2017

2 Facilties Plan

Overview

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Facilities Master Plan

In 2016, a Facilities Master Plan update was developed to reflect the College's accomplishments related to site and facilities development since 2012 . The Facilities Plan chapter of this CMP highlights the linkages between the Educational Master Plan and the facilities recommendations and provides an update guide for future development.

The Facilities Plan provides a written and narrative description of how El Camino College will address long-range forecast for enrollment and weekly student contact hours (WSCH), serve changing needs, and position the College to maximize state funding opportunities. It is guided by the College's Educational Master Plan, which serves as the foundation for recommendations regarding facilities. The Facilities Plan provides a road map for future development of the campus, including recommendations for renovation and replacement of facilities, as well as a number of site improvements for the campus.

El Camino College has been involved in several facilities planning efforts, beginning in 1997 with the development of the first Facilities Needs Report. The findings of this report were incorporated into the 2002 Facilities Master Plan, which established the long-range vision for campus development. Since 2002, a series of facilities master plan updates were developed to address changing conditions, priorities and needs of the College.

The most recent Facilities Master Plan was developed and approved in 2012 and served as the basis for a series of campus improvements. In 2016, an update was developed to reflect these improvements and to incorporate more detailed recommendations for the Fine Arts Precinct area of the campus.

Planning Data

Data is the key element that is used to link educational and facilities planning efforts. The Planning Team worked closely with the College to collect the planning data and develop a forecast of future facilities space needs to serve the current and projected programs for the College.

Profile of Current Curriculum

Quantifying space needs begins with an assessment of the current programs of instruction. To create this snapshot, the 2015 fall semester was used to represent the College's current program of instruction. The process included an analysis of key curriculum components and a comparison of those components to statewide standards or averages for community colleges in California.

An analysis of sections and full time equivalent students (FTES) generated a breakdown of ratios for lecture versus laboratory hours and weekly student contact hours (WSCH) produced. The process and the elements were used to create a baseline from which the current program of instruction could be viewed. Characteristics of the current program of instruction, by instructional division, are presented in Figure A.

Figure A: Program of instruction by Instructional Division - Fall 2015

College Division	Sections	WSCH	FTES	LEC WSH	LAB WSH	On-line WSH	Off-Campus WSH	% of Sections	%of WSH
Behavioral & Social Sciences	341	40,530.74	1,399.47	39,073.95	788.91	436.69	231.20	16.12%	14.08%
Business	115	14,670.76	444.59	12,152.36	2,476.09	42.31	-	5.43%	5.10%
Fine Arts	333	33,217.08	1,000.46	22,282.01	10,859.51	75.56	-	15.43%	11.54%
Health Sciences & Athletics	285	32,587.69	873.39	11,755.23	20,759.78	52.69	-	13.47%	11.32%
Humanities	412	54,141.86	1,585.04	46,037.15	8,088.64	96.06	-	19.47%	18.80%
Industry & Technology	202	32,888.73	852.61	11,732.91	13,394.46	54.36	7,706.99	9.55%	11.42%
Mathematical Sciences	265	45,185.85	1412.58	41,072.41	3,979.69	133.75	-	12.52%	15.69%
Natural Sciences	163	34,711.04	1,048.59	18,964.02	15,731.58	15.44	-	7.70%	12.06%
Total	**2,116**	**287,933.74**	**8,616.72**	**203,090.03**	**75,998.65**	**906.86**	**7,938.19**	**100.00%**	**100.00%**

Source: El Camino Community College District, Office of Academic Affairs

Translation of Current Curriculum to State Standards

To create a benchmark comparison with statewide standards and averages, disciplines and programs were coded with the state's Taxonomy of Programs (TOP) code format. The following table provides a view of the College's translated instructional disciplines and key curriculum components via the TOP code designation.

It should be noted that the TOP code format is used throughout the remainder of this document to forecast physical space needs.

Figure B Source (opposite page): El Camino Community College District, Office of Academic Affairs

Figure B: Program of Instruction by TOP Code

TOPS DISCIPLINE	TOP CODE	SECTIONS	WSCH	FTES	LEC WSCH	LAB WSCH	ON-LINE WSCH	OFF-CAMPUS WSCH	% OF SEC-TIONS	% OF WSCH
Academic Strategies	493013	11	1,398.69	20.18	1,398.69	-	-	-	0.52%	0.49%
Accounting	050200	27	5,474.40	156.76	4,497.76	976.64	-	-	1.28%	1.90%
Administrative Of Justice	210500	24	2,169.29	71.36	2,125.41	31.69	12.19	-	1.13%	0.75%
Air Conditioning and Refrig	094600	6	876.31	22.77	453.11	423.21	-	-	0.28%	0.30%
American Studies	220120	3	489.60	14.65	489.60	-	-	-	0.14%	0.17%
Anatomy & Physiology	041000	19	5,860.30	179.99	1,632.70	4,227.60	-	-	0.90%	2.04%
Anthropology	220200	34	3,958.70	146.17	3,624.40	278.80	55.50	-	1.61%	1.37%
Architectural Technology	020100	12	1,473.90	42.95	703.37	770.53	-	-	0.57%	0.51%
Art	100200	96	11,499.93	346.46	6,610.90	4,871.40	17.63	-	4.54%	3.99%
Astronomy	191100	17	2,332.40	70.73	2,135.20	197.20	-	-	0.80%	0.81%
Auto Collision Repair/Painting	094900	6	1,659.28	48.45	413.61	1,245.67	-	-	0.28%	0.58%
Automotive Technology	094800	10	1,832.20	55.55	722.50	1,109.70	-	-	0.47%	0.64%
Biology	040100	29	7,893.80	237.32	3,451.60	4,442.20	-	-	1.37%	2.74%
Business Management	050600	20	2,264.49	70.11	2,250.80	-	13.69	-	0.95%	0.79%
Chemistry	190500	31	8,296.80	249.55	4,564.11	3,732.69	-	-	1.47%	2.88%
Childhood Education	130500	34	3,518.21	130.38	3,377.07	81.71	59.44	-	1.61%	1.22%
Computer Aided Design/Drafting	095300	11	1,284.63	31.65	390.71	880.74	13.18	-	0.52%	0.45%
Computer Information Systems	070200	32	3,463.73	108.26	1,962.55	1,481.30	19.88	-	1.51%	1.20%
Computer Science	070600	21	2,763.25	85.37	1,426.86	1,325.14	11.25	-	0.99%	0.96%
Construction Technology	095200	12	1,493.60	46.14	458.17	1,035.43	-	-	0.57%	0.52%
Cosmetology	300700	11	4,249.18	90.63	755.82	3,493.36	-	-	0.52%	1.48%
Dance	100800	41	2,711.05	91.12	1,268.40	1,407.40	35.25	-	1.94%	0.94%
Earth Sciences	193000	24	3,531.04	109.93	2,261.00	1,254.60	15.44	-	1.13%	1.23%
Economics	220400	18	2,060.90	74.20	2,026.40	-	34.50	-	0.85%	0.72%
Education	080100	1	96.60	1.46	96.60	-	-	-	0.05%	0.03%
Electronics	093400	9	1,405.20	41.88	504.97	900.23	-	-	0.43%	0.49%
Engineering	090100	2	178.00	5.44	178.00	-	-	-	0.09%	0.06%
Engineering Technology	092400	17	1,401.90	42.66	96.60	193.20	-	1,112.10	0.80%	0.49%
English	150100	315	42,800.93	1,273.27	34,829.07	7,891.73	80.13	-	14.89%	14.86%
Environmental Technology	030300	3	239.60	7.03	163.87	75.73	-	-	0.14%	0.08%
Ethnic Studies	220300	7	1,047.20	32.17	1,047.20	-	-	-	0.33%	0.36%
Family Consumer Studies	130100	20	2,056.68	65.35	1,569.89	463.04	23.75	-	0.95%	0.71%
Film/Video	061200	12	1,787.00	51.20	1,465.52	321.48	-	-	0.57%	0.62%
Fire Academy/Emergency Tech	213350	41	9,224.34	198.51	2,077.45	546.75	5.25	6,594.89	1.94%	3.20%
Foreign Languages	110100	67	8,672.30	249.76	8,672.30	-	-	-	3.17%	3.01%
Geography	220600	17	2,291.60	67.33	2,091.00	200.60	-	-	0.80%	0.80%
Health & First Aid	083700	39	4,328.93	146.96	4,163.10	124.20	41.63	-	1.84%	1.50%
History	220500	63	8,372.35	270.51	8,204.20	-	45.75	122.40	2.98%	2.91%
Horticulture	010900	5	373.30	11.33	328.84	44.46	-	-	0.24%	0.13%
Human Development	200300	34	2,834.88	71.21	2,834.88	-	-	-	1.61%	0.98%
Humanities	490300	2	126.69	7.55	119.00	-	7.69	-	0.09%	0.04%
Journalism	060200	13	846.85	28.08	721.69	116.91	8.25	-	0.61%	0.29%
Law/Legal Assistance	140100	21	2,145.55	69.34	2,118.65	18.15	8.75	-	0.99%	0.75%
Library Information Science	160100	2	71.83	1.21	71.83	-	-	-	0.09%	0.02%
Machine Tool Technology	095630	8	1,210.00	37.51	467.31	742.70	-	-	0.38%	0.42%
Manufacturing Technology	095600	1	97.60	2.10	24.40	73.20	-	-	0.05%	0.03%
Mathematics	170100	242	42,244.60	1,321.80	39,467.55	2,654.55	122.50	-	11.44%	14.67%
Medical Assistance	120800	3	411.40	12.63	411.40	-	-	-	0.14%	0.14%
Music	100400	78	5,888.15	180.03	4,000.55	1,864.91	22.69	-	3.69%	2.04%
Nursing	123000	48	7,369.66	107.07	2,367.88	5,001.78	-	-	2.27%	2.56%
Office Administration	051440	8	540.60	16.03	540.60	-	-	-	0.38%	0.19%
Philosophy	150900	24	2,711.50	92.59	2,686.00	-	25.50	-	1.13%	0.94%
Photography	101100	18	1,774.70	51.42	781.36	993.35	-	-	0.85%	0.62%
Physical Education	083500	133	14,103.89	418.50	910.58	13,182.24	11.06	-	6.29%	4.90%
Physical Sciences	190100	1	213.90	6.68	71.30	142.60	-	-	0.05%	0.07%
Physics	190100	20	3,917.90	115.73	2,428.28	1,489.62	-	-	0.95%	1.36%
Political Science	220700	37	4,564.81	164.56	4,399.20	-	56.81	108.80	1.75%	1.59%
Psychology	200100	54	7,083.80	254.12	6,609.60	384.20	90.00	-	2.55%	2.46%
Radiologic Technology	122500	14	1,978.36	53.46	603.10	1,375.27	-	-	0.66%	0.69%
Real Estate Escrow	051100	7	782.00	24.11	782.00	-	-	-	0.33%	0.27%
Recreation	083600	2	248.20	7.54	248.20	-	-	-	0.09%	0.09%
Respiratory Care/Therapy	121000	9	940.30	28.87	447.23	493.07	-	-	0.43%	0.33%
Sign Language/Inter Training	085000	21	2,260.14	70.02	2,108.13	152.01	-	-	0.99%	0.78%
Sociology	220800	30	3,452.19	136.92	3,338.80	44.20	69.19	-	1.42%	1.20%
Special Resource Center	080900	16	946.82	28.36	515.61	431.21	-	-	0.76%	0.33%
Speech Communication	150600	70	7,280.60	219.44	7,142.00	138.60	-	-	3.31%	2.53%
Theatre	100600	18	2,275.65	60.81	1,013.28	1,262.37	-	-	0.85%	0.79%
Tutor Training	493009	2	224.58	4.99	224.58	-	-	-	0.09%	0.08%
Welding	095650	11	2,215.04	48.00	805.75	1,409.29	-	-	0.52%	0.77%
Women's Studies	220110	2	340.00	10.51	340.00	-	-	-	0.09%	0.12%
TOTAL		**2,116**	**287,933.74**	**8,616.72**	**203,090.03**	**75,998.65**	**906.86**	**7,938.19**	**100.00%**	**100.00%**

Curriculum Indicators

Figure C provides a snapshot of key curriculum indicators for the fall 2015 semester of instructional programs. Figure C compares enrollment per class section using the TOP code format for instructional programs. The statewide standard for enrollment per class section is 35 students. Combined with the percentage ratio of overall seats enrolled, the table provides a snapshot of the key TOP code instructional disciplines as they presently exist. The College averages 28 seats per class section for the baseline 2015 fall semester.

Source: El Camino Community College District, Office of Academic Affairs

Figure C: Seat Count Analysis/Comparison by TOP Code – Fall 2015

TOPS DISCIPLINE	TOP CODE	TOTAL SEATS	AVG CLASS SIZE	+/- STATE STANDARD	% ENROLLED SEATS
Academic Strategies	493013	440	28	-21.30%	0.62%
Accounting	050200	1,090	35	-0.42%	1.53%
Administrative Of Justice	210500	794	28	-19.17%	1.11%
Air Conditioning and Refrig	094600	165	21	-40.00%	0.23%
American Studies	220120	135	46	31.43%	0.19%
Anatomy & Physiology	041000	684	34	-2.41%	0.96%
Anthropology	220200	1,480	41	18.40%	2.07%
Architectural Technology	020100	363	22	-38.57%	0.51%
Art	100200	3,144	23	-33.30%	4.41%
Astronomy	191100	695	39	11.76%	0.97%
Auto Collision Repair/Painting	094900	109	16	-54.29%	0.15%
Automotive Technology	094800	211	20	-44.00%	0.30%
Biology	040100	1,021	34	-3.15%	1.43%
Business Management	050600	842	33	-4.86%	1.18%
Chemistry	190500	933	28	-19.45%	1.31%
Childhood Education	130500	1,420	38	8.82%	1.99%
Computer Aided Design/Drafting	095300	258	19	-46.75%	0.36%
Computer Information Systems	070200	789	21	-41.07%	1.11%
Computer Science	070600	454	18	-48.44%	0.64%
Construction Technology	095200	289	18	-47.62%	0.41%
Cosmetology	300700	133	12	-66.49%	0.19%
Dance	100800	1,235	19	-45.16%	1.73%
Earth Sciences	193000	801	30	-13.21%	1.12%
Economics	220400	784	40	13.81%	1.10%
Education	080100	50	42	20.00%	0.07%
Electronics	093400	234	21	-40.63%	0.33%
Engineering	090100	70	32	-10.00%	0.10%
Engineering Technology	092400	448	23	-33.78%	0.63%
English	150100	10,228	29	-16.92%	14.33%
Environmental Technology	030300	89	16	-54.29%	0.12%
Ethnic Studies	220300	299	43	23.67%	0.42%
Family Consumer Studies	130100	706	29	-17.43%	0.99%
Film/Video	061200	456	35	1.19%	0.64%
Fire Academy/Emergency Tech	213350	1,340	26	-24.46%	1.88%
Foreign Languages	110100	2,244	22	-37.23%	3.14%
Geography	220600	666	37	6.55%	0.93%
Health & First Aid	083700	1,628	36	2.34%	2.28%
History	220500	2,763	41	16.73%	3.87%
Horticulture	010900	181	20	-44.00%	0.25%
Human Development	200300	1,035	28	-19.66%	1.45%
Humanities	490300	84	38	8.57%	0.12%
Journalism	060200	463	19	-45.05%	0.65%
Law/Legal Assistance	140100	823	29	-15.78%	1.15%
Library Information Science	160100	60	18	-50.00%	0.08%
Machine Tool Technology	095630	183	22	-37.50%	0.26%
Manufacturing Technology	095600	24	14	-60.00%	0.03%
Mathematics	170100	8,717	34	-3.67%	12.22%
Medical Assistance	120800	120	40	14.29%	0.17%
Music	100400	2,285	21	-41.36%	3.20%
Nursing	123000	728	13	-63.69%	1.02%
Office Administration	051440	210	19	-46.07%	0.29%
Philosophy	150900	1,008	37	5.60%	1.41%
Photography	101100	545	19	-44.76%	0.76%
Physical Education	083500	4,369	25	-27.58%	6.12%
Physical Sciences	190100	30	31	-11.43%	0.04%
Physics	190100	640	30	-13.71%	0.90%
Political Science	220700	1,622	43	22.32%	2.27%
Psychology	200100	2,402	43	23.49%	3.37%
Radiologic Technology	122500	241	16	-54.49%	0.34%
Real Estate Escrow	051100	310	32	-7.35%	0.43%
Recreation	083600	70	35	0.00%	0.10%
Respiratory Care/Therapy	121000	240	16	-53.97%	0.34%
Sign Language/Inter Training	085000	560	25	-28.84%	0.78%
Sociology	220800	1,445	44	25.71%	2.03%
Special Resource Center	080900	331	17	-51.25%	0.46%
Speech Communication	150600	2,112	29	-16.16%	2.96%
Theatre	100600	476	23	-33.97%	0.67%
Tutor Training	493009	230	42	18.57%	0.32%
Welding	095650	228	18	-49.09%	0.32%
Women's Studies	220110	90	50	41.43%	0.13%
TOTAL		**71,352**	**28**	**-18.99%**	**100.00%**

Figure D: WSCH per FTEF Analysis/Comparison – Fall 2015

The state standard used for determining optimal productivity is based on WSCH generated per full-time equivalent faculty (FTEF). The fall 2015 overall average productivity measure of 499 WSCH/FTEF was about 95% efficient when compared to the state standards. ECC currently has an overall average productive measure above 525 WSCH/FTEF.

Figure D provides a summary of the WSCH generated per FTEF by TOP code for the 2015 fall semester.

TOP DISCIPLINE	TOP CODE	WSCH	FTEF	ACTUAL WSCH/FTEF	ADJUSTED WSCH/FTEF	+/- 525 STATE TARGET	% OF TOTAL WSCH
Academic Strategies	493013	1,398.69	1.52	921.54	819.15	56.03%	0.49%
Accounting	050200	5,474.40	8.28	661.39	587.90	11.98%	1.90%
Administrative Of Justice	210500	2,169.29	4.60	472.03	419.58	-20.08%	0.75%
Air Conditioning and Refrig	094600	876.31	1.84	475.02	422.24	-19.57%	0.30%
American Studies	220120	489.60	0.61	797.35	708.75	35.00%	0.17%
Anatomy & Physiology	041000	5,860.30	8.41	697.23	619.76	18.05%	2.04%
Anthropology	220200	3,958.70	6.81	581.39	516.79	-1.56%	1.37%
Architectural Technology	020100	1,473.90	3.39	434.88	386.56	-26.37%	0.51%
Art	100200	11,499.93	27.51	417.97	371.53	-29.23%	3.99%
Astronomy	191100	2,332.40	3.38	690.15	613.47	16.85%	0.81%
Auto Collision Repair/Painting	094900	1,659.28	3.28	506.17	449.93	-14.30%	0.58%
Automotive Technology	094800	1,832.20	4.63	395.73	351.76	-33.00%	0.64%
Biology	040100	7,893.80	11.57	682.32	606.51	15.53%	2.74%
Business Management	050600	2,264.49	4.09	553.18	491.72	-6.34%	0.79%
Chemistry	190500	8,296.80	15.13	548.44	487.50	-7.14%	2.88%
Childhood Education	130500	3,518.21	6.88	511.69	454.84	-13.36%	1.22%
Computer Aided Design/Drafting	095300	1,284.63	2.77	464.05	412.49	-21.43%	0.45%
Computer Information Systems	070200	3,463.73	8.68	398.92	354.60	-32.46%	1.20%
Computer Science	070600	2,763.25	8.02	344.76	306.45	-41.63%	0.96%
Construction Technology	095200	1,493.60	3.43	435.27	386.91	-26.30%	0.52%
Cosmetology	300700	4,249.18	8.68	489.26	434.89	-17.16%	1.48%
Dance	100800	2,711.05	8.71	311.28	276.69	-47.30%	0.94%
Earth Sciences	193000	3,531.04	6.21	568.40	505.24	-3.76%	1.23%
Economics	220400	2,060.90	3.68	559.39	497.23	-5.29%	0.72%
Education	080100	96.60	0.07	1,353.35	1,202.97	129.14%	0.03%
Electronics	093400	1,405.20	3.18	442.54	393.37	-25.07%	0.49%
Engineering	090100	178.00	0.34	519.47	461.75	-12.05%	0.06%
Engineering Technology	092400	1,401.90	3.25	431.80	383.82	-26.89%	0.49%
English	150100	42,800.93	80.17	533.85	474.53	-9.61%	14.86%
Environmental Technology	030300	239.60	0.75	320.61	284.98	-45.72%	0.08%
Ethnic Studies	220300	1,047.20	1.43	730.90	649.69	23.75%	0.36%
Family Consumer Studies	130100	2,056.68	4.18	492.40	437.69	-16.63%	0.71%
Film/Video	061200	1,787.00	2.79	640.65	569.47	8.47%	0.62%
Fire Academy/Emergency Tech	213350	9,224.34	22.60	408.07	362.73	-30.91%	3.20%
Foreign Languages	110100	8,672.30	19.71	439.96	391.08	-25.51%	3.01%
Geography	220600	2,291.60	3.38	678.08	602.74	14.81%	0.80%
Health & First Aid	083700	4,328.93	7.98	542.31	482.05	-8.18%	1.50%
History	220500	8,372.35	12.89	649.28	577.14	9.93%	2.91%
Horticulture	010900	373.30	1.11	337.31	299.83	-42.89%	0.13%
Human Development	200300	2,834.88	4.83	587.38	522.12	-0.55%	0.98%
Humanities	490300	126.69	0.41	309.48	275.09	-47.60%	0.04%
Journalism	060200	846.85	2.88	294.30	261.60	-50.17%	0.29%
Law/Legal Assistance	140100	2,145.55	4.27	503.05	447.16	-14.83%	0.75%
Library Information Science	160100	71.83	0.14	503.13	447.22	-14.81%	0.02%
Machine Tool Technology	095630	1,210.00	2.94	411.95	366.18	-30.25%	0.42%
Manufacturing Technology	095600	97.60	0.22	440.87	391.89	-25.35%	0.03%
Mathematics	170100	42,244.60	73.71	573.08	509.41	-2.97%	14.67%
Medical Assistance	120800	411.40	0.61	669.99	595.55	13.44%	0.14%
Music	100400	5,888.15	15.08	390.54	347.14	-33.88%	2.04%
Nursing	123000	7,369.66	18.81	391.85	348.31	-33.65%	2.56%
Office Administration	051440	540.60	1.64	330.15	293.47	-44.10%	0.19%
Philosophy	150900	2,711.50	4.91	551.98	490.65	-6.54%	0.94%
Photography	101100	1,774.70	4.85	365.85	325.20	-38.06%	0.62%
Physical Education	083500	14,103.89	24.78	569.15	505.91	-3.64%	4.90%
Physical Sciences	190100	213.90	0.34	632.88	562.56	7.15%	0.07%
Physics	190100	3,917.90	6.48	604.88	537.67	2.41%	1.36%
Political Science	220700	4,564.81	7.57	602.77	535.79	2.06%	1.59%
Psychology	200100	7,083.80	11.65	607.91	540.37	2.93%	2.46%
Radiologic Technology	122500	1,978.36	5.75	344.12	305.89	-41.74%	0.69%
Real Estate Escrow	051100	782.00	1.43	545.80	485.16	-7.59%	0.27%
Recreation	083600	248.20	0.41	606.32	538.95	2.66%	0.09%
Respiratory Care/Therapy	121000	940.30	3.16	297.67	264.59	-49.60%	0.33%
Sign Language/Inter Training	085000	2,260.14	5.33	424.00	376.89	-28.21%	0.78%
Sociology	220800	3,452.19	6.29	548.81	487.83	-7.08%	1.20%
Special Resource Center	080900	946.82	2.82	335.17	297.93	-43.25%	0.33%
Speech Communication	150600	7,280.60	14.16	514.13	457.01	-12.95%	2.53%
Theatre	100600	2,275.65	4.32	527.11	468.54	-10.75%	0.79%
Tutor Training	493009	224.58	0.08	2,952.79	2,624.71	399.94%	0.08%
Welding	095650	2,215.04	3.78	585.22	520.20	-0.92%	0.77%
Women's Studies	220110	340.00	0.41	830.57	738.28	40.63%	0.12%
TOTAL		**287,933.74**	**560.00**	**514.16**	**457.03**	**-12.95%**	**100.00%**

Source: El Camino Community College District, Office of Academic Affairs

Space Program

Enrollment and WSCH Forecasts

Long range enrollment and weekly student contact hours (WSCH) forecasts are issued by the California Community Colleges Chancellor's Office (CCCCO) each year and projects enrollment growth for the next 10 years. It includes historical data from the previous years and projects total enrollment and WSCH for the College using an average anticipated growth factor.

These forecasts provide the basis for establishing eligibility for funding of facilities through the capital outlay program and were used as the basis for developing the Facilities Master Plan Space Program. The base year used for this analysis is the fall semester of the 2015-16 academic year.

Table 1: Projected Enrollment

Year	Enrollment	WSCH	Other
2015	**24,522**	**288,361**	**Actual**
2025	**27,273**	**327,687**	**Projected***

** Projections from CCCCO - January 2015*

Space Inventory

The space inventory of facilities is an important tool for planning and managing college campuses. The Facilities Utilization Space Inventory Options Net (FUSION) is a database of all California Community Colleges facilities and includes descriptive and quantifiable data for all buildings and space on campus. This information is essential for developing the annual Five Year Capital Construction Plan, planning for capital outlay construction projects, analyzing space utilization, and projecting future facilities space needs. The CCCCO mandates annual updates of the space inventory for all facilities to reflect changes since the prior submittal.

Existing Building Inventory

Many of the original campus buildings were built in the 1950s and are more than 50 years old. Several of these have been renovated or replaced with new facilities. Recent new construction includes the Humanities Building (2007), the Learning Resource Center expansion (2009), the Math Business Allied Health (MBA) Building (2014), the Center for Applied Technology (CAT) Building (2015), and the Stadium and Athletic Complex (2016). A major reconstruction to the original Math/Computer Science (MCS) Building resulted in the opening of the new Industry Technology Education Center (ITEC) in (2015).

The El Camino College Facilities Space Inventory includes important data used for planning and managing space on a college campus. The space inventory includes descriptive and quantifiable data for all buildings and space on campus and is updated by the college annually to reflect current information.

The spaces within each building are classified according to the CA Community College Space Inventory Handbook. State building guidelines require at least 65% of the gross square footage (GSF) within a building to be assignable to be considered efficient. Assignable square footage (ASF) is defined as space that is dedicated to lecture, laboratory, office and conference, library, media/audio/television or PE use. All other spaces within the buildings (including corridors, stairwells and restrooms), are included in the gross square footage.

Figure E includes a table summarizing the existing building inventory on the El Camino College campus.

The campus currently has a facilities inventory of 837,370 ASF of facility space and approximately 1,250,000 of GSF. An overall assessment of current facilities indicates that the College has a sufficient volume of space to meet current, as well as a majority of future space demands. However, much of this space is inefficient. Many of the classroom buildings are oversized for current class sizes. State building guidelines require at least 65% of the gross square footage within a building to be dedicated to lecture, laboratory, office and conference, library, or media/audio/television use to be considered efficient. Currently, 50% of the buildings on campus have ASF to gross square footage ratios that are below the state building requirements for state funding of new construction.

The college prepares a Five Year Capital Construction Plan each year in order to communicate with the Chancellor's Office (CCCCO) and define the plan for facilities projects in the upcoming years. The CCCCO uses this information to determine facilities funding qualifications through the analysis of how the college is using five key areas of space – lecture, lab, office, library and instructional media. Areas that exhibit capacity load ratios under 100% are considered as qualifying for state supported funding and areas that exceed the 100% ratio do not qualify for state supported funding.

Figure E: Existing Building Report

Bldg #	Building Name	Constr. Year	Total Rooms	Total Stations	Total Room ASF	Total OGSF	% Efficiency
1	ADMINISTRATION	1950	65	620	40,256	50,358	79.9%
2	STUDENT SRVCS CENTER	1950	113	797	34,594	43,475	79.6%
3	LIBRARY	1952	81	362	64,210	72,435	88.6%
4	ART	1955	151	1,165	58,635	112,006	52.3%
6	NATURAL SCIENCES	1952	46	463	21,520	27,648	77.8%
8	MUSIC	1955	90	1,449	44,332	82,366	53.8%
9	HEALTH CENTER	1955	49	398	45,384	65,227	69.6%
10	CHILD DEVELOPMENT CENTER	1992	18		5,903	6,688	88.3%
13	FACILITIES & RECEIVING	1958	40	17	28,607	36,224	79.0%
14	HUMANITIES	2007	111	2,077	52,101	85,644	60.8%
15	I TECH BUILDING	1969	103	1,236	66,972	107,533	62.3%
16	CHEMISTRY	1956	49	540	23,493	33,939	69.2%
17	PHYSICS	1956	13	140	7,453	15,181	49.1%
19	PLANETARIUM	1969	4	77	3,684	3,953	93.2%
20	AUDITORIUM	1967	34	2,164	40,527	53,591	75.6%
21	MENS-GYM	1958	38	238	52,913	97,026	54.5%
23	SOCIAL SCIENCE	1960	37	1,097	22,825	34,081	67.0%
25	COMMUNICATIONS	1962	67	608	21,945	36,950	59.4%
26	BOOKSTORE	1974	66	468	43,732	53,416	81.9%
51	CONSTRUCTION TECH	1982	8	49	5,907	11,143	53.0%
53	CAMPUS POLICE	2000	11		2,528	4,536	55.7%
65	LIFE SCIENCES	1956	17	204	9,158	13,198	69.4%
220	ACTIVITIES CENTER	1950	16	281	22,959	25,875	88.7%
221	LEARNING RESOURCE CENTER	2008	18	158	14,458	21,424	67.5%
222	MBA	2013	169	2,814	75,758	115,000	65.9%
223	FIRE ACADEMY	1970	6	35	3,471	3,853	90.1%
224	CAT BUILDING	2015	26	5	24,045	39,318	61.2%
27 BUILDINGS ON CAMPUS			**1,446**	**17,462**	**837,370**	**1,252,088**	**66.9%**

*Source: El Camino Community College District Facility Building Report 17 Summary 2016, * OGFT refers to overall gross square footage*

The campus currently has a facilities inventory of 837,370 assignable square feet (ASF) of facility space and approximately 1,250,000 of gross square footage (GSF). An overall assessment of current facilities indicates that the College has a sufficient volume of space to meet current, as well as a majority of future space demands. However, much of this space is inefficient. Many of the classroom buildings are oversized for current class sizes.

State building guidelines require at least 65 percent of the gross square footage within a building to be dedicated to lecture, laboratory, office and conference, library, or media/audio/television use to be considered efficient. Currently, 50 percent of the buildings on campus have ASF to gross square footage ratios that are below the state building requirements for state funding of new construction.

Room Use Categories

The spaces within each building are classified according to the California Community Colleges Space Inventory Handbook. Rooms are assigned a space type based on how the room is used the majority of the time. Standard Room Use categories included in the space inventory are listed in Figure F

ASF is defined as space that is assigned to, or available for assignment to an occupant, including every type of space functionally usable by an occupant. All other spaces within the buildings (including corridors, stairwells and restrooms), are included in the gross square footage. State building guidelines require at least 65 percent of the gross square footage within a building to be assignable to be considered efficient.

Figure F: ASF Room Use Categories

Room Use	Lecture	Lab	Office	Library	Instructional Media	Other
Numbers	100s	200s	300s	400s	530s	520, 540–800s
Description	Classrooms Support Spaces	Labs Support Spaces	Offices Support Spaces All offices including administrative and student services	Library Study Tutorial Support Spaces	AV/TV Technology Support Spaces	PE Assembly Food Service Lounge Bookstore Meeting Rooms Data Processing Physical Plant Health Services

Source: Space Inventory Handbook

Space Utilization and Planning Standards

Title 5 of the California Administrative Code prescribes standards for the utilization and planning of educational spaces on public community college campuses. These standards, when applied to the total number of students, or weekly student contact hours, produce total capacity requirements that are expressed in assignable square feet (space available for assignment to occupants excluding circulation, restrooms, etc.).

The Title 5 space standards used to determine both existing and future capacity requirements are listed in the table below. Each component of these standards is applied with an appropriate form of enrollment to produce a total ASF capacity requirement for each category of space. The sum of these categories represents the total building requirements for the College. Figure G lists the prescribed state standards.

Figure G: State Space Standards

Category	Formula	Rates/ Allowances
Classrooms	ASF/Student Station	15
	Station Utilization Rate	66%
	Average hours room/week	53
Labs	ASF/Student Station*	
	Station Utilization Rate	85%
	Average hours room/week	27.5
Offices/ Conference Rooms	ASF per FTEF	140
Library/Learning Resource Center	Base ASF Allowance	3,795
	ASF/1st 3,000 DGE	3.83
	ASF/3,001-9,000 DGE	3.39
	ASF/ > 9,000 DGE	2.94
Instructional Media AV/ TV/ Radio	Base ASF allowance	3,500
	ASF/1st 3,000 DGE	1.50
	ASF/3,001-9,000 DGE	0.75
	ASF / > 9,000 DGE	0.25
* varies per TOPS code		

Source: Title 5 Space Standards

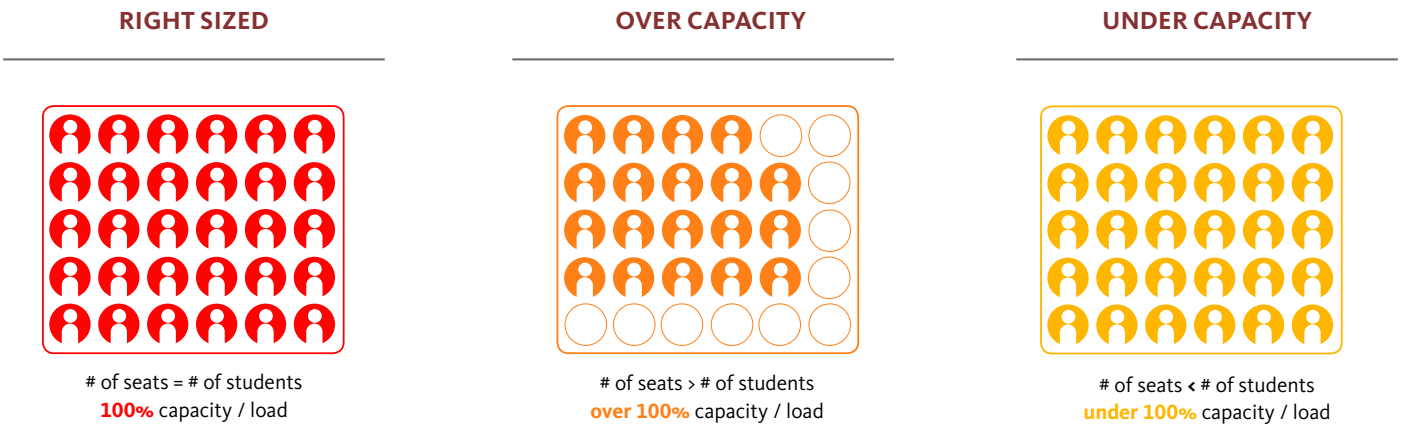
Capacity Load Ratios

Capacity load ratios represent the direct relationship between the amount of space available, by type, which may be used to serve students, and the number of students participating in campus programs. The diagrams in Figure H graphically illustrate the various levels of utilization for capacity load room categories on a campus.

The space type "other" includes a number of spaces on campus that are considered to be non-capacity load categories. These are spaces that are not analyzed by the CCCCO in relation to utilization and efficiency, but are important as part of the College's inventory related to facilities.

- The capacity/load ratio is the measure of the space utilization efficiency according to Title 5 standards.
- Assumed utilization for classrooms is 53 hours per week, utilization for labs varies per discipline.
- Capacity/load ratios are rolled up and measured as an aggregate by room use category.

Figure H: Capacity Load Ratio Diagrams



Five-Year Capital Construction Plan

The College prepares a Five-Year Capital Construction Plan each year in order to communicate with the CCCCO and define the plan for facilities projects in the upcoming years. The CCCCO uses this information to determine facilities funding qualifications through the analysis of how the College is using five key areas of space – lecture, lab, office, library and instructional media. Areas that exhibit capacity load ratios under 100 percent are considered as qualifying for state-supported funding and areas that exceed the 100 percent ratio do not qualify for state-supported funding.

Presently the capacity load ratios for most categories of space on the El Camino College campus exceed 100 percent, indicating a low potential to qualify for state-funded growth projects. However, there are opportunities to qualify for state funding to renovate or replace aging facilities and the College is exploring these opportunities now.

Figure I lists the capacity loads for key space categories using the actual 2015 planning data and the projected 2020 and 2025 forecasts from the CCCCO.

Figure I: Capacity Load Forecasts

Space Type	2015	2025	2025
Lecture	159%	142%	133%
Lab	131%	110%	105%
Office	148%	125%	116%
Library	102%	99%	95%
Instructional Media	53%	55%	73%

Source: Fusion

Projected Space Needs

Using data from the previous tables and calculating formulas for prescribed state space standards, Figure J provides a net analysis of ASF required for all capacity load categories on campus.

The 2016 Inventory column includes the totals by space type as listed in the most recent space inventory. The Forecasted Space Need column lists the projected need based on enrollment and WSCH forecasts from the CCCCO. The Difference listed in the right column highlights the space to be addressed with the implementation of the Facilities Master Plan. A positive number indicates an excess of space and a negative number indicates a need for additional space.

Figure J: 2025 Master Plan Program

Space Type	2015 Inventory	Forecasted Space Need	Difference
Lecture	143,079,395	146,319	-3,240
Lab	203,258	199,320	33,938
Office	117,856	87,865	30,171
Library	67,326	54,279	13,047
Instructional Media	7,983	14,086	-6,103
Top Cap Load Categories	**539,502**	**501,689**	**37,813**

Source: Fusion

Facilities Master Plan

Following the review and analysis of the planning data summarized above, a series of facilities planning priorities were developed and used to guide discussions and lead toward the development of the 2016 Facilities Master Plan Update.

Priorities

Maximize functional Space
- Renovate facilities
- Address program needs

Eliminate Non-Functional Space
- Remove temporary buildings
- Replace aging facilities

Simplify Implementation
- Limit number of moves
- Minimize need for swing space

Improve efficiency/utilization of facilities
- Consolidate related programs
- Create flexible, interdisciplinary space

Right-size the campus to address program needs
- Align the projects space inventory with state guidelines
- Position ECC to maximize funding (state and local)

2016 Facilities Master Plan Update

In the summer of 2016 an updated Facilities Master Plan drawing was developed to reflect the College's accomplishments since 2012. The 2016 Facilities Master Plan Update presents an overall picture of the future developed campus and includes recommendations for renovation and replacement of facilities, and campuswide site improvements.

While drawings in the plan appear specific, the forms are conceptual sketches that highlight the location and purpose of improvements. The final design of each site and facility project will take place as projects are funded and detailed programming and design occurs.

2016 Facilities Master Plan Update

Gensler