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Welcome and Diversity

Session Chairs

Maria Gini
University of Minnesota

Rachel Pottinger
University of British Columbia

Divesh Srivastava
AT&T

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Kamau Bobb

Senior Director of the Constellations
Center for Equity in Computing

Georgia Tech

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Carla E. Brodley

Dean of Inclusive Computing and
Founding Executive Director of the
Center for Inclusive Computing (CIC)

Northeastern University

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Catherine Gill

Executive Director - Center for Inclusive Computing

Northeastern University

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Jeff Forbes

Program Director – Education and Workforce

National Science Foundation

Equitable Computing Education is not Apolitical

What happens when AI collides with a dramatic shift in American education?

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1964	civil rights act of 1964
1978	roe v. wade
1996	regents of the university of california v. bakke
1998	google founded
2004	facebook founded
2004	csta founded
2016	cs for all
2022	dobbs v. jackson women's health
2023	students for fair admissions v. harvard
2024	presidential election

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an assertion:

academic leaders in computing have an outsized responsibility in the current cultural climate

Top CS Programs	Black %	Hispanic %
MIT	3 (302)	10
Stanford	3 (242)	9
UC Berkeley	0 (63)	3
Carnegie Mellon	1 (99)	2
Univ. Illinois, Urbana Champaign	1 (137)	3
Univ. Washington, Seattle campus	1 (173)	3
Cornell	2 (169)	5
Georgia Tech	3 (626)	4
Princeton	3 (44)	7
Univ. Texas, Austin	2 (158)	12

avg. 2015 - 2021 (bs, ms, phd)

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Computing in service of justice.

Georgia Tech College of Computing
Constellations Center for Equity in Computing

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NSF CISE

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CISE's commitment to BPC

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"It will take more than good intentions or business as usual, however, to reverse longstanding underrepresentation. **It will take committed, focused, and sustained efforts on the part of *many* in the computing community.**"

"CISE will address BP programmatically both through focused activities and through **the inclusion of BPC efforts as an *accepted* and *expected* part of its research and education award portfolios.**"

– CISE BP Strategic Plan (2012)

Supporting the CISE Community in BPC

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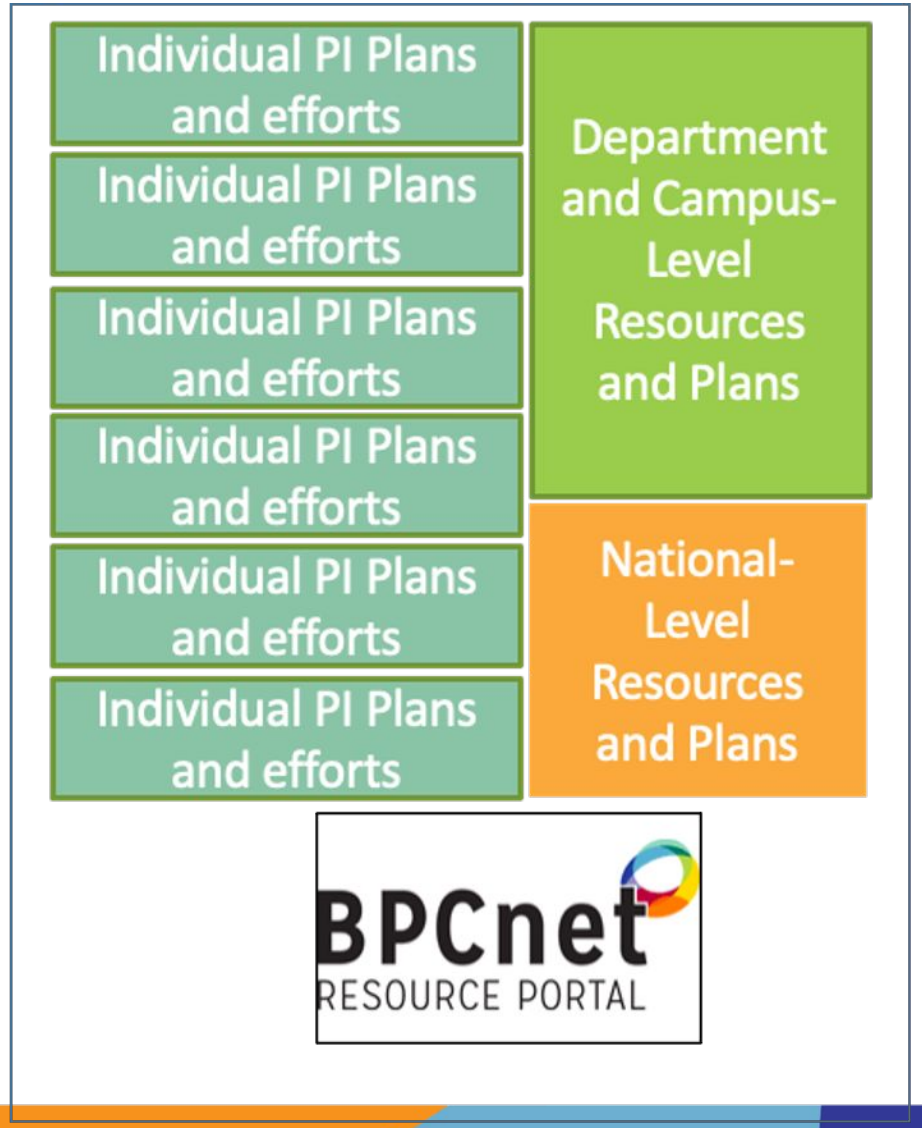

From the BPC Plan to the BPC Initiative

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Funding

Available at time of award, supplements, or demonstration projects

Assessment

From BPC Corps to **accepted** and **expected** part of CISE merit review process

Accountability

Annual reporting requirement and external evaluation

Funding for BPC Activities

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1. Request funding at award time for BPC activities
   - Costs for the BPC activities are separate from the stated budget limits
2. Request a **BPC Supplement** (**NSF 24-030**) to either
   - extend the reach of current BPC activities or
   - coordinate BPC activities within a department or similar unit.
3. Submit a **BPC Demonstration Project** (**NSF 21-571**) proposal to develop and evaluate a pilot of a BPC intervention

BPC Supplements

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- Medium and larger awards for CISE Core Programs, SaTC, and CPS pro require a meaningful BPC plan and can request a BPC Supplement
- Supplements should either:
  - **Extend the reach** of current BPC activities that have some evidence of effectiveness to more participants or institutions;
    - **Example:** Partner with community colleges to offer summer research experiences a webinars in Quantum Information Science & Engineering
  - **Coordinate** or **institutionalize** BPC activities within a department or simil
    - **Example:** Implement activities in department to improve retention in coordination v and evaluate initial interventions

NSF

Questions?

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NSF CISE BPC Initiative

NSF BPC FAQ (22-125)

CISE Core Programs Solicitation (23-561)

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cs_ed: remove(barriers)

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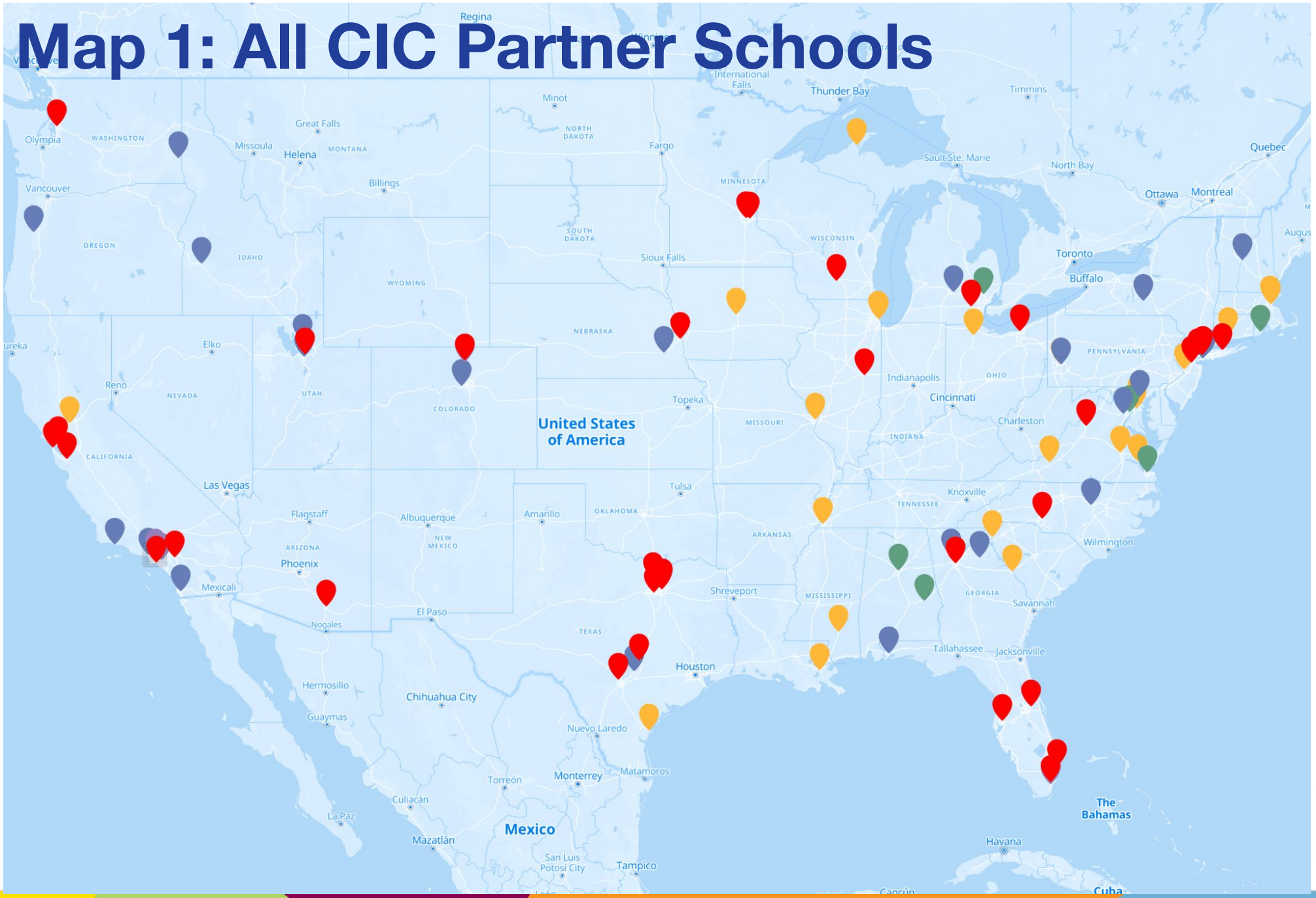
Map 1: All CIC Partner Schools



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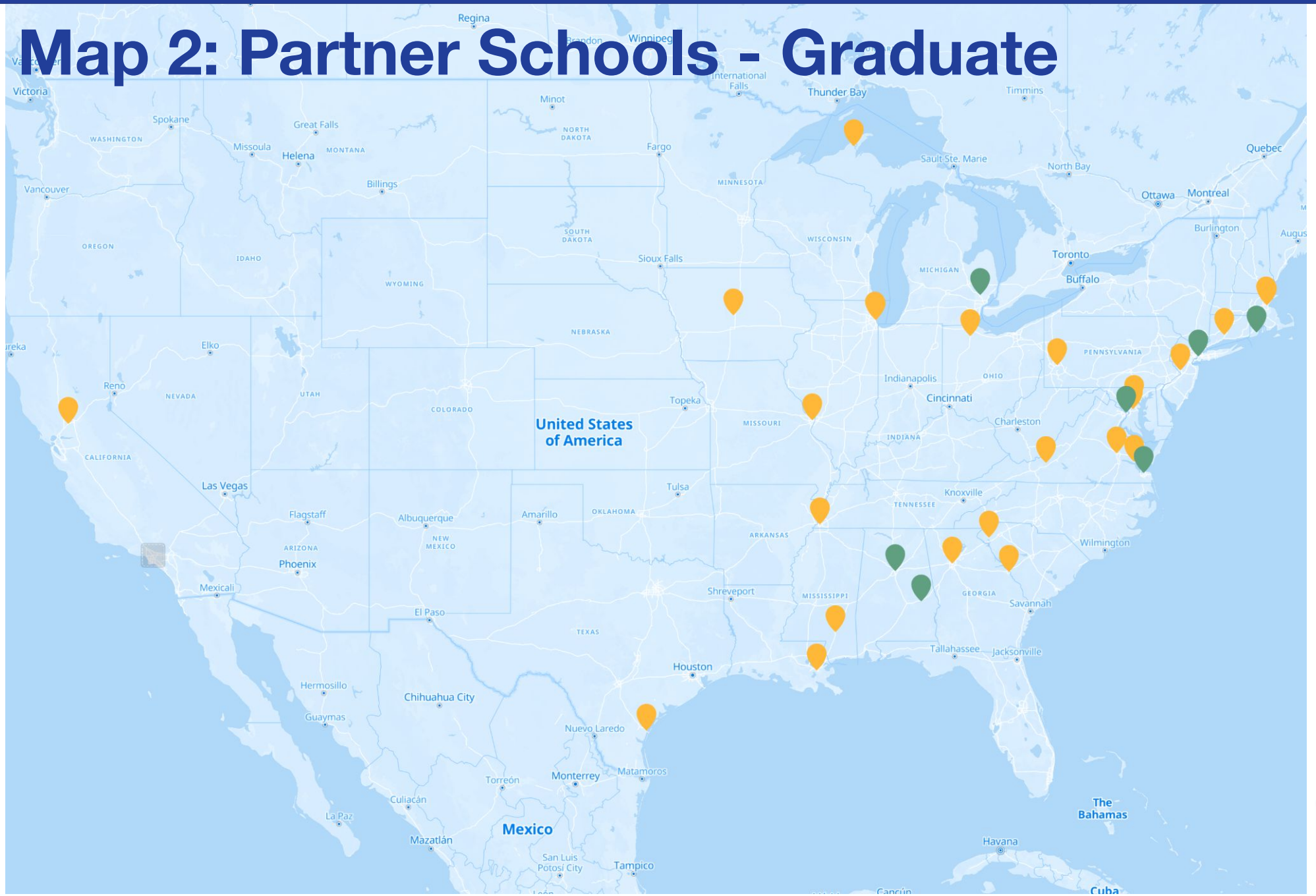
Map 2: Partner Schools - Graduate



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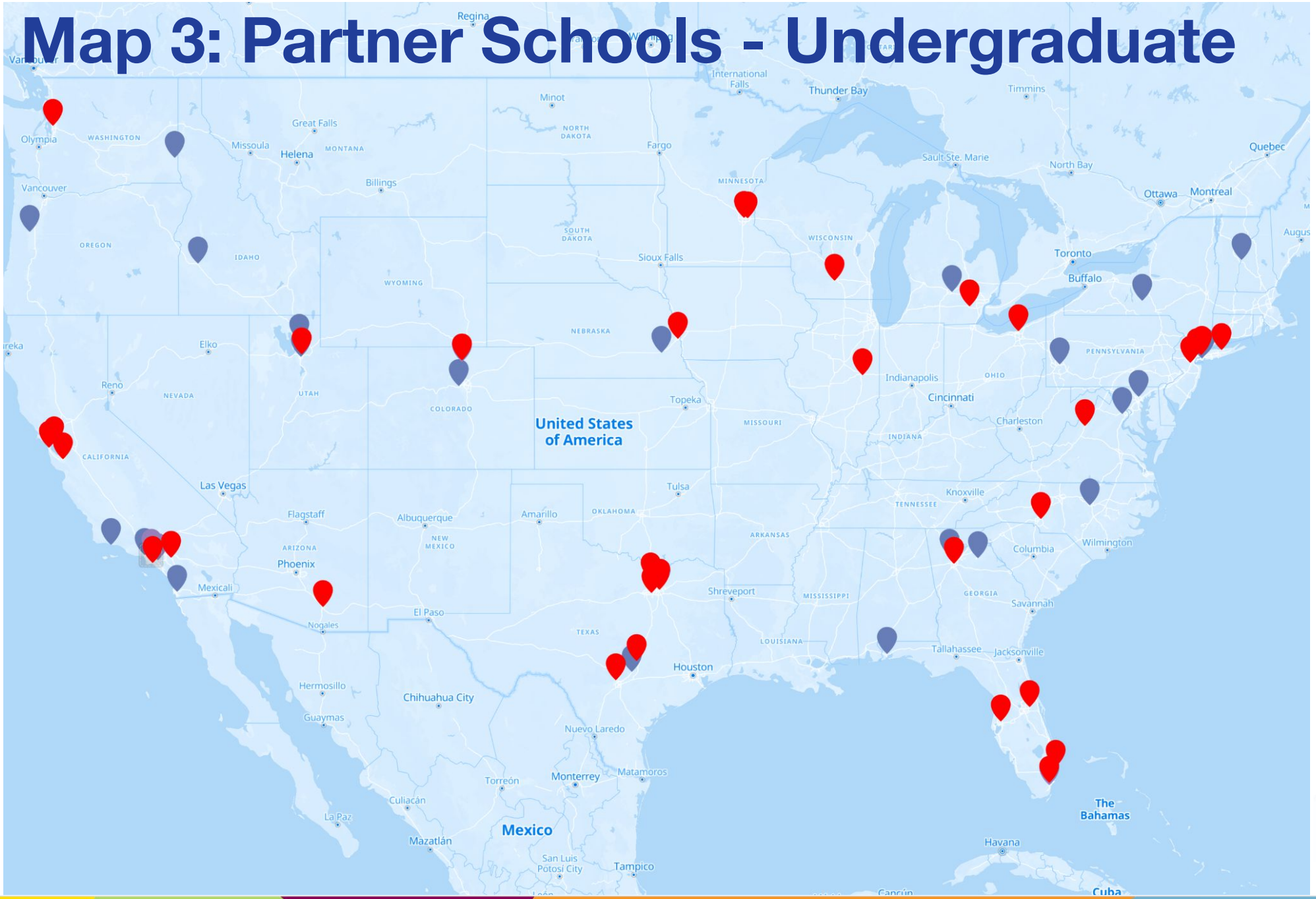
Map 3: Partner Schools - Undergraduate



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40 CIC Partner Schools implementing changes to the undergrad program

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Colorado State University | Columbia University | Barnard College | University of Minnesota | Rutgers University | New Jersey Institute of Technology | UT Austin | Stony Brook University | University of South Florida | University of Central Florida | University of Utah | University of Wisconsin - Madison | Florida International University | University of Michigan | UC Riverside | University of Illinois, Urbana Champaign | CSU Fullerton | UC Berkeley | San Jose State University | CSU Long Beach | University of Washington | James Madison University | San Francisco State University | Georgia State University | University of Arizona | Metro State University | UT San Antonio | Baruch College | University of North Carolina, Charlotte | Cleveland State University | Florida Atlantic University | Southern Methodist University | University of North Texas | UT Arlington | UT Dallas | East Los Angeles College | Front Range Community College | Miami Dade College | Dallas College | City College of San Francisco

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21 CIC Partner Schools that have been implementing changes for 2+ years

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Colorado State University | Columbia University | Barnard College | University of Minnesota | Rutgers University | New Jersey Institute of Technology | UT Austin | Stony Brook University | University of South Florida | University of Central Florida | University of Utah | University of Wisconsin - Madison | Florida International University | University of Michigan | UC Riverside | University of Illinois, Urbana Champaign | CSU Fullerton | UC Berkeley | San Jose State University | CSU Long Beach | University of Washington | James Madison University | San Francisco State University | Georgia State University | University of Arizona | Metro State University | UT San Antonio | Baruch College | University of North Carolina, Charlotte | Cleveland State University | Florida Atlantic University | Southern Methodist University | University of North Texas | UT Arlington | UT Dallas | East Los Angeles College | Front Range Community College | Miami Dade College | Dallas College | City College of San Francisco

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Change in Representation of Students Majoring in Computing

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Net Increase In Majors

	AIAN	Asian	BAA	H/L	Mult	NHPI	NRA	UnK	W	Total
W	0	2,972	516	1,154	219	4	769	226	840	6,700
M	19	5,077	1,031	3,192	588	3	1,789	356	1,231	13,287

0-33% 34-66% 67-100% 100+%

Percent △ In Majors

	AIAN	Asian	BAA	H/L	Mult	NHPI	NRA	UnK	W	Total
W	0.0%	98.6%	163.8%	131.0%	67.8%	40.0%	68.4%	86.6%	52.1%	88.7%
M	70.4%	62.4%	103.0%	76.2%	59.7%	8.1%	56.9%	44.2%	14.0%	48.9%

Increase in declared majors from the fall before the start of project to Fall 2023.
The categories of race and ethnicity are those used by IPEDS
(AIAN: American Indian or Alaska Native; BAA: Black or African American; HL: Hispanic or Latinx;
Mult: Multiple Races; NHPI: Native Hawaiian or Other Pacific Islander; NRA: Non-Resident Alien; and W: White).

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Total Women Computing Majors

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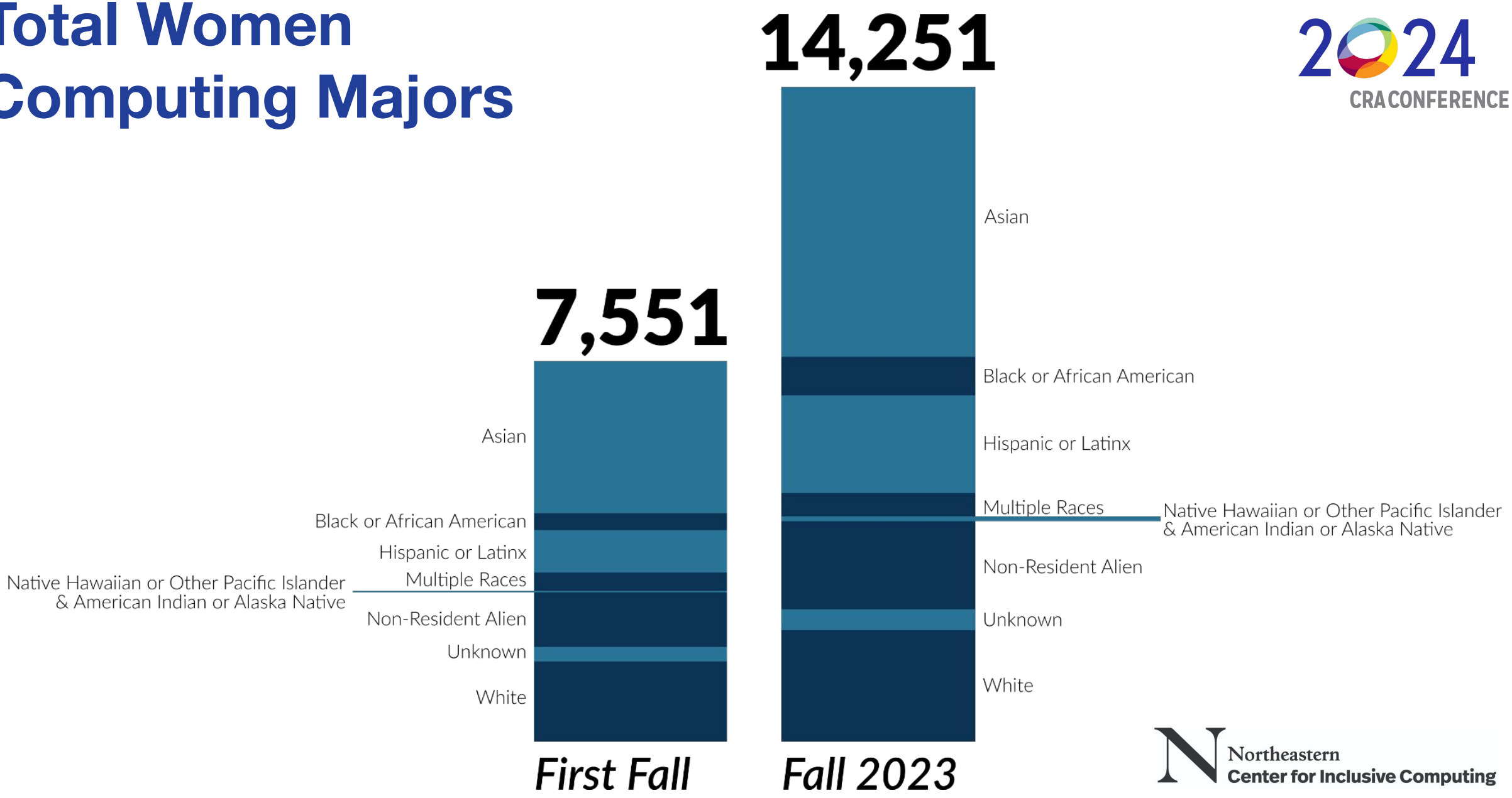

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% of Women Computing Majors

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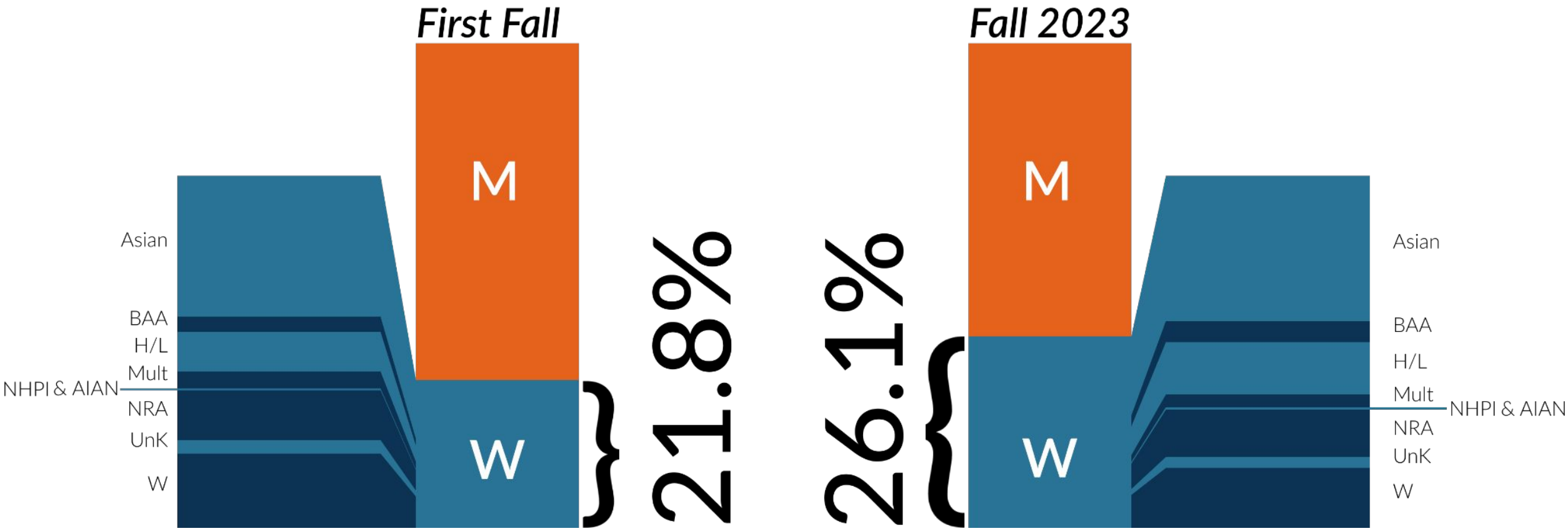

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What does it cost to make these systemic changes?

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CIC Experts

Carla Brodley

Christine Alvarado

Shaundra B. Daily

Albert Lionelle

Mia Minnes

Lori Pollock

Monique Ross

Brian K. Smith

...@ Snowbird

Tracy Camp

Nate Derbinsky

Jodi Tims

Jamie Payton

Manuel Pérez-Quiñones

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The CIC is eager to explore collaborative opportunities. Let's connect!

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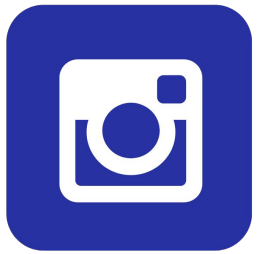
Stay connected!

Follow CRA on social media

@computing-research-association



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