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FRAMEWORK FOR FACILITIES RECOMMENDATIONS

OVERVIEW

This EFMP was developed through an integrated process that considered input from many sources including the ideas and aspirations voiced by members of the internal College community, such as faculty, staff, administrators, and students, as well as the ideas and aspirations voiced by residents in the communities that surround the College. These varied sources described a remarkably consistent vision of the qualities desired for Mt. SAC's campus.

This input was used in facilities planning to understand needs, identify objectives, and apply best practices. This chapter describes each of the following five resources that influenced the facilities plan presented in Chapter 10: *Facilities Recommendations* and Chapter 11: *Site and Infrastructure Improvements Recommendations*.

IMPLICATIONS OF THE MASTER PLAN THEMES
Interviews were conducted as primary resources for the development of this EFMP. Approximately 170 faculty, staff, managers, and administrators met twice with members of the master plan consultant team. Chapter 6: *Master Plan Themes* presents a synthesis of this input as well as the Implications for Facilities. A consolidated list of the facilities themes is included in this chapter in the section titled Implications of the Master Plan Themes.

STUDENT FEEDBACK AND COMMUNITY FEEDBACK

Students and members of the public were invited to contribute their recommendations about the factors the College should consider in long-term

planning. These two sections summarize the input gathered at student focus group meetings and public meetings.

PROJECTION OF SPACE NEEDS

Facilities recommendations are also based on data. The first of these two data-informed sources is the College's growth forecast, which is used to estimate the amount of space that would be needed to accommodate the projected enrollment. The second of these data-informed sources is California Code of Regulations Title 5 Educational Space Standards. The findings and methodology for using these two resources are described in this chapter in the section titled Projection of Space Needs.

PROJECTION OF PARKING NEEDS

Mt. SAC's *2017 Parking and Circulation Master Plan* based its estimate of future parking needs on the EFMP's growth forecast, and recommended parking and vehicular circulation improvements that were incorporated into the EFMP. The PCMP's recommendations are summarized in the section titled Projection of Parking Needs.

SUSTAINABILITY OBJECTIVES

In support of Mt. SAC's commitment to environmental sustainability, the EFMP process included objectives to guide planning for this key area. These Sustainability Objectives were used to inform the scope and design of facilities and site improvements.

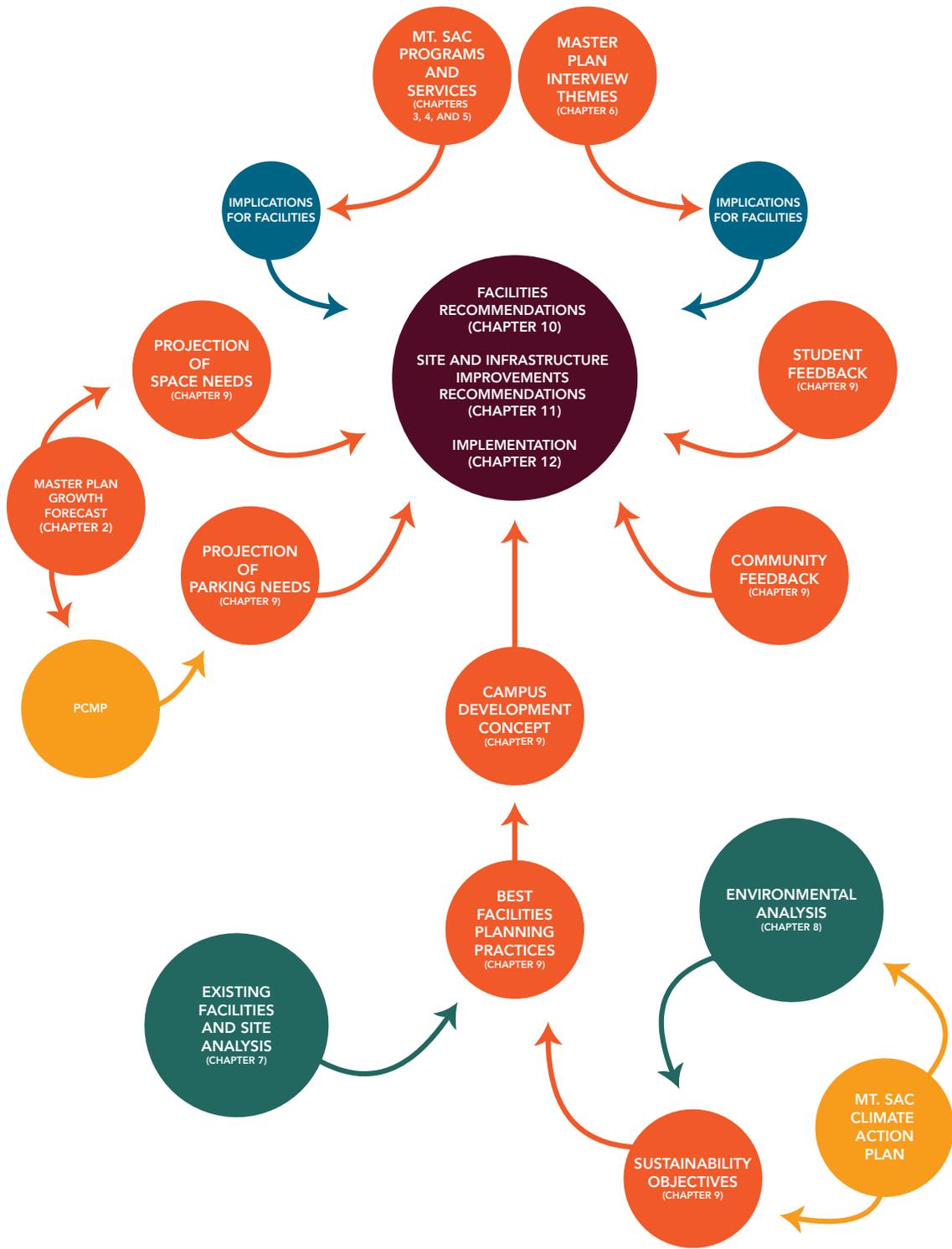
FRAMEWORK FOR FACILITIES RECOMMENDATIONS OVERVIEW (cont.)

BEST FACILITIES PLANNING PRACTICES

The section titled Best Facilities Planning Practices explains a set of best practices recommended by the EFMP Planning Consultant Team, that were reviewed by the Master Plan Steering Task Force and were presented at other College and community meetings to guide the discussion and validation of the EFMP facilities recommendations.

CAMPUS DEVELOPMENT CONCEPT

This section illustrates the development concept that underlies the EFMP's facilities, site, and infrastructure recommendations, while describing the holistic and performance-based approach that it brings to this plan. The concept is intended to guide every aspect of the campus' development by planning for the highest and best use of its land and resources.



SOURCES OF INPUT

9.3

FRAMEWORK FOR FACILITIES RECOMMENDATIONS

IMPLICATIONS OF THE MASTER PLAN THEMES

The interviews with faculty and staff from every College program and service were conducted by teams that included both educational and facilities planners. This approach helped the planners understand the complex relationship between the ways that Mt. SAC's employees teach and work and the physical attributes of the campus environment. Due to their broad participation and comprehensive nature, these interviews are rich and important sources of input for facilities planning.

Interview participants were asked to identify Challenges and Opportunities that they are currently addressing or anticipate addressing in the coming decade, and to describe the facilities they would need to address those Challenges

and Opportunities. Each unit's Challenges and Opportunities and associated Implications for Facilities are included in Chapter 3: *Instructional Programs*, Chapter 4: *Student Services*, and Chapter 5: *Administrative Services and Human Resources*.

The Challenges and Opportunities and Implications for Facilities sections in these three chapters were then analyzed to identify the common programmatic and facilities themes, which are presented in Chapter 6: *Master Plan Themes*. The facilities themes are planning and design ideas that respond to the way that faculty, staff, and administrators see themselves addressing the Challenges and Opportunities they identified. These ideas informed the descriptions



of projects that are documented in Chapter 10: *Facilities Recommendations*. Each project description answers the question: How will this project address the Implications for Facilities of the Challenges and Opportunities described in Chapters 3, 4, 5, and 6?

The following is a consolidated list of the facilities themes associated with the programmatic themes for Instruction, Student Services, Administrative Services, and Human Resources.

INSTRUCTION

Active Learning

- o Space allowing for interaction and project work in classrooms and offices
- o Space that is easy to rearrange
- o Space that allows for variety of instructional methods
- o Library space and laboratories for student research and after-hours independent study
- o Classrooms with multiple display walls
- o Outdoor space for technical demonstrations and performances

Flexible Space

- o Flexibility for both instructional and office space
- o Flexibility in the amount and configuration of space
- o Space for larger group activities, such as film viewing, lectures, and exhibits
- o Space to support College initiatives, such as the Honors Center, Pride Center, Study Abroad, and the Teacher Preparation Institute

More Open Computer Laboratories

- o Increased space for Library, Learning Centers, and open access computer laboratories
- o Inclusion of open access time for students
- o Specific software programs for coursework as well as digital library and information literacy resources
- o Access to printers
- o Instructional laboratories for three-hour blocks that can also be scheduled for open hour use

Appropriate Adjacencies

- o Courses sharing resources located together
- o Space for Counseling, Learning Centers, and independent study close to instruction
- o Easy access to Counseling, Library, and Learning Centers
- o Student resources and support located together
- o Multi-use laboratories and storage shared between/among disciplines

Office/Collaboration Space

- o Office complexes with collaboration space, including office space for adjunct faculty
- o Small group rooms and alcoves
- o Easy access for student and faculty interaction
- o Larger space for professional development
- o Increased computer laboratory space for faculty to work with educational technology tools
- o Space for faculty to innovate pedagogy for online and hybrid classes

FRAMEWORK FOR FACILITIES RECOMMENDATIONS

IMPLICATIONS OF THE MASTER PLAN THEMES (cont.)

Makerspace/Innovation Laboratory

- o Space that is shared between programs and open for all students and community members
- o Common machine shop equipment combined with innovative computer controls and with leading-edge technology such as 3D printers
- o Space that supports research and innovation
- o Space that can be used for hands-on project work

Outdoor Instructional Space

- o Outdoor laboratories
- o Research space
- o Educational signage for plants, geology, and sustainability initiatives

Simulation and Virtual Reality Laboratories

- o Current and future instructional technology
- o Laboratories that mimic industry settings

Storage and Support Space

- o Storage for instruction with easy access, including access from corridor
- o Laboratory storage and support space

STUDENT SERVICES

Add open computer laboratories

- o Increased space for Library, Learning Centers, and open access computer laboratories
- o Inclusion of open access time for students
- o Specific software programs for coursework
- o Access to printers

Active Learning

- o Space allowing for interaction and project work in classrooms and offices
- o Space that is easy to rearrange
- o Ensure access through the use of Universal Design, compliance with Americans with Disabilities Act standards, ergonomic accommodations, and special accommodations such as service animals

Flexible Space

- o Follow an open space, flexible-with-options model to allow for the fluid rotation of staff members and workstations
- o Flexibility in the amount and configuration of space
- o Space for periodically scheduled activities for larger groups, such as film viewing, lectures, and exhibits

Office/Collaboration Space

- o Office complexes with collaboration space
- o Small group rooms and alcoves
- o Easy access for interactions with students through intuitive wayfinding and branding of services

- Options for levels of enclosure/privacy integrated within open interaction space
- Outdoor collaboration space
- Robust and open access to technological tools

Appropriate Adjacencies

- Co-locate Student Services to increase student access to and comprehension of the services
- Space for Counseling, Learning Centers, and independent study close to instruction
- Student resources and support located together

Large Indoor and Outdoor Assembly Spaces

- Space that supports a wide variety of activities, such as orientations, workshops, training, recognition events, and group activities
- Flexible capacities and sizes of space
- Space that could be used by the community

ADMINISTRATIVE SERVICES AND HUMAN RESOURCES

Flexible and Well-equipped Space

- Sufficient and well outfitted space for equipment and work activities
- Flexibility in the amount and configuration of space
- Building utilities and support systems designed with added capacity for future needs

Office/Work/Collaboration Space

- Space to meet with, serve, and train students, faculty, and staff
- More quality office space and workshop space to support increasing staffing
- Office and support space for sustainability-focused staff and operational systems
- New Campus Safety facility

Storage and Support Space

- More secure storage for records, equipment, furniture, and supplies
- More support space for vehicles, vehicle maintenance, and fuel

Appropriate Adjacencies

- Satellite Campus Safety office in the campus core
- Offices for Information Technology and Technical Services staff located near the faculty and staff that they serve

FRAMEWORK FOR FACILITIES RECOMMENDATIONS

STUDENT FEEDBACK

In late spring 2017 Mt. SAC students were invited to share their perceptions of the College's facilities at one of five focus groups. A total of 57 students discussed the following questions.

Students were asked to think about the campus spaces and facilities they use at Mt. SAC, including parking, buildings, and places to learn, study, eat, hang out, relax, and interact with others. They were then asked the following four questions about these types of spaces:

- o What works well about these spaces?
- o What is missing?
- o What needs work?
- o What are the challenges with these spaces?

Their feedback is organized into the following summary of common themes.

THREE TYPES OF SPACE: VERY QUIET, MODERATE NOISE/GROUP WORK, LOUD/SOCIAL SPACE

Students expressed concern about overcrowding and misuse of spaces on campus. In general, the students want to have ample access to three types of spaces: (a) the silent or very quiet space, which would be used for individual/silent studying; (b) a place with moderate noise (like a coffee shop environment, but not like the dining areas which feel too formal) where students can work either in a group or individually; and (c) a recreation space where students are able to hang out between classes without worrying about interrupting students trying to study.

PARKING

Students were concerned with the lack of parking available on campus and the long distances they have to walk once they are able to find parking.

SECURITY/SAFETY

Students also expressed concern about their safety when walking back to their cars late at night. They would like to see more blue emergency lights around campus, along with more readily available security guards to assist in escorting students to their cars.

WIFI

Inconsistent WiFi access and strength was a common concern of focus group participants. They explained that poor WiFi connections made both social and scholastic attempts difficult.

ACCESS TO OUTLETS

Participants explained that they often have trouble finding outlets that are both available and in working condition.

FOOD OPTIONS

Food concerns on campus revolved around a few key concepts: cost, time, and EBT/food stamps. Students explained that the food from Mountie Café was too expensive, while the WOW café had better options, but the food took longer to receive. Students also explained that they often have to walk off-campus to buy food at a retailer that accepts EBT/food stamps.

WATER STATIONS

Students would like to see more water refill stations across campus. They are interested in sustainable options and believe water refill stations will promote this initiative.

COMPUTER ACCESS

Students explained that although there are specialized computer laboratories on campus, they have trouble accessing general computers unless they arrive on campus very early in the morning.

The full report of the Student Focus Groups can be found in the Appendix.

FRAMEWORK FOR FACILITIES RECOMMENDATIONS

COMMUNITY FEEDBACK

In February and March 2017 members of the communities served by Mt. SAC were invited to attend public workshops hosted by members of the Board of Trustees. The workshops introduced the master plan, gathered community feedback, and informed the public about the College's programs and resources. Approximately 90 community members provided feedback during these public workshops.

Each workshop began with a brief presentation about Mt. SAC and an introduction to the master plan project. After the presentation, community members were invited to provide feedback and obtain information at one or more of five stations. Each station featured a different topic:

- o Campus buildings and facilities
- o Transportation and parking
- o Community destinations on campus
- o Educational programs and services
- o General Mt. SAC information

The feedback gathered in these community meetings is organized into the following eight themes that are listed below with sample comments. It is important to note that the comments are based on people's experiences and perceptions, sometimes from many years ago. Their feedback may or may not accurately reflect current conditions on or around the College.

SAFETY

- o Improve lighting and pedestrian-vehicular interface, particularly along Grand Avenue

TOWN/GOWN INTEGRATION

- o Increase connections with neighboring communities, including partnerships with local businesses and invitations to local residents to use College resources

ENERGY EFFICIENCY

- o Modernize campus facilities to reduce Mt. SAC's carbon footprint

SIGNAGE AND WAYFINDING

- o Add prominent gateways or entrances onto campus
- o Add signs to improve internal campus navigation

BUILDING IMPROVEMENTS

- o Add space for career technical education and student life programs
- o Update restrooms across campus

CURRICULUM AND PROGRAMMING

- o Increase support for returning adult students
- o Add job preparation skills, such as interviewing skills

CAMPUS ACCESS

- o Improve pedestrian connectivity to the surrounding residential communities and businesses

PARKING AND TRAFFIC

- o Increase availability and visibility of visitor parking

The full report of the feedback received in the spring 2017 public workshops can be found in the Appendix.

Transportation & Parking

Parking



FRAMEWORK FOR FACILITIES RECOMMENDATIONS

PROJECTION OF SPACE NEEDS

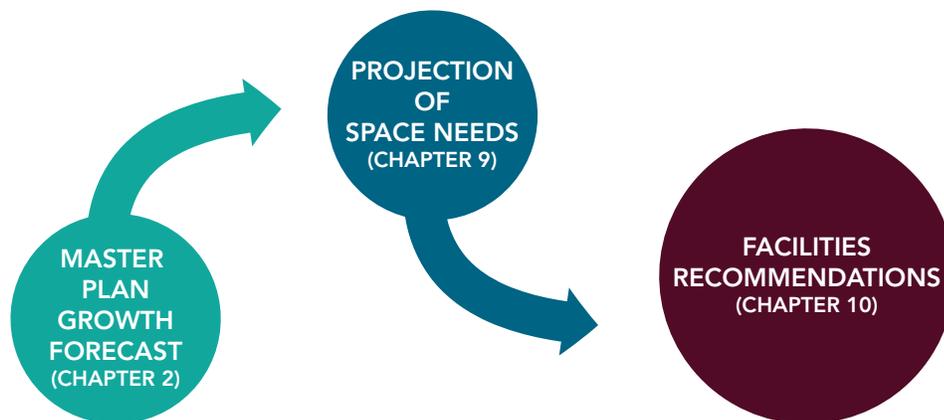
Since the College's mission is to provide higher education opportunities to residents in its communities, College's capacity to serve students must keep pace with population growth in its communities in order to continue to fulfill its mission. The long-range forecast of enrollment connects educational needs and facilities planning, and is the foundation for projecting the amount of assignable space that the College is likely to need during the next decade as well as the capacity of circulation, parking, transportation, and infrastructure systems.

ENROLLMENT GROWTH FORECAST

Mt. SAC's enrollment growth forecast is based on careful consideration of the information in the data portfolio, such as population size and age projections, the economic status of the local region, and historical enrollment trends. High, medium, and low projected growth rates are presented in Chapter 2: *Profile of the College's Communities and Students*.

The analysis in this section translates the enrollment growth forecast into assignable square feet through the application of California Title 5 Educational Code space standards. The projected assignable areas are compared to Mt. SAC's existing inventory of assignable square feet to identify the types of space that may need to be increased.

This quantitative analysis is one of many considerations in facilities planning and does not override the need to plan for the unique needs of programs that are likely to grow in the next decade. This analysis is intended to yield a best guess estimate of the amount of space (square footage) that will be needed in the future. It is not intended to predict space needs in a specified year. Rather, the forecast is predicated upon the College reaching a particular amount of WSCH. Weekly Student Contact Hours (WSCH) is a measure of attendance in an academic program or



institution. It is the number of students multiplied by the number of hours that faculty contacted students weekly. The growth forecast projects that the College will reach 477,813 WSCH in fall semester 2027. However, the College might reach this level earlier or later than fall semester 2027. Whenever this level of WSCH is attained, the following square footages of space may be needed.

ANALYZING SPACE

Space on a California community college campus is analyzed by comparing the amount of space available with the current and projected student headcount. This comparison is a capacity-to-load ratio: what space is available to serve students (capacity) compared to the number of students to be served (load).

Space capacity/load analysis enables an institution to identify the types of space it needs and the types of space it holds in excess. Space capacity/load analysis typically includes the categories of space listed in Table 1 on page 9.14. Generally, the standard for the quantity of space is proportional to student enrollment. While the state provides standards for utilization for more than 60 percent of space types on campus, the capacity estimates for non-state standard spaces are based on a combination of factors, the most important being the specific needs of individual institutions identified through educational master planning discussions.

The upper five types of space listed in Table 1 are the capacity/load categories for which utilization and space standards are set by state regulations.

The line item in Table 1 for space type "Other" includes a number of spaces on campus that are considered to be in non-capacity load categories. The following spaces are not analyzed by the CCCCCO in relation to utilization and efficiency, but are an important part of the College's inventory related to maintenance and operations.

- o Physical Education (Teaching Gym)
- o Clinic/Demonstration
- o Assembly/Exhibition
- o Food Facilities
- o Lounge
- o Merchandise Facilities (Bookstore)
- o Recreation
- o Meeting Rooms
- o Locker Rooms
- o Data Processing
- o Physical Plant/Facilities
- o Health Services

FRAMEWORK FOR FACILITIES RECOMMENDATIONS

PROJECTION OF SPACE NEEDS (cont.)

SPACE UTILIZATION AND PLANNING

To determine the amount of space required to support the programmatic needs of a campus, the enrollment and program forecasts are applied to a set of standards for each type of space.

The required utilization and space standards for classroom, laboratory, office, library, and audio-visual are contained in the California Code of Regulations, Title 5, Chapter 8, Section 57020–57032. These standards refer to the Board of Governors of the California Community Colleges

Policy on Utilization and Space Standards dated September 2010.

These space standards, when applied to the total weekly student contact hours (WSCH), produce total capacity requirements that are expressed in assignable square feet (allocated on a per student or per faculty member basis). The space standards and formulas used to determine both existing and future capacity requirements are summarized in Tables 2 and 3 on pages 9.16 and 9.17, respectively.

TABLE 1: ROOM USE CATEGORIES

Space Type	Room Use Numbers	Description
Lecture	100s	Classrooms and support spaces
Laboratories	200s	Laboratories and support spaces
Offices/Conference Room	300s	Offices and support spaces; all offices, including administrative and student services
Library/LRC Study/Tutorial	400s	Library, study and tutorial, and support spaces
Instructional Media AV/TV	530s	AV/TV; Technology and support spaces
Other	520, 540 to 800s	PE, Assembly, Food Service, Lounge, Bookstore, Meeting Rooms, Data Processing, Physical Plant, Health Services

Source: California Community Colleges Chancellor's Office Space Inventory Handbook

Table 2, on page 9.16, is applied to a campus with less than 140,000 WSCH. Table 3 is applied to a campus for 140,000 or more WSCH, such as the Mt. SAC campus.

The standards for teaching laboratories are measured in both assignable square feet per student station and in assignable square feet per 100 WSCH generated. Table 4, on pages 9.18 and 9.19, summarizes these standards.

Each component of these standards is applied to projected enrollment to produce a total assignable square foot (ASF) capacity requirement for each category of space. The sum of these areas represents the total building area requirement for the campus.

The space standards are based on the following assumptions.

- o Utilization standards refer to the amount of time rooms and "stations" (such as a desk, laboratory bench, or computer terminal) should be in use. "Utilization" is the amount of time that rooms and stations are actually in use. Utilization standards address utilization on an "hours-per-week" basis
- o Classrooms are available 48 hours per 70-hour week for a campus with less than 140,000 WSCH and 53 hours per 70-hour week for a campus with 140,000 or more WSCH and will be occupied, on average, two-thirds of the time. That occupancy percentage might be achieved by having full classrooms two-thirds of the time and empty classrooms

the remaining time.) Thus, the classroom utilization standard is either 32 or 35 weekly hours of station use depending on the total amount of WSCH. The utilization standards for laboratories are lower than the classroom utilization standards

- o Office space includes academic offices, student services offices, administrative offices, clerical offices, office service rooms, and conference rooms
- o Library and study space includes stacks and staff and reader station space, as well as open computer laboratories that are available most of the time for student use outside of class
- o Areas such as the main lobby, elevators, stairs, walled corridors, most restrooms, and areas accommodating building maintenance services are not deemed usable/assignable

FRAMEWORK FOR FACILITIES RECOMMENDATIONS PROJECTION OF SPACE NEEDS (cont.)

TABLE 2: PRESCRIBED SPACE STANDARDS FOR A CAMPUS WITH LESS THAN 140,000 WSCH

Category	Formula	Rates/ Allowances
Lecture (Classroom)	Assignable Square Feet/Student Station	15
	Station Utilization Rate (occupancy)	66%
	Average hours room/week	48
	Station use/week (hours)	31.68
Laboratory (Teaching Laboratories)	Assignable Square Feet/Student Station	see Table 4
	Station Utilization Rate (occupancy)	85%
	Average hours room/week	27.5
	Station use/work (hours)	23.375
Offices/Conference Room	Assignable Square Feet per Full Time Equivalent instructional staff member	140
Library/LRC/Study	Base Assignable Square Feet Allowance	3,795
	Assignable Square Feet/1st 3,000 DGE*	3.83
	Assignable Square Feet/3001–9,000 DGE	3.39
	Assignable Square Feet/DGE>9,000 DGE	2.94
Instructional Media AV/TV and Radio	Base ASF Allowance	3,500
	Assignable Square Feet/1st 3,000 DGE	1.50
	Assignable Square Feet/3001–9,000 DGE	0.75
	Assignable Square Feet/DGE>9,000 DGE	0.25

Source: Board of Governors of the California Community Colleges, Policy on Utilization and Space Standards, September 2010

*DGE = Day-graded Enrollment

TABLE 3: PRESCRIBED SPACE STANDARDS FOR A CAMPUS WITH 140,000 OR MORE WSCH

Category	Formula	Rates/ Allowances
Lecture (Classroom)	Assignable Square Feet/Student Station	15
	Station Utilization Rate (occupancy)	66%
	Average hours room/week	53
	Station use/week (hours)	34.98
Laboratory (Teaching Laboratories)	Assignable Square Feet/Student Station	see Table 4
	Station Utilization Rate (occupancy)	85%
	Average hours room/week	27.5
	Station use/work (hours)	23.375
Offices/Conference Room	Assignable Square Feet per Full Time Equivalent instructional staff member	140
Library/LRC/Study	Base Assignable Square Feet Allowance	3,795
	Assignable Square Feet/1st 3,000 DGE	3.83
	Assignable Square Feet/3001–9,000 DGE	3.39
	Assignable Square Feet/DGE>9,000 DGE	2.94
Instructional Media AV/TV and Radio	Base Assignable Square Feet Allowance	3,500
	Assignable Square Feet/1st 3,000 DGE	1.50
	Assignable Square Feet/3001–9,000 DGE	0.75
	Assignable Square Feet/DGE>9,000 DGE	0.25

Source: Board of Governors of the California Community Colleges, Policy on Utilization and Space Standards, September 2010

FRAMEWORK FOR FACILITIES RECOMMENDATIONS

PROJECTION OF SPACE NEEDS *(cont.)*

TABLE 4: ASSIGNABLE SQUARE FEET (ASF) FOR LABORATORY SPACE

TOP Code	TOP Code Division	ASF per 100 WSCH	ASF per Station
0100	Agriculture and Natural Resources	492	115
0115	Natural Resources	856	200
0200	Architecture and Environmental Design	257	60
0400	Biological Sciences	235	55
0500	Business and Management	128	30
0600	Media and Communications	214	50
0700	Information Science	171	40
0800	Education	321	75
0936	Printing and Lithography	342	80
0945	Industrial Systems Technology and Maintenance	556	130
0947	Diesel Technology	856	200
0948	Automotive Technology	856	200
0950	Aeronautical and Aviation Technology	749	175
0952	Construction Crafts Technology	749	175
0954	Chemical Technology	556	130
0956	Manufacturing and Industrial Technology	385	90
All other 900s	(Engineering)	321	75
1100	Foreign Language	150	35
1200	Health	214	50
1300	Family and Consumer Sciences	257	60
1400	Law	150	35

TABLE 4: ASSIGNABLE SQUARE FEET (ASF) FOR LABORATORY SPACE (CONT.)

TOP Code	TOP Code Division	ASF per 100 WSCH	ASF per Station
1500	Humanities (Letters)	150	35
1600	Library Science	150	35
1700	Mathematics	150	35
1800	Military Studies	214	50
1900	Physical Sciences	257	60
2000	Psychology	150	35
2100	Public and Protective Services	214	50
2200	Social Sciences	150	35
3000	Commercial Services	214	50
4900	Interdisciplinary Studies	257	60

Source: Board of Governors of the California Community Colleges, Policy on Utilization and Space Standards, September 2010

FRAMEWORK FOR FACILITIES RECOMMENDATIONS

PROJECTION OF SPACE NEEDS (cont.)

SPACE INVENTORY ANALYSIS

The *Mt. SAC Space Inventory Report* was updated in 2016 and used to analyze the utilization and sufficiency of campus space. Table 5 summarizes the total current inventory of assignable area in each of the capacity load categories of space and compares them with current space needs. Current needs were calculated by applying space planning standards for each type of space in the capacity/load categories to the current enrollment. Mt. SAC currently has 725,845 assignable square feet of space in the five capacity load categories as shown in the second column of Table 5. The third column shows the capacity-to-load ratio. The next column shows the amount of space needed based on Title 5 space standards. The final column shows the

net need or surplus of the College's space in each category.

According to Title 5 space standards, the College shows a need for space in four capacity load categories: laboratory, office, library and instructional media; and a surplus of space in one category—classroom (lecture). Based on these standards, the College currently qualifies for an additional 54,563 assignable square feet overall. As previously noted, the application of Title 5 space standards to analyze space needs provides one perspective that should be expanded to consider the unique needs of Mt. SAC's programs and services.

TABLE 5: 2016 SPACE INVENTORY AND TITLE 5 NEEDS

Space Categories	Current Space Inventory	Capacity-to-Load Ratio	Title 5 Space Needs	Current Space Need (Surplus)
Classroom	170,528	129%	132,192	(38, 336)
Laboratory	286,483	91%	314,816	28,333
Office	178,356	85%	209,831	31,475
Library	80,175	76%	105,493	25,318
Instructional Media	10,303	57%	18,075	7,772
Total	725,845		780,408	54,563

Note: All figures are in assignable square feet, except percentages

Source: Mt. San Antonio Community College District Five-Year Capital Construction Plan, California Education Code, Title 5 §57020

FUTURE SPACE NEEDS

This calculation of the College's future space needs is based on the following assumptions about student headcount and Full Time Equivalent Faculty (FTEF) growth.

- o The growth rate of WSCH will be linear and will, on average, be 0.75 percent each year over the next decade.
- o Student headcount will grow at the same rate as WSCH. This implies that the average student load will remain constant over the next ten years. This is important, especially for forecasting library space needs, which are predicated on headcount.
- o FTEF will grow at the same rate as WSCH. This implies that the WSCH per faculty load (FTEF) will remain constant over the next ten years. This is important for forecasting office space, which is predicated on total FTEF.
- o The mix of disciplines generating WSCH in laboratory classes will not change dramatically. Title 5 standards allow different amounts of space for laboratory classes depending on the discipline. For example, diesel mechanic laboratories qualify for 856 assignable square feet per 100 WSCH, while art laboratories qualify for 257 and mathematics laboratories qualify for 150. Refer to Table 4 Assignable Square Feet for Laboratory Space on pages 9.18–9.19

The methodology for projecting future space needs is summarized by the following.

- o The fall 2027 enrollment was projected by applying the annual planned growth rate (compounded annually) to the baseline fall 2015 WSCH.
- o Master plan WSCH projections were applied in combination with appropriate space planning standards to result in a total space requirement in ASF by type of space.
- o The "adjusted inventory" was subtracted from the total space requirements described above to yield the net assignable area (ASF) overage or need by type of space for the fall 2027 master plan horizon.
- o The result, net assignable square footage by type of space, served as the basis for developing facilities options for the EFMP.

FRAMEWORK FOR FACILITIES RECOMMENDATIONS PROJECTION OF SPACE NEEDS (cont.)

Table 6 assumes the completion of three projects described in the Mt. SAC's *Five-Year Capital Construction Plan*. The table adjusts the College's inventory of space to show the remaining space needs after these three projects are completed—Business and Computer Technology Building, Equity Center (temporary), Physical Education Projects: Phase 1 (Athletics Complex East), and Physical Education Projects: Phase 2 (Physical Education Complex).

Table 6 assumes that the projects will be completed as currently designed. Please note that the total square footage of each space type may change somewhat before these buildings are constructed. Some of the capital construction

projects include the removal of existing facilities. The numbers in the table show the net change in space for each project. Space types outside of the five key space categories are not included in this analysis.

In addition to the removal of existing facilities that will be replaced by the four projects shown in Table 6, the EFMP recommends the removal or vacating of space that will be replaced by recommended facilities projects. These are shown under the category of near-term removals in Chapter 10: *Facilities Recommendations*. The last column of Table 6 shows the total amount of space in each capacity load category that would be addressed in aggregate by new and

TABLE 6: 2027 SPACE INVENTORY AND TITLE 5 NEEDS COUNTING PREVIOUSLY PLANNED PROJECTS

Space Type	Current Space	Business and Computer Tech	Equity Center (Temp)	Athletics Complex East (ACE)	Physical Ed Complex	Cumulative Total	2027 Title 5 Space Needs	2027 Net Space Needs (Surplus)
Classroom	170,528	17,884	-	1,461	-	189,873	144,593	(45, 280)
Laboratory	286,483	4,454	-	2,995	2,400	296,332	344,348	48,016
Office	178,356	4,806	1,906	(1,949)	(1,510)	181,609	229,514	47,905
Library	80,175	4,529	3,071		-	87,775	112,721	24,946
AV/TV	10,303	-	-		-	10,303	18,844	8,541
Total	725,845	31,673	4,977	2,507	890	765,892	850,020	84,128

Note: All figures are in assignable square feet

Source: Mt. San Antonio Community College District Five-Year Capital Construction Plan, California Education Code, Title 5 §57020

renovated space provided by the recommended projects. This amount does not include space to accommodate growth that may occur soon after facilities projects are completed. The potential for near-term growth should be assessed and accommodate when individual projects are programmed and designed.

CONCLUSIONS

The following considerations may contribute to the understanding and use of this Space Inventory Analysis.

1. It is not necessary to remove spaces that are shown to be in surplus. The only space category at Mt. SAC showing a surplus is classroom space. One option to reduce this surplus is to convert some of the classroom space to another space category
2. Another tool useful in facilities planning is a space utilization analysis, which would study how the College is currently using its facilities and offer recommendations for maximizing the use of its space
3. Remodeling to optimize existing space may be a better option than new construction, such as creating large lecture halls, align the numbers of large and small classrooms with class sizes, and repurpose underused laboratories
4. The College could increase its productivity by reviewing and revising, as needed, the practices and policies that are the foundation for the development of class schedules, room assignments, and class size limits

PROJECTION OF PARKING NEEDS

The need for a college to provide sufficient parking and transportation-related facilities is important to maintain student, employee, and community access and satisfaction, as demonstrated by the input from stakeholders recorded throughout this chapter. Because parking facilities, especially, can use a significant portion of the campus land area and College resources to build and maintain, it is vital to understand and project future parking needs in a thoughtful manner that considers the characteristics of current usage and facilitates alternative modes of transportation. Mt. SAC has studied its transportation profile and needs in a comprehensive manner through the *2017 Parking and Circulation Master Plan* (PCMP). Information from the PCMP that provides the foundation for the vehicular circulation and parking recommendations in the EFMP is summarized in this section.

PARKING CAPACITY RECOMMENDATION

The PCMP estimates the number of on-campus parking spaces that will be needed in each academic year through 2025–2026, as shown in the table on the adjacent page. It did this by establishing actual usage and demand through a survey that was conducted on March 15, 2017—a day that was deemed to represent baseline conditions (refer to page 7.72 of the Parking section in Chapter 7: *Existing Facilities and Site Analysis*). The projections assume that demand will grow annually by 0.75 percent—a rate that aligns with the midpoint of the EFMP’s enrollment growth forecast range (refer to pages 2.68–2.69 in Chapter 2: *Profile of the College’s Communities and Students*). The projection for academic year 2026–27 was extrapolated using this growth rate.

To be conservative and to help account for campus conditions in the generally busier first three weeks of each semester, the projected need for parking spaces was increased by 5 percent to arrive at the PCMP’s recommended parking capacity for each year.

It should be noted that the relationship between student enrollment and parking demand may not remain static over the next decade and, in fact, Mt. SAC is actively encouraging the use of alternatives to single-driver commuting. One of the most desirable benefits that result from increased use of alternative transportation is a reduced need for parking facilities and the investment of land and funds that they entail. Mt. SAC intends to survey its parking demand periodically to keep apprised of any trends that may indicate a changing transportation profile.

PARKING FACILITIES RECOMMENDATIONS

- o Distributed locations for medium-sized parking structures are recommended (refer to Scheme D in the *2017 Parking and Circulation Master Plan*)
- o Existing parking lots would be reconfigured to improve circulation within these lots and to increase parking capacity
- o Approximately 73 percent of all spaces would be designated as student permit parking, and 15 percent of all spaces would be designated as staff permit parking (these percentages are similar to those in 2017)
- o Staff permit parking spaces would be located on an edge of parking lots, instead of being intermingled with other types

- o Balance the needs of students and staff when locating student permit parking and staff permit parking
- o 35 percent of staff permit spaces would be in the parking structures proposed for Lots S, R, and F
- o Free staff permit parking would no longer be allowed in pay spaces
- o The number of visitor spaces (745) would remain at current levels and near current locations
- o The College wishes to maintain pay parking areas for visitors in both Lots A and B, and would consider including pay parking (along with permit parking) in Lots F, R, and S to serve visitors to the College’s athletic facilities
- o Consider preferred carpool parking distributed in multiple locations closest to the center of campus
- o Consider parking permits that specify location(s) to help reduce congestion and time spent searching for a stall

CAMPUS-WIDE PARKING CAPACITY RECOMMENDATIONS

Academic Year	Growth Rate—0.75% Per Year		Growth Rate—1.22% Per Year	
	Projected Need (Spaces)	Recommended Capacity (Spaces)	Projected Need (Spaces)	Recommended Capacity (Spaces)
2016–2017	8,041	8,443	8,041	8,443
2017–2018	8,101	8,506	8,139	8,546
2018–2019	8,162	8,570	8,238	8,650
2019–2020	8,223	8,634	8,339	8,756
2020–2021	8,285	8,699	8,441	8,863
2021–2022	8,347	8,764	8,544	8,971
2022–2023	8,410	8,830	8,648	9,080
2023–2024	8,473	8,896	8,753	9,191
2024–2025	8,536	8,963	8,860	9,303
2025–2026	8,600	9,030	8,968	9,417
2026–2027	8,665	9,098	9,078	9,532

FRAMEWORK FOR FACILITIES RECOMMENDATIONS

SUSTAINABILITY OBJECTIVES

Mt. SAC's EFMP process contributed to the College's sustainability planning process by analyzing existing environmental conditions and facilitating discussions among sustainability-focused College committees and organizations. These activities informed and built enthusiasm for the creation of Mt. SAC's first *Climate Action Plan*, a requirement for signatory members, such as Mt. SAC, of Second Nature's Climate Commitment Program.

The *2018 Climate Action Plan* was prepared concurrently with the EFMP to help coordinate these two plans. As shown below, the *2018 Climate Action Plan* recommends actions in several areas, and these actions are also integrated into the EFMP facilities recommendations. This was accomplished by planning for facilities with an awareness of sustainability objectives and incorporating appropriate strategies within specific projects and project categories as described in Chapter 10: *Facilities Recommendations* and Chapter 11: *Site and Infrastructure Improvements Recommendations*.

The *Climate Action Plan* focuses on each of the following areas.

FACILITIES-RELATED SOURCES

- o Reduce energy consumption of existing buildings through building efficiencies, adjustment of controls and setpoints, updates to central plant equipment, updates to building HVAC equipment, demand response, and offsetting energy use intensity with renewables
- o Construct new buildings to meet energy use intensity standards of the ARCH 2030 targets
- o Monitor and control energy consumption through a campus-wide energy management system

TRANSPORTATION-RELATED SOURCES

- o Increase availability and convenience of mass transit options by developing an on-campus Transit Center
- o Incentivize commuters to use alternate forms of transportation by providing electric vehicle charging stations, low emission vehicle parking stalls, and carpool parking stalls; continuing bus pass subsidies; developing a Mt. SAC transportation mobile app for students and employees; and providing bike lockers, a bike center, and a bike loan program

INSTITUTIONAL CHANGE

- o Set the goal to achieve net zero greenhouse gas emissions from energy use by 2030
- Follow the California Community College Chancellors Office Energy and Sustainability Policy to reduce energy consumption by a minimum of 15 percent and outperforming statewide energy standards on construction projects
- Develop strategies for energy procurement and production that reduce dependence on the State's electricity grid
- Outperform Title 24 Energy Standards by 10 percent for renovations and 15 percent

- for new construction projects
- Offset energy-use with renewable energy technologies
- Mandate that all buildings will be certified at the gold level through the Leadership in Energy and Environmental Design program or achieve the equivalent level of performance
- o Set a timeframe to achieve net zero greenhouse gas emissions caused by transportation
 - Set target dates to reduce emissions by specific increments
- o Set the goal to achieve net zero greenhouse gas emissions caused by waste by 2030
 - Divert 95 percent of construction waste by 2020
 - Divert 100 percent construction waste by 2030
 - Increase the capacity of on-site recycling centers
 - Coordinate diversion plans with hauling agencies that handle all waste, including food waste, landscape clippings, metal, cardboard, glass, and aluminum
- o Set the goal to achieve net zero greenhouse gas emissions from water use by 2050
 - Replace water intensive landscaping with drought tolerant landscaping, synthetic turf in non-athletic areas, and other non-plant materials
 - Convert to the use of drip or low-flow irrigation systems where irrigation is needed
 - Design buildings to minimize water use
 - Design new building and building addition sites that replace existing landscaping to provide space equal to 75 percent of the square footage of the building's footprint, with water conserving landscaping and/or the installation of water meters and other water conservation measures
 - Provide meters on site wells to allow for monitoring of water usage
 - Treat sewage onsite through a blackwater system
- o Set a goal of carbon neutrality by 2050
 - Offset greenhouse gas emissions through sequestering (tree planting, renewable energy certificates, Green Energy, etc.)
- o Climate Commitment Implementation Committee
 - Continue to provide oversight of the 2018 *Climate Action Plan* process, including monitoring and reporting progress toward

FRAMEWORK FOR FACILITIES RECOMMENDATIONS

SUSTAINABILITY OBJECTIVES (cont.)

milestones to the College and Second Nature

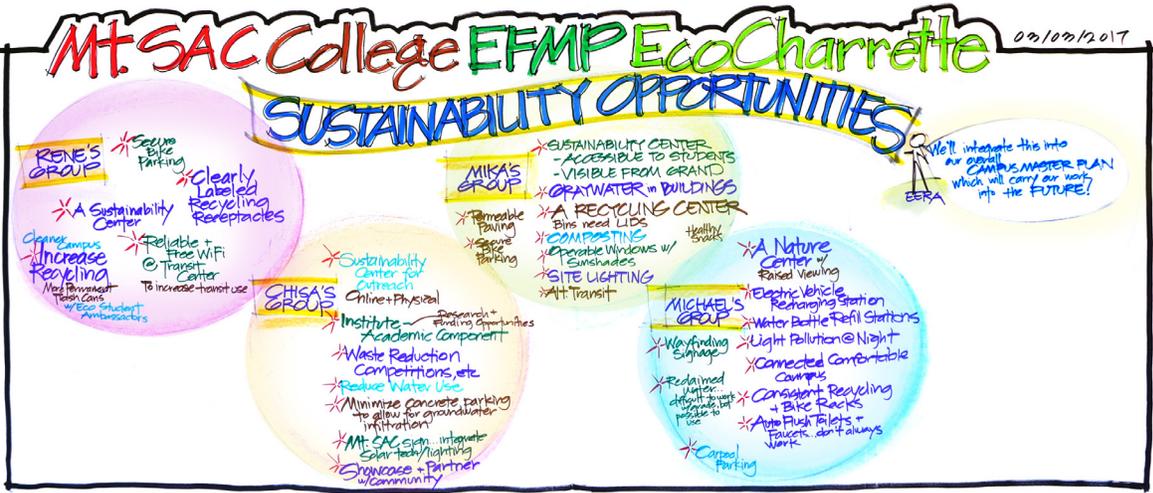
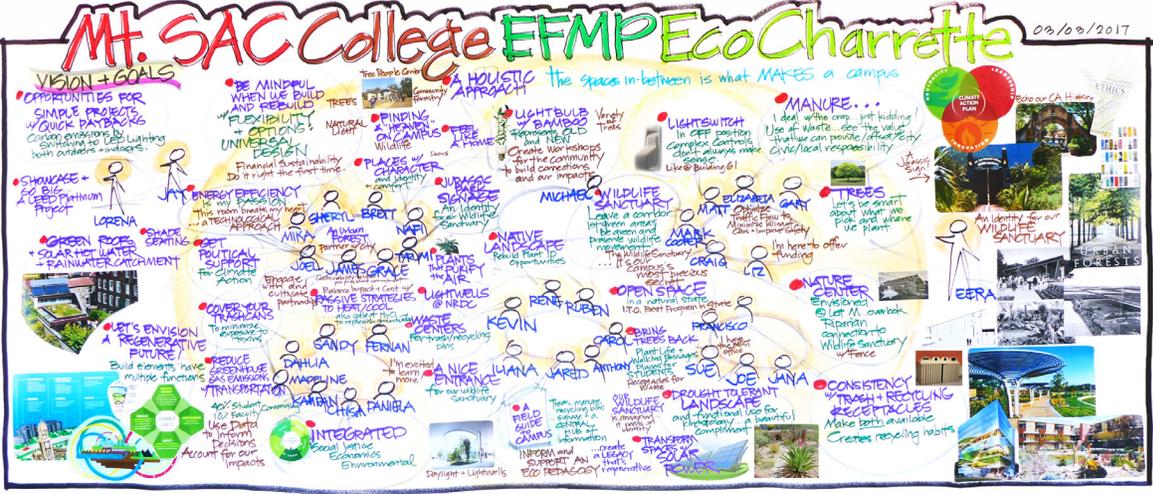
- Incorporate sustainability into efforts and activities on campus and the broader community
 - Establish and maintain channels of communication within the campus community and the broader community, related to sustainability
 - Provide guidance to the Mt. SAC Administration on matters related to sustainability
 - Collaborate with the campus and surrounding community to research and pursue funding that supports sustainability efforts and activities
- o Sustainability Task Force
 - Continue to coordinate with the President's Office regarding sustainability efforts
 - Provide input to the *2018 Climate Action Plan*
 - o Facilities Advisory Committee
 - Provide input in *2018 Climate Action Plan* with regards to sustainable design, maintenance, and operations of the campus buildings, grounds, and infrastructure

ACADEMIC CHANGE AND SUSTAINABILITY RESEARCH

- o Develop "Leaf" designation for classes
- o Institutionalize faculty role by creating a Sustainability Coordinator Position
- o Support sustainability research
- o Integrate sustainability into Professional Development
- o Integrate sustainability into New Faculty Seminar and any adjunct faculty orientation that is developed
- o Fund and appoint a Sustainability Director

COMMUNITY OUTREACH AND OTHER EFFORTS

- o Work with municipal governments and community organizations to build institutions to support further engagement with the broader community in these three areas: education programs, vocational training and research, and project partnerships
- o Coordinate sustainability education and community outreach programs with community entities such as the Energize Colleges program, the Eagles Club, and the USGBC Inland Empire Chapter
- Examples of potential programs include sustainability-themed tours of the Wildlife Sanctuary and the Farm, drought tolerant landscaping tours, park cleanups, and green job training



BEST FACILITIES PLANNING PRACTICES

These best practices are general principles that make sense for planning for facilities at most college campuses. To be effective, they must be applied with an awareness of the unique Challenges and Opportunities facing Mt. SAC's campus. These best practices were recommended by the EFMP Planning Consultant Team to guide the development of facilities planning options and serve as lenses through which the options were evaluated by the Master Plan Steering Task Force and College leadership. Ideally, they will continue to guide ongoing planning and implementation of the EFMP.

MAXIMIZE FUNCTIONAL SPACE AND ELIMINATE NON-FUNCTIONAL SPACE

- o Ensure that spaces are well-equipped and outfitted to support their functions
- o Organize the location and distribution of programs and functions in a logical manner
- o Connect facilities through well-designed links to campus-wide systems and to spaces housing related and supporting functions
- o Remove and replace temporary facilities with permanent facilities in a timely manner
- o Renovate or remove and replace aged and outdated facilities

IMPROVE THE EFFICIENCY/UTILIZATION OF SPACE

- o Align the classroom inventory with class sizes by increasing the proportion of large classrooms and reducing the proportion of small classrooms
- o Assign available space to facilities needs that align with College priorities and goals
- o Build flexible, multi-use, multi-purpose space and space that can be readily reconfigured by occupants
- o Increase the utilization of land by replacing small single-story buildings with multi-story buildings and consolidating open space into usable-sized portions

RIGHT-SIZE THE CAMPUS FOR PROGRAM NEEDS

- o Consider Title 5 space standards as a starting point for right-sizing the campus space inventory
- o Analyze unique program needs in order to right-size specific facilities
- o Develop campus space design standards to accommodate the ways that Mt. SAC intends to teach, work, and deliver services to students

ENHANCE THE CAMPUS LEARNING AND WORKING ENVIRONMENT

- o Create a welcoming, student-focused campus by prioritizing students' needs, comfort, and enjoyment
- o Make every part of the campus a Living Laboratory for intellectual enrichment and environmental sustainability
- o Design the campus to be a healthy, safe, secure, and sustainable place to learn and work during both day and night

PROMOTE SUSTAINABLE FACILITIES DESIGN, CONSTRUCTION, AND OPERATIONS

- o Continue to support alternative transportation modes
- o Continue to develop non-potable water and alternative energy systems
- o Continue to develop and implement storm water management plans
- o Develop building and site design standards that support increasingly stringent reductions of the campus carbon footprint and promote a culture of sustainability awareness

SIMPLIFY IMPLEMENTATION

- o When feasible, plan and schedule projects to eliminate the need for temporary housing
- o Locate projects to minimize disruptions to occupants and the campus
- o Phase and schedule projects to prevent reworking of previously completed work

CONNECT TO THE COMMUNITY

- o Work with community partners to understand their perspectives, increase their use of campus facilities, and mitigate negative impacts such as traffic
- o Inform the community of campus development plans and the reasons why new facilities are needed
- o Create an attractive, well-branded campus presence that is a source of pride in the community
- o Explore the opportunity for a community-oriented development and facilities that can have shared usage with the community

FRAMEWORK FOR FACILITIES RECOMMENDATIONS

CAMPUS DEVELOPMENT CONCEPT

The campus development concept is the organizational framework that underlies the facilities and site improvement recommendations in Chapter 10: *Facilities Recommendations* and Chapter 11: *Site and Infrastructure Improvements Recommendations*. The concept has emerged from a close examination of the campus' unique physical context and existing development; the consideration of its established land use planning; and the discussion and study of the arrangement of buildings, parking, circulation, and open spaces that would best support Mt. SAC's educational objectives and enhance the campus experience.

The campus development concept, shown on the opposing page, focuses outward to strengthen the relationship of the campus with its surrounding community, as well as inward to strengthen the campus' internal organization and connections. The concept is informed by an understanding of the relationships between the physical elements that comprise campus development: buildings, open spaces, parking, and circulation. Buildings define a campus setting by their form and location. They establish the edges of open spaces, which should fluidly connect to comprise the landscape of the campus. Architecture and open spaces should work together on equal footing to develop the campus' character and massing. Open spaces should be designed not only to serve adjacent buildings, but to serve the campus as a whole.

Similarly, parking should be located and designed in a holistic manner—not just serving any one building. In this concept, parking would be strategically distributed, well-connected

to vehicular circulation, and well-connected by primary circulation pathways to campus neighborhoods.

A clear hierarchy within the campus' pedestrian circulation system would be paramount in helping to define campus neighborhoods and providing access across the campus through well-defined and beautiful open spaces. (Source: Polyzoides, Stefanos. "On Campus-Making in America" 1997).



CAMPUS DEVELOPMENT CONCEPT

9.33

FRAMEWORK FOR FACILITIES RECOMMENDATIONS CAMPUS DEVELOPMENT CONCEPT (cont.)

ELEMENTS OF THE DEVELOPMENT CONCEPT

Mt. SAC's challenge for facilities planning is to unify the disjointed development that occurred over many years. Much of the past campus development has resulted in a framework of outdoor spaces that are oriented to specific buildings and networks of circulation routes that lack an organizing principle (refer to the Campus Development History in Chapter 7: *Existing Facilities and Site Analysis*).

If the campus is thought of as being a quilt, it is one that has been pieced together over time without a unifying guide. Refer to the adjacent quilt images that demonstrate the contrast between hierarchical, cohesive, and organized design (top image) and a more scattered, disjointed, and disorganized design (bottom image). The EFMP's campus development concept employs the following elements of a unified pattern that will work as a harmonious design upon completion.

- o Green Gateways
- o Green Corridor
- o Miracle Mile
- o Pedestrian Circulation Hierarchy
- o PCMP Parking Recommendations
- o Open Space Concept
- o Healthy Living Loop

Inspirational Images



GREEN GATEWAYS AND GREEN CORRIDOR

Temple Avenue presents the most significant physical discontinuity and planning challenge for the College. Viewing the campus once again as a quilt draped across its valley setting, Temple Avenue would be a tear, separating the campus into two pieces. But Temple Avenue could also be viewed as an opportunity to achieve many objectives, such as the development of gateways into the campus.

The development of the College's campus is closely tied to the topography of the land that it occupies (see the section titled Campus Geology and Massing, in Chapter 7: *Existing Facilities and Site Analysis*). The academic core comprises buildings and outdoor areas nestled into the sloping terrain of the northern part of campus, connected by paths that—like rivulets of water—make their way downhill along paths of least resistance. Temple Avenue is like a river along the base of the slope, separating the academic core from the Athletics, Support, and Land Management Zones that make good use of the flatter land in the "valley" bottom. Instead of dividing the campus, Temple Avenue could become a unifying feature that, like a river, could collect and link the circulation flows from both sides.

As a well-traveled public roadway through the center of campus, Temple Avenue is also an opportunity to improve the community's impression of the campus by developing strong points of arrival and compelling views of green spaces and beautiful buildings. At either end of Temple Avenue, the campus is currently anchored

by significant green open spaces—the Wildlife Sanctuary and the Farm's grazing pastures. These unique features would be highlighted as Green Gateways that signify arrival to Mt. SAC's campus. The proposed Green Corridor concept (described in Chapter 11: *Site and Infrastructure Improvements Recommendations*) treats Temple Avenue as a corridor within the campus that provides high ecological performance and safe multi-modal circulation along and across the roadway. Working together, the Green Gateways and Green Corridor would provide a strong sense of entry to the campus and a unifying element within the campus.

FRAMEWORK FOR FACILITIES RECOMMENDATIONS

CAMPUS DEVELOPMENT CONCEPT (cont.)

MIRACLE MILE

The topography of Mt. SAC's campus has favored circulation routes that are parallel with the slope of the land, running in the east-west direction. Temple Avenue is one such public circulation route and, within the academic core, the primary pedestrian corridor, Miracle Mile, also follows a strong east-west axis (refer to the section titled Pedestrian Circulation, in Chapter 7: *Existing Facilities and Site Analysis*).

"Miracle Mile," is a reference to the moniker given to Wilshire Boulevard in Los Angeles. Before its development, Wilshire Boulevard was a 20-foot-wide dirt road, passing through agricultural and oil fields. Seeing wealthy residential neighborhoods rising in Beverly Hills to the west, and Hollywood to the north, real estate developer A.W. Ross envisioned the area as a bustling retail district. However, because of its condition and lack of connection to the electric rail line, many were skeptical of Ross's vision. According to the story, as Ross was describing his vision a friend interrupted, "From the way you talk, A.W., one would think this is really a miracle mile." Ross abandoned his original name for the development, Wilshire Boulevard Center, for the much more memorable "Miracle Mile." (Source: "How the Miracle Mile Got Its Name: A Brief History of L.A.'s Unlikely Retail District", Nathan Masters, 4/11/12, KCET. <https://www.kcet.org/shows/lost-la/how-the-miracle-mile-got-its-name-a-brief-history-of-las-unlikely-retail-district>) And thus, Wilshire Boulevard developed from agricultural and oil fields into the city's main hub of high-end department stores, attracting flocks of patrons (see the image on the bottom of the opposing page).

Mt. SAC's pioneers knew of Ross's story and wanted to bring the same visionary spirit of quality and miracles to the College. Over the years, they developed Mt. SAC into a premiere institution that provides quality education to people who never thought they could afford a higher education or succeed at college. Mt. SAC's campus development concept reinforces its Miracle Mile as a cohesive thoroughfare across campus—one that reflects the quality of the education it provides and the miracles that result for students.

PEDESTRIAN CIRCULATION HIERARCHY

Miracle Mile would provide the backbone of the campus' pedestrian circulation network, and also function as a highly social space for interactions and the dissemination of knowledge. As shown in the Campus Development Concept on page 9.33, the campus development concept supports pedestrian circulation throughout the campus with a clear hierarchy of primary, secondary, and tertiary pathways. The hierarchy is intended to facilitate wayfinding and help to unify the campus character through the use of consistent design elements.

Existing Miracle Mile



FRAMEWORK FOR FACILITIES RECOMMENDATIONS

CAMPUS DEVELOPMENT CONCEPT (*cont.*)

PCMP PARKING RECOMMENDATIONS

The Wilshire Boulevard Miracle Mile rose to prosperity with the rise of the personal automobile. Similarly, most people drive their personal vehicles to Mt. SAC, resulting in the need to increase the campus' parking capacity (refer to the section titled Vehicular Circulation and Parking, in Chapter 7: *Existing Facilities and Site Analysis*). The campus development concept reflects the PCMP's recommendation to locate parking structures around the campus core to distribute traffic, facilitate wayfinding, and connect with the pedestrian circulation network. Multiple, medium-sized structures achieve these goals with more efficiency and less visual and traffic impact than a few large structures.

OPEN SPACE CONCEPT

Buildings that serve all students and the community—such as the Library/Learning Resources facility (LLR), Auditorium (AUD), and Student Services North facility (SSN)—are located at the junction of primary vehicular arrival points and the on-campus pedestrian circulation network. The Library/Learning Resources facility and the Auditorium (which would accommodate many public events) are both strategically located for high visibility from outside the campus, while also being easily accessed from within the campus.

Many of Mt. SAC's buildings have ancillary outdoor spaces, such as courtyards and patios, however, the Campus Development Concept graphic on page 9.33 plans for significant open spaces across the campus. Collectively, these large open spaces would support the needs of the wider campus community, in addition to the programs housed

in the adjacent structures. These open spaces would function as living laboratories for social and educational interactions. Like individual squares of a quilt, campus open spaces may vary in function and design, but taken together, they contribute to the overall character of the campus landscape and support the goals of the College.

HEALTHY LIVING LOOP

Revisiting the metaphor used earlier in this section, just as the border of a quilt defines its edges and holds the unique individual pieces together in a unified design, Mt. SAC's perimeter is the College's public face. This perimeter should reflect the unity of the College as a distinct place within its community context. The campus development concept envisions a campus perimeter that defines the College's land area, but is also welcoming to the public.

The Healthy Living Loop (described further in Chapter 11: *Site and Infrastructure Improvements Recommendations*) would be its key feature—one that would facilitate interactions among students, faculty, staff, the community, and the environment. It would provide a route around the campus perimeter where everyone has an opportunity to exercise, learn, and practice the activities of a healthy lifestyle. The welcoming face of the College would be defined not only by its eye-catching buildings and landscaping, but also by this accessible and engaging perimeter amenity.



IMPLEMENTATION

CAMPUS DEVELOPMENT CONCEPT (cont.)

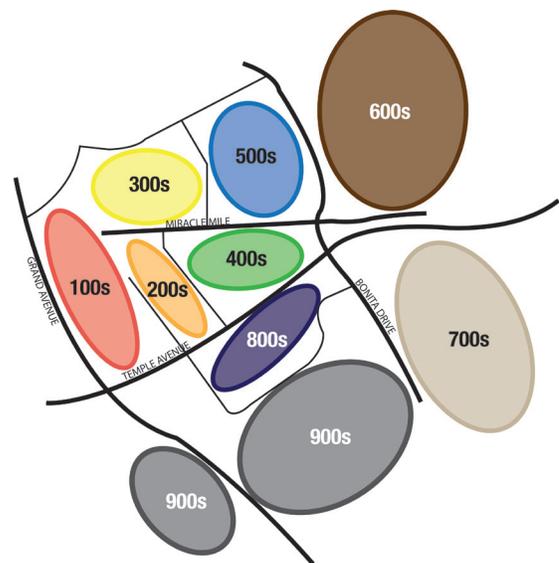
CAMPUS NEIGHBORHOODS

Within Mt. SAC's campus development concept, the campus would be organized into neighborhoods to facilitate wayfinding, helping students and visitors find their destinations. Doing so would address input from College and community stakeholders who have voiced concerns about the difficulty they have often experienced when navigating this large campus.

Establishing a system of neighborhoods would subdivide the campus into manageable areas. It would also help the College to adopt a better numbering system for its buildings. A three-digit building numbering system would help people to find their destinations by first guiding them to the desired neighborhood, and then to the desired facility. This is further examined in the section titled Building Renumbering in Chapter 12: *Implementation*.

The campus would be organized into the nine neighborhoods shown in the Campus Neighborhoods graphic on the opposing page. Neighborhoods are defined, not by function (which could change over time), but by location within the campus' system of vehicular and pedestrian circulation routes. Doing this would align neighborhoods with the campus wayfinding system and pedestrian circulation hierarchy (refer to the Pedestrian Circulation and Pedestrian Circulation Hierarchy sections in Chapter 11: *Site and Infrastructure Improvements Recommendations*).

CAMPUS NEIGHBORHOOD CONCEPT





CAMPUS NEIGHBORHOODS

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CBT AND HMC ARCHITECTS / DRAFT DATED 12.12.18