COMPLETE COLLEGE AMERICA

Game Changers - Colorado

Dhanfu E. Elston, Ph.D. ***(dah-nee-foo), Vice President***
Katie Zaback, Senior Director of Research
Bruce Vandal, Ph.D., ***Senior Vice President***

@BruceatCCA @DrElston @kzaback

@CompleteCollege

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COMPLETE COLLEGE AMERICA

Working with states to significantly **increase** the number of Americans with quality career **certificates or college degrees** and to **close attainment gaps** for traditionally underrepresented populations.

www.completecollege.org

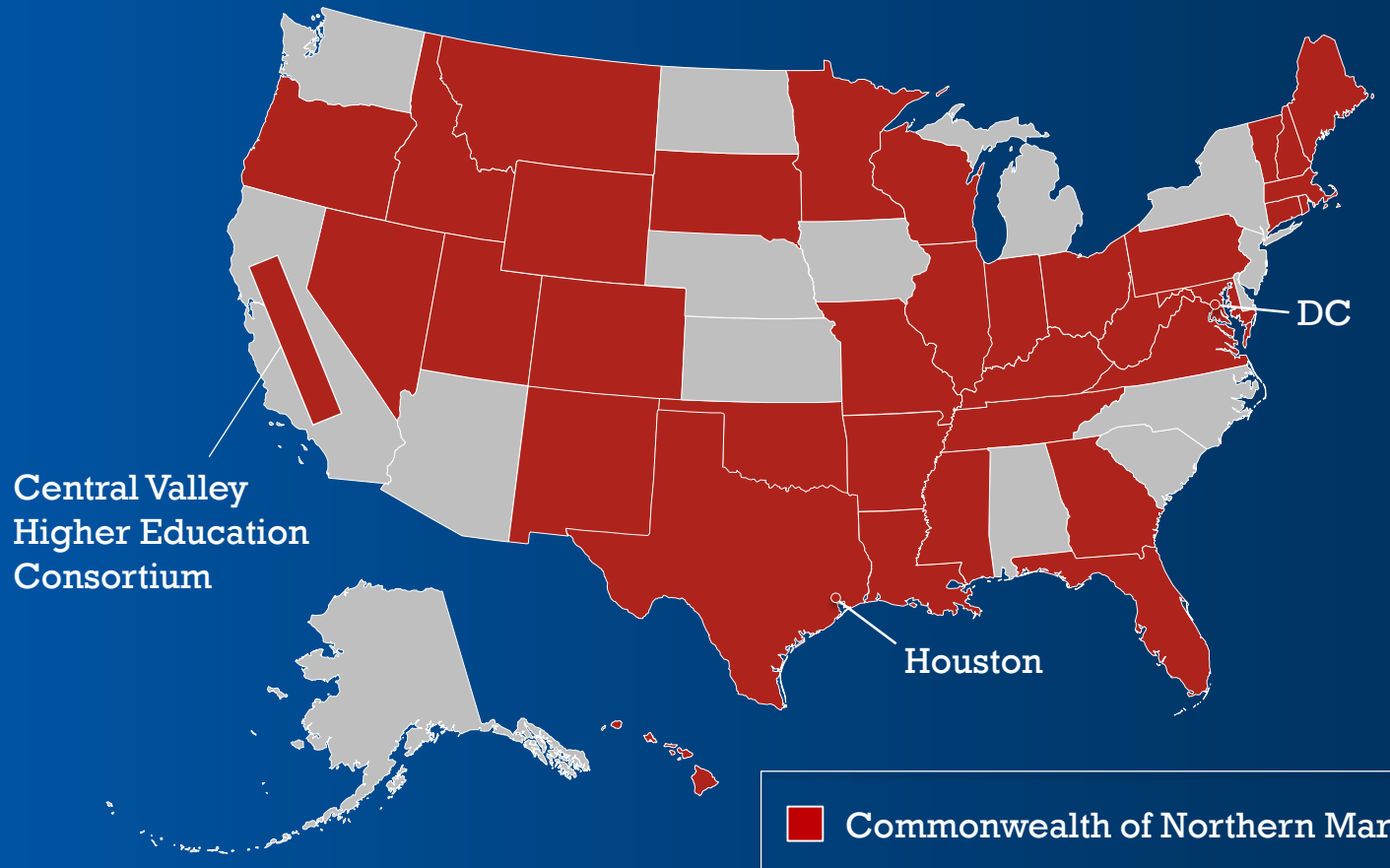
Our Approach

Work with states, systems and consortia to implement **evidence-based strategies at scale** to see double-digit gains in outcomes.

COMPLETE COLLEGE AMERICA

The Alliance

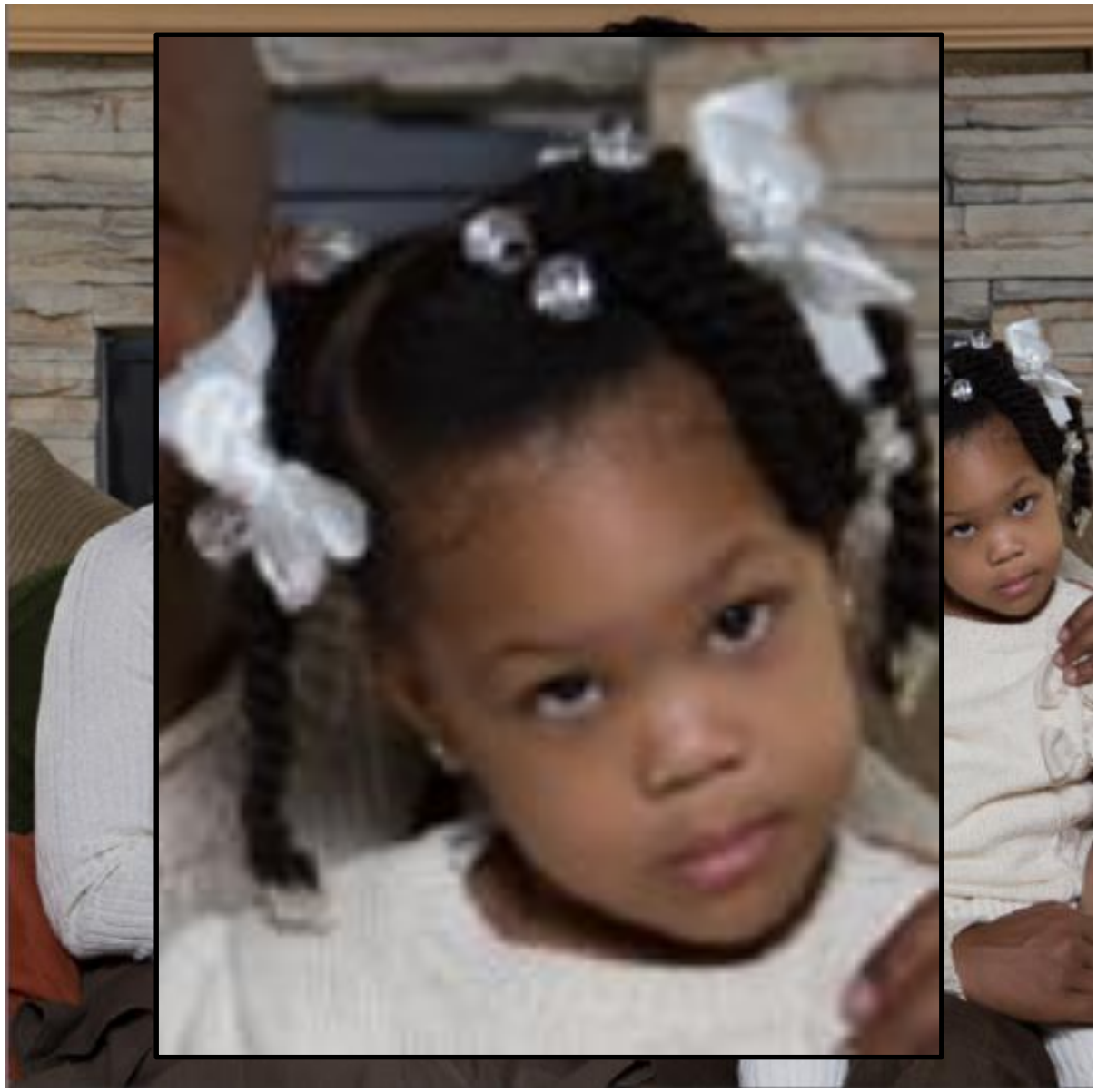
42

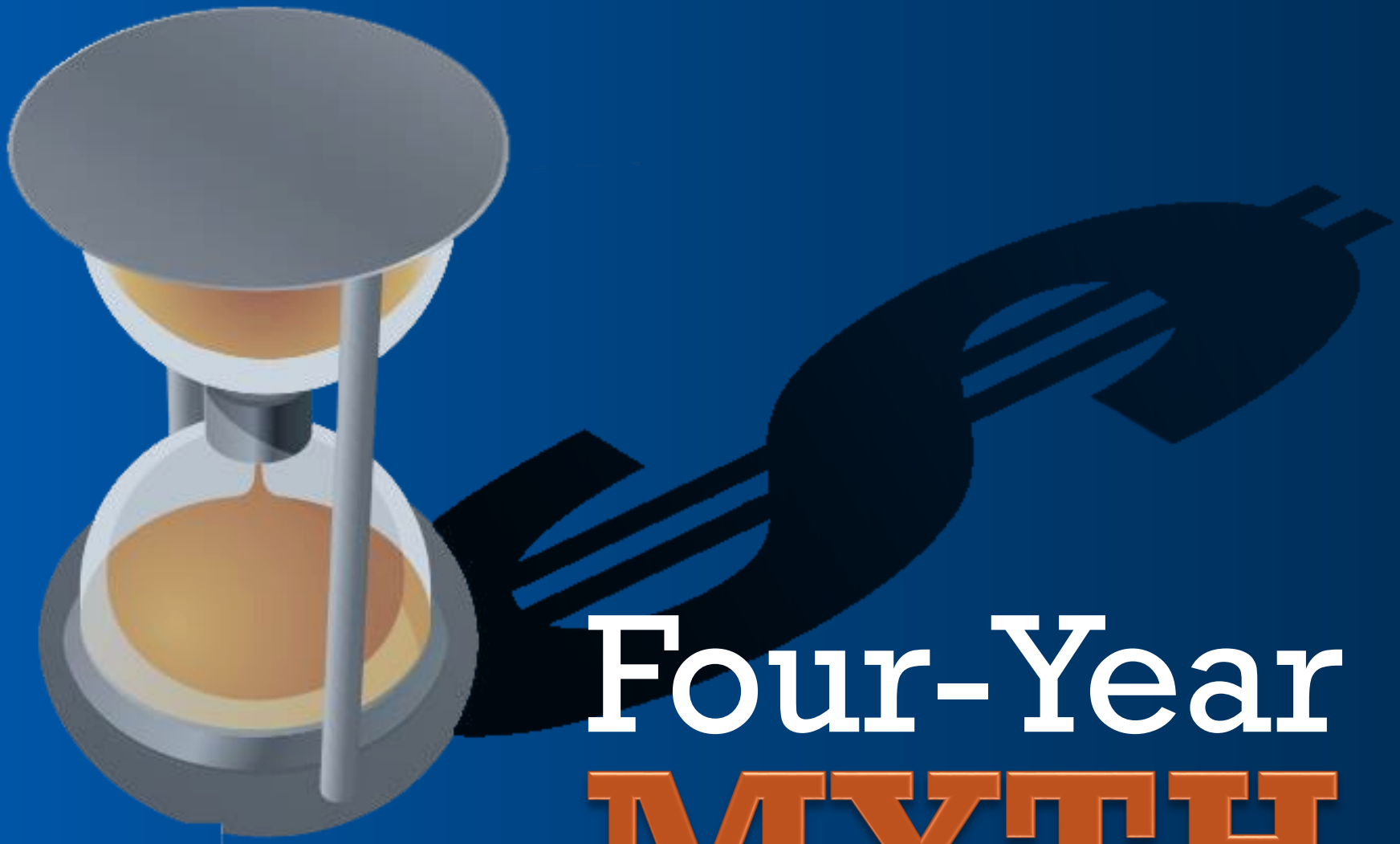


- Commonwealth of Northern Mariana Islands
- Puerto Rico
- Thurgood Marshall College Fund Consortium

50 of 580+

public four-year institutions



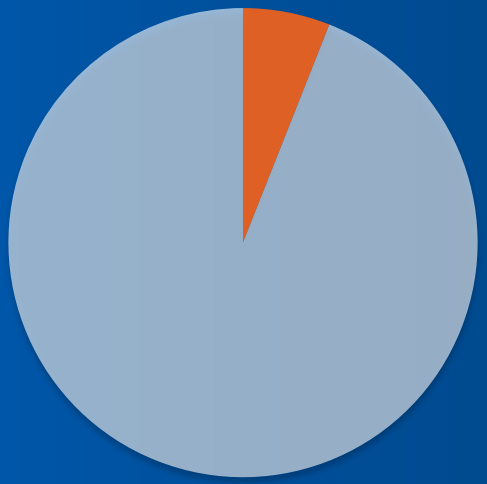


Four-Year MYTH

On-Time Graduation Rates

(Colorado Full-Time Students)

2-Year Associate

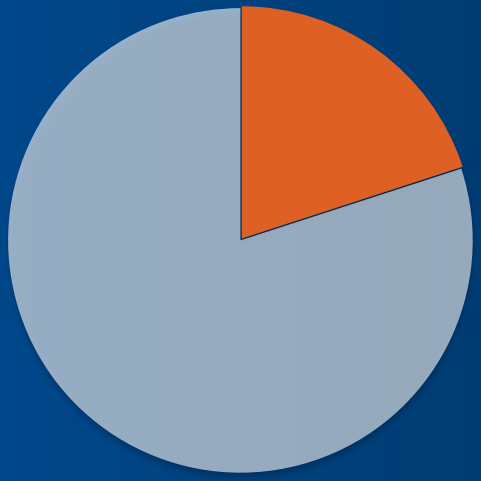


6%

ON TIME

Fall 2010 Cohort

4-Year Bachelor's Other

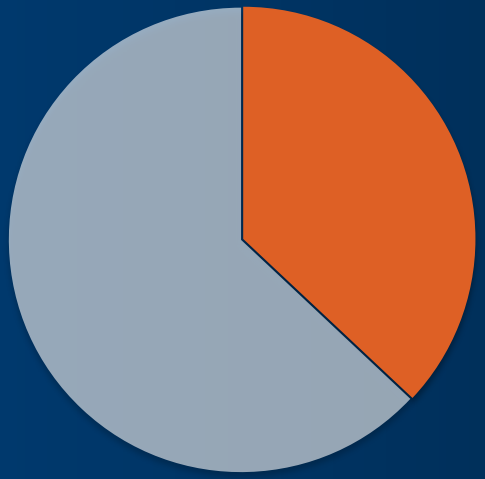


20%

ON TIME

Fall 2008 Cohort

4-Year Bachelor's Very High Research



37%

ON TIME

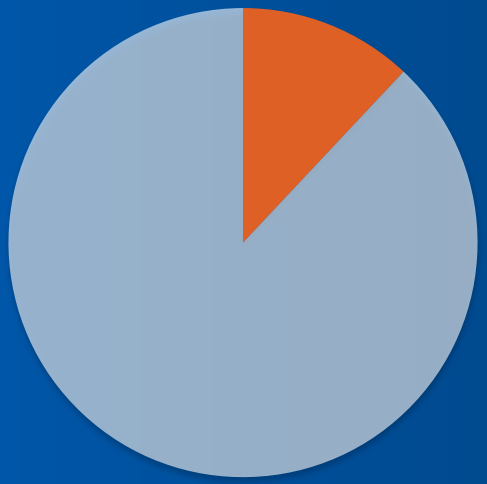
Fall 2008 Cohort

2016 Collection

150% Graduation Rates

(Colorado Full-Time Students)

2-Year Associate

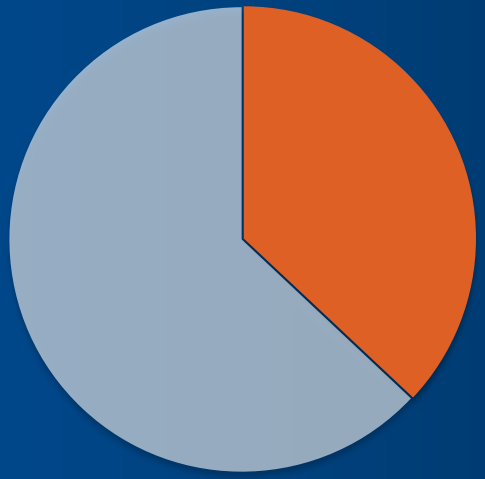


12%

3 YEARS

Fall 2010 Cohort

4-Year Bachelor's Other

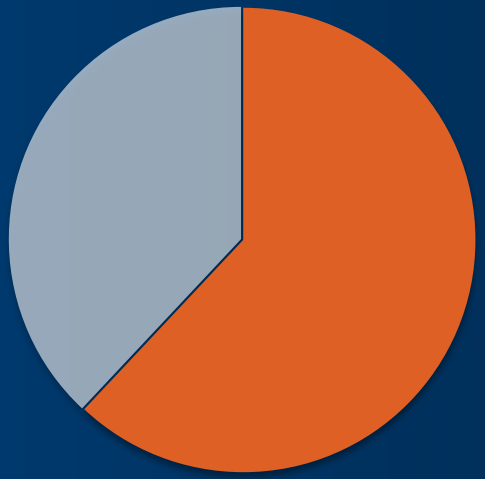


37%

6 YEARS

Fall 2008 Cohort

4-Year Bachelor's Very High Research



62%

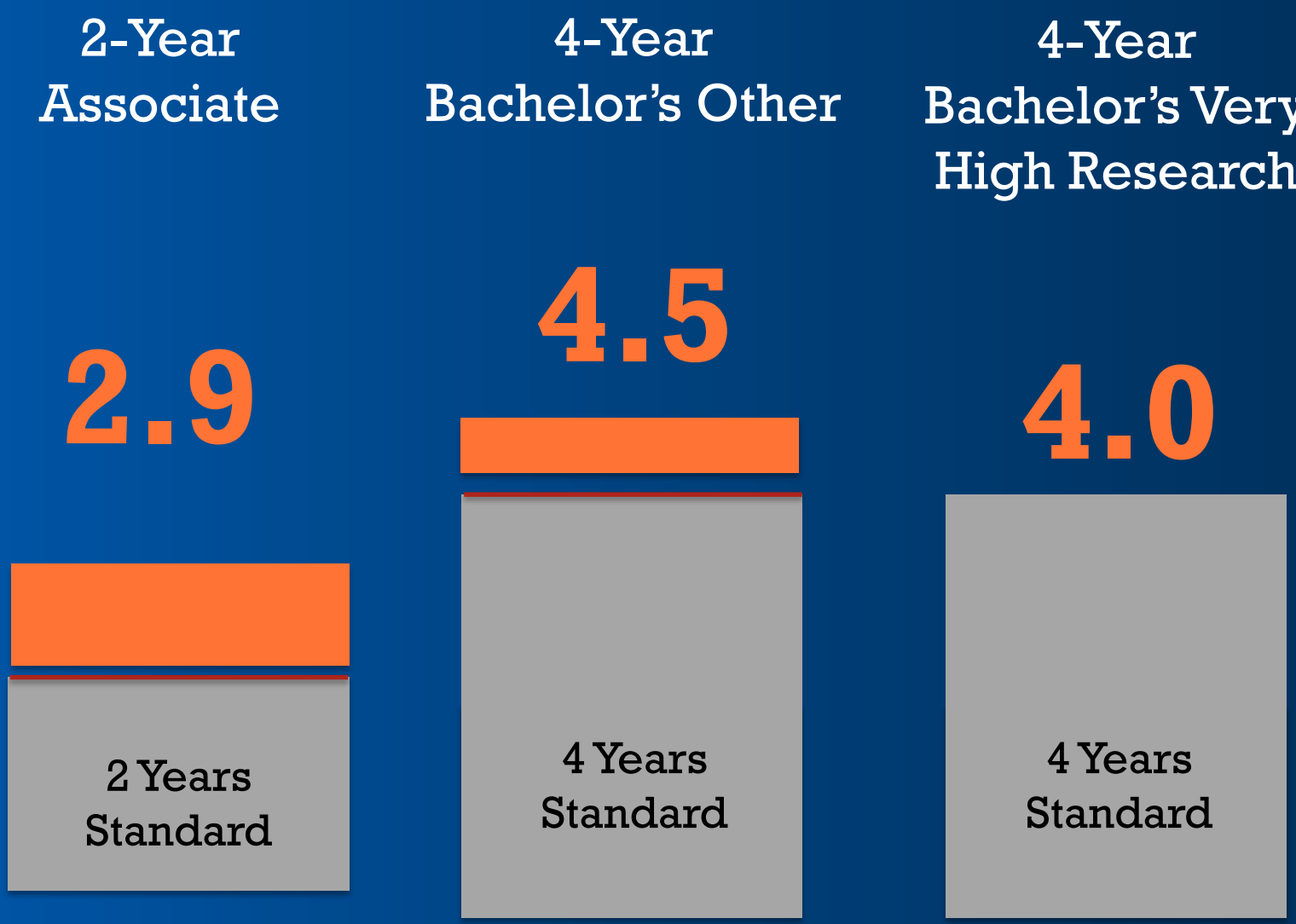
6 YEARS

Fall 2008 Cohort

2016 Collection

Time to Degree

(Colorado Full-Time Students)

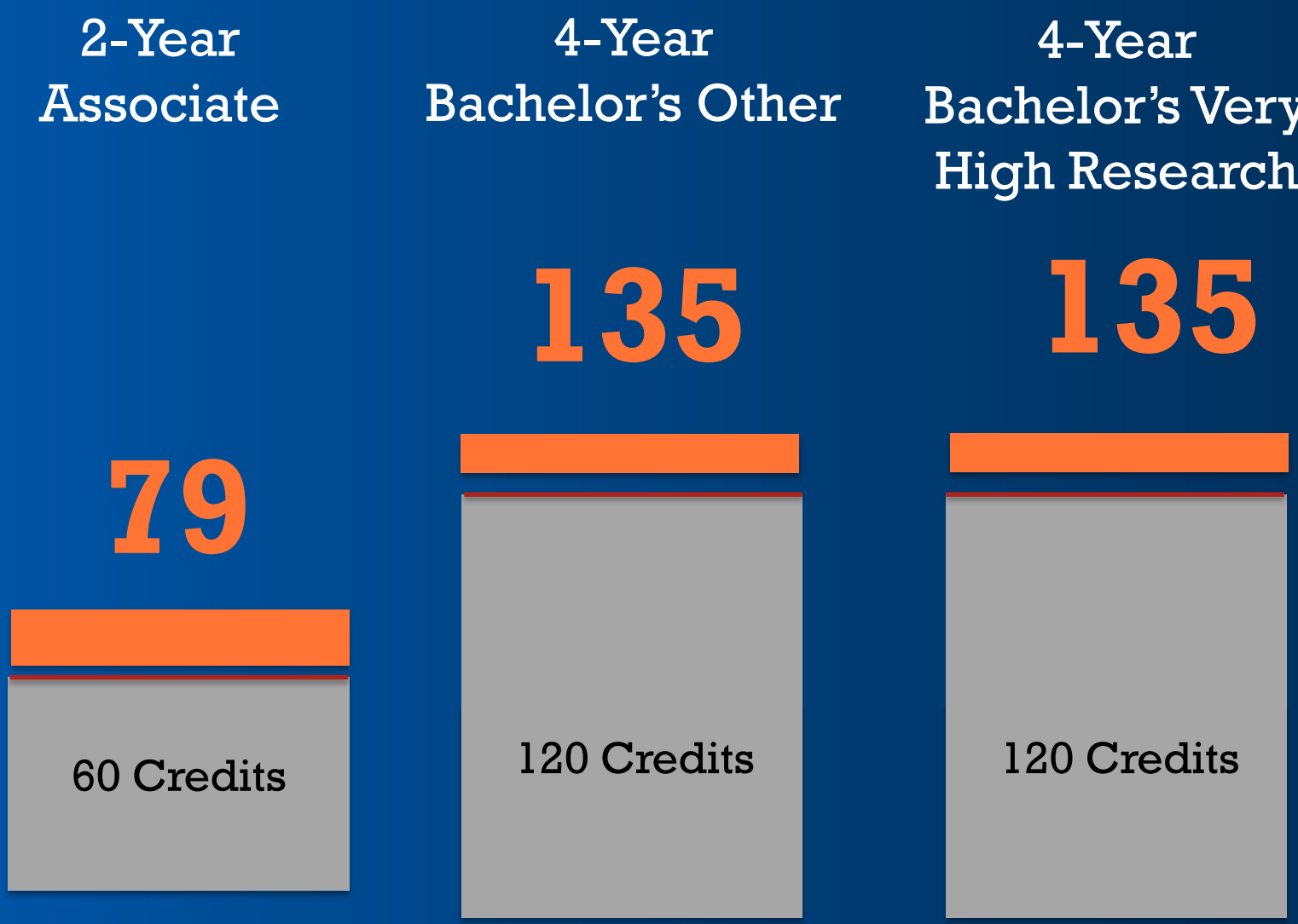


Students Graduating in 2011-12

2014 Collection

Credits to Degree

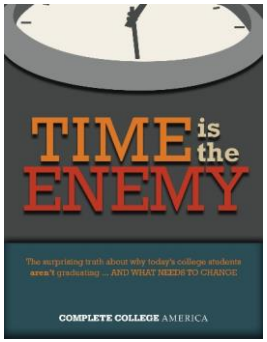
(Colorado Full-Time Students)

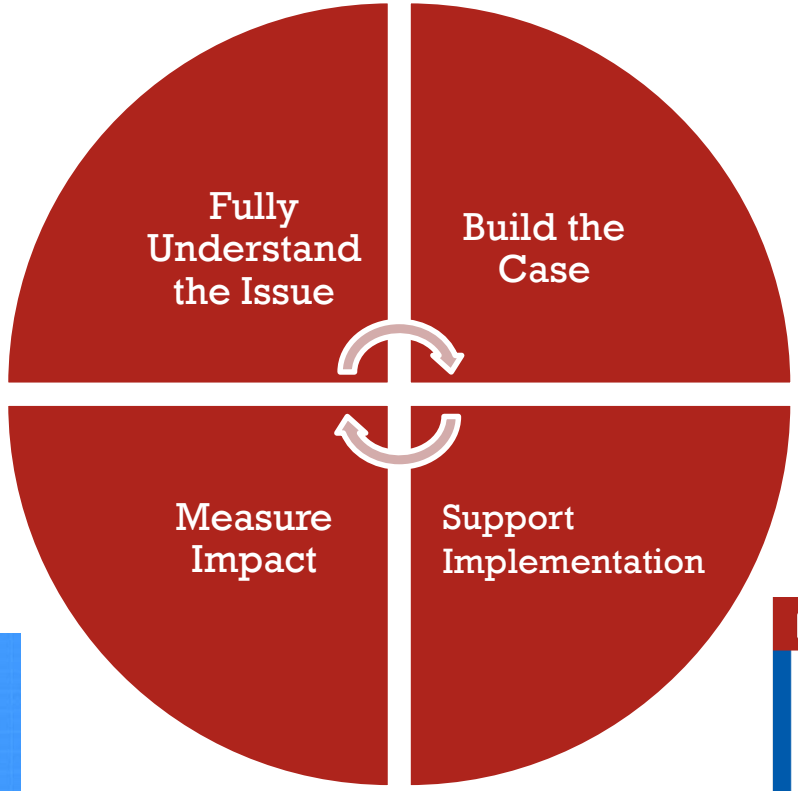


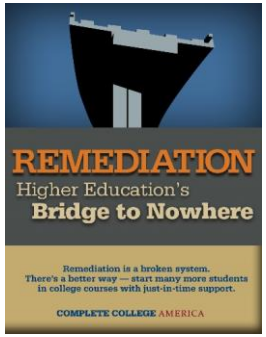
Students Graduating in 2011-12

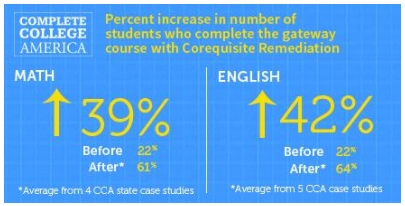
Using Data to Grow and Measure Impact

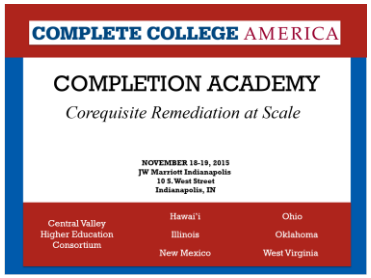
Impact of Our Metrics on Our Work
The CCA WAY











The Game Changers

COMPLETE COLLEGE AMERICA

1. #15ToFinish

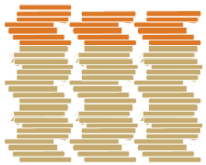
2. GPS Direct

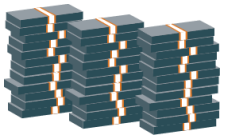
3. Corequisite Remediation

4. Math Pathways

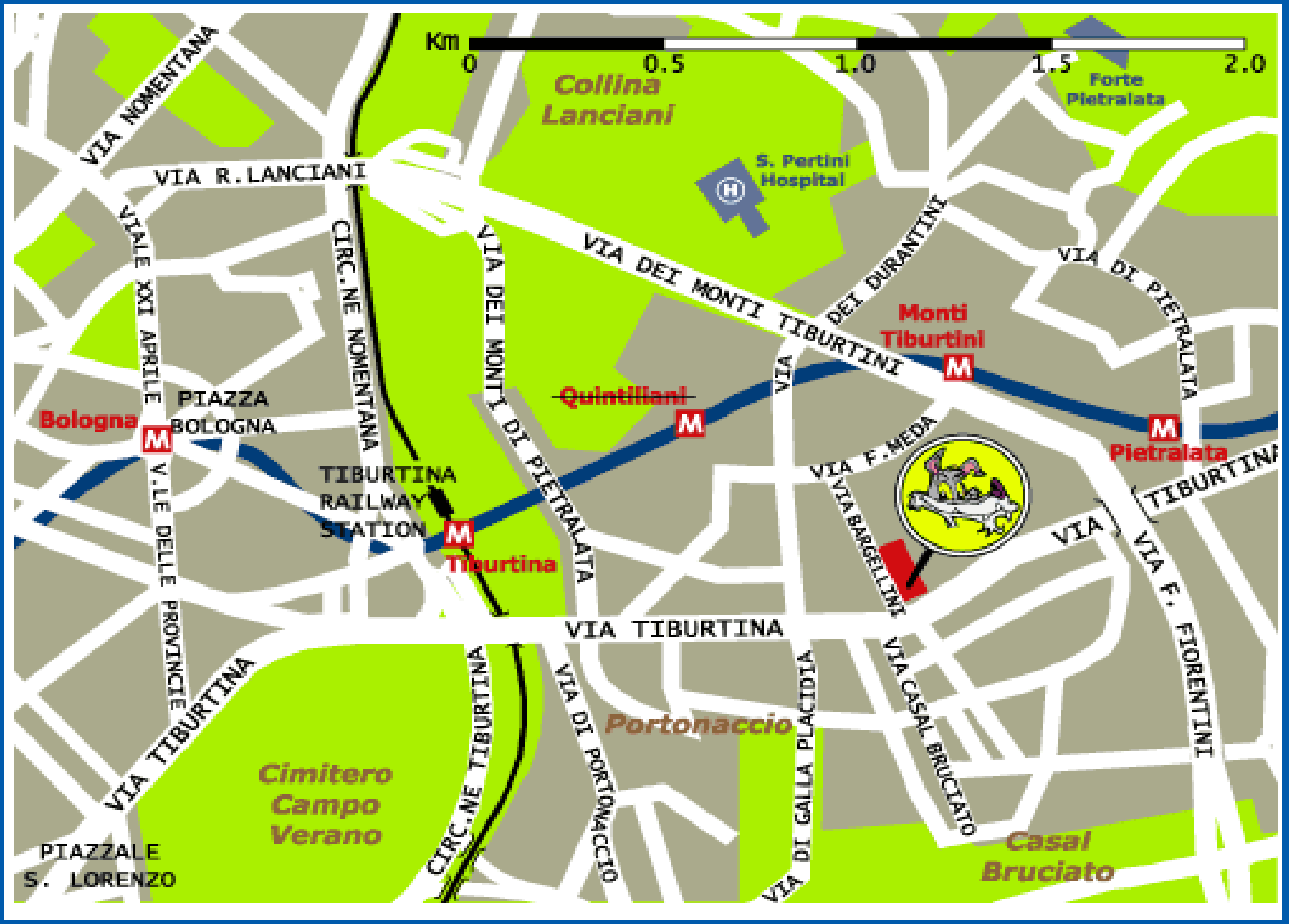
5. Structured Schedules / A Better Deal

The BIG Issues

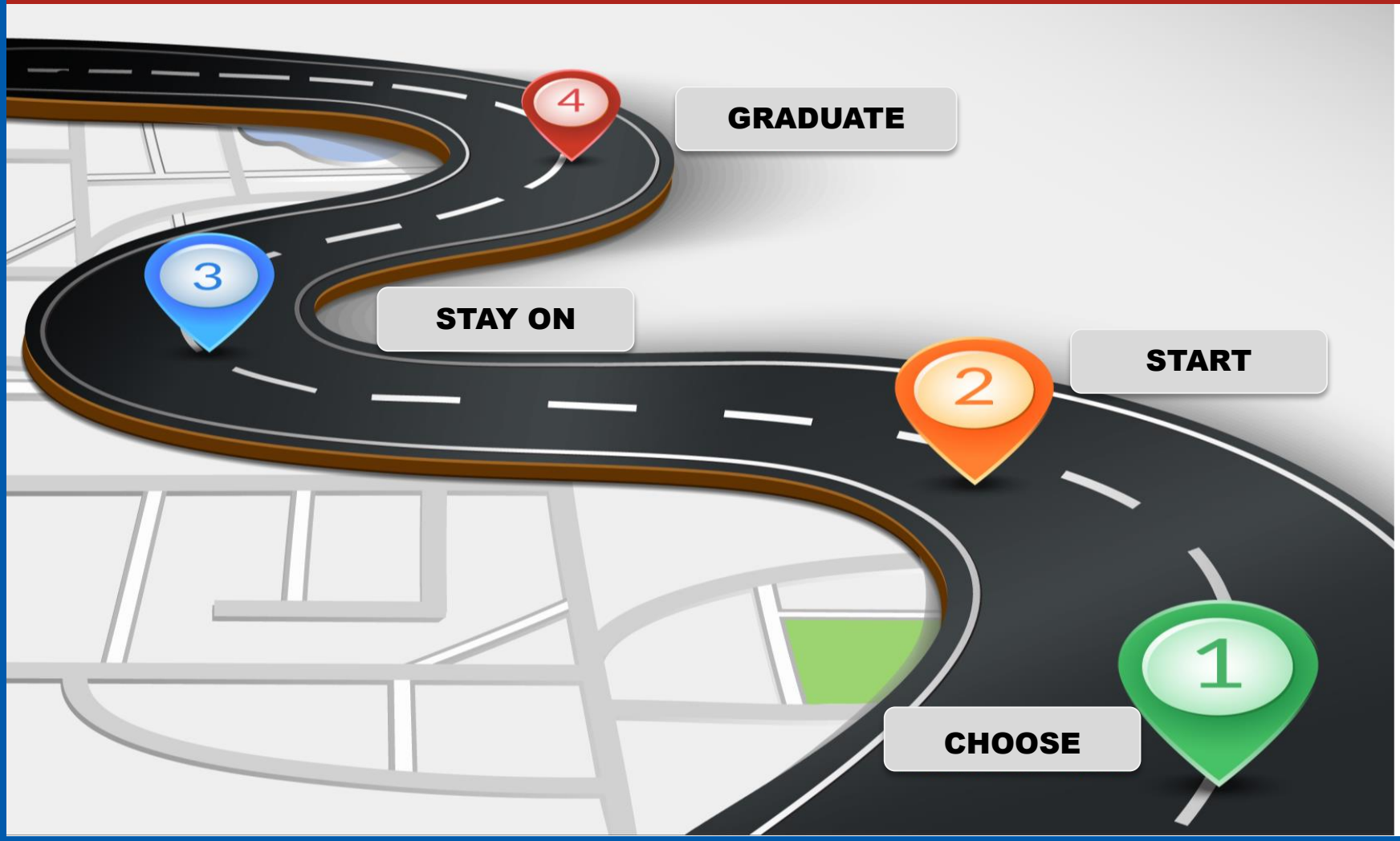


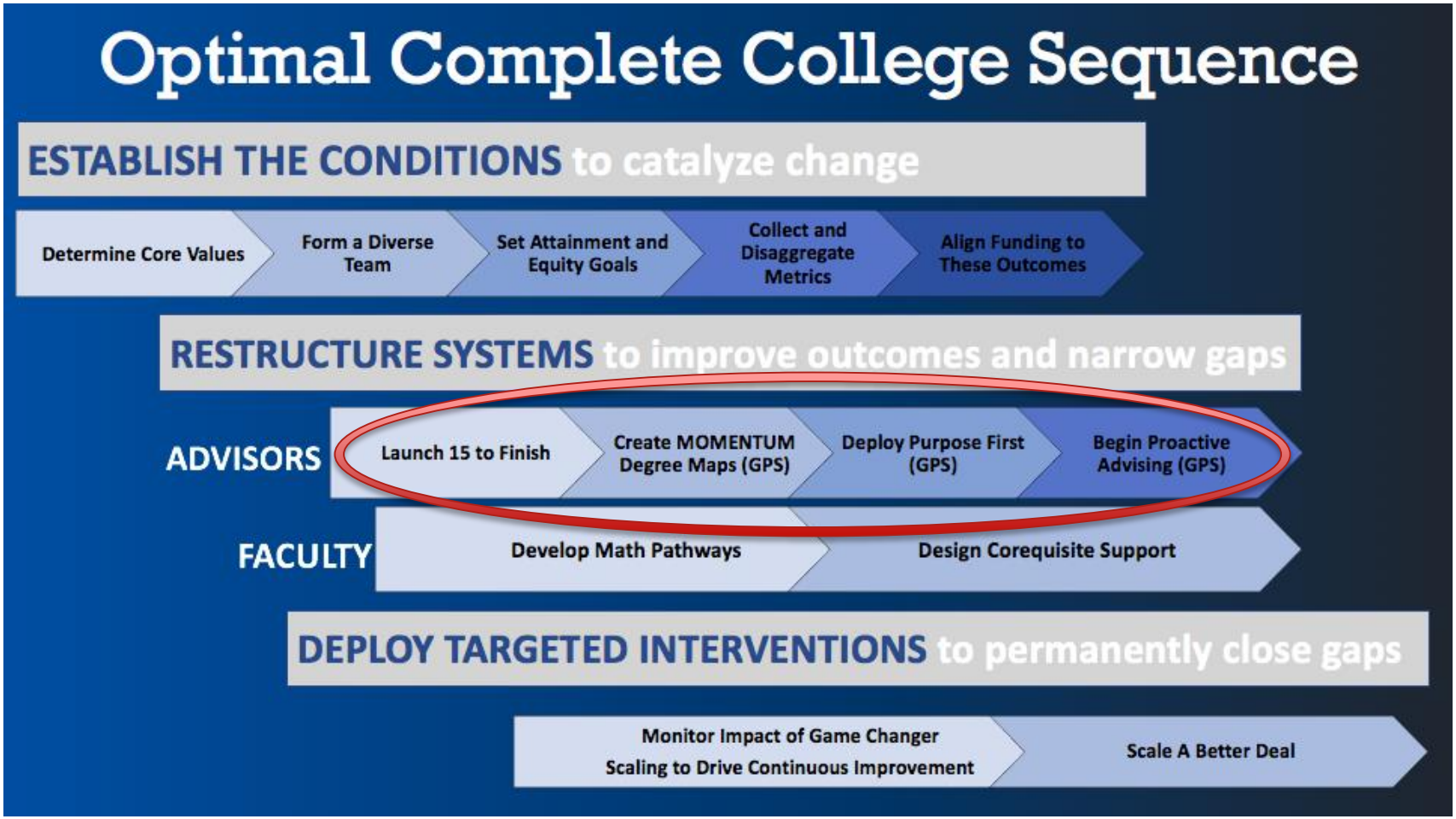


- Uniformed major decisions
- Taking too much time
- Inability to access required courses
- Difficulty with registration
- Excess credits
- Not enough guardrails to prevent poor choices
- Spending too much money
- Not graduating


Km
0
0.5
1.0
1.5
2.0
Collina Lanciani
Forte Pietralata
S. Pertini Hospital
VIA NOMENTANA
VIA R.LANCIANI
VIALE XXI APRILE
CIRC.NE NOMENTANA
VIA DEI MONTI DI PIETRALATA
VIA DEI MONTI TIBURTINI
VIA DEI BURANTINI
VIA DI PIETRALATA
Monti Tiburtini
Quintiliani
Bologna
PIAZZA BOLOGNA
Pietralata
TIBURTINA RAILWAY STATION
Tiburtina
V.LE DELLE PROVINCIE
VIA F.MEDA
VIA BARGELLINI
TIBURTINA
VIA F. FIORENTINI
VIA TIBURTINA
VIA TIBURTINA
CIRC.NE TIBURTINA
VIA DI PORTONACCIO
Portonaccio
VIA DI GALLA PLACIDIA
VIA CASAL BRUCIATO
Cimitero Campo Verano
PIAZZALE S. LORENZO
Casal Bruciato

GPS Direct




Optimal Complete College Sequence
ESTABLISH THE CONDITIONS to catalyze change
Determine Core Values
Form a Diverse Team
Set Attainment and Equity Goals
Collect and Disaggregate Metrics
Align Funding to These Outcomes
RESTRUCTURE SYSTEMS to improve outcomes and narrow gaps
ADVISORS
Launch 15 to Finish
Create MOMENTUM Degree Maps (GPS)
Deploy Purpose First (GPS)
Begin Proactive Advising (GPS)
FACULTY
Develop Math Pathways
Design Corequisite Support
DEPLOY TARGETED INTERVENTIONS to permanently close gaps
Monitor Impact of Game Changer
Scaling to Drive Continuous Improvement
Scale A Better Deal

GAME CHANGER

15 To Finish

#15ToFinish

15 to FINISH

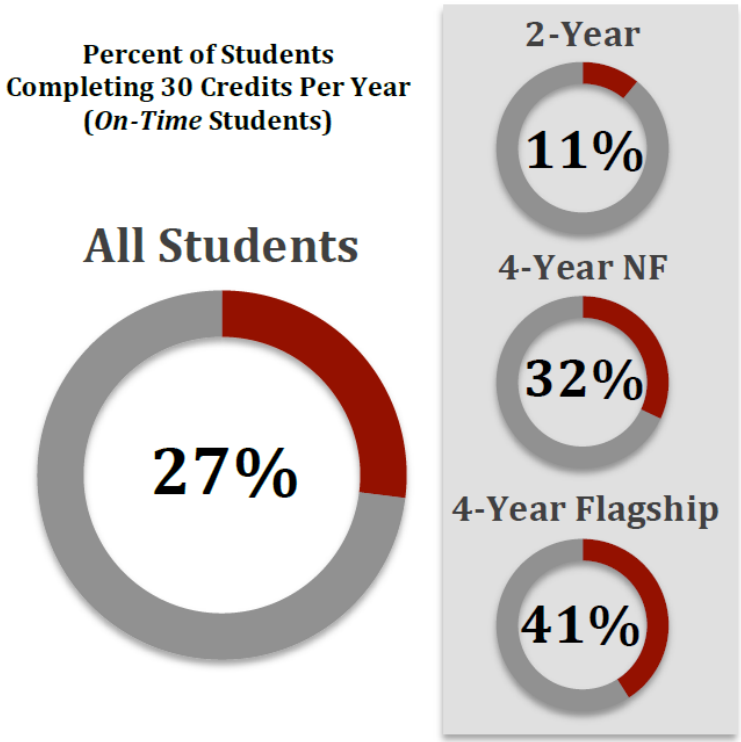
THINK 30

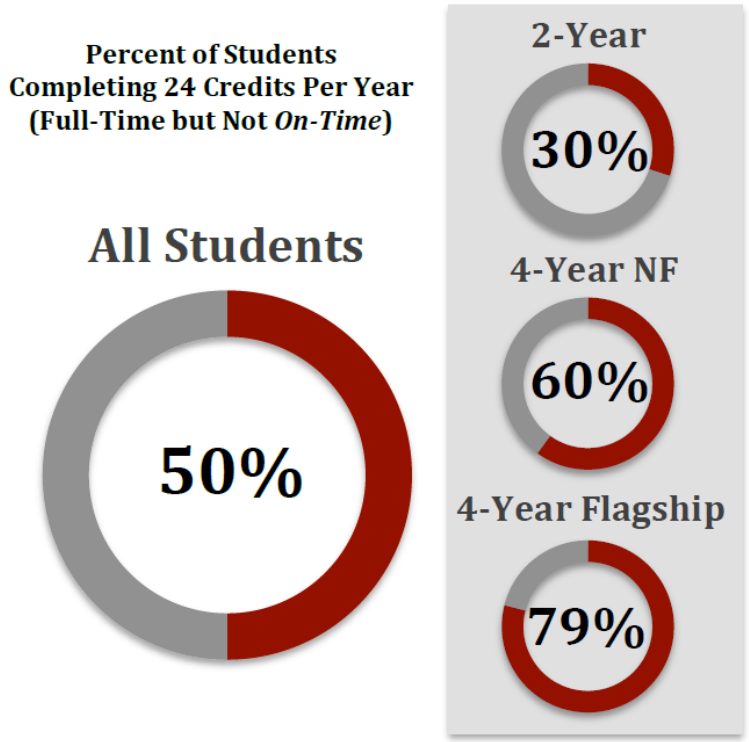
30 Louisiana THINK

2+2

Finish in 4

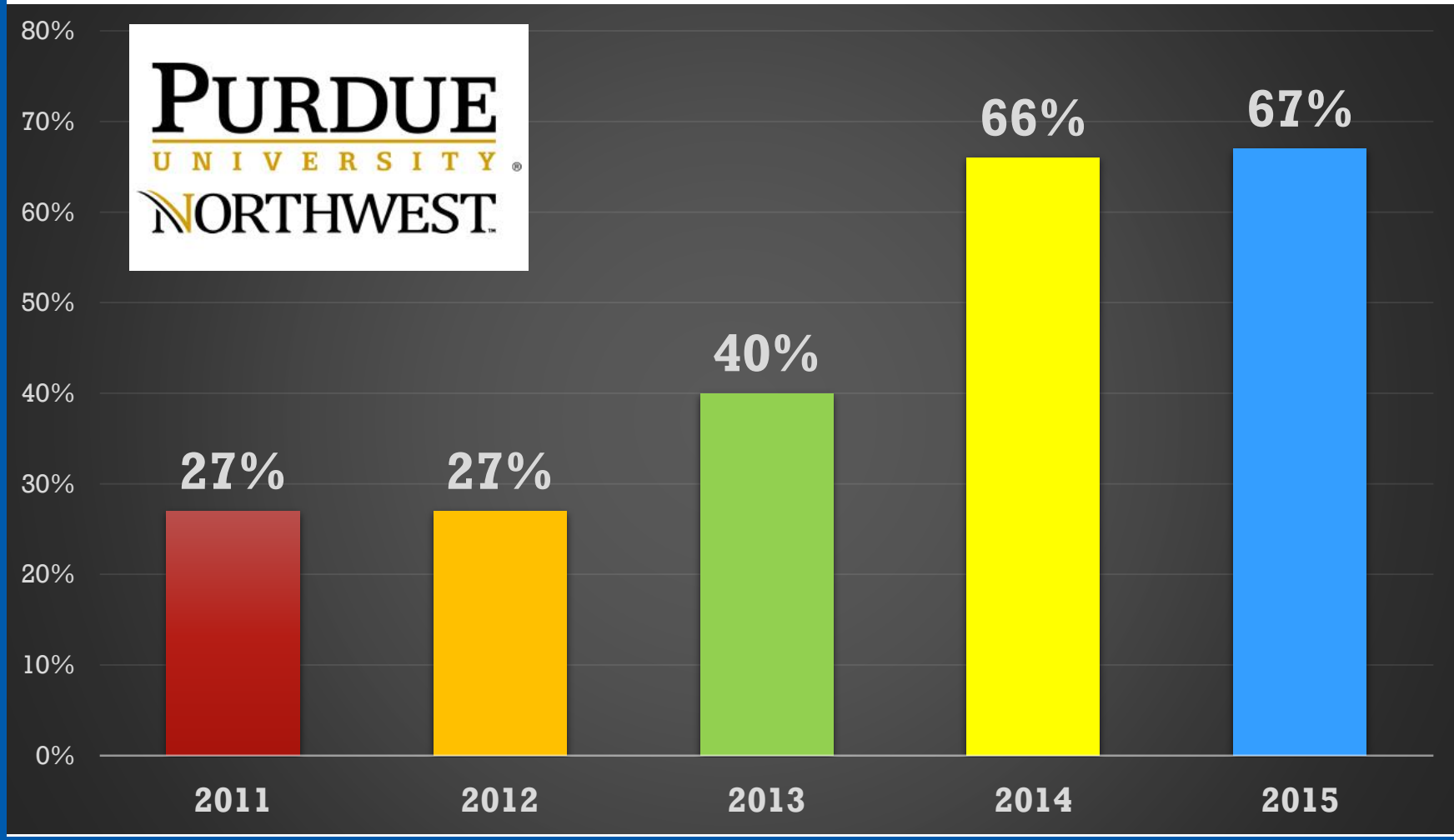
Half of American college students need just one more course per semester to be on track for on-time graduation.

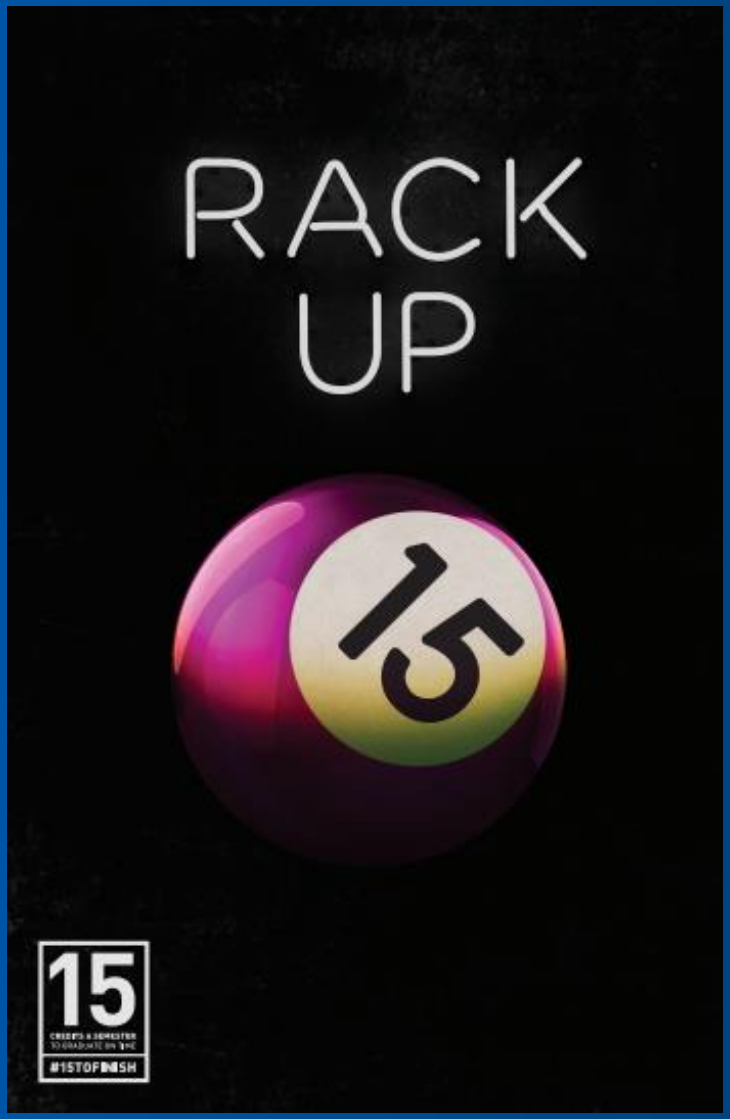




	ONE EXTRA YEAR, PUBLIC COLLEGE	ONE EXTRA YEAR, PRIVATE COLLEGE	TWO EXTRA YEARS, PUBLIC COLLEGE	TWO EXTRA YEARS, PRIVATE COLLEGE
Tuition and loans	$18,598	$26,815	$37,456	$53,760
Opportunity costs	$128,429	$128,429	$245,253	$245,253
Total cost for not graduating in four years	**$147,026**	**$155,244**	**$282,691**	**$298,995**

% First-Time, Full-Time Students Enrolled in 15+ Credit Hours (1st semester)




RACK
UP
15
15
#15TOFINISH

fill up on

GAME CHANGER

GPS: Direct

#GPSDirect

Washington
The Ellipse

DO THIS

GPS Direct: Essential Components

1. Purpose First: Informed Choice & Meta-Majors

2. Momentum Degree Maps w/ Critical Path Courses & Aligned Math

3. Default "One-Click" Registration

4. Proactive Advising

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How Are Students Choosing Majors?

SAN JACINTO COLLEGE
CAREER PATHWAYS
Education
Early Childhood
Childcare Associate
Elementary Education
Secondary Education
Arts, Humanities, Communication & Design
Art Audio Engineering Music
Dance English Speech
Theatre and Film Humanities
Visual Graphics Foreign Language
Design Graphics
Interior Design
Business
Accounting Management
Paralegal Real Estate
Economics Agriculture
International Business Logistics
Maritime Administration
Business Office Technology
Construction Industry Manufacturing & Transportation
Air-Conditioning Technology
Automotive Collision Repair
Automotive Technology Aviation
Biomedical Equipment Repair Welding
Construction Technology Pipefitting
Construction Management Diesel Technology
Electrical Technology
Electronics Technology Instrumentation
Maritime Transportation Non-Destructive Testing
Process Technology
Environmental Health & Safety
Public Safety and Human/Consumer Services
Cosmetology
Criminal Justice
Culinary Arts
Restaurant Management
Fire Science
Personal Training
Massage Therapy
Health Sciences
Emergency Medical Technician
Pharmacy Technician Surgical Technology
Nursing Dental Assistant
Eye Care Technology Medical Coding and Billing
Health Information Medical Assisting
Mental Health Respiratory Care
Cancer Data Management Long Term Care
Medical Lab Tech Medical Radiology
Sonography Physical Therapy Assistant
Social & Behavioral Science
Anthropology
Geography
Government
History
Philosophy
Psychology
Sociology
Science, Technology, Engineering & Math
Biology Chemistry Geology
Computer Science Mathematics
Computer Programming Engineering
Computer Simulation (gaming)
Environmental Science
Engineering Design Graphics Computer
Information Technology
Information Technology Security
Physics Web Development

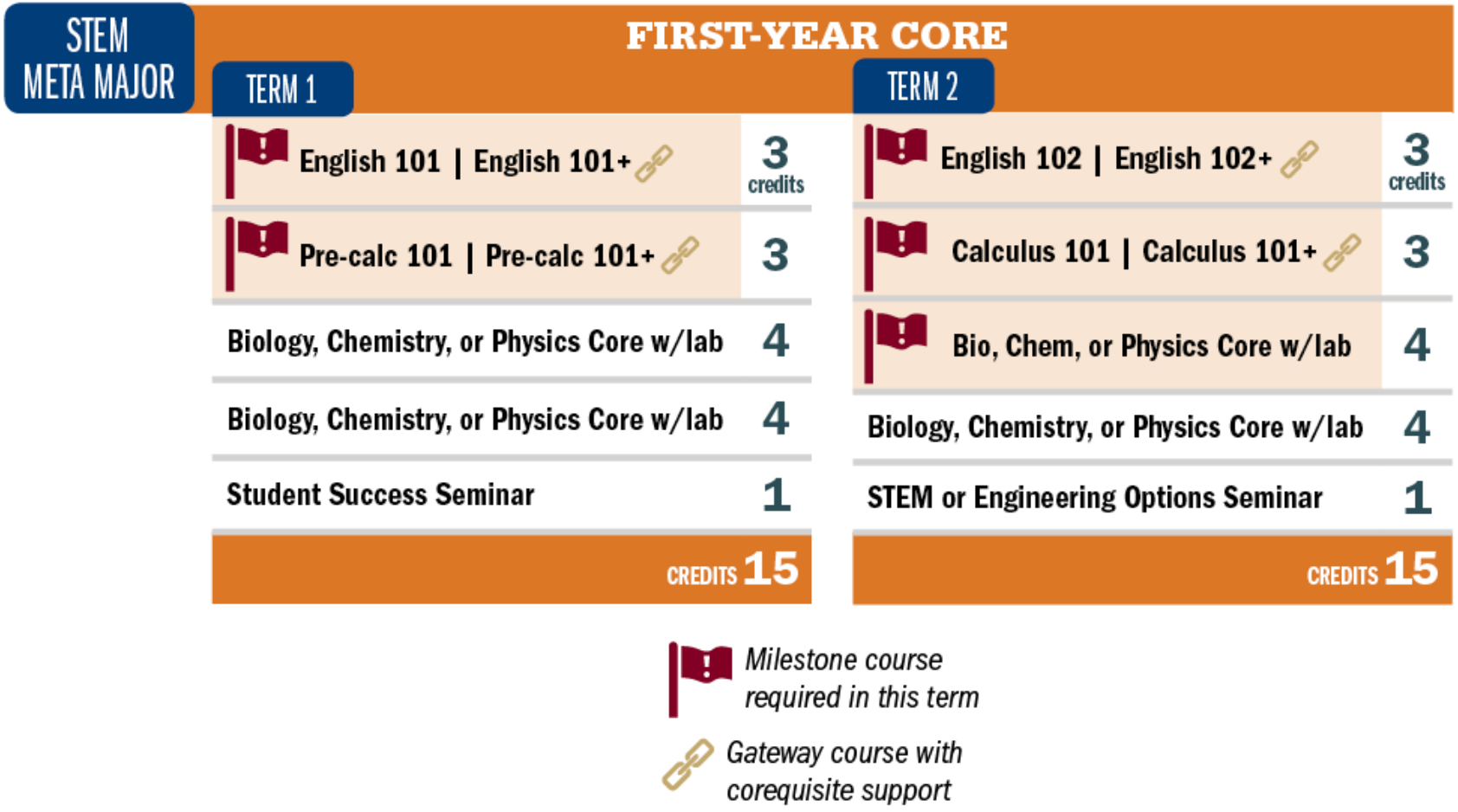
STUDENT MOMENTUM

In the first year of enrollment students who. . .

- Earn 30 Credits in First Year
- Complete Math and English Gateway Courses
- Enter a Program of Study
- Complete 9 Program Credits

. . . Are far more likely to graduate.

Default Degree Maps



HOUSTON | GPS

COMPLETE COLLEGE AMERICA

UNIVERSITY of
HOUSTON

SAN JACINTO
COLLEGE
Your Goals. Your College.

WCJC
Wharton County
Junior College

COMPLETE
COLLEGE
AMERICA

UHD
University of Houston
DOWNTOWN

HCC

LONE STAR
COLLEGE
SYSTEM

University
of Houston
Clear Lake

GAME CHANGER

Math Pathways

#MathPathways

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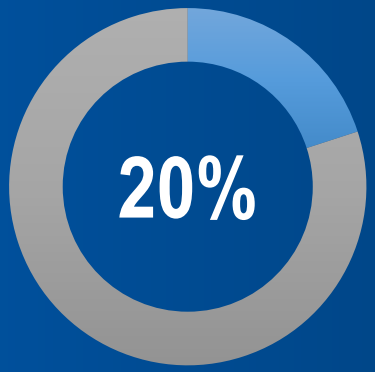
Math Pathways

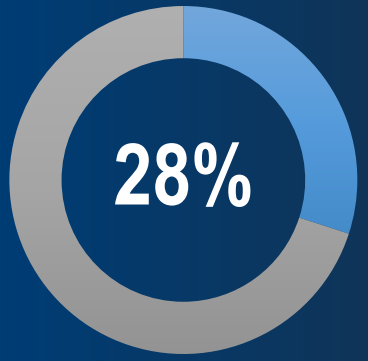
#CCAMomentum

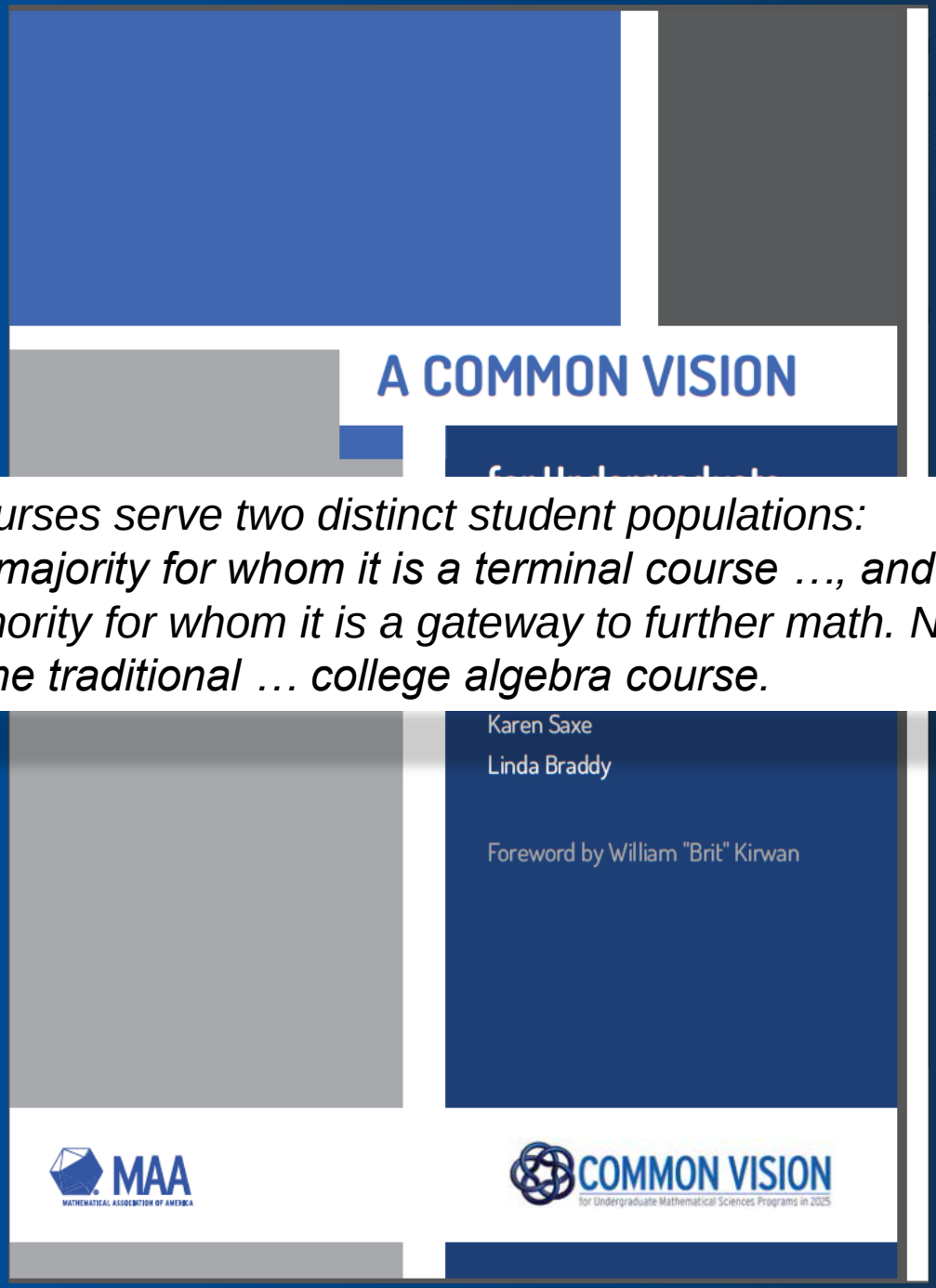
Very Few Community College Students Complete Gateway Math

One Year



Two Years

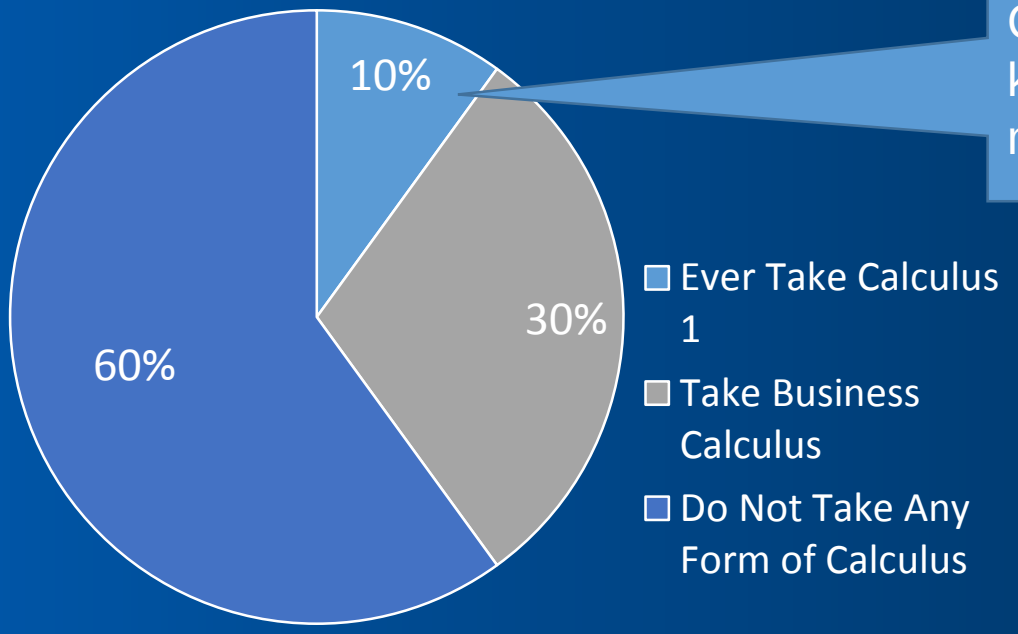




college algebra courses serve two distinct student populations: the overwhelming majority for whom it is a terminal course …, and the relatively small minority for whom it is a gateway to further math. Neither group is well-served by the traditional … college algebra course.

Few in College Algebra, Enroll in Calculus

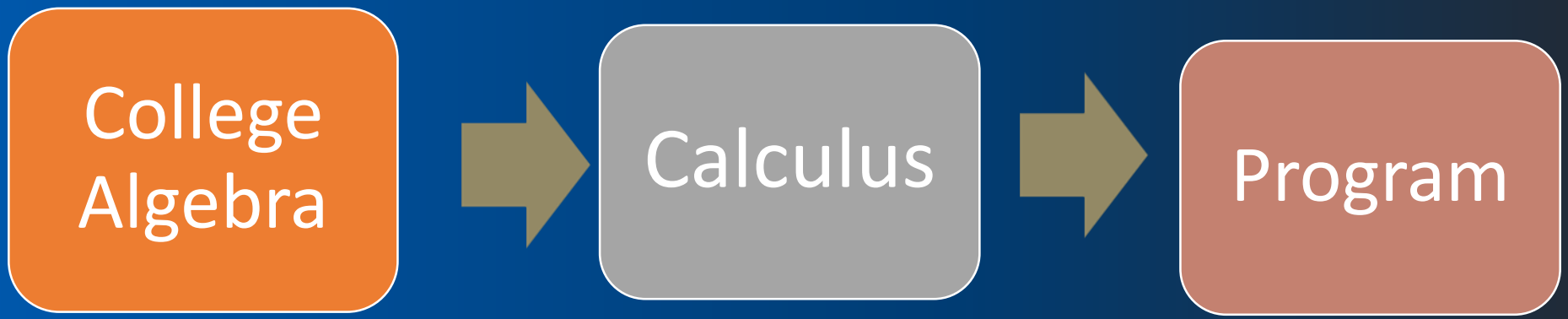
Students Who Take College Algebra

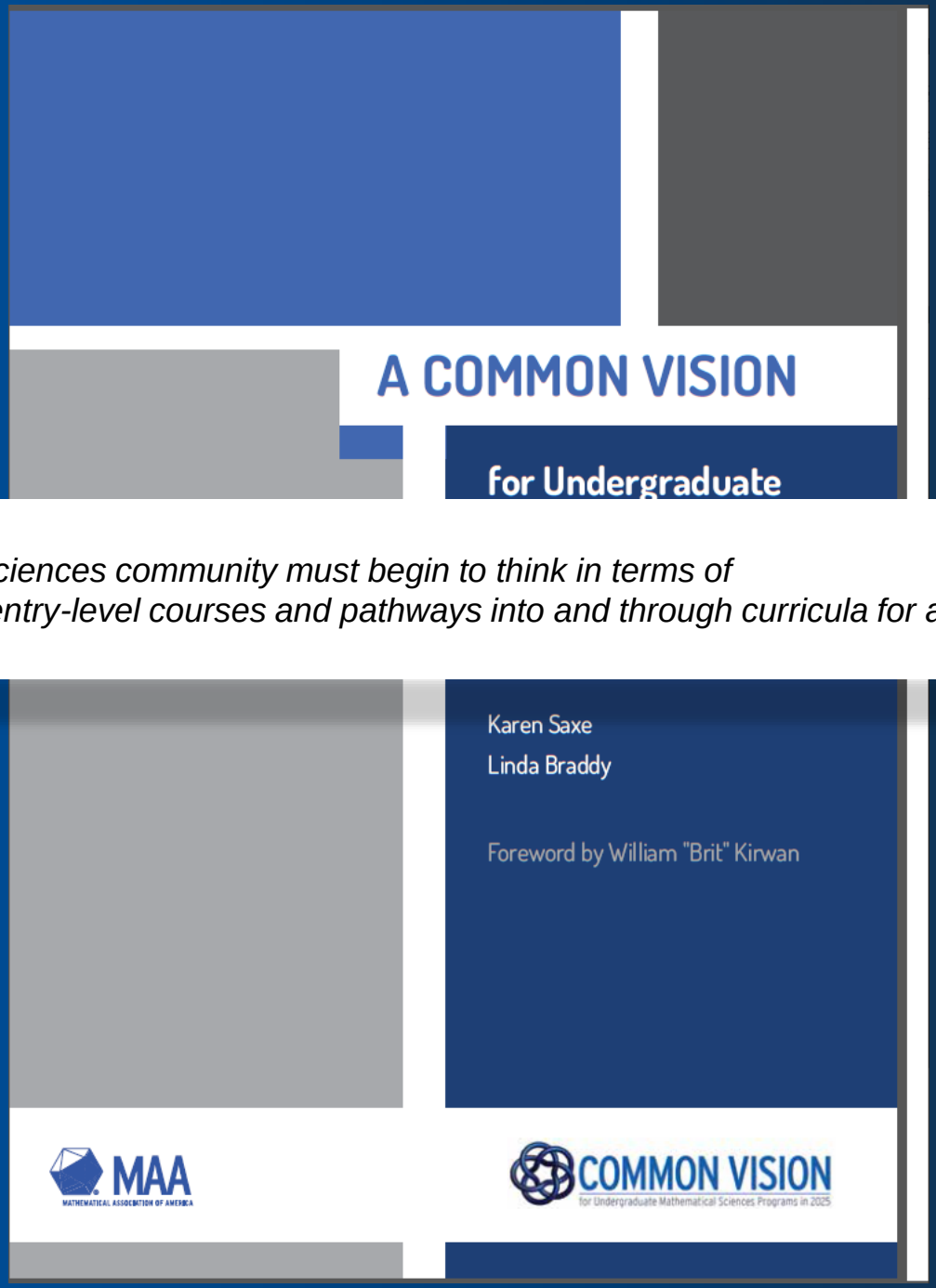


Virtually no students who pass college algebra ever start Calculus III, which is a key course for STEM majors.

Dunbar, S. 2005. *Enrollment flow to and from courses below calculus* . In A Fresh State for Collegiate mathematics: Rethinking the Courses below calculus, N.B. Hastings et al. (Eds.). Washington DC: MAA Notes, Mathematical Association of America.

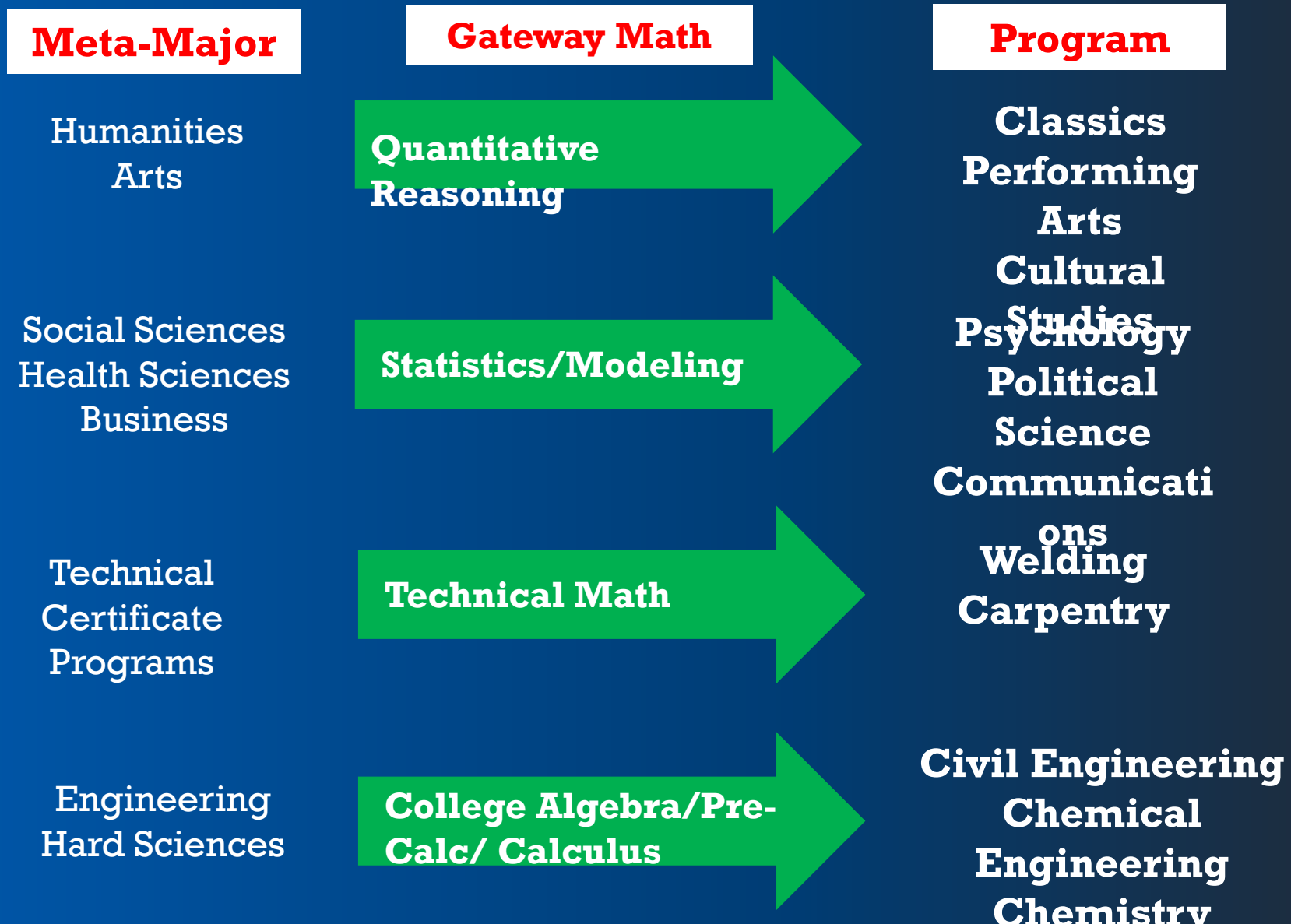
College Algebra's Purpose Is Preparation for Programs Requiring Calculus





The mathematical sciences community must begin to think in terms of a broader range of entry-level courses and pathways into and through curricula for all students,

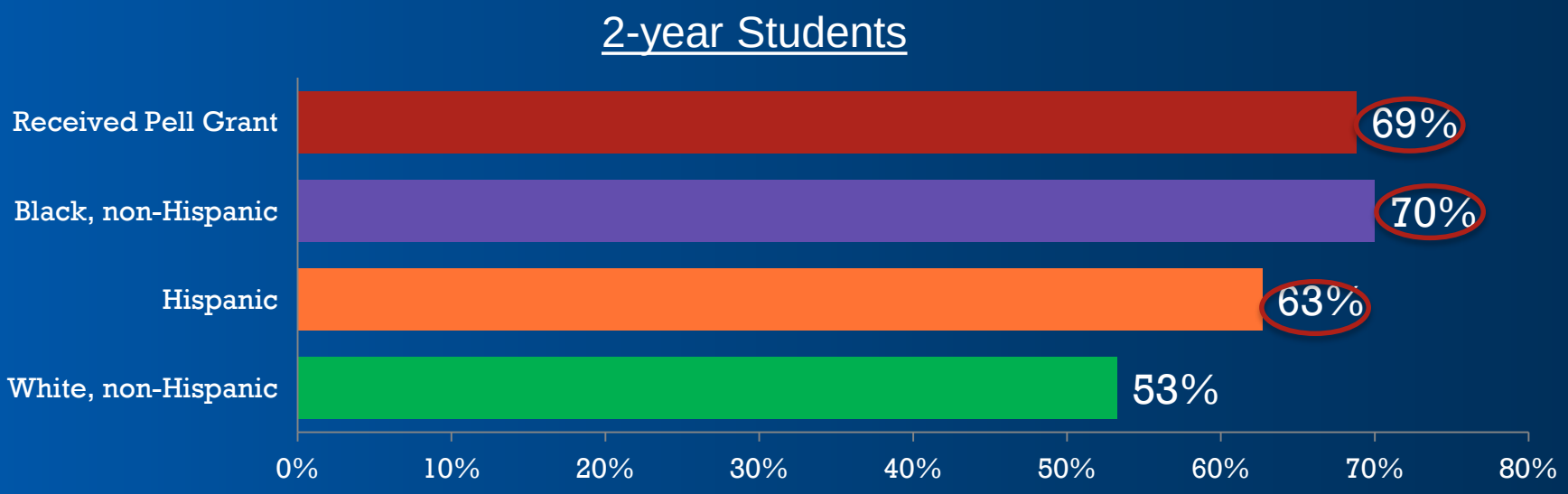
Math Is Aligned to Majors

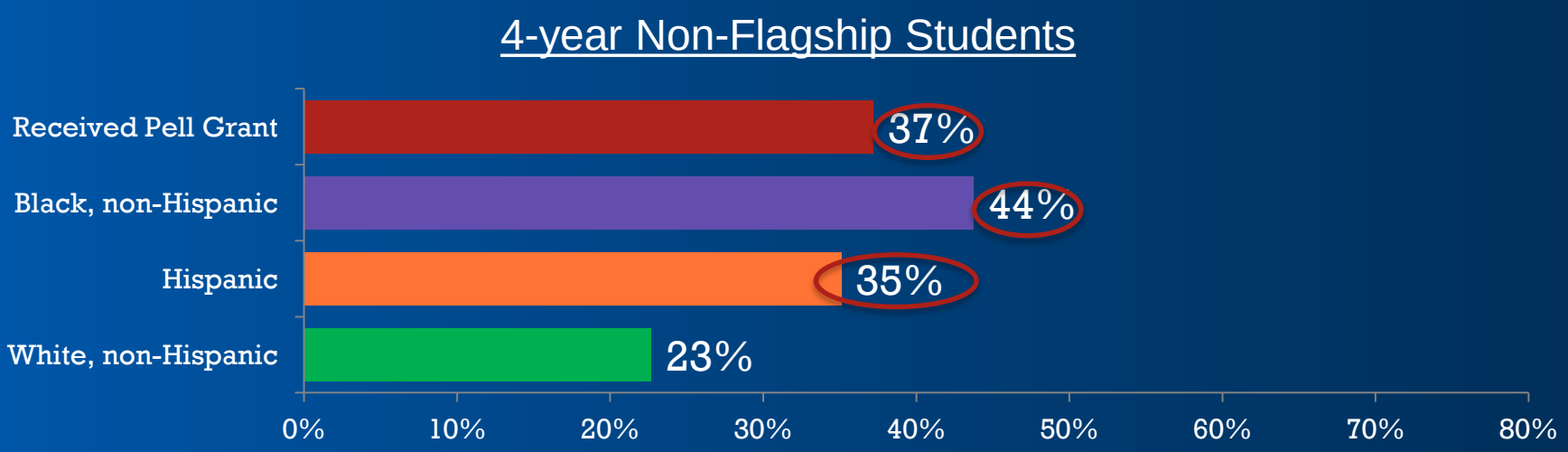


Corequisite Support

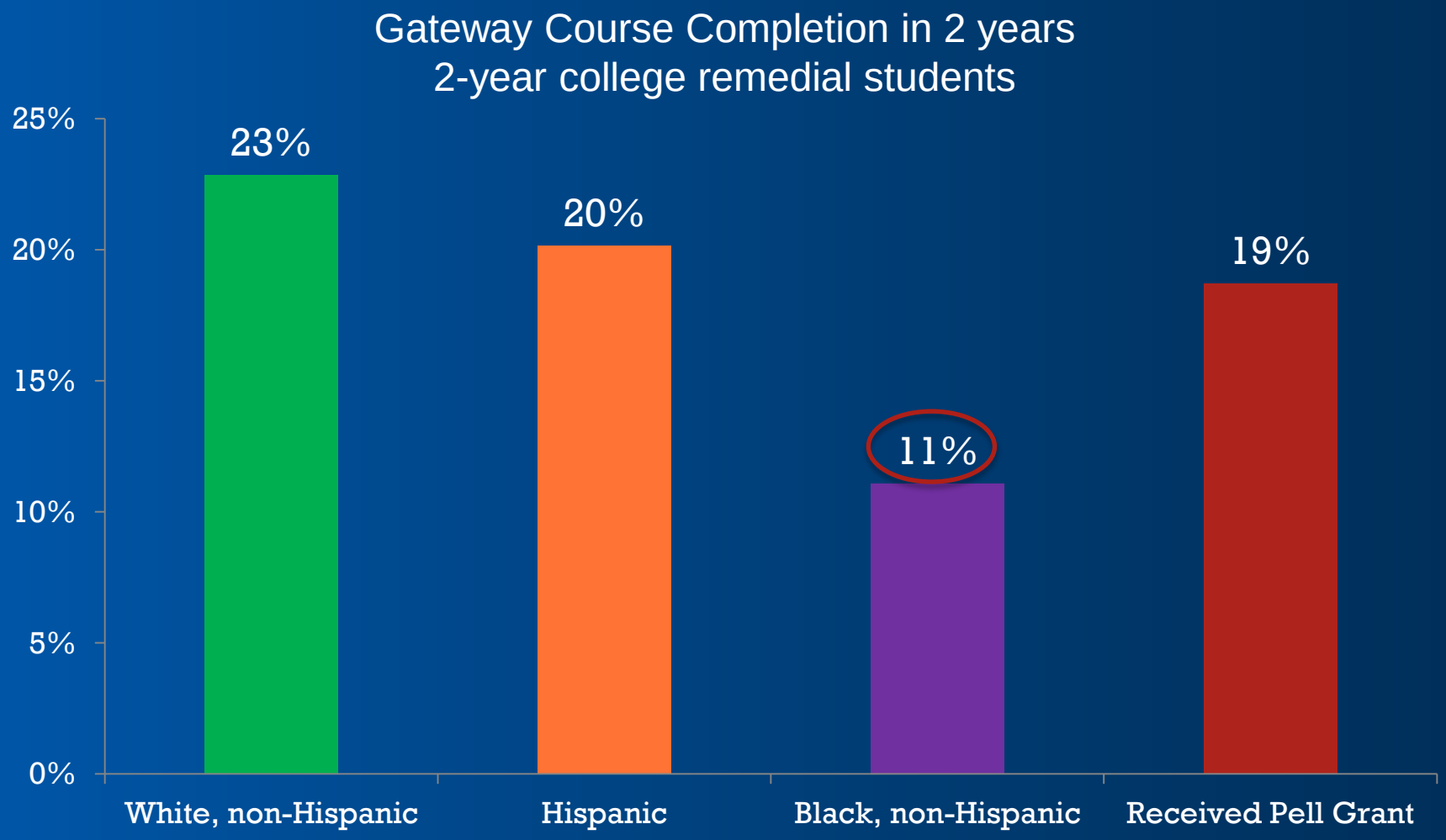
#CCAMomentum

African Americans, Hispanics and Pell Students are Over Represented

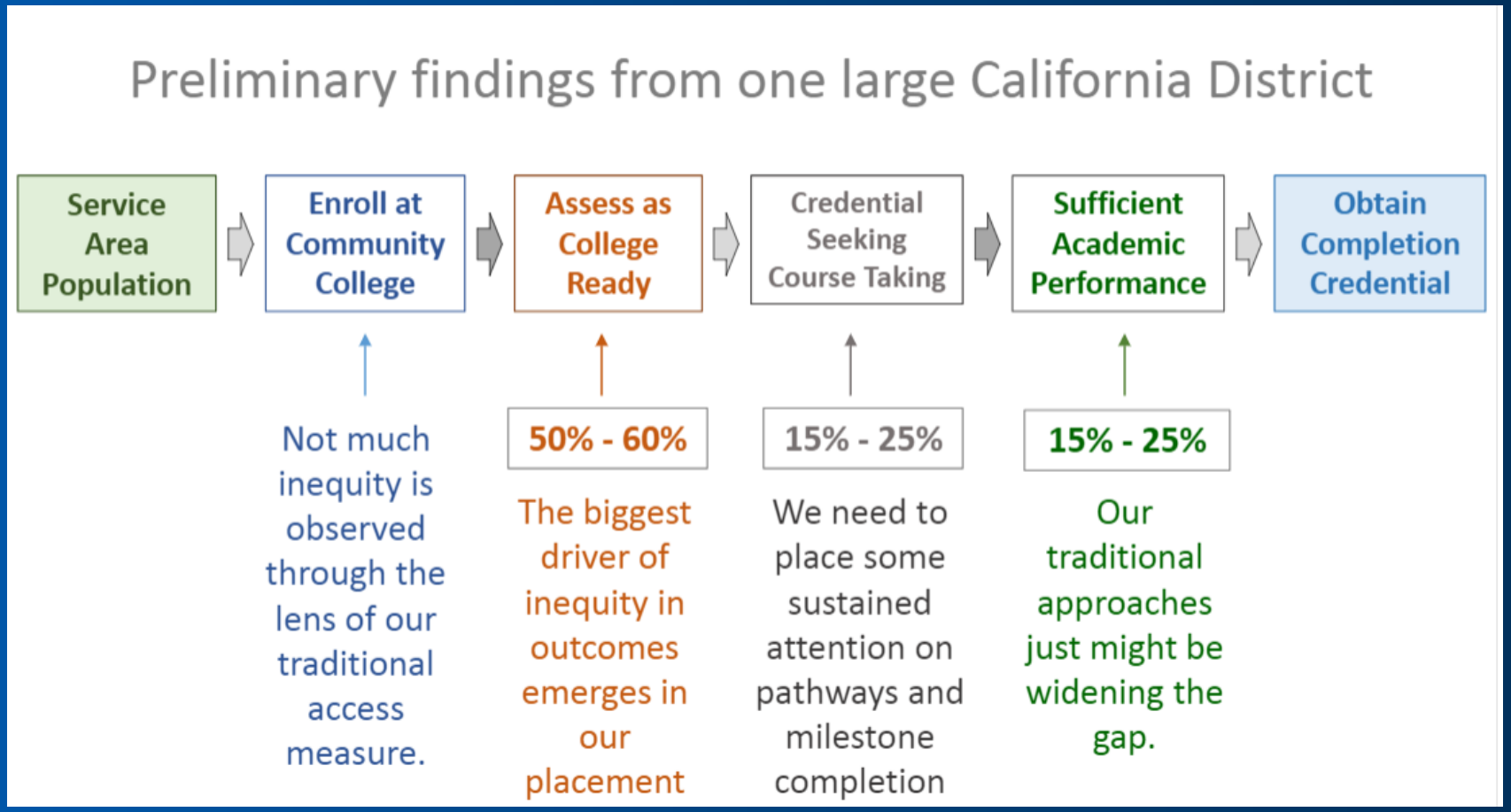




The System Does Not Work, Particularly for African Americans



Corequisite Support the First Big Challenge to Building Guided Pathways



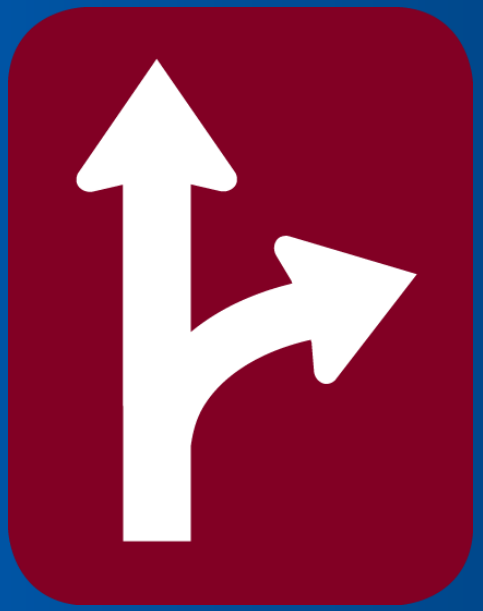
Stoup, 2016

Few Graduate or Transfer

Of 2-year students enrolled in remediation:

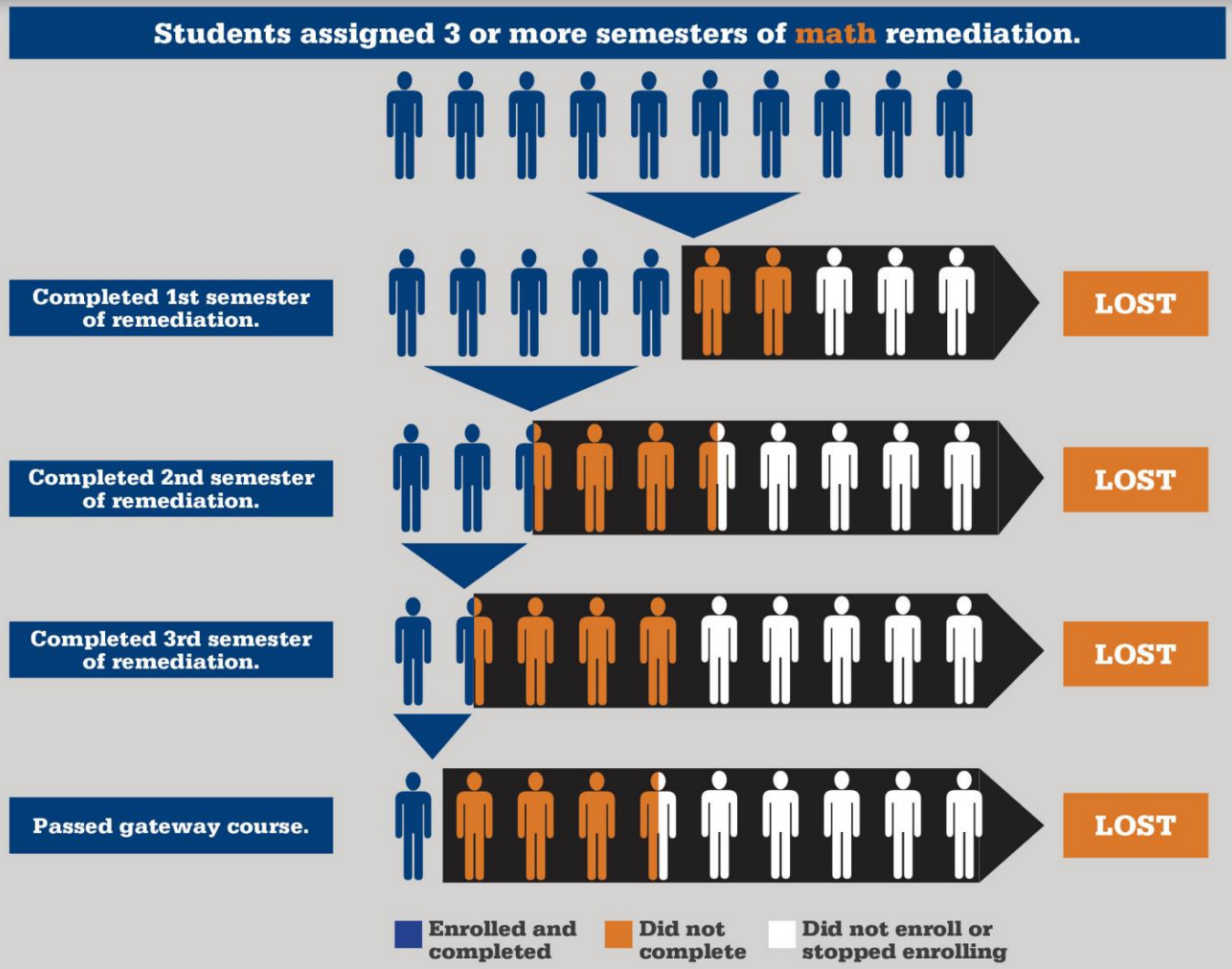
- 11% graduate in 3 years
- 18% transfer to 4-year institution (with or without a degree) in 4 years

Remediation



Student attrition is at the heart of the matter…

Remediation: The effect of attrition.



KNOW THIS The remediation system is broken. More students quit than fail.

Source: Hughes, K., Edgecombe, N., & Snell, M. (2011). "Developmental Education: Why and How We Must Reform It." New York: Columbia University, Teachers College, Community College Research Center. Presentation given at the 2011 League for Innovation in the Community College Annual Conference.

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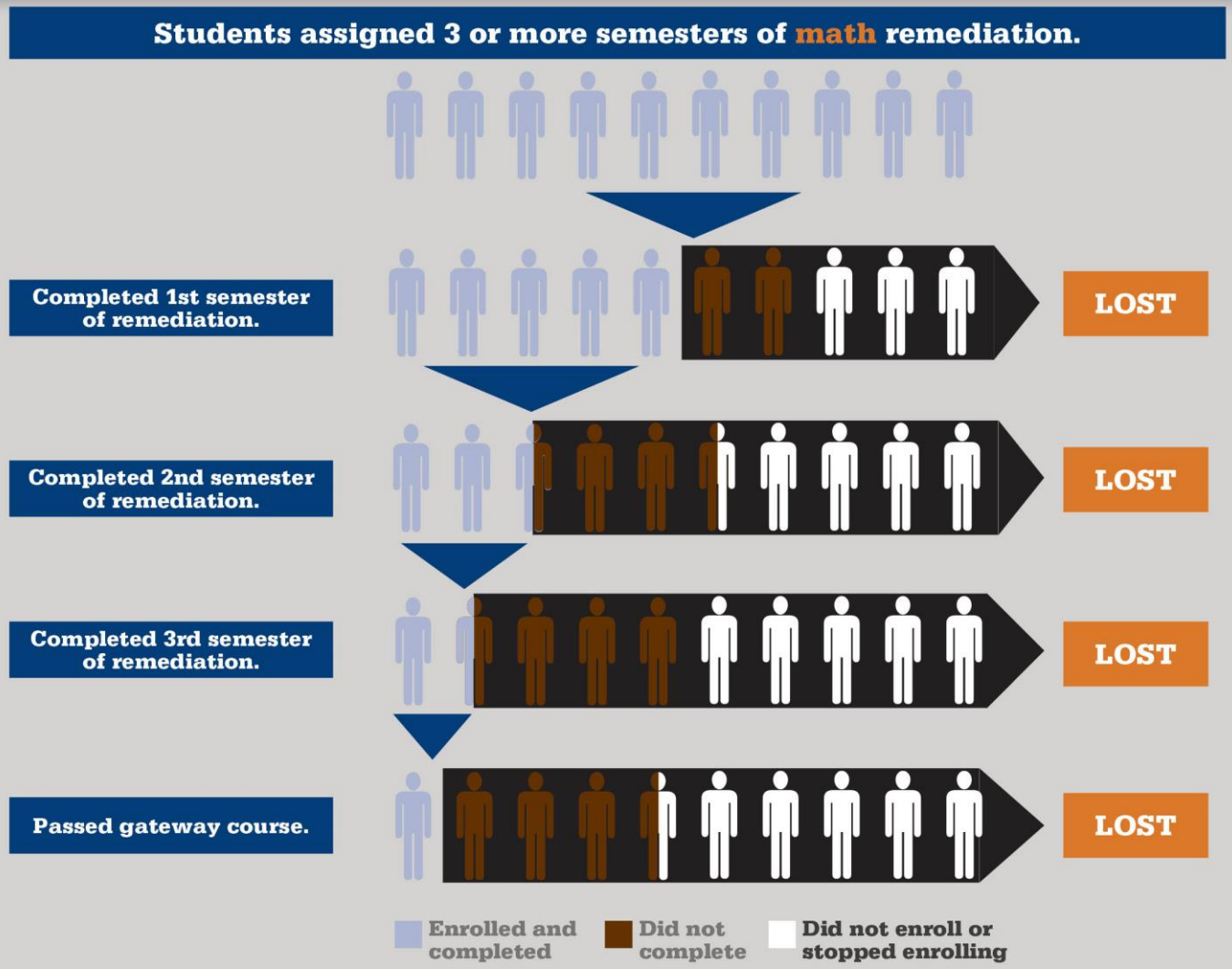

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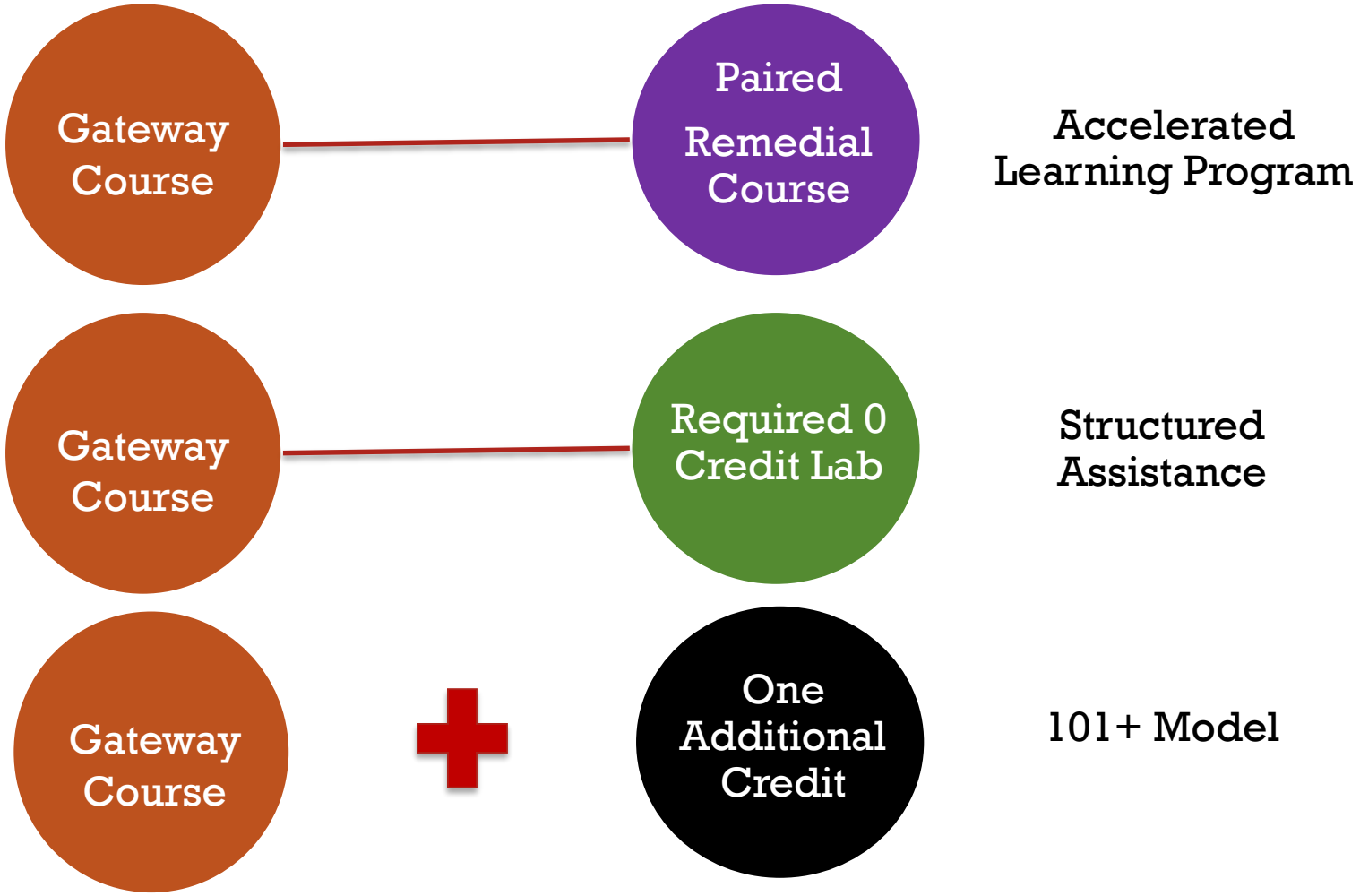
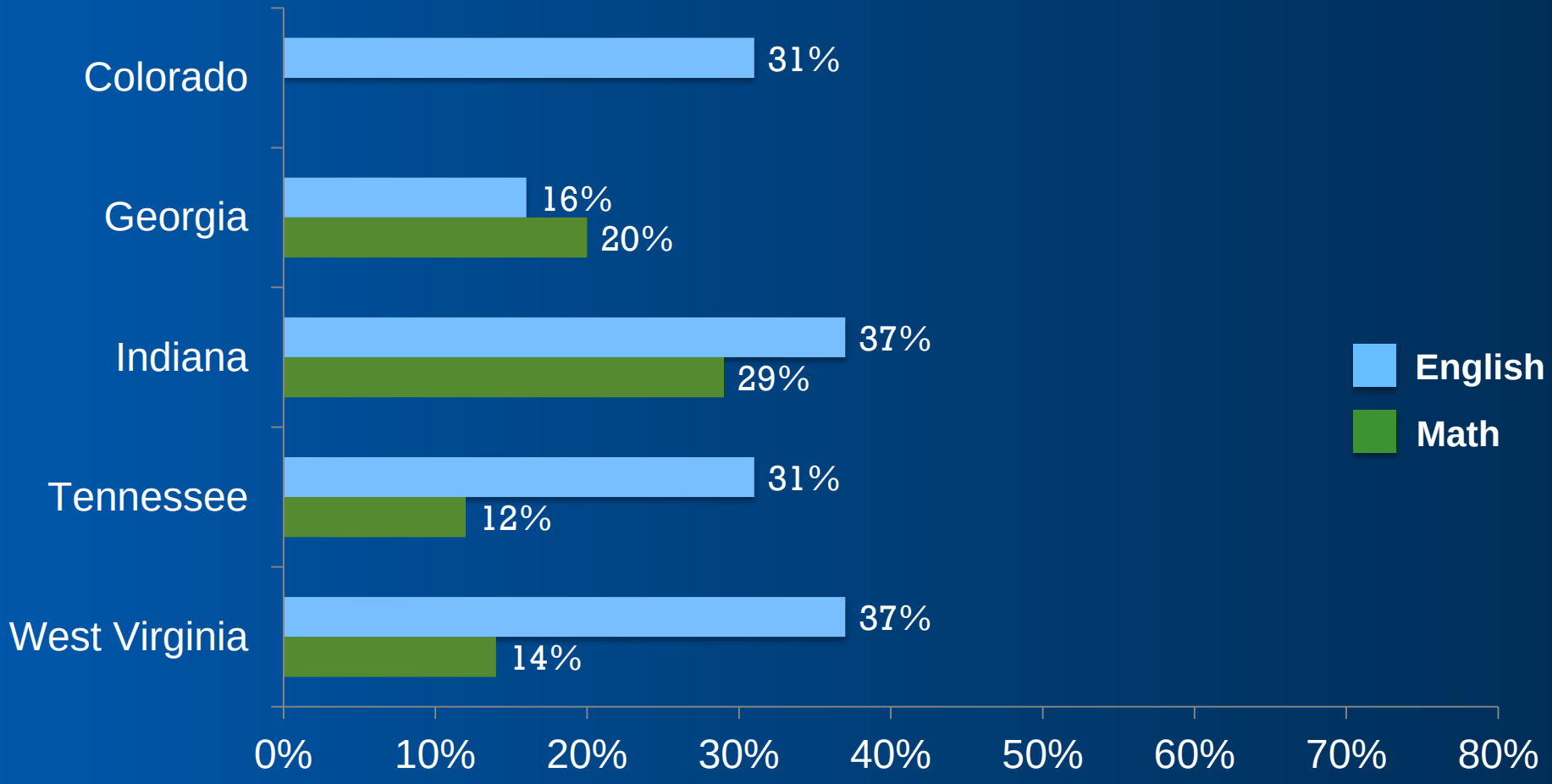
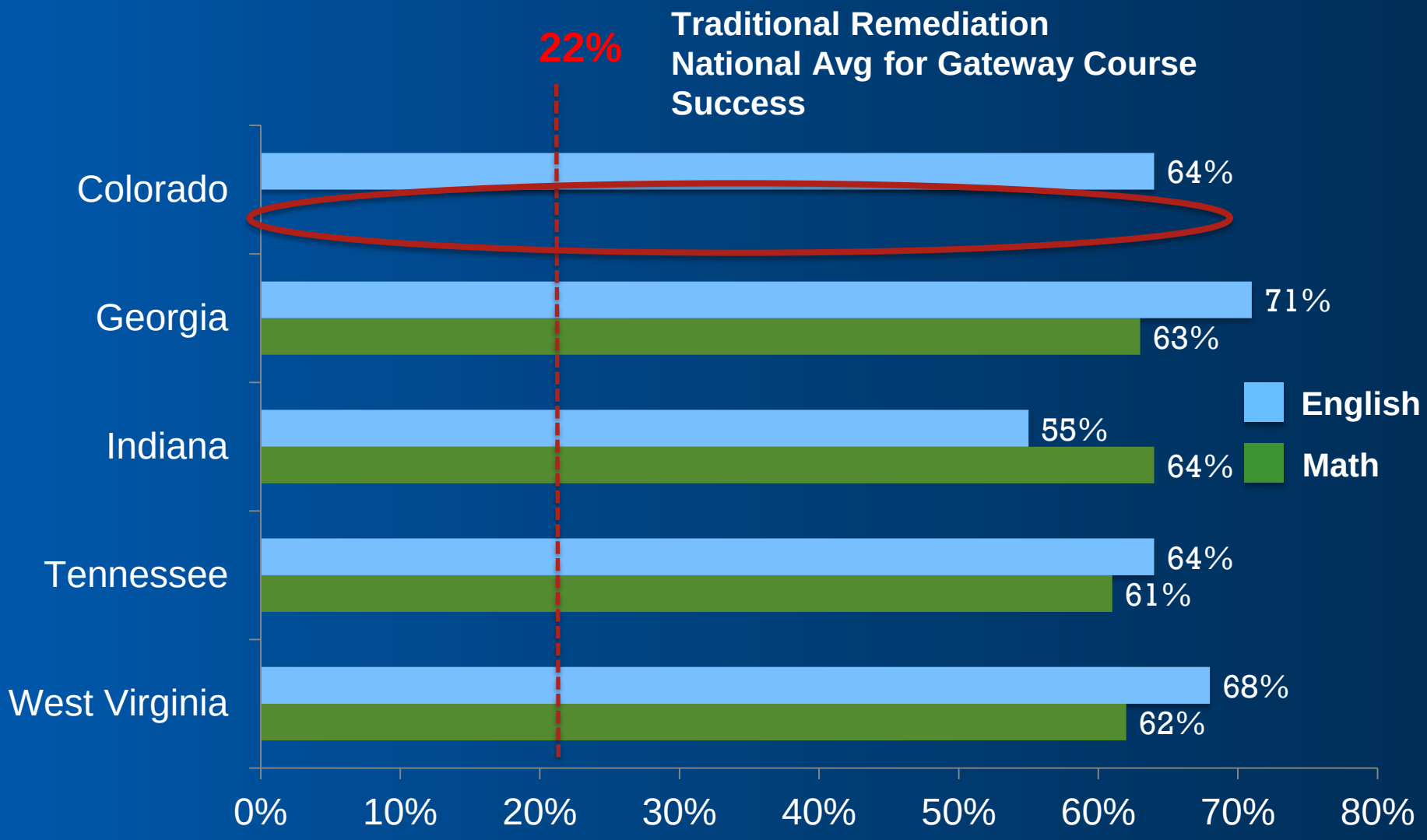
Multiple Corequisite Models



Traditional Remediation Results



One Semester Scaled Results



The Colorado Challenge

- Fully implement math pathways
  - Fully align content in each pathway
  - Ensure transfer and applicability
  - Develop advising protocols into math pathways
- Scale math corequisites
  - Set a date on calendar for implementing and scaling corequisite math
  - Develop corequisite math models for each math pathway.
- Align math pathways and corequisites to GPS

GAME CHANGER

Structured Schedules / A Better Deal

#StructuredSchedules

Today's Students

- **70%** are **non-traditional.**
- **70% commute** to campus.
- **40% work 30 hours** a week.
- **25% work full time** and **attend college full time.**
- **20%** have **children**.

☑ GAME CHANGER
Structured Schedules

Block schedules of classes

Cohorts of students

Students choose programs or majors, not courses

Attendance required

Baltimore City Community College

Monday	Tuesday	Wednesday	Thursday	Friday
MORNING BLOCK				
8:00AM – 8:50AM MUS 103 - #8765	**Structured Learning Activities**	**8:00AM – 8:50AM** MUS 103 - #8765	**Structured Learning Activities**	**8:00AM – 8:50AM** MUS 103 - #8765
9:00AM – 9:50AM MAT107 - #8766		**9:00AM – 9:50AM** MAT107 - #8766		**9:00AM – 9:50AM** MAT107 - #8766
10:00AM – 10:50AM SP 101 - #8767		**10:00AM – 10:50AM** SP 101 - #8767		**10:00AM – 10:50AM** SP 101 - #8767
11:00 AM – 11:50AM ENG101 - #8768	**11:00 AM – 12:10PM** RENG 92 - #8769	**11:00 AM – 11:50AM** ENG101 - #8768	**11:00 AM – 12:10PM** RENG 92 - #8769	**11:00 AM – 11:50AM** ENG101 - #8768
12:00PM – 12:50PM ***COLLEGE FREE HOUR***		**12:00PM – 12:50PM** ***COLLEGE FREE HOUR***		**12:00PM – 12:50PM** ***COLLEGE FREE HOUR***
AFTERNOON BLOCK				
1:00PM – 1:50PM ART 106 - #8771	**1:00 AM – 2:10PM** MAT 92 -	**1:00PM – 1:50PM** ART 106 - #8771	**1:00 AM – 2:10PM** MAT 92 -	**1:00PM – 1:50PM** ART 106 - #8771
2:00PM – 2:50PM SP 101 - #8772		**2:00PM – 2:50PM** SP 101 - #8772		**2:00PM – 2:50PM** SP 101 - #8772
3:00 PM – 3:50PM ENG 101 - #8773	**Structured Learning Activities**	**3:00 PM – 3:50PM** ENG 101 - #8773	**Structured Learning Activities**	**3:00 PM – 3:50PM** ENG 101 - #8773
4:00PM – 4:50PM MAT 107 - #8774		**4:00PM – 4:50PM** MAT 107 - #8774		**4:00PM – 4:50PM** MAT 107 - #8774
5:00PM – 5:50PM		**5:00PM – 5:50PM**		**5:00PM – 5:50PM**

Where there is structure, there are significant results.

TENNESSEE COLLEGES OF APPLIED TECHNOLOGY

75% avg. **on-time** graduate rate

TENNESSEE COMMUNITY COLLEGES

14% avg. **on-time** graduate rate

GPS DIRECT: MOMENTUM

- Meta-Majors
- Academic Maps
- Math Pathways
- 15-To-Finish

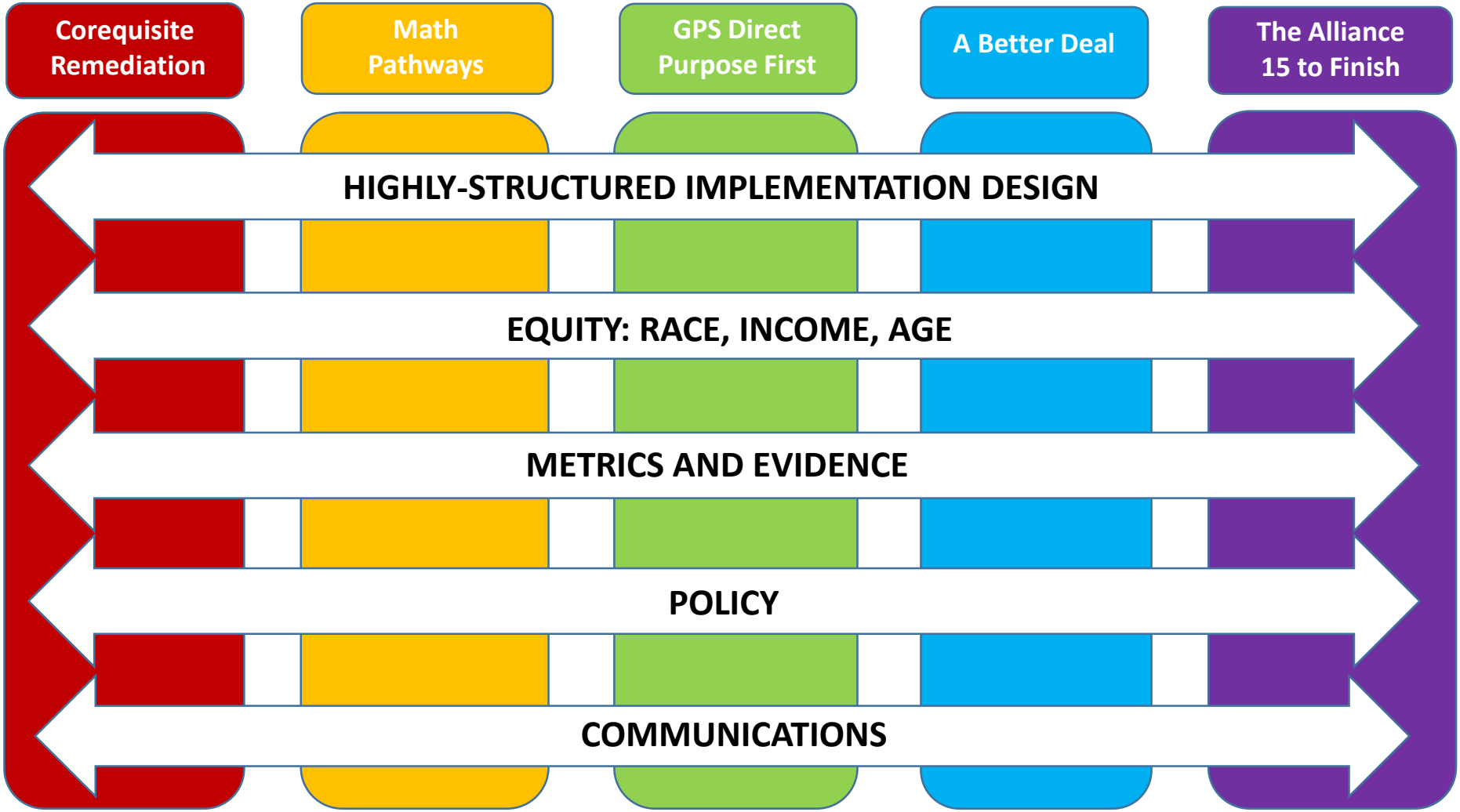
- Structured Schedules
- Corequisite Remediation
- Default Registration

Create Path → **Choose Path** → **Start Path** → **Stay On Path / Graduate**

- Purpose First (Onboarding)
- Meta-Majors
- 15-To-Finish

- Critical Path Courses
- Proactive Advising

TECHNOLOGY | DATA METRICS

THE CCA WAY

The Game Changers and Scaling Standards