### CCFT Salary Study

Draft: February 10, 2009, 8pm

Questions this Study attempts to answer:

- How does Cabrillo's Tenured Pay compare to all the other districts in the state?
- More specifically, how does Cabrillo's pay compare to other local districts? Or districts that are similar in size?
- What has happened to Cabrillo's salaries in recent years?
- Are there factors that can explain the differences in pay between districts, such as: cost of benefits, size of the district, adjunct compensation, instructor efficiency or district budget limitations?

A comparison of compensation of one district to another is not simple due differences in salary tables (number of steps and columns and what one does to get on those steps and columns), benefits, and workload. Even if one can devise a precise comparison, any differences must still be put into context of the relative conditions of the districts.

#### Comparison Schools:

In many tables a small set of districts were presented even though all districts were included in the analysis. The comparison schools included three groups. The first selection of schools were those of the Bay Area which are: Chabot, Contra Costa, Foothill/DeAnza, Marin, Ohlone, Peralta, San Francisco, San Jose, San Mateo, Sonoma, and West Valley. The next set of schools were those close to Cabrillo: Gavilan, Hartnell, and Monterey. Finally, a selection of "similar schools" was suggested by the district. These are single college districts of similar size. They are: Butte, Chaffey, Citrus, Rio Hondo, Santa Barbara, and Santa Clarita.

#### Data Sets:

Salary schedule data is mostly from the 2007/2008 school year. Much of the data for college budgets is from 2006/2007 school year. That data is from state reports, and those reports are not yet available for other districts for 2007/2008. Cabrillo's CCFS-311 report for 2007/2008 is available and information has been updated to reflect the most recent data.

#### Dates & Updates:

This study began more than a year ago. As updated data became available, it was incorporated when possible and time allowed. This may create a few spots of confusion if not anachronism. This document should not be seen as a final product but an ongoing method of assessing salary. Updates should be made regularly.

#### A Place To Start: We're 51 out of 71 (or worse)

Looking at HND & Step 14.

HND is the "Highest Non-doctorate" salary column. That's the far right column of Cabrillo's salary schedule. There are several reasons to choose this column for comparison. First, it's used by Sonoma for their salary comparison, so data is readily available. Second, most Cabrillo full-time faculty are on this column. Third, it's the highest column faculty can move over to by taking additional classes.

Step 14: To begin making comparisons, one step needed to be chosen to get an early idea about where Cabrillo stood. Step 15 seemed appropriate because it's approximately the average step for full time faculty. However, past Sonoma salary studies only went as high as step 14.

HND14 gives a good picture of an average full-time faculty at Cabrillo. We use the Santa Rosa study data for 2007/2008 year. Updates, when available, have been included.

Results:

Out of 71 districts, Cabrillo ranks 51<sup>st</sup> (1 is the top, 71 would be the lowest ranked).

It should also be noted that when some districts have not yet settled salary for this year and a previous year's salary schedule was used.

The table below has the group of comparison districts and their HND14 salary. It also presents the state ranking of that salary:

District	Step 14	State Rank
Foothill	\$98,808	4
San Jose	\$95,326	9
Rio Hondo	\$94,552	11
Chabot/Las Positas	\$94,544	12
Santa Clarita	\$92,860	14
San Francisco	\$90,892	16
San Mateo	\$89,150	22
Gavilan	\$87,643	35
Hartnell	\$87,081	38
Contra Costa	\$86,532	40
Monterey	\$86,092	43
Citrus	\$85,419	45
Peralta	\$85,006	47
Cabrillo	\$84,615	51
Santa Barbara	\$84,448	52
Chaffey	\$83,655	53
West Valley	\$82,705	55
Marin (BA)	\$82,272	57
Butte-Glenn	\$81,601	58
Ohlone*	\$79,208	63

\* Ohlone pays benefits as part of base salary. The Ohlone salary was reduced by the two person benefits stipend at Cabrillo

## Recent Slippage: From 15<sup>th</sup> to 51<sup>st</sup> in 4 years

How today's standing compare with the recent past?

Using the 2003 Sonoma Salary Study, Cabrillo was ranked 15<sup>th</sup> out of 71. That's quite a slide. How did it happen? Here's the size of salary changes from the 2003 salary study data to the current data for 70 districts. Cabrillo ranks 3<sup>rd</sup> from the bottom in the size of pay raises for the last 4 years.

Note: Copper Mountain did not exist in the 2003 study so it is not in the following table. The same warning again: some salary schedules were from a previous year because negotiations for that year had not been concluded. Many salary schedules in the 2003 study were from 2001 or 2002. Cabrillo's was current in the 2003 study.

41.8%	Yuba	19.0%	Sequoias
33.1%	Desert	18.8%	Ohlone
30.6%	South Orange	18.6%	Feather River
30.4%	Peralta	18.1%	San Joaquin Delta
26.2%	West Kern	17.9%	Shasta
25.1%	Chabot/Las Positas	17.6%	Mira Costa
24.9%	San Jose	17.2%	Los Angeles
24.9%	San Mateo	16.9%	Hartnell
24.3%	Coast	16.5%	San Francisco
23.9%	Monterey	16.1%	Gavilan
23.8%	Rio Hondo	15.9%	West Hills
23.7%	Palomar	15.4%	Marin
23.2%	Antelope Valley	14.9%	Redwoods
23.2%	Santa Clarita	14.5%	West Valley
22.8%	San Bernardino	14.4%	Siskiyous
22.8%	Riverside	14.4%	Cerritos
22.5%	Grossmont	14.4%	Solano
21.5%	Mount San Antonio	14.3%	Los Rios
21.3%	Glendale	13.8%	Butte
21.2%	North Orange	13.8%	Sonoma
20.9%	Lake Tahoe	13.4%	Santa Monica
20.9%	Napa Valley	13.2%	Sierra
20.5%	State Center	12.8%	Chaffey
20.4%	Pasadena	12.7%	Santa Barbara
20.4%	Long Beach	12.6%	Mount San Jacinto
20.1%	Imperial	12.2%	Citrus
20.0%	Merced	12.0%	Ventura
19.9%	Mendocino	11.3%	Yosemite
19.9%	Foothill	11.1%	Barstow
19.8%	Victor Valley	10.8%	Palo Verde
19.7%	Rancho Santiago	9.8%	Kern
19.6%	Allan Hancock	9.1%	San Diego
19.4%	Southwestern	8.7%	Cabrillo
19.3%	San Luis Obispo	7.0%	Contra Costa
19.1%	El Camino	0.0%	Lassen

## A Wider View of the Salary Table: Cabrillo improves to 41<sup>st</sup>.

There was a desire to look at more than HND14. The study was broadened to look at five salary positions: HND14, HND Step 1, HND Maximum, Masters-Only Step 1, and Masters-Only Maximum.

Because we're now comparing 5 different steps and columns, the picture is more complicated. Depending on which step and column of the five you're looking at, Cabrillo ranks 29<sup>th</sup>, 56<sup>th</sup>, 37<sup>th</sup>, 51<sup>st</sup>, 38<sup>th</sup>. A composite ranking was generated off of those five rankings. This composite is called the "UberRanking." Using the UberRanking, Cabrillo is 41<sup>st</sup>.

Here are the comparison schools and their state ranking. Salaries are not included because this tables is generated from five different salary numbers:

District	UberRank
Foothill	2
Chabot/Las	
Positas	8
Santa Clarita	9
Sonoma	11
San Jose	12
Rio Hondo	17
San Mateo	20
San Francisco	23
Gavilan	32
West Valley	35
Citrus	37
Chaffey	38
Contra Costa	39
Peralta	40
Cabrillo	41
Hartnell	46
Marin (BA)	48
Santa Barbara	52
Monterey	54
Ohlone	58
Butte-Glenn	61

#### If we look at what instructors are paid: Cabrillo is 48<sup>th</sup>.

In looking about the above salary numbers, they are all taken from salary schedules. Salary schedules may not reflect what instructors are actually getting paid. The state does publish a salary comparison of tenured instructors which reports their actual pay rates.

The story doesn't change much by looking at actual salaries. Cabrillo is ranked 48<sup>th</sup> overall using the 2007 state study.

Where was Cabrillo ranked in 2003? 4<sup>th</sup> in the State. In four years, Cabrillo went from 4<sup>th</sup> to 48<sup>th</sup>.

One warning: I have questions about the veracity of all of the data. Supposedly, the average salary at West Valley is \$64,594. Looking more closely at the data, West Valley is reporting that they have tenured instructors making under \$40,000, and 5% of the tenure faculty are making less than \$50,000. West Valley has no place on their salary schedule for under \$40,000, and they only have one cell under \$50,000 (no masters, no experience). There are problems, no doubt, either in how districts report the numbers or how the state compiles them. There's a similar problem with Peralta, and an even stranger problem with Southwestern (data not shown below, but does appear in the table on the next page). I don't doubt the accuracy of Cabrillo's number, but one must be skeptical of some of the very low numbers.

	Average	State	
District	Salary	Rank	
Ohlone	\$91,458		6
Chabot/Las Positas	\$88,312		11
Marin (BA)	\$87,659		12
Santa Clarita	\$86,687		13
Foothill	\$85,838		16
Contra Costa	\$83,829		24
Rio Hondo	\$82,511		27
Gavilan	\$81,882		31
Chaffey	\$81,685		33
San Mateo	\$81,084		38
San Francisco	\$80,757		39
Monterey	\$80,137		41
Hartnell	\$79,957		42
San Jose	\$79,944		43
Butte-Glenn	\$79,521		45
Cabrillo	\$78,714		<b>48</b>
Citrus	\$78,283		49
Peralta	\$65,134		69
West Valley	\$64,594		70
Santa Barbara	No data		

# Slippage Part 2: 4<sup>th</sup> to 48<sup>th</sup> in four years.

Using the state's study of actual average salaries, not salary tables, I calculated the increase in the average salary of tenured instructors from 2003 to 2007.

I'm skeptical of both the highest (Barstow) and lowest (Southwest) numbers of the table.

Barstow	62%	Marin (BA)	17%
West Kern	32%	San Bernardino	17%
North Orange	31%	Mount San Jacinto	17%
Hartnell	27%	Feather River	16%
Palomar	27%	San Jose	16%
Yuba	26%	Lake Tahoe	15%
Victor Valley	25%	Palo Verde	15%
Imperial	25%	Long Beach	15%
Redwoods	24%	Pasadena	14%
Shasta	24%	San Joaquin Delta	14%
Compton	24%	West Hills	14%
State Center	23%	Citrus	14%
Los Angeles	23%	Monterey	14%
Chabot/Las Positas	23%	Siskiyous	14%
Glendale	23%	Mira Costa (BA)	14%
Coast	22%	Solano	14%
Ohlone	22%	Rancho Santiago	13%
Mount San Antonio	22%	Kern	13%
Napa Valley	22%	San Francisco	13%
Gavilan	22%	Butte-Glenn	13%
Santa Clarita	20%	Allan Hancock	12%
Copper Mountain	20%	San Luis Obispo	12%
Los Rios	19%	San Diego	12%
San Mateo	19%	Mendocino	10%
Rio Hondo	19%	Yosemite	10%
Riverside	19%	Ventura	9%
El Camino	19%	Santa Monica	8%
Antelope Valley	19%	Santa Barbara	8%
Sonoma	18%	Grossmont	8%
Sequoias	18%	Contra Costa	8%
South Orange (BA)	18%	Chaffey	6%
Desert	18%	Peralta	4%
Foothill	18%	Lassen	4%
Cerritos	17%	West Valley	1%
Sierra	17%	Cabrillo	0%
Merced	17%	Southwestern	-23%

#### Explanation: It's not a Size Issue

It terms of size, Cabrillo ranks 41<sup>st</sup> (based on General Funds Revenue. We're 40<sup>th</sup> based on FTES, Full Time Equivalent Student). We're 41<sup>st</sup> on salary (using the UberRank). That suggests there might be a connection between size and salary. This notion is called "Economies of Scale." As a school district grows, revenues increase faster than costs which allow a better pay scale. Several tests were conducted to examine the connection of size to other factors. Only one test resulted in a statistically significant, but very weak, result.

Correlations which were not statistically significant:

Connection between Size and meeting the "50% Law"

Correlation was measured between the size of revenues and the ratio calculated for the 50% law. Correlation was not statistically significant. Small schools meet the 50% with same ability as large schools.

Connection between Size and Fraction of Revenues Spent on Instructors

A ratio was created of the fraction of revenues that go to instructor salaries. The correlation of this ratio was measured relative to the size of the school. The result was insignificant. Large schools do not devote more of their revenue to instructor salaries or benefits. On fraction of revenues spent on instruction, Cabrillo ranks 57<sup>th</sup>.

Connection between Size and Instructor spending per Student

A ratio was created of the instructional spending per student. Larger schools do not spend more on instruction per student than smaller schools.

Some statistical significance was found:

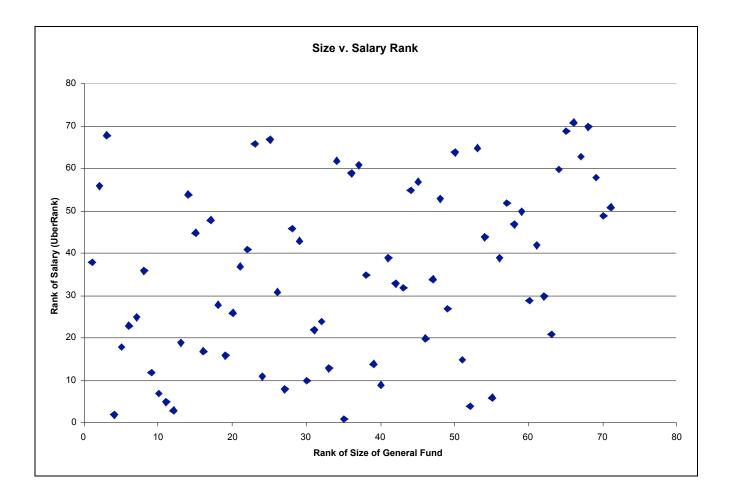
Connection between Size and the UberRank

A weak connection was found between the rank size of the school and the salary UberRank. The  $r^2$  was only .13 (only 13% of variation of salaries can be explained by size). To see the weakness of this connect, a graph is drawn (see below). The graph plots the size of a district against its rank of salary (UberRank). In analyzing the graph, one can see why there's a correlation and it relates to only eight schools.

Conclusion: Size does not explain differences in how much schools spend on instructors, salaries, or benefits. Except for very small schools, size does not explain differences in salary schedules (see the graph and discussion below for the exception)

Corollary: If size is not an issue, then one must be skeptical as whether recent growth in a district can explain salary differences.

Note: a slightly older 2007 data set was used. The results were not updated because of the weakness of the results.



This scatter graph shows the connection, or lack thereof, of size rank to salary rank.

The horizontal axis is the rank of the size of the district's General Fund Revenue. Large districts are on the left of the graph. Small districts are on the right of the graph.

The vertical axis is the rank of the salary schedule (using the UberRank system which looks at Masters column and HND column). Higher paid schools are at the bottom; lower paid are at the top.

Cabrillo is in the center of the graph on both axes.

If you look at the left side of the graph, you see that large schools have both high and low rated salaries. However, if you look at the right side, the cluster of eight schools furthest right are all have low rated salaries (the eight points in the upper right of the graph). Those schools are: Mendocino, Siskiyous, Barstow, Lake Tahoe, Lassen, Palo Verde, Feather River, and Copper Mountain. If those schools are removed from the regression, the results are insignificant.

Therefore, the appropriate conclusion is that except for the smallest eight schools, size doesn't affect salary.

## Explanation: It's not a Benefits Issue

Another reason suggested why Cabrillo's salary is low is the college's spending on benefits. Out of total General Revenues, how much does Cabrillo spend on benefits? Cabrillo spends 15.1% on benefits. How does this compare to other schools? Comparing all 72 districts, Cabrillo ranks 57<sup>th</sup>. The state average is 16.7%. If Cabrillo spent that state average percentage on benefits, Cabrillo would be spending about \$1,150,000 more on benefits than we currently do.

The benefit data is taken from the state 311 reports for the 2006/2007 year. It reflects the cost of all benefits, not just health care coverage.

District	Benefits/Rev	State Rank
Rio Hondo	22.07%	1
Peralta	20.78%	3
West Valley	20.47%	5
Marin (BA)	19.65%	7
Hartnell	18.72%	11
Contra Costa	18.28%	16
Foothill	18.22%	17
San Mateo	18.21%	18
Citrus	18.20%	20
Chabot/Las Positas	18.17%	21
San Francisco	17.35%	31
San Jose	17.02%	35
Sonoma	15.69%	52
Gavilan	15.48%	56
Cabrillo	15.06%	57
Chaffey	14.94%	58
Butte-Glenn	13.97%	63
Santa Barbara	12.95%	67
Santa Clarita	12.58%	69
Ohlone	11.95%	70
Monterey	9.57%	72

Furthermore, in a multivariate model discussed below, benefits per FTEF were calculated and included in a regression on salary. Benefits per FTES were statistically insignificant in explaining salary.

One should note though that when we look at Cabrillo's budget presented in a few pages, we'll see that the rising costs of benefits have become a dominating factor in the last couple of years.

## Explanation: It's not the Adjunct Pay; for the 50% Law, Cabrillo is 59<sup>th</sup>.

This study has focused on full time salaries. It has been suggested that a reason why full-time salaries are lower is because we spend more on adjunct salaries.

Adjunct salaries are more difficult to assess. Viable data on adjunct salaries is unavailable. Schools use various methods to compensate adjuncts (e.g. unit pay or hourly). The number of columns and steps varies tremendously. The extent of adjunct exploitation varies. When looking at the correlation between the state's average adjunct pay rate, one of the few data sets of adjunct pay, and full-time salaries, the relationship was positive. Higher adjunct salaries are correlated with higher full-time salaries. This result is the opposite of the theorized impact.

If we can't look at adjunct salaries, we can look to some extent at the combined spending on both adjunct and full-time. The 50% Law calculation gives us a glimpse. If Cabrillo's below average full-time salaries allow funds to be funneled into adjunct salaries, then the total spending on instructors, both full-time and adjunct, should be higher.

So where do we stand in complying with the 50% law? We're ranked 59<sup>th</sup> out of all districts. Below is our percentage of educational expenses spent on instructors. The average ratio for the state is 52.2%. Cabrillo is at 50.35%. If we spent at 52.2%, Cabrillo would need to devote \$960,000 more to classroom instructors and LIA salary and benefits.

Also remember as mentioned above, size cannot explain the ranking of that list. There was no correlation found between the size of a school and its 50% ratio. Data is from 2006/2007

Note: the numerator in determining the 50% law compliance includes salaries of anyone generating FTES and their benefits. This includes LIA's who are in the classified union. It also excludes any CCFT employee (or fraction thereof) who is not generating FTES.

District	50% Rank	Ratio
Chabot/Las Positas	4	56.97%
Monterey	8	55.35%
Santa Barbara	16	54.22%
Santa Clarita	17	54.10%
San Mateo	23	53.27%
Foothill	25	52.72%
San Francisco	26	52.63%
Contra Costa	28	52.60%
West Valley	31	52.10%
Rio Hondo	36	51.68%
Marin (BA)	41	51.51%
Peralta	44	51.24%
Ohlone	45	51.18%
Chaffey	49	51.07%
Hartnell	50	51.07%
Butte-Glenn	52	50.77%
San Jose	54	50.55%
Gavilan	57	50.42%
Cabrillo	59	50.35%
Citrus	65	50.11%

# Explanation: It's not the Adjunct Pay, Part II; Cabrillo is 52<sup>nd</sup> on Instructor Spending per Student

Another statistic that would be useful to look at is the cost of instructors per FTES. By looking at instructor spending per FTES we can get see two things: total spending on both full-time and adjuncts and we some measure of efficiency with regards to FTES generation.

Instructor spending (salary and benefits including LIA's, which is the numerator in the 50% law calculation) is divided by FTES. Data is from 2006/2007.

In looking at instructor spending per student (FTES), Cabrillo is ranked 52<sup>nd</sup> out of all districts.

Cabrillo spends \$2,250 per FTES generated. The average for the state is \$2,451. If Cabrillo matched that average, expenditures on instructor salaries would increase by \$2,350,000

Furthermore, the correlation between the cost per FTES and size was calculated. There was no statistically significant result. Instructor spending per FTES is not related to the size of the college.

From an efficiency stand point, we just invert the ranking. That is, we educate students with lower instructor spending. Looking at it from this perspective, Cabrillo is 21<sup>st</sup>. Another measure of efficiency, one not based on spending, will be examined below.

	Instructor Spending	5
District	per FTES	State Rank
Marin (BA)	\$4,467	1
West Valley	\$2,733	9
Contra Costa	\$2,697	12
Peralta	\$2,440	24
Chabot/Las Positas	\$2,427	25
Hartnell	\$2,419	26
Sonoma	\$2,414	29
San Jose	\$2,403	31
San Francisco	\$2,347	36
Ohlone	\$2,345	37
San Mateo	\$2,280	42
Foothill	\$2,273	45
Santa Barbara	\$2,262	49
Rio Hondo	\$2,252	51
Cabrillo	\$2,250	52
Chaffey	\$2,190	58
Gavilan	\$2,173	60
Butte-Glenn	\$2,154	61
Santa Clarita	\$2,107	65
Citrus	\$1,983	70
Monterey	\$1,668	72

## Recent Cabrillo Budget History

The following table provides a history of Cabrillo's budget:

	2006/2007	2002/2003	Growth
Total Revenue, Unrestricted General Fund	60,801,276*	48,041,533	26.6%
Academic Salaries	26,806,393	23,345,501	14.8%
Instructional Salary Cost	26,278,716	23,198,118	13.3%
Current Expense of Education	52,195,125	45,653,528	14.3%
50% Ratio	50.3%	50.8%	
Employee Benefits	9,745,102	7,812,076	24.7%

\* Important: This is not the actual revenue claimed and collected by the school. The actual number is \$62,201,276. However, it was understood that \$1,400,000 (a rounded number, but one used here) is the result of shifting students from summer and did not represent the "true" revenue to the school.

Over the last 5 years, revenues rose in the district by almost 27%. Yet educational costs rose only about 14% and payment to FTES generators rose by only about 13%. And the discrepancy can't be explained by non-FTES generating faculty (or academic administrators, for that matter). Academic salaries rose by just under 15%.

Employee Benefits which is all benefits for all employees is the only thing to closely follow pace with the increase in revenue.

If instructional salary costs had grown at the rate of college revenue, the school would be now spending \$3,080,000 more on instructional salaries than they do.

If we had included the \$1,400,000, Cabrillo would be spending \$3,760,000 on instructional salaries.

### 2007/2008 Update

As will be seen in the next two graphs, the 2007/2008 year presented some reversals of trends. Below are the 2007/2008 data:

	2007/2008	2006/2007	Growth
Total Rev Unrestricted Gen Fund	62,792,999	60,801,276*	3.3%
Academic Salaries	28,306,719	26,806,393	5.6%
Instructional Salary Costs	28,771,297	26,278,716	9.5%
Current Expense of Education	56,386,063	52,195,125	8.0%
50% Ratio	51.0%	50.3%	
Employee Benefits	11,617,992**	9,745,102	19.2%

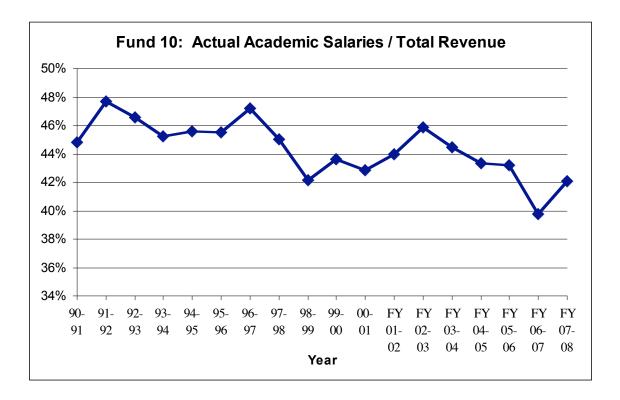
\*\* This amount includes the cost of retiree benefits paid from the sub-fund, not from the general fund. Paying these benefits from the sub-fund began in 2007/2008.

## Historic Lows in Salary Spending

This analysis is an updating of the first CCFT analysis of the 311 reports. One statistic of that report compared the year by year differences in revenues and expenses. The other statistic generated was to compare total academic spending to total revenues. In this table, all data is Total General Fund (Fund 10) meaning both Unrestricted and Restricted.

Academic Salaries includes both faculty salaries and also salaries of academic administrators.

As you can see in the graph, in the 1990's, the college devoted about 45% of revenues to academic salaries. This number falls to about 43% in 1998. The college has reached a low of about 40% the year before last, recovering to 42% last year.

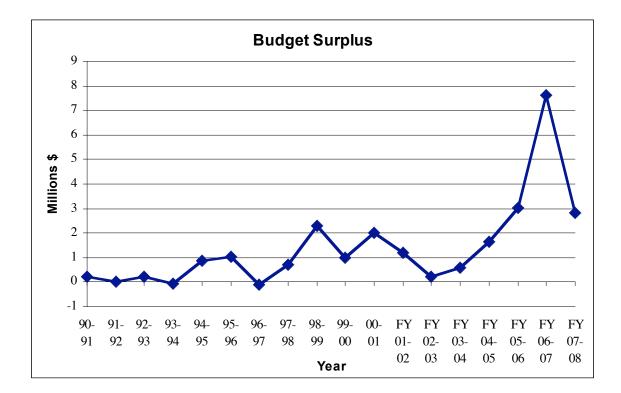


## Historic "Surpluses"

With salary spending not keeping up with college revenues, the college has been able to generate historically high surpluses.

The surplus data presented in the table below is a simple calculation. Fund 10 (Unrestricted and Restricted funds) Expenses are subtracted from Revenues. Note, this simple "surplus" will not included committed expenditures that did not take place in the budget year.

Also, a "Budget Surplus" does not necessarily mean that the entire sum was saved. Some of the surplus will be transferred into other uses which do not show up in the expenses, such as paying for retiree medical benefits or to cover the cost of other college services. Retiree medical benefits are not paid out of the general fund but instead are paid out of a special sub-fund specifically for retiree benefits.



#### Net Ending Balance

The simple "Budget Surplus" calculated above does not include all spending which is financed through General Funds, either unrestricted or restricted. Other expenses are financed from the general fund through budget transfers which shows up as "Other Outgo". Net Ending Balance gives a better picture of unspent revenue because it includes the Other Outgo. It will not include expenditures committed to the following year.

What has happened to the General Fund's net ending balance? It has risen to 18.6% of current expenses. The state sets a minimum of 5%. The average for the state is 14.5%.

Cabrillo's rank for Net Ending Balance compared to expenses is 17<sup>th</sup> in the state.

Using 2006/2007 data, here are the comparison schools and their Net Ending Balance as a fraction of expenses:

	Net Ending	State
District	Balance	Rank
Foothill	22.8%	7
West Valley	20.5%	10
Chabot/Las Positas	19.8%	12
Butte-Glenn	18.9%	13
Ohlone	18.8%	14
Chaffey	18.7%	15
Cabrillo	18.6%	17
Peralta	14.3%	32
Contra Costa	13.1%	36
San Jose	12.7%	38
Santa Barbara	12.6%	39
San Francisco	12.5%	40
Santa Clarita	11.9%	43
San Mateo	11.9%	44
Marin (BA)	11.6%	48
Gavilan	11.0%	53
Rio Hondo	10.4%	55
Monterey	10.4%	56
Citrus	10.1%	58
Hartnell	9.9%	60
Sonoma	7.7%	67

Recalculating the Net Ending Balance as a fraction of expenses for 2007/2008, Cabrillo's fraction dropped to 18.4%.

#### Revenue Changes across the State

How do Cabrillo's revenue and expense changes compare to other districts'? Below are the rates of growth in revenue for comparison schools and their statewide rank from 2002/2003 to 2006/2007.

Cabrillo ranks 37th in the State with a revenue growth rate of 28.8%. State average is 31.0%.

West Kern saw the largest increase in the state with a revenue growth rate of 73.1%. Lassen saw their revenue *fall* by 5.2% and is ranked  $72^{nd}$ .

	Growth of	
District	Revenue	State Rank
Santa Clarita	60.0%	3
Santa Barbara	47.9%	7
Citrus	36.4%	18
Chabot/Las Positas	35.8%	19
Chaffey	32.9%	23
Gavilan	32.7%	24
Rio Hondo	31.8%	29
Butte-Glenn	30.3%	34
Marin (BA)	29.2%	35
Cabrillo	28.8%	37
Ohlone	28.4%	39
West Valley	28.3%	40
San Mateo	25.5%	48
Foothill	24.7%	49
Peralta	23.8%	55
Sonoma	23.8%	56
San Jose	23.0%	57
San Francisco	21.6%	60
Monterey	19.5%	62
Contra Costa	19.5%	63
Hartnell	19.3%	65

#### Expense Changes across the State

Below are the rates of growth in revenue for comparison schools and their statewide rank from 2002/2003 to 2006/2007.

Also included is the difference between the Growth of Revenues and the Growth of Expenses and the rank of that number statewide.

As to growth of expenses, Cabrillo ranks 60th in the State with a growth rate of 15.5%. State average is 23.8%. Rank order is the largest growth rate is number one (West Kern that had expenses grow at 53.1%).  $72^{nd}$  place goes to the district which had expenses grow the slowest (Actually, shrunk the most. Lassen saw expenses *fall* by 7.1%).

Not surprising, the districts that had revenues grow rapidly saw expenses grow rapidly. West Kern was first in both rankings, and Lassen was ranked last in both. What about the difference between the two growth rates? A more important indicator would be how much revenues outpaced expenses. That's the last set of numbers on this page.

Cabrillo ranks 10<sup>th</sup> in the state with revenues rising 13.3% faster than expenses. State average is 7.3%.

	Growth of	State		Difference	State
Distrist	Expenses	Rank	District	in Rates	Rank
Santa Clarita	50.3%	2	Monterey	14.1%	8
Santa Barbara	41.4%	6	Cabrillo	13.3%	10
Chaffey	30.9%	14	Contra Costa	12.5%	11
West Valley	29.3%	16	Foothill	11.1%	14
Chabot/Las Positas	29.0%	17	Santa Clarita	9.7%	18
Gavilan	28.5%	19	Rio Hondo	9.6%	19
Citrus	28.5%	20	Peralta	9.5%	20
Hartnell	24.5%	30	San Mateo	8.5%	26
Butte-Glenn	22.3%	37	Marin (BA)	8.3%	28
Rio Hondo	22.1%	39	Butte-Glenn	8.0%	31
San Jose	21.4%	41	Citrus	7.9%	32
Ohlone	21.3%	42	Ohlone	7.1%	37
Marin (BA)	21.0%	44	Chabot/Las Positas	6.8%	39
Sonoma	19.6%	46	Santa Barbara	6.5%	40
San Francisco	18.1%	54	Sonoma	4.3%	47
San Mateo	16.9%	56	Gavilan	4.3%	48
Cabrillo	15.5%	60	San Francisco	3.6%	51
Peralta	14.3%	62	Chaffey	2.0%	59
Foothill	13.6%	64	San Jose	1.7%	62
Contra Costa	7.0%	69	West Valley	-0.9%	68
Monterey	5.4%	70	Hartnell	-5.3%	71

## Explanation: Faculty Efficiency is a Factor

Another explanation that has been voiced is that Cabrillo Faculty are less productive than higher paid schools.

A measurement of faculty "efficiency" was calculated. The full time equivalents of full-time and adjuncts was summed to create a FTEF = full time equivalent faculty. FTES, full time equivalent students, was divided by FTEF to create an efficiency measure. This can be thought of as the number of students per faculty. Data is taken from the 2006/2007 year. With last year's and this year's increases in FTES, efficiency will have increased.

In terms of efficiency, Cabrillo is ranked 32<sup>nd</sup>, higher than our salary.

		State
District	FTES/FTEF	Rank
Rio Hondo	49.2	3
Citrus	45.6	6
San Francisco	45.2	7
Foothill-DeAnza	44.2	8
Monterey Peninsula	43.5	9
Santa Barbara	42.2	12
Santa Clarita	41.1	15
San Jose-Evergreen	40.6	17
San Mateo	38.9	21
Sonoma County	37.0	25
Hartnell	36.2	28
Butte	36.0	30
Peralta	35.6	31
Cabrillo	35.6	32
Chabot-Las Positas	34.9	34
Gavilan	34.7	35
West Valley-		
Mission	34.1	39
Ohlone	33.7	40
Chaffey	31.8	47
Contra Costa	31.1	53
Marin	24.1	68

To further test the connection of instructor efficiency to salary, the correlation between salary and efficiency was calculated and is statistically significant. The correlation coefficient was of about the same magnitude as the size regression discussed above. Based on this regression, the predicted salary for HND14 for Cabrillo would be \$87,300 which is almost \$3,000 more than the current salary level.

### Another Factor: Revenue per FTES

Simple correlations calculated between Revenue per FTES and salary were statistically insignificant. However, as we will see below with the multivariate regression, when efficiency is included, Revenue per FTES is statistically related to salaries.

This number reflects how much a college gets paid on average for each full-time (equivalent) student.

In terms of Revenue per student (FTES), Cabrillo ranks 41<sup>st</sup>.

District	<b>Rev/FTES</b>	State Rank
Marin (BA)	\$10,933.02	3
Butte-Glenn	\$7,863.91	11
Hartnell	\$7,141.35	17
Contra Costa	\$6,977.72	18
West Valley	\$6,638.27	22
Gavilan	\$6,465.75	26
San Jose	\$6,438.32	27
Ohlone	\$6,240.28	31
San Mateo	\$6,193.09	33
Peralta	\$6,132.91	38
Cabrillo	\$6,116.78	41
Foothill	\$5,977.26	47
Chabot/Las Positas	\$5,976.80	48
Santa Clarita	\$5,803.62	54
Chaffey	\$5,800.34	55
Santa Barbara	\$5,756.68	58
San Francisco	\$5,581.70	64
Rio Hondo	\$5,563.99	65
Sonoma	\$5,450.06	68
Monterey	\$5,423.84	69
Citrus	\$5,421.45	70

Note: of the ten schools who get less Revenues per Student than Cabrillo, only two have a lower salary as measured by HND14 (Santa Barbara and Chaffey).

## Another Factor: Adjunct Exploitation

The statistical model that is estimated below includes a measure of adjunct exploitation. The metric used is the state provided estimate of percentage of faculty work done by contract faculty (as opposed to adjunct).

According to the state, 65.1% of faculty work is done by full-timers at Cabrillo. This places Cabrillo at 13<sup>th</sup> in the state (which means we exploit adjunct less than most community colleges in the state). The state average is 58.6%.

The model suggests that Cabrillo's above average use of full-timers reduces full-time salaries. Using that salary model, it is estimated that with Cabrillo being 6.5% above average reduces full-time salary by \$2,178. That is, if we exploited adjuncts at the state average rate, the model predicts full-time salaries at Cabrillo would be about two thousand dollars more.

There are some well known complaints of accuracy with the state's number. However, it is the only measure we have.

	% work done	
District	by full-timers	State Rank
West Valley	75.30%	1
Rio Hondo	71.40%	4
San Francisco	68.50%	9
Cabrillo	65.10%	13
San Jose	64.50%	14
Ohlone	64.30%	15
Citrus	64.20%	16
Foothill	63.10%	20
Marin (BA)	62.40%	24
San Mateo	60.40%	30
Peralta	59.10%	34
Santa Barbara	59.00%	36
Monterey	57.90%	40
Chabot/Las Positas	57.70%	41
Hartnell	57.70%	42
Gavilan	56.70%	44
Butte-Glenn	56.30%	45
Santa Clarita	54.50%	51
Contra Costa	52.00%	56
Chaffey	50.40%	61

#### Multivariate Regression Model

With a measure of efficiency statistically significantly correlated to salaries (measured by either HND14 or average paid salary), more advanced models were created and tested.

Variables tested included:

Efficiency (measured by FTES/FTEF) % of FTEF taught by Full-time Faculty Revenues Generated per FTES Size (measured by FTES) Dummy Variable for Multi-college Districts Dummy Variable for "small school" – identifying the smallest 8 schools Hourly Pay Rate of Adjuncts Benefits Spending per FTEF

After various tests, the following model was run:

Salary regressed on: Efficiency % of FTEF taught by Full-time Faculty Revenues per FTES Dummy for small schools

Using HND14 for Salary,  $r^2$  for the model was .35, and all variables were significant. The coefficients estimated with interpretation were:

Efficiency = 571 (for every student increase in efficiency, salary rose by \$571) % FTEF by Full-time = -336 (for every 1% increase in work done by full-time instead of adjunct, salary fell by \$336) Revenue per FTES = 2.42 (for every \$1 increase in Revenue per student, salaries rose by \$2.42) Small School Dummy = -11,140 (the smallest eight schools get paid \$11,140 less)

Using this model, Cabrillo's predicted HND14 is \$85,328. This is \$713 more than Cabrillo's actual HND14. This model puts Cabrillo's HND14 only 1% below a modeled salary.

The model was repeated using actual paid salaries. However, four schools were dropped from the sample because of questionable data. In doing so, results improved. Those schools were: Southwest, Barstow, West Valley, and Peralta. Also, the % FTEF taught by full-time became insignificant when dropping those four schools. The results were similar enough to the results stated above that they are not repeated here.

Using the model on average paid salary, the prediction would be that the average Cabrillo salary should be \$82,025. This is \$3,311 above what the average Cabrillo faculty member is actually paid. This means according to this model, the average Cabrillo faculty is underpaid by 4.2%.

#### Salary Summary

#### HND14

#### Cabrillo's HND14: \$84,615

- State Average: \$87,157 Cabrillo's amount below average: \$2,542 (3.0%)
- Model Predicted HND14: \$85,328 Cabrillo's amount below prediction: \$713 (0.8%)
- Average of Comparison Group: \$87,620 Cabrillo's amount below average: \$3,005 (3.6%)
- 10<sup>th</sup> Highest District: \$94,824 (San Joaquin Delta) Cabrillo's amount below Top Ten: \$10,209 (12%)

#### **Average Salary Paid**

Cabrillo's Average Salary: \$78,714

- State Average: \$80,941 Cabrillo's amount below average: \$2,227 (2.8%)
- Model Predicted Average Salary: \$82,025 Cabrillo's amount below prediction: \$3,311 (4.2%)
- Average of Comparison Group\*: \$82,839 Cabrillo's amount below average: \$4,125 (5.2%) \* Santa Barbara did not provide data. West Valley & Peralta dropped because of questionable data.
- 10<sup>th</sup> Highest District: \$88,531 (South Orange) Cabrillo's amount below Top Ten: \$9,817 (12%)

## Comparing Cabrillo to 10<sup>th</sup> in the UberRanking

The College of the Sequoias is ranked 10<sup>th</sup> in the UberRanking. The UberRanking combines five different locations on the full-time salary schedule. Below is the comparison of each of those five between Cabrillo and the College of the Sequoias

Lowest, Masters Only: Cabrillo: \$51,683 Sequoias: \$53,969 Difference: \$2,286 (4.4%)

Highest, Masters Only: Cabrillo: \$72,802 Sequoias: \$102,296 Difference: \$29,494 (40.5%)

#### Lowest, HND:

Cabrillo: \$58,517 Sequoias: \$60.635 Difference: \$2,478 (4.3%)

#### HND14:

Cabrillo: \$84,615 Sequoias: \$87,933 Difference: \$3,318 (3.9%)

#### Highest, HND:

Cabrillo: \$97,413 Sequoias: \$112,251 Difference: \$14,838 (15.2%)

#### Compilation of State Rankings

Below are the various rankings that have been done. Depending on the data set, the ranking is out of the 70, 71, or 72 community college districts.

51<sup>st</sup> Salary (HND14)

(15<sup>th</sup> 4 years ago)

- 41<sup>st</sup> Salary (UberRank)
- 68<sup>th</sup> Pay Increases on Schedule last 4 years
- 48<sup>th</sup> Average Instructor Pay

(4<sup>th</sup> 4 years ago)

- 71<sup>st</sup> Average Pay Increase last 4 years
- 59<sup>th</sup> 50% ratio
- 57<sup>th</sup> Fraction of Revenues going to Instructional Costs
- 52<sup>nd</sup> Instructional Cost per Student
- 57<sup>th</sup> Spending on Benefits
- 32<sup>th</sup> Instructor Efficiency (FTES/FTEF)
- 17<sup>th</sup> Ending Balance of General Fund
- 41<sup>st</sup> Size based on General Revenues
- 40<sup>th</sup> Size based on FTES
- 41<sup>st</sup> Revenues generated per student
- 37<sup>th</sup> Growth Rate of Revenues
- 60<sup>th</sup> Growth Rate of Expenses
- 10<sup>th</sup> Growth Rate of Revenue in Excess of Expenses
- 13<sup>th</sup> Work done by Full-timers

Cabrillo is above average: Instructor Efficiency (slightly), General Fund ending balance, and Excess of Revenue Growth over Expenses.

Cabrillo is below average in all measures of salary and benefits.

CCFT Salary Study February 11, 2009

CCFT Salary Study February 11, 2009