Michael Schutzler
CEO
Washington Technology Industry Association

We consolidate the power of member companies to solve business problems they cannot readily solve alone. Our guiding principle is to help Washington residents gain access to high-wage tech-industry jobs.

ICT
Companies
10,000

200,000
Employees

Including
Tech Units
280,000

100,000
SDE+

Economic
Multiplier
7X

800,000
Jobs created in
last 25 years

100,000
SDE+

90,000
Come from outside WA

<15%
Female

<1%
Black or Hispanic

Expand Local

- Finance CSE Expansion
- Adjust curricula
- Deploy CS in EVERY HS

Recruit Deeper

- Educate & motivate Government Leadership
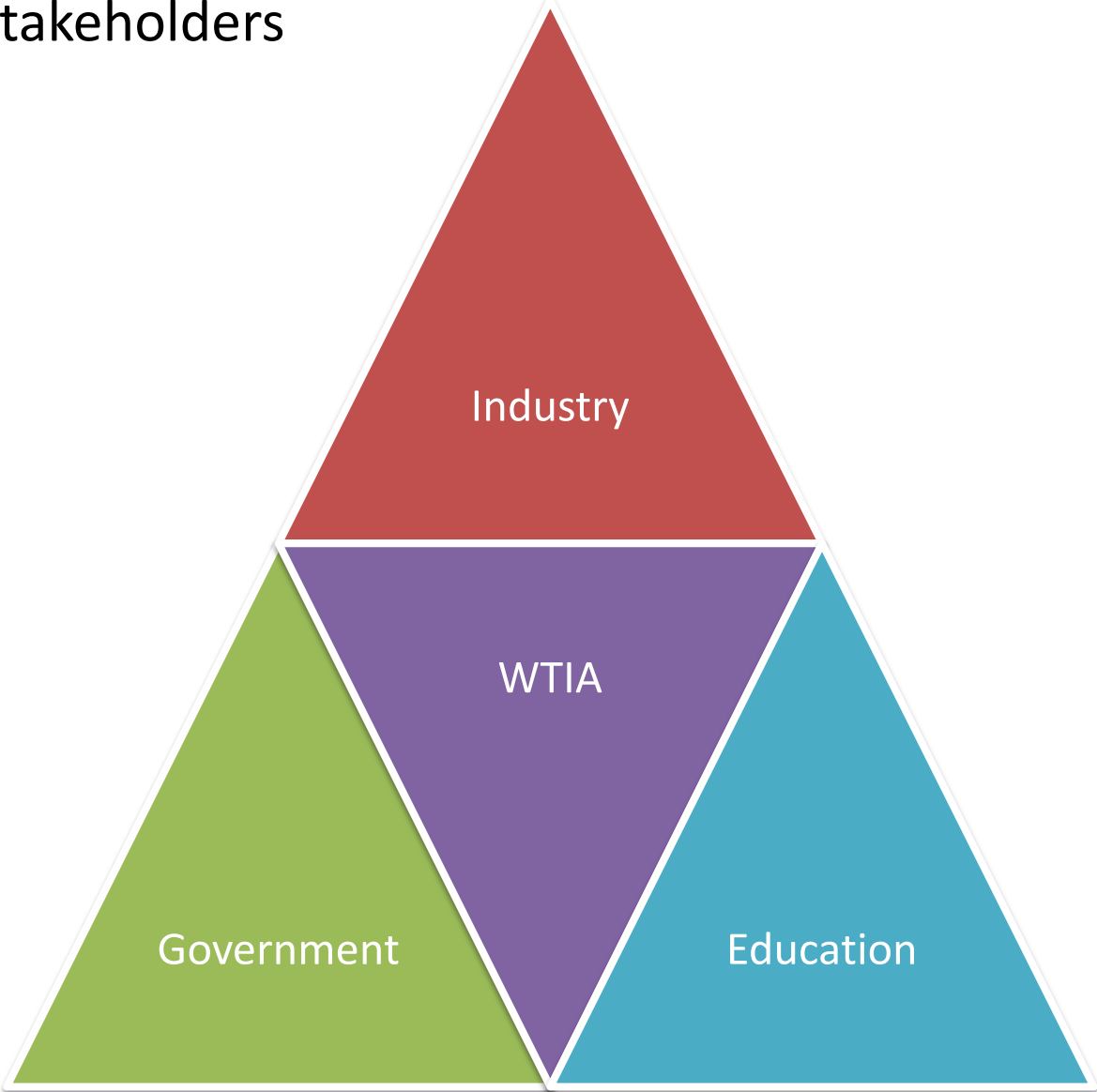- Aggregate Campus Presence

Develop Local

- K12 capacity & capability
- Recruit & deploy mentors
- Apprenticeship model as viable path to career

Retain

- Diversity focused onboarding
- Creating cultures that embrace diversity

Nexus of Stakeholders

What are our priorities?

- **Recruit** hard-to-find talent for tech companies, with a special emphasis on women, people of color, and veterans

- **Run** the only nationally registered industry apprenticeship program (Apprenti™)

- **Provide** a turnkey HR benefits bundle for small and mid-sized tech companies

- **Provide** peer level introductions and facilitated professional networking among education, government and industry leaders

- **Ensure** that public policies are well informed and aligned with our guiding principle of providing access to high-wage, tech industry jobs for Washington residents

FullConTech: Action starts here.

October 3, 2016
Microsoft Conference Center (Redmond)
8 AM- 5 PM

Register Today →

Un Conference

Draft Day

Job – Degree Taxonomy

National Brand Awareness

Challenge Seattle   Apprenti   Cascadia Conference

2016

7:30	Registration
8:00	Breakfast

8:30-9:15	Welcome, Review 2015 FullConTech Plays, and **Keynote**
9:15-10:00	Flash Talks
10:00 – 10:30	**Break**

10:30-11:25

Discover Session: Grow, Attract, Retain **Inside** Companies
- Preparing Employees for Different and More Challenging Jobs
- Building a Culture for Retaining Talent
- Attracting a Diverse Talent Force

11:25 – 11:35	**Break**

11:35-12:30

Discover Session: Grow, Attract, Retain in the **Community-at-large**
- Techtopia: How do we get tech innovators to start up and stay in Puget Sound?
- Building an Industry Pipeline
- Maintaining a Healthy Growth Environment

12:30-1:30	**Lunch**

1:30-2:45	Invent Sessions
2:45-3:00	**Break**
3:00-4:30	Invent Sessions (cont.)

4:30-5:00	Closing session
5:00	**Happy Hour**

APPRENTi
The path, the plan, your career in tech.

WTIA WORKFORCE INSTITUTE

APPRENTICESHIP OVERVIEW: Apprenti

Jennifer Carlson
Executive Director
Washington Technology Industry Association Workforce Institute

Overview

- Introductions & Appreciation
- Apprenti Overview
- Partnership Model
- Training
- Process
- Timeline
- Q & A

APPRENTi

The path, the plan, your career in tech.

Team

- Jennifer Carlson, Executive Director
- Jordan Shepherd, Program Director
- Karen Manuel, Project Manager

Our Source

Funded by AAI Grant, Oct 2015 to build pilot program for registered apprenticeship in Technology Industry.

In the U.S., 1:20 job openings is a tech job	**Fewer than 1,000 4-year college grads to fill these jobs annually** Of these, 4,000 area quasi technical roles	**Opportunity to stratify occupations and focus on middle skill jobs that can be filled by accelerated or vocational training.**

Washington is

The fastest growing by population in the country

Washington State has nearly 8,000 skilled tech job openings
Of these, 4,000 are in quasi technical roles

80,000 New Jobs over the next 20 years

Need for Apprenticeship in Technology

How apprenticeship differs from internship

Enables tech industry increase diversity among their workforce while addressing urgent workforce needs.
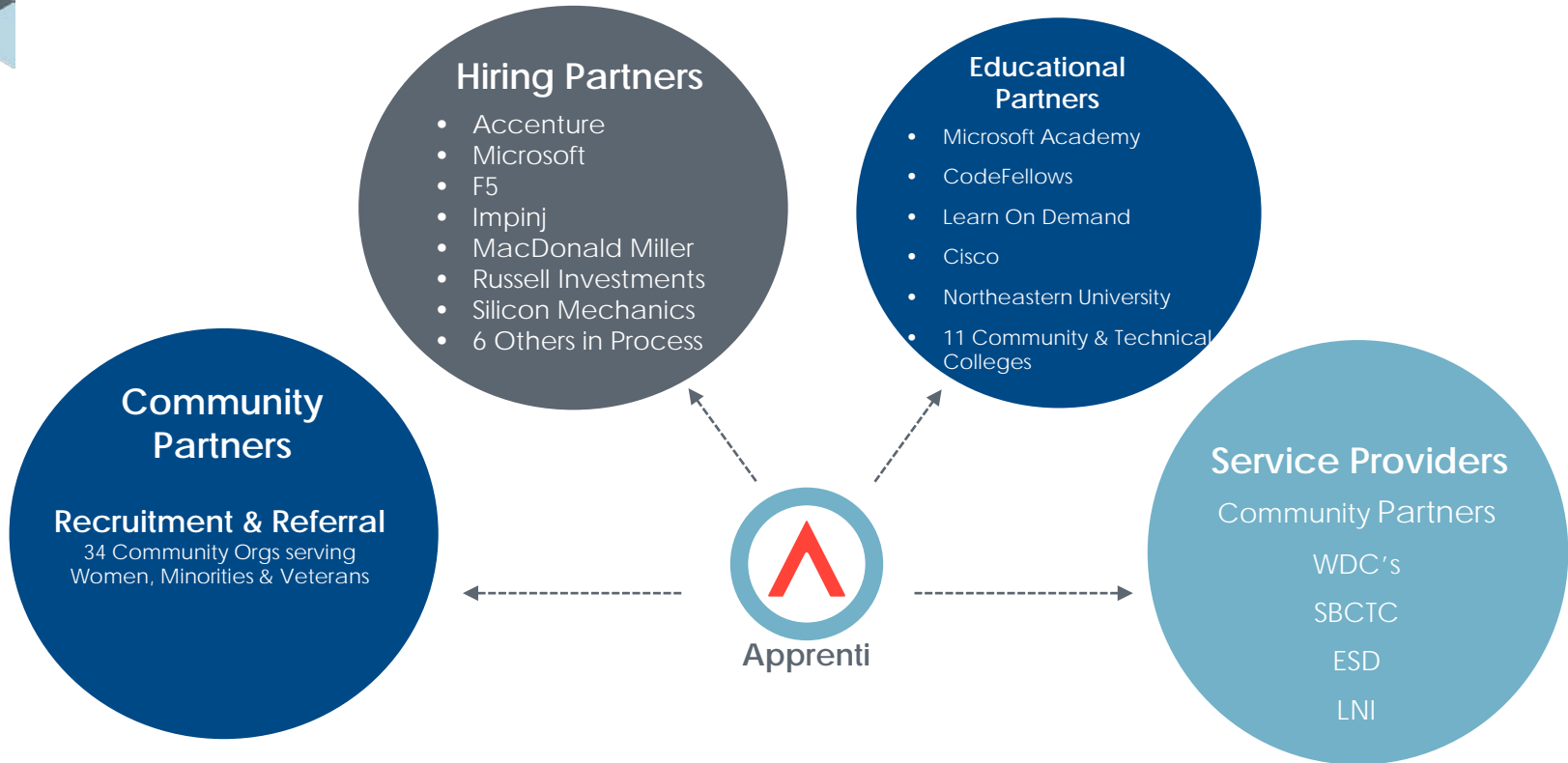
Training designed to meet industry requirements and deliver recognized certifications.

Attracts talent by

- Providing paid on-the-job training for one year.
- Offering benefits such as healthcare and retirement.
- Guided journey to prevent drop outs during learning curve.

Our Partnership Model

Hiring Partners

- Accenture
- Microsoft
- F5
- Impinj
- MacDonald Miller
- Russell Investments
- Silicon Mechanics
- 6 Others in Process

Educational Partners

- Microsoft Academy
- CodeFellows
- Learn On Demand
- Cisco
- Northeastern University
- 11 Community & Technical Colleges

Community Partners

Recruitment & Referral
34 Community Orgs serving
Women, Minorities & Veterans

Service Providers

Community Partners

WDC's

SBCTC

ESD

LNI

Apprenti

Occupational Training

Initial Occupations

- Database Administrator
- Network Security Administrator
- Project Management
- Software Applications Development
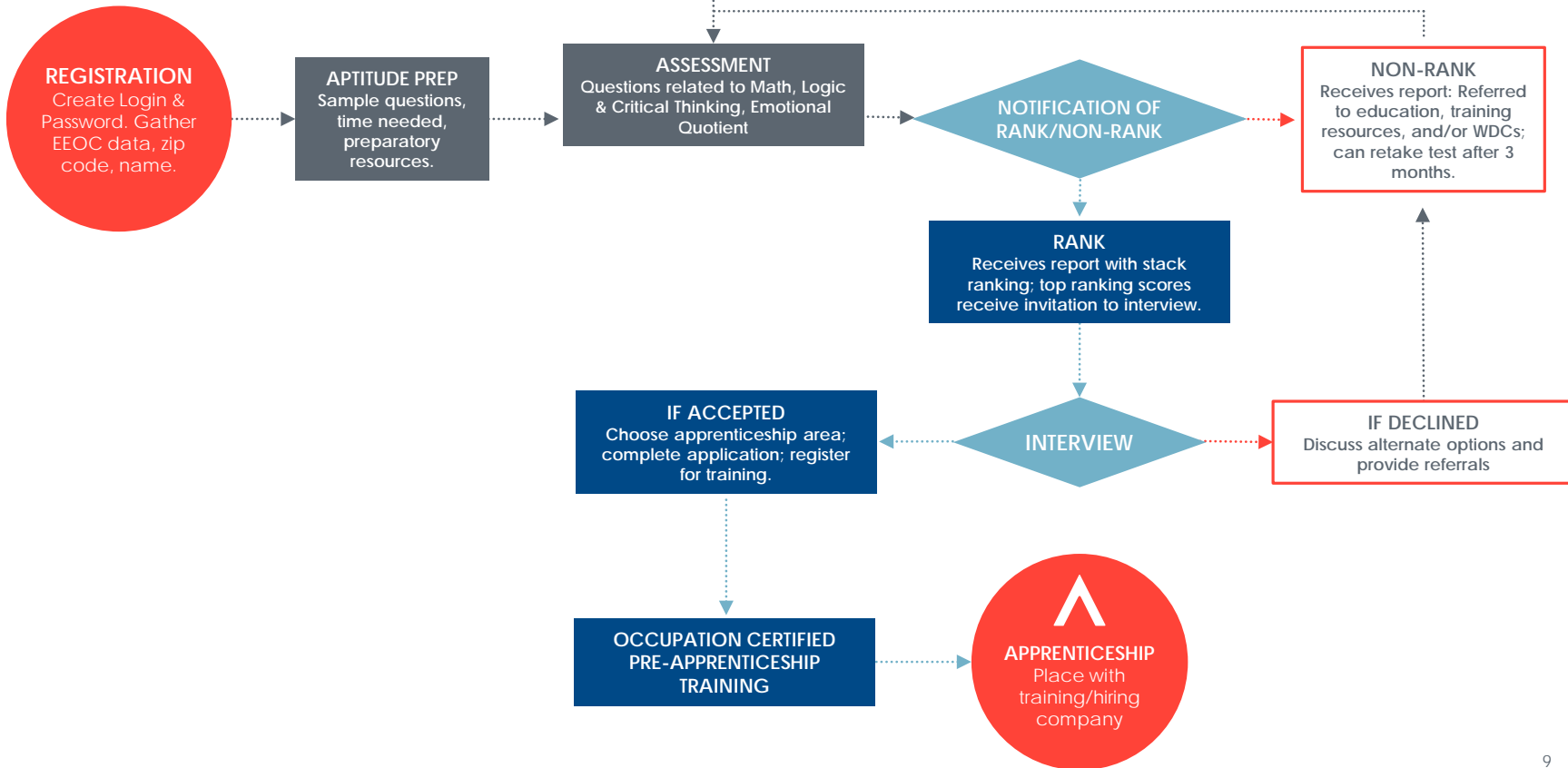- Web Applications Development

Training

- Two to four months, full-time
- First cohort's technical training is sponsored by JP Morgan Chase
- Option for unemployment benefits

Future Occupations

- QA
- UI/UX
- Business Analyst
- Technical Product Support
- Computer Aided Design (CAD)
- And More!

How it Works – ApprentiCareers.org

REGISTRATION
Create Login & Password. Gather EEOC data, zip code, name.

APTITUDE PREP
Sample questions, time needed, preparatory resources.

ASSESSMENT
Questions related to Math, Logic & Critical Thinking, Emotional Quotient

NOTIFICATION OF RANK/NON-RANK

NON-RANK
Receives report: Referred to education, training resources, and/or WDCs; can retake test after 3 months.

RANK
Receives report with stack ranking; top ranking scores receive invitation to interview.

IF ACCEPTED
Choose apprenticeship area; complete application; register for training.

INTERVIEW

IF DECLINED
Discuss alternate options and provide referrals

OCCUPATION CERTIFIED PRE-APPRENTICESHIP TRAINING

APPRENTICESHIP
Place with training/hiring company

Timeline

Outreach & Assessment

- Now! Quarterly cohorts beginning October 2016

Interviews

- Mid to End September – Select 20-25 Apprentices for Cohort 1
- November - Select 20-25 Apprentices for Cohort 2

Technical Training

- October to January –– Cohort 1
- January to March – Cohort 2

On-the Job Training

- January – Cohort 1 begins OJT at companies
- April – Cohort 2 begins OJT at companies

Q&A Session

Thank You

For more information, please contact
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ApprentiCareers.org

Washington STEM's 2017-2019 Priorities and State Funding Request

Caroline King

Chief Policy Officer

Washington STEM

WASHINGTON STEM

- **Statewide nonprofit; cradle to career; equity, innovation and opportunity**

- **Engaged Washington STEM Board and 10 Regional Networks to develop 10-year goals and 2017-19 priorities**

- **Commissioned Education First to recommend policy and investment priorities to advance basic education outcomes and equity through STEM**

- **Reviewed evidence base, national best practices and community needs across Washington**

- **Legislative priorities aligned to HB 1872**

FUTURE READY WASHINGTON

WASHINGTON STEM

Young Washingtonians have the technical and critical skills needed to thrive in today's jobs and create and excel in the unknown jobs of tomorrow as well as exemplify opportunity and create shared prosperity for our communities.

Washington STEM and our regional Networks and partners aspire to a Future Ready Washington.

Together, here's what we plan to achieve by 2025. »

Our work is organized in four priority initiatives:

Computer Science

Career Connected Learning

Early Math

Science & Engineering

We advance this work by building partnerships, leveraging policy, and expanding innovation.

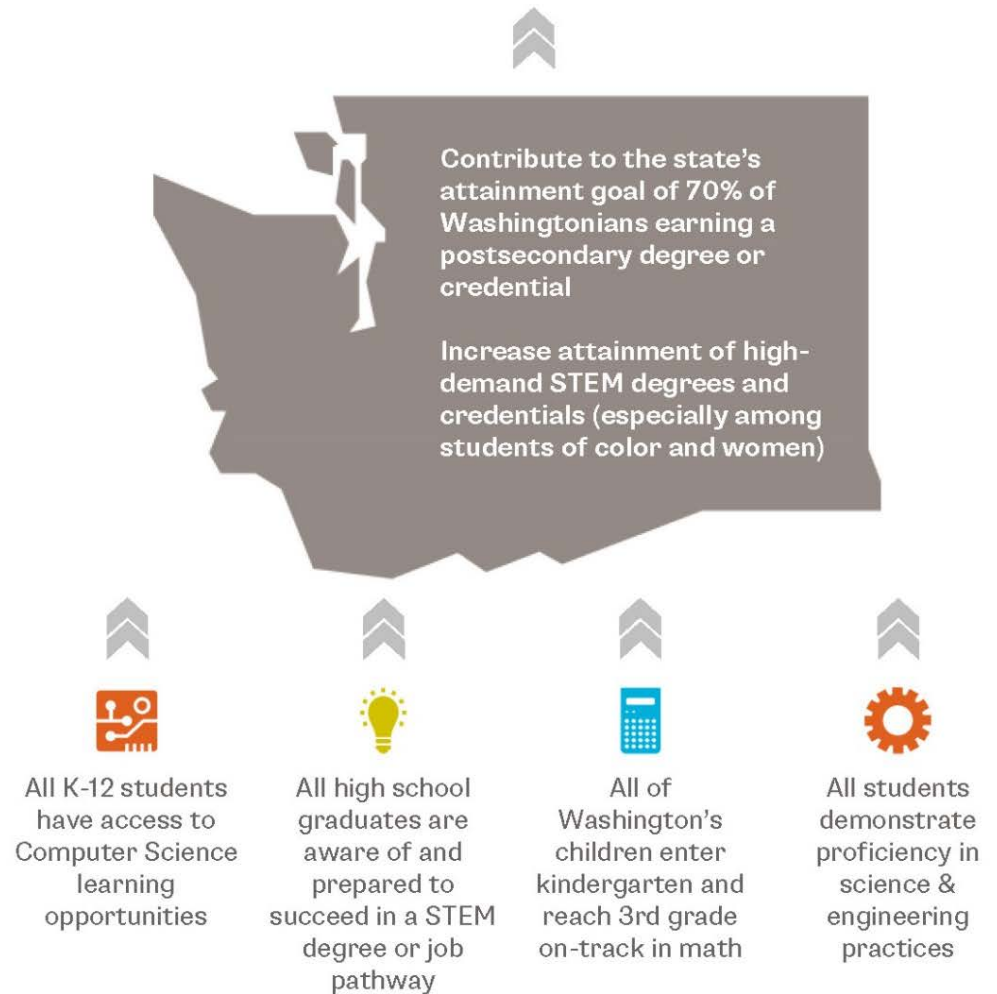## In all our work we focus on:

Equity

All students deserve the opportunities that come with being STEM ready. We focus our work and encourage networks to target gaps in gender, race, income, and geography.

Teaching Quality

Quality instruction can unlock so much student potential. We support professional development, standards implementation, resource dissemination in service of these objectives.

Increase STEM access, interest, and success for all students

Contribute to the state's attainment goal of 70% of Washingtonians earning a postsecondary degree or credential

Increase attainment of high-demand STEM degrees and credentials (especially among students of color and women)

All K-12 students have access to Computer Science learning opportunities

All high school graduates are aware of and prepared to succeed in a STEM degree or job pathway

All of Washington's children enter kindergarten and reach 3rd grade on-track in math

All students demonstrate proficiency in science & engineering practices

2017-19 LEGISLATIVE AGENDA: CRADLE TO CAREER

Our Legislative Agenda focuses on building student opportunity and success through STEM from cradle to career, with a focus on underserved and underrepresented students.

EARLY LEARNING	K-12	HIGHER EDUCATION
Support efforts to include STEM in early learning **Focus**: Early Math	**Drive equity and career- and college-readiness in K-12 basic education through STEM** • **Focus**: Computer Science, Career Connected Learning, Science & Engineering, Early Math • **Focus**: Improve and grow STEM capital grant program	**Expand incentives and supports for high-demand, technical, and 2- and 4-year degrees** • WSOS scholarships • MESA Community College footprint • Apprenticeships and 4-year STEM degree opportunities

2017-19 K-12 LEGISLATIVE PRIORITIES

- ☐ **Deep-dive set of K-12 state funding and policy recommendations**
  - ☐ Informed by best practices around the country
  - ☐ Informed and vetted by regional STEM Networks, statewide partners, and other key stakeholders

- ☐ **$45M for 2017-19** (1:1 match; $22.5M state, $22.5M private).
  - ☐ Resource breakdown
  - ☐ Reach 50% of K-12 students
  - ☐ Build capacity, drive equity, and spur scale

- ☐ **Four priorities**: Computer Science, Career Connected Learning, Early Math, and Science & Engineering

- ☐ **Essential part of the McCleary solution:** Deliver on basic education goals, close opportunity gaps, and build diverse skilled workforce.

2017-19 K-12 LEGISLATIVE PRIORITIES

PRIORITY #1

Ensure all students have access to computer science (CS) learning opportunities by 2025.

PRIORITY #3

Ensure that all PreK-3 students demonstrate grade-level competency in math by 2025.

PRIORITY #2

By 2025 all high school graduates have the communication, problem-solving, and collaboration skills necessary to thrive in work and life, supported by high-quality Career Connected Learning experiences at elementary, middle, and high school.

PRIORITY #4

All students engage in investigations aligned with newly adopted state standards to learn how science and engineering relate to natural systems, challenges, and key industries throughout the state.