

Data Trend Cheat Sheet: Instructional, CTE, and Student Success Programs

Instructional Programs

1. How to calculate data trends over a 5-year period

Example: In the data table above, what does the data trend indicate about the productivity number?

Enrollment Trends All Units						
	2015-16	2016-17	2017-18	2018-19	2019-20	5-yr %Inc
Unduplicated Headcount	60,771	61,732	62,256	58,763	57,649	-5.1%
Census Enrollment	311,543	302,341	290,314	273,207	265,200	-14.9%
Sections	10,246	10,631	10,226	9,633	9,453	-7.7%
WSCH	481,466	468,125	442,524	423,513	412,606	-14.3%
FTEs (end of term)	32,068	31,176	29,480	28,227	27,504	-14.2%
FTEF (end of term)	915.8	928.9	885.3	802.5	788.7	-13.9%
Productivity (WSCH/FTEF)	526	504	500	528	523	-0.5%

↑
% of change

Locate the % of change or use the formula:

$$\% \text{ of Change} = \frac{(\text{Current Year} - \text{Base Year})}{\text{Base Year}}$$

**Note: This data trend prompt may also appear in the following sections: Enrollment Trends for FTEs, Number of Sections, and Productivity*

2. How to calculate data trends over a 5-year period between one or more groups

Example: What does the data trend indicate about enrollment (headcount) by gender in the program?

Enr Distribution by Student Demographics
All Units

by Gender

	2015-16		2016-17		2017-18		2018-19		2019-20	
	Enr	Percent								
Female	152,335	49%	149,464	49%	144,012	50%	134,648	49%	131,110	49%
Male	156,721	50%	150,305	50%	143,842	50%	135,980	50%	131,231	49%
Non-Binary	0	0%	0	0%	0	0%	27	0%	137	0%
Not Reported	2,487	1%	2,572	1%	2,460	1%	2,552	1%	2,722	1%
Total	311,543	100%	302,341	100%	290,314	100%	273,207	100%	265,200	100%

Locate the % of change or use the formula for each gender category:

$$\% \text{ of Change} = \frac{(\text{Current Year} - \text{Base Year})}{\text{Base Year}}$$

**Note: This data trend prompt may also appear in the following sections: Enrollment Trends By Gender, By Ethnicity, By Gender of Declared Majors, and Course Success By Overall Course Success, By Ethnicity, and By Gender*

3. How to calculate disaggregated program data as compared to the college

Example: Does your program differ in the percentage of males to females, **in this most recent year**, compared to the College? (College 2019-20 = 51% Female, 47% Male)

Enrollment Distribution by Student Demographics										
By Gender										
	2015-16		2016-17		2017-18		2018-19		2019-20	
	Enr	Percent								
Female	483	66%	491	68%	486	69%	453	68%	409	64%
Male	245	33%	215	30%	219	31%	199	30%	217	34%
Non-Binary	0	0%	0	0%	0	0%	1	0%	3	0%
Not Reported	8	1%	13	2%	4	1%	10	2%	7	1%
Total	736	100%	719	100%	709	100%	663	100%	636	100%

Formula:

$$(\text{College Male} - \text{Program Male}) = |Y|$$

$$(34 - 47) = |13|$$

$$(\text{College Female} - \text{Program Female}) = |X|$$

$$(64 - 51) = |13|$$

**Note: This data trend prompt may also appear in the following sections: Enrollment Trends By Gender and By Ethnicity*

4. How to calculate gaps and disparities over a 5-year period

Example: Is there a course success gap between African-American, Latinx, Filipino student groups and Asian, Native American, Pacific Islander, White, Decline to State student groups?

Course Success for African American, Latinx, and Filipino Students										
	2015-16		2016-17		2017-18		2018-19		2019-20	
	Grades	Percent								
Success	372	80%	329	69%	298	72%	333	74%	213	67%
Non Success	58	13%	93	19%	64	15%	59	13%	56	18%
Withdrew	33	7%	55	12%	52	13%	61	13%	49	15%
Total	463	100%	477	100%	414	100%	453	100%	337	100%

Course Success for Asian, Native American, Pacific Islander, White, and Decline to State Students										
	2015-16		2016-17		2017-18		2018-19		2019-20	
	Grades	Percent								
Success	465	79%	528	83%	491	80%	394	66%	302	78%
Non Success	79	13%	59	9%	68	11%	105	18%	41	11%
Withdrew	43	7%	51	8%	51	8%	96	16%	44	11%
Total	587	100%	638	100%	610	100%	595	100%	387	100%

Formula:

Step 1: Current Year Course Success [Group 1] – Current Year Course Success [Group 2] = Current Year Gap

Step 2: Base Year Course Success [Group 1] – Base Year Course Success [Group 2] = Base Year Gap

Step 3: Current Year Gap – Base Year Gap = Course Success Gap

**Note: This data trend prompt may also appear in the following sections: Student Course Success by Student Groups and By Ethnicity*

Career and Technical Education Programs

1. How to calculate regional Labor Demand trends

Example: In the data table above, what does the regional labor demand data trend indicate?

Total Regional Employment

The total number of jobs for 2018 and 2023 and percentage growth or decline in occupations associated with the selected TOP code in the microregion where the college is located

● Bay Area, Automotive Technology (0948), 2018-2019

	2018	2023	Change 2018-23	% Change
Regional Jobs Total	16,668	16,938	270	2%
Requires a Postsecondary Certificate				
Automotive Service Technicians and Mechanics (49-3023)	16,668	16,938	270	2%

Locate the % of change



Projected Regional Job Openings

The total number of annual job openings for 2018-23 time period in occupations associated with the selected TOP code in the microregion where the college is located

● Bay Area, Automotive Technology (0948), 2018-2019

	Projected Average Annual Openings (2018-2023)
Regional Annual Openings Total	1,602
Requires a Postsecondary Certificate	
Automotive Service Technicians and Mechanics (49-3023)	1,602

2. How to calculate regional Labor Supply trends

Example: In the data table above, what does the regional labor supply data trend indicate?

Overall	
2011-2012	11,185
2012-2013	9,788
2013-2014	10,021
2014-2015	9,271
2015-2016	8,767
2016-2017	8,426
2017-2018	8,251
2018-2019	8,652

Formula: % of Change = $\frac{\text{Current Year} - \text{Base Year}}{\text{Base Year}}$

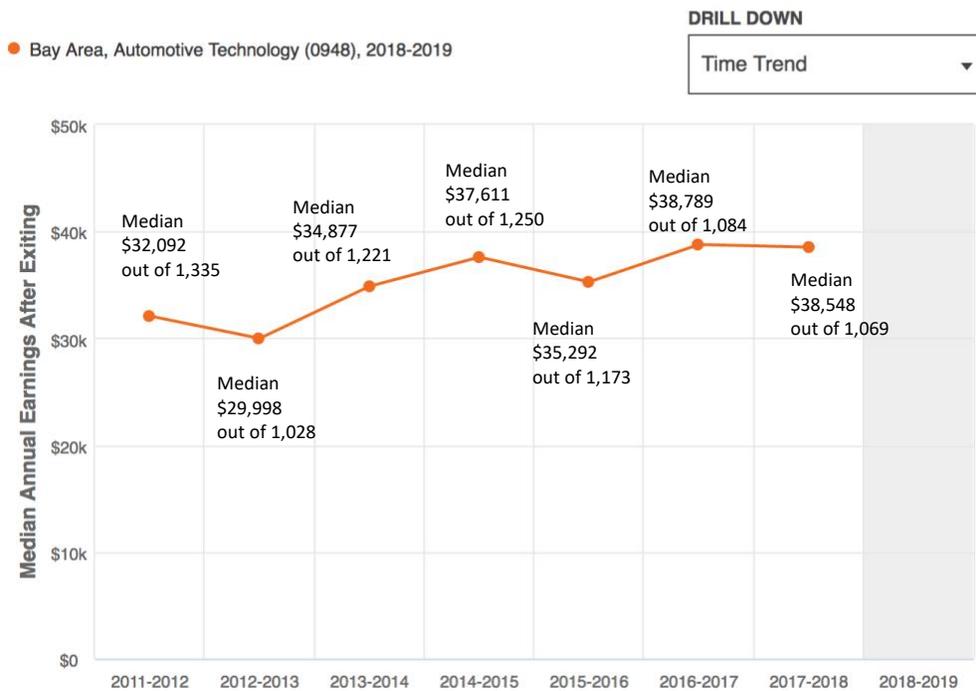
Example: -23% = $\frac{(8,652 - 11,185)}{11,185}$

3. How to calculate Regional Wages and Employment Rates?

Example: In the data table above, what does the wage data trend indicate?

Median Annual Earnings After Exiting

Among students who exited the community college system and who did not transfer to any postsecondary institution, median earnings following the academic year of exit



Formula: $\% \text{ of Change} = \frac{\text{Current Year} - \text{Base Year}}{\text{Base Year}}$

**Note: This data trend prompt may also appear in the following sections: Regional Wages and Graduate Employment Rates*

4. How to calculate Program 13.5 Course Completion over a 5-year period?

Example: In the data table above, what does the data trend indicate about the number of students completing the 13.5 CTE units each year in the last five years within your program?

Program 13.5 Course Completion					
Unduplicated Headcount	2015-16	2016-17	2017-18	2018-19	2019-20
Program	22	12	6	16	14

$$\text{Formula: } \% \text{ of Change} = \frac{(\text{Current Year} - \text{Base Year})}{\text{Base Year}}$$

Student Success Programs

1. How to calculate data trends over a 5-year period

Example: In the data table above, what does the data trend indicate about the number of students completing Step 1?

Completing CCC Apply (Step 1)						
Note: Student type determined from application data. Source: FHDA Banner:Szrccap table						
	2015-16	2016-17	2017-18	2018-19	2019-20	5yr change
	HC	HC	HC	HC	HC	% change
First-Time New	3,330	3,384	3,303	3,440	4,209	26%
First-Time Transfer	14,726	16,441	16,516	15,542	14,712	0%
Total	18,056	19,825	19,819	18,982	18,921	5%

% of change

Locate the % of change Or Use the formula:

$$\% \text{ of Change} = \frac{(\text{Current Year} - \text{Base Year})}{\text{Base Year}}$$

**Note: This data trend prompt may also appear in the following sections of Financial Aid Program Review: Overall Completed Application Trends, FAFSA Completed Applications By Ethnicity, By First Gen, By Gender, and Completed Dream Act Applications, CADAA Completed Applications By Ethnicity, By First Gen, By Gender, College Promise Participants, and Students Completing FAFSA in Year Two By Ethnicity and Overall, Students Completing Dream Act in Year Two, and Ethnicity Trends Of Students Completing The CADAA In Year Two.*

Example: What does the data trend indicate for Step 2 completion?

**Priority Enrollment Steps
(Combined)**

Note: Steps 2-4 not required to enroll; each step can be completed any term in the same academic year as application (Student Success Metrics definition).

Source: FHDA Banner; Swrftix table

	2015-16		2016-17		2017-18		2018-19		2019-20		5yr change
	HC	Percent	% change								
First-Year New											
CCC Apply (Step 1)	3,330	100%	3,384	100%	3,303	100%	3,440	100%	4,209	100%	
Assessment Req (Step 2*)	72	2%	1,042	31%	1,037	31%	1,008	29%	1,094	26%	24%
Orientation (Step 3*)	37	1%	767	23%	740	22%	496	14%	822	20%	18%
Ed Plan (Step 4*)	62	2%	1,299	38%	1,319	40%	1,091	32%	652	15%	14%
Enrolled HC (Step 5)	1,850	56%	1,791	53%	1,735	53%	1,653	48%	1,964	47%	-9%
First-Year Transfer											
CCC Apply (Step 1)	14,726	100%	16,441	100%	16,516	100%	15,542	100%	14,712	100%	
Assessment Req (Step 2*)	48	0%	935	6%	1,364	8%	1,528	10%	1,229	8%	8%
Orientation (Step 3*)	43	0%	918	6%	831	5%	646	4%	1,779	12%	12%
Ed Plan (Step 4*)	83	1%	3,337	20%	4,780	29%	3,471	22%	544	4%	3%
Enrolled HC (Step 5)	7,793	53%	8,360	51%	9,166	55%	8,343	54%	7,841	53%	0%

*Recommended but not required for students to enroll. These steps can occur in any order.

Locate the % of change Or Use the formula:

$$\text{\% of Change} = \frac{(\text{Current Year} - \text{Base Year})}{\text{Base Year}}$$

**Note: This data trend prompt may also appear in the following sections of Admissions and Records Program Review: Students Completing CCC Apply Steps 1 through 5.*