

## Glossary for Program Review

### Program and Student Success Indicators

**Basic Skills Courses:** (Precollegiate) preparatory courses in reading, writing, computation, or ESL. Units do not apply to the Associate Degree.

**Degree Applicable Courses:** Units apply to the Associate Degree.

**Enrollments (First Census):** An attendance accounting procedure that determines the number of actively enrolled students at a particular point in the term.

**Census** is the Monday closest to the point at which 20% of the class has been completed (Title 5 §58003.1.b). For the primary terms, this date is typically the Monday of the fourth week of a semester based on 20% of 17.5 weeks = 3.5 weeks rounded to four weeks); the number of students enrolled in a class on that date is the enrollment number used in the funding formula. For short-term classes, the census date is calculated individually for each short term pattern.

**Enrollments (Duplicated):** The number of "seats" filled at the institution. Each course enrollment is counted separately.

**Enrollments (End-of-term):** A count of all students receiving a grade.

**Enrollments (Unduplicated):** A student enrollment count based on an individual Student Number or Social Security Number that identifies a student only once in the system.

**Faculty Loads:** The amount of "teaching time" assigned/appropriate to a given instructional class – i.e. lecture or laboratory, to a given semester, or an academic year (2 semesters). It is typically defined in terms of 15 "teaching hours" per week as being equal to one (1) full-time equivalent faculty, a "full faculty load."

Actual faculty loads are governed by negotiated agreements and collective bargaining.

**FTES:** An acronym for a "full-time equivalent student." Each "FTES" equals fifteen credit hours of registration (typically 15 units), whether taken by one or several students. So total FTES for a district or department equals all credit hours enrolled, divided by 15.

FTES is used by the State as the measure for attendance accounting verification. Also, it is a student workload measure that represents 525 class (contact) hours in a full academic year.

**FTEF:** An acronym for "full-time equivalent faculty." Each "FTEF" generally equals 15 units of instructional loading, regardless of whether those units are taught by full- or part-time faculty. All academic employees are considered to be faculty for this purpose including instructors, librarians, and counselors.

Full-Time Equivalent Faculty for instructional faculty is calculated at the course level as a proportion of a full-time teaching load. FTEF is calculated by using the Faculty Load Credit (FLC) assigned to the course. For instance, a course with 3 FLCs translates to 0.20

FTEF since 15 FLCs is considered a full teaching load (3 FLCs/15 LCs=0.20 FTEF). Once FTEF is calculated for a course, it can be combined with FTEF from other courses to determine total FTEF for a department, division, or for the College as a whole.

It is a common expression of the size of the faculty as a whole, but not of their number. For example, For Fall 2008, CSM employed 140 full-time faculty and 368 adjuncts for a total of 508 individuals. The FTEF, however, was approximately 475 for 2007/08 academic year.

**Headcount:** The number of students enrolled. Each student who “comes in the door” counts as one, regardless of the number of units in which that student is enrolled. A headcount may be “duplicated” when a student attends more than one site.

**Persistence:** The percentage of students who enroll in a subsequent term—that is, individual students are tracked across terms. Typically computed fall-to-fall, or sometimes fall-to-spring, or spring-to-fall.

**Projections:** Projections used in program review are not intended as goals or targets, but are advisory, and a legitimate tool for program evaluation and planning.

In non-technical terms, projections have been variously called forecasts, estimates, interpolations, or extrapolations. Although there are technical differences between these terms, projections are illustrative calculations estimating the future based upon certain given assumptions.

As used here, the projections for 2008/09, 2009/10, and 2010/11 are based upon the mean of the prior 3 years' data (2005/06, 2006/07, and 2007/08). The projections for the 6 indicators (Enrollments, WSCH, FTES, LOAD, Retention %, and Success %) are “forecasts” of the “future values” of these indicators—assuming the past 3-year trend continues. In short, if 2005/06 – 2007/08 continues to happen, 2008/09 – 2010/11 will be the result.

However, as is well known, calculations bearing upon the future involve uncertainty. One cannot predict with certainty such human behavior as student enrollment and achievement.

*Technical Note on Projection Methodology Used In CSM Program Review:*

## Linear Trend (TREND(X)) (RMV algorithms)

1. Use all the nonmissing observations in the series to fit the regression line of the form

$$\hat{X}_t = a + bt$$

The least squares estimates are

$$b = \frac{\sum (X_t - \bar{X})(t - \bar{t})}{\sum (t - \bar{t})^2}$$
$$a = \bar{X} - b \bar{t}$$

2. Apply the regression equation to replace the missing values

$$\hat{X}_{i+l} = a + b(i+l)$$

Using College total enrollments, 2005/06 – 2007/08, as an example:

$$\bar{X} = \text{Mean}(58289, 57833, 56172) = 57431.33$$

$$b = \frac{[(58289 - 57431.33) \cdot (2005 - 2006) + (57833 - 57431.33) \cdot (2006 - 2006) + (56172 - 57431.33) \cdot (2007 - 2006)]}{[(2005 - 2006)^2 + (2006 - 2006)^2 + (2007 - 2006)^2]} = -1058.5$$

$$a = 57431.33 - (-1058.5) \cdot 2006 = 2180782$$

$$\text{So } \hat{X}_{2008} = \text{Estimate for Academic Year 2008-09} = 2180782 + (-1058.5) \cdot (2008) = 55314.33$$

**Retention:** The percentage of enrollments with a grade of A, B, C, D, F, CR, NC, I, at end-of-term. (Only excludes W's.)

**Transfer-level:** Transferable to a UC or CSU.

**Success:** The percentage of enrollments with a grade of A, B, C, CR at end-of-term.

**Vocational:** Courses offered in programs defined as "occupational" by the California Community Colleges State Chancellor's Office.

**WSCH.** An acronym for "Weekly Student Contact Hours." (WSCH is pronounced as "wish.") WSCH represents the total hours per week a student attends a particular class. WSCH are used to report apportionment attendance and FTES.

*MMT's Example:*

5 classes x 3 hrs. per week (15 units of registration) x 17.5 (semester length) x 2 semesters (academic year) = 525 class contact hours.

**WSCH/FTEF=LOAD:** (AKA as "Productivity")

Represents the ratio between the faculty's hours of instruction per week ("faculty load") and the weekly hours of enrolled students in his/her sections. It is the total weekly student contact hours (WSCH) divided by the faculty member's load.

The State productivity & efficiency measure for which funding is based is 525 WSCH/FTEF. The higher the number, the more students served by each FTEF, and the lower the cost to the district.

**525:** The 525 number is derived from the efficiency principle that a "typical" community college class enrolls 35 students.

**An example of 525:** One instructor teaches 5 classes of 3 units each, each section enrolling 35 students.

5 (sections) x 3 (units) x 35 students = 525 WSCH/1 FTEF= 525 LOAD

**Another example of 525:** One instructor teaches one section of a 3-unit class.

WSCH: 3 units of 35 students = 105 WSCH.

FTEF: 3 units represents 3 FLCs/15 FLC's = .20 FTEF

Load calculation of WSCH/FTEF: 105/.20= 525

**Examples of LOAD Calculations:**

A faculty member teaching 5 sections of Sociology, each section meeting for 3 hours per week with an average per section enrollment of 30 students, equals 450 WSCH/FTEF.

(5 class sections X 3 hours/week X 30 students = 450 WSCH/FTEF)

A faculty member teaching 3 sections of Biology, each section meeting for 6 hours per week with an average section enrollment of 25 students, would be teaching 450 WSCH/FTEF.

(3 class sections X 6 hours/week X 25 students = 450 WSCH/FTEF)