

LMC Flex Day

So what does the data say?

August 9, 2017

Gregory M Stoup

Interim Associate Vice Chancellor of Educational Service

What we will tackle over the 30 minutes

- Demographic, workforce and enrollment trends
- Perspectives from the public, policy makers, employers and students
- New statewide initiatives pointing to change
- The infrastructure we've built in the East Bay
- Condensed summary

Chapter 1

- Demographic, workforce and enrollment trends
- Perspectives from the public, policy makers employers and students
- New statewide initiatives pointing to change
- The infrastructure we've built in the East Bay
- Condensed summary

A very brief summary from a wealth of resources and tools

Zoom in (Ctrl+Plus)

East Bay ECONOMIC OUTLOOK



Contra Costa County Asset Mapping

Final Report

Fall 2015

Regional Labor Market Assessment

East Bay Sub-Region

October, 2016



EAST BAY Regional Planning Unit PY 2017-2020 Local and Regional Plans

March 15, 2017



EASTBAYWorks (EBW)
Alameda County Workforce Development Board (ACWDB)
Contra Costa County Workforce Development Board (CCWDB)
The City of Oakland Workforce Development Board (OWDB)
The City of Richmond Workforce Development Board (RWDB)

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Interactive tools

EMSI

<http://www.economicmodeling.com/>

CTE LaunchBoard

<https://www.calpassplus.org/Launchboard/Home.aspx>

4CD resources

Contra Costa Community College District
Contra Costa Community College District

Environmental Scan

A summary of findings from our external environment

March 2017

Contra Costa Community College District
Contra Costa Community College District

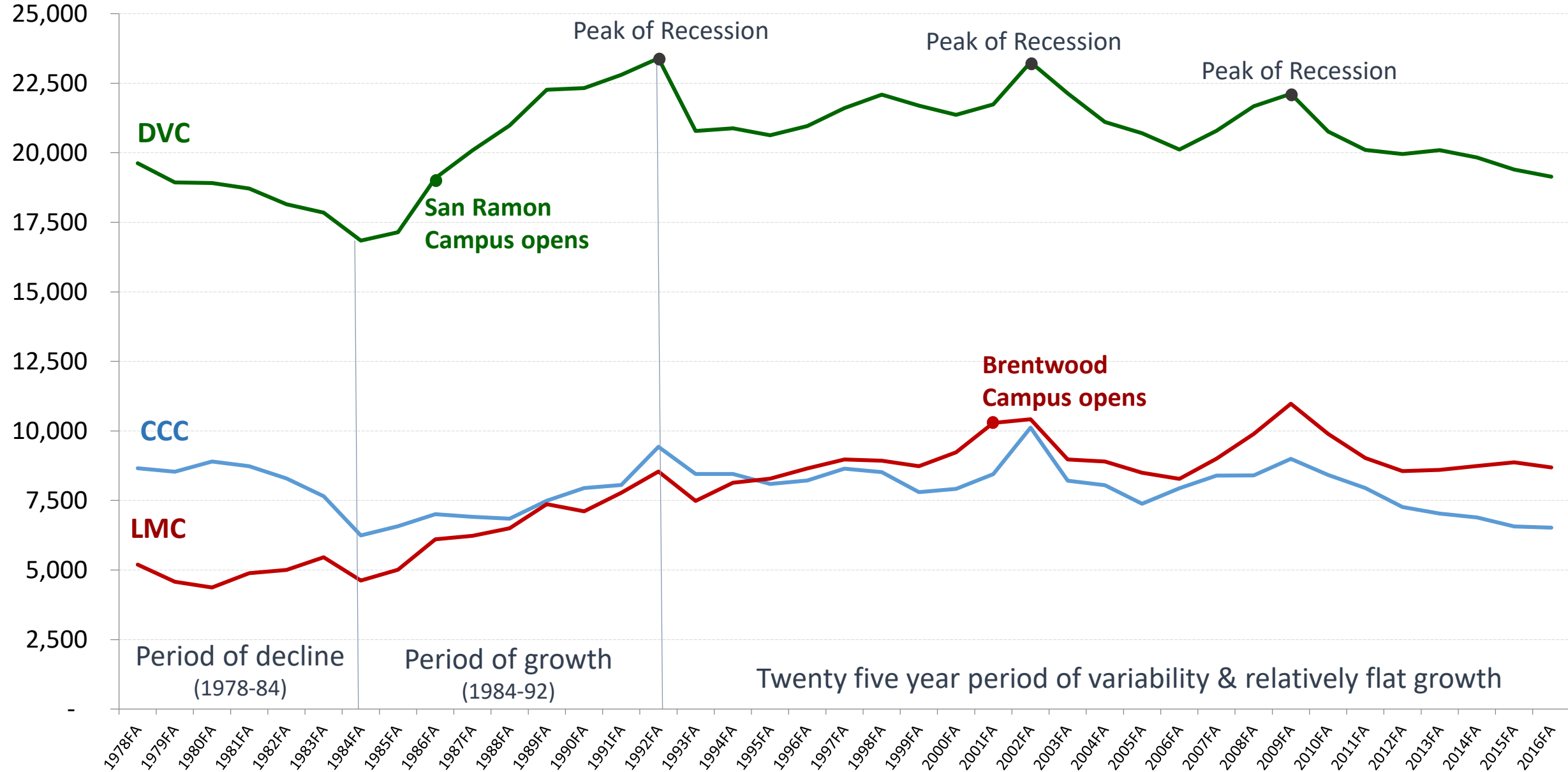
HIGH SCHOOL GRADUATE STUDY

Readiness and Success of Recent High School Graduates
Bay County Districts

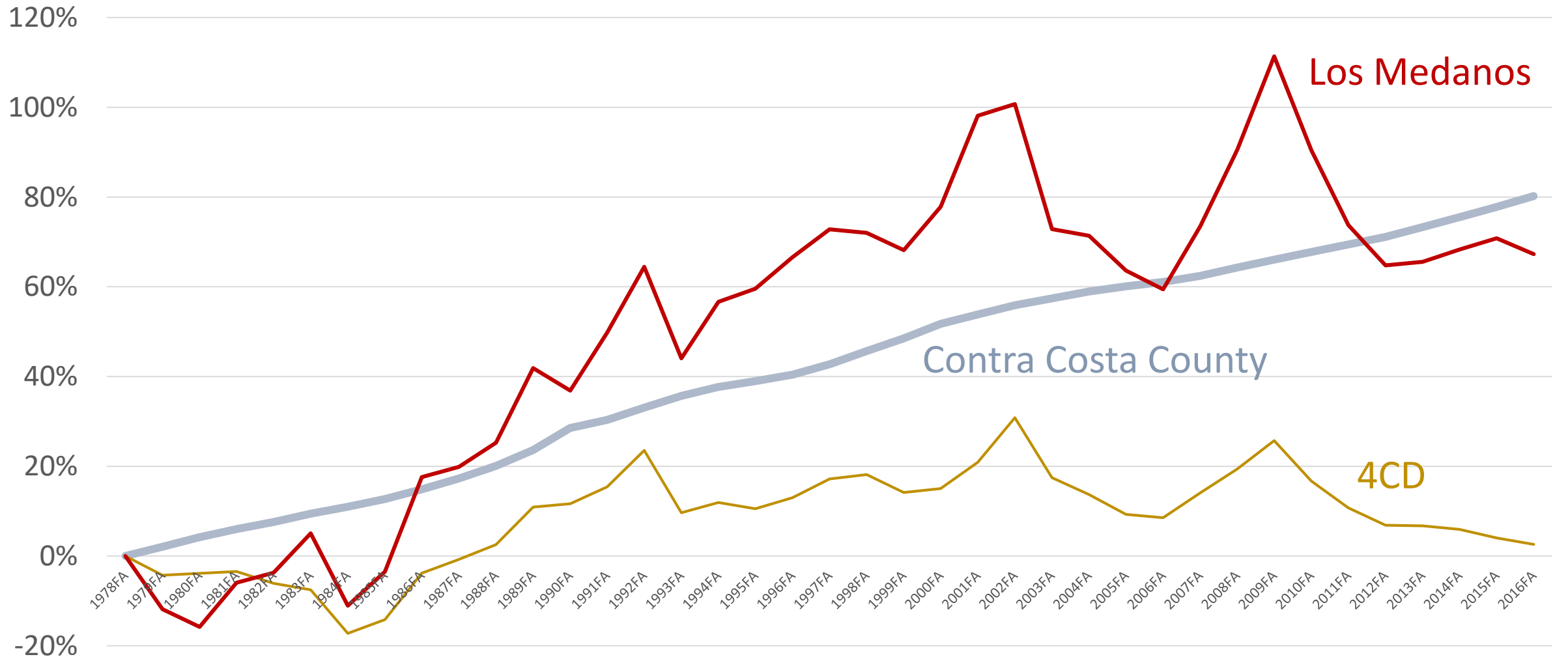
June 2017

District Research
Contra Costa Community College District
1000 Green Street
Hayward, California 94512

First let's take a historical look at enrollment trends (1978 – 2016)

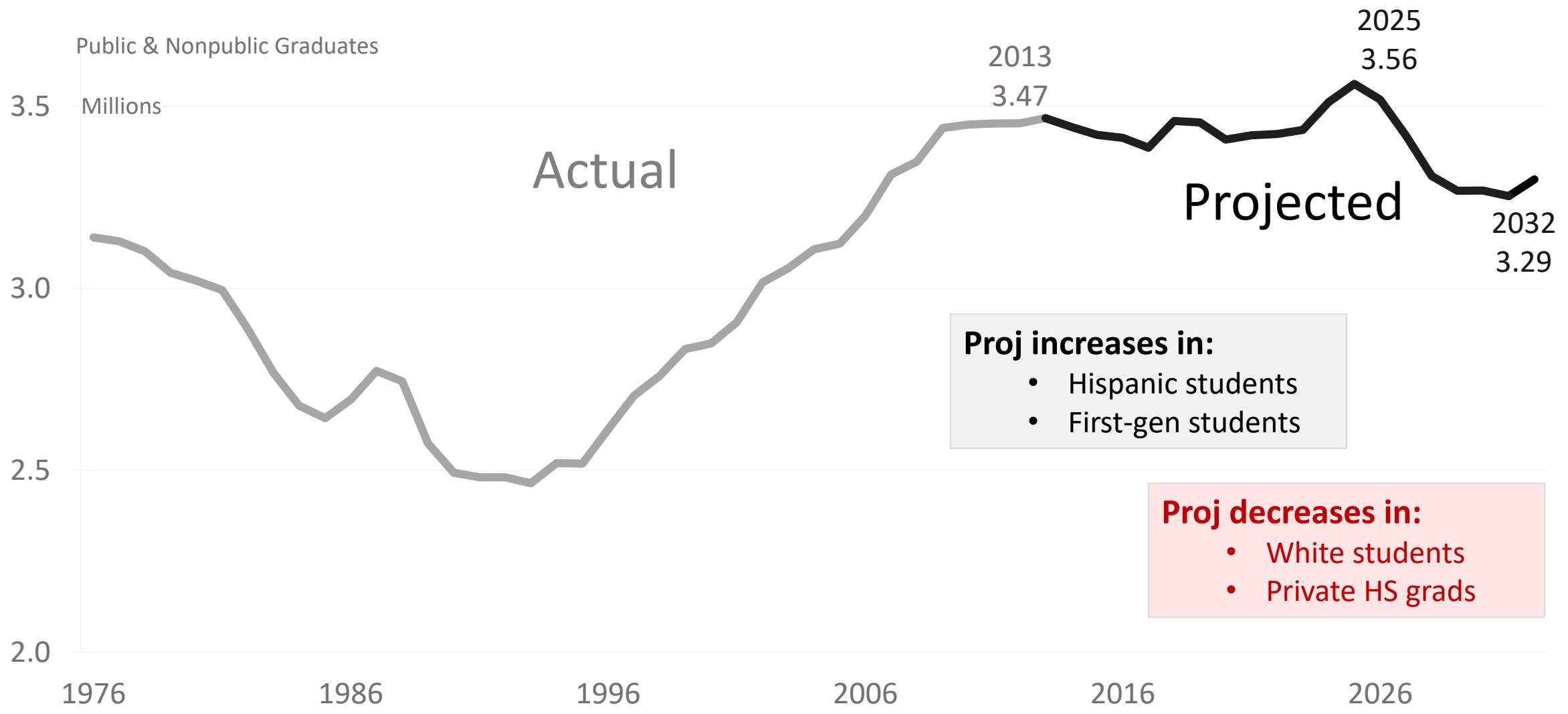


Percentage growth in county population and student enrollment (1978 – 2016)



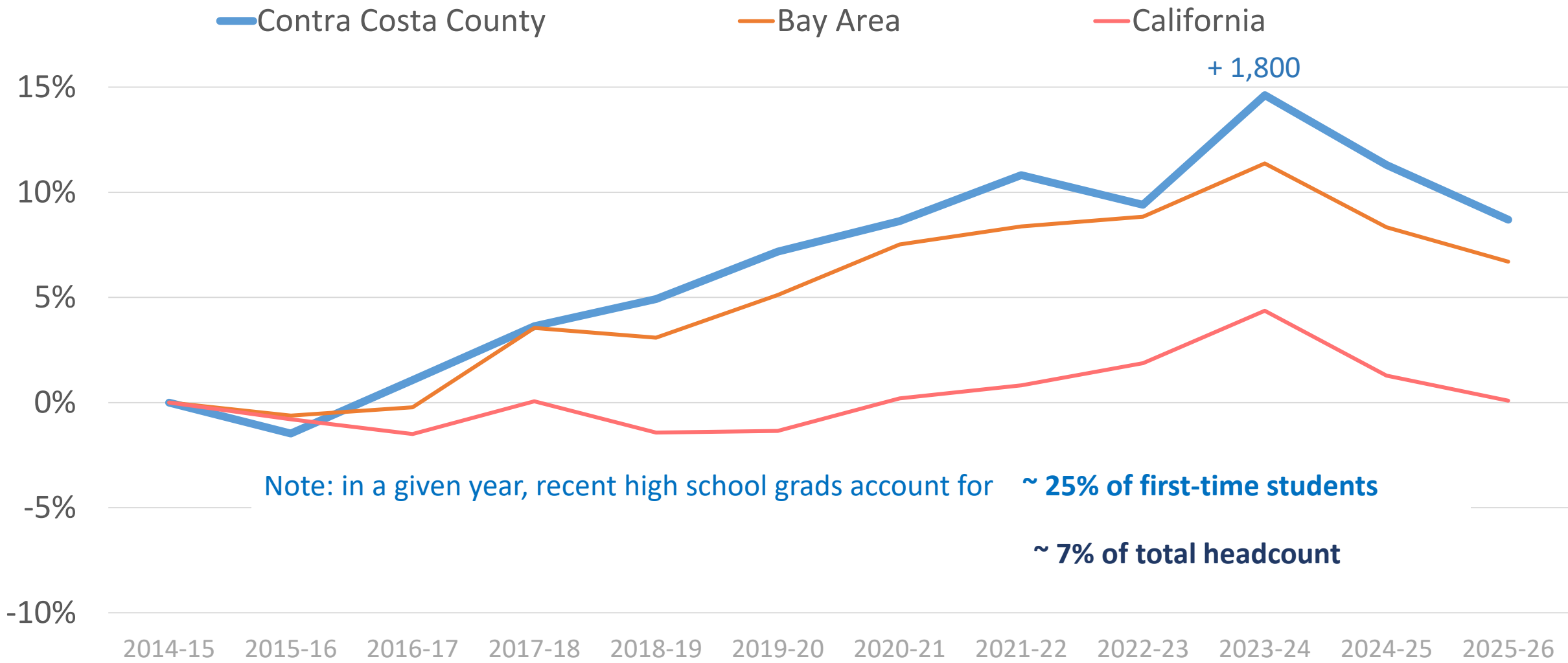
	East County
Overall population	Second largest region; fastest growing
Age Distribution	Youngest age pool; U-shaped growth
Ethnicity	Bimodal ethnicity; rapid minority growth
Origin of Birth	Moderate growth in foreign born residents
Language Spoken	Fastest growth among non-English speakers
Education Attainment	Least educated; strong growth in AA degrees
HS Graduate Market	Rapid growth; rising capture rates
Feeder HS ACT Profile	Lowest performance
Labor Market	slower job growth; growing poverty
Income & Housing Market	Lower income & declining housing market

Projections: U.S. High School Graduates (1976 – 2026)



Source: NCES data through SY2012-13, WICHE *Knocking at the College Door* 2016 for SY2013-14 to 2031-32.

Projections: California High School Graduate (2014/15 – 2025/26)

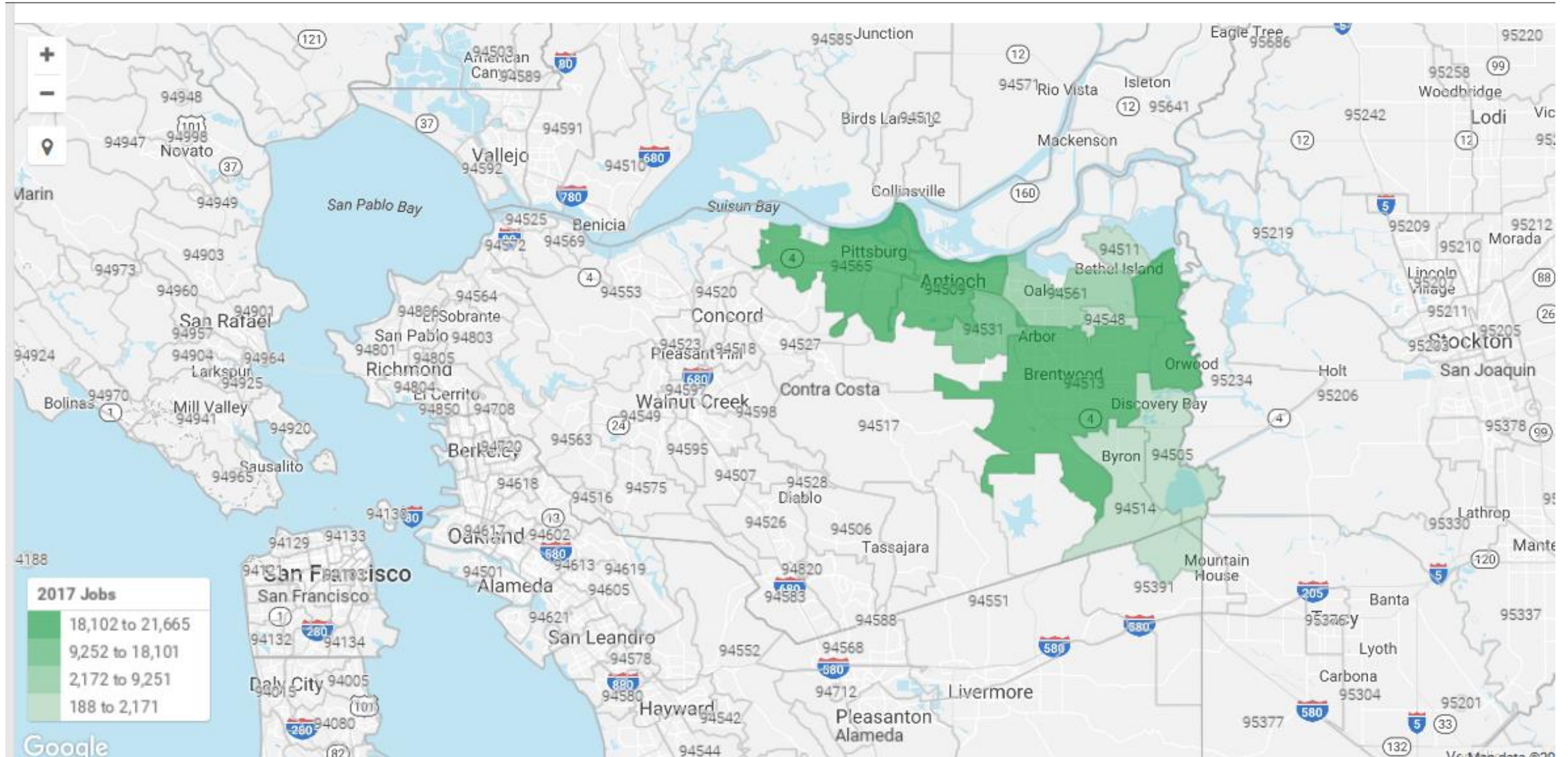


Source: California Department of Finance, Demographic Research Unit, (2016).

Broad labor market trends in our county

- A bedroom community that is evolving into an employment cluster
- Highest concentrations in “inward facing” industries: retail, healthcare, government and construction
- Strong economic growth driven, to a large degree, by small businesses (more so than broader Bay Area)
- Growing stronger in renewable energy; logistics; manufacturing; information technology

A glimpse of labor market trends in the LMC service area



Largest occupations in LMC's service area

Occupation	2017 Jobs	Change in Jobs (2017-2022)	% Change	2015 Median Hourly Earnings
Registered Nurses	1,252	165	13%	\$61.24
Nursing Assistants	688	105	16%	\$15.60
Heavy and Tractor-Trailer Drivers	400	12	3%	\$20.31
Hairdressers, Hairstylists, and Cosmetologists	333	40	12%	\$12.30
Preschool Teachers, Except Special Education	299	9	3%	\$15.96
Dental Assistants	298	27	9%	\$19.41
Medical Assistants	297	50	17%	\$21.40
Licensed Practical and Licensed Vocational Nurses	297	47	16%	\$28.26
First-Line Supervisors of Nonretail Sales Workers	296	18	6%	\$27.60
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	295	50	17%	\$22.44
Manicurists and Pedicurists	295	27	9%	\$10.79
Firefighters	295	9	3%	\$40.05
Massage Therapists	295	35	12%	\$19.16
Dental Hygienists	295	35	12%	\$51.22
Veterinary Technicians and Animal Care Workers	295	21	7%	\$19.26
Telecommunications Equipment Installers and Repairers, Except Line Installers	295	65	22%	\$32.70
Radiologic Technologists	95	9	9%	\$46.11
Medical Records and Health Information Technicians	78	9	12%	\$26.23
Library Technicians	77	1	2%	\$19.35
Skincare Specialists	71	7	10%	\$15.20

- Registered Nurses, LPNs, Nursing Assistant
- Telecommunications Equip and HVAC Installers
- First-line Supervisors and Operating Workers
- Radiological and Surgical Technologist
- Truck drivers and logistics specialists
- Hairdressers, Cosmetologist, Manicurists

LMC's highest volume credentials

Degree Type	Associate Degree Title
AA	Liberal Arts: Math & Science
AA	Liberal Arts: Behavioral Science & Social Science
AA	Liberal Arts: Arts & Humanities
AAT	Psychology for Transfer
AS	Biological Science
AS	Registered Nursing
AST	Business Administration for Transfer
AST	Administration of Justice for Transfer
AAT	Sociology for Transfer
AAT	Kinesiology for Transfer

Account for 85% of degree's awarded at LMC

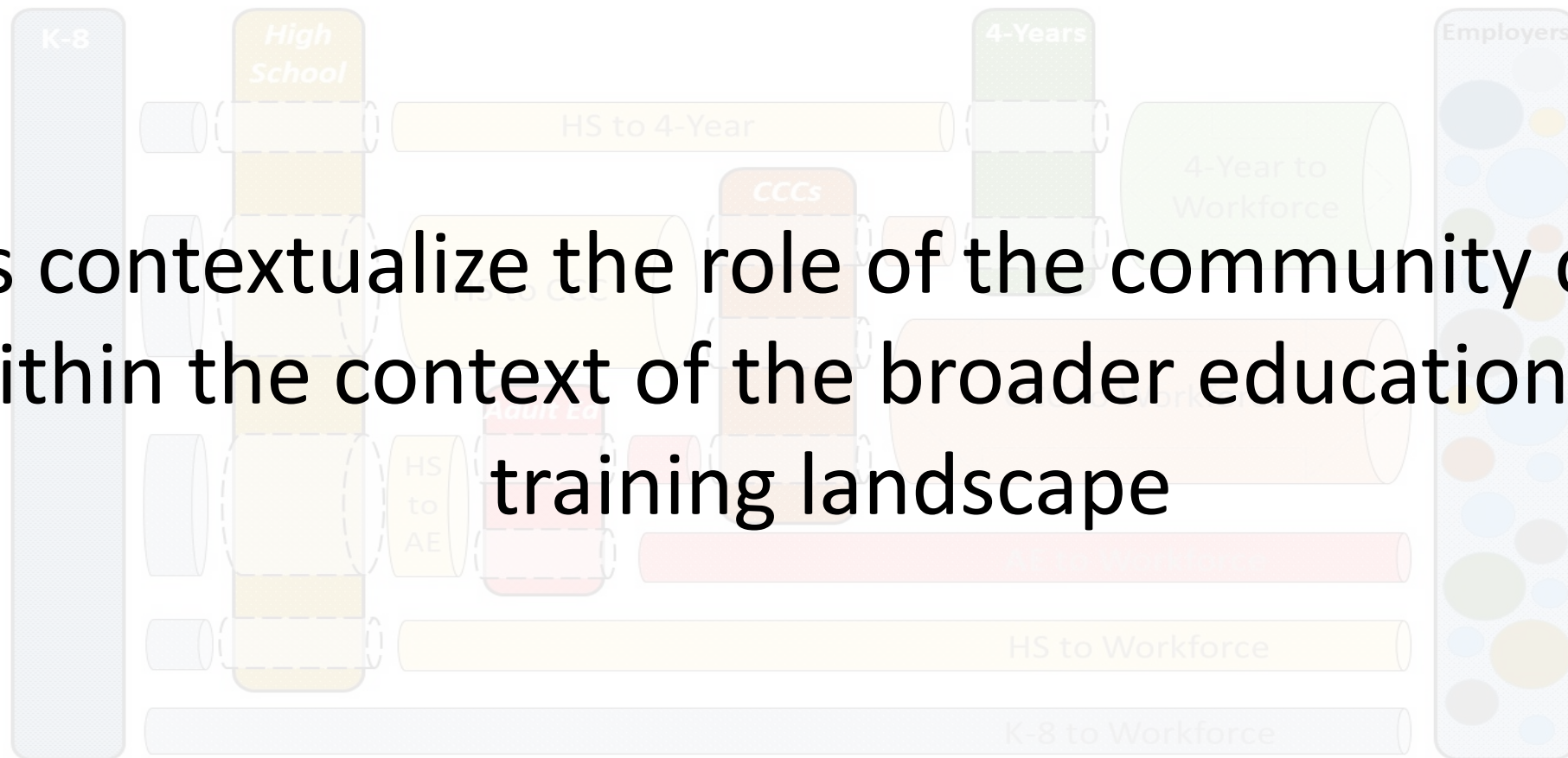
Account for 80% of certificate's awarded at LMC

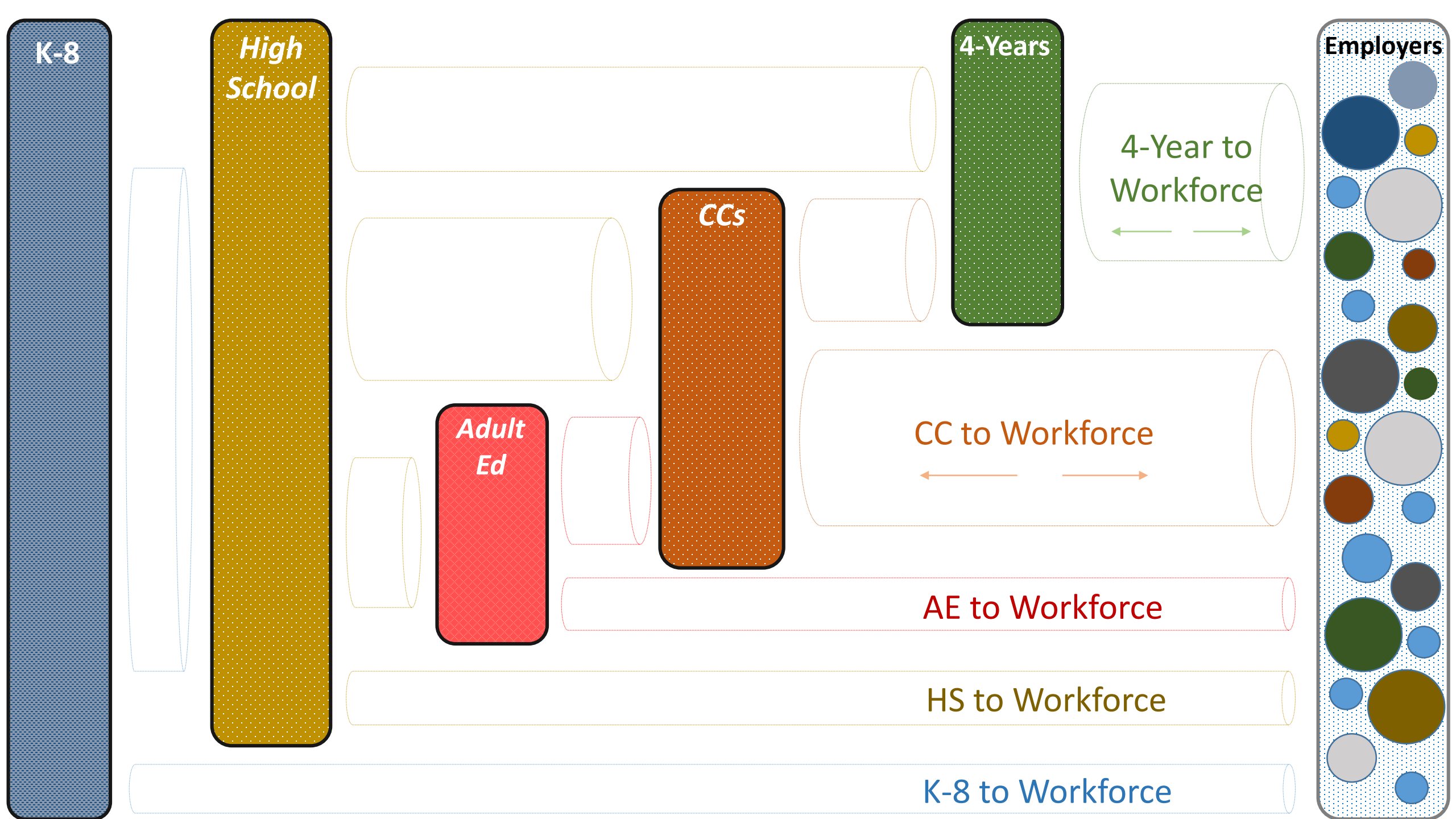
Certificate Title
CSU General Education (CSU-GE Breadth)
Emergency Medical Technician I
Intersegmental General Education Transfer Curriculum
Assistant Teacher Permit Coursework
Basic Fire Academy
Process Technology
Instrumentation Technology
Associate Teacher Permit Coursework
Child Development
Vocational Nursing
Fire Technology
Electrical Technology
Fire Prevention
Spanish
Fire Protection

Chapter 2

- Demographic, workforce and enrollment trends
- **Perspectives from the public, policy makers, employers and students**
- New statewide initiatives pointing to change
- The infrastructure we've built in the East Bay
- Condensed summary

Let's contextualize the role of the community college within the context of the broader education and training landscape





K-8

High School

4-Years

Employers

CCs

Adult Ed

4-Year to Workforce

CC to Workforce

AE to Workforce

HS to Workforce

K-8 to Workforce

K-8

High School

- Percentage composition of current workforce
- Trend over last several decades

4-Years

Employers

~ 35%
(expanding)

~ 30%
(fastest growing)

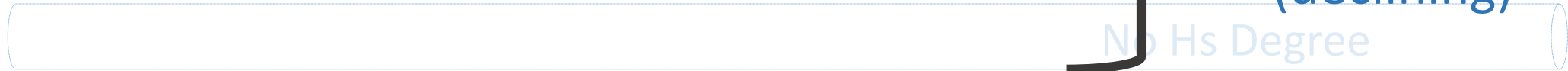
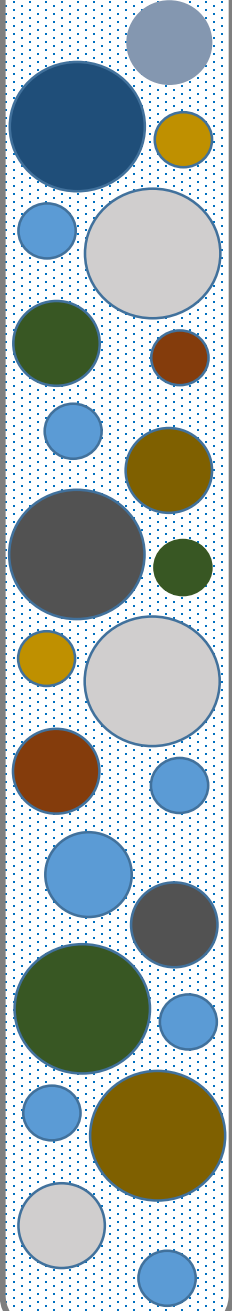
GED / AE Certificates

~ 35%
(declining)

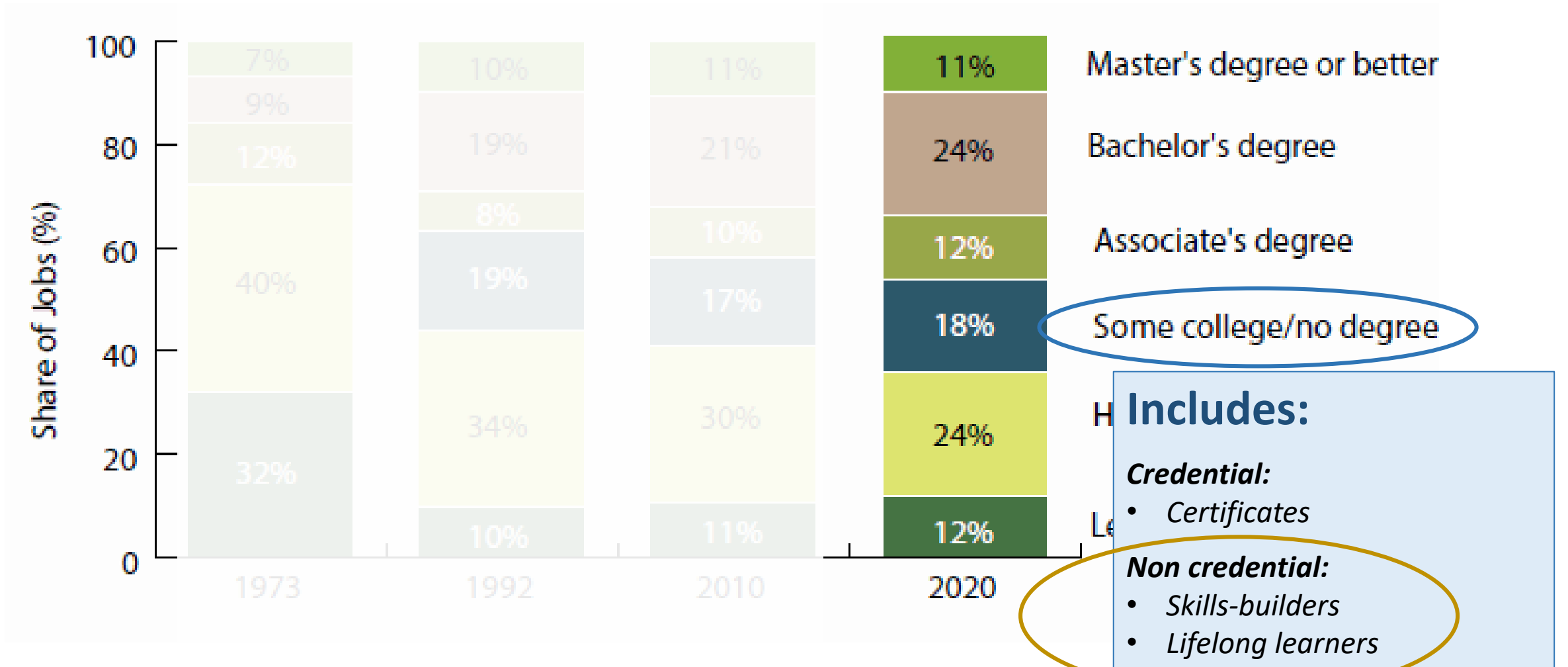
No Hs Degree

Adult Ed

CCs



The evolving needs of employers



Key take away #1

- The community college pipeline is becoming more important to employers (both the credentialed and non-credentialed)

That's the landscape. Let's move
to a discussion on emerging trends

Workforce Education and Career Pathways Trends

Trend #1: Workforce development taking on a higher priority; ever larger investments

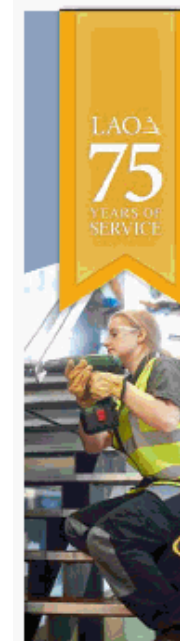
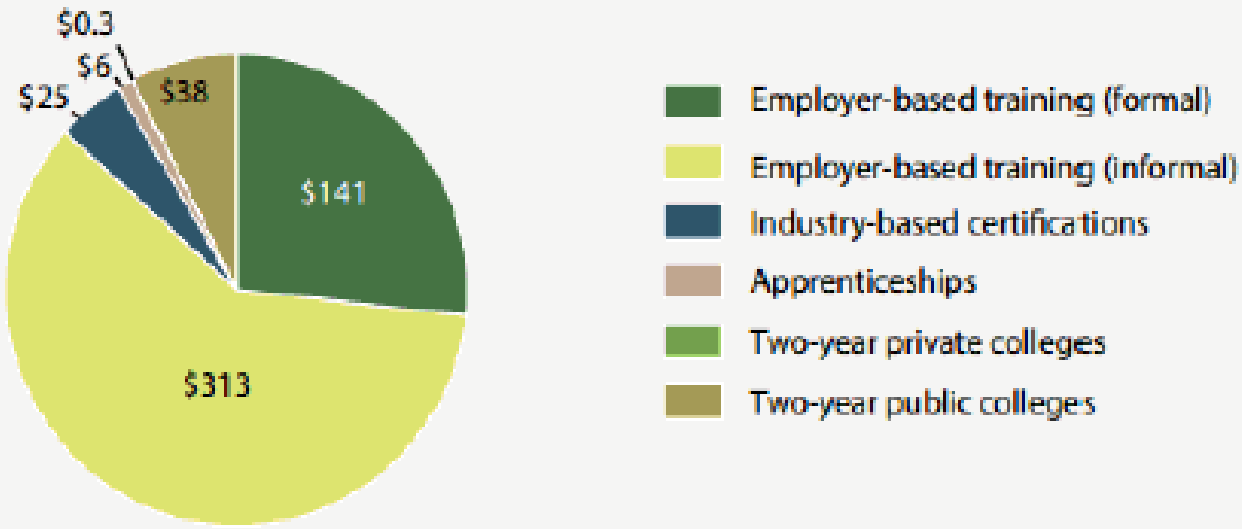
Trend #2: Jobs are becoming increasingly specialized and requiring on-going training

Trend #3: Employers and students asking for systemic change from higher education

We make large annual investments in human capital

\$ 524 billion annually on CTE pathways nationwide

National Spending on Five CTE Pathways



MAC TAYLOR

LAO 75 YEARS OF SERVICE

Figure 1
Funding for Workforce Education and Training Programs in California

2016-17 (In Millions)

Program	Agency	State General Fund	Other Fund Sources ^a	Total Funding
Apprenticeships for workforce education and training	CCC	\$2,122 ^b	—	\$2,122
Adult Education Block Grant	CDE/COC	505 ^c	—	505
Career Technical Education Incentive Grants	CDE	300 ^d	—	300
CalWORKs employment and training services	DBS	253	\$1,094	1,327
Strong Workforce Program	CCC	200	—	200
Office of Correctional Education programs	CCCR	199	—	199
Office of Offender Services workforce programs	CCCR	114	43	158 ^e
Vocational Rehabilitation	DOR	59	364	423
Apprenticeships	CDE/COC	54	—	54
Career Technical Education Pathways Program	CDE/COC	48 ^f	—	48
Project Workability for students in special education	CDE	40	—	40
CCC Student Services for CalWORKs Recipients	CCC	44	—	44
Cons Training Program	Corps	42	48	91
Economic and Workforce Development Program	CCC	23	—	23
California Partnership Academies	CDE	21	—	21
Adults in Correctional Facilities	CDE	15	—	15
Nursing program support	CCC	13	—	13
Specialized Secondary Programs	CDE	5	—	5
Agriculture Incentive Grants	CDE	4	—	4
Adult, Youth, and Dislocated Worker Services (WIDA Title I)	EDD	—	418	418
Wagner-Peyser Employment Services (WIDA Title II)	EDD	—	127	127
Carl D. Perkins Career and Technical Education Act Program	CDE/COC	—	123	123
Adult Education and Family Literacy Program (WIDA Title II)	CDE/COC	—	85	85
Employment Training Panel	EDD	—	73	73
CalFresh Employment and Training Program	DBS	—	63	63
Jobs for Veterans State Grant	EDD	—	20	20
CDE Student Services for CalWORKs Recipients	CDE	—	10	10
Proposition 50 pre-apprenticeships	EDD	—	3	3
Offender Development programs	CalPIA	—	2 ^g	5
Totals		\$4,044	\$2,473	\$6,517

\$6.5 Billion

^a Largely federal funds with some special funds.
^b Extrapolated from best available data. Assume community colleges spend one-third of apprenticeship funding as one adult education.
^c \$5 million in one-time funding for technical assistance to regional centers.
^d Reflects second year funding for three-year, \$800 million grant program.
^e Reflects funding for wraparound services, which include workforce education and training.
^f Tracked legislation sunsets program July 1, 2017 and bids funding into Strong Workforce Program.
^g Transfer from CCCR.
^h Funded through sale of CalPIA goods. Assume program will sell the same value of goods as in 2015-16.
 CCC = California Community Colleges; CDE = California Department of Education; DBS = California Department of Social Services; CCCR = California Department of Corrections and Rehabilitation; DOR = California Department of Rehabilitation; Corps = California Conservation Corps; WIDA = Workforce Innovation and Opportunity Act; EDD = California Employment Development Department; and CalPIA = California Prison Industry Authority.

Yet public satisfaction with higher education waning

Crisis of Confidence Threatens Colleges

Rising costs test families' faith, while 1 in 3 presidents see academe on wrong road



- *Over half Americans now believe that college is a gamble that might not pay off*
- *Just 18% of millennials think higher education is working well for them*

Community college reputation better for now

THE CHRONICLE OF HIGHER EDUCATION

People Esteem Community Colleges but Question How Well Higher Ed Serves Students

By Eric Kelderman | MAY 1

The American public
students, according to
nonpartisan think tank
to be successful
is "fine just the way it is,"

"80% of those surveyed agree that community colleges contribute to a strong workforce, are worth their cost and prepare people to succeed"

RELATED CONTENT

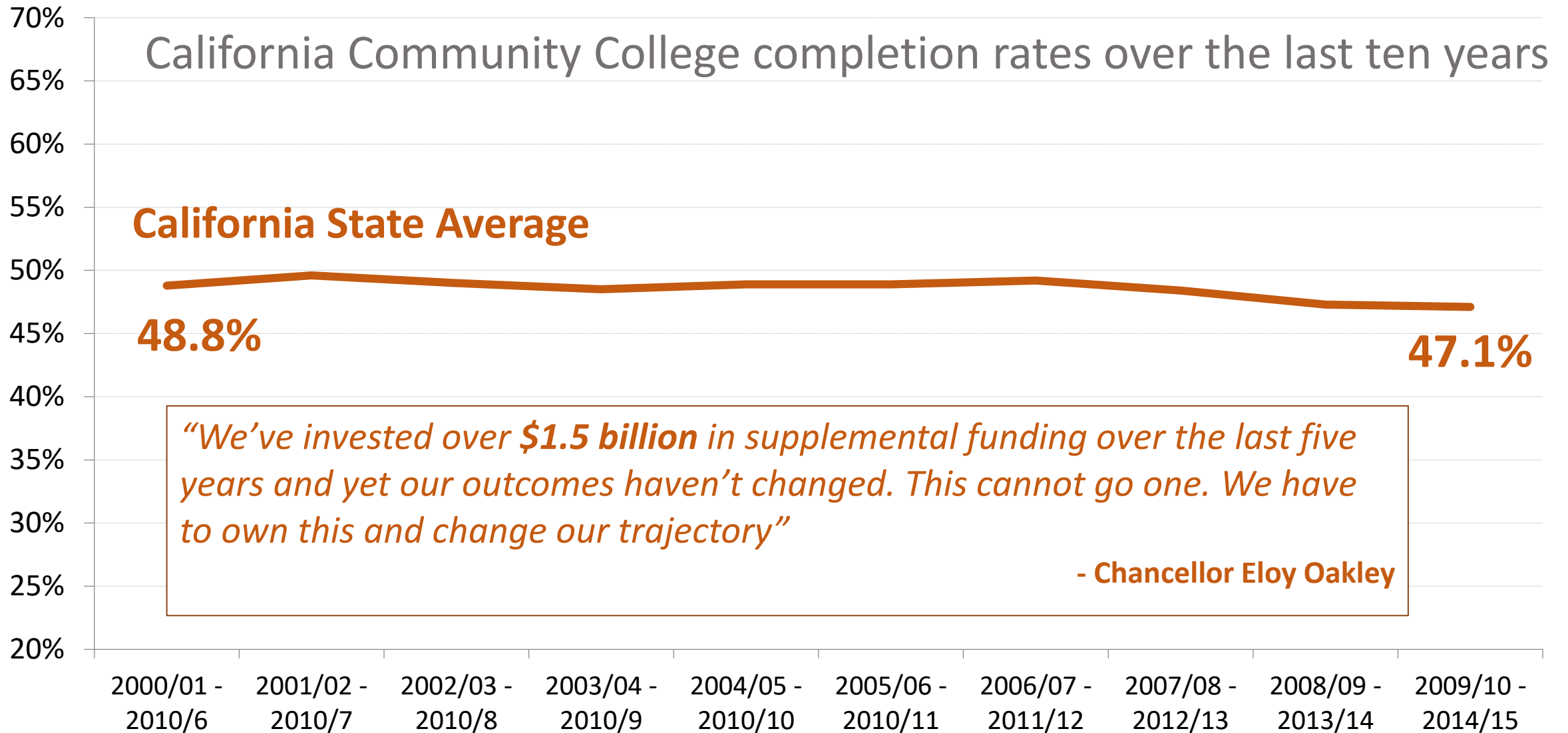
Higher Education in America: a Crisis of Confidence

What Americans Think About Higher Education ✓ PREMIUM

Americans Hold Positive Views

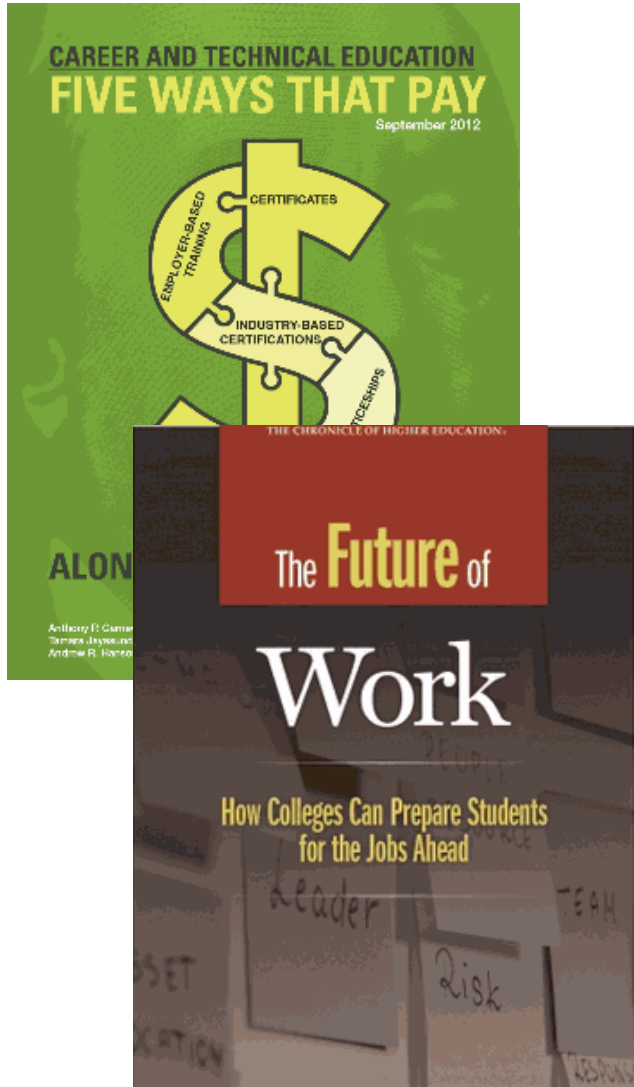
But within the results are several positive signs for academe, including a relatively glowing picture of community colleges: At least 80 percent of those who answered the poll said that community colleges contribute to a strong work force, are

Accountability challenge: Investments up; trends remain flat



Key take away #2

- Investments in workforce education are large and growing while the public and policy makers are asking for results



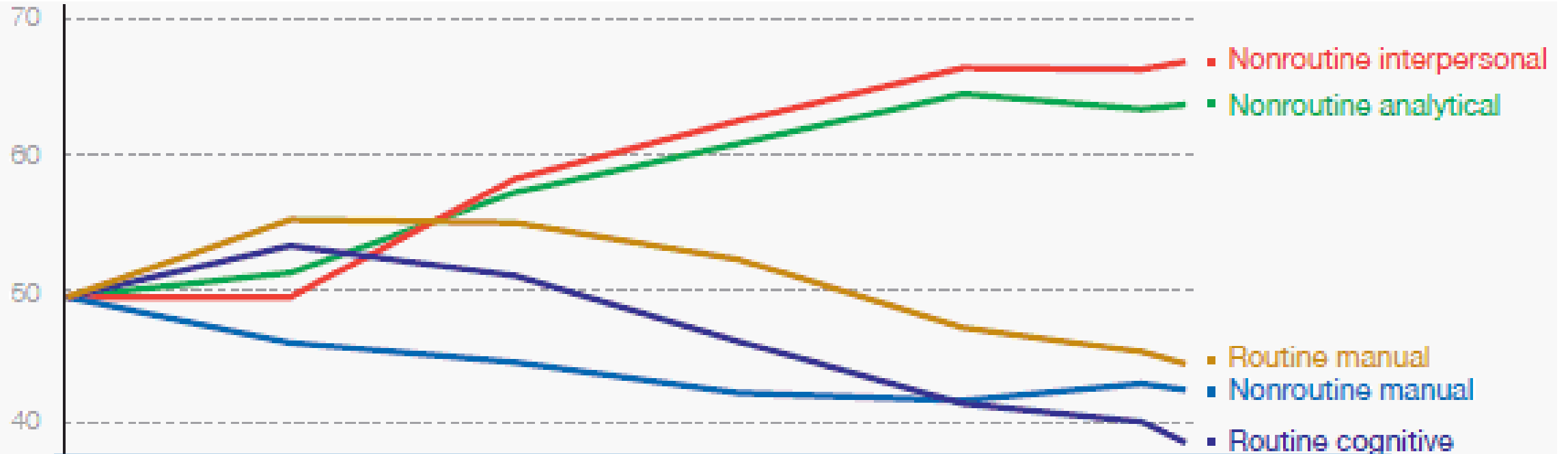
We've examined the landscape and the public and policy demands placed on us, now let's turn our attention to what employers and students are asking of us

More specialization. More programs of study.

Between 1970 and 2010 the American economy saw:

- The number of occupations grew from 270 to 1,000+
- The number of colleges and universities more than doubled from 1,850 to 4,720
- The number of postsecondary programs of study grow from 410 to 2,260
- Between 2000 and 2017 the number of certificate and degree programs at 4CD grew from 189 to 402*

Industry is placing greater emphasis on higher order skills

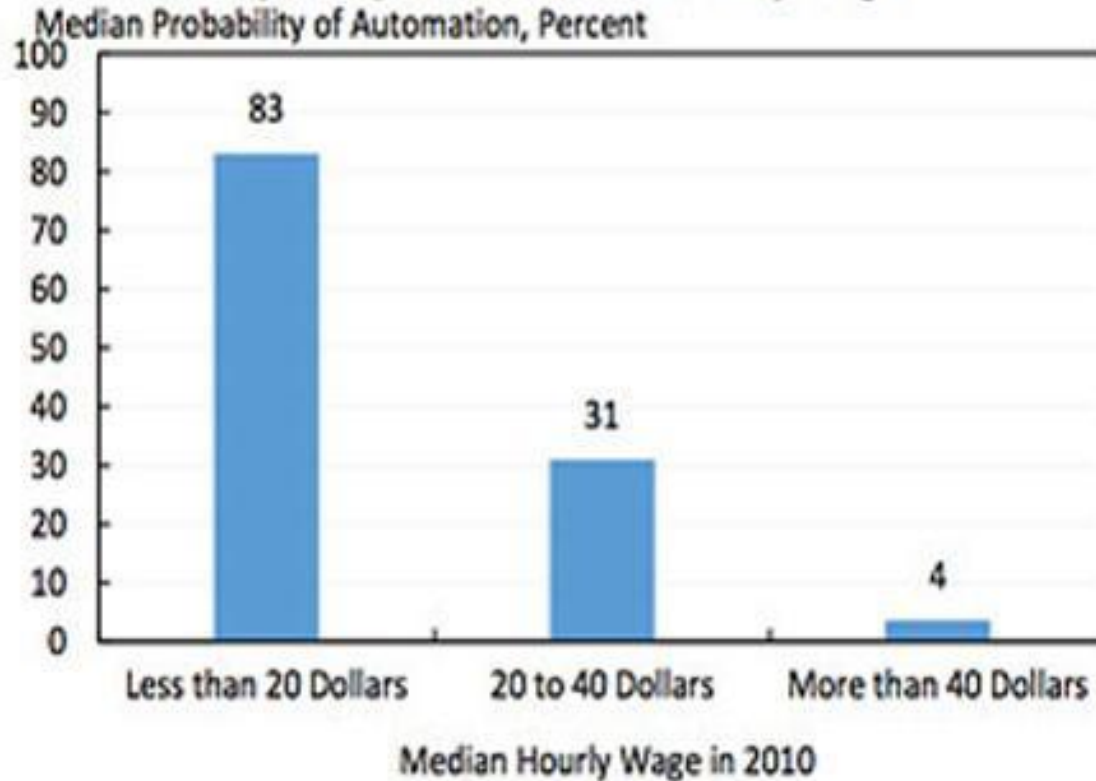


Consider your job at risk if:

1. The job has clearly identifiable goals
2. The job follows a clear set of steps (programmable) to complete a task

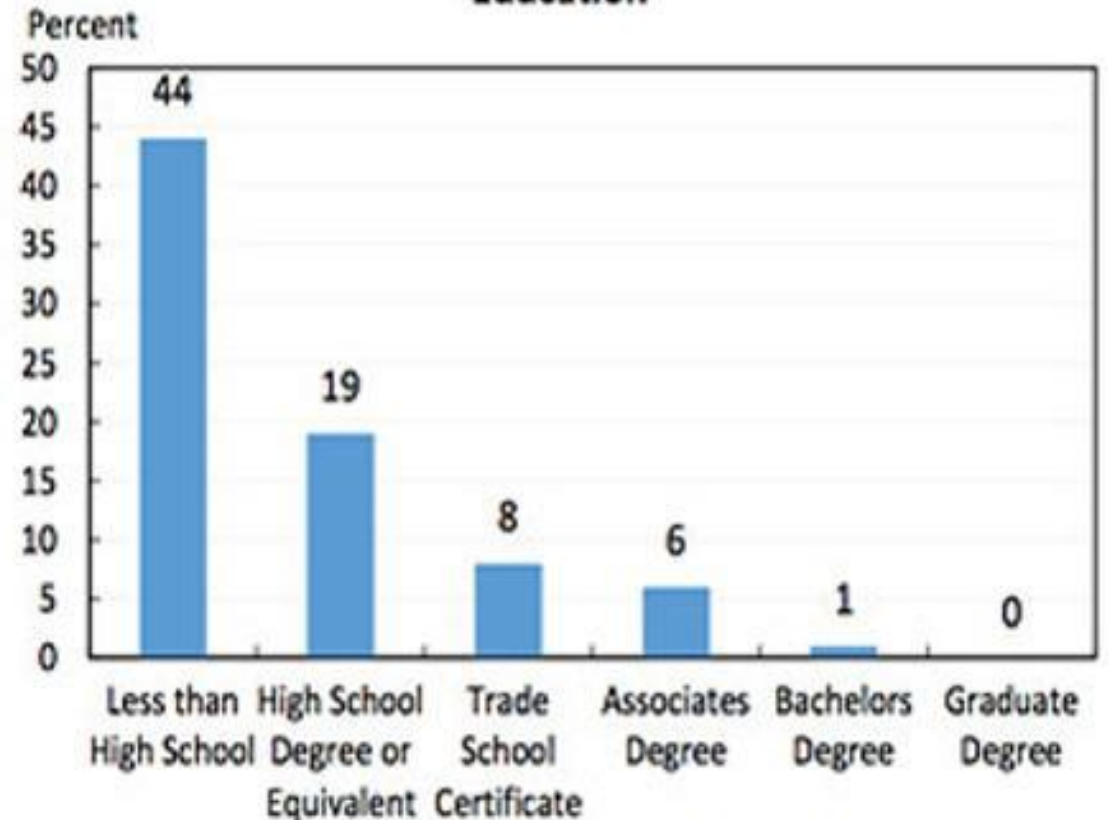
The jobs most at risk: low skill, low pay

Figure 3a: Share of Jobs with High Probability of Automation, by Occupation's Median Hourly Wage



Source: Bureau of Labor Statistics; Frey and Osborne (2013); CEA calculations.

Figure 3b: Share of Jobs with Highly Automatable Skills, by Education



Source: Arntz, Gregory, and Zierahn (2016) calculations based on the PIAAC 2012.

What are employers telling us ?

In survey after survey employers are saying the technical skills aren't the problem. We *desperately* need our new recruits to:

- communicate better (verbally and in written form)
- think critically and collaboratively
- be creative in solving problems
- be resilient and push through setbacks

The millennials are also asking for change

- By 2025 millennials will comprise 75% of the workforce
- In a 2016 survey those most unsatisfied with higher education today: Millennials (78% somewhat or very unsatisfied)
- Asking for programs that are:
 - *shorter in duration*
 - *more frequently offered*
 - *more focused in coverage*
 - *directly connecting them to employers*

Bringing students and employers together



“Today’s ecosystem of post secondary credential is complex, fragmented and multilayered and presents significant challenges to learners, employers and policymakers”

Key take away #3

- Both employers and students are asking for change

Employers: more higher order skills

Students: more flexible/adaptive programs

Both: help us find each other

Chapter 3

- Demographic, workforce and enrollment trends
- Perspectives from the public, policy makers, employers and students
- **New statewide initiatives pointing to change**
- The infrastructure we've built in the East Bay
- Condensed summary

More investment is leading to more accountability while students and employers also want change.

Let's see how we are responding at the state level and here in the East Bay

California policy makers are responding

Vision for Success: <https://foundationccc.org/Vision-for-Success>

Career Education: <http://careered.cccco.edu/video-library/>



A New Vision for Success

- Career Education
- General Education

*Pointing us toward
a confluence of two
previously separate
strategies*

Guided Pathways (launched 2017)



Traditional approach:

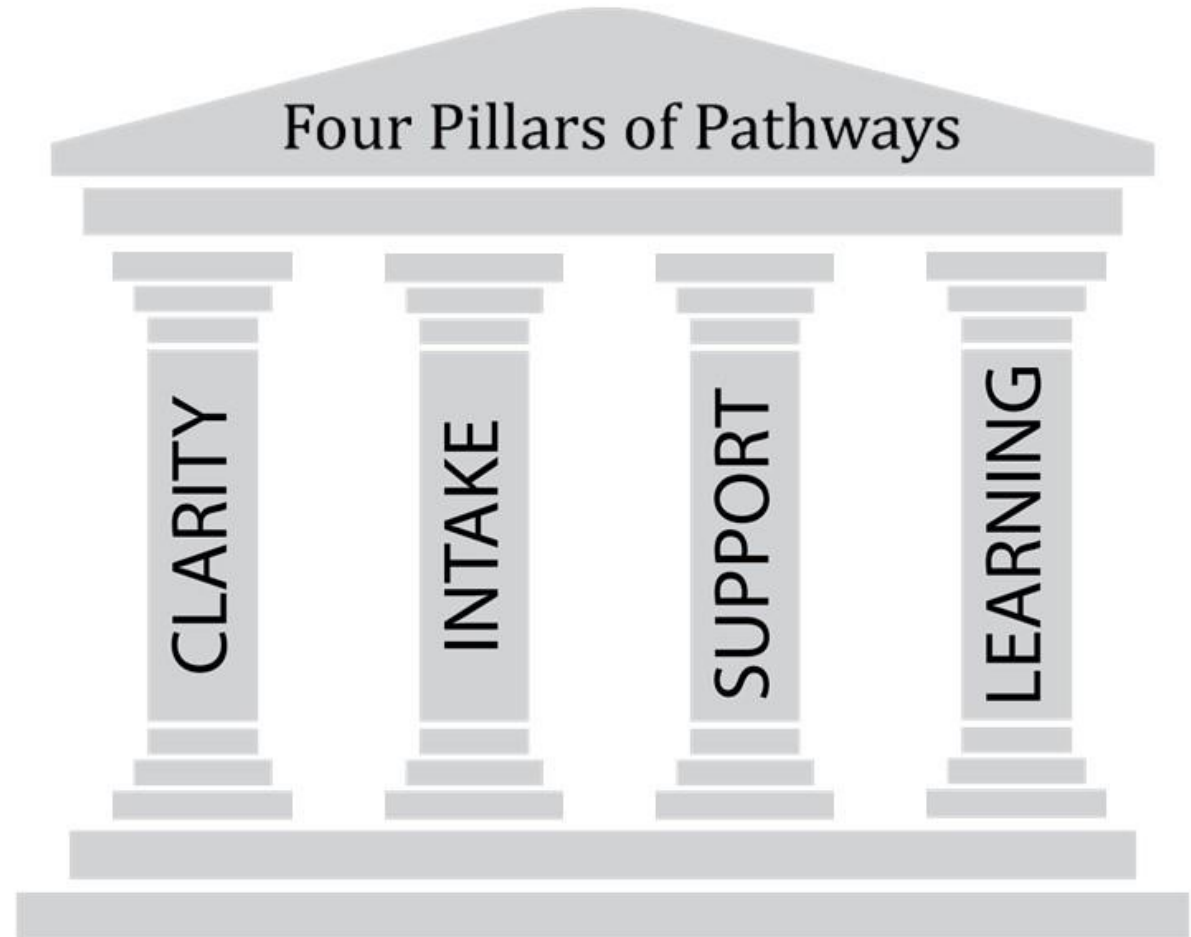
The cafeteria college offers and promotes courses

The Pathways approach:

Coherent pathways to employment or transfer for all students

GUIDED PATHWAYS

Four Pillars of Pathways



Chapter 4

- Demographic, workforce and enrollment trends
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- New statewide initiatives pointing to change
- **The infrastructure we've built in the East Bay**
- Condensed summary

We've leveraged federal, state and local resources to:

- Building a robust network of upstream and downstream partnerships
- Align our programs with labor market demand

- Establish curriculum alignment with workforce requirements

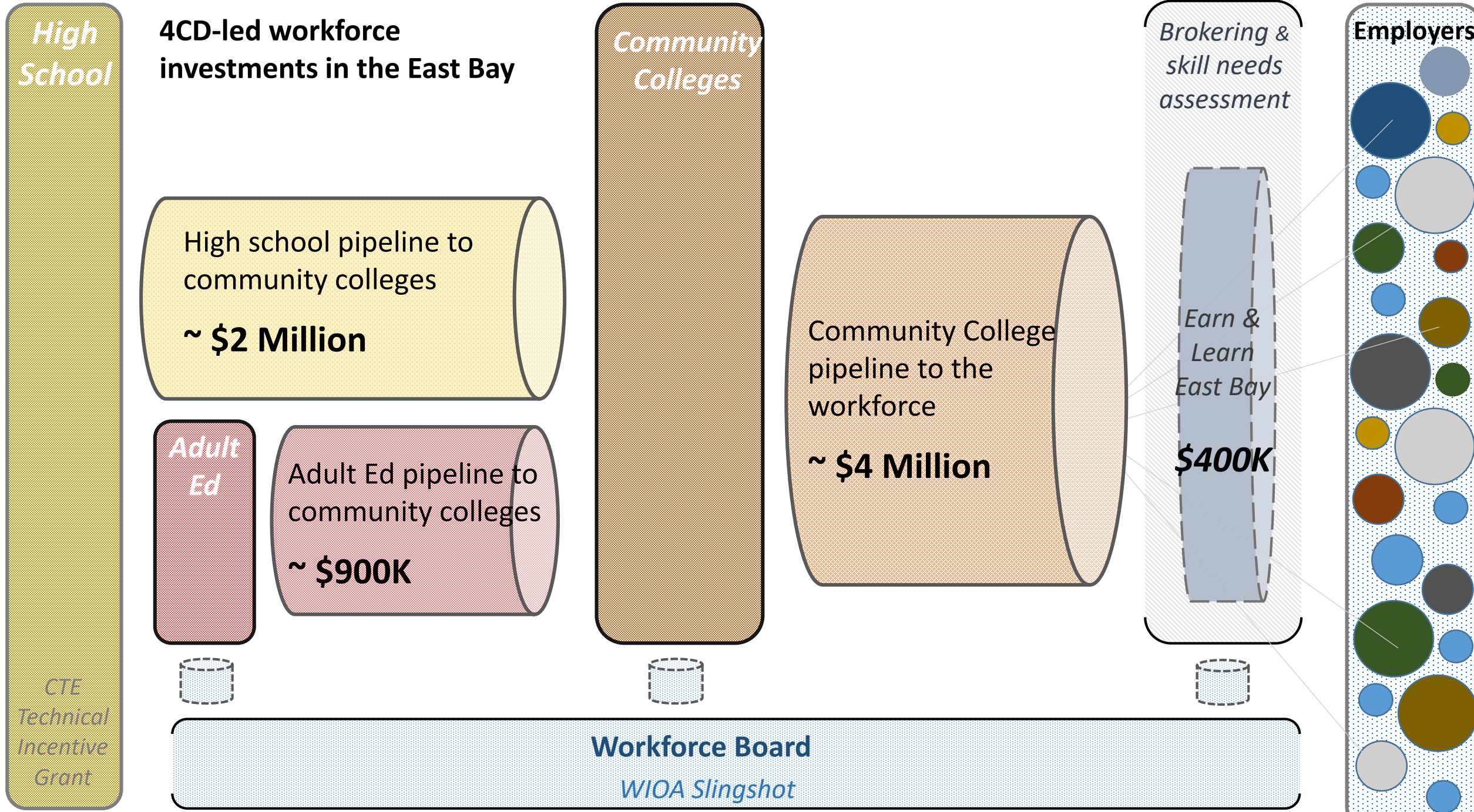
- Improved counseling and services to help students start, persist in & complete programs

- Building data monitoring systems that track students from entry to labor market outcomes



Example Workforce Strategies at 4CD Include:

- **Strong Workforce Program** – Enhancing Career Education programs & partnerships to better meet the needs of students and employers in the region
- **K-14 Pathways** – Building more systematic connections with K-12, to help more young students enter, persist and complete community college programs
- **Adult Education Consortium** – Strengthening relationships with Adult Schools, to help more adults with barriers enter, persist and complete community college programs
- **Earn & Learn East Bay** – Coordinating communications with employers among college, K-12 and workforce partners, to reduce employer fatigue and increase engagement



High School

CTE Technical Incentive Grant

4CD-led workforce investments in the East Bay

High school pipeline to community colleges
~ **\$2 Million**

Adult Ed

Adult Ed pipeline to community colleges
~ **\$900K**

Community Colleges

Community College pipeline to the workforce
~ **\$4 Million**

Brokering & skill needs assessment

Earn & Learn East Bay
\$400K

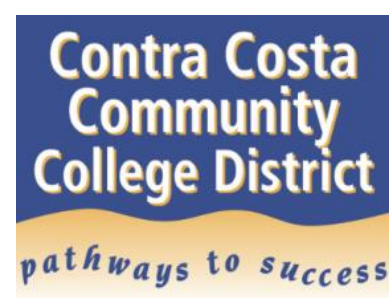
Employers

A vertical bar containing a bubble chart with various colored circles (blue, green, brown, grey, yellow) of different sizes, representing employer data.

Workforce Board
WIOA Slingshot

Condensed summary

- Demographic and economic trends provide some direction
- Employers and students asking for change/help
- The state is responding with new strategies
- 4CD has built a strong foundation in the East Bay and a statewide reputation for excellence
- And we're continuing to invest in programs that address the needs of both students and employers



LMC Flex Day: Game of Plans

Autumn is coming...

August 9, 2017

Gregory M Stoup

Interim Associate Vice Chancellor of Educational Service