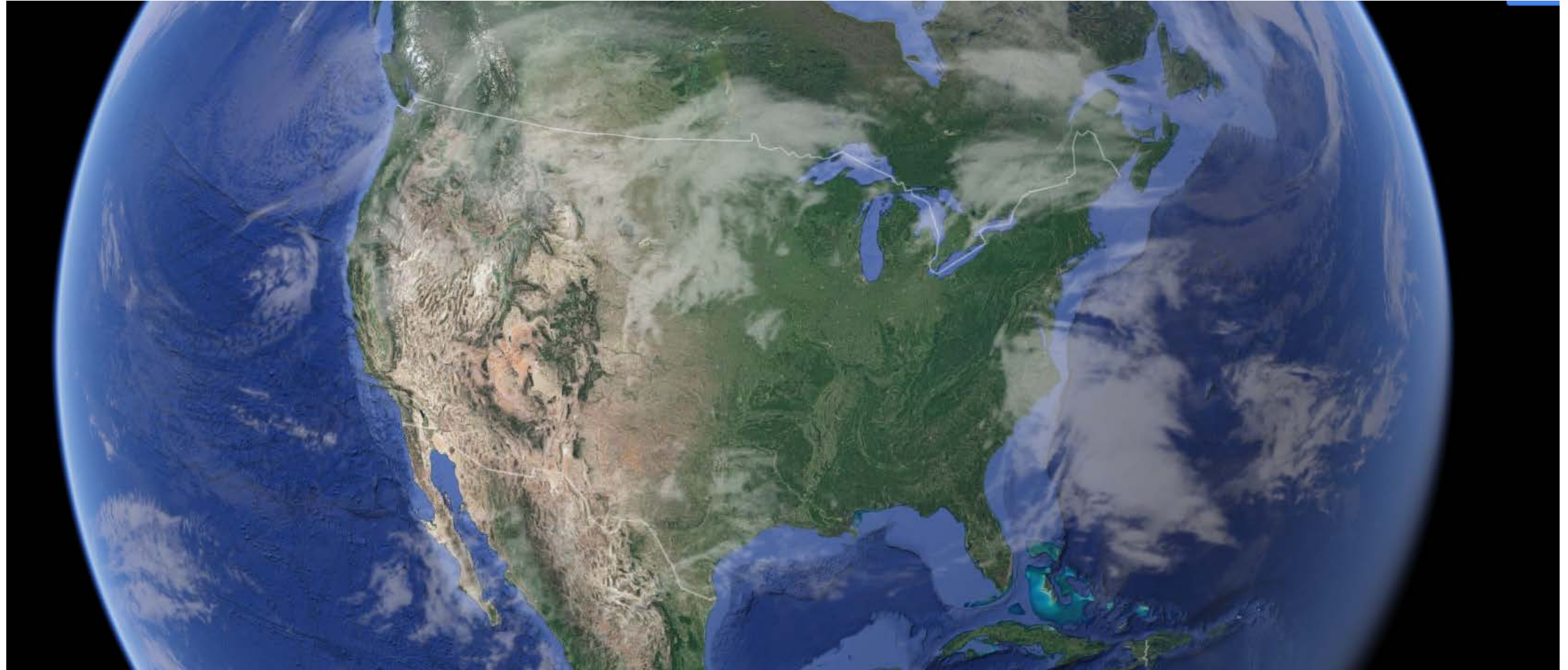
3

Important:
Relevant and
localized data

4

Small changes
=
Lasting impact

Local to Global



Thank You!!

Shawn Bergman, Ph.D.

Professor and Director of Professional Education

Appalachian State University

bergmans@appstate.edu

Director of Research

Vela Institute

shawn.bergman@velainstitute.org