

### **CCC Planning Committee**

## An Overview of Contra Costa Community College data in support of Strategic Planning

October 16, 2014

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Office of Research and Planning

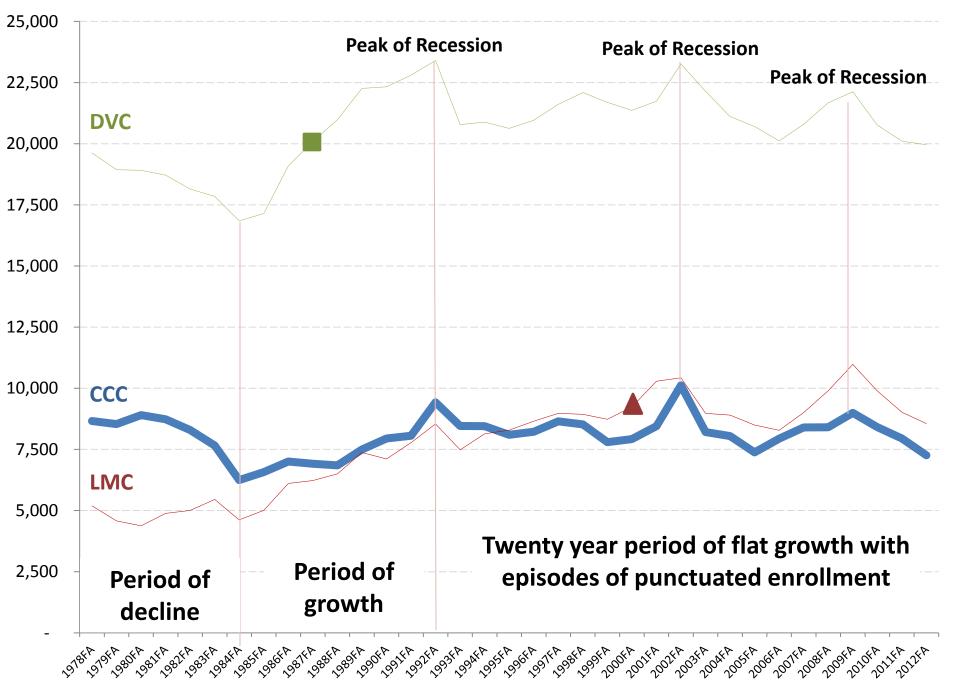


### What we'll review today

- 1. Summary data from the environmental scan
- 2. Student Success Scorecard data on completion
- 3. Student equity though the Scorecard lens
- 4. A set of fifteen student performance metrics

5. Systemwide data on completion and equity

#### CCCCD Fall Headcount since 1978



	West County	<b>Central County</b>	<b>East County</b>	
Overall population	Third largest region; slow growth	Largest region; modest growth	Second largest region; rapid growth	
Age Distribution	Most diverse by age; aging by decline in youth	Deepest age pool; aging by growth in elderly	Youngest age pool; U-shaped growth	
Ethnicity	Ethnically diverse; rapid decline of African-Americans	Least diverse; growing more diverse	Bimodal ethnicity; rapid minority growth	
Origin of Birth	High & growing density of foreign born	Low density but fast growth in foreign born	Rapid growth of foreign born residents	
Language Spoken	English speakers soon to be minority	High density of English speakers but changing	Fastest growth among non-English speakers	
<b>Education Attainment</b>	Slightly less educated but growing more so	Most educated and growing more so	Least educated; strong growth in AA degrees	
HS Graduate Market	Weak growth; stable capture rates	Moderate growth; stable capture rates	Booming growth; rising capture rates	
Feeder HS API Profile	Lowest performing	Highest performing	Midlevel performance	
Labor Market	Above ave unemployment; pockets of high poverty	Strong labor market; low levels of poverty	Weak job growth; growing poverty	
Income & Housing Market	Low but improving income; strengthening housing market	High income and high home valuations	Slow income growth & tepid housing market	

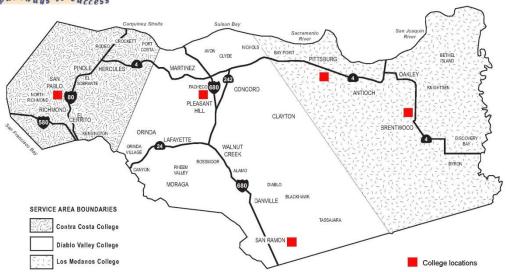


## A comparison of student ethnicity distribution to that of the college service area





#### **Contra Costa County**



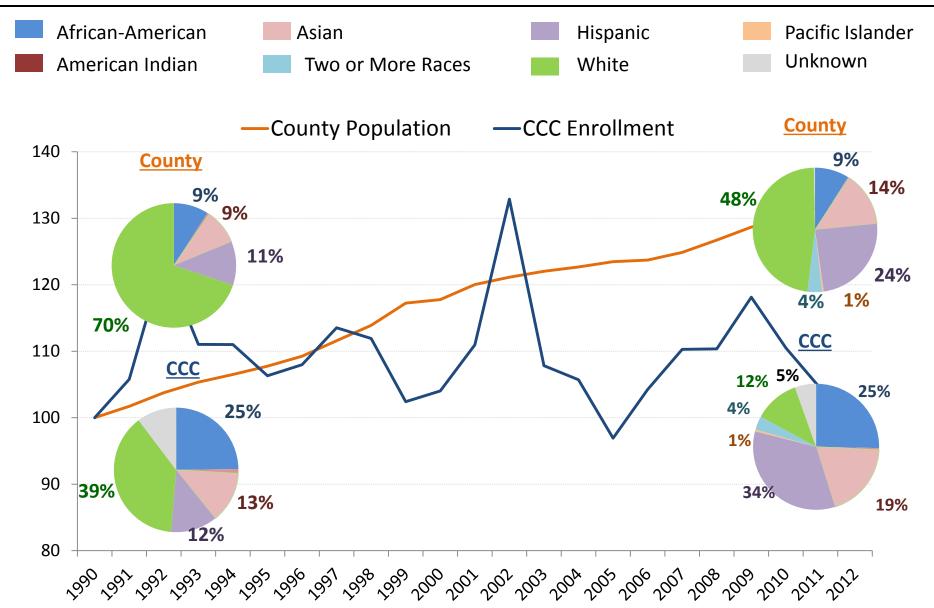
#### Contra Costa College Students



COMMUNITY ACTIONACCES OF ACCESS ACCESSORY AND STREET ACCESSORY ACC

#### County population and Contra Costa enrollment

(growth rates since 1990)





## College Completion

# The Contra Costa College Scorecard



## The Scorecard looks at one population of students

Students pursue a wide variety of educational goals:

$$(60 - 80\%)$$

- Transfer
- AA/AS Degree
- Certificate



- Educational Development
- Basic Skills development
- 4 Yr student taking class at 2-Yr
- Undecided

The Scorecard focuses on completion

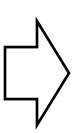


### A simplified completion model





College Completion



Societal Outcomes

Our focus today

But we can't lose sight of this connection

Consider two possible college goals:

- 1) To prepare students for the world
- 2) To maximize completion rates

These are not the same thing.

#### Incidentally, we already know a lot about what drives completion

- Good curricular alignment with High Schools
- Dual enrollment and AP programs
- Placement prep and support

Student Access

- Good enrollment mgmt.
- Effective outreach
- Proper branding
- Equitable access
- Programworkforce alignment

- High Academic standards
- Quality instruction
- Engaging learning environment

Academic success

Service Support

- Effective support services
- Feeling of connection
- Engaging campus life
- Appreciation for value of education

- Academic success
- Unit load
- Course taking pattern
- Dev Ed
   Acceleration
   programs

Persistence

- Financial Aid
- Matriculation services
- Effective course scheduling
- Peer groups
- Good enrollment mgmt

- Academic success
- Steady unit accumulation
- Educational planning support

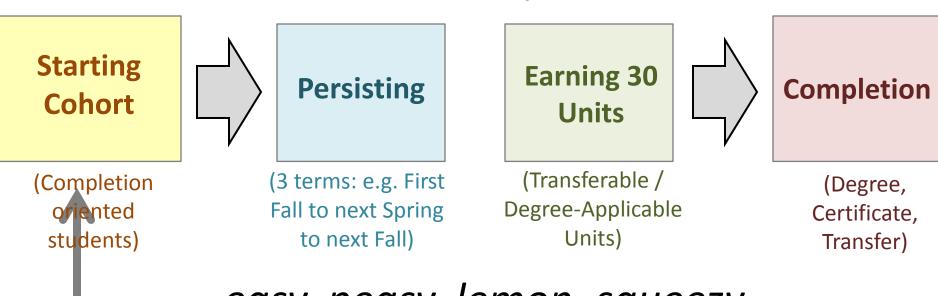
Completion

- Faculty connection & support
- Friendly application process



#### The Scorecard model

#### momentum points



...easy, peasy, lemon, squeezy ...

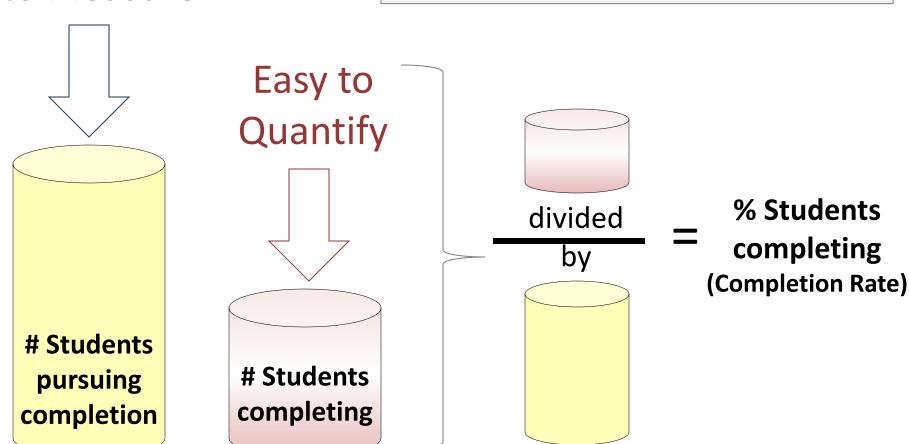
except, we first need to determine which students to include in that starting cohort bucket ...



#### The art of calculating completion

## More difficult to measure

Who should we count and for long should we count?



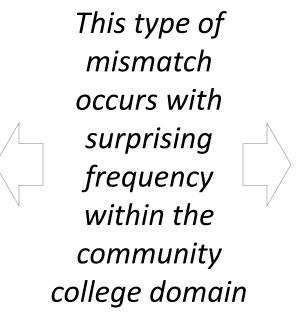


Why not simply ask students about their goals and track how many make it there?

**The problem**: data gathered on student goals when they apply to go to college are only loosely connected to their course taking behavior once in college

## Student Self-reported Goal

"I want to transfer to a four-year College"



#### Course selections for same student

#### **First Term**

- Gym course
- Program elective

#### **Second Term**

Gym course

Should we count them as a transfer student?



### Selecting cohorts

Rather than rely on self-reported goals, let's look at the courses students actually take and then use their course taking behavior to categorize them.

Enter the Student Success Scorecard



#### Who are we counting in the Scorecard?

# Students pursuing completion **Definition**: The number of first-time students with a minimum of 6 units earned within six years who also attempted any Math or English in the first three years ...

# Students completing ... who then achieved any of the following outcomes within six years of entry:

- Earned AA/AS or credit Certificate
- Transfer to four-year institution
- Achieved "Transfer Prepared" Status



## So how many CCC students are we counting?



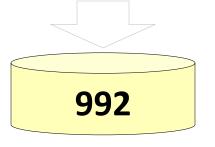
Total CCC
Headcount

3,248

First-time Students

Number of first-time students with a minimum of 6 units earned who attempted any Math or English in the first three years

- 8.9% of Headcount
- **30**% of First-time students

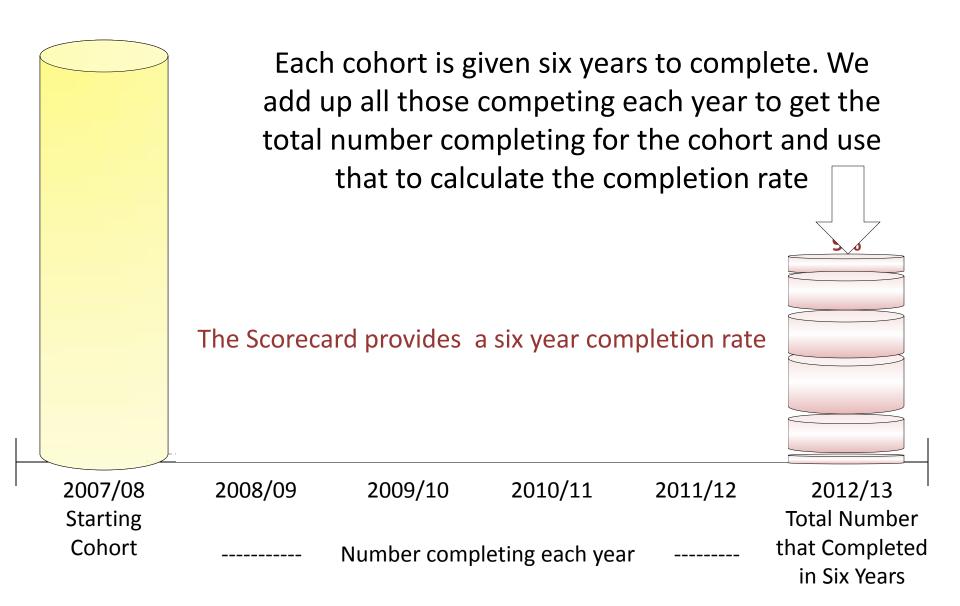


Students in the Scorecard Starting Cohort

Note: figures pertain to the 2007/08 academic year.

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### How long do we count?





#### STUDENT SUCCESS SCORECARD

#### Contra Costa College

Click here to select a different college

MOMENTUM POINTS

COMPLETION OUTCOMES

PROFILE

REMEDIAL

PERSISTENCE 30 UNITS

ITS DEGREE/TRANSFER

CAREER TECHNICAL EDUCATION

#### College Profile

Click here to view current year report

The student population and course sections offered described in the tables are based on the 2012-13 academic year. Students represented differ from those included for calculation of Scorecard metrics, which are based on first-time students enrolled in 2007-08.

STUDENT INFORMATION				
Students			11,108	
GENDER		ETHNICITY/RACE		
Female	58.1%	African American	25.2%	
Male	40.3%	American Indian/Alaska Native	0.5%	
Unknown 1.6%		Asian	13.9%	
AGE		Filipino	5.3%	
Less than 20 years old	29.1%	Hispanic	33.2%	
20 to 24 years old	30.0%	Pacific Islander	0.6%	
25 to 39 years old	24.2%	White	12.5%	
40 or more years old	16.6%	Two or more Races	3.6%	
Unknown	0.1%	Unknown	5.3%	

OTHER INFORMATION	
Full Time Equivalent Students	5,283.5
Credit Sections	1,533
Non-Credit Sections	26
Median Credit Section Size	28
Percentage of Full-Time Faculty	54.6%
Student Counseling Ratio	554:1

Contra Costa College (CCC), established in 1948, is part of the San Pablo Contra Costa Community College District. There are three colleges in the district: Contra Costa College (San Pablo), Los Medanos College (Pitsburgh) and Diablo Valley College (Pleasant Hill). The college has several notable programs including the Center for Science Excellence, that works to increase minority participation in the sciences; High-Performance Computing Center, a pioneering program that teaches the emerging science of computer clustering; and the CCC Speech and Debate Team, which is one of the top community college teams in the nation.





#### STUDENT SUCCESS SCOREGARD

#### Contra Costa College

MOMENTUM POINTS

COMPLETION OUTCOMES

AL PERSISTENCE 30 UNITS DEGREE/TRANSFER

CAREER TECHNIC

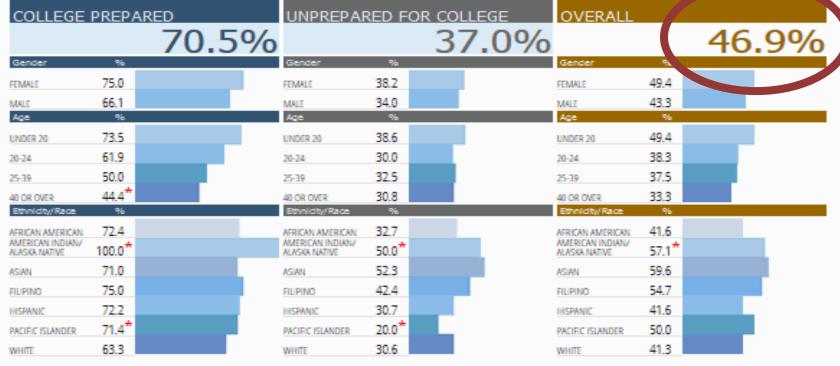
The über metric

#### Completion

PROFILE

Click here to liew trend data

Percentage of degree, certificate and/or transfer-seeking students starting first time in 2007-08 tracked for six years through 2012-13 who competed a degree, certificate or transfer-related outcomes.



0%: Cohort with no students attaining an outcome N/A: Cohort has no students

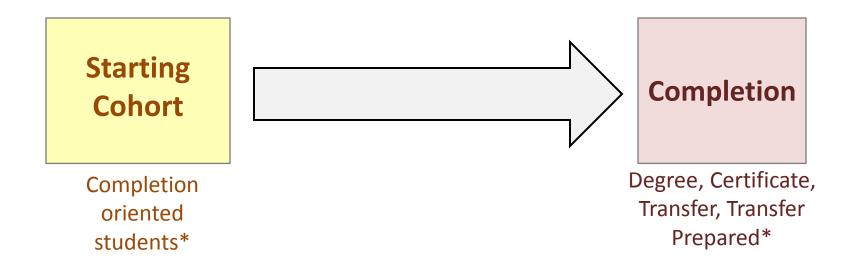
\*: Cohort fewer than 10 students

COLLEGE PREPARED: Student's lowest course attempted in Math and/or English was college level UNPREPARED FOR COLLEGE: Student's lowest course attempted in Math and/or English was remedial level OVERALL: Student attempted any level of Math or English in the first three years

View Printable Scorecard Reports



#### Completion & disproportionate impact



In the next slide we use Scorecard data to look at the ethnicity distribution of students in the starting cohort and compare that to the distribution of those in the completion cohort. A gap in these two distributions is one measure of disproportionate impact.

<sup>\*</sup> The California Student Success Scorecard defines the starting cohort as The number of first-time students with a minimum of 6 units earned within six years who also attempted any Math or English in the first three years who then achieved any of the following outcomes within six years of entry: Earned AA/AS or credit Certificate, Transfer to any four-year institution, Achieved "Transfer Prepared" Status (earned 60+ transferable units).

#### Scorecard Completion Data segmented by student ethnicity

(final column displays the magnitude of the gap between starting & completing cohorts)

#### **Contra Costa College**

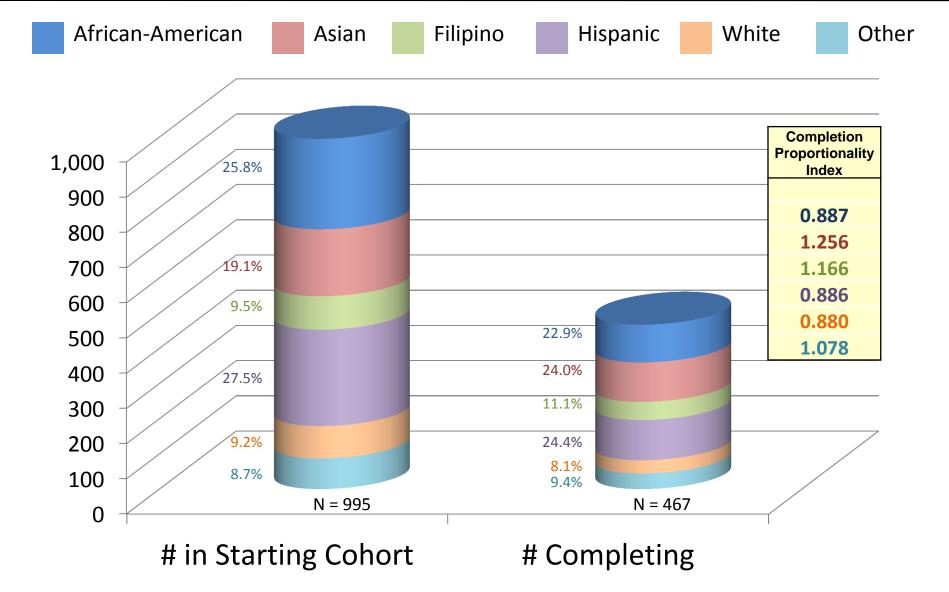
Student Ethnicity	Number in Starting Cohort	Number Completing	% Distribution of those in the Starting Cohort	% Distribution of those Completing	Proportionality Index
College Overall	995	467			
African-American	257	107	25.8%	22.9%	0.887
Asian	190	112	19.1%	24.0%	1.256
Filipino	95	52	9.5%	11.1%	1.166
Hispanic	274	114	27.5%	24.4%	0.886
White	92	38	9.2%	8.1%	0.880
Other	87	44	8.7%	9.4%	1.078

The proportionality methodology compares the percentage of a disaggregated subgroup in an initial cohort to its own percentage in the resultant outcome group. The formula for proportionality is the percentage in the outcome group divided by the percentage in the original cohort (outcome percentage/cohort percentage). A ratio of less than 1.0 indicates that the subgroup is completing at a lower rate than the overall college average. The lower the index value the greater the degree of disproportional impact. The proportionality methodology does not specify a value at which point a proportionality index should be considered "actionable" and for that should rely on the judgment of the analysis team based on local conditions.

Source: Chancellor's Office 2014 Student Success Scorecard; data are most currently available and reflect the six year completion rate (Degree, certificate, transfer & transfer prepared) of first-time students starting in the 2007/08 academic year.

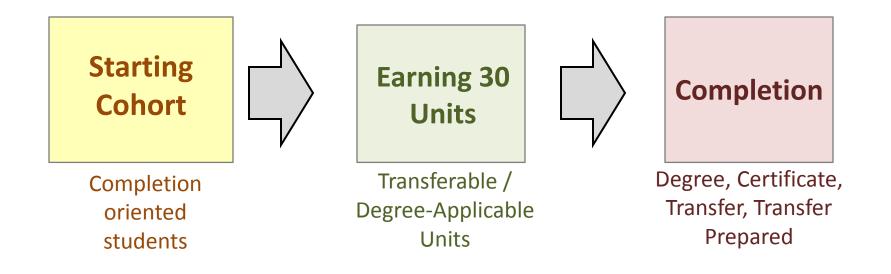
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ACCOUNTABILITY BASIC SKILLS
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ACCOUNTABILITY BASIC SKILLS
PRIORITIZE
PATHWAYS CRITICAL
EQUITY COMPLETION INTEGER
EQUITY COMPLETION INTEGER
EQUITY COMPLETION INTEGER
SUCCESS CULTURE
LIARNING OF THE STREET STATES
CAREER/WORKFORCE
INNOVATIVE INTEGRITY COLLABORATION
SUSTAINABILITY STUDENT—CENTEREE
SUSTAINABILITY STUDENT—COMMUNICATION
STUDENT SUCCESS

## Comparing the ethnic composition of starters and completers



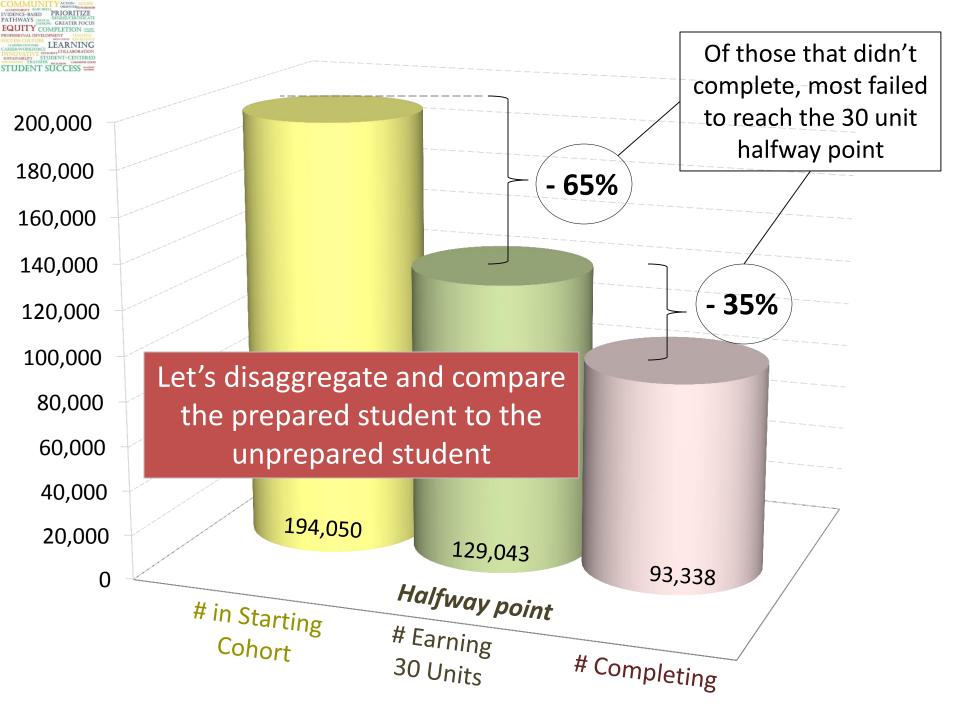


## A lean pathway model that includes a progress milestone



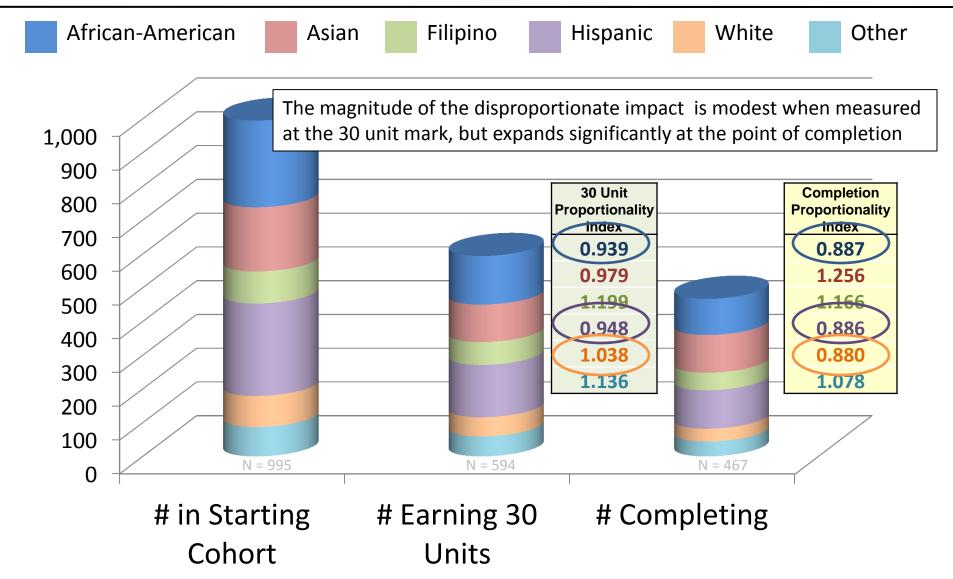
In the next slide we use Scorecard data to track students moving through the three step sequence above, from starting cohort to achievement of 30 college-level units to completion.

<sup>\*</sup> The California Student Success Scorecard defines the starting cohort as The number of first-time students with a minimum of 6 units earned within six years who also attempted any Math or English in the first three years who then achieved any of the following outcomes within six years of entry: Earned AA/AS or credit Certificate, Transfer to any four-year institution, Achieved "Transfer Prepared" Status (earned 60+ transferable units).



ACCOMMUNITY ACTIONACCOMMENTATION ACCOMMENTATION A

## Examining disproportionate impact along the pathway





#### STUDENT SUCCESS SCORECARD

### Contra Prepared Students

**Unprepared Students** 

DEGREE/TRANSFER | CAREER TECHNIC

The über metric

#### Completion

PROFILE

Click here to liew trend data

46.9%

Percentage of degree, certificate and/or transfer-seeking students starting first time in 2007-08 tracked for six years through 2012-13 who completed a degree certificate or transfer-related outcomes.

COLLEGE PREZ ARED NPREPARED 70.5% 37.0% 75.0 FEMALE MALE 66.1 MALE Age 73.5 UNDER 20 Two subpopulations 61.9 20-24 50.0 25-39 with strikingly different 40-OR OVER Ethnidty/Race experiences AFRICAN AMERICAN AMERICAN INDIANA 100.0\* ALASKA NATIVE 71.0 ASIAN ASIAN 75.0 42.4 FILIPINO FILIPINO 72.230.7 HISPANIC HISPANIC 71.4  $20.0^{\circ}$ PACIFIC ISLANDER PACIFIC ISLANDER

WHITE

AFRICAN AMERICAN 41.6

AMERICAN INDIAN/
ALASKA NATIVE 57.1\*

ASIAN 59.6

FILIPINO 54.7

HISPANIC 41.6

PACIFIC ISLANDER 50.0

49.4

43.3

49.4

38.3

37.5

33.3

41.3

OVERALI

FEMALE

UNDER 20

40-OR OVER

25-39

WHITE

0%: Cohort with no students attaining an outcome N/A: Cohort has no students

63.3

Cohort fewer than 10 students

CDILEGE PREPARED: Student's lowest course attempted in Math and/or English was college level UNPREPARED FOR COLLEGE: Student's lowest course attempted in Math and/or English was remedial level OVERALL: Student attempted any level of Math or English in the first three years

View Printable Scorecard Reports:

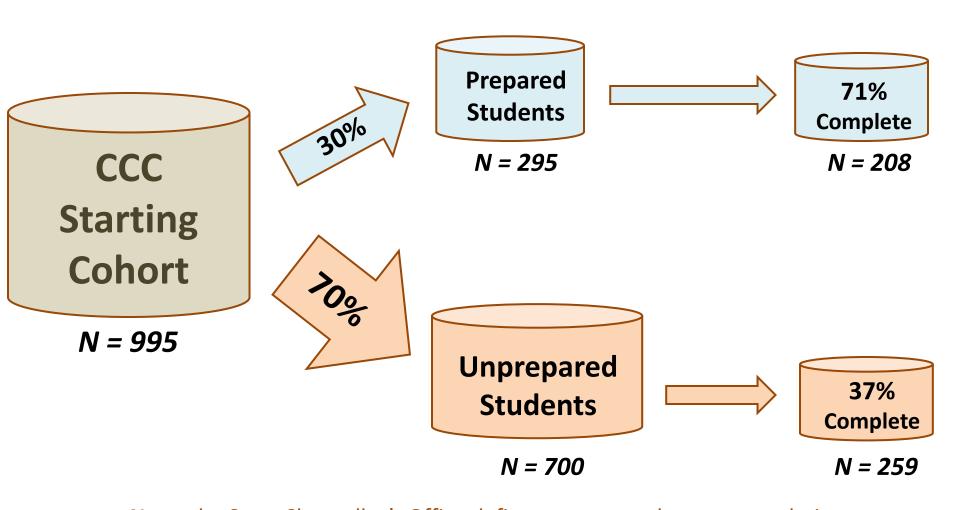
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Five Year

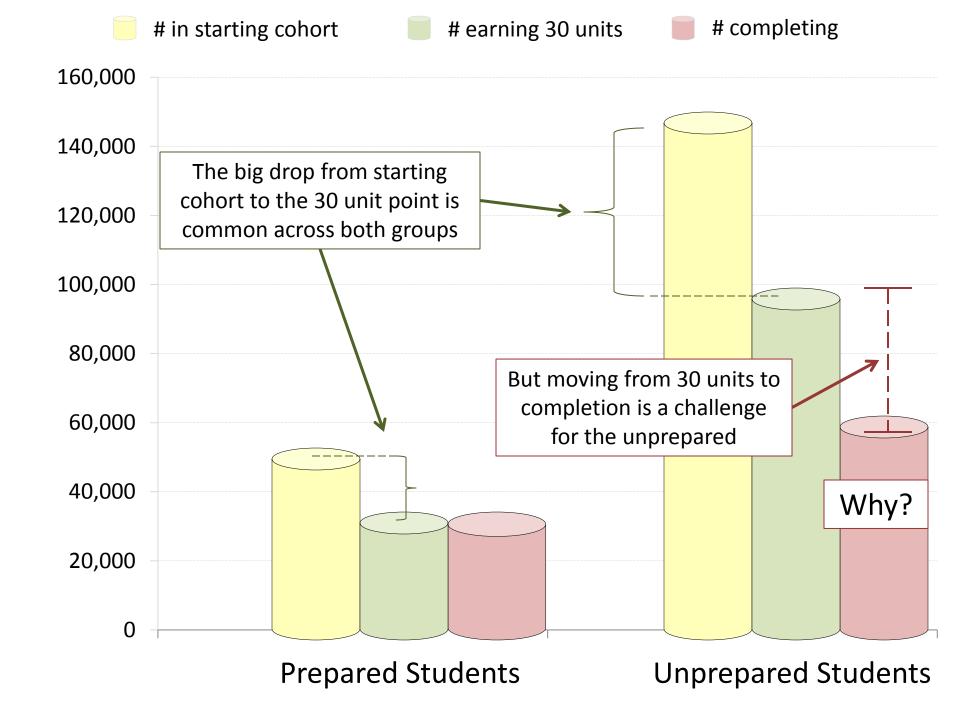
WHITE

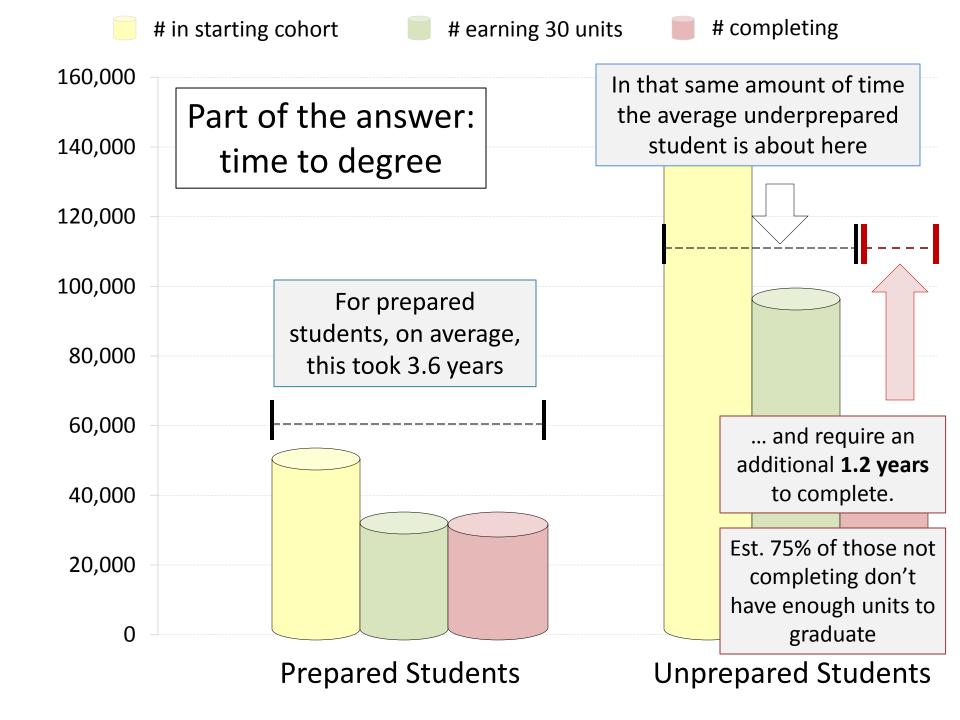


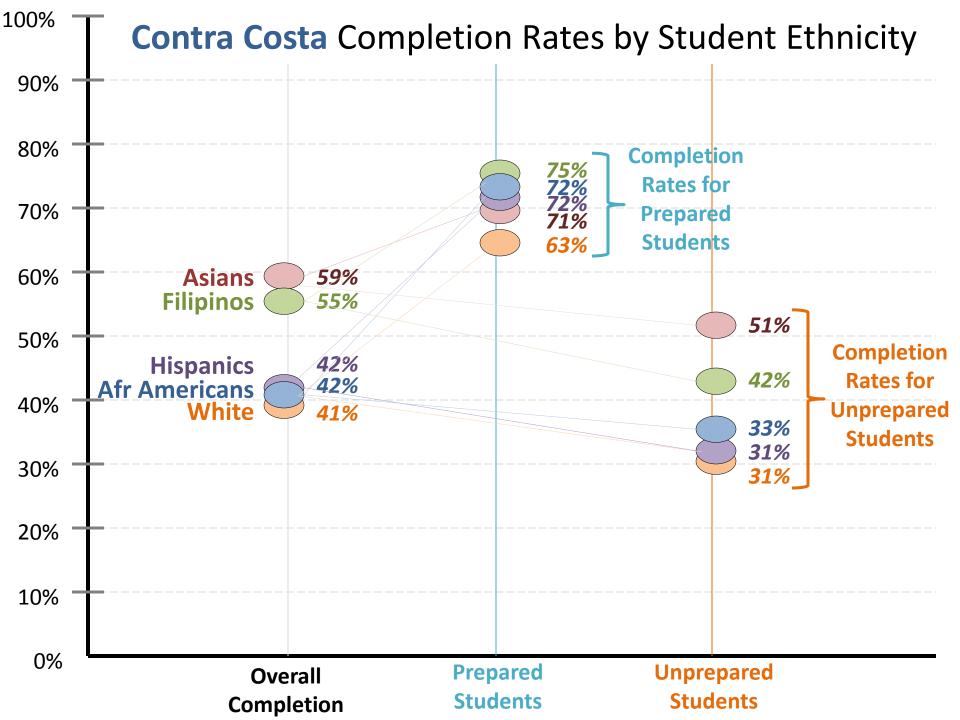
## Comparing disproportionate impact on completion for the prepared & unprepared



**Note**: the State Chancellor's Office defines unprepared as any completion oriented student whose first course in math or English was below transfer level.









## Within each ethnicity there is significant variation in how many enter college prepared

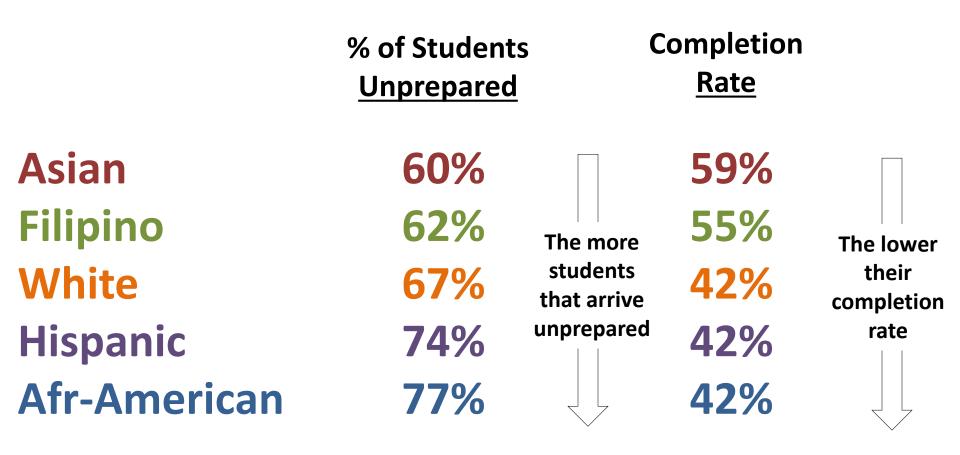
#### **Contra Costa College**

	<b>N</b> I	Prep	ared	Unprepared		
Student Ethnicity	Number in Cohort	#	%	#	%	
College Overall	995	295	30%	700	70%	
African-American	257	58	23%	199	77%	
Asian	190	76	40%	114	60%	
Filipino	95	36	38%	59	62%	
Hispanic	274	72	26%	202	74%	
White	92	30	33%	62	<b>67</b> %	
Other	87	23	26%	64	74%	

Note: The Scorecard definitions of prepared and unprepared are determined by student course taking patterns and not placement data i.e. students enrolling in any non degree-applicable course is counted as unprepared. As such, these figures likely under represent the size of the unprepared populations.



### Equity and preparedness



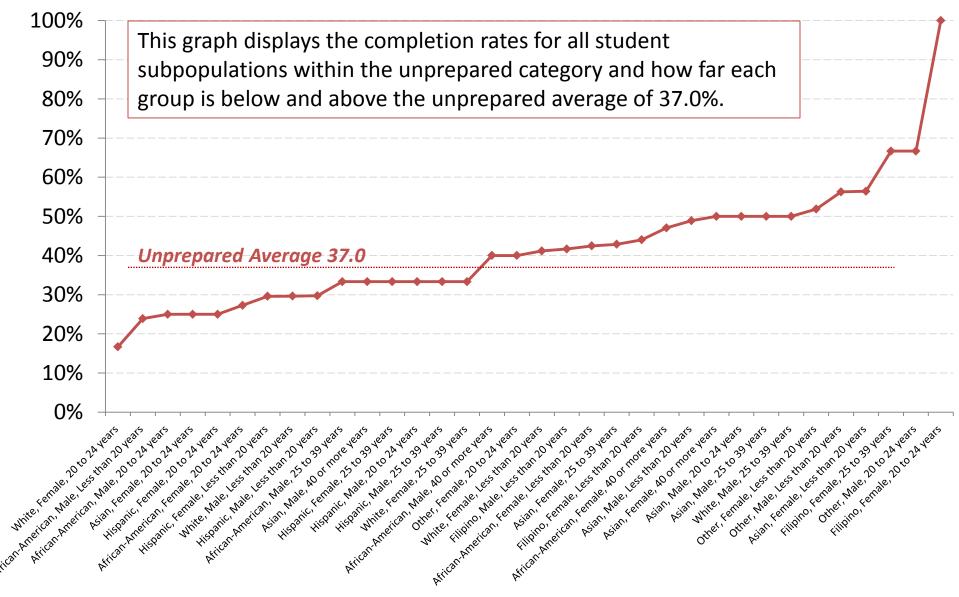


### We can get very granular

Let's look at the completion rates of every student gender-age-ethnicity combination at Contra Costa College ....



Distribution of CCC completion rates for unprepared student populations (sorted from lowest to highest completion rates)





## We can estimate the magnitude of change associated with various strategies

Subpopulation	Number in Unprepared Cohort	Completion Rate	# of additional completions needed to reach Unprep Average	Improvement in the Overall Average for change in previous column	Cumulative Improvement of moving each successive group
White, Female, 20 to 24 years old	6	16.7%	2	0.2%	0.2%
African-American, Unknown Gender, Less than 20 years old	5	20.0%	1	0.1%	0.3%
African-American, Male, Less than 20 years old	67	23.9%	9	0.9%	1.2%
African-American, Male, 20 to 24 years old	8	25.0%	1	0.1%	1.3%
Asian, Female, 20 to 24 years old	8	25.0%	1	0.1%	1.4%
Hispanic, Female, 20 to 24 years old	8	25.0%	1	0.1%	1.5%
African-American, Female, 20 to 24 years old	11	27.3%	2	0.2%	1.7%
Hispanic, Female, Less than 20 years old	98	29.6%	8	0.8%	2.5%
White, Male, Less than 20 years old	27	29.6%	2	0.2%	2.7%
Hispanic, Male, Less than 20 years old	74	29.7%	6	0.6%	3.3%
African-American, Male, 25 to 39 years old	6	33.3%	1	0.1%	3.4%
Asian, Male, 40 or more years old	3	33.3%	1	0.1%	3.5%
Hispanic, Female, 25 to 39 years old	3	33.3%	1	0.1%	3.6%
Hispanic, Male, 20 to 24 years old	3	33.3%	1	0.1%	3.7%
Hispanic, Male, 25 to 39 years old	3	33.3%	1	0.1%	3.8%
White, Female, 25 to 39 years old	6	33.3%	1	0.1%	3.9%

= 40 students

+ 3.9% increase in completion rate

<sup>\*</sup> Note that these figures apply to the 2007/08 cohort (most recent that is available) and therefore the figures associated with additional completions needed to reach the unprepared average apply to that cohort and not future cohorts.

1. Gleaned from state and national literature

2. Current level and recent trends

3. DVC and LMC benchmarks

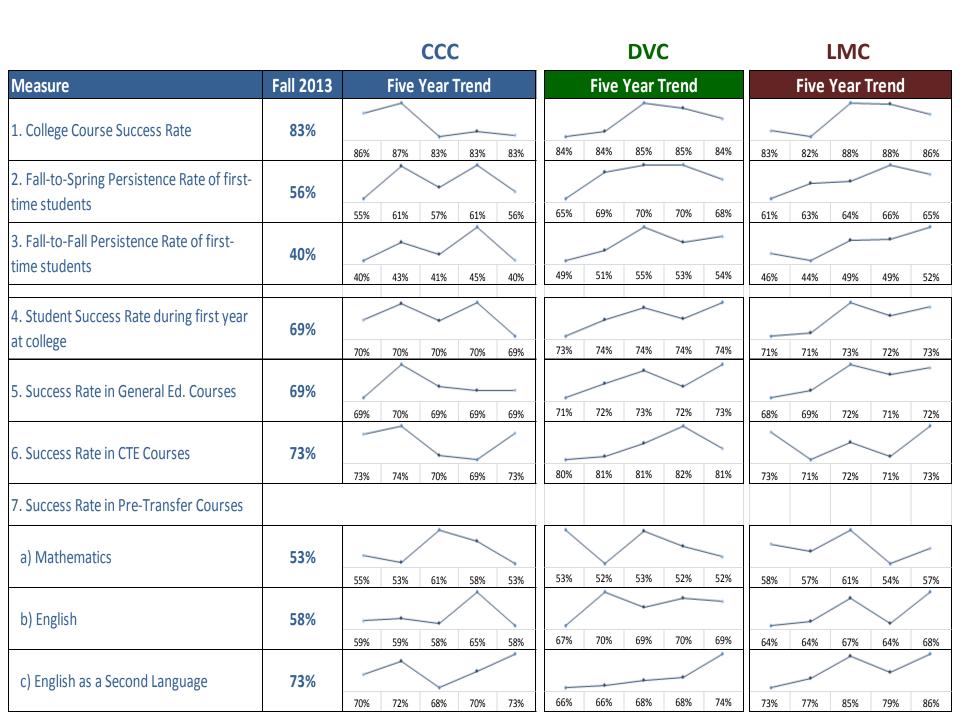
4. Possible tool for setting institutional goals

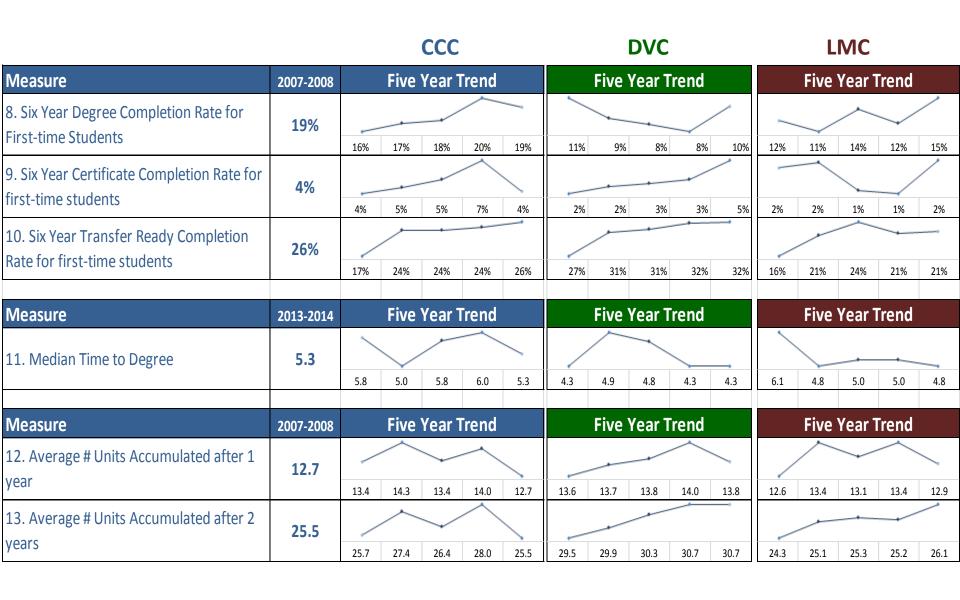
#### **Contra Costa College – Recent Trends for 15 Performance Measures**

Measure	Fall 2013	Five Year Trend				
1. College Course Success Rate	83%					
		86%	87%	83%	83%	83%
2. Fall-to-Spring Persistence Rate of first-time students	56%	/				\
		55%	61%	57%	61%	56%
3. Fall-to-Fall Persistence Rate of first-time students	40%					
		40%	43%	41%	45%	40%
. Student Success Rate during first year 69%	69%					
at college		70%	70%	70%	70%	69%
5. Success Rate in General Ed. Courses	69%					
		69%	70%	69%	69%	69%
6. Success Rate in CTE Courses	73%					
		73%	74%	70%	69%	73%
7. Success Rate in Pre-Transfer Courses						
a) Mathematics	53%					
		55%	53%	61%	58%	53%
b) English	58%					
		59%	59%	58%	65%	58%
c) English as a Second Language	73%					
		70%	72%	68%	70%	73%

#### **Contra Costa College – Recent Trends for 15 Performance Measures**

Measure	2007-2008	Five Year Trend			
8. Six Year Degree Completion Rate for First-time Students	19%	16% 17% 18% 20% 19%			
9. Six Year Certificate Completion Rate for first-time students	4%	4% 5% 5% 7% 4%			
10. Six Year Transfer Ready Completion Rate for first-time students	26%	17% 24% 24% 26%			
Measure	2013-2014	Five Year Trend			
11. Median Time to Degree	5.3	5.8 5.0 5.8 6.0 5.3			
Measure	2007-2008	Five Year Trend			
12. Average # Units Accumulated after 1 year	12.7	13.4 14.3 13.4 14.0 12.7			
13. Average # Units Accumulated after 2 years	25.5	25.7 27.4 26.4 28.0 25.5			



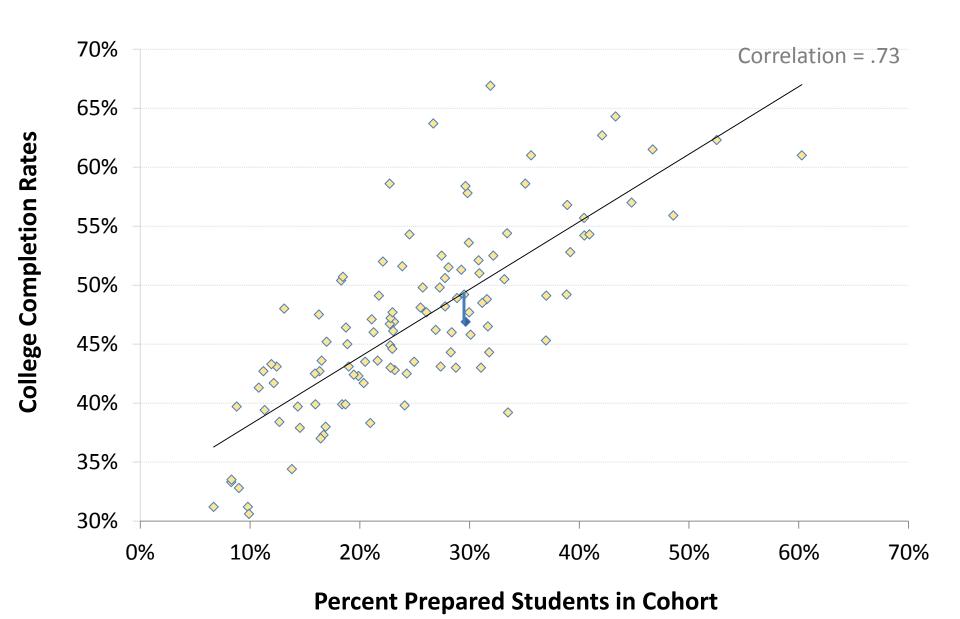




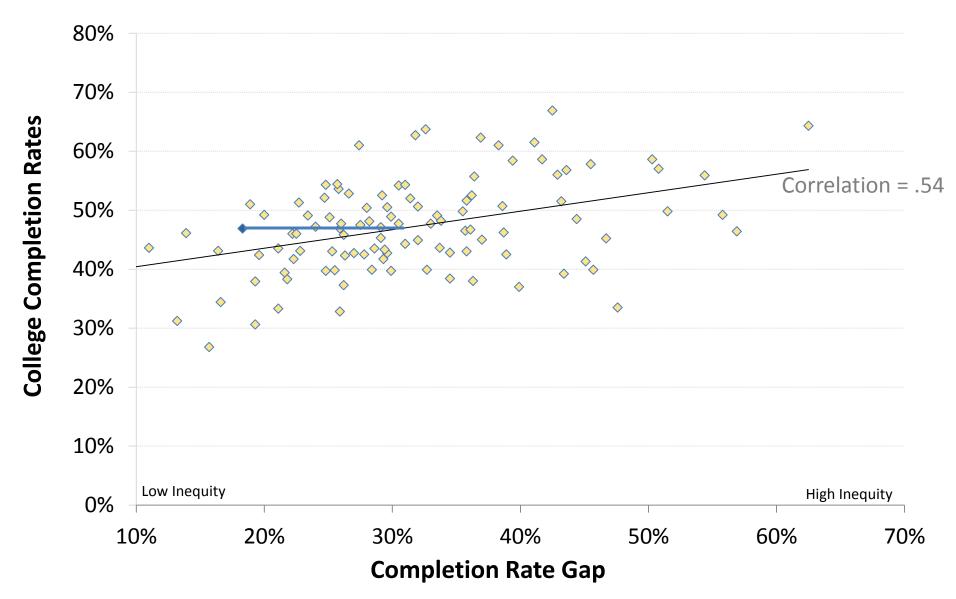
### System wide data

- 1. A tool to help identify best practices statewide
- 2. Another benchmark or context to evaluate Contra Costa College

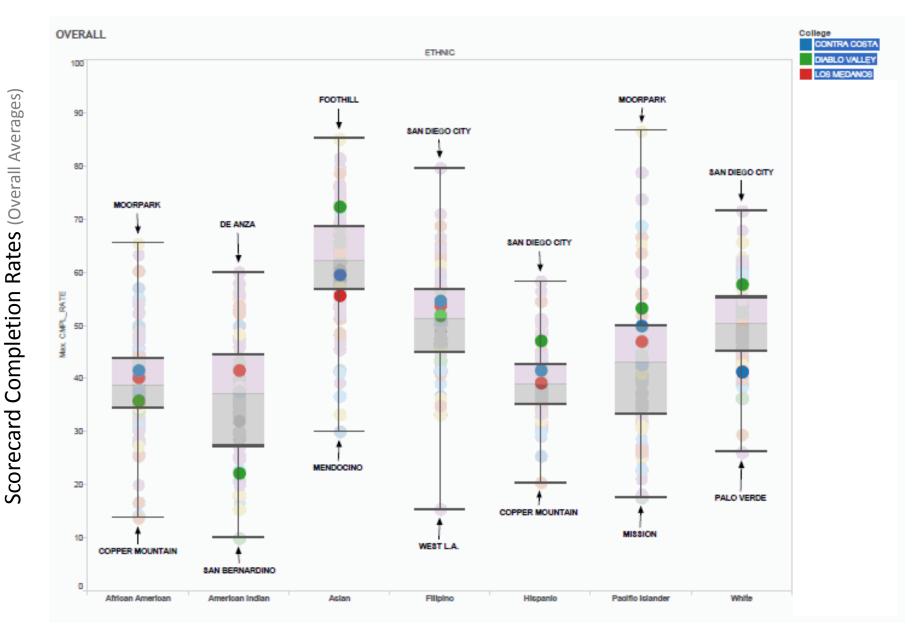
Example #1. a tool to identify best practices in student completion and colleges that might be good candidates for proactive outreach support

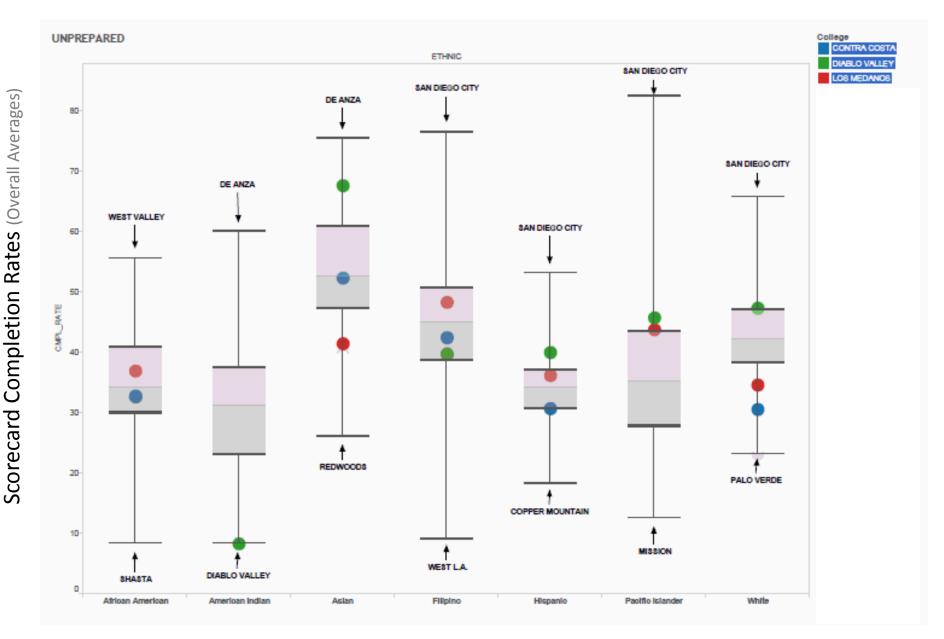


Example #2. a potential tool for identify colleges with strong equity performance

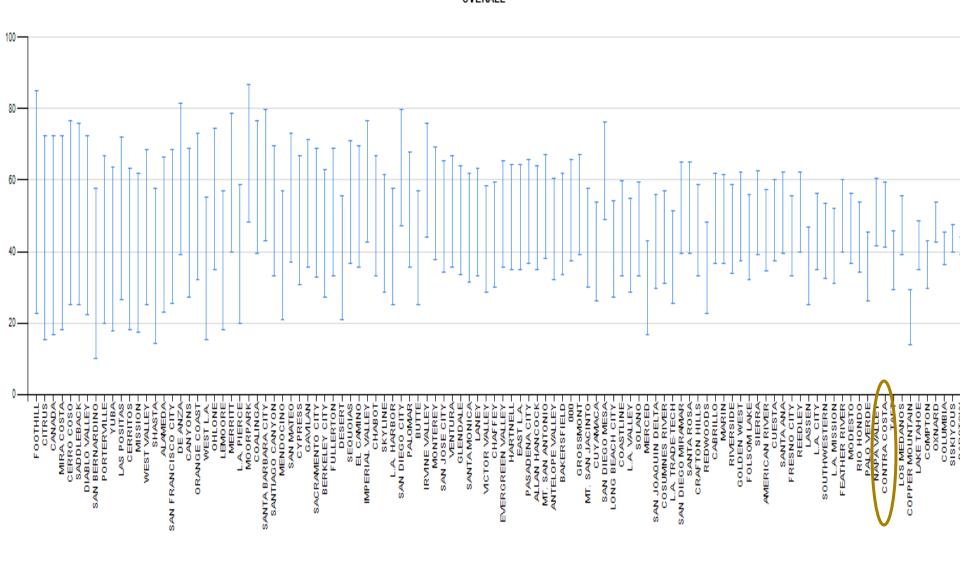


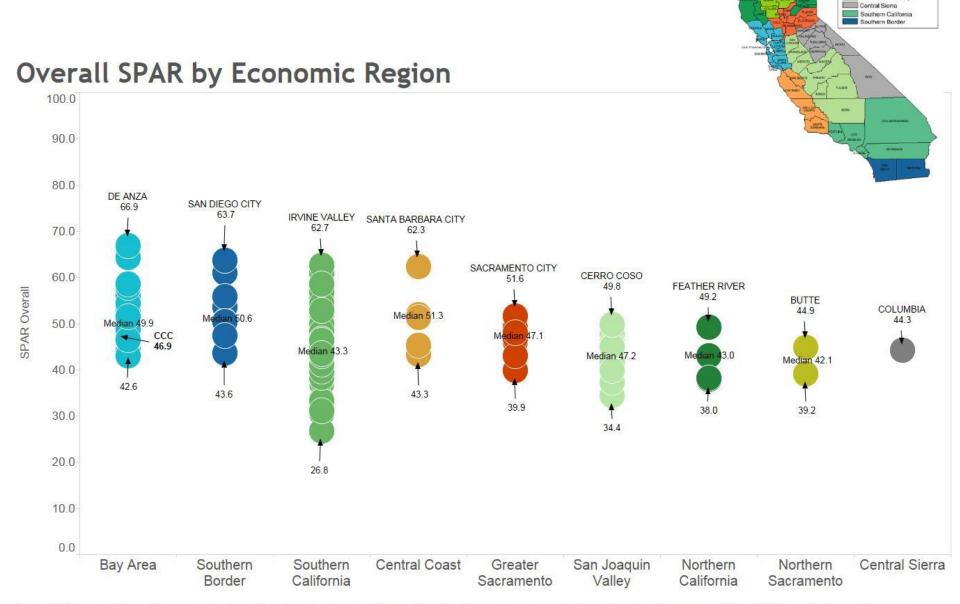
(Difference between highest & lowest performing ethnicity groups)



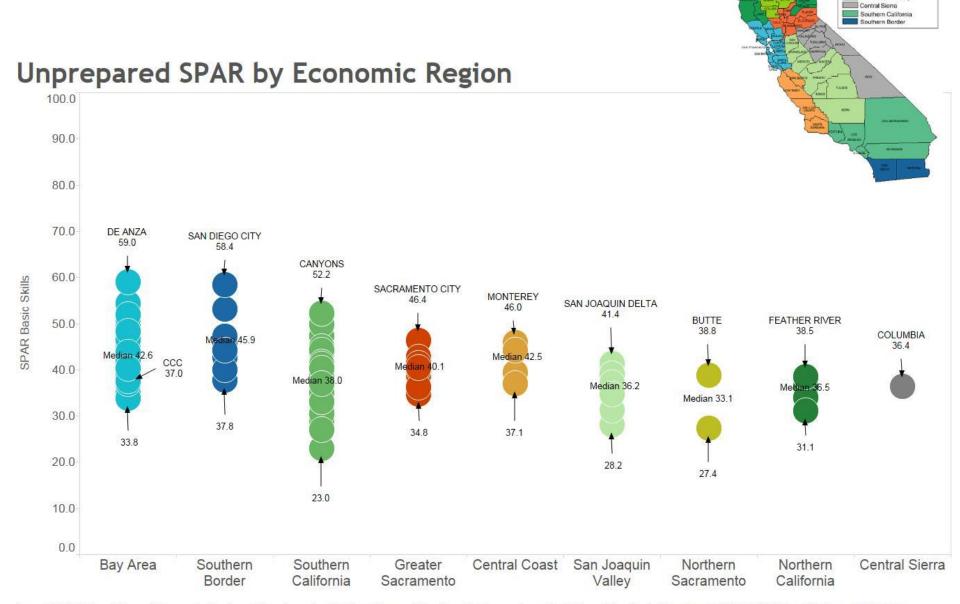


#### **OVERALL**





Northern California Northern Sacramento Valley Greater Sacramento Bay Area Central Coast San Joaquin Valley



Northern California Northern Sacramento Valley Greater Sacramento Bay Area Central Coast San Joaquin Valley



## THANK YOU!

October 16, 2014

Gregory M Stoup
Sr. Dean Contra Costa Community College District
Vice President, RP Group



## **Additional Data**

# What if Analysis DVC Subpopulations



## We can estimate the magnitude of change associated with various strategies

Subpopulation	Number in Unprepared Cohort	Completion Rate	# of additional completions needed to reach Unprep Average	Improvement in the Overall Average for change in previous column	Cumulative Improvement of moving each successive group
Hispanic, Female, 25 to 39 years old	15	13.3%	6	0.3%	0.3%
Hispanic, Male, 25 to 39 years old	6	16.7%	2	0.1%	0.4%
Hispanic, Male, 20 to 24 years old	5	20.0%	2	0.1%	0.4%
Asian, Female, 40 or more years old	9	22.2%	3	0.1%	0.6%
White, Male, 20 to 24 years old	27	22.2%	8	0.4%	0.9%
Hispanic, Female, 20 to 24 years old	12	25.0%	3	0.1%	1.1%
African-American, Female, Less than 20 years old	56	28.6%	12	0.6%	1.7%
White, Female, 40 or more years old	16	31.3%	3	0.2%	1.8%
White, Female, 25 to 39 years old	32	34.4%	5	0.3%	2.1%
Hispanic, Male, Less than 20 years old	134	35.1%	21	1.0%	3.1%
Asian, Female, 25 to 39 years old	14	35.7%	2	0.1%	3.2%
White, Female, 20 to 24 years old	18	38.9%	2	0.1%	3.3%
White, Male, 25 to 39 years old	15	40.0%	2	0.1%	3.4%
Other, Female, 25 to 39 years old	10	40.0%	1	0.1%	3.4%
African-American, Male, Less than 20 years old	54	42.6%	4	0.2%	3.7%
Filipino, Male, Less than 20 years old	56	42.9%	4	0.2%	3.9%
Filipino, Female, Less than 20 years old	48	45.8%	2	0.1%	4.0%
White, Male, Less than 20 years old	386	45.9%	19	0.9%	4.9%
Hispanic, Female, Less than 20 years old	146	47.3%	2	0.1%	5.0%

= 103 students

+ 5% increase in completion rate

<sup>\*</sup> Note that these figures apply to the 2007/08 cohort (most recent that is available) and therefore the figures associated with additional completions needed to reach the unprepared average apply to that cohort and not future cohorts.

Distribution of completion rates for unprepared student populations (sorted from lowest to highest completion rates)

