



Washington State Data

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By 2030, Washington students will be career- and future-ready.

70%

triple.





What gets measured, gets done

WA State Measurement Vision: transparent, accessible, and relevant communication of *disaggregated* student outcomes and progress toward *cross-sector* goals that aim to close equity gaps and to prepare all WA students for their futures

- Examples of cross-sector goals:
 - 70% credential attainment among adults (WSAC) or among K-12 originators by the HS Class of 2030 (WRT/P4L, WA STEM)
 - 60% “career launch” experience completion by HS Class of 2030 (Career Connect WA)



What We Need to Measure

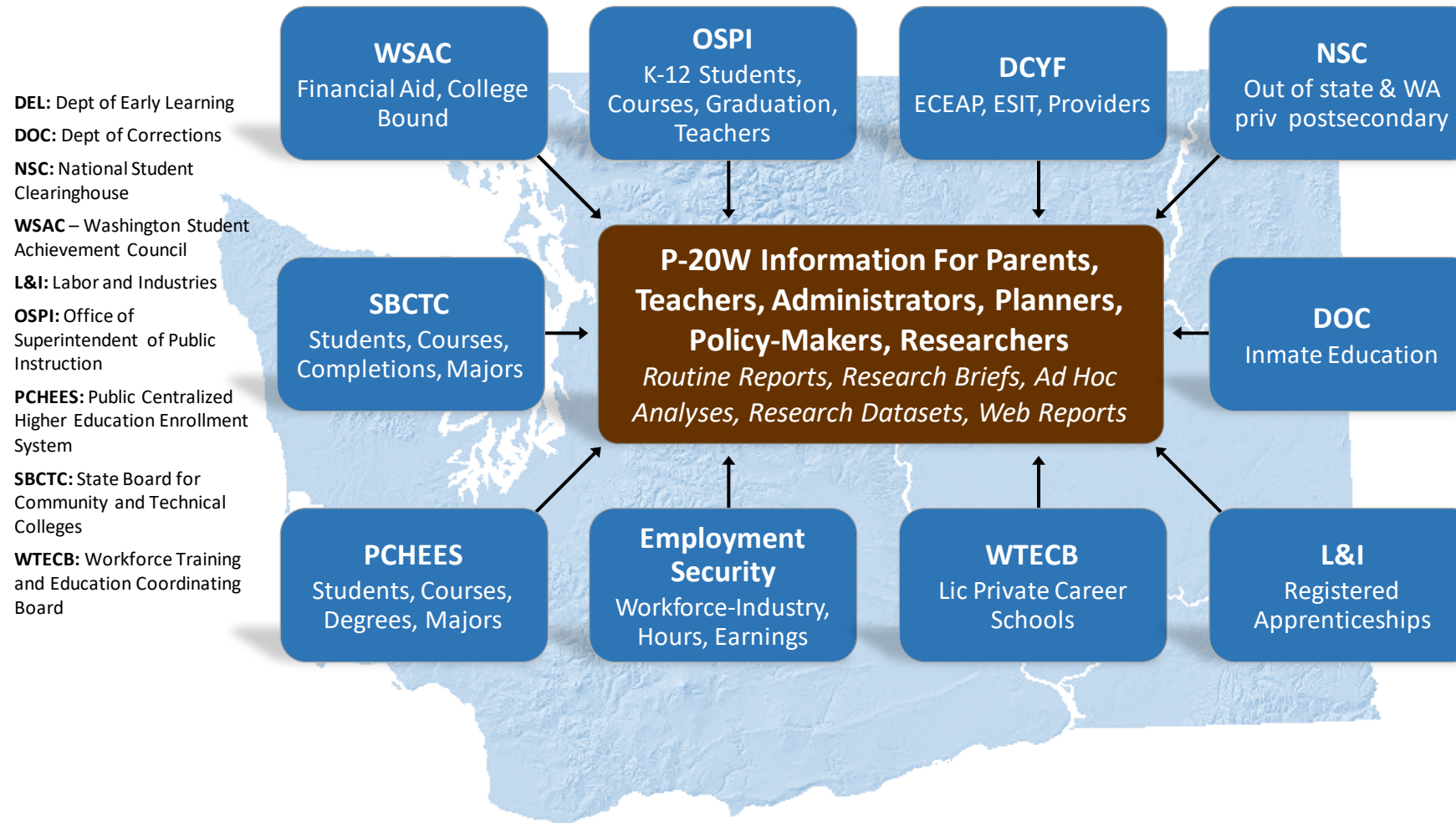
- **Problem:** job openings, talent & credential shortages, equity imperative
- **Outputs:** Work-based programming (career connected learning; career awareness, career exploration, career launch)
- Student/adult **outcomes** from:
 - K-12 (including programs and experiences),
 - Into higher ed/credentials,
 - into the workforce (at least 5 years out),
 - along lines of equity



WA State Data Agency Partners

- Workforce Training & Education Coordinating Board
 - Career Bridge
- Washington Student Achievement Council
 - Adult Reengagement Portal
- Employment Security Department
 - High School and Beyond Planning (HSBP) Tool
- Education Research Data Center
 - P20 Database (P20 Identifier)
- Office of Superintendent of Public Instruction
 - HSBP + Career & Technical Education planning data
- State Board of Community & Technical Colleges
 - Career Launch Program Endorsement

Current Data Inputs (P-20 Identifier for All)



HISTORY OF STEM BY THE NUMBERS

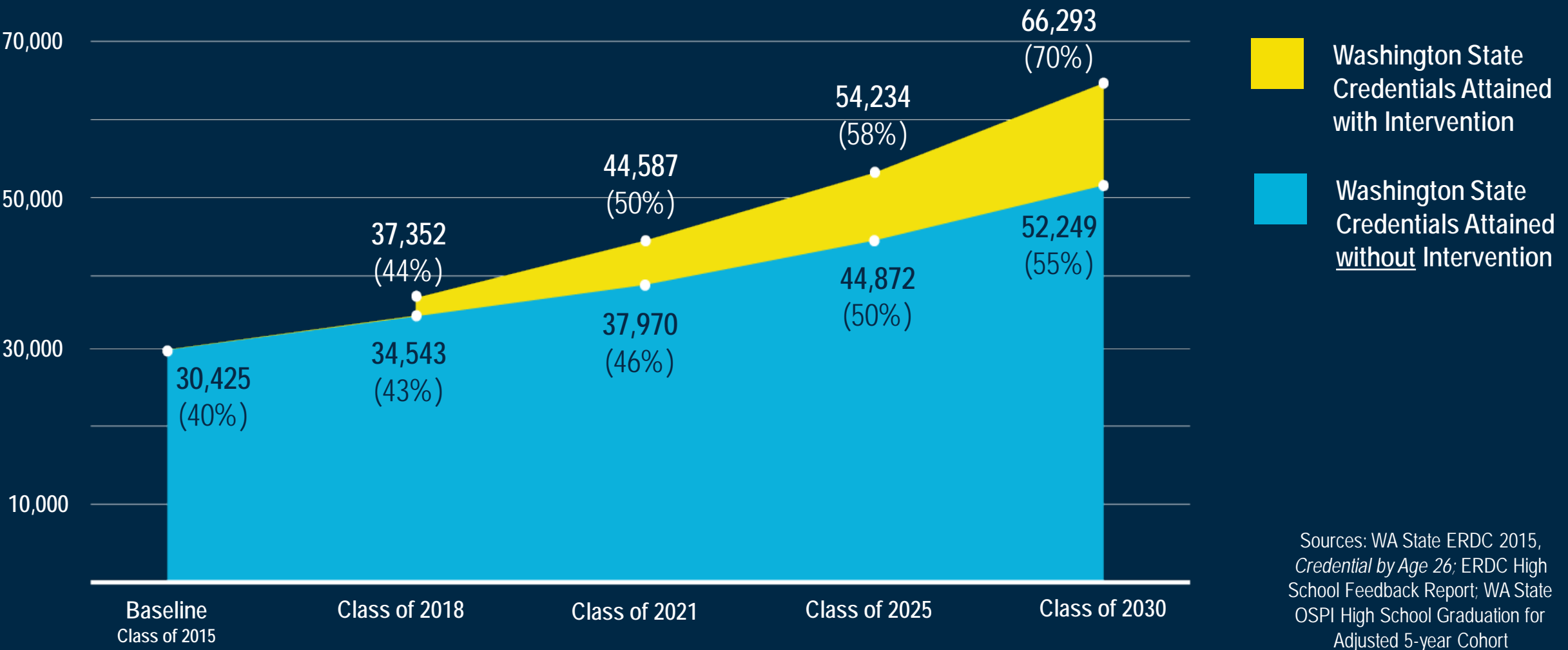
Big goal (70%) that is necessary to for our economy, necessary to close equity gaps, and necessary allow all students to have individual choice and opportunity.

This goal is daunting, so we are doing four major things to support measurement of career connected learning/work-based learning outputs and outcomes:

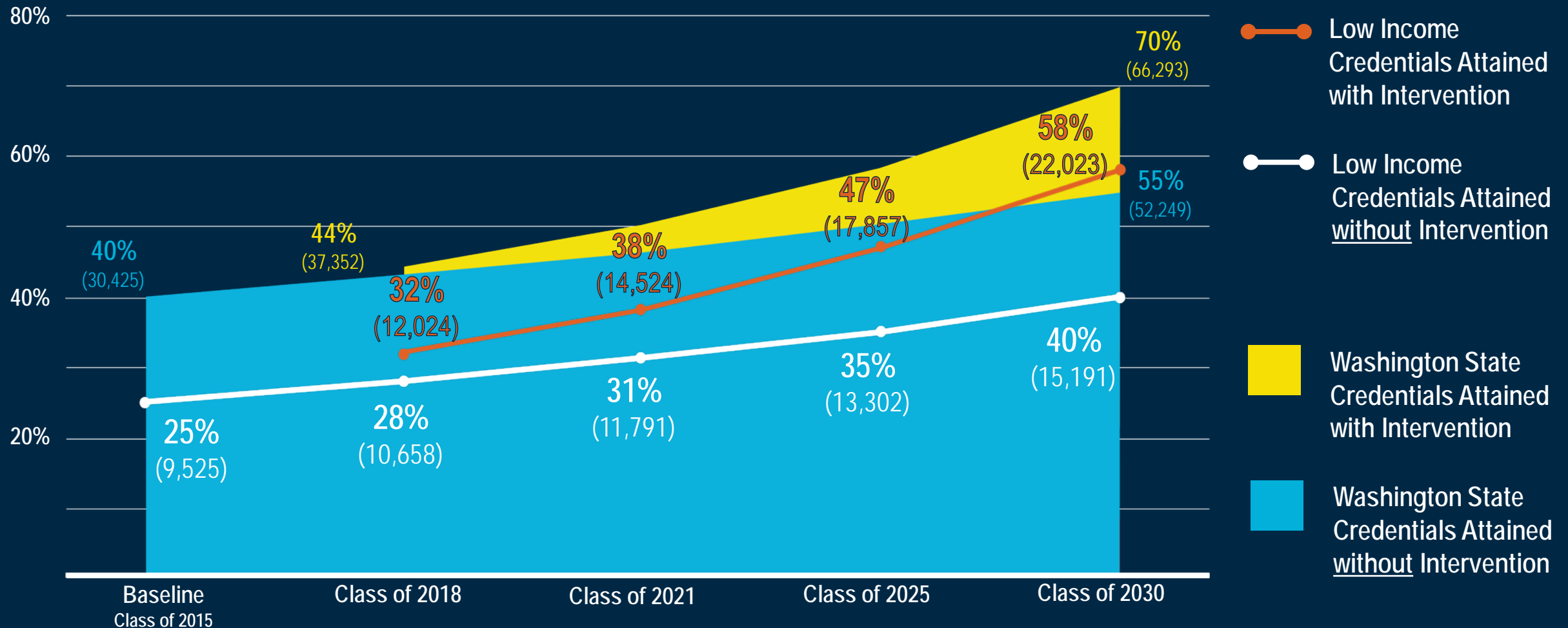
WA STEM'S ROLE IN SUPPORTING PARTNERS

1. Getting & advocating for better data that tells us about outcomes across transitions
2. Breaking it down (focusing on the students historically furthest from opportunity) by region & demographic
3. “Backwards mathing and mapping” by region and by demographic to make highly-localized analyses
4. Supporting our partners in using this data to set goals, make plans, start new pathways, and chip away at the opportunity gaps in their own backyard

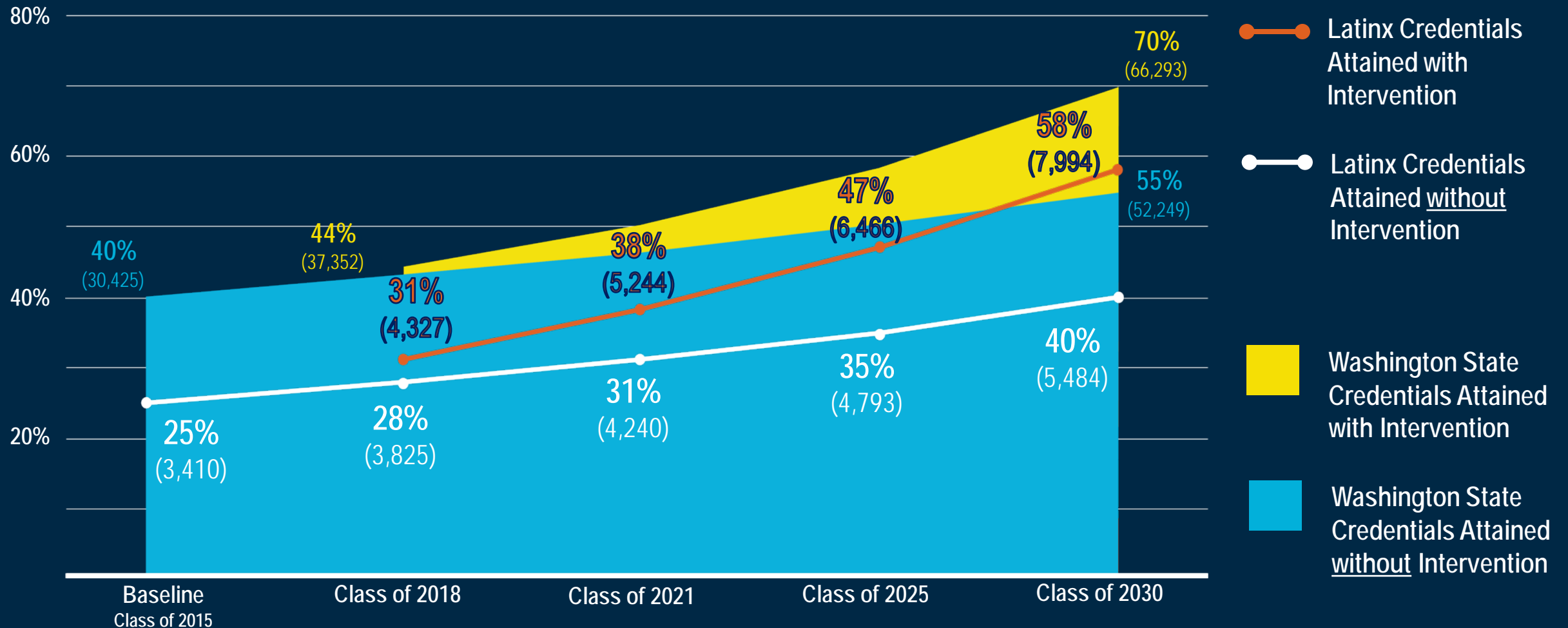
PROJECTED CRED. ATTAINMENT V. WA STEM GOAL



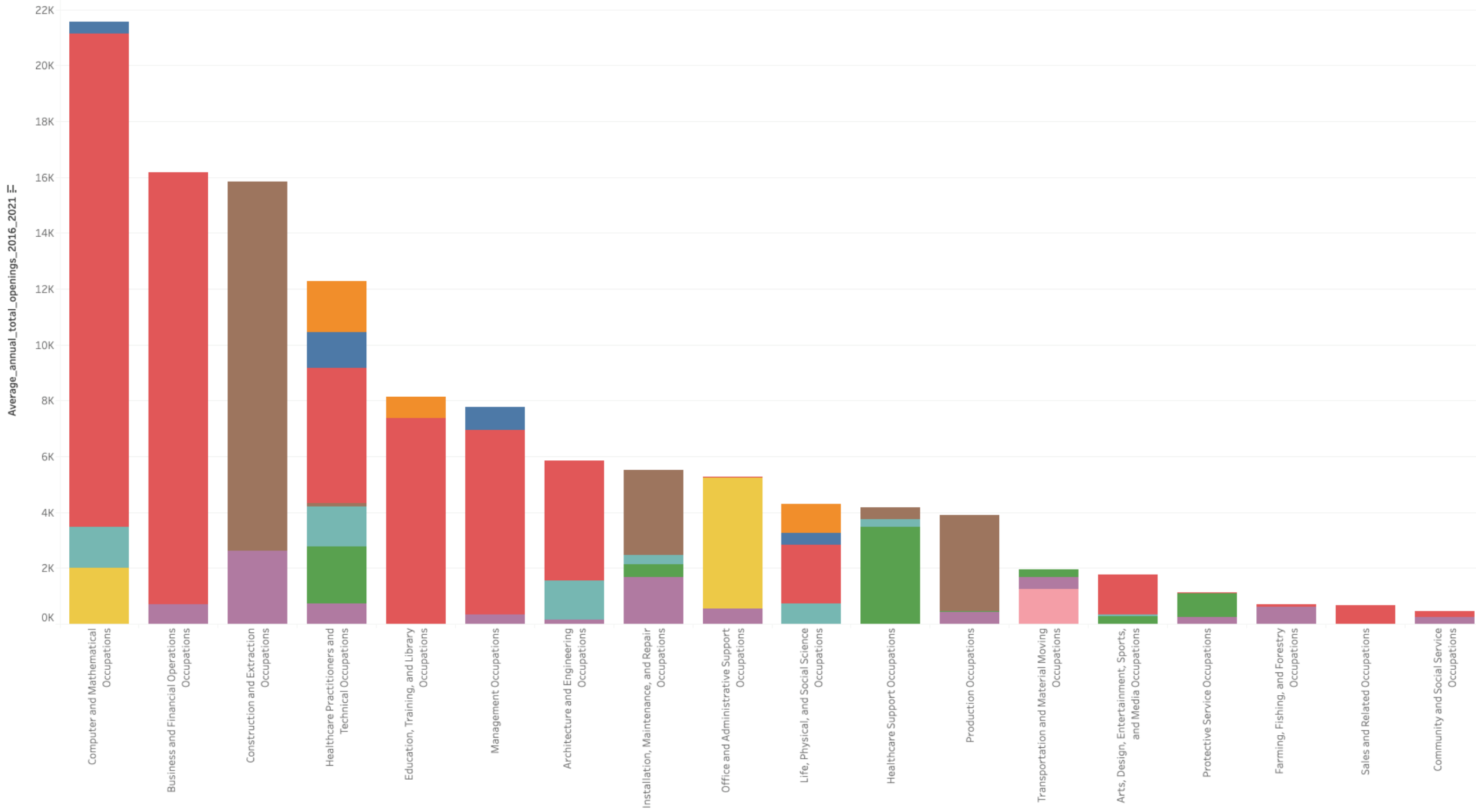
LOW INCOME



LATINX CREDENTIAL ATTAINMENT



Job Projections - Groups



State or Regional Data

Regions

Washington State

Region [WDA]

Washington State

Wage Range

Family Wage

Average Wage

\$38,467 \$308,671

Occupation Demand

(All)

STEM/Not STEM Jobs

(Multiple values)

Occupation Group - Sel...

(All)

Typical Credential Need...

(All)

Typical On The Job Trai...

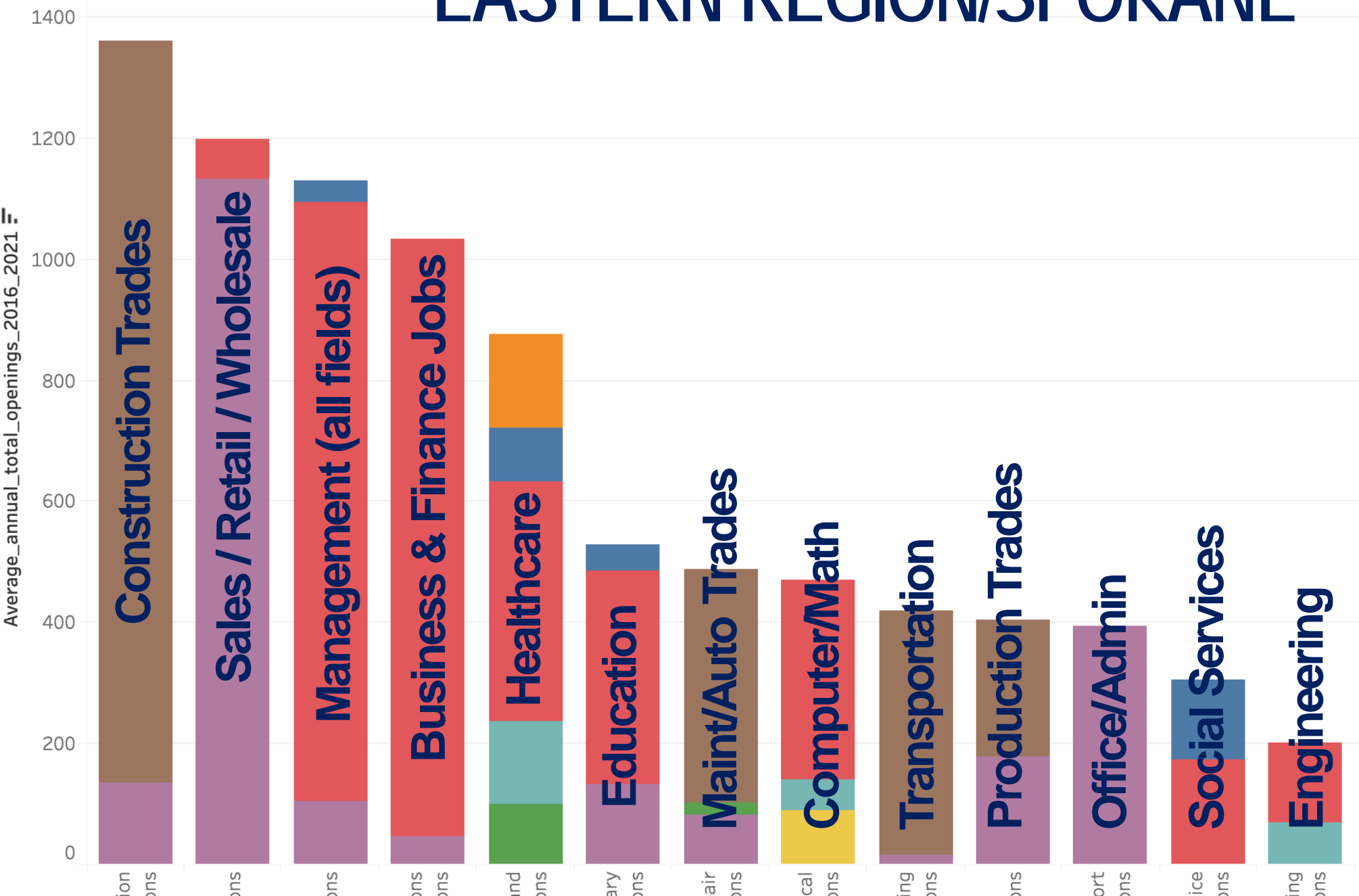
(All)

Work experience in a re...

(All)

- Typical Credential Need...
- Doctoral or profess...
 - Master's degree
 - Bachelor's degree
 - Apprenticeship
 - Associate's degree
 - Some college, no de...
 - Certificate
 - High school diplom...
 - No formal educatio...

EASTERN REGION/SPOKANE



- Doc/Prof. Degree
- Masters Degree
- Bachelors Degree
- Apprenticeship
- Associates Degree
- Cert./Voc Cred.
- HS Diploma

EASTERN REGION/SPOKANE

HEALTHCARE PROFESSIONAL

REGISTERED NURSE & MEDICAL ASSISTANT

Annual # of Openings: 1,347

Credential: Certificate → Bachelor's

Average Regional Wage: \$37,000 → \$79,875

TRADES PROFESSIONAL

Annual # of Openings: 990

Credential: Apprenticeship

Average Regional Wage: \$55,190

K-12 TEACHER

Annual # of Openings: 604

Credential: Bachelor's

Average Regional Wage: \$60,700

INFORMATION TECHNOLOGY

Annual # of Openings: 374

Credential: Bachelor's

Average Regional Wage: \$78,304

BUSINESS & FINANCE PROFESSIONAL

Annual # of Openings: 362

Credential: Bachelor's

**Average Regional Wage:
\$64,000 → \$72,000**

ENGINEERING

Annual # of Openings: 200

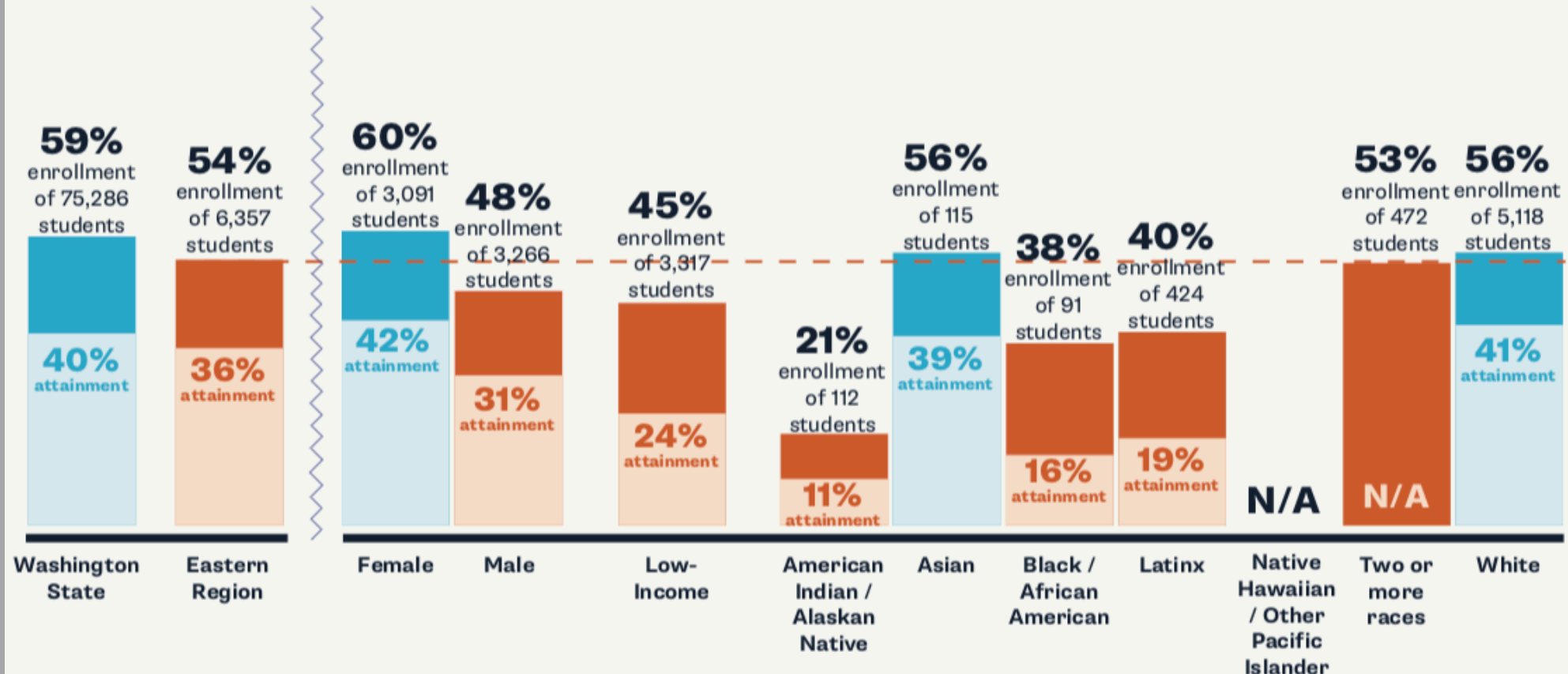
Credential: Bachelor's

**Average Regional Wage:
\$80,000 - \$106,000**

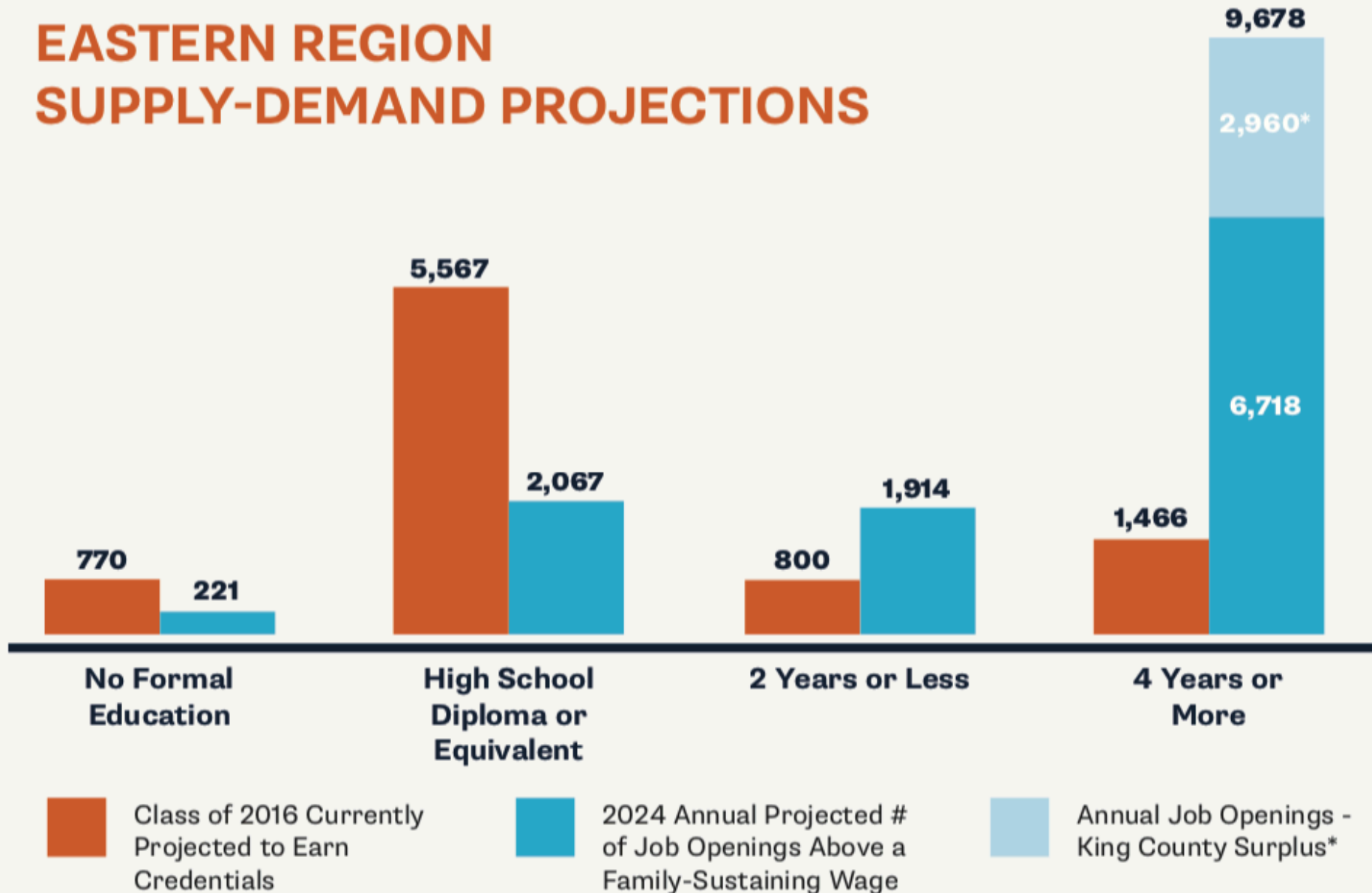
EASTERN REGION/SPOKANE

CREDENTIAL ENROLLMENT/ATTAINMENT

54% of 6,357 of the originating ninth graders in the Eastern Region enroll in a postsecondary program and **36%** of those originating ninth graders earn a credential by age 26.

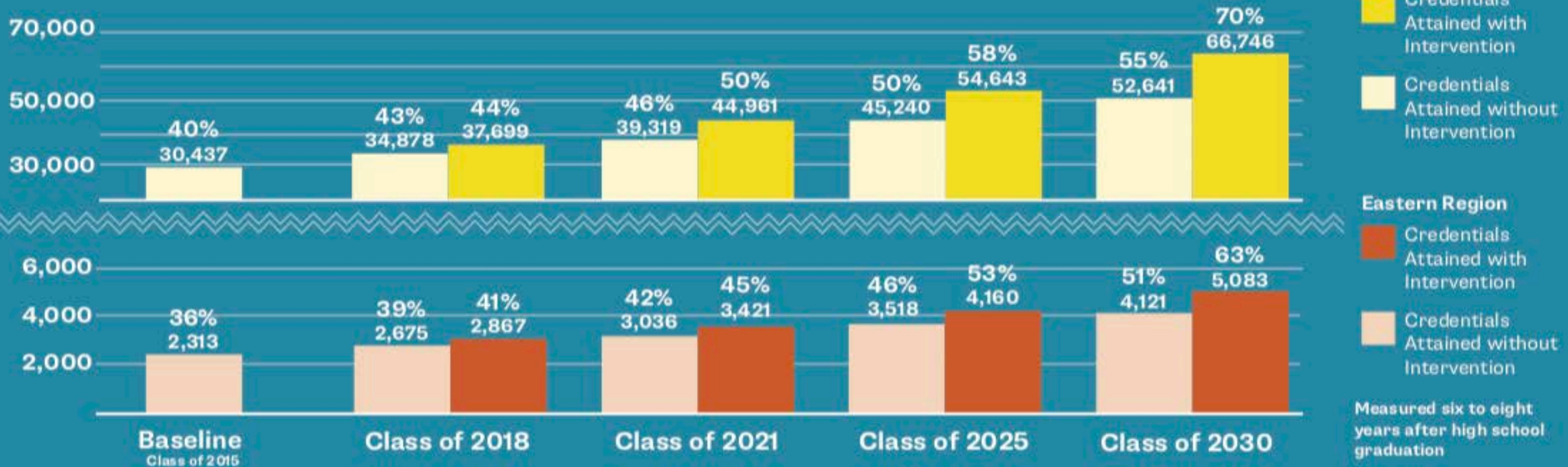


EASTERN REGION SUPPLY-DEMAND PROJECTIONS



EASTERN REGION/SPOKANE

185 MORE CREDENTIALS PER YEAR = REGION ON TRACK



CREDENTIAL OPPORTUNITIES BY REGION & INDUSTRY MATRIX (CORI)

North Central									
Supply and Demand Estimates for <u>Family Wage</u> Occupations in Demand									
Health Science Composite Sector in North Central Region							All Remaining Sectors in North Central Region		
SOC Code	Top Occupations	Typical Credential Needed	Demand		Supply		SOC Code	Top Occupations	Supply Shortage
			Estimated Annual Openings	Other Job Openings seeking same credential (s)	Credentials Awarded	Supply Shortage			
43-6013	Medical Secretaries	High school diploma or equivalent	42	20	-	(62)	43-9061	Office Clerks, General	(268)
11-9111	Medical and Health Services Managers	Bachelor's degree	32	15	-	(47)	25-2022	Middle School Teachers, Except Special and Career/Technical Education	(217)
31-9091	Dental Assistants	Postsecondary nondegree award	42	-	-	(42)	25-2021	Elementary School Teachers, Except Special Education	(155)
29-2052	Pharmacy Technicians	High school diploma or equivalent	27	-	-	(27)	41-4012	Manufacturing, Except Technical and Scientific Products	(126)
29-1071	Physician Assistants	Master's degree	12	10	-	(22)	13-2011	Accountants and Auditors	(79)
29-1123	Physical Therapists	Doctoral or professional degree	14	-	-	(14)	39-9031	Fitness Trainers and Aerobics Instructors	(70)
29-1051	Pharmacists	Doctoral or professional degree	12	(0)	-	(12)	41-3021	Insurance Sales Agents	(70)
29-2041	Emergency Medical Technicians and Paramedics	Postsecondary nondegree award	12	-	-	(12)	11-9141	Property, Real Estate, and Community Association Managers	(66)
29-2021	Dental Hygienists	Associate's degree	10	-	-	(10)	41-9022	Real Estate Sales Agents	(66)
29-2099	Health Technologists and Technicians, All Other	Postsecondary nondegree award	7	0	-	(7)	41-1012	First-Line Supervisors of Non-Retail Sales Workers	(59)
29-1127	Speech-Language Pathologists	Master's degree	6	-	-	(6)	15-1151	Computer User Support Specialists	(37)
29-2081	Opticians, Dispensing	Apprenticeship	6	-	-	(6)	11-3031	Financial Managers	(37)
29-1021	Dentists, General	Doctoral or professional degree	5	-	-	(5)	21-1093	Social and Human Service Assistants	(33)
29-1141	Registered Nurses	Bachelor's degree	154	5	66	(93)	25-2032	Career/Technical Education Teachers, Secondary School	(31)
31-9092	Medical Assistants	Postsecondary nondegree award	78	24	58	(55)	31-9011	Massage Therapists	(31)

Region
Eastern WA
Eastern WA (Spokane)
King County
North Central
North Olympic
Northwest
Pierce County
Snohomish County
South Central
South Olympic

Composite Sector
Arts, A/V Technology and...
Business Management and...
Education and Training
Finance
Health Science
Hospitality and Tourism
Human Services
Information Technology
Law, Public Safety, Corrections,...
Life Sciences
Manufacturing/Advanced Mfg
Marketing
Port

Supply Shortages

LINKS FOR EACH TOOL:

1. Labor Market Dashboard:
washingtonstem.org/STEMbytheNumbers
2. Credential Production Visual:
<https://education.uw.edu/faculty-and-research/washingtonpathways/state-credential-production>
3. CORI Source Files:
washingtonstem.box.com/s/66keh31t7hx5t7hti5s5lupwwmlhf0
4. CORI Tool:
washingtonstem.box.com/s/5c7jigeaps1t96q0o511otgkzo9xgs12

FORTHCOMING WORK:

Landscape of opportunities/programming (systems support & equity of access use case) & pathway mapping tool (student/school use case)

- Regional job openings, salary, and credentials required ✓
- Location and capacity of credentialing programs ✓
- Middle school and high school pathway availability
- Internships, career fairs, and other school/community-based exposure

FORTHCOMING WORK:

Tracking work-based learning/career connected learning program offerings & participation (along lines of equity)

- Apprenticeships & pre-apprenticeships ✓
- Higher education credentials with work-based learning ✓
- Career & Technical Education participation & concentration ✓
- Work-based learning courses ✓
- Internships
- Career fairs
- High school & beyond plans (✓)