

Expanding Access to High Opportunity Educational and Career Pathways

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New York:
Community college
enrollments
declining since
2011 (except dual
enrollment)

New York: Community college funding continues to be reliant on tuition/fees

Community College Revenues per Student

Revenues reported in 2018 dollars. Showing unweighted institutional averages. Data: IPEDS.

Revenue Source (click to highlight)

- Tuition/Fees
- State
- Other
- Local

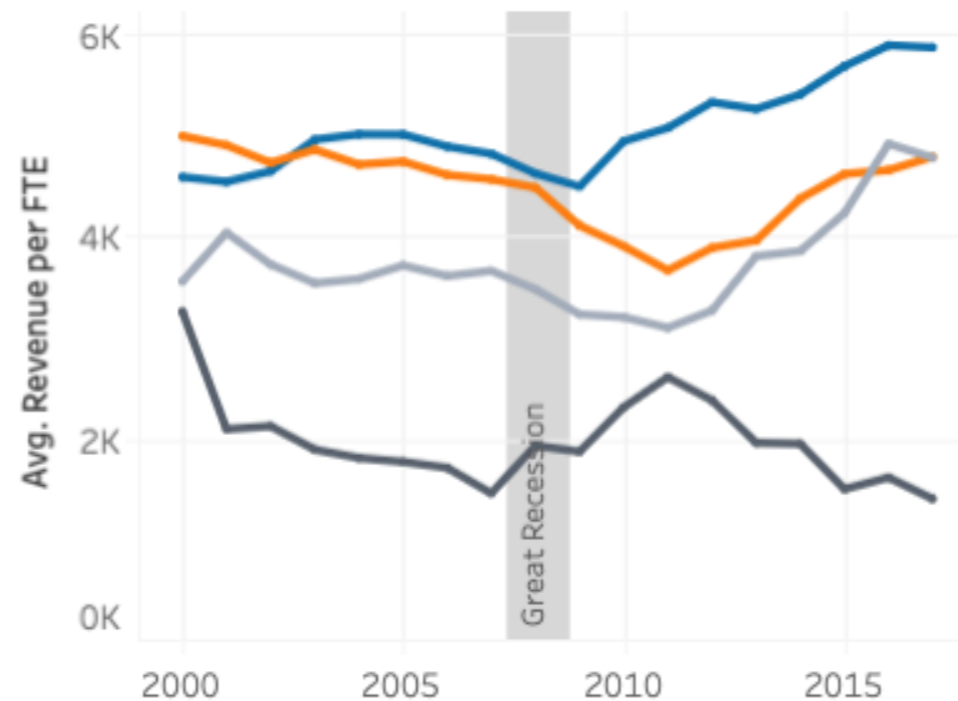
Filter by State/Territory

New York

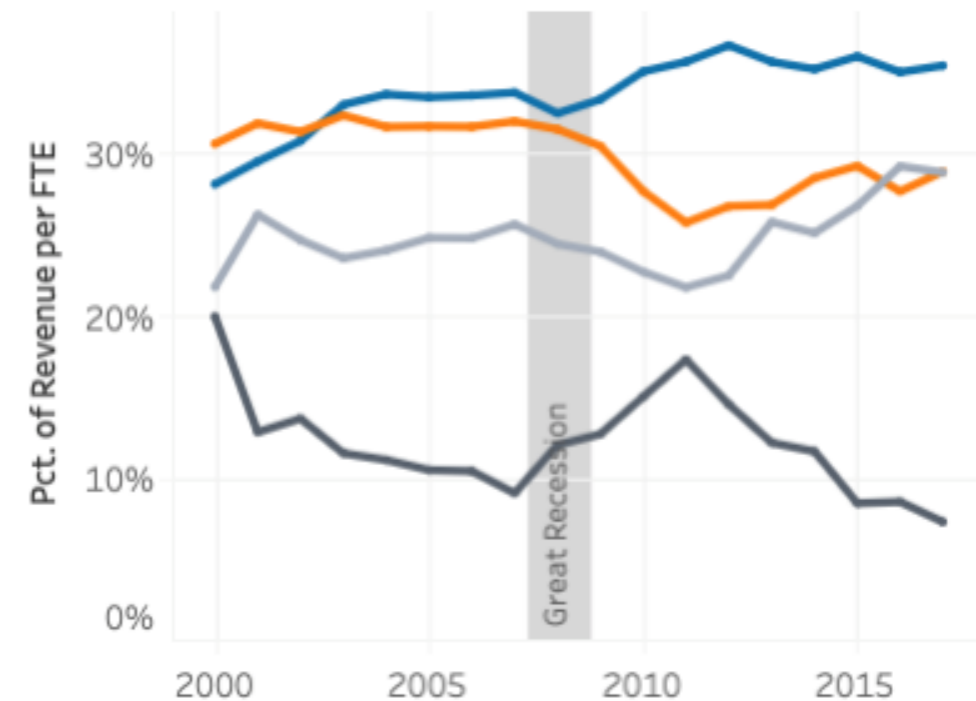
Filter by College

(All)

Per Student Revenue by Source



Share of Per Student Revenue



Guided pathways college: Redesigned for access and success

Clarify paths to student end goals – by ensuring that every program prepares students for good jobs and further education needed for career advancement

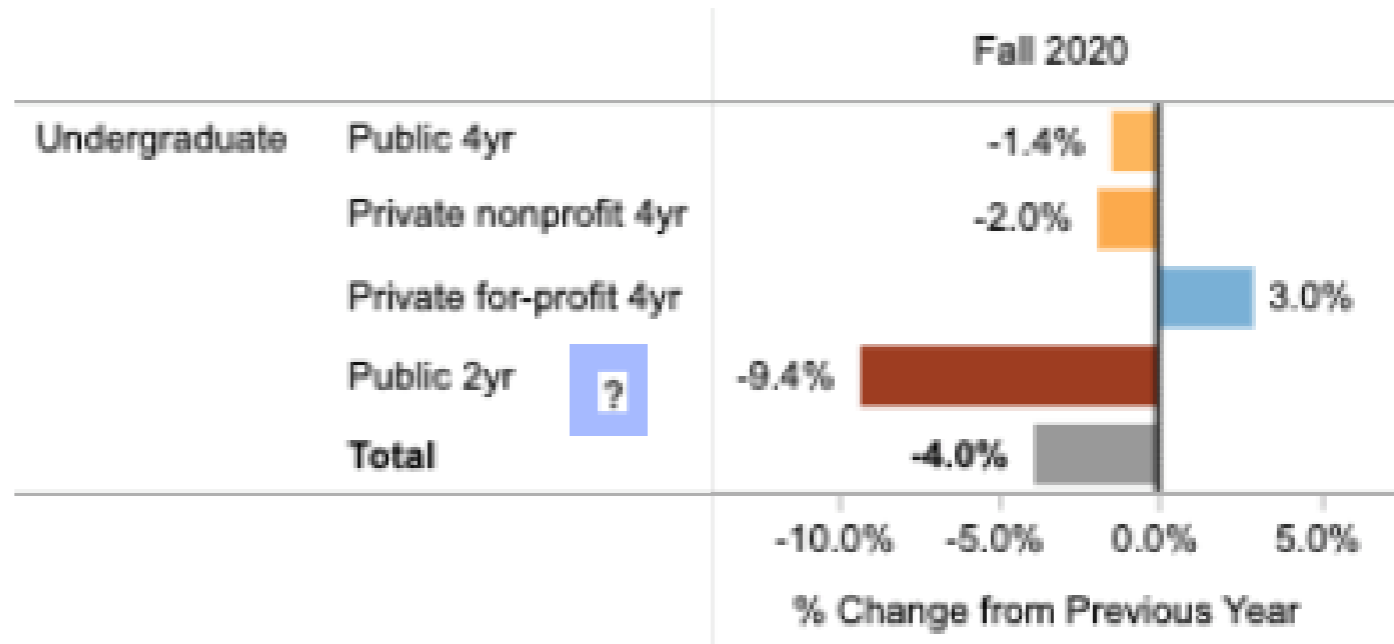
Help students get on a path – by helping all students actively explore options and interests, become part of an academic and career community, and develop a full program completion plan

Keep students on path – by scheduling classes and monitoring student progress based on students' plans to ensure timely and affordable program completion

Ensure students are learning – by strengthening active and experiential learning across programs to ensure students have know-how (including soft skills) required for good jobs and further education

Students and Colleges Hard-hit by COVID

Figure 1. Undergraduate Enrollment Changes by Sector



Public 2-year institutions

Figure 7. Undergraduate Enrollment Changes by Age

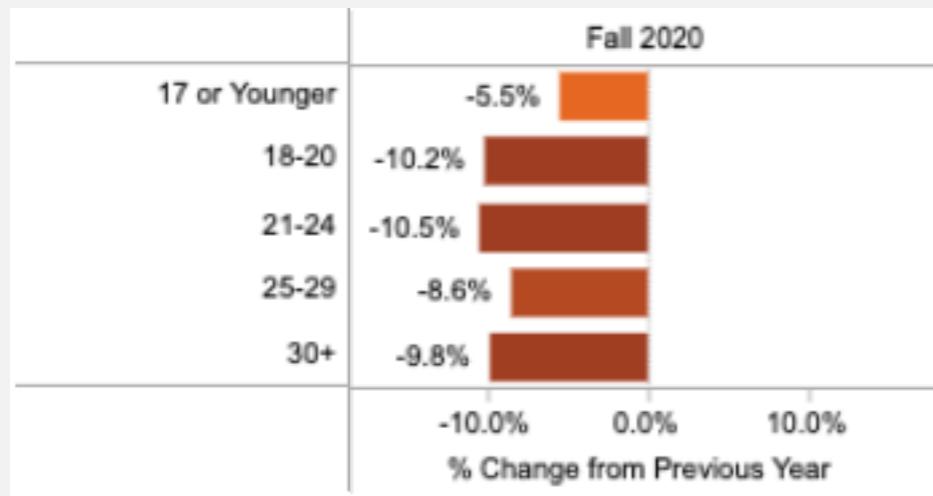
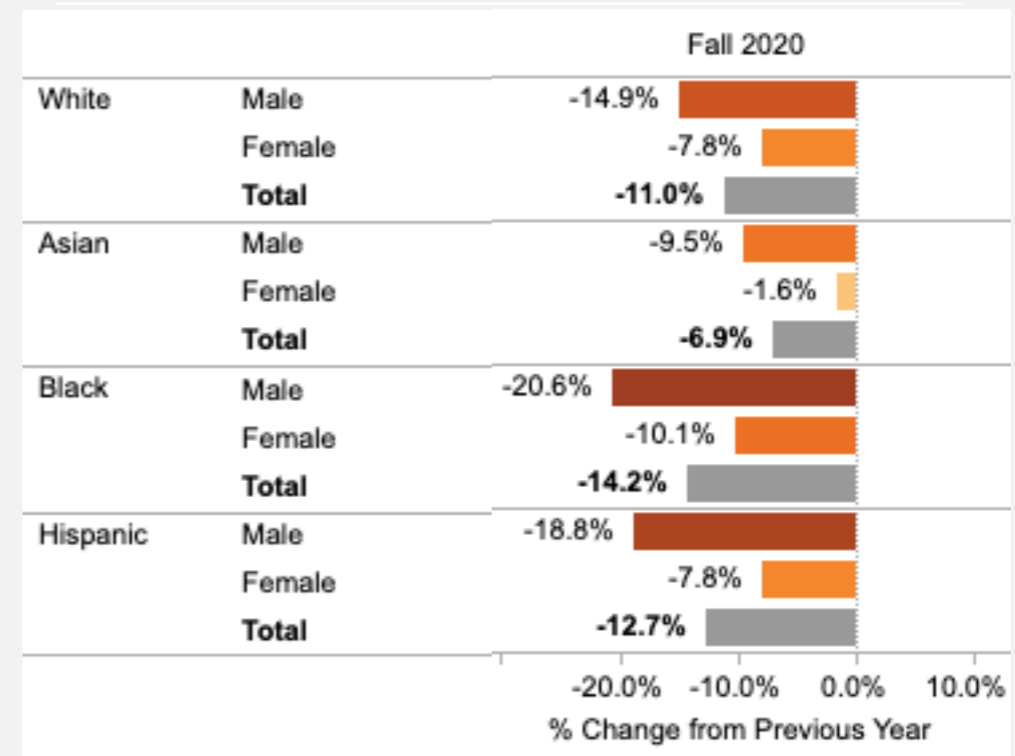


Figure 9. Undergraduate Enrollment Changes by Race/Ethnicity and Gender



COVID challenges for students and colleges

- Students will be even less able to afford college so they will expect programs that enable them to achieve goals as quickly and affordably as possible
- Students will want programs that enable them to secure stable jobs in short term and good jobs in longer term—offered in formats/on schedules that work for adults with intense job and family pressures
- Demand for HS dual enrollment offerings that save time and money required to earn a bachelor's degree in students field of interest will increase
- Students will face higher levels of trauma than usual
- Competition from online degree completion providers, regional public universities, less-selective privates will intensify
- State funding will likely be cut substantially; colleges will have to break down silos, work collaboratively to respond to challenges

What is one way your college has changed to better serve students this fall?

Virtual Gallery Walk:

1. 90 seconds to type a response in the chat (but don't hit enter!)
2. Everyone clicks enter when I say
3. 3 minutes to read & reflect



Guided pathways strategies for student success and equity



Program Value: Backward design all programs to ensure they prepare students to secure good jobs and/or further education needed for career advancement



Purpose: Help every student explore career/academic interests and connect with faculty, advisors, students, & alumni in their field of interest from the start



Empowerment: Ensure every student takes a “light the fire” course on topics of interest in term 1



Plan: Ensure every student has a career goal and full educational plan by the end of term 1

Guided Pathways to What? For Whom?

Unpacking Program Enrollments and Completions With Equity in Mind

By John Fink and Davis Jenkins

Across the country hundreds of community colleges are implementing whole-college guided pathways reforms to create clearer paths to college and career success for students.¹ The aim of these reforms is to help students explore and decide upon career and education goals that align with their interests and aspirations, and to plan and complete a program of study to achieve those goals. As part of these reforms, colleges redesign intake and advising processes around broad career fields sometimes called “meta-majors”; this helps entering students make sense of the large number of program options that are available and engages them with faculty, advisors, and other students in a field of interest right from the start (Jenkins et al., 2020). Guided pathways reforms are challenging for colleges to pursue; they entail the participation of all staff in modifying practices around a far-reaching notion of student success (Jenkins et al., 2019). They require a shift in mindset wherein college personnel ask not only “Are students persisting and completing?” but also “Do our programs really lead to the education and career outcomes students seek?” and “Is student representation across our programs equitable?”

Critically examining what programs students are entering and completing is particularly important given that some community college programs lead to substantially higher economic returns than others (Belfield & Bailey, 2017; Dadgar & Trimble, 2015). A substantial literature base reveals not only that returns to higher education programs are stratified but also that this stratification operates along racial/ethnic, gender, and socioeconomic lines (Carnevale et al., 2016; Castex & Decher, 2014). Though this research has focused primarily on the four-year sector, it may be that community colleges are in even more danger of facilitating inequitable stratification since their programs vary by subject area as well as length (corresponding, e.g., to short- and long-term certificates, applied associate degrees, and associate of arts degrees designed to prepare students for upward transfer to bachelor’s degree programs). There is a wide range in the economic returns to different types of community college awards, with longer programs and those leading to bachelor’s degrees in math-intensive fields, for example, leading to stronger labor market returns.

“A substantial literature base reveals not only that returns to higher education programs are stratified but also that this stratification operates along racial/ethnic, gender, and socioeconomic lines.”

Categorizing Community College Programs by Post-Graduation Opportunity



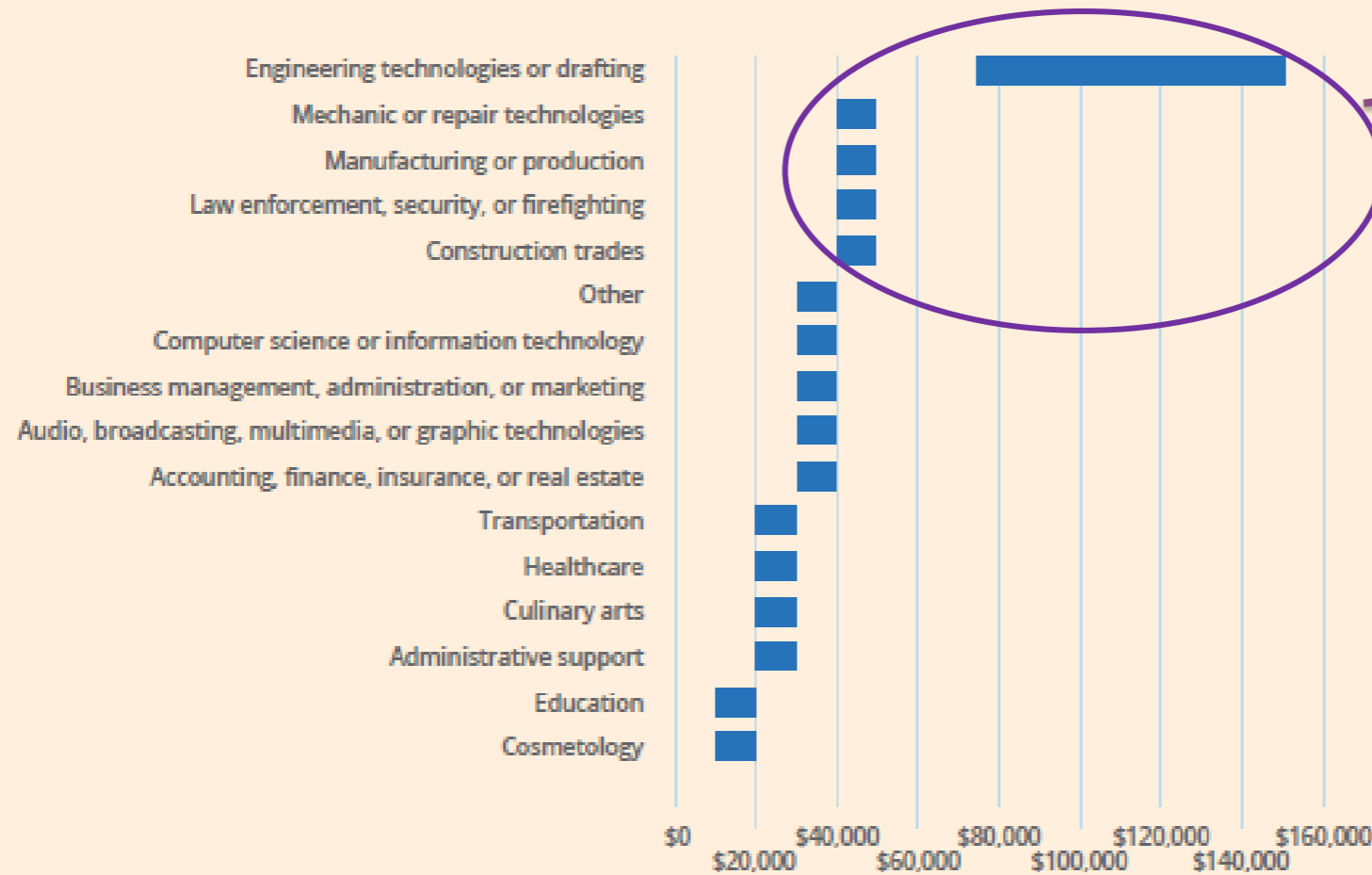
Workforce Programs

Transfer Programs

Other Programs

Higher-Returning Certificates

FIGURE 13. Workers with certificates in engineering technologies or drafting have median earnings between \$75,001 and \$150,000—higher than those with certificates in other fields.



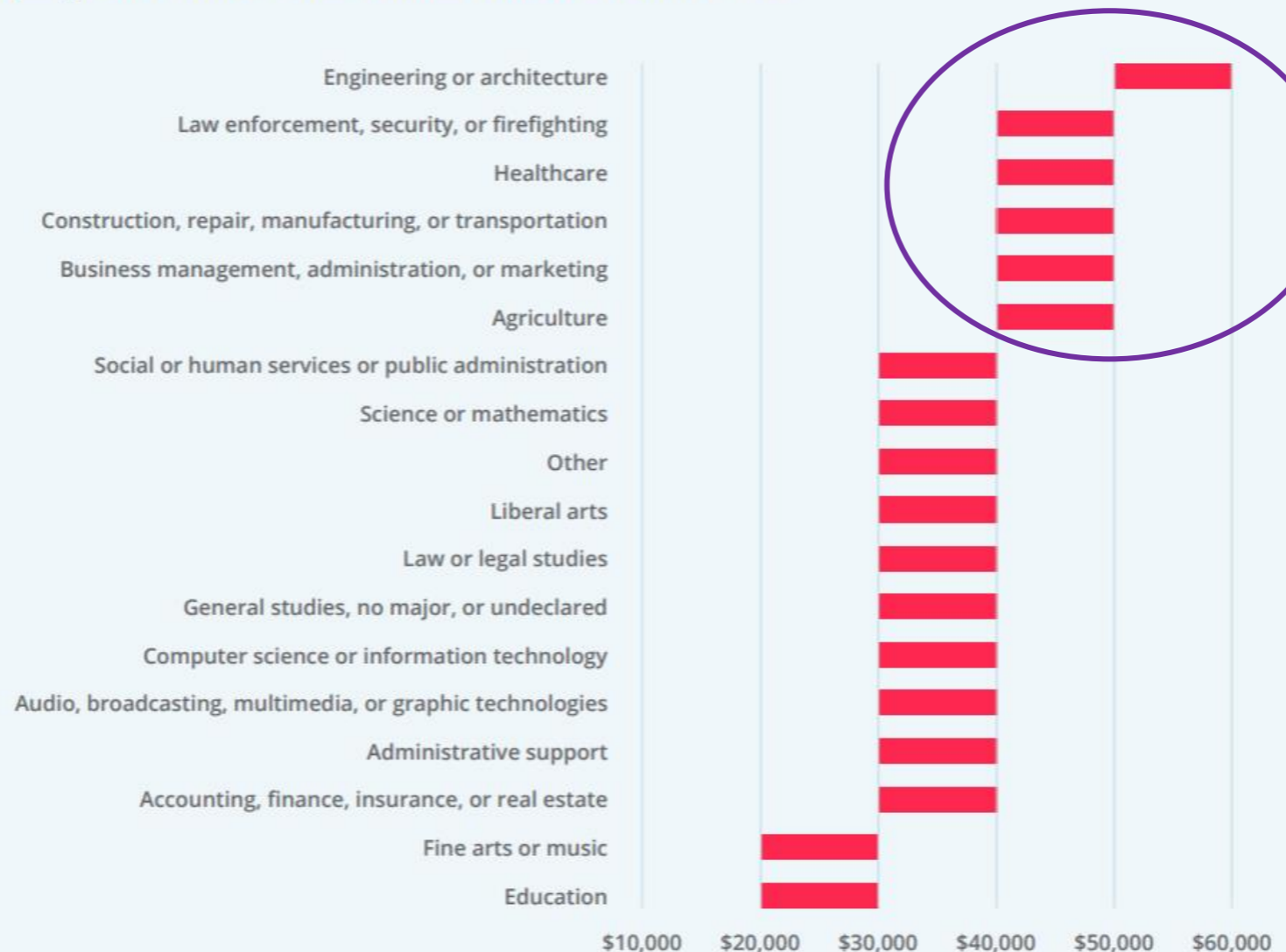
29% certificates awarded by NY ccs in 2016-17

Source: Georgetown University Center on Education and the Workforce analysis of data from the Adult Training and Education Survey (ATES), 2016.

Note: ATES asks respondents to specify their earnings during the 12 months prior to the interview within prescribed wage bands by field of study. We calculated median wage bands based on earnings for prime-age workers (ages 25 to 64) with positive earnings. Fields with fewer than 30 records were not included.

Higher-Returning Associate Degrees

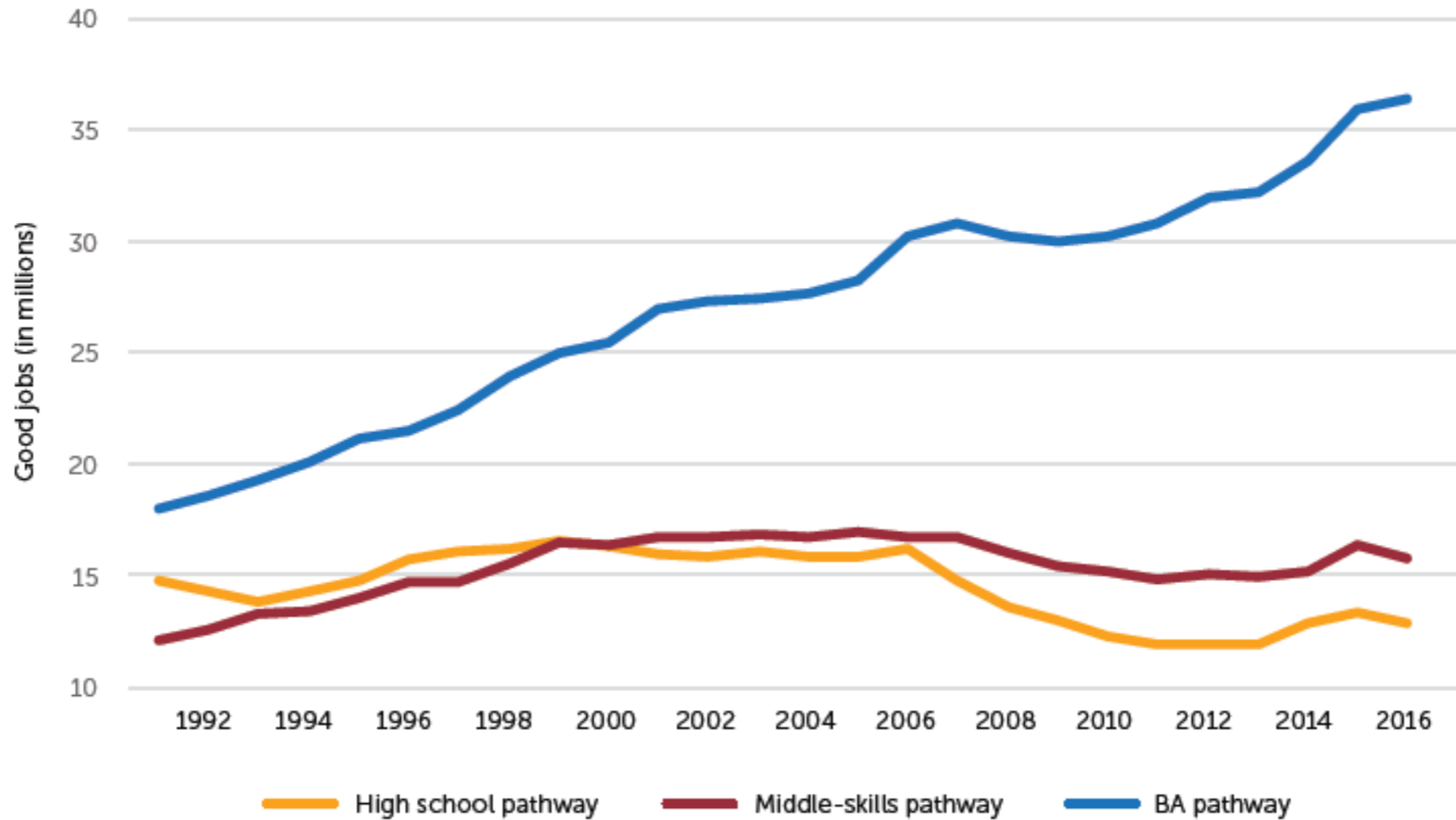
FIGURE 12. Workers with associate’s degrees in engineering have median earnings between \$50,001 and \$60,000 per year, compared to between \$20,001 and \$30,000 per year for those who studied education or fine arts.



49% of associate degrees awarded by NY ccs in 2016-17

Trends in Good Jobs*

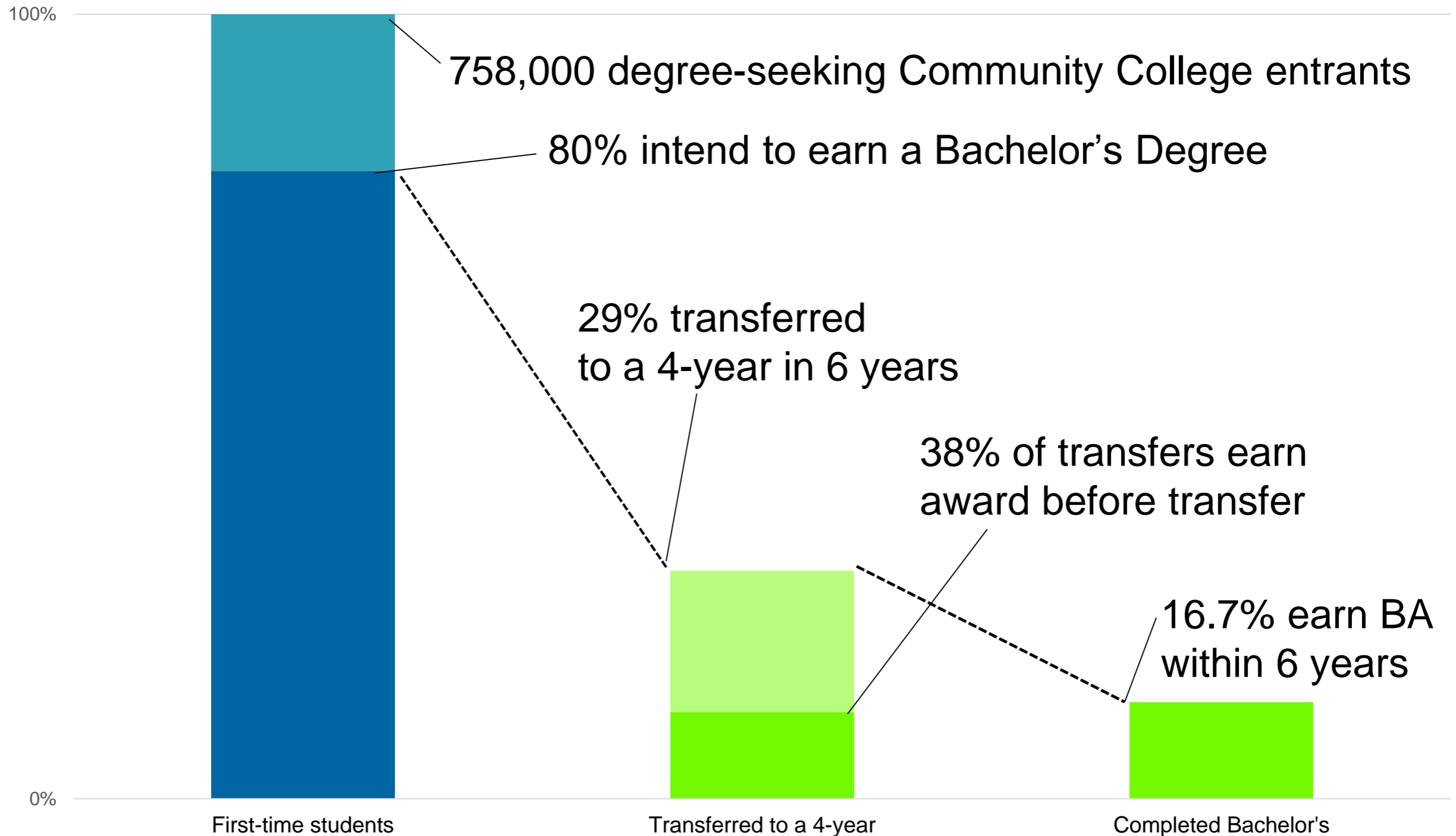
Figure 4. By 2000, the middle-skills pathway surpassed the high school pathway in providing good jobs.



Source: Georgetown University Center on Education and the Workforce analysis of data from the US Census Bureau and Bureau of Labor Statistics, *Current Population Survey*, 1992–2017.

* “Good jobs” defined as those that pay a minimum of \$35,000 for workers between the ages of 25 and 44 and at least \$45,000 for workers between the ages of 45 and 64.

Few Transfer, Even Fewer Complete

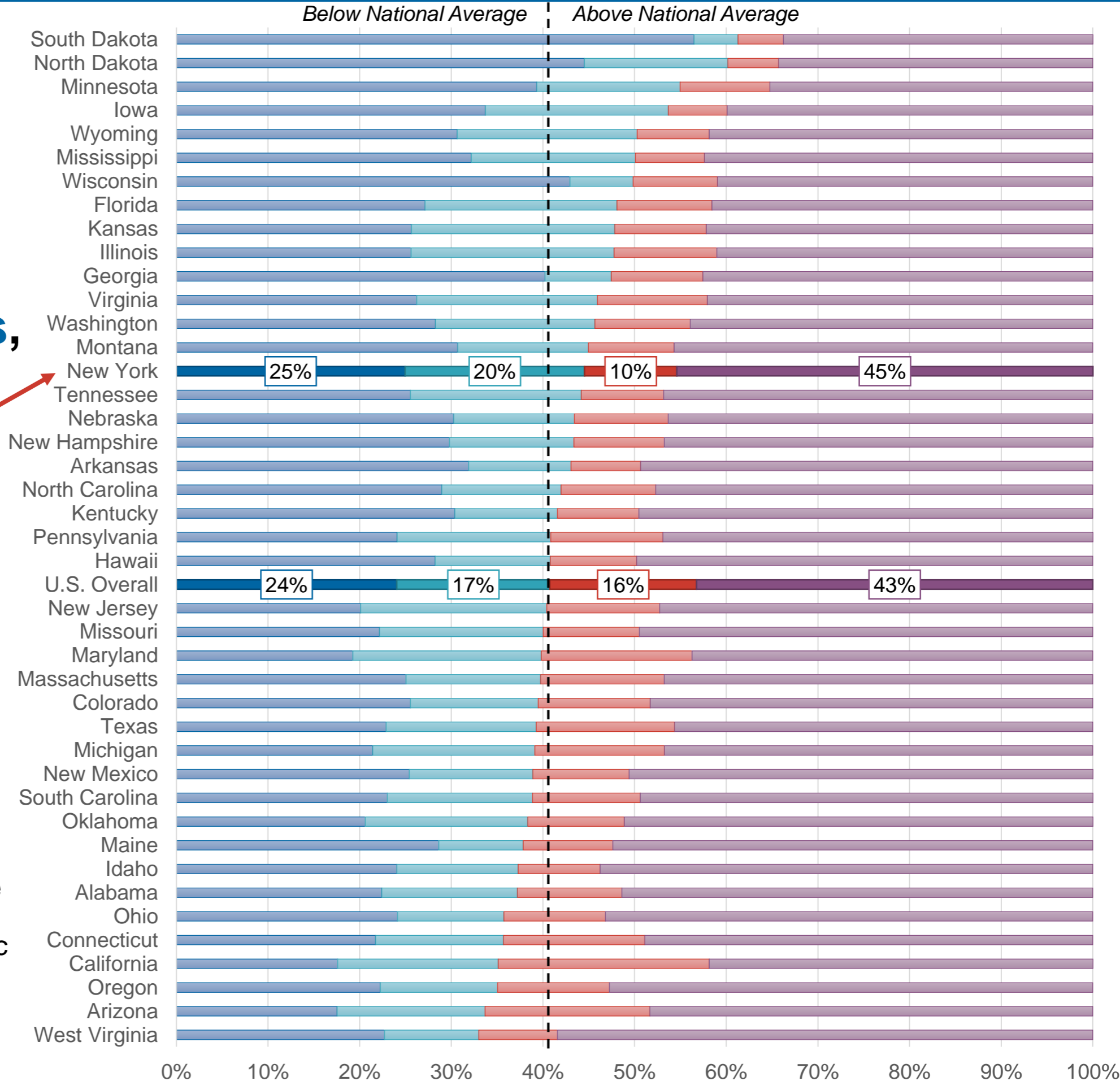


Highest Outcomes in Six-Years: Community College Entrants, by State

New York

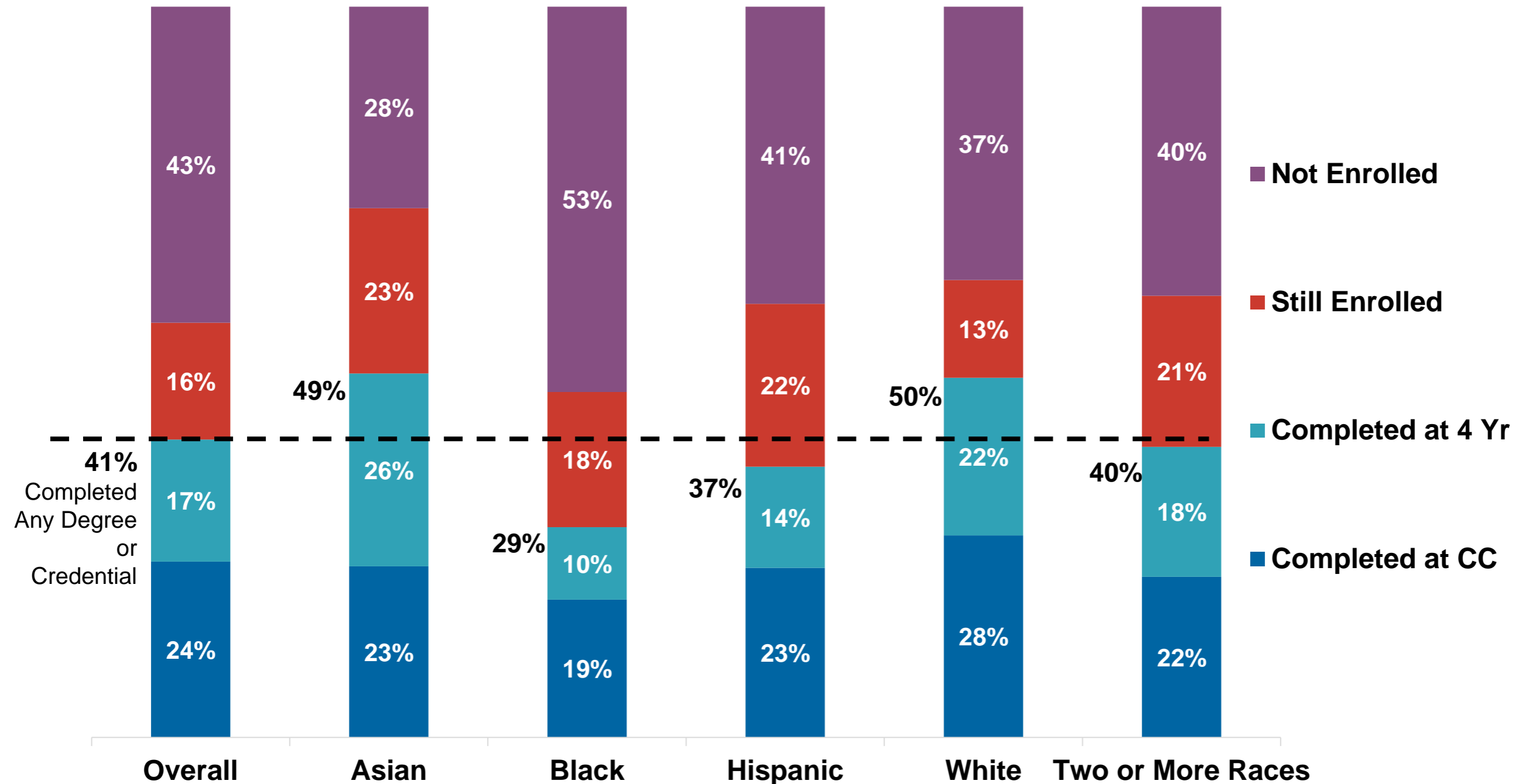
- Completed at CC
- Completed at FY
- Still enrolled
- Not enrolled

41% Completed Any Degree or Credential

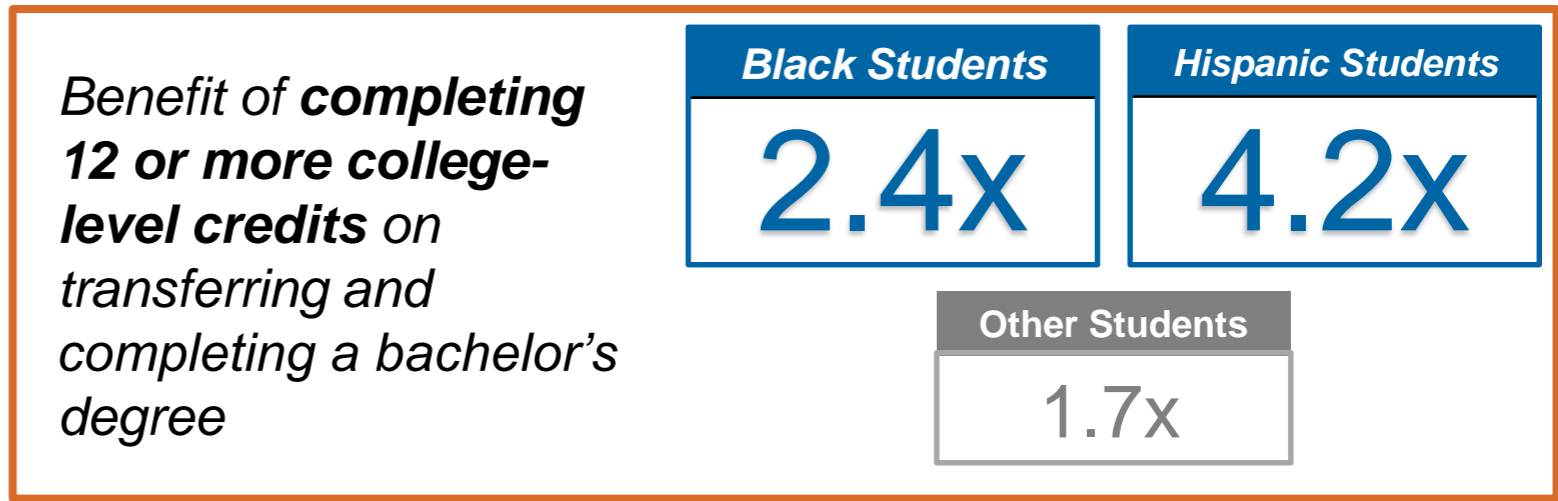


Source: NSC Completing College Signature Report tracking the fall 2013 FTIC, degree-seeking public 2-yr entering cohort (excluding current dual enrollment students but **including** former DE students)

Highest Outcomes in Six-Years among FTIC Community College Entrants, by Race/Ethnicity



Benefits of Momentum for Transfer



<i>Transfer to a four-year institution</i>	Benefit of Milestone (Baseline Group: White)
Credit Momentum (6+, 12+, or 24+ college credits)	3-5x
Gateway English/Math (College-level)	3-4x
Completed Transfer Degree	7-8x

Narrowing and Closing the Racial Transfer Gap

All students who entered community college

Students who completed **6+** college-level credits

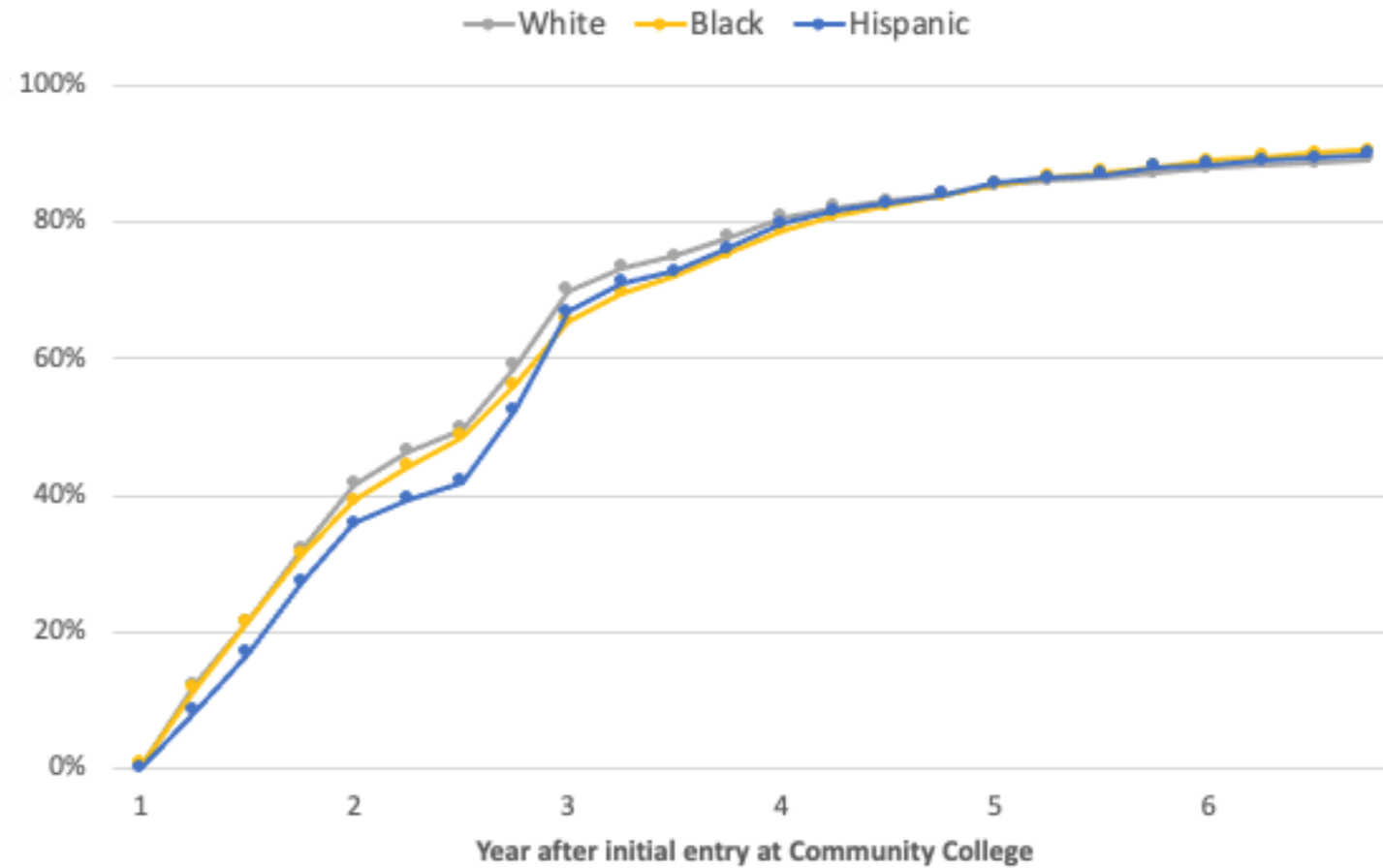
Students who completed college-level **math**

Students who completed a **transfer associates degree**

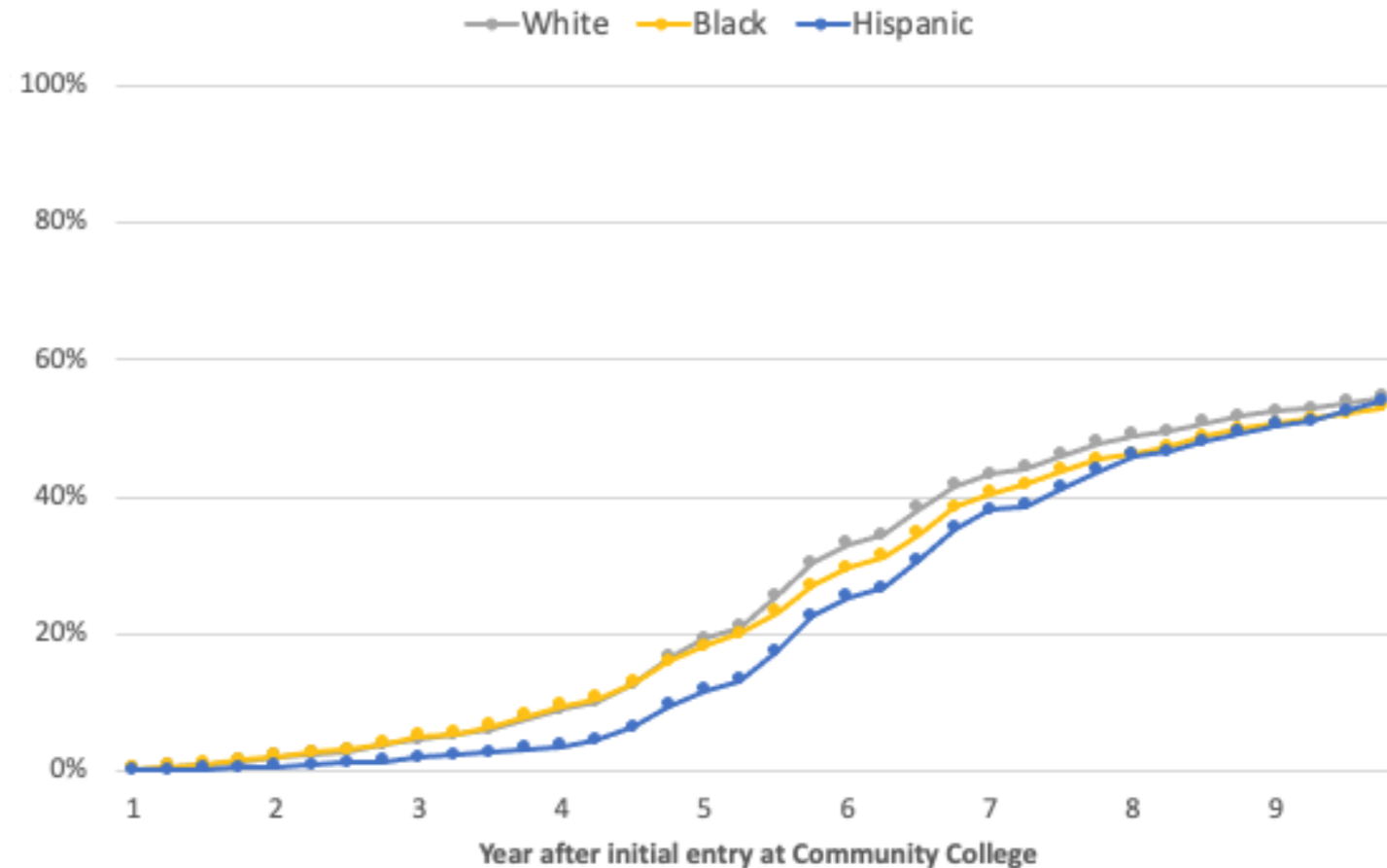
Yuxin Lin, Maggie Fay, & John Fink. (Forthcoming).

CCRC analysis using statewide administrative data on 573,806 community college entrants between 2009-2018, tracked up to 10 years. Estimated odds ratios from hazard models controlling for students characteristics, college fixed effects and cohort fixed effects.

Probability of Transferring to a Four-Year Institution

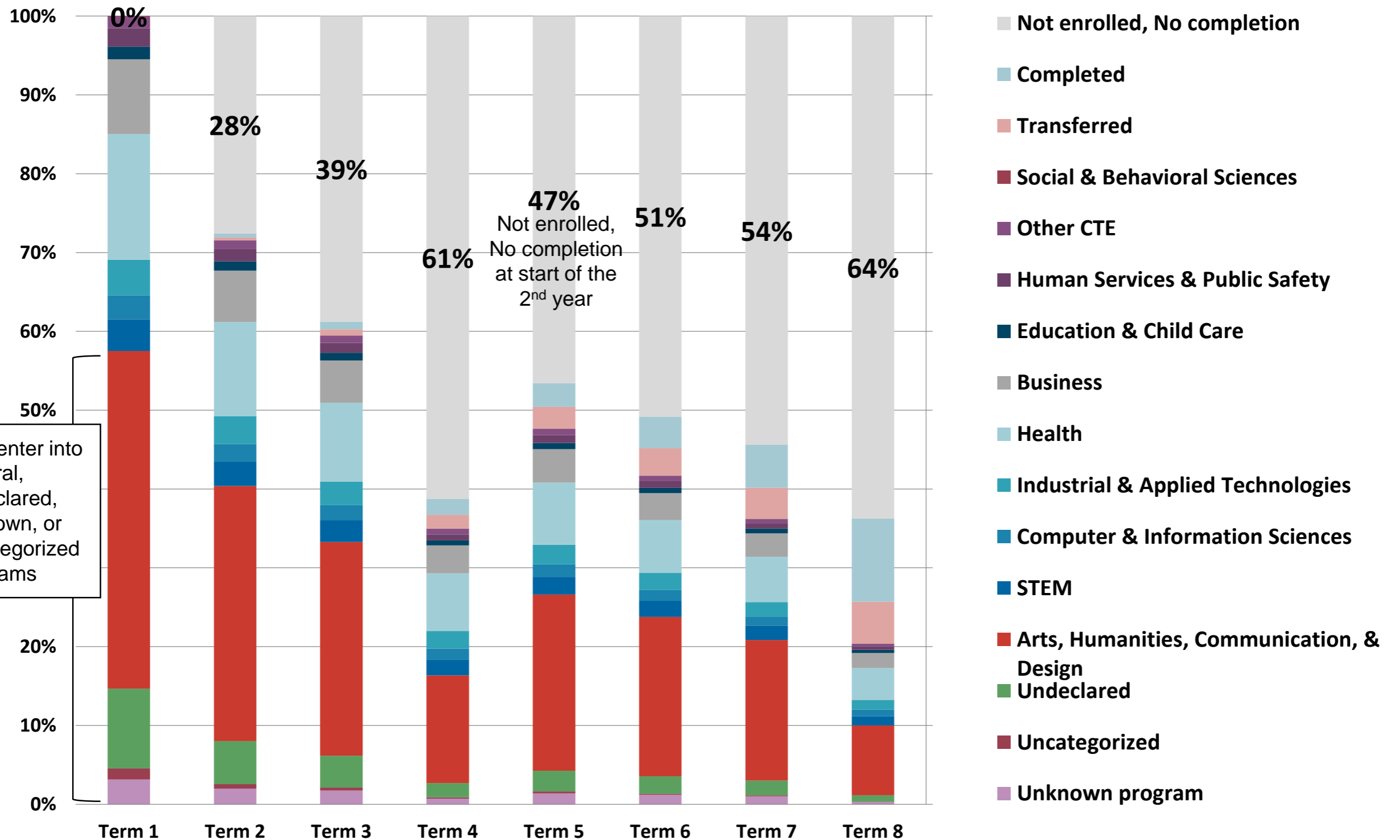


Probability of Transferring and Completing a Bachelor's



Half of students don't return for a second year

Term-by-term program enrollments among degree-seeking CC entrants in one state



Transfer Credit Loss



Just **58%** of students successfully transferred 90% of their credits.



And **15%** can't transfer any credits at all.

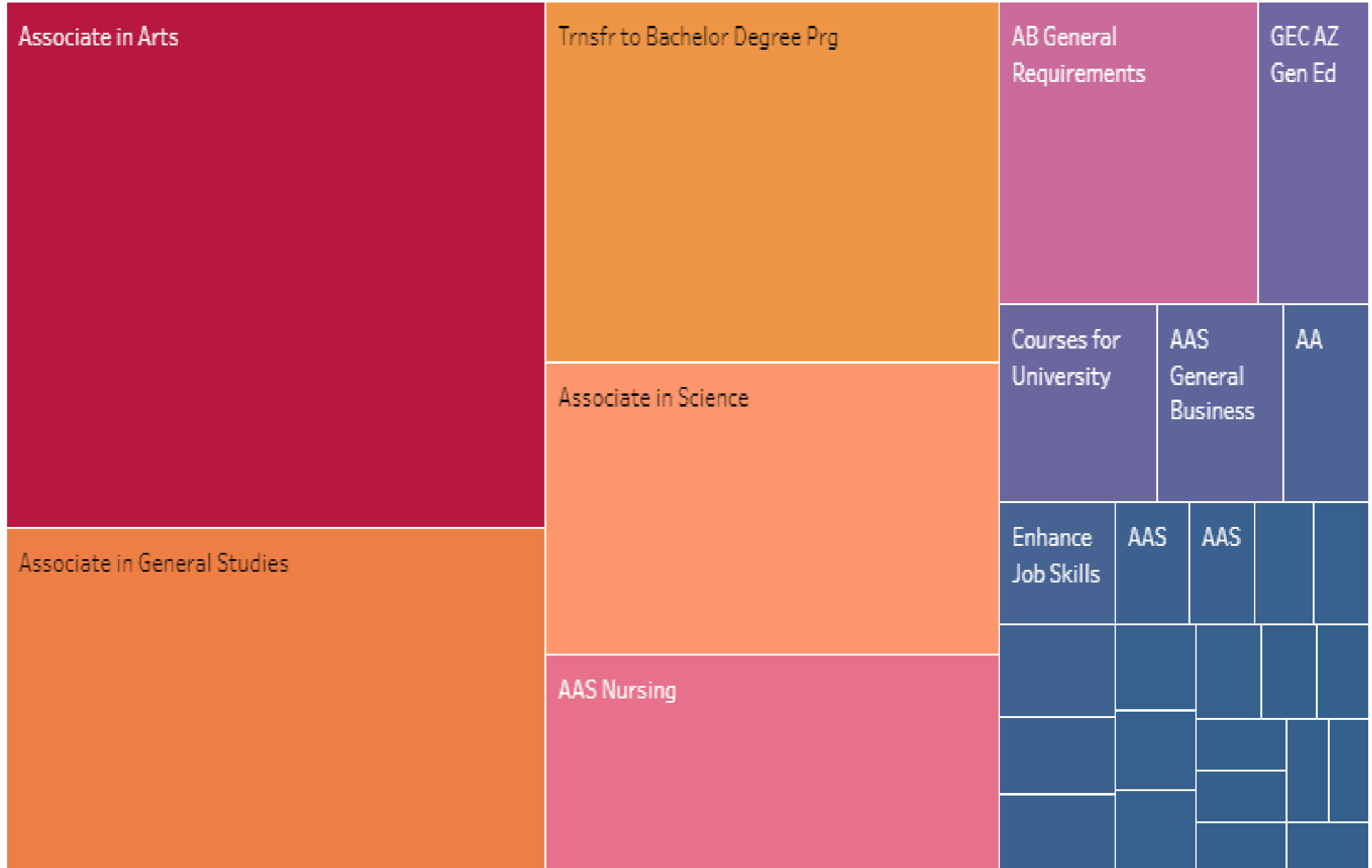


Students who can transfer 90% of their credits were **2.5x** more likely to get their bachelor's degree, compared to those who transfer half or less.

DECLARED MAJORS AT MCCCC

DECLARED MAJORS

All | Academic Plans and Subplans



TOP TRANSFER PROGRAMS (ASU, UA, NAU)

TOP TRANSFER PROGRAMS

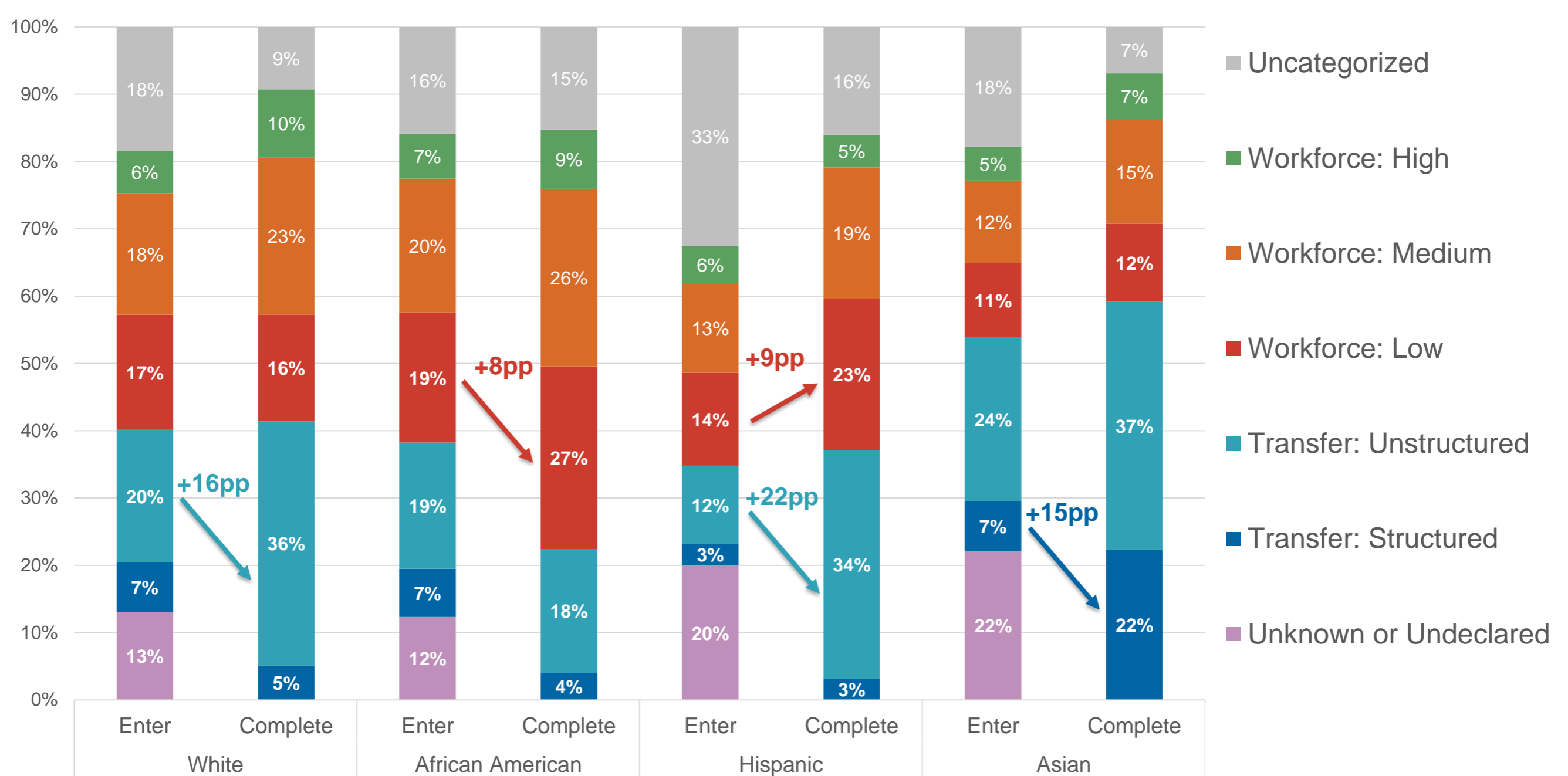
* Students Transferring to All

Registered Nursing/Registered Nurse	Psychology, General	Criminal Justice/Law Enforcement Administration	Elementary Education and Teaching	Business	Social Work
	Biology/Biological Sciences, General	Science	Foods,	English	Political Science and
Business, Management, Marketing, and Related Support Services, Other	Speech Communication and Rhetoric	Special Education and Teaching, General	Public Health, General	Computer Science	Electrical and Electronics
		Health and Physical Education/Fitness, Other	Economics, General	Accounting	
Liberal Arts and Sciences/Liberal Studies	Multi-/Interdisciplinary Studies, Other	Secondary Education and Teaching	Mechanical Engineering		
		Health/Medical Preparatory Programs, Other	Sociology	Kinesiology and Exercise	Art/Art Studies, General

Categorizing Community College Programs by Post-Graduation Opportunity

Category	Description	Examples
Workforce: Low	Program places students into jobs with low average earnings (e.g., less than \$14/hour)	Criminal Justice, Automobile Technology, Early Childhood
Workforce: Medium	Program places students into relatively middle-paying job (e.g., between \$14-\$17.55/ hour)	Accounting, Welding, Business Management, Dental Assistant
Workforce: High	Program places students into a relatively high-paying job (e.g., more than \$17.55/ hour)	Nursing, Radiology Technology, Sonography, Dental Hygiene
Transfer: Unstructured	Program designed for general transfer (no pre-major or university destination necessarily specified)	AA-General Studies, "General Transfer"
Transfer: Structured	Program designed to prepare students for a particular baccalaureate major/meta-major and/or a specific four-year destination	AA-Business (DTA), AS-T (Engineering)
Undeclared or Unknown	Listed as undeclared or missing program information	Null, Missing Program, Undeclared
Uncategorized or Other	Non-degree seeking, ESL, ABE, dual enrollment	Basic Education, ESL, Running Start

Enrolled Students Only: Program Enrollments by Term among FTEIC degree-seeking CC Entrants, 2009-2011



Planning Guide and Data Tool for Colleges on Access to Higher-Opportunity Pathways



1. What programs are our students currently enrolled in?
2. Which programs lead to greater or lesser opportunity?
3. Is student representation across programs proportionate?

Figure 1.
College A: Treemap of Program Enrollments

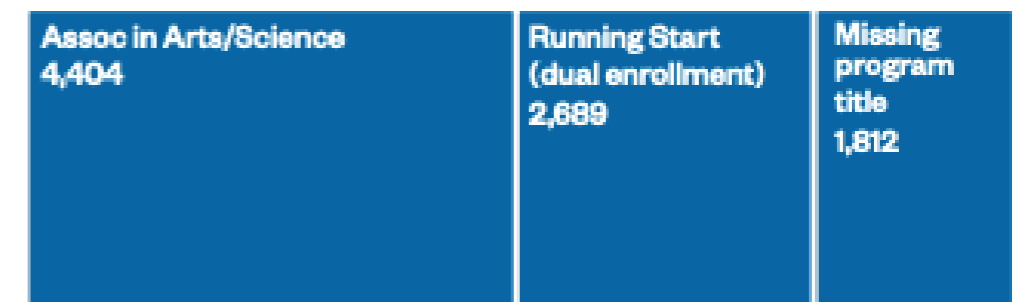
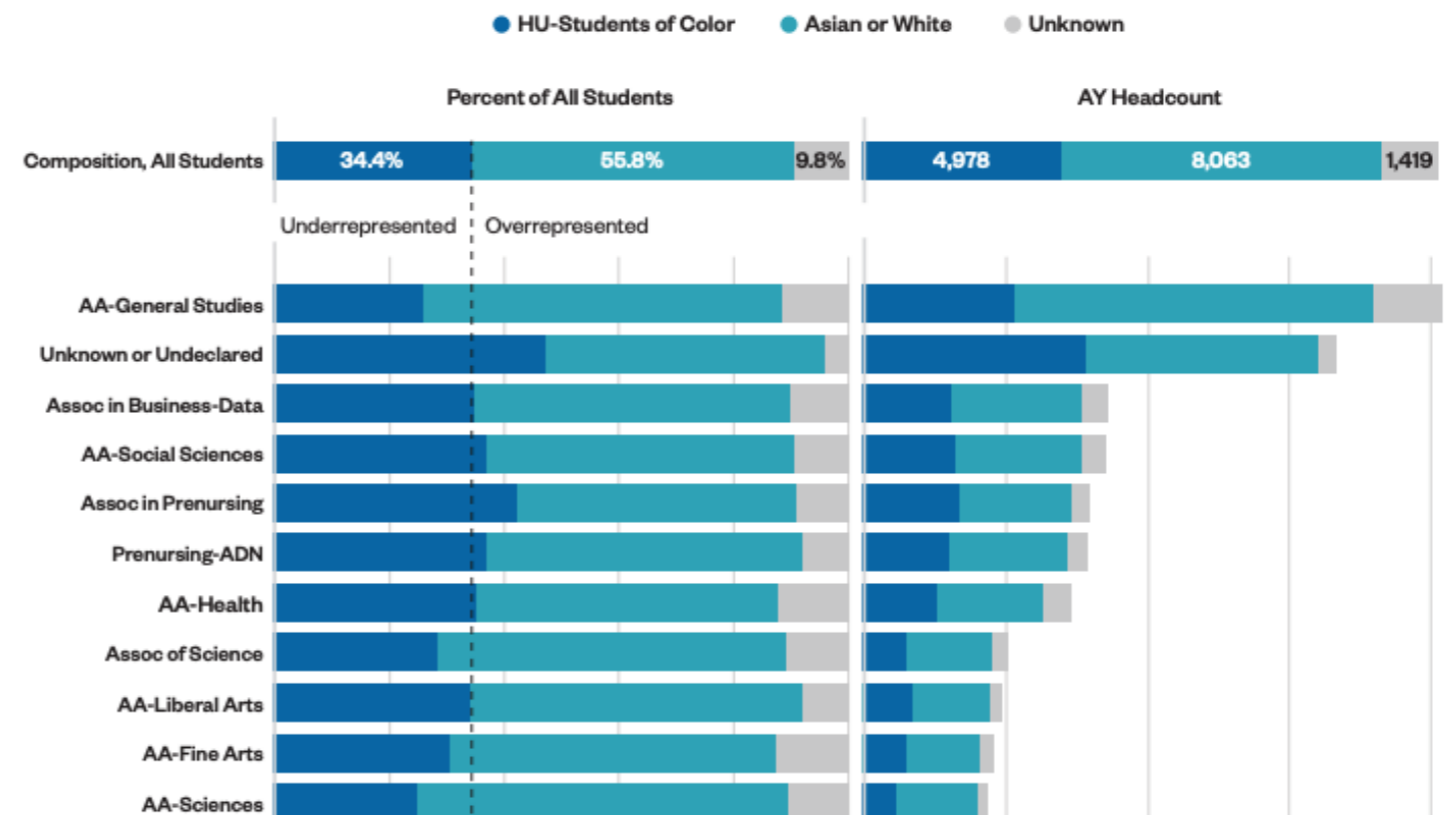
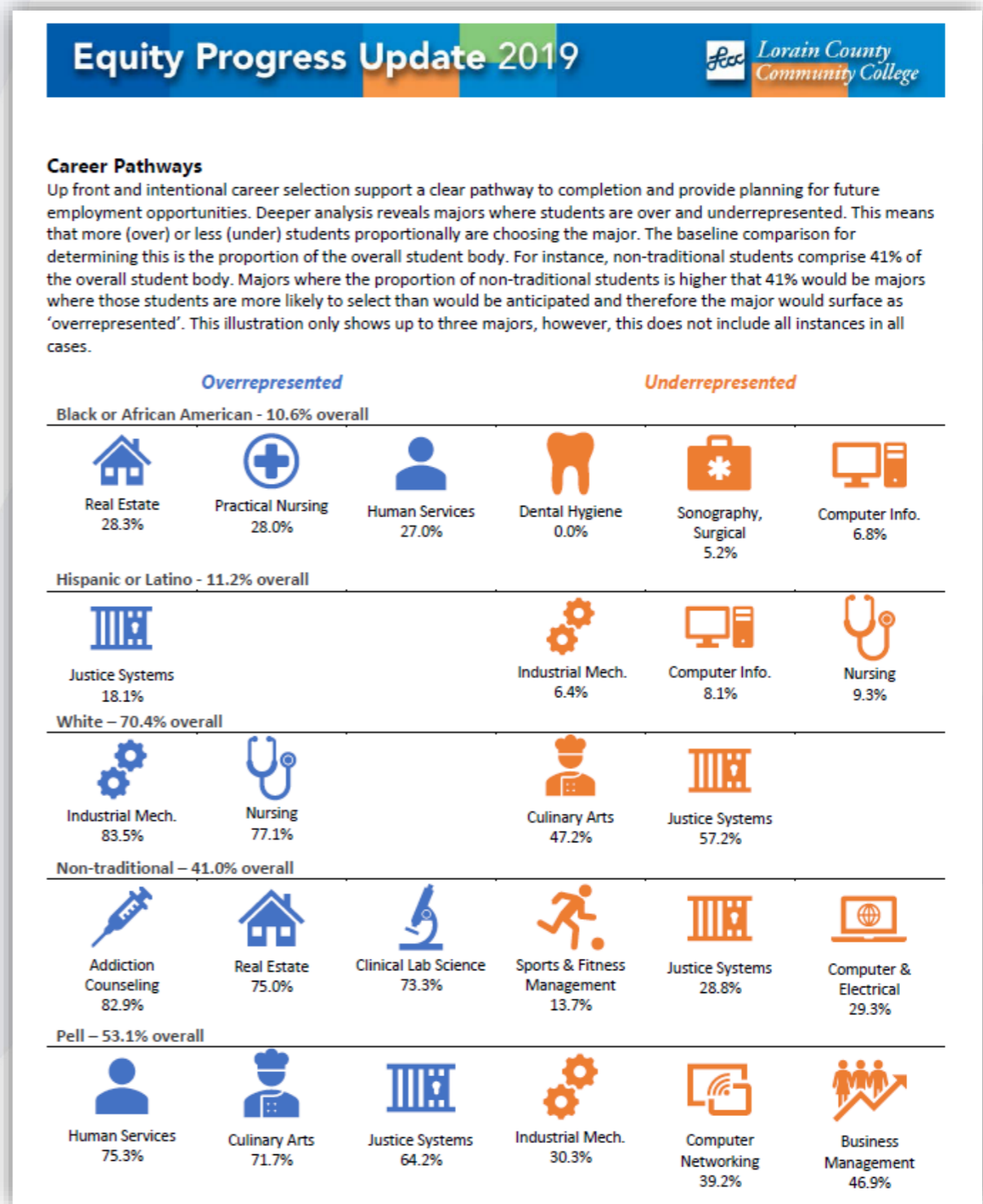


Figure 5.
College B: Racial/Ethnic Composition of Top-Enrolled Programs



Program enrollment equity

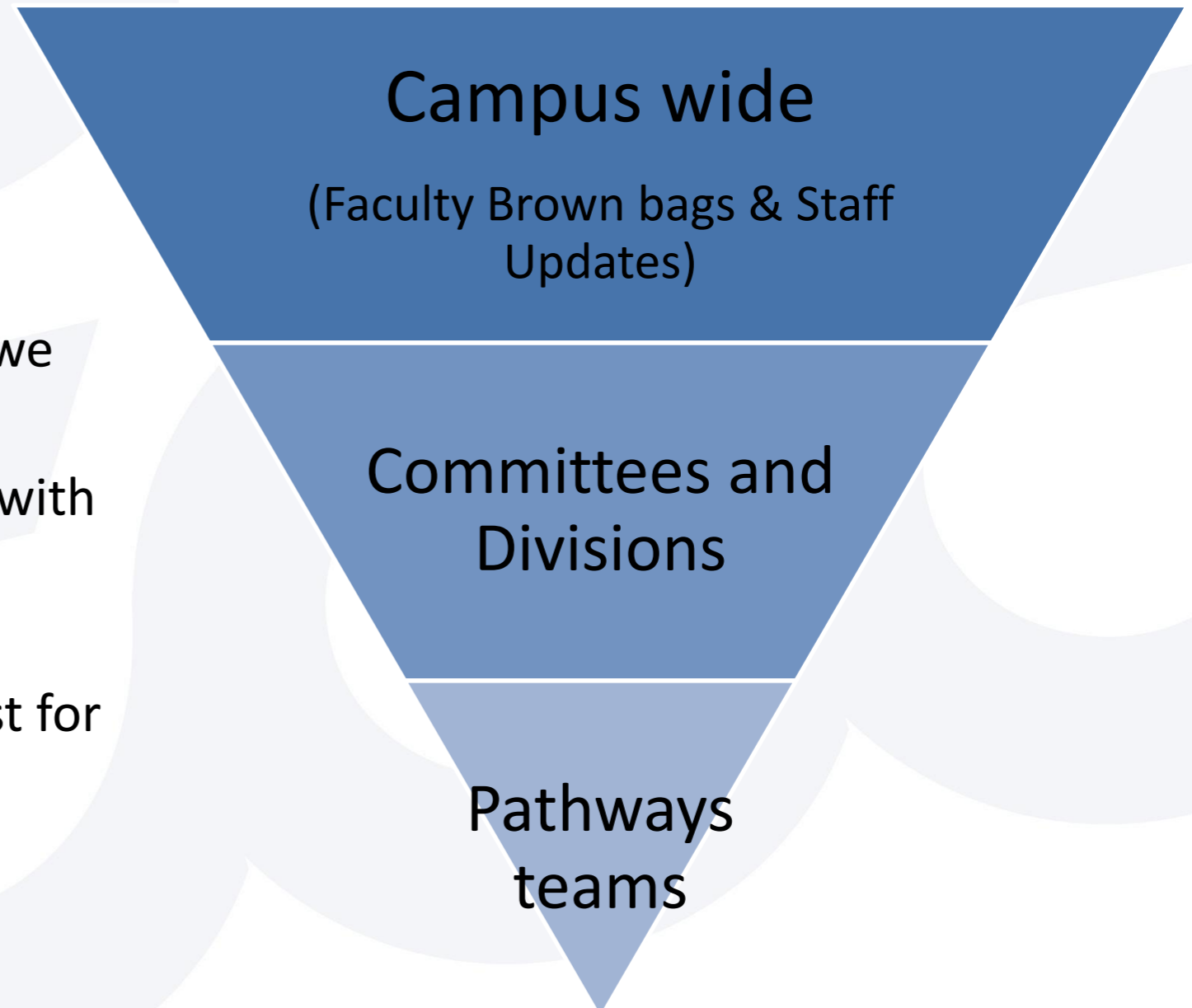
- National studies released about the impact of program selection
- Disaggregated completion rates started to prompt pipeline discussions
- Results from graduate outcome surveys sparked internal dialog
- Data & Information Group (DIG) shared creation of new report



Courageous Conversations

Questions discussed

- Why is this occurring? Is it structural? Is it access?
- What other information do we need?
- How do you equip students with the tools to make the most informed decisions?
- Where do opportunities exist for redesign?



Informed Strategies

- Identify & begin implementing a **culturally responsive career counseling approach**
- **New intake survey** to learn about students' backgrounds and family support, continuing to deepen a holistic, appreciative advising approach
- **Avanzando Through College** program provides a culturally-informed approach to college transition for Hispanic and Latinx students, seeking a similar support community model for new Black/African American students
- **Advisors visit program sites, clinical locations, employers, etc.** to see work in action and be able to better describe opportunities within their assigned academic/ career pathways
- Integrate career and academic pathway connections into **Student Engagement efforts**
- **College Success course redesign** to include a research component that provides opportunities for faculty to highlight career pathways and professional organizations with which students can connect
- Transfer Coordinator position working to ensure **each pathway LCCC offers has an aligned transfer option** to lead to enhanced skills and socioeconomic mobility

Rethinking Onboarding From a Guided Pathways Perspective

FROM

Orientation to college

Optional career and transfer advising and planning

Engaging with programs after prerequisites

À la carte high school dual enrollment coursetaking

TO

Orientation to fields of study

Required career and transfer advising and program planning

Engaging with programs from the start

Dual enrollment as an on-ramp to a program pathway

What do students want from onboarding?

- The opportunity to explore programs and careers thematically through meta-majors.
- To interact with other new and current students who share similar academic and career interests.
- To network with faculty and professionals in their field of study.
- Students who have clear career goals need different kinds of support than those who don't.

Tools for Digging In

Program Explorer Excel Tool

Data Tool: Unpacking Program Enrollments and Completions with Equity in Mind

John Fink, June 2020

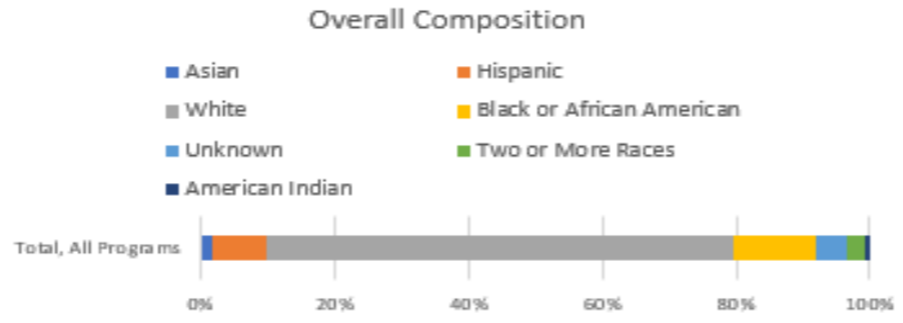


TEACHERS COLLEGE, COLUMBIA UNIVERSITY

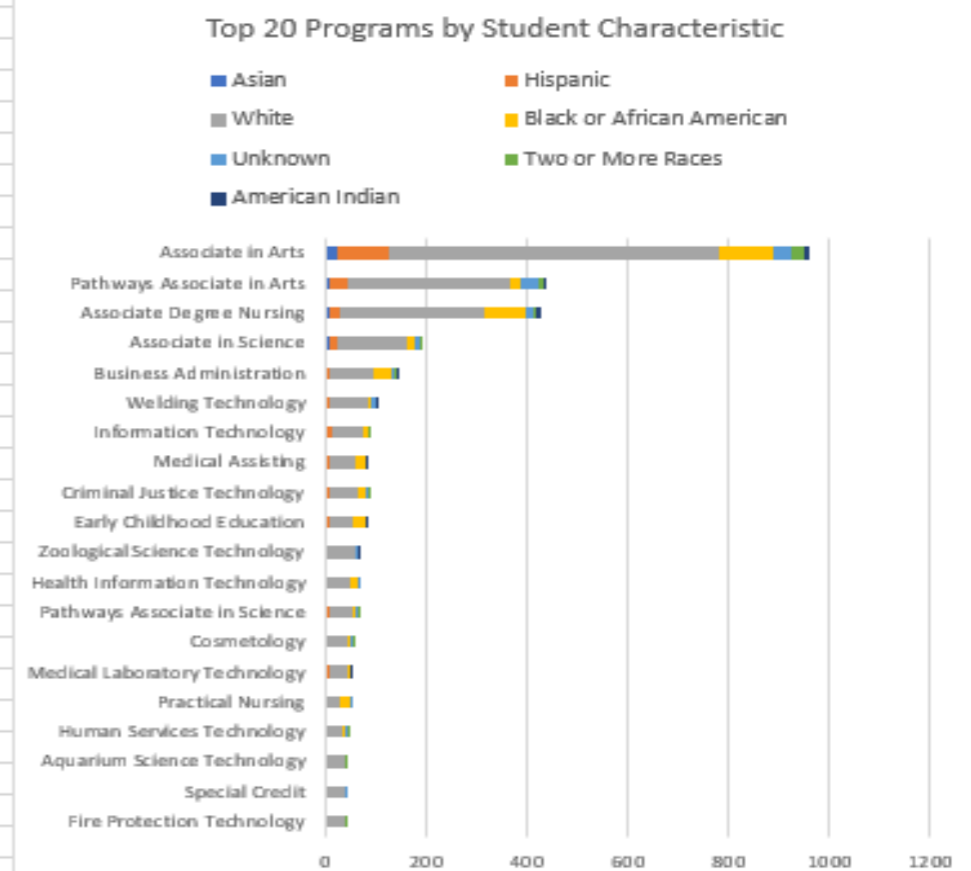
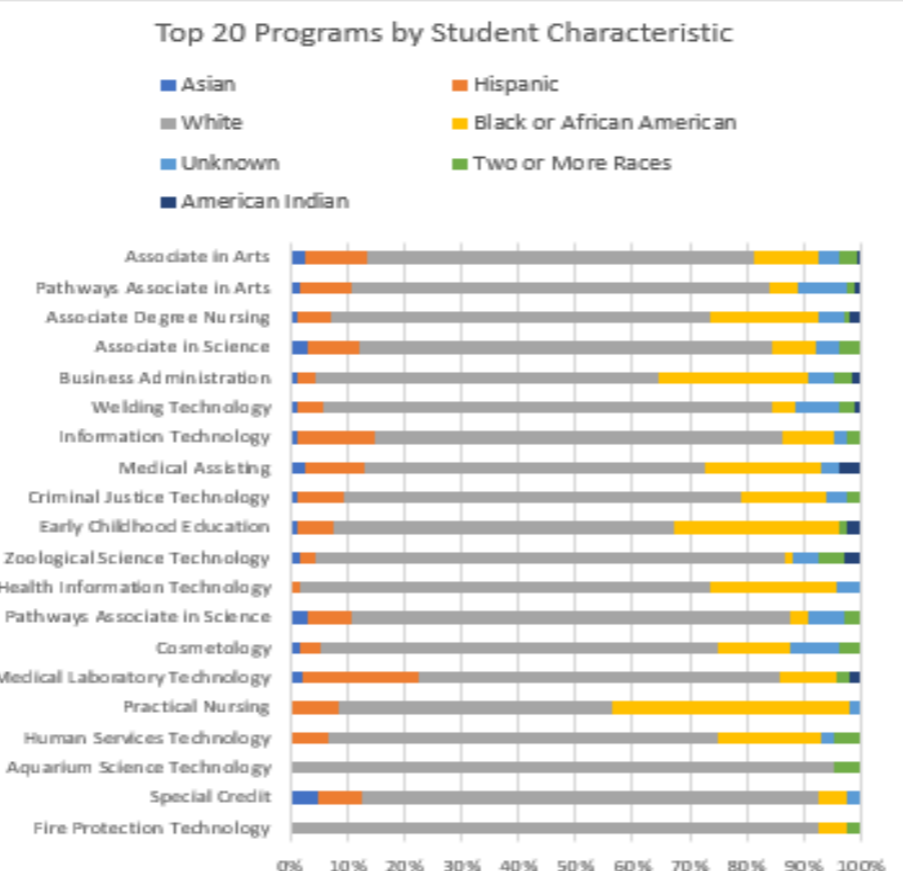
Treemap: Programs Nested Within Broader Categories

Note. You can organize the treemap by meta-majors by editing the pivot table

Sum of count	Workforce/Transfer Category	Program	Total
Total Students: 2			
TRANSFER-STRUCTURED			
96	AA-Transfer-Business		
84	AS-Transfer-Nursing		
80	AS-Transfer-Construction		
40	AS-Transfer-Chemistry		
38	AS-Transfer		
38	AS-Transfer-Physics		
24	AS-Transfer-Engineering		
14	AA-Transfer-Biology		
14	AS-Transfer-Atmospheric Sci		
12	AA-Transfer-Math Education		
8	AS-Transfer-Biology		
TRANSFER-UNSTRUCTURED			
432	General Liberal Arts		
76	Early Childhood Ed		
38	Human Services		
28	Physical Therapy		
26	Phys Education		
24	AA-English		
24	AA-Communications		
24	AA-Business		
24	Radiologic Tech		
22	Sociology		
22	Pre-Med		
22	Pre-Vet Medicine		
22	AA-Biology		
22	Psychology		
22	AA-Criminal Justice		
16	Funeral Service Ed		
16	Visual Arts		
16	Global Studies		
16	Photography		
14	Pre-Law		
14	Graphic Design		
14	Political Science		
14	History		
14	Theatre/Acting		
14	Geoscience		
14	Occupatnl Therapy		
12	Philosophy		
12	Health/Wellness		
12	Studio Arts		
12	Written Arts		
10	World Languages		



- WORKFORCE-HIGH
- WORKFORCE-LOW
- WORKFORCE-MEDIUM
- (blank)



What courses are students taking?

First-term course enrollments among top programs

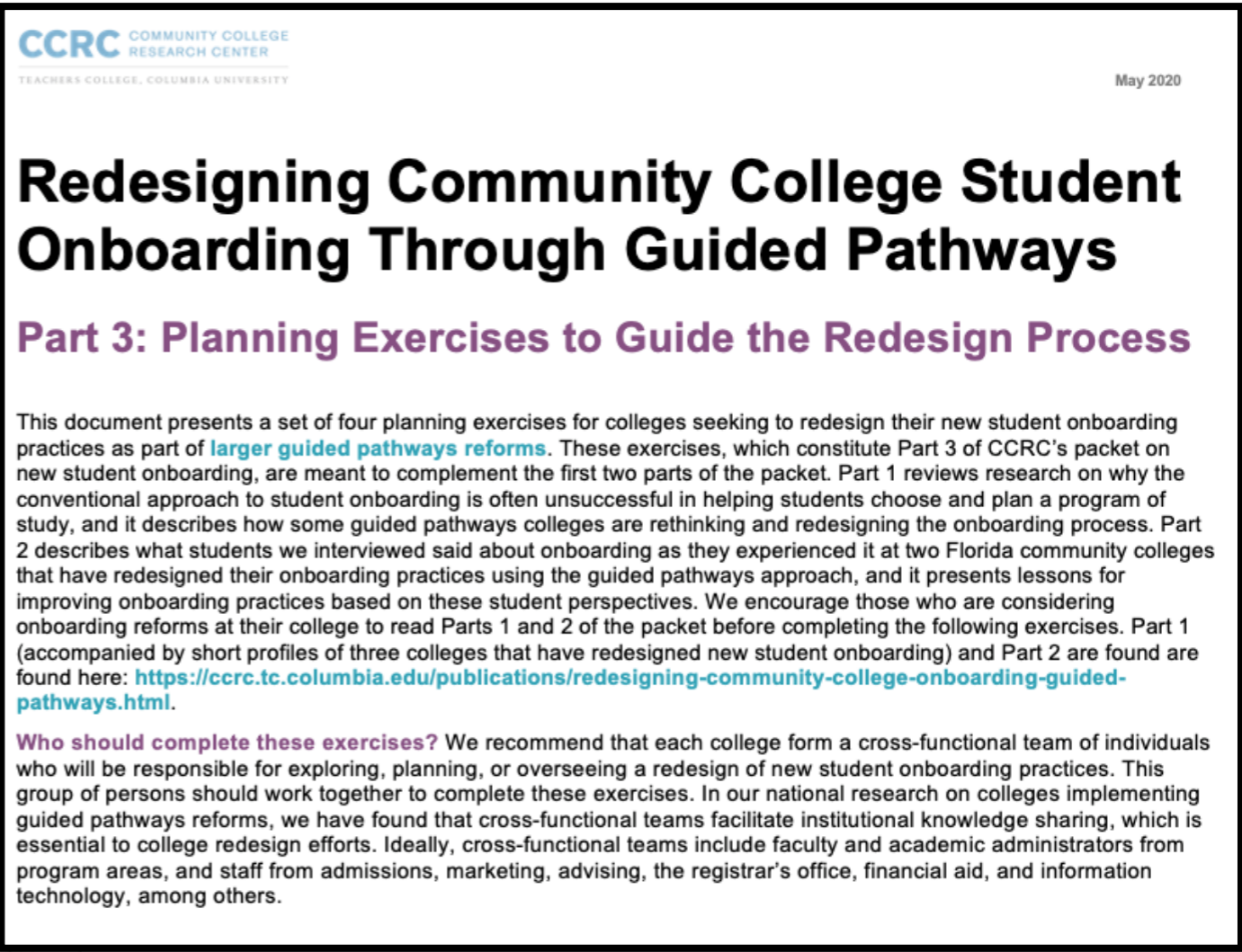
First term course enrollments among entrants into top programs

Fall 2018 courses attempted among all **first time** fall 2018 entering students (all students who attempted at least 1 credit-bearing course, **including** degree- and non-degree-seeking, full- and part-time, current and former dual enrollment students), by program. Common courses (e.g., English 101) will likely be in the top 10 for multiple programs.

#2 Program (N= 1,545 students): AS Liberal Arts General Studies (Transfer)

Rank	Course Title	Course ID	Number of Program Students who took this Course	Percent of Program Students who took this Course
1	<i>College Composition</i>	<i>ENG101</i>	723	46.8%
2	<i>College Orientation & Success</i>	<i>COS133</i>	548	35.5%
3	<i>Basic Math (non-credit)*</i>	<i>TRS092</i>	377	24.4%
4	<i>Pre-Algebra (non-credit)*</i>	<i>TRS094</i>	340	22.0%
5	<i>College Orientation</i>	<i>COS101</i>	295	19.1%
6	<i>Intro to Psychological Science</i>	<i>PSY101</i>	278	18.0%
7	<i>Intermediate Algebra</i>	<i>MTH104</i>	270	17.5%
8	<i>Intro Read & Writ (non-credit)*</i>	<i>TRS100</i>	262	17.0%
9	<i>Elementary Algebra (non-credit)*</i>	<i>MTH098</i>	151	9.8%
10	<i>Physical Fitness</i>	<i>PEC148</i>	148	9.6%
>10	275 other different courses attempted by at least 1 student from this program			

New Research and Resources on Redesigning Onboarding Through Guided Pathways



Redesigning Community College Student Onboarding Through Guided Pathways
Part 1: Rethinking New Student Onboarding

By David Jenkins, Dana Lohr, and Lauren Pellegrino

Apply to college. Take a placement test. See an advisor (maybe). Register for first-term courses. Attend a college orientation (maybe). Start attending classes.

This is the typical experience for the nearly two million first-time students who begin community college every year. The process is designed to enable large numbers of students to start taking college coursework right away, but the institutions have limited staff to help new students, and the process is not well designed to help students explore career, academic interests, find a program of study that is a good fit, and develop a plan for completing such a program.

Research generally finds that college students are more likely to complete a program of study if they choose a major that aligns with their interests and goals (Allen & Robb, 2010; Tracy & Robbins, 2006). Yet many new community college students do not have clear goals. Nearly 40% of community college students report being undecided the major at the end of their first year (authors' calculations from the 2004/05 National Postsecondary Students Longitudinal Study), and the actual proportion who are truly undecided may be much higher, as students must declare a program of study to qualify for financial aid.

Community colleges, of course, want to help students develop their goals and find their way. All community colleges have academic advisors, and most provide career services. Yet it is often left to students to seek out these supports. As a result, community college students—and particularly those most in need of assistance—tend to self-advise, relying on the catalog, the college website, and friends and family members (who may have no high education experience themselves) to help them navigate a myriad of college choices (for Community College Student Engagement [CCSE], 2014; DeL-Armas & Rosen, 2005). It is perhaps not surprising, then, that community college students often experience confusion and frustration with advising and registration, with many indicating later that they did not need or that needed not to transfer their chosen major at a destination college (Keller & Gupta, 2014; Schuckle, Bradley, & Absher, 2000).

Redesigning Community College Student Onboarding Through Guided Pathways
Part 2: Student Perspectives on Reformed Practices at Two Florida Colleges

By Elizabeth Kaplan and Sarah Griffin

Until recently, most community colleges have done little through the new student onboarding process to help entering students explore academic and career interests, choose a program of study aligned to their interests, and develop a plan for completing such a program. This has been the case even though many students start college without clear goals or even a good sense of how academic programs are connected to particular career areas. Students can visit the campus career center for help—if they are aware of this resource and choose to use it. But most students do not make use of the career center until they near graduation, if at all. And while students may be assigned an academic advisor and indeed may be required or encouraged to attend an advising session before or during their first term, advising is typically focused on selecting and registering for courses for the upcoming semester rather than on helping students explore interests, develop goals, and build an appropriate educational plan. While this characterizes the situation at many community colleges, those that are undertaking whole-college guided pathways reforms (see Jenkins, Lohr, Park, & Gupta, 2018) are modifying the onboarding process to give entering students active support with exploration, goal-setting, and educational planning.

Community colleges undertaking guided pathways reforms are modifying the onboarding process to give entering students active support with exploration, goal-setting, and educational planning.

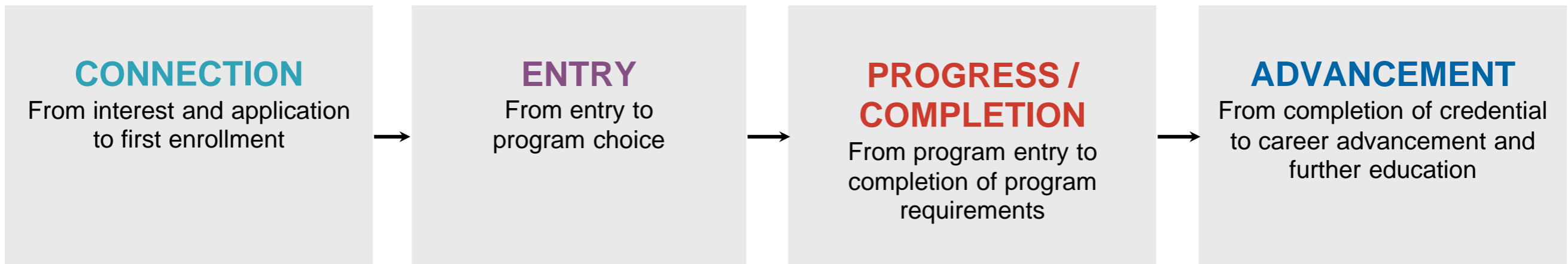
Redesigning Community College Student Onboarding Through Guided Pathways
Part 3: Planning Exercises to Guide the Redesign Process

This document presents a set of four planning exercises for colleges seeking to redesign their new student onboarding practices as part of **larger guided pathways reforms**. These exercises, which constitute Part 3 of CCRC's packet on new student onboarding, are meant to complement the first two parts of the packet. Part 1 reviews research on why the conventional approach to student onboarding is often unsuccessful in helping students choose and plan a program of study, and it describes how some guided pathways colleges are rethinking and redesigning the onboarding process. Part 2 describes what students we interviewed said about onboarding as they experienced it at two Florida community colleges that have redesigned their onboarding practices using the guided pathways approach, and it presents lessons for improving onboarding practices based on these student perspectives. We encourage those who are considering onboarding reforms at their college to read Parts 1 and 2 of the packet before completing the following exercises. Part 1 (accompanied by short profiles of three colleges that have redesigned new student onboarding) and Part 2 are found here: <https://ccrc.tc.columbia.edu/publications/redesigning-community-college-onboarding-guided-pathways.html>.

Who should complete these exercises? We recommend that each college form a cross-functional team of individuals who will be responsible for exploring, planning, or overseeing a redesign of new student onboarding practices. This group of persons should work together to complete these exercises. In our national research on colleges implementing guided pathways reforms, we have found that cross-functional teams facilitate institutional knowledge sharing, which is essential to college redesign efforts. Ideally, cross-functional teams include faculty and academic administrators from program areas, and staff from admissions, marketing, advising, the registrar's office, financial aid, and information technology, among others.

<https://ccrc.tc.columbia.edu/publications/redesigning-community-college-onboarding-guided-pathways.html>

Exercise: Process mapping the *ideal* student experience to help students enter the college and a program



For each phase:

- When would students (a) **explore** program options and interests, (b) **gain experiences** in a program of interest, and (c) **develop** academic and career **plans**?
- What do you want to know about incoming students' program interests? How would you learn this systematically?
- How might different student groups experience these onboarding activities (first-time students, older students, etc.)?
- How can you move from current practice to the ideal?

Dual enrollment as an on-ramp to college programs

Indian River State College's Great Explorations event for high school junior and seniors to explore programs and careers



What connection back to your work are you “walking” away with?


AND/OR

What further questions has this raised for your work?

Thank you!

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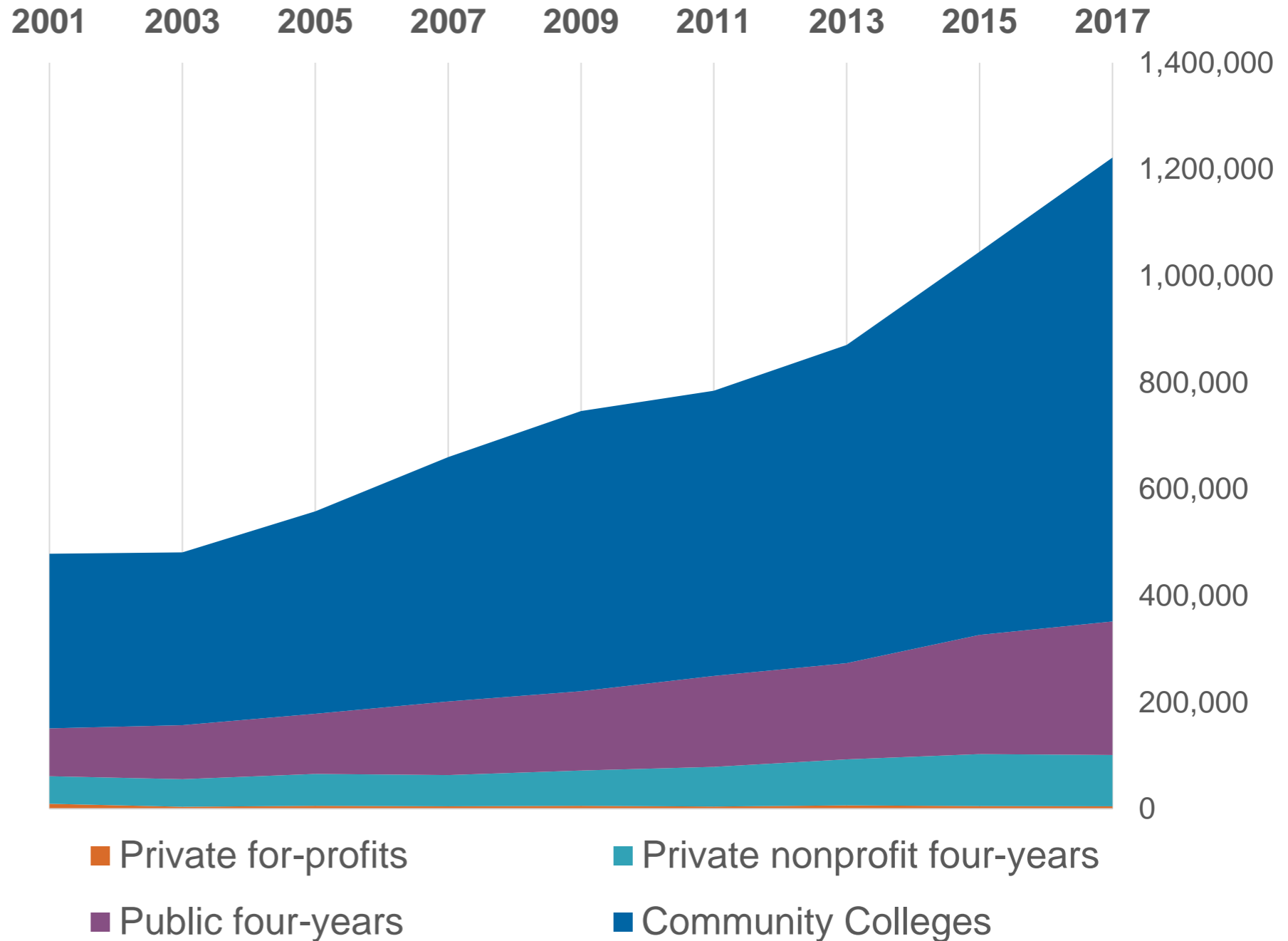
 ccrc@columbia.edu

 212.678.3091

Growth of Dual Enrollment 2001-2017

IPEDES Fall Enrollments

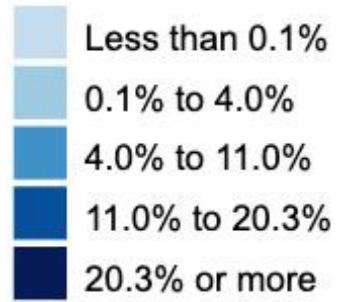
Fall Undergraduate Enrollments among Students Aged 17 or Younger



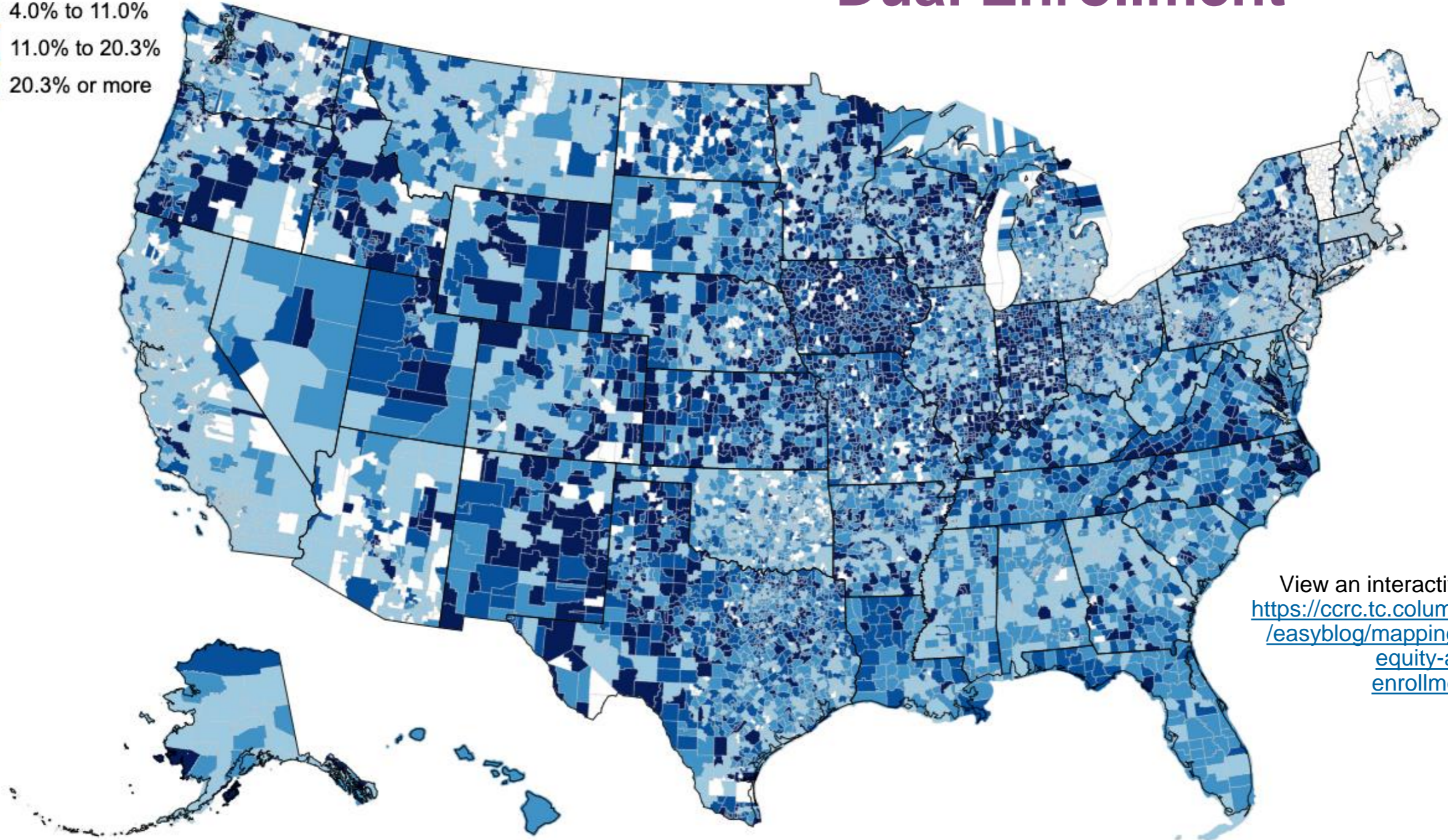
Expansion of Dual Enrollment Concentrated at Community Colleges

2015-16 High School student participation in Dual Enrollment and AP: **School Districts**

DE-Participation Rate



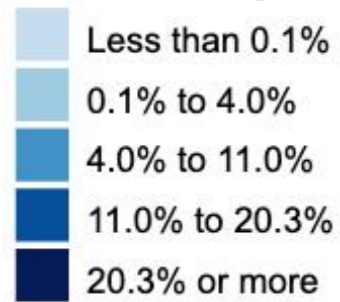
Dual Enrollment



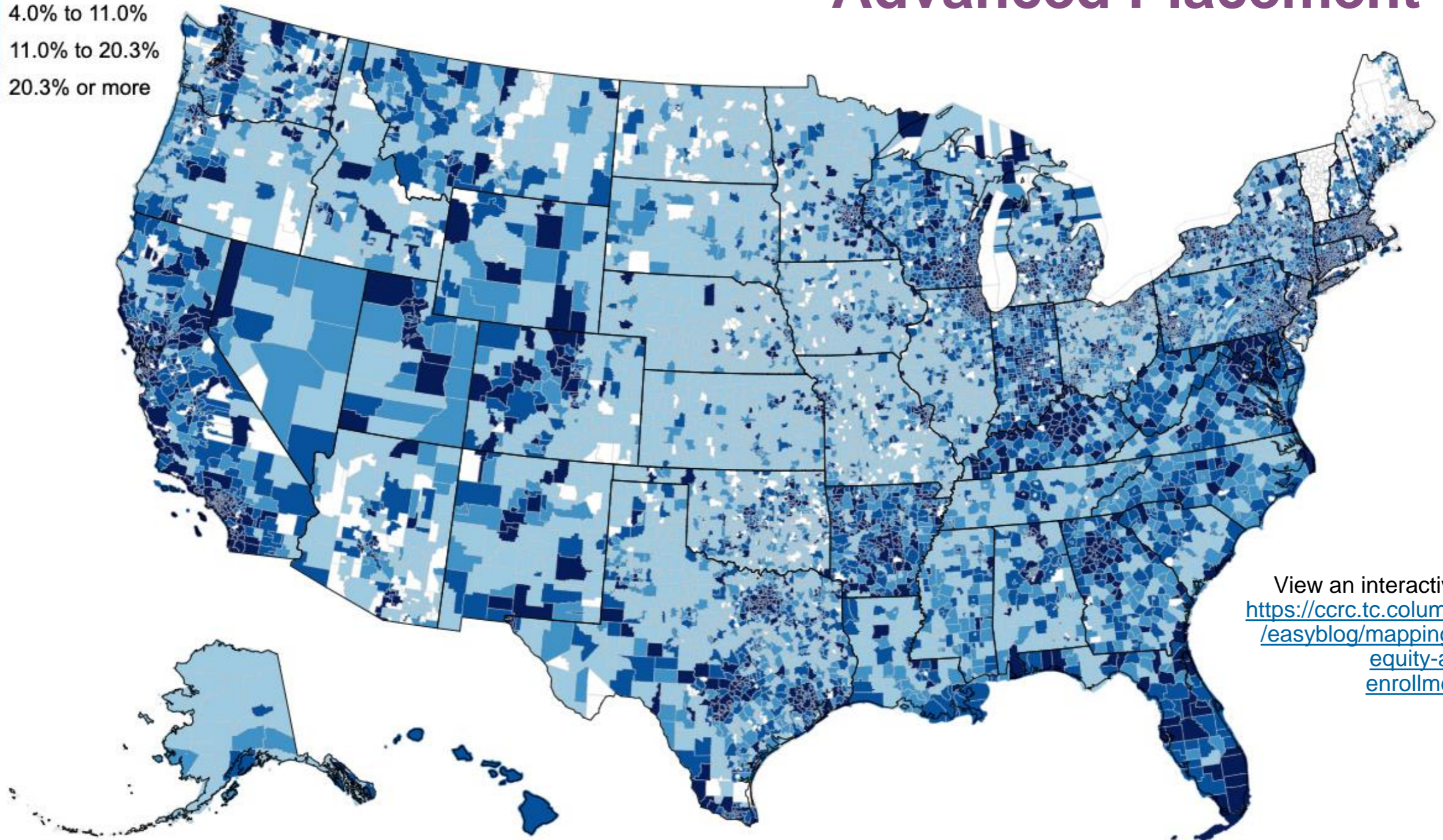
View an interactive map:
<https://ccrc.tc.columbia.edu/easyblog/mapping-racial-equity-ap-dual-enrollment.html>

2015-16 High School student participation in Dual Enrollment and AP: **School Districts**

AP-Participation Rate



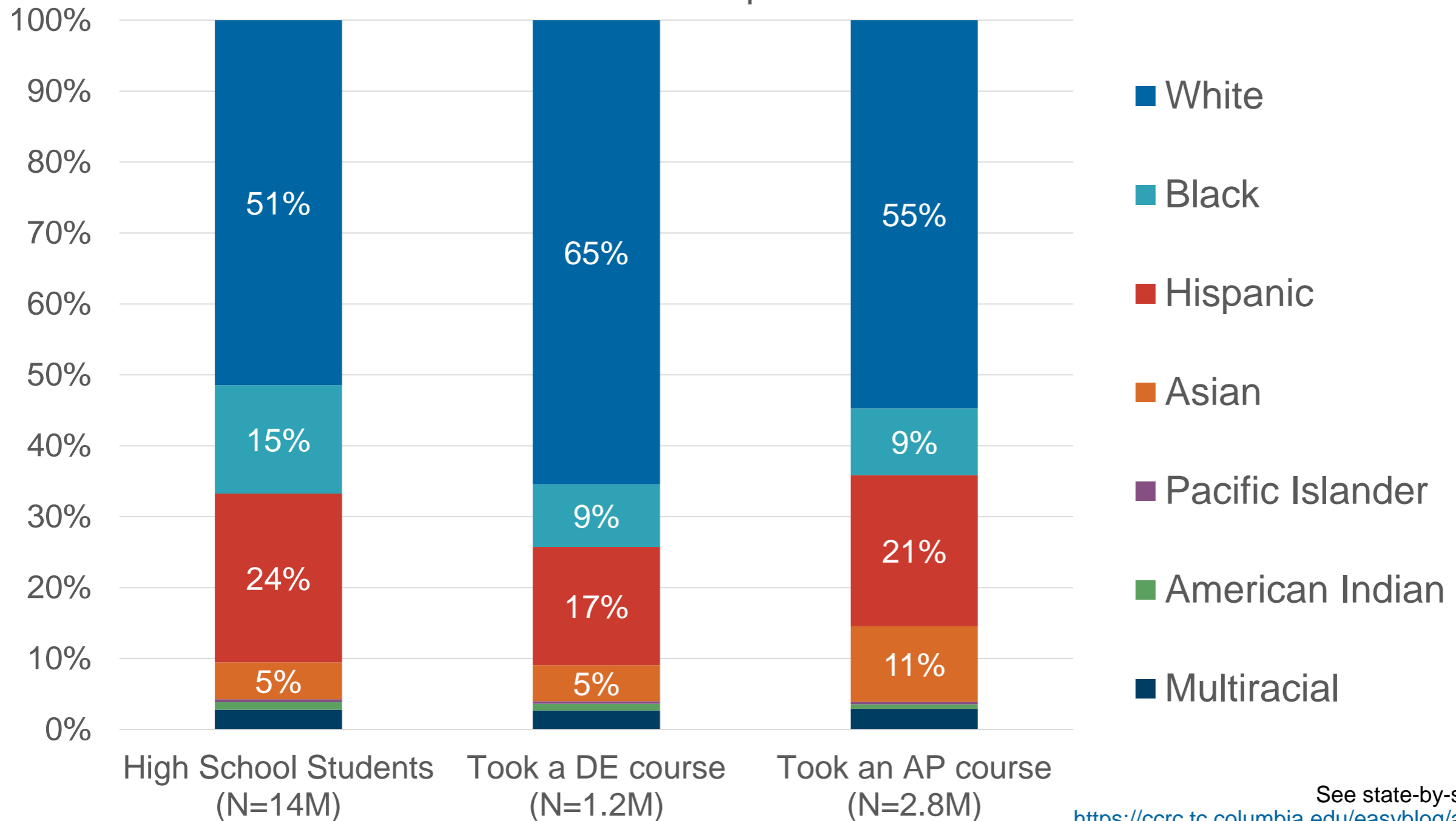
Advanced Placement



View an interactive map:
<https://ccrc.tc.columbia.edu/easyblog/mapping-racial-equity-ap-dual-enrollment.html>

2015-16 School Year: Black and Latinx HS Students Underrepresented in Dual Enrollment & AP courses

HS Student Racial Composition

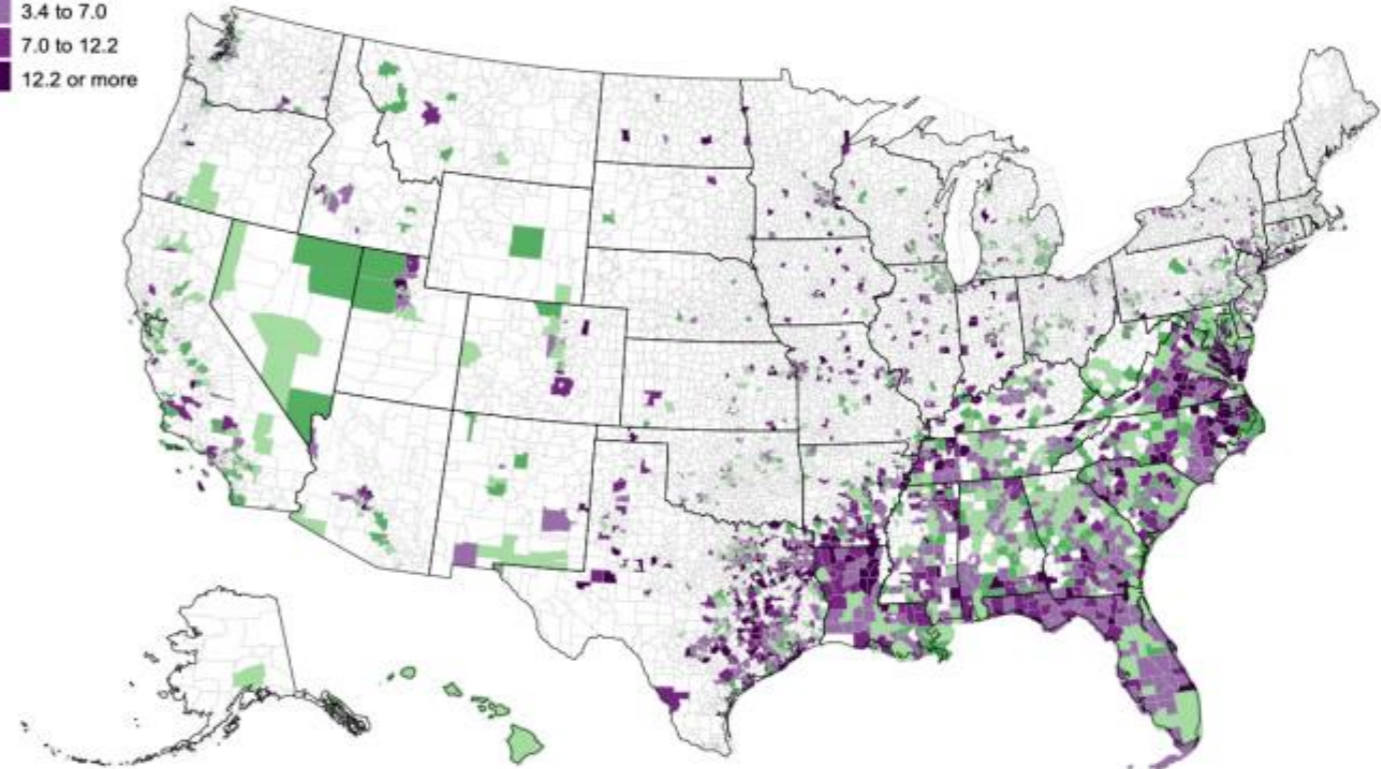
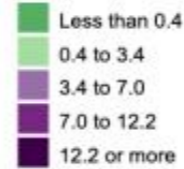


See state-by-state results:
<https://ccrc.tc.columbia.edu/easyblog/access-dual-enrollment-advanced-placement-race-gender.html>

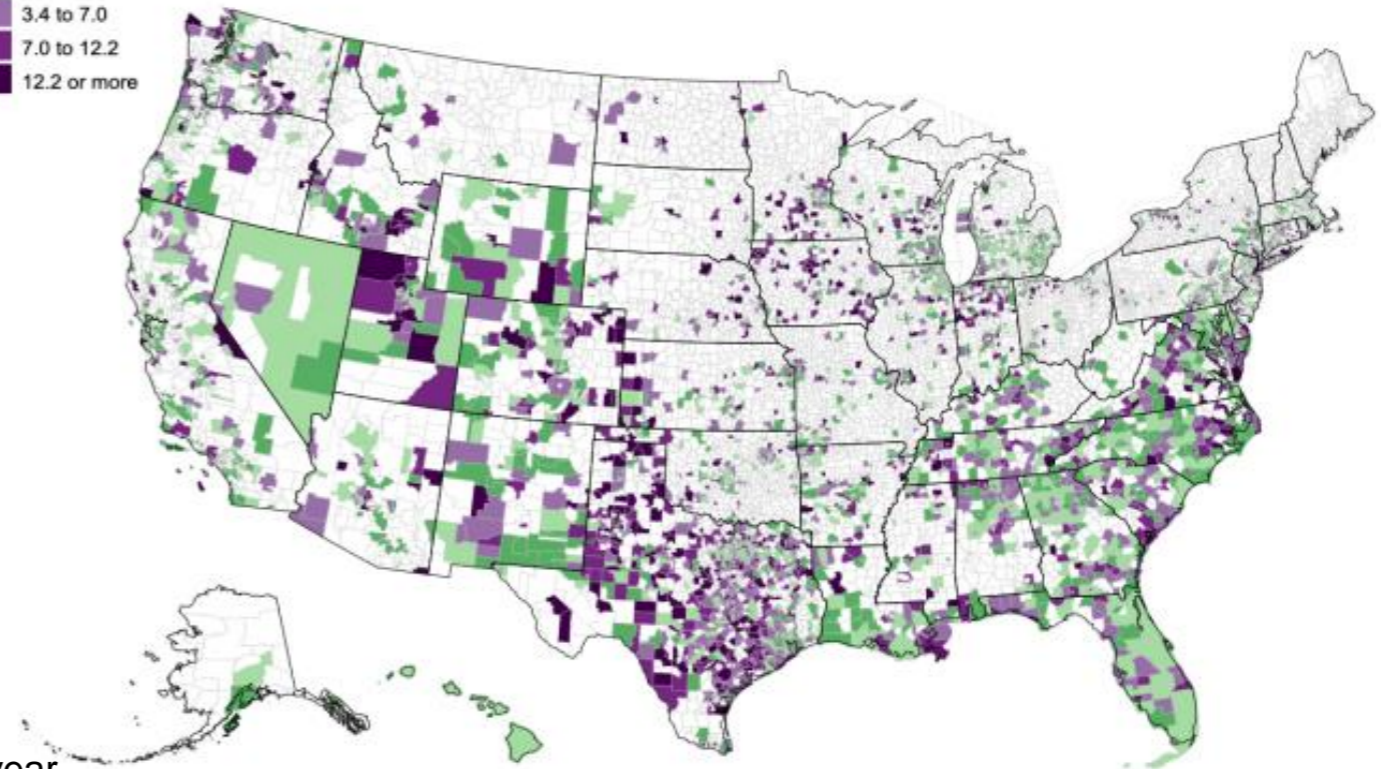
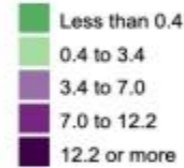
Substantial national variation in racial equity gaps in DE participation among US school districts...

...but one in five school districts across the country have closed racial equity gaps in access to dual enrollment courses

DE-White-Black Gap (pp)

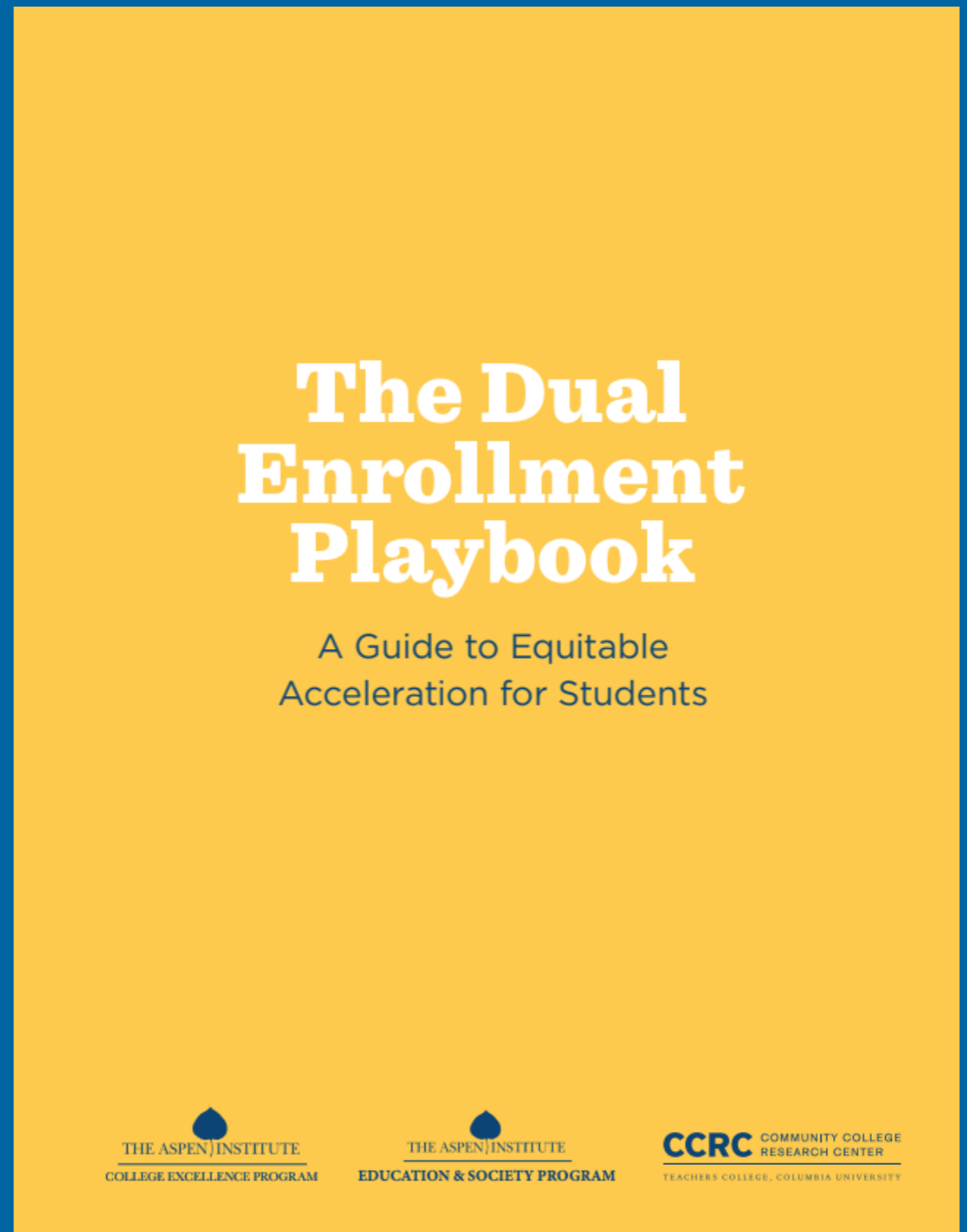


DE-White-Hispanic Gap (pp)



Given the substantial variation nationally in access to and success in dual enrollment,

What can be learned from high schools and colleges that are more effective in serving students of color through dual enrollment?



The Dual Enrollment Playbook: A Guide to Equitable Acceleration for Students

Five Principles to Advance Equity in High-Quality Dual Enrollment

Principle

I

SET A SHARED VISION AND GOALS THAT PRIORITIZE EQUITY

Principle

II

EXPAND EQUITABLE ACCESS

Principle

III

CONNECT STUDENTS TO ADVISING AND SUPPORTS THAT ENSURE EQUITABLE OUTCOMES

Principle

IV

PROVIDE HIGH-QUALITY INSTRUCTION THAT BUILDS STUDENTS' COMPETENCE AND CONFIDENCE

Principle

V

ORGANIZE TEAMS AND DEVELOP RELATIONSHIPS TO MAXIMIZE POTENTIAL