



SOUTH MOUNTAIN COMMUNITY COLLEGE
MASTER PLAN
MARCH 2003

South Mountain Community College Master Plan

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SMCC Campus 4.2002

Maricopa Community College District Governing Board

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Mr. Ed Contreras	Member
Mr. Gene Eastin	Member
Mrs. Linda Rosenthal	Member
Ms. Nancy Stein	Member

South Mountain Community College Administration

Dr. Ken Atwater	President
Dr. Kay Martens	Dean of Students & Administrative Services
Dr. Ken Roberts	Dean of Instruction

Master Planning Team

LEO A DALY

Greg Mueller	Director of Planning
Tom Dwyer	Director of Operations
Viet Dam	Architectural Designer
Gonzalo Toro	Planner/ Architect
Kasandra Torres	Project Planner
Vince Coffeen	Education Specialist
Brad Graham	Project Programmer

3D/International

Wayne Einbinder	Senior Analyst
Jeff Stevens	Project Manager/Estimator
Keith Kilborn	Project Manager/Estimator

Abell & Associates

James Abell, FAIA, LA	Architect/Landscape Architect
Yash Chaudhry, RA	Architect
John Glenn	Landscape Architecture Designer

SMCC Participants

Ken Atwater	President
John Avalos	Facilities Manager
Stacey Ayers	Ahwatukee Foothills Center
Tony Bracamonte	Student Enrollment Services
Janet Denson	Student Activities
Jim Galbraith	Career/ Tech. Education
Hung Hoang	College Business Services
Tim Keneipp	MCCD/ FP&D
Mike Lewis	Director of Technology
Teresa Leyba	Faculty
Gary Marks	Library Director
Kay Martens	Dean
Raul Monreal	Guadalupe Center Director
Wilma Patterson	Chairperson
Ken Roberts	Dean
Raul Sandoval	President's Office
Jill R. Seymour	Librarian
Pat Smith	MSE Sec/ PSA President
Sue Starrfield	Research
Dzung C. Tran	College Business Services



South Mountain Community College Master Plan

Introduction

Introduction

Executive Summary

In February of 2002, the Maricopa Community College District retained the offices of Leo A Daly and 3D/International to develop a Master Plan for the South Mountain Community College. The following document summarizes the findings of the master plan process.

The primary goal of the master plan is to fulfill a requirement of a bond initiative for all the colleges in the district. Each college must have an approved master plan that cites key development projects that may be included in the measure. In addition, the Master Plan must provide a framework for long-term development of the campus for projects beyond the scope of the measure to allow the campus to grow and respond to its evolving community.

The Master Planning Committee assisted in shaping the direction for future facilities that support college strategic directions. This committee discussed demographic information, enrollment projections, goals and program information that were used to develop the South Mountain Community College Master Plan.

This six month process, with extensive participation from the students, the community college faculty and administration, sought to deal with the critical issues facing the campus. Meetings were held every two weeks. The meetings were started with an overview of the previous meeting followed by a round table discussion over issues of concern. These workshops helped to develop the campus master plan issues, needs, goals and objectives.

The master plan addresses the campus in context with the surrounding community. Furthermore, it emphasizes the campus' importance as a community icon by enhancing entry points and creating a place of distinction to be shared by visitors and residents of the area. In addition to creating an educational resource for the community, the campus is also a link to open space amenities such as the ball fields, tennis courts and the future Western Canal trail system.

The campus is in the center of a thriving community with new housing starts occurring in the general vicinity as well as in Laveen, Ahwatukee and Chandler. The college and its main campus are facing growth issues. The plan focuses on future expansion needs of the existing programs, the replacement and rebuilding of older buildings and future improvements to the expansion of the college's educational centers. The resulting master plan evolved through a series of meetings and discussions as how to best achieve this end.

The plan achieves the primary goal of providing the necessary programmatic space in the quickest time possible and with as little disruptions to the existing services as possible.

College Mission

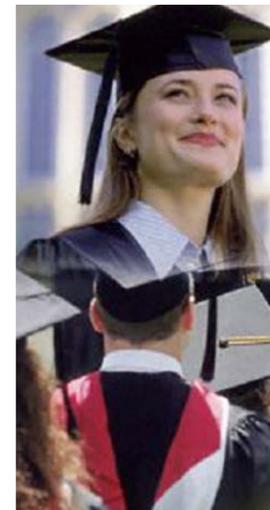
The mission of South Mountain Community College is to provide quality educational opportunities for the growth and development of our diversified population. We respond to the changing needs of our community through transfer, occupational, developmental, and general studies programs and support services. Our college provides the most effective teaching and staff support, facilities, and instructional technology possible with available resources. Our teaching-learning experiences facilitate the total development of our students so that they may become more productive and employable citizens in the global community (*SMCC Fact Book 2000-2001*).

Vision Statement

The vision of South Mountain Community College is to build community through cultural diversity, collaboration, and information technology (*SMCC Fact Book 2000-2001*).

Goals

1. Insure college growth through recruitment
2. Increase student retention
3. Encourage student advancement through graduation, university transfer and job placement



Introduction

Master Plan Goals & Objectives

The long-term goal of the master plan is to create a flexible document that allows for the optimum development of the campus within a framework. The strategy acknowledges the need for continuous change over time. Thus, the permanent elements of the master plan will be determined by the infrastructure.

Long Term Goals

- Creation of a supportive environment for a range of learning and student activities - a student centered campus
- Creation of a landscaped campus that is safe and inviting to the community
- Creation of an environment which supports educational goals and faculty needs
- Creation of a visual link between the campus and the neighboring community
- Creation of outdoor rooms that will serve as places for students to study, meet and enjoy

Short-term objectives

- Resolution of parking needs
- Creation of a state of the art, multi-function Learning Resource Center
- Relocation of Child Care Center
- Relocation and up-grading of Physical Sciences and Life Sciences
- Relocation of Administration Offices
- Create campus identity at entry points through signage and landscaping
- Address campus edges as they relate to the community and canal renovation
- Provide outdoor rooms for gathering and activities
- Increase in classroom space
- Improve campus character and edge conditions.





South Mountain Community College Master Plan

SMCC Main Campus - Context & Site Analysis

SMCC Main Campus - Context & Site Analysis

History

The Maricopa Community Colleges were initiated with one college - Phoenix College, founded in 1920 with 53 students. Today the Maricopa County Community College District is made up of ten regionally accredited colleges, multiple satellite extensions and two skill centers. The Maricopa County Community College District ranks among the nation's largest community college systems and is the largest single provider of higher education in Arizona. It is a major resource for those seeking post-secondary education and job training.

South Mountain Community College (SMCC) was created by the Governing Board on April 16, 1978 and by 1980 had about 499 students; today there are more than 7,300 students year round. This college in the desert is the seventh of the 10 college Maricopa County College district. It was accredited in 1984 with continued accreditation granted in 1989 and 1999.

South Mountain Community College is one of 10 colleges in the Maricopa County Community College District. In 1979, the district's Governing Board approved building the college to provide higher education opportunities to the communities in southern Maricopa County.

Classes were held in area schools and churches while construction was completed on the 98-acre site at 7050 South 24th Street in Phoenix. The college, dedicated in 1980, began offering classes at the new thirteen building campus in 1981.

In 1986-87, two more buildings were added to accommodate growth in student population. The 1994 bond election allotted funding for new construction at the college. A new technology center has been added and performing arts center is nearing completion.



Landmarks

Phoenix has a variety of venues for the performing arts including the Phoenix Symphony Hall, the restored Orpheum Theater and the Dodge Theater. Over the last decade, downtown Phoenix has undergone a transformation by adding the Arizona Science Center, Phoenix Museum of History, Phoenix Art Museum and the Bank One Ball Park. They have revitalized the heart of the Downtown.

Phoenix has a broad range of recreational opportunities, cultural amenities and professional sports that provide its residents with a multitude of options for leisure activities. In addition to professional sports, the area has more than 150 golf courses and 1,200 tennis courts. The City's park system also includes almost 26,000 acres of desert parks and preserves within the City limits.



SMCC Main Campus - Context & Site Analysis

Housing

The City of Phoenix has added a large amount of new housing in the past several years, with about 25,411 new single-family units and 15,376 new multi-family housing units built from 1995 through the end of 1998. The total housing stock now includes over 495,325 units spread over 470 square miles. Close to two thirds of the housing, about 63 percent, is made up of single-family homes and town houses. More than 30 percent of the housing stock has been built in the past 10 years, and more than 50 percent of the new single family homes are in master planned communities. The median sales price of new and resale single family homes in Phoenix ranges from \$60,000 to \$116,000.

The immediate community surrounding SMCC is primarily single family housing with a trailer park (Jade Park) immediately north of the site. Retail uses are located along Baseline Road just south of the site. The I-10 Freeway is located within 5 minutes of the campus while I-17 is located approximately 10 minutes away. Baseline Road, Southern and 24th Street all have major bus routes that serve the campus, as well as buses from A.S.U. serving their students.

Demographics

The City of Phoenix is the largest city in Arizona and the seventh largest city in the nation. The Phoenix economy is vibrant and strong, attracting many new businesses and people making Phoenix an anchor city of 2.8 million people. The city has grown from just over 983,000 residents in 1990 to 1,321,045 residents in 2000 representing a 34 percent increase in ten years according to the U.S. Census bureau.

The city of Phoenix has a young and diverse mix of residents. The median age of Phoenix residents is 32 years, which is significantly below the nation’s median of 35 years. The median household income is \$32,950 in Phoenix. The average household is 2.68 people with about 37 percent of the households having two or more working adults. About 26 percent of the adults have some college education, and an additional 27 percent have completed an associates, bachelors or graduate degree.

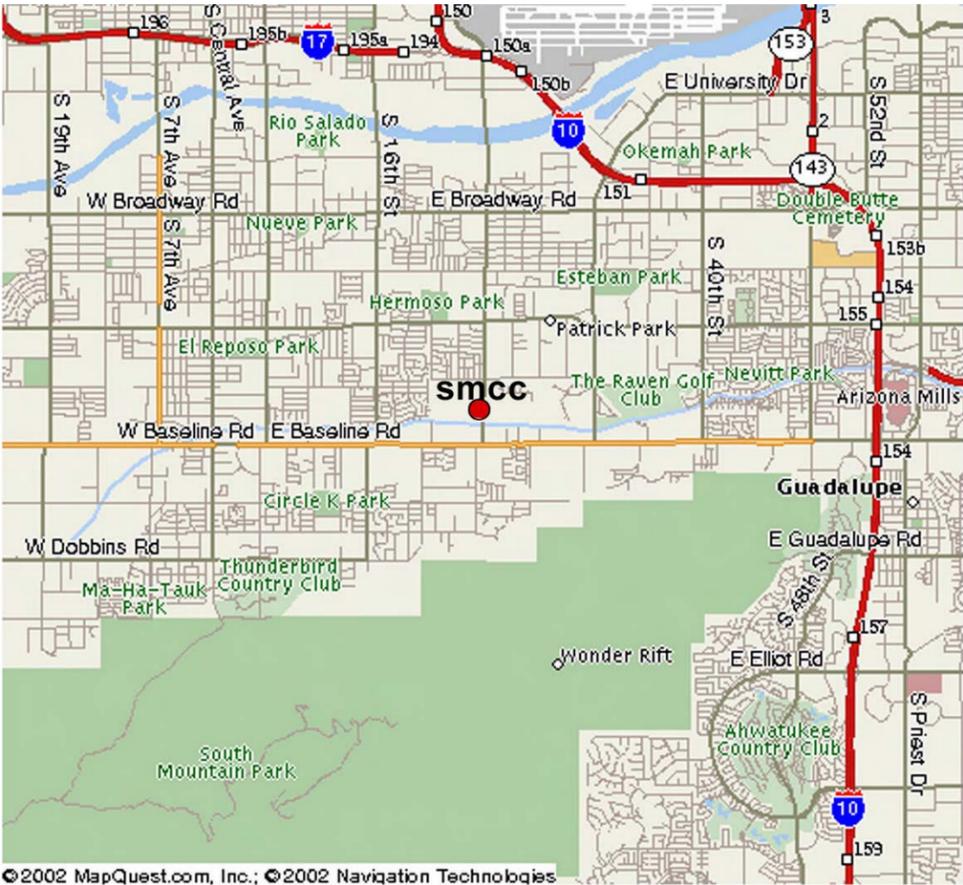
In 2000, 17 percent of residents were at the poverty level. 23 percent of related children under 18 years old were below the poverty level, compared to 12 percent of people 65 years and older. 14 percent of all families, and 32 percent of families with a female householder and no husband present had incomes below the poverty level.

Demographic statistics are important to the planning process for several reasons. Not only do they identify existing conditions, the data can be used to predict future growth and housing conditions, but they can so be used to predict market trends

Phoenix Demographic Profile (Race Ethnicity 2000)

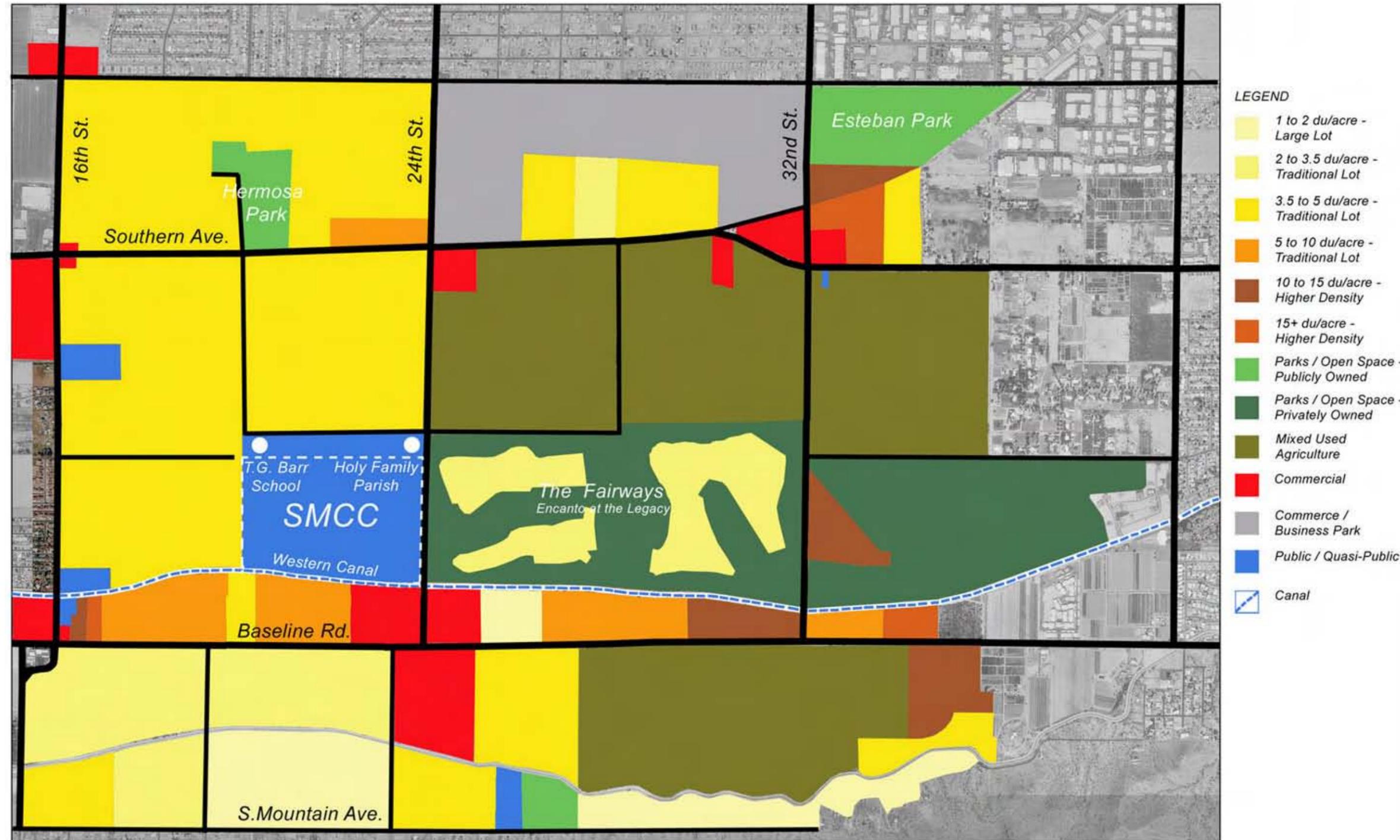
White	938,853	71.1%
Black or African American	67,416	5.1%
American Indian or Alaska native	26,696	2.0%
Asian	26,449	2.0%
Native Hawaiian and other Pacific Islander	1,766	0.1%
Other	216,589	16.4%
Two or more races	43,276	3.3%
Hispanic or Latino	449,972	34.1%

Of the 1,321,045 residents in the Phoenix metro area, 34.1 percent or 449,972 reported a Hispanic or Latino ethnicity. People that identify themselves as Hispanic, Latino or Spanish can be of any race.



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SMCC Main Campus - Context & Site Analysis



Land Use

SMCC Main Campus - Context & Site Analysis



Neighborhood

Natural features dominate the South Mountain area like the agriculture of the citrus groves, plant nurseries, flower gardens and the 17,000 acres of Sonoran desert that makes up South Mountain Park . Each of these contributes to the open feel of the area. The Western Canal traverses the area just south of the site, north of Baseline Road. The city has prepared design guidelines to apply to development of the canals and development adjacent to canals so that new development does not turn it's back on the canals. These guidelines encourages multiple uses of the use of the canal banks. The city and SRP have selected a portion of the canal between 7th street and Central Avenue as a demonstration site, although funding is not yet available for this improvement (Baseline Area Master Plan, City of Phoenix 1998). The Phoenix Rio Salado Project is a plan that will restore the Salt River to this natural state. This project reintroduces a desert habitat within the riverbed. Once restored, the 10 mile river area will support native wildlife, plant life and create a recreational river corridor through central Phoenix.

The character of the area is unusual for property within 15 minutes travel time to the center of the city and to the airport while being adjacent to an incredible recreational source. South Mountain Park is the world's largest municipal park. Hikers, mountain bikers and equestrians traverse its more than 58 miles of trails covering 16,500 acres. Just north of South Mountain is Mystery Castle, a structure built of rock, brick, wood and other salvaged parts.

Historically people from the Valley of the Sun have traveled along Baseline Road to enjoy the fruit and flower stands and to purchase landscape materials. This area is rich in immigrant's cultures and traditions. One of these is the traditions of horticulture from Japan that was started 1918 by Kajuro Kishiyama. Mr. Kishiyama moved to the United States and started farming at the base of South Mountain. He initially relied on vegetable sales, locally and as far away as Los Angeles, to stay above water financially. Over time, however, Kishiyama experimented with flower growing. Before long, he became a successful floriculturist, shipping flowers by bus, train, and air freight to markets in Arizona and throughout the nation.

The Kishiyama's developed a virtual trademark in flower production in Maricopa County when they established the Japanese Flower Gardens near South Mountain. By the 1950s, these growers were shipping 250 boxes of flowers a day to nationwide destinations; the flower gardens became a prominent Phoenix area tourist attraction.

In addition to the farming and horticulture, this area is bounded by South Mountain Park, the largest municipal park in the United States. The Mystery Castle, Boy Scout and Girl Scout Camps, and the Pointe Hilton at South Mountain contribute to the unique atmosphere of the area. Recent projects, such as the Raven Golf Club at South Mountain, Legacy Golf Resort and Thunderbird Country Club at South Mountain, have taken advantage of the locale and contributed to its character by bringing more people to the area.

SMCC has centers in Ahwatukee Foothills, offering instructions at Desert Vista High School, Cesar Chavez High School, South Mountain High School and Mountain Pointe High School. There is also a SMCC Guadalupe Center in the Town of Guadalupe.

SMCC Main Campus - Context & Site Analysis

SMCC Service Area

The SMCC service area encompasses a six mile radius from the main campus at 24th St. and Baseline Road. The boundaries are 35th Ave. on the west, 56th St. on the east; University Drive on the north and Elliott Rd. on the South. This area includes south Phoenix, Laveen and the northern portion of the Ahwatukee foothills. SMCC is an integral part of a culturally diverse neighborhood. South Phoenix is geographically separated from Ahwatukee Foothills, and the two areas diverge demographically. South Mountain is the physical barrier between South Phoenix and the Ahwatukee Foothills. There are rapid changes occurring in the service area, the disappearance of the agricultural landscape of flowers and citrus groves and the rapid conversion to single and multifamily housing developments, high scale development along the base of South Mountain and the creation of small retail centers. Several plan initiatives to preserve open space, create guidelines architectural guidelines, re-develop neighborhoods, re-invest in older neighborhoods, improve transit, create a visually pleasing streetscape, and to create incentives for commercial development can be found in the following:

- South Central Avenue Corridor Study/Neighborhood
- South Phoenix Village Redevelopment Area Plan*
- Southwest Growth Study/Laveen

South Phoenix Villages *(2001: <http://azcentral.com>, Julie Newberg)*

Ahwatukee Foothills Village

Ahwatukee Foothills in the southern portion of the Valley represents the booming growth in planned residential communities in Arizona. Ahwatukee Foothills is known for its family atmosphere and a range of housing options from senior living to townhomes. Attractions close to the community include the South Mountain Park, Arizona Mills shopping center and the Gila River Indian Community.

Guadalupe

Guadalupe is a town that celebrates its rich heritage with an annual Easter celebration of the Pascua Yaqui people who make up a portion of the population. It takes place in a plaza at the center of town that is bordered by Our Lady of Guadalupe Catholic Church and the Yaqui Temple. The town is named for the Virgin of Guadalupe, the patron saint of Mexico. Its main shopping center is the El Tianguis Mercado, where colorful items from Mexico may be found. Guadalupe population is mostly Hispanic and is a close-knit town where families stay for generations.

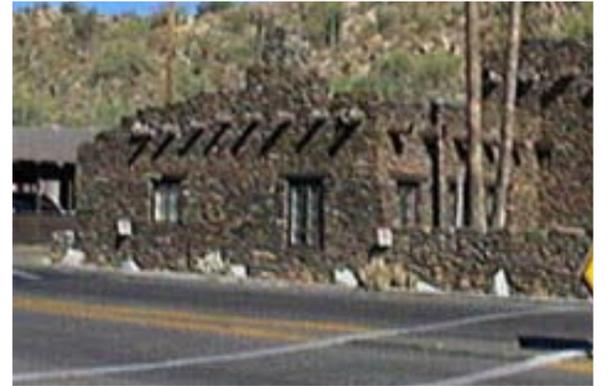
Laveen

Laveen is on the cusp of a population boom as development moves to the West. The town is named for the first postmaster, Walter Laveen. Long an agricultural community growing crops such as cotton and alfalfa, Laveen is increasingly sought out by those who appreciate the small town atmosphere and convenience of living next to a big city. Local landmarks include the Cheatham Dairy that was famous for eschewing tractors for traditional horse-drawn wagons. Events held annually include the Country Challenge Bicycle Tour and the Laveen Community Parade.

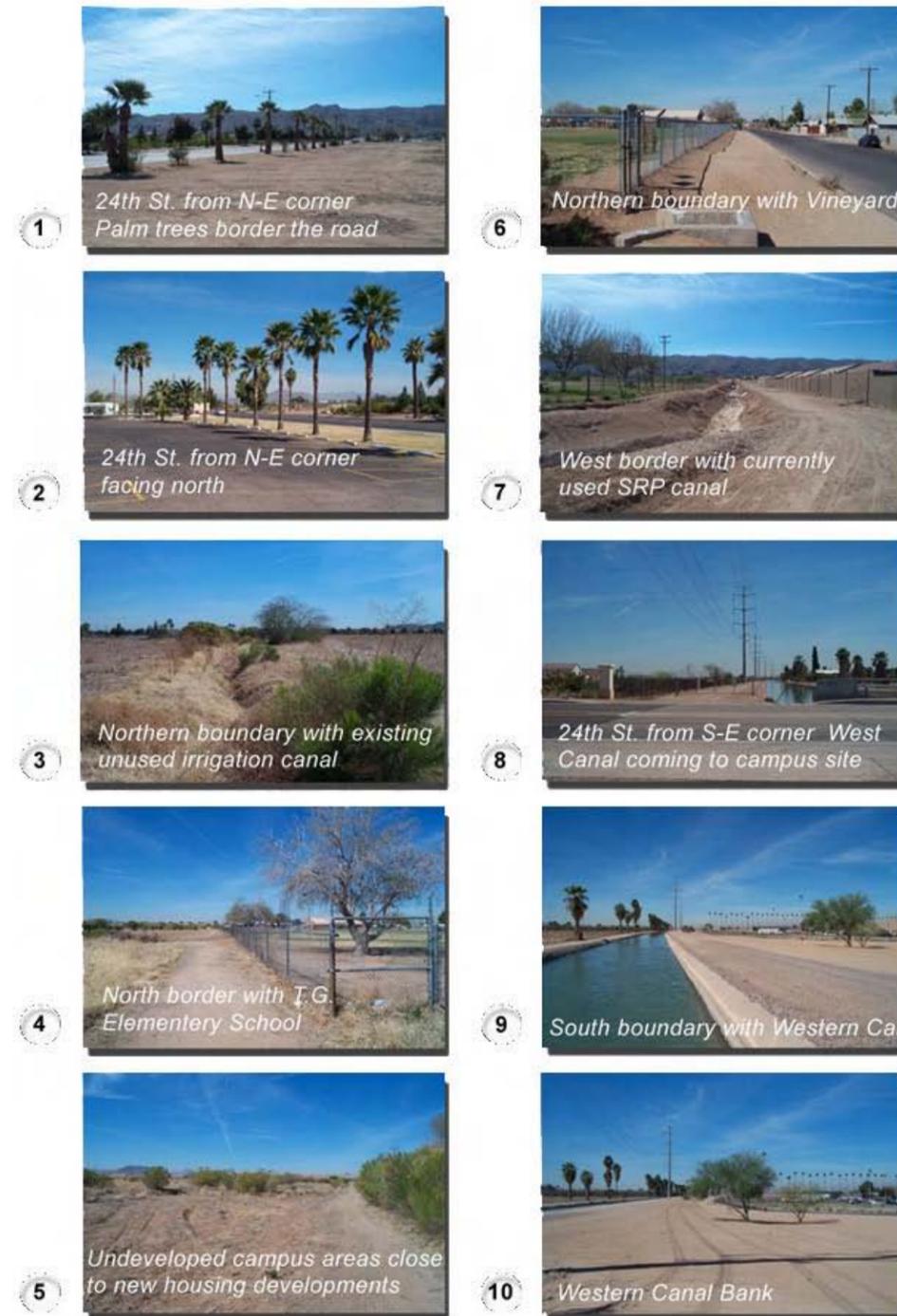
South Mountain Village

South Mountain Village is noted for its diversity. Lifestyles are equally diverse, with farms to the west, industry to the north and numerous residential and recreational areas scattered throughout. The area has become a residential "hot spot" in recent years with homes near South Mountain Park becoming increasingly popular. Homeowners not only have easy access to the park, but also have some of the best views of the Valley from their windows.

The park is the area's most notable feature with miles of hiking trails attracting thousands of hikers throughout the cooler months of the year. An annual Native American fair at the park features jewelry, art, food and cultural demonstrations. The area's future looks brighter as more businesses, resorts and golf courses are built. The new Performing Art Center at South Mountain Community College will become a landmark as it will be the tallest building in South Phoenix.



SMCC Main Campus - Context & Site Analysis



The importance of a site analysis is to understand the existing conditions. The breath and magnitude of the issues are collected and prioritized for the later charette discussions and master plan development. Some of the issues, which are crucial in the forming of a common ground of understanding, are:

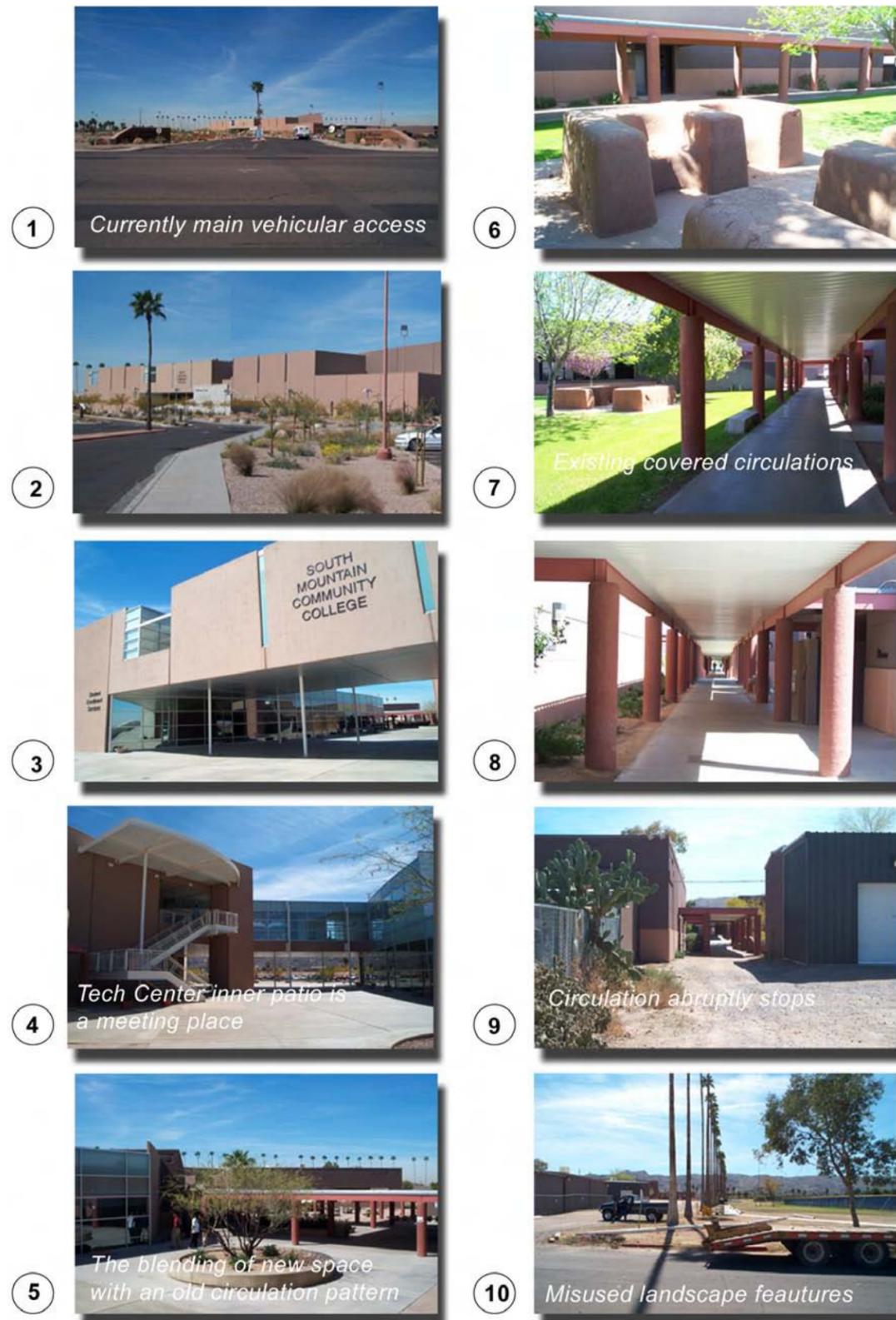
- Edge Conditions
- Campus Environment
- Parking & Vehicular Circulation

Edge Conditions

The images analyze the existing conditions of the campus and outline key concepts that are used to form the master plan.

- Undefined campus edge
- Poor sidewalks and uneven landscape
- Stronger landscape treatment needed along Western Canal
- No pedestrian bridges over Western Canal to link Baseline Road and SMCC
- Existing pedestrian access between T.G. Barr Elementary school and SMCC is a dirt trail
- Undefined southeast corner of campus for passerby
- No visual, pedestrian and architectural links with surrounding community
- Inconsistent landscaping does not reinforce the cohesiveness of the college campus
- Campus is surrounded by residential housing except to the south, where it is bounded by the Western Canal
- Campus needs to engage 24th street

SMCC Main Campus - Context & Site Analysis



Campus Environment

- Main entrance signage, architecture and landscape architecture are not cohesive.
- Campus signage is not clear and visible
- Campus monument sign creates a visual hazard at main entrance
- Covered circulation walkways are efficient, yet lack lighting, signage, and orientation elements
- Backside of campus has several old buildings that must be replaced
- Service road traversing site disrupts pedestrian interaction
- The current service road is an element that creates an artificial boundary around the campus.
- Service road is becoming a parking area to be closer to classrooms. Surrounding parking is under-utilized.

SMCC Main Campus - Context & Site Analysis



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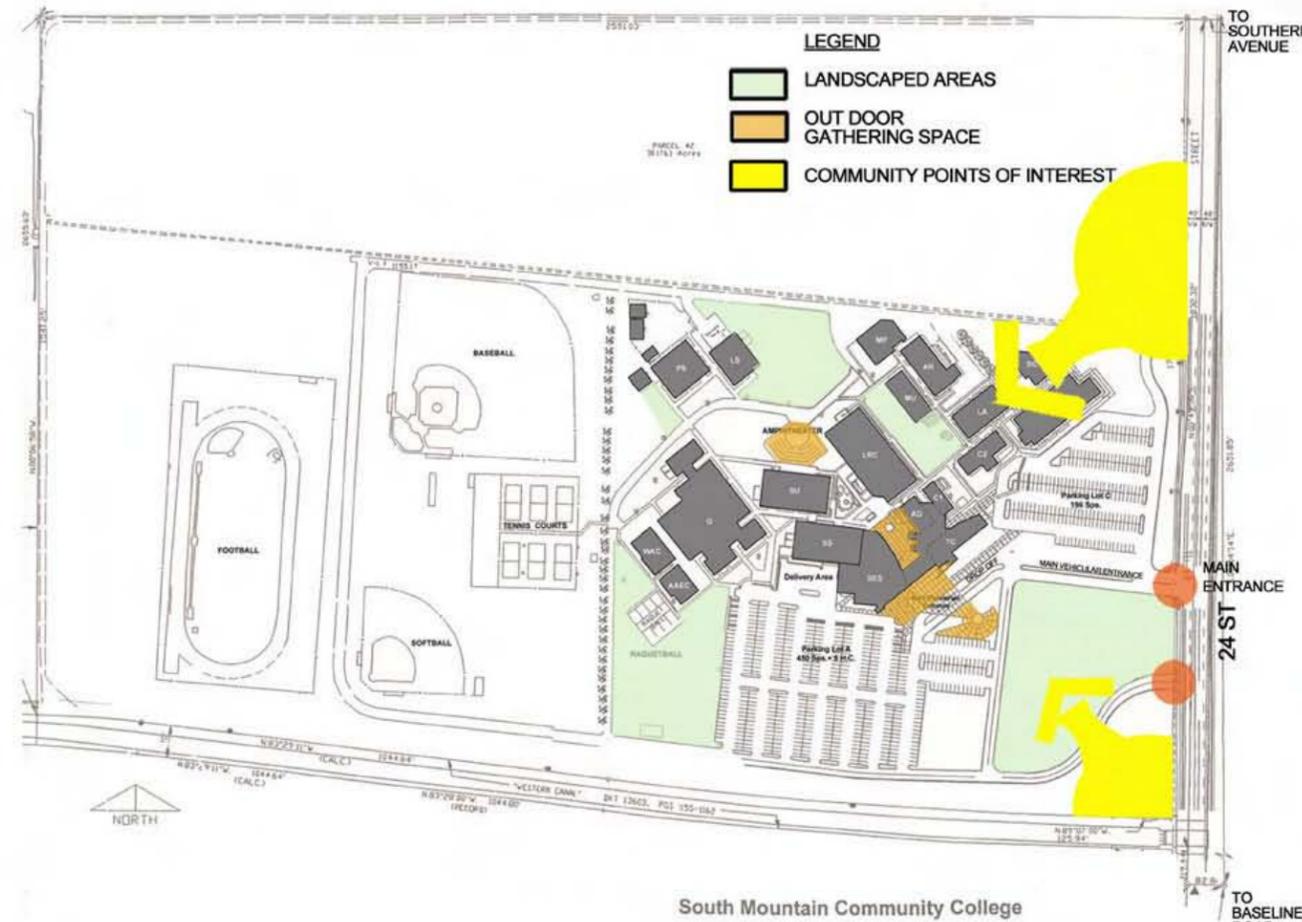
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Campus Environment (cont.)

- The bus drop-off area is insufficient for the growing number of buses and should be relocated
- Student drop off at the main entrance creates hazardous back-ups
- Access drive to east parking is too close to main entry drive. Lack of queuing space is a traffic hazard
- Campus corners and edges are not defined
- Amphitheater needs shaded areas for summer months - year round useable landscaping area
- Outdoor space next to Student Services building is underutilized due to the lack of shade and seating
- Walkways on northern portion of the campus are not a contiguous pathway system
- Walkways abruptly end with no focal point
- Outdoor seating and gathering areas are not conducive to meeting
- Outdoor spaces need shade, possibly internet hook-ups & power outlets
- No obvious "heart" of the campus
- Ample courtyard needs more landscaping
- Palm Walk is current focus of campus landscape
- Palm Walk leads to no destination and gets used as shaded parking
- Manicured lawn is beautiful visually but is inappropriate as a gathering space in summer months
- Poor sidewalks and landscape treatments
- Unused racket ball courts are deteriorated and taking up valuable space
- Inconsistent edge treatment along athletic field
- Inadequate campus lighting in parking lots and along campus are issues of security control
- Inconsistent landscape treatment in campus plan
- Buildings should enhance campus borders
- Create pocket areas for contemplation and study
- Integrate landscaping and new architecture to create campus identity
- Shaded gathering spaces for students encourage campus interactions

SMCC Main Campus - Context & Site Analysis



The initial impression of a campus is often from the automobile and from the parking area. Therefore, the processional sequence is important for the campus visitors and daily users. The arrival experience and movement through the campus should offer visual clarity, mental/physical comfort and physical orientation.

Parking & Vehicular Circulation

- Vehicular entrance signage needs to be improved
- Current signage for 24th street is inadequate and creates a vehicular hazard by blocking sight lines.
- Proper lighting is important on campus.
- Security is an important consideration in design.
- Service entry and area should be defined.
- Campus should strengthen link with community.
- Architecture and landscape can guide the visitors.
- Secondary entrances should be enhanced.
- Way-finding signage is poor.
- Orientation within campus is not always clear.
- ADA accessibility should be reviewed.
- Entrances at 24th St. are too close together.

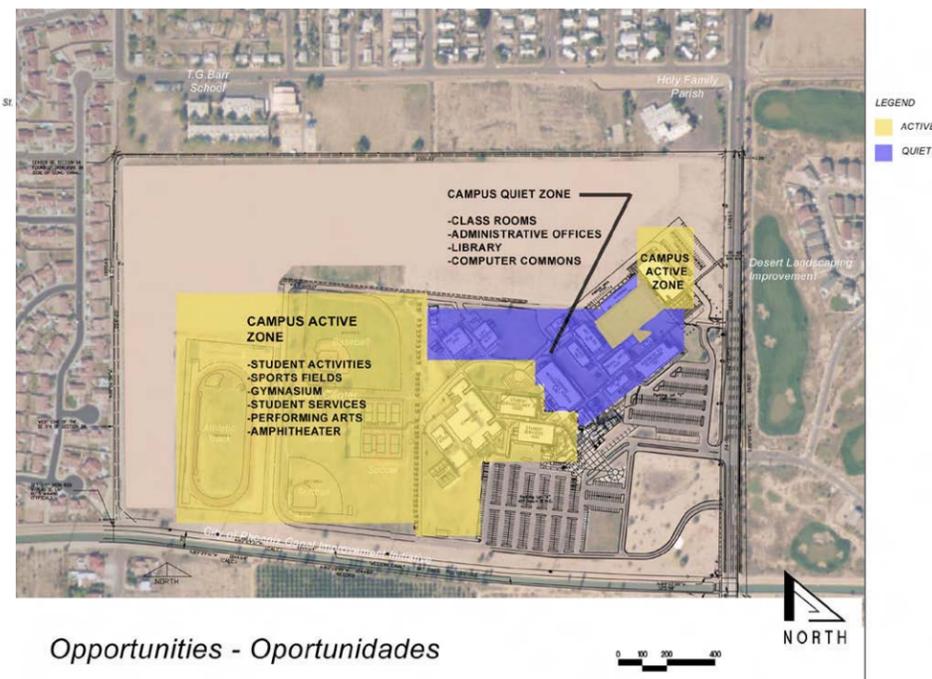
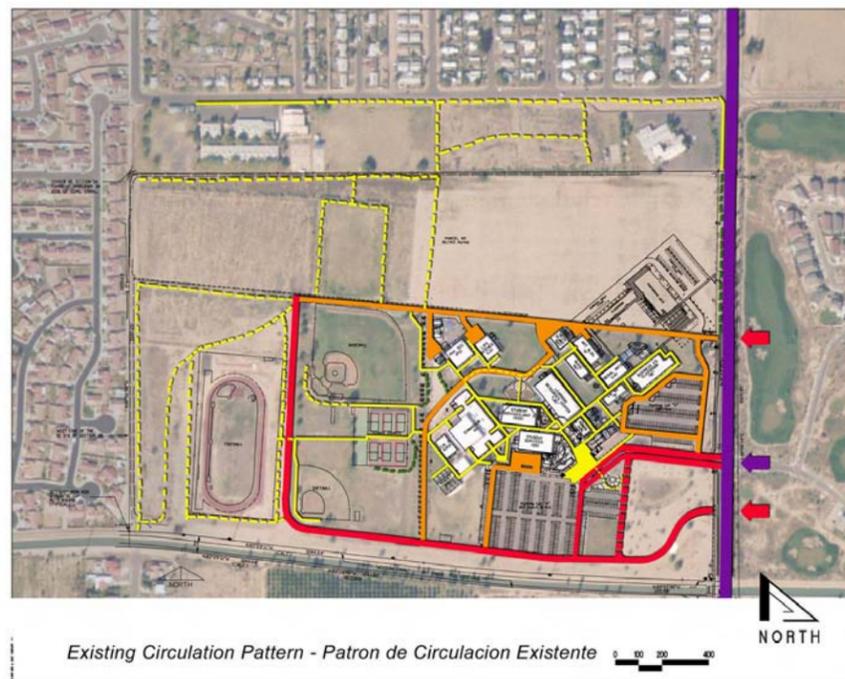
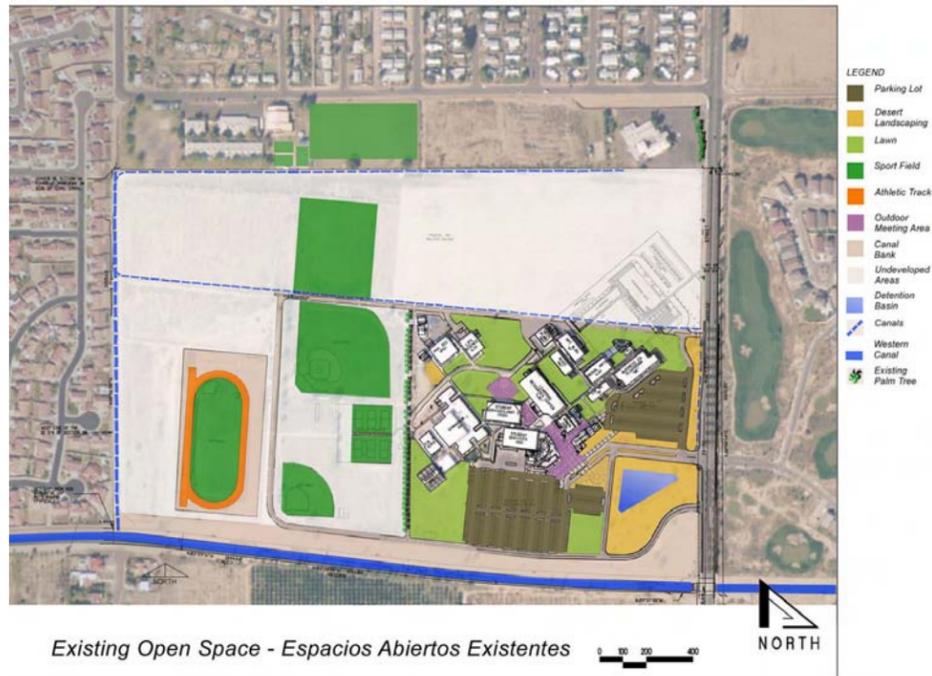
SMCC Main Campus

Planning Workshop Charette

The design charette workshops offer excellent opportunities to share thoughts and experiences. Other meetings were set up with the Student Council and community members of Guadalupe to inform of our goals and to gather additional insights.

In these workshops, the team of Leo A Daly, 3D/ International and James Abell & Associates shared their findings and insights with the SMCC master plan committee. SMCC members from all groups and levels were asked to participate. The workshops covered a wide range of issues, such as budget, program, phasing, future growth, urban design, architecture, landscape architecture, etc. The sessions were interactive periods, where ideas were discussed, exchanged and noted for further design development.

The process strives to ensure that goals and objectives are translated into the master plan vision.

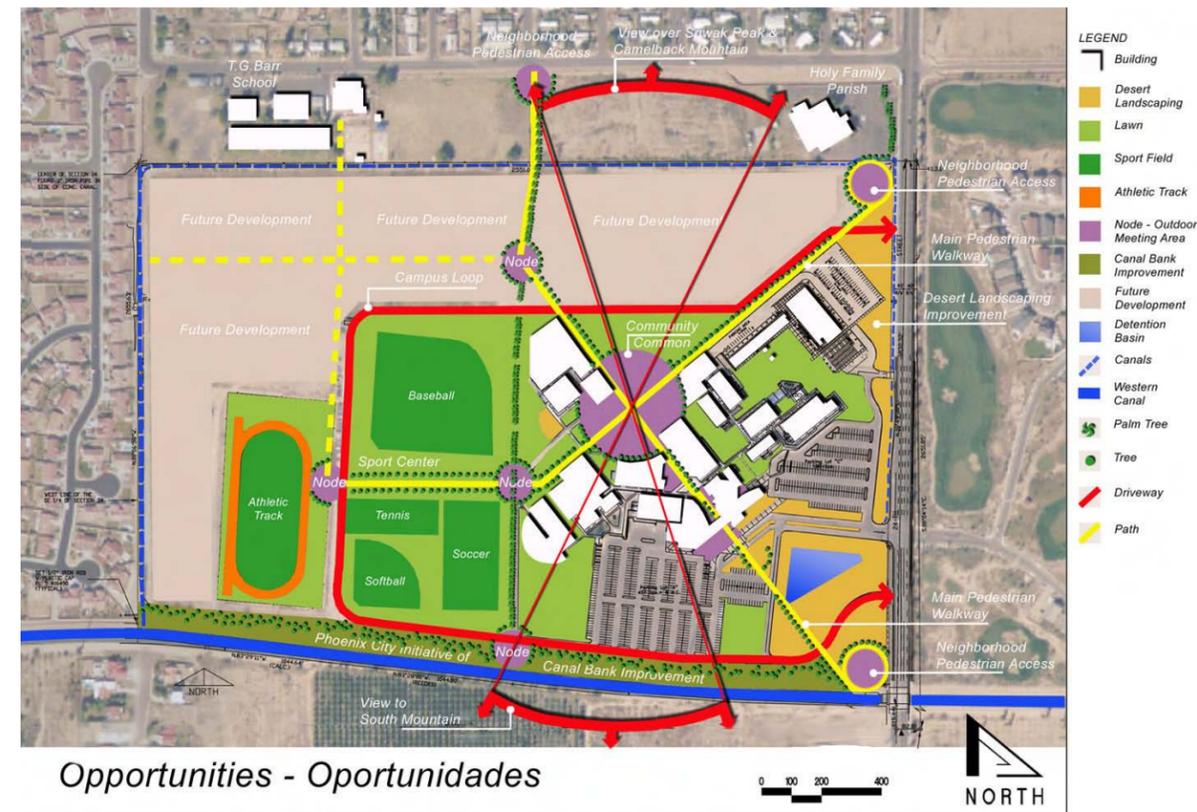
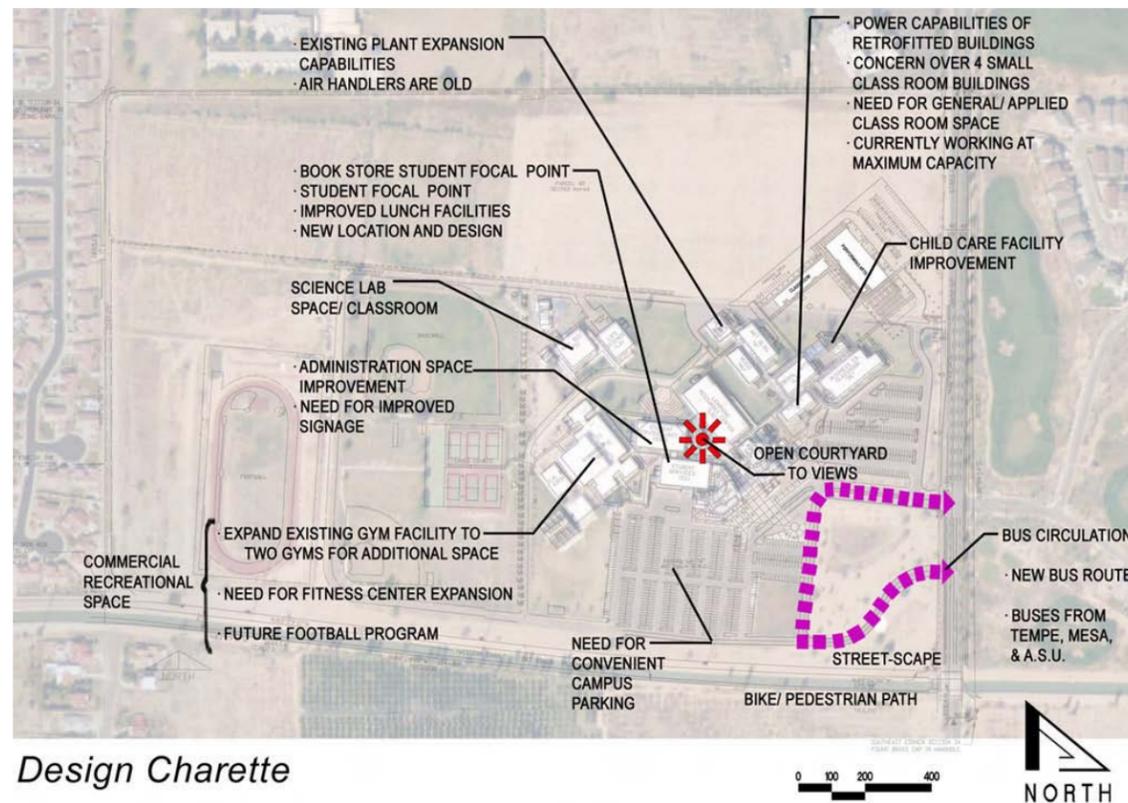


SMCC Main Campus - Planning Workshop Charette

Considerations for the Campus:

- New (LRC) Learning Resource Center - Central Campus Location
- Should have Technology Center within heart of campus
- New Cafeteria & Bookstore
- Campus parking should be accessible to classrooms, etc
- More general & applied classroom spaces
- Create a phasing plan and maximize flexibility
- Science labs are needed
- Modernize gym & fitness center
- Add a football program & improve football facility
- Expand the Child Care Center. Maximize flexibility
- Administrative office space must expand
- Replace ALL temporary buildings
- Central Plant capacity will have to expand in a couple of years
- Replace all air handlers that are 20 years old
- Improve campus signage & way-finding, especially at entries
- Security along north boundary is a problem - theft from youth
- Due to high demand for improved library services the option for a City of Phoenix joint public/ college library.

- Upgrade ADA accessibility for whole campus
- Improve Bus accessibility and drop-off area
- Evaluate existing structures - power, data, utilities, etc.
- New buildings should be two to three stories to conserve land for future uses
- The existing amphitheater area is important.
- Views to the north should be preserved
- Importance of views and open space is high
- The Performing Arts Center has multi-purpose courtyard space
- Curriculum Strengths:
 - Liberal Arts
 - Occupational training
 - Technology training
- Campus business partners , such as Cox Cable.
- Golf teams partner with the neighboring golf courses.
- SMCC likes current landscape palette, reflecting Sonoran desert
- Palm trees are a visual landmark
- Must enhance image along 24th Street. Possibly bury the SRP power lines.



Design Charette

Opportunities - Oportunidades

SMCC Main Campus - Area Demographics

Service Area Data (South Mountain Community College Fact Book 2001-2002)

According to the U.S. Census 2000, the South Phoenix service area population grew by 18% since 1990 and consisted of 96,569 people. In this statistic, 44% were white, 61% were Hispanic, 18% were black, 2% were American Indian and 30% were identified as Other. (SMCC Fact Book 2001-2002)

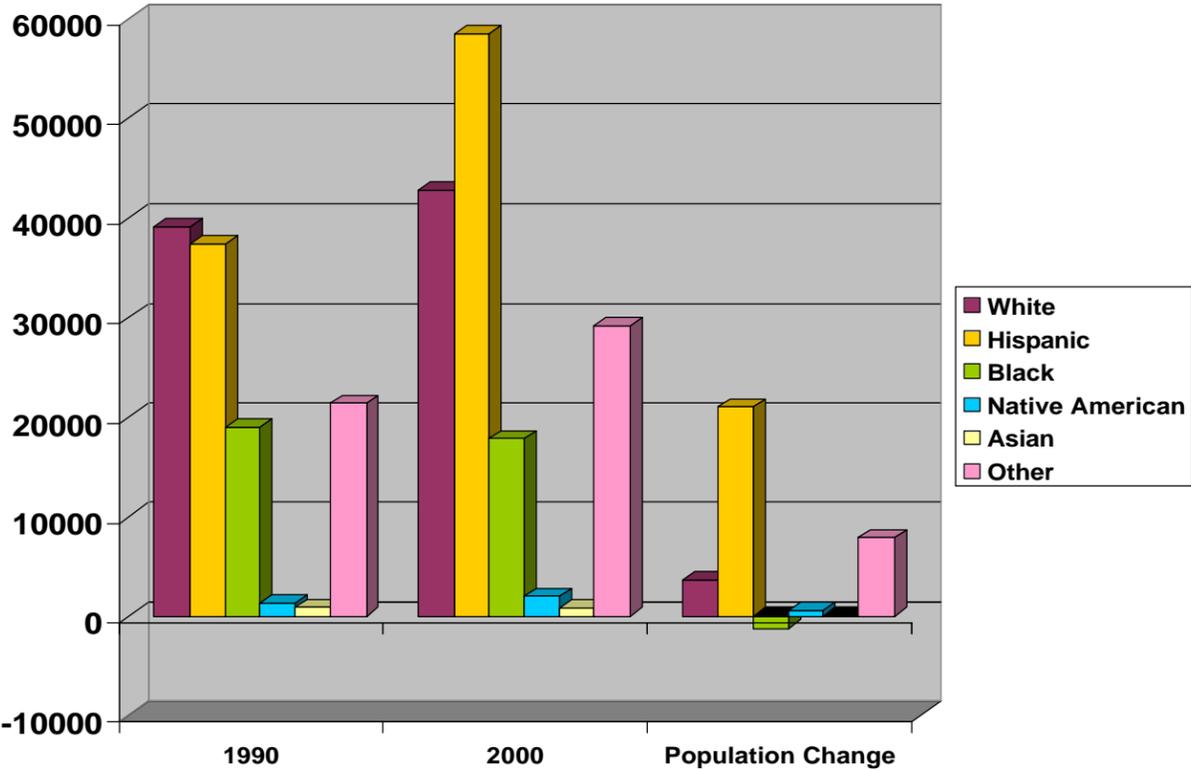
The population of the South Phoenix service area grew by 18% since the 1990 census, but the proportions of residents categorized by race/ethnicity changed significantly. The number of Hispanic (56%) and Native American (44%) residents grew, while the number of white (10%) and of black (5%) residents decreased.

The proportion of Hispanics in the South Phoenix area is nearly twice that of Maricopa County. The Hispanic population in the South Phoenix area is proportionality young, so there will be some lag time until those under the age of eighteen will attend college.

The Ahwatukee Foothills service area had a population of 75,961 growing by 146% since the 1990 census. The Town of Guadalupe's population has decreased slightly by about 4 % since the 1990 Census to 5,228. The NW Chandler portion of the SMCC service area, east of the Ahwatukee foothills, grew an amazing 514% or 13,823. Ahwatukee Foothills and NW Chandler are the fastest growing communities in the South Mountain Community College Service Area.

South Phoenix Demographics* Ethnicity Change

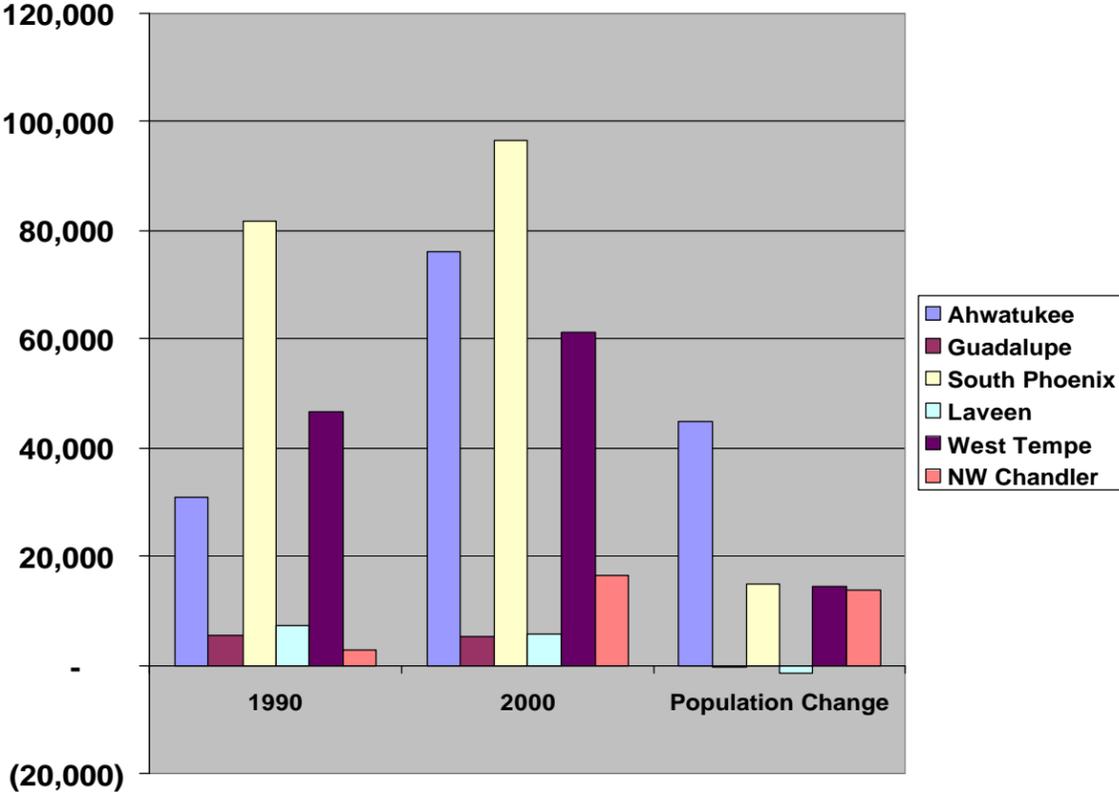
(South Mountain Community College Fact Book 2001-2002)



*Demographic data consists of the Census Tracts in the SMCC Area

SMCC Service Area Population Change*

(South Mountain Community College Fact Book 2001-2002)



*Demographic data consists of the Census Tracts in the SMCC Area

SMCC Main Campus - Student Projection

Student information (South Mountain Community College Fact Book 2001-2002)

SMCC enrollments are slightly up over a ten year period. The Fall 1992 enrollment of 3,061 dipped to 2,416 in the Fall 1995 and rose to 3,150 in Fall 99. The highest enrollment during the during the ten year period from Fall 1991 to Fall 2001 was 3,514 Fall 2000.

Numbers of Hispanic students have increased and so has the proportion of enrollment that they represent. In Fall 2001, Hispanics represented 46% of the student population enrolled at SMCC, or 1,579. The increase in Hispanic enrollment is related to changes in service area population, especially in zip codes 85040, 85041 and 85042.

As of Fall 2002, the College's minority enrollment is 70%; while the district minority enrollment total is 28%. SMCC is the only MCCCDC college to serve a predominantly minority population. Forty-six percent of the student body is Hispanic, 16% is black, 4% is American Indian and 2% is Asian.

Enrollment (South Mountain Community College Fact Book 2001-2002)

The five off-site locations in Fall 2001 are South Mountain Guadalupe Center in the Town of Guadalupe, South Mountain High School, Cesar Chavez, Desert Vista High School and the Horizon Learning Center. They produce 200 FTSE or 1/6 of the total FTSE.

Growth Projections (South Mountain Community College Fact Book 2001-2002)

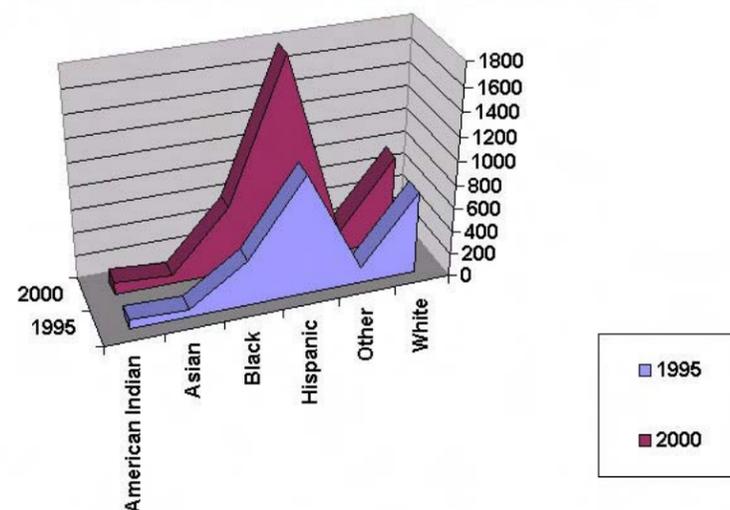
Growth projections assisted in determining additional classroom space over the next 5 and 10 years. The projections were based on student population growth averaging 7%. That number was derived as an average from a 5% (conservative) to a 10% (fast paced) growth depending on growth spurts in the community. Additionally the FTSE and Head Counts were both considered based on that growth.

Most day students at SMCC take two courses and about 80% take less than 12 credit hours each semester. While FTSE has decreased by 11% between 1992 and 2002, the occupational FTSE has increased by 104%.

There are 12 zip codes with more than 50 SMCC enrollees in Fall 2001 and Spring 2002. Thirty percent live in the zip code 85042, the same as the college. An additional 11% live west of the college in zip code 85041, while between 6-9% live in each of the three zip codes 85044 (6%, Ahwatukee), 85048 (9%, Ahwatukee) and 85083(8%, Tempe/ Guadalupe). Based on the growth of the SMCC service area, the main campus and it's extended campuses must respond to the rapid rate of growth by expanding it's current facilities and looking into the future.

The Spring 45th Day Admission Status Report (SMCC Fact book, 2000-2001), showed the largest student enrollment in 2001 was by high school graduates (1,226) at 43.3 %. College transfers made up 676 of the students at 23.9%. These two groups together made up over half of the student population at SMCC.

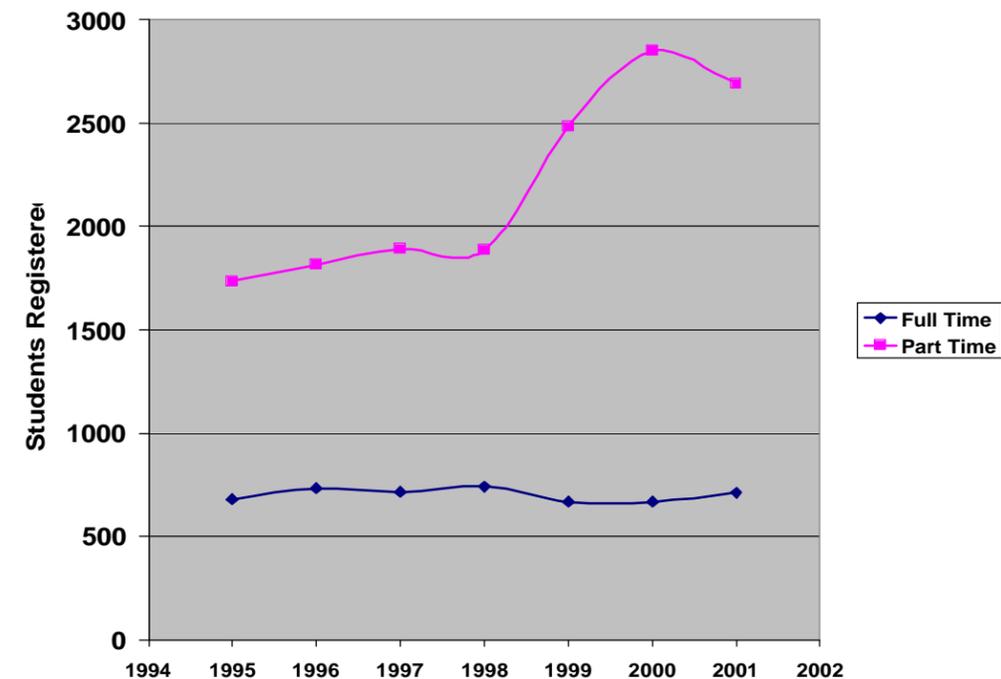
**ALL REGISTERED STUDENTS FALL 45TH DAY
SMCC STUDENTS REGISTERED FOR FALL 2000**



	American Indian	Asian	Black	Hispanic	Other	White
1995	86	64	388	1033	139	706
2000	112	81	586	1780	188	767

All Registered Students Fall 45th Day F/T vs P/T

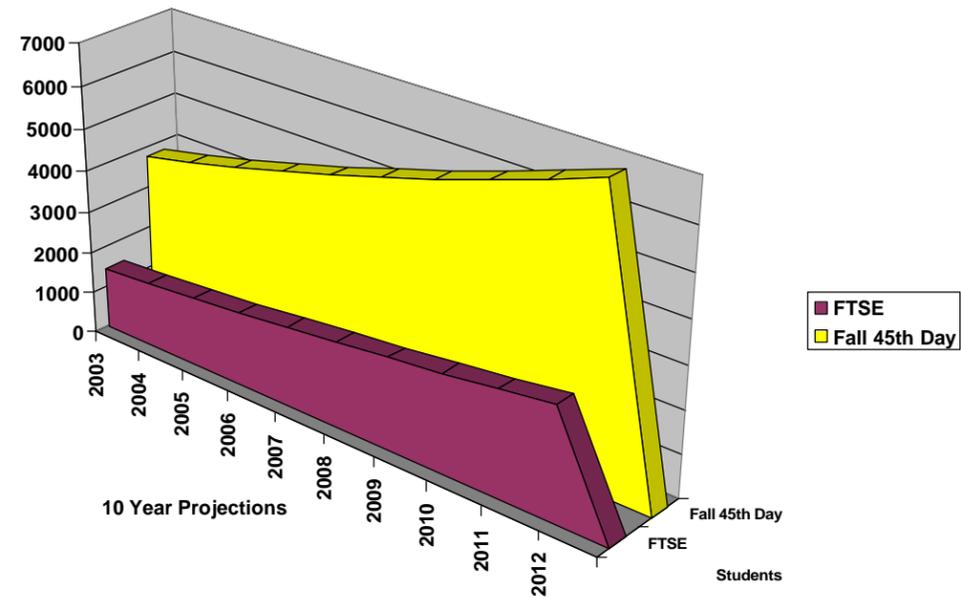
(South Mountain Community College Fact Book 2001-2002)



SMCC Main Master Plan - Student Projection

All Registered Students Fall 45th Day vs FTSE

(South Mountain Community College Fact Book 2001-2002)



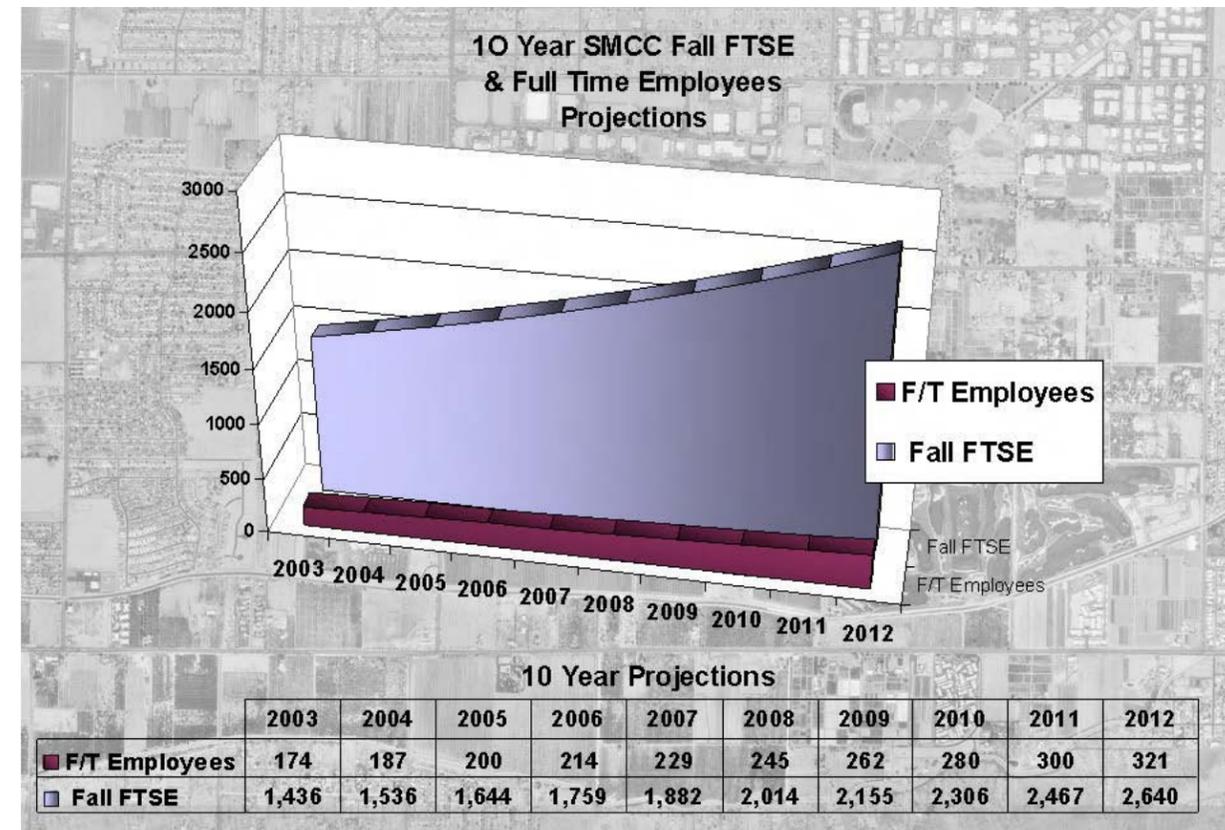
Thirty credits taken over the course of fall and spring equals 1 FTSE. It is a measure that is used by the district for some, but not all calculations. As SMCC grows with off-campus centers, the FTSE for the main campus as well as its sites is tallied. Since many of the students will come to the main campus for some services, this calculation has some value. Generally FTSE offers a good, consistent representation of students that are on campus. However, projected student outcomes can not be based solely on FTSE. The formula may need to be customized to the college and the community/student demographics. About 80% of SMCC students take fewer than 12 hours each semester.

5 Year Projection

FTSE Enrollment: 1,882
 Fall Student Head count: 4,909
 F/T Employees: 229
 P/T Employees: 57
 Parking Required: 1,115 Total
 General Classroom: 96,496 A.S.F.

10 Year Projection

FTSE Enrollment: 2,640
 Fall Student Head count: 6,885
 F/T Employees: 321
 P/T Employees: 80
 Parking Required: 1,564 Total
 General Classroom: 103,275 A.S.F.



*** Assumptions:**

- Over 80% of the students at SMCC take less than 12 credits a semester. An average of 7% growth rate of the 45th day Fall Students was used.
- Parking was based on the City of Phoenix requirements:
 - 1 stall per every 5 students
 - 1 stall per every 3 full-time employees.
- General classroom space per student was calculated at 15 S.F. per student, not including circulation or support spaces.
- Full-time employee offices/ administration was calculated at 100 S.F. per person.
- P/T employees ratio used for parking, offices etc. : 1 part-time employee per every 4 full-time employees.



South Mountain Community College Master Plan

Facility Assessment

SMCC Main Campus - Campus Assessment

Introduction

In March 2002 Leo A Daly Architects authorized 3D/International to conduct a Level I facilities assessment of South Mountain Community College, a 216,693 square foot campus located at the northwest corner of Baseline Road and 24th Street in South Phoenix. The primary objective of the Facilities Assessment was to determine the condition of existing facilities and what role each should play in Leo A Daly's new master plan for the entire campus. The document is a strategic tool for identifying the value of each asset. The completed assessment will provide Leo A Daly and campus leadership with the technical information needed to make informed decisions regarding capital renewal analysis.

A complete Level I Analysis was performed on all twenty-one buildings at the main campus plus the 4,800 square foot Guadalupe Center in Guadalupe. Two additional buildings are under construction at the main campus, the Performing Arts and Classroom #4 buildings. Assessors visited all facilities and evaluated all systems in each of the buildings. The reports in this document include tables showing ranking of buildings, pie-charts showing composition of deficiencies, and chart projections which project maintenance costs over the next twenty years.

As stated, the assessment performed on SMCC for Leo A Daly is a Level I Facilities Assessment. A Level I Facilities Assessment uses field visits, building system modeling, drawing analysis, and staff interviews to arrive at an evaluation of the existing condition of the facility. By means of cost models and the use of square foot costs, percentages of deterioration can be used to mathematically model the life cycles of the various building systems. By this means, current as well as future maintenance costs may be projected with the aid of computer software.



South Mountain Community College



Main Entrance/ Technology Center

Objectives

The Assessment of South Mountain Community College was performed during the months of March and April, 2002. An assessment team, which included Keith Kilborn (Mechanical, Plumbing, and Electrical Assessor), and Jeff Stevens (Project Manager and General Assessor) visited the site and talked with the staff. Based on visual observations and discussions with facility occupants, interviews with maintenance personnel, and analysis of the design drawings on file, evaluations along with corresponding projections for future maintenance costs were derived for each facility. A narrative for each building, giving a brief overview of the building's construction, building systems and general condition, has been provided in the executive summaries at the end of this report.

The following objectives are outlined for this Facilities Assessment:

- To provide an objective and technical analysis of the physical condition of all individual components and systems at the campus.
- To identify the cost required to bring each system to standard, addressing both the building deficiencies and the replacement value of the facilities.
- To develop an implementation strategy with recommendations for improving and upgrading each facility based on various funding scenarios.
- To co-ordinate with Leo A Daly with regard to which facilities should be replaced and which should be renovated as a part of the current master plan

Level I Facilities Assessment Methodology

The primary objective of the assessment is to inspect each system in each building and assign a percentage value to it based on where it is in its life cycle. Each system is then "weighted" or multiplied by the normal square foot cost for that system in a building.

SMCC Main Campus- Campus Assessment

Definitions

The following definitions and terms are used throughout this report and are included here for clarification.

Facility Condition Index

The facility condition index (FCI) represents the relative physical condition of facilities. The FCI measures the estimated cost of the deferred maintenance including recommended improvements and grandfathered issues and compares that to the projected replacement cost of the facility. The total cost of the repairs is divided by the current replacement cost for the facility, resulting in the FCI. The higher the FCI is, the poorer the relative condition of the facility. For example, if a building has a replacement value of \$1,000,000 and has \$100,000 of existing deficiencies, the FCI is $\$100,000/\$1,000,000$ or 0.10.

Facility Replacement Cost

This represents the hypothetical expense of rebuilding the existing facilities in a manner representing the original construction. It is determined by multiplying the gross area of the facility by a square foot cost estimate. The estimate includes: fixtures, furnishings, equipment (FF&E) and site development.

Soft Costs

Soft costs are additional costs that are necessary to accomplish the corrective work but are not directly attributable to the deficient system. Soft costs vary by user but can include: construction contingency; design; specialized investigations such as geotechnical, environmental, or hazardous material; program management fees whether in-house or consultant; and various administrative fees. The soft costs used in this assessment of these buildings are as follows:

General Conditions Costs	10% of direct costs
Contractors Overhead and Profit	15% of direct costs and general conditions
Gross Receipts Tax	5.62% of contractor fees
Architect, Design, and Engineering	7% of sum of contractor costs
Design and Construction Contingencies	8% of contractor costs and architect fees
Owner Furnished Items as may be required	7% of sum of contractor costs and architect fees
Miscellaneous permits, fees, and expenses	6% of contractor costs and architect fees
Project/Construction Management	4% of contractor costs and architect fees
Hazardous Materials Abatement	1% of contractor costs and architect fees
MCCCD Administration	2% of contractor costs and architect fees
Inflation	3% per year

Facility Systems:

- Electrical: alarms & communications, lighting & power, service & distribution
- Exterior Closure: exterior doors, exterior walls, windows & glazed walls
- Interior Construction: ceiling finishes, floors finishes, interior doors, stairs, wall finishes, walls
- Mechanical: heat exchangers, cooling, HVAC pipe, insulation, plumbing fixtures, plumbing pipe
- Roofs: roofing
- Specialties: specialties (lab tables and gym equipment, for example)
- Structural: superstructure (columns, beams, footings, foundations, slab-on-grade, for example)



Guadalupe Learning Center



Life Science Building

SMCC Main Campus- Campus Assessment

Summary of Results

The FCI, or Facilities Cost Index, summarizes the results of this survey. For SMCC, it shows the expected cost per square foot to replace each facility, and the estimated cost of repairing the deficiencies found. For the campus as a whole the cost of repair would be about \$7.2 million and the expected cost of replacement would be approximately \$24.5 million, so the FCI for the campus as a whole is 29.3%. The generally accepted rule of thumb in building condition assessment is:

Condition	FCI%
Excellent	0 to 5%
Good	6 to 10%
Fair	11 to 20%
Poor	21% & above

This standard has been adopted by the Building Owners and Managers Association, the Council on Education Facilities, and the American University Planners Association, and a number of other national facilities groups.

So as a whole, the condition of the campus has entered the "poor" classification. As a reference, some school districts automatically slate for replacement any building that has an FCI of 65% or greater. The only building which is greater than 65% is the WAC Building, a temporary portable. With an FCI of 97%, we would recommend it for immediate removal were it not for the fact that it may be useful as a temporary facility for displaced students or staff while other facilities are either being constructed or renovated in the near future.

SMCC has eleven buildings which are greater than 40% FCI. These buildings will require closure for complete renovation. This will need to be scheduled within the present decade. These facilities are shown in the FCI report.



Technology Center



Learning Resource Center

Estimate by Building System - S.M.C.C.

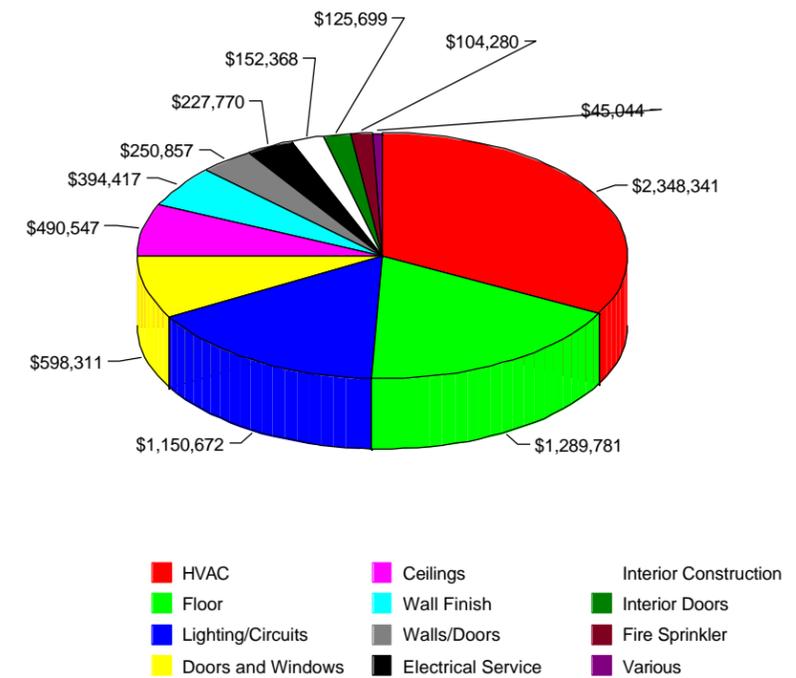


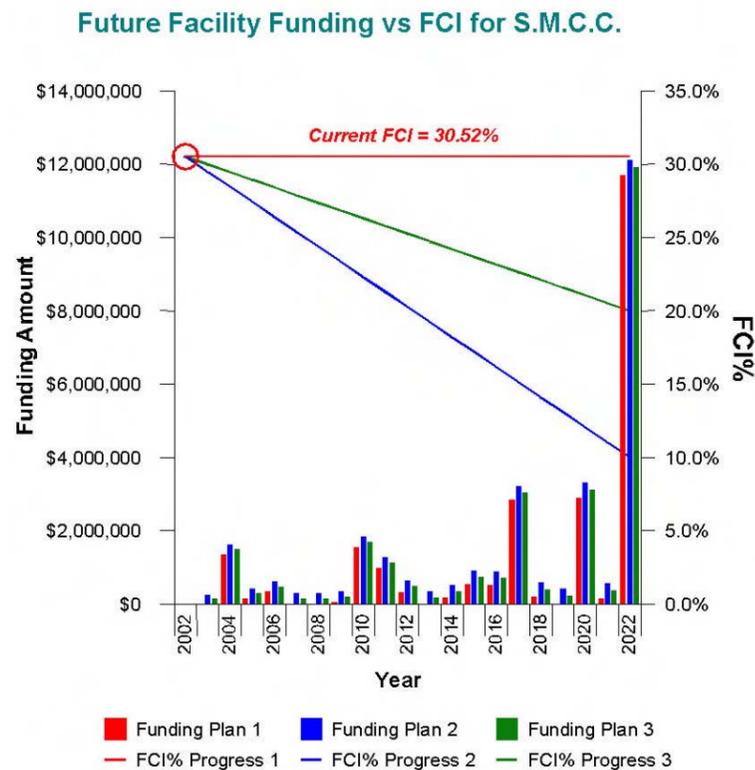
Fig. 2 - Composition of Total Deficiencies at S.M.C.C.

The pie chart above (Fig. 2) shows that the major deficiencies were distributed among all of the CSI Divisions, reflecting the fact that many components of the buildings are worn out or beyond useful life. HVAC and Electrical generally represent a large percentage of the total because of the high cost of these components, and this is also the case with SMCC.

SMCC Main Campus- Campus Assessment

From the life-cycle projections, we can determine the remaining life of the systems, as well as the cost of future replacement. The result is an approximation of the future costs of building renewal for these facilities. The projected costs for the next twenty years are shown for S.M.C.C. in Figure 3.

This chart shows maintenance cost projections for the next twenty years, given that the current backlog of deferred maintenance is corrected. In other words, the costs shown in the "spikes" in the chart in Figure 3 are over and above the \$7.2 million that the campus needs today.



MET - Printed on: 5/7/2002
Escalation %: 3%

Fig. 3 - Future Capital Renewal Costs for S.M.C.C.

There is good news in this chart, in that, after the 7.2 million that the campus requires in 2002, the campus will need only an additional \$1.85 million to make it through 2009.

The chart below shows the same information in tabular form. It is important to note that if a little more is spent over the next few years, the FCI can be lowered to 20% or even 10%.

	Current FCI%	FCI 20%	FCI 10%
2002	\$0	\$0	\$0
2003	\$0	\$127,387	\$248,529
2004	\$1,352,033	\$1,483,242	\$1,608,018
2005	\$140,588	\$275,733	\$404,253
2006	\$325,834	\$465,034	\$597,409
2007	\$609	\$143,985	\$280,331
2008	\$0	\$147,677	\$288,114
2009	\$32,416	\$184,523	\$329,173
2010	\$1,533,915	\$1,690,586	\$1,839,575
2011	\$960,755	\$1,122,126	\$1,275,585
2012	\$310,467	\$476,679	\$634,742
2013	\$0	\$171,198	\$334,003
2014	\$153,796	\$330,130	\$497,819
2015	\$539,426	\$721,051	\$893,770
2016	\$506,335	\$693,408	\$871,309
2017	\$2,751,887	\$2,944,573	\$3,127,811
2018	\$181,825	\$380,291	\$569,026
2019	\$0	\$204,419	\$398,817
2020	\$2,893,289	\$3,103,841	\$3,304,070
2021	\$143,227	\$360,096	\$566,332
2022	\$11,942,466	\$12,165,841	\$12,378,264
Total	\$23,768,868	\$27,191,820	\$30,446,950

Fig.4 - Maintenance Costs per Year at Given FCI Levels

It should always be noted that the incremental costs to go from "poor" to "fair" and from "fair" to "good" over twenty years are relatively small, compared to the cost to maintain the FCI at its present level.

If the current funding level of \$60,000 is maintained, this is what will happen to the FCI (as shown by the blue line):

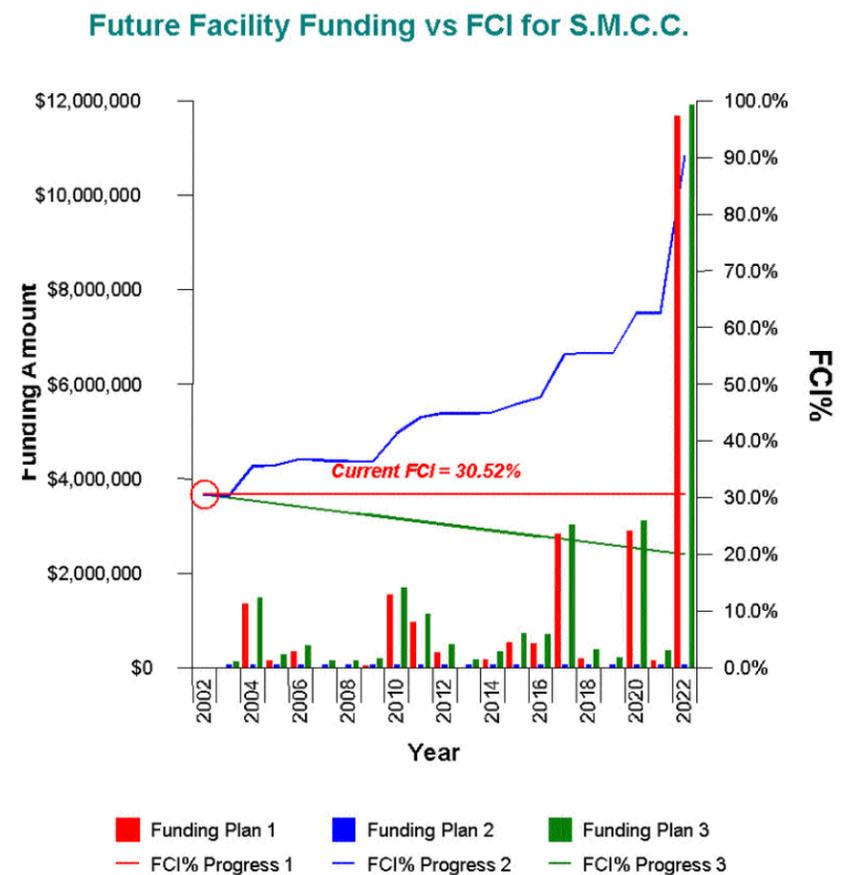


Fig.5 - FCI versus Funding Level for S.M.C.C

SMCC Main Campus- Campus Assessment

Conclusions

Ten buildings on the SMCC Campus are in serious need of renovation, and one is in need of removal. Fortunately, this work does not have to be done immediately.

Given the fact that the campus is growing extremely rapidly and because the condition of several facilities is severely deteriorated, such that they will need to be closed for renovation, it is recommended that new facilities be brought on line as quickly as possible so that existing facilities can then be vacated and remodeled as quickly as possible.

This strategy has three major advantages: first, it allows initial capital funding to be spent on new facilities, which is an easier sell with mass appeal, and it gets additional square footage on-line as quickly as possible.

Second, it allows designers to remodel/ re-design the older facilities at a later time; allowing them to be more contemporary in their design at a future time and more functionally appropriate to their future uses.

Third, it allows the significant, major renovation of each older building to be done "all at once" rather than "some now and some later", minimizing expenses, and getting more use out of the buildings in the meantime.

In summary, we recommend the strategy for SMCC be "Build the new, then vacate the old, and replace the old or make it new". Aside from affording the best and most timely responses to user needs, this approach would be the most cost effective, as well as the most productive.

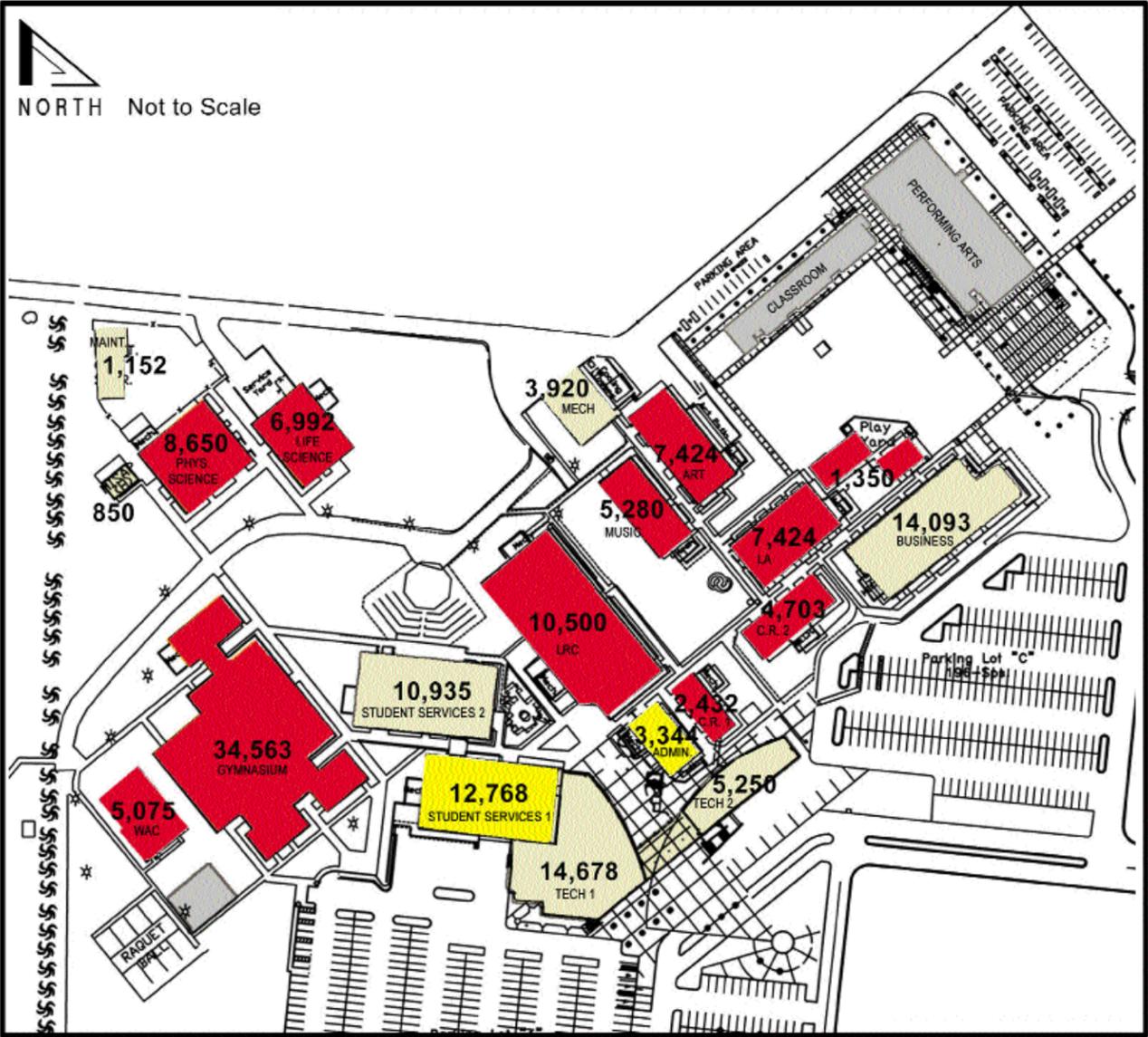
*Detailed information on each of the facility's conditions are available in the Facility Assessment Report.

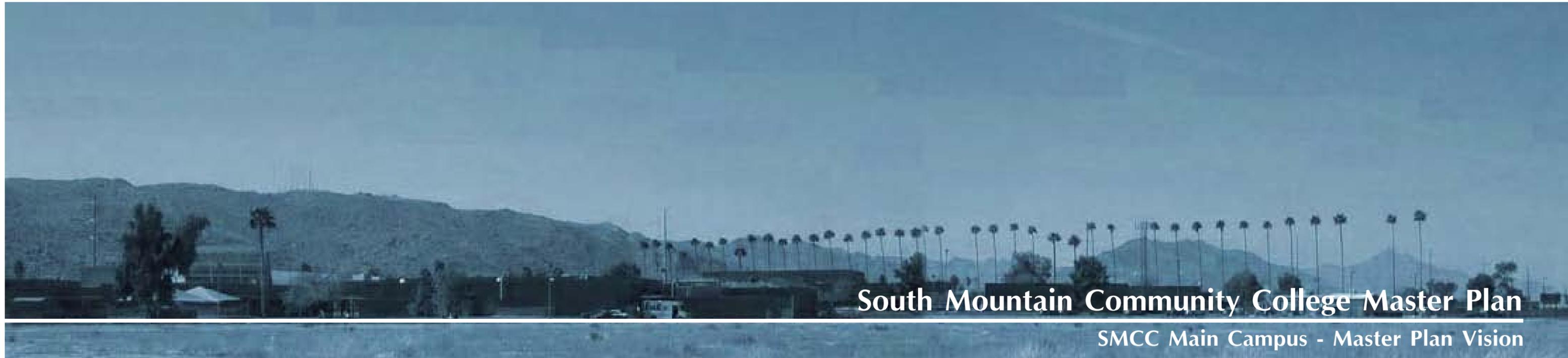
FCI % (S.F.)

	+ 40%	(94,393 S.F.)
	20 - 40%	(16,112 S.F.)
	0 - 20%	(74,112 S.F.)

RULE OF THUMB

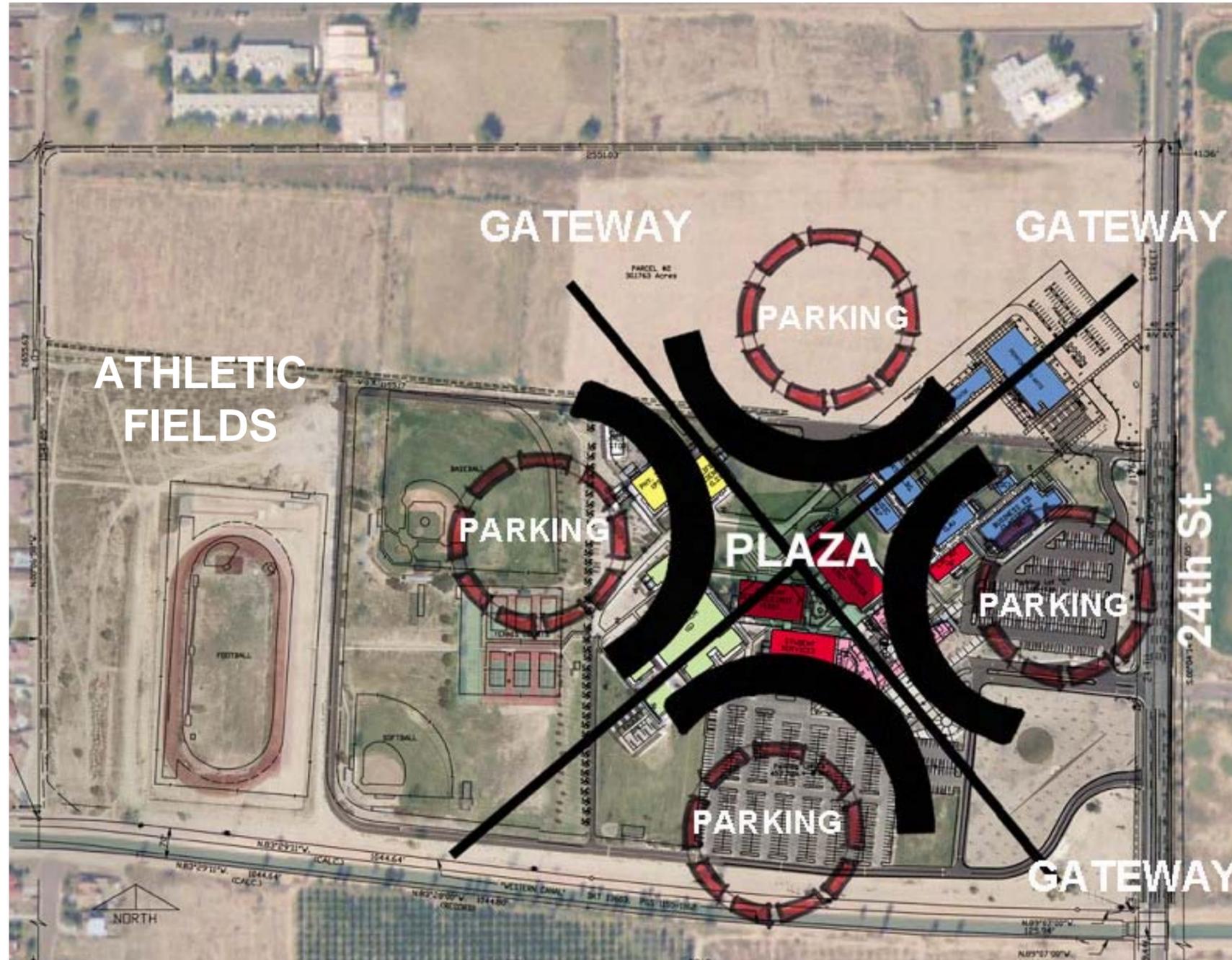
<u>CONDITION</u>	<u>FCI%</u>
POOR	21% - Above
FAIR	11% - 20%
GOOD	6% - 10%
EXCELLENT	0% - 5%





South Mountain Community College Master Plan

SMCC Main Campus - Master Plan Vision



Master Plan Concept Diagram

Master Plan Objectives

The concept development team insisted on the integration of urban design, architectural design and landscape architecture to bring added value to both the community and SMCC campus. With the many possible goals and objectives, it was important to distill and to establish a clear framework for the master plan. Architectural ideas, which were supportive of the campus programs, character and developments, were cultivated. Some of the key issues crucial to the master plan development were:

- To work with the existing fabric of the campus while providing a stronger, value-added, viable vision for SMCC.
- To establish a strong heart of the campus with future developments.
- To reinforce and to activate heart of campus with dynamic building programs, such as a new Learning Resource Center, Student Union and Library.
- To define outdoor rooms with buildings working together as an ensemble.
- To have the architecture, landscape architecture and parking strategy complement each other.
- To create usable, comfortable, micro-climate gathering spaces through courtyard buildings.
- To enhance the sense of place and orientation within the campus.
- To recommended higher building height and density for efficiency and economy.
- To strengthen the campus edges with a creative landscape strategy.
- To reach out toward the community with buildings and community service functions.
- To allow for closer parking to classrooms and accommodate economical means of phasing.
- To re-stripe existing parking for safety and clarity.
- To extend and to enhance the existing vehicular loop road in accommodating future growth.

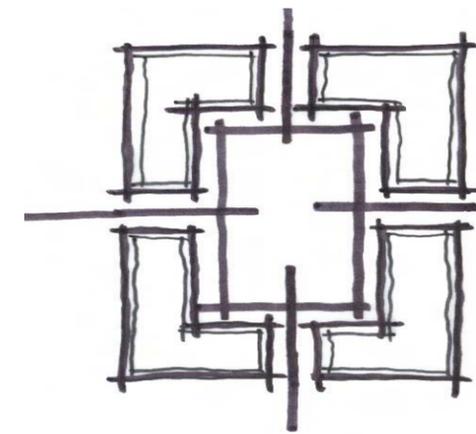
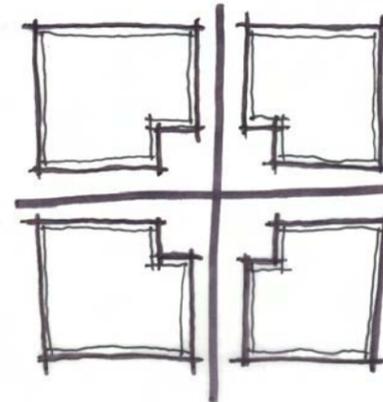
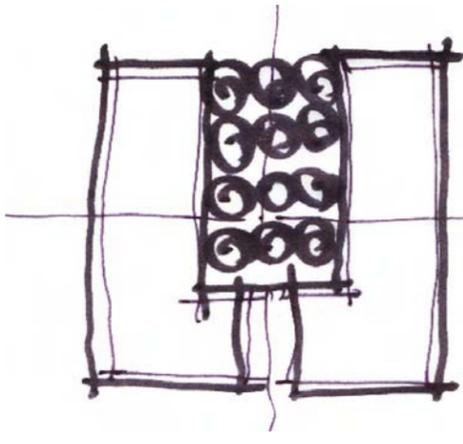
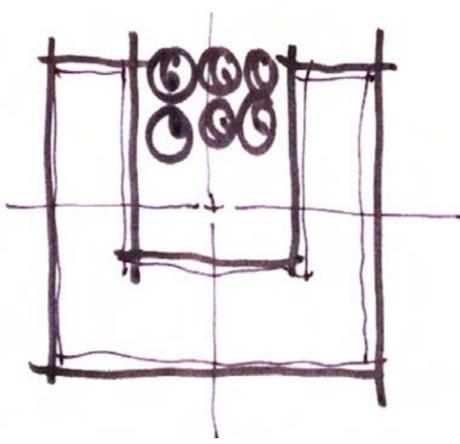
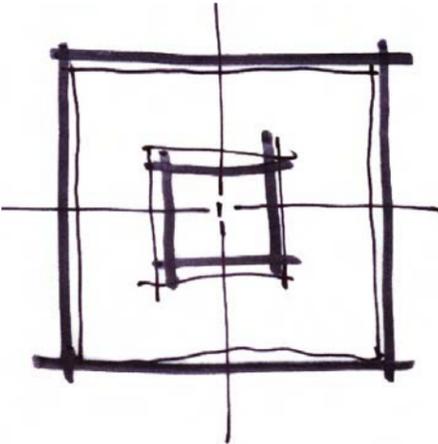
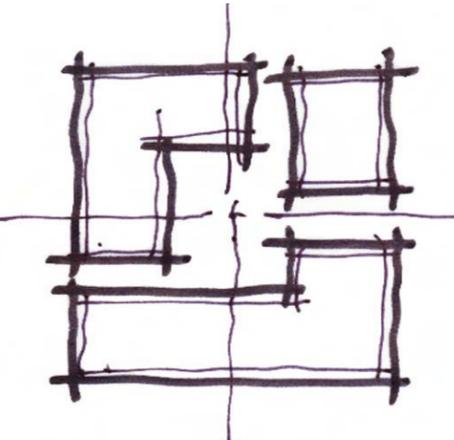
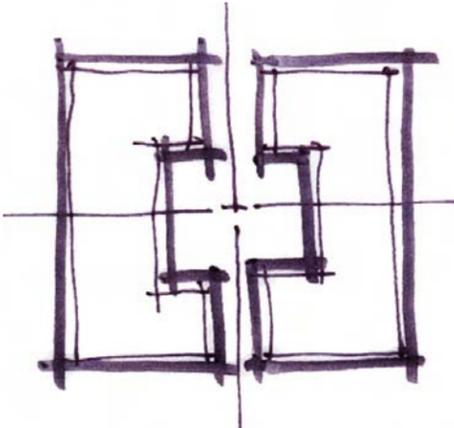
SMCC Main Campus Master Plan

Architectural Building Concepts

A campus laid out with useable courtyards takes advantage of the edge definition of buildings and creates useable pedestrian plazas and walkways that are clearly definable and maintainable. A courtyard is beneficial because it screens outside noise, something that is especially important in an urban setting. A courtyard building's key characteristic is the way that outdoor space is captured and included in the volume. Courtyard buildings provide an ideal building prototype for the desert communities. In the colder periods of the year the courtyard if properly oriented provides a source of sun at the heart of the building. During the hot season, the courtyard walls can provide a shade on at least part of the courtyard throughout the day. Overhead shading in the summer months can be achieved through deciduous vines, and light or partial coverings. Courtyard buildings form a limited oasis microclimate that can moderate climactic extremes and provide manageable green space appropriate to limited water resources.

Where possible, the courtyard building typology is highly encouraged for the campus. The idea is not only appropriate to the climate and region, but it also promotes a higher density and efficient campus for the future. The master plan provides a framework of courtyard buildings. The "footprints", however, allows great flexibility and possibilities for future designers as they deal with their individual building, functions, square footage and needs. Through the master plan, the buildings then act as ensemble in strengthening the campus vision. Other benefits are:

- To provide an inviting outdoor campus, clear spatial organization and an orderly sequence of phasing for future growth
- To establish intimate and unique character within the framework of the larger campus.
- To reinforce the sense of place and strengthen the sense of orientation for the campus users.
- To promote the use of outdoor areas as an enhancement to the overall academic experience. Areas conducive to outdoor socializing, study, recreation, and learning.
- To create campus identity and character through Sonoran regional plant palette, showcasing the rich and varied landscape traditions of the South Mountain area.
- To provide building and landscape design guidelines that would secure health and safety issues for all campus users.
- To establishing campus standards for walkways, malls, plazas, and outdoor recreation and gathering areas that are enjoyable, maintenance responsive and water-wise.



Master Plan 20-Year Vision

The vision for the main SMCC campus is both simple and memorable. The plan accommodates the existing built fabric, while striving for a cohesive character of a unique campus.

The master plan's "X" form anchors the campus, while establishing important connections to the campus' corners and neighbors. The strong clarity of the plan also defines a new central plaza - "heart of the campus". The gateways invite both local inhabitants and nearby corporate participants. The engagement of these members will enhance and complete the community college experience.

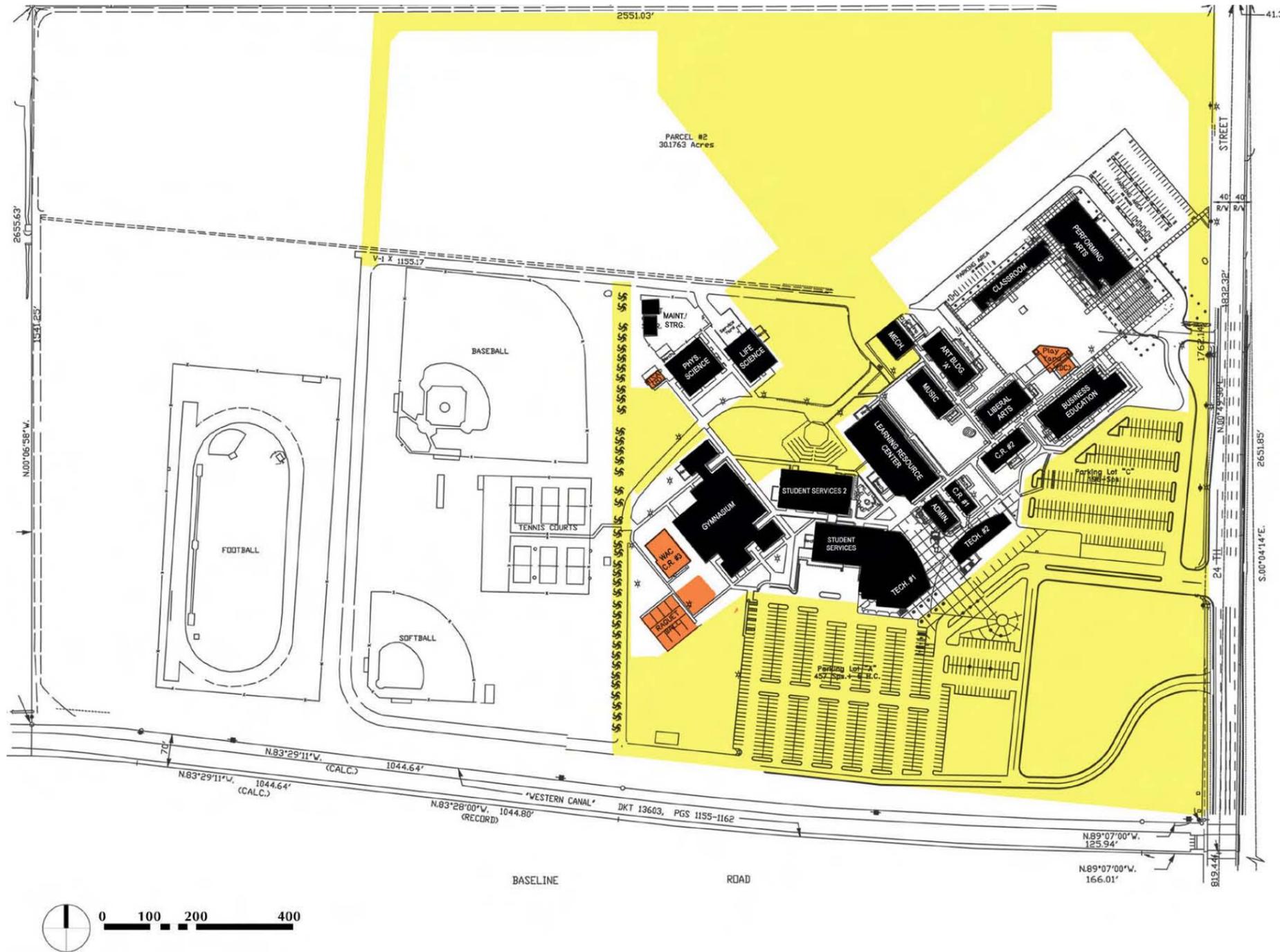
Large fields of parking are a reality of any large development. Here, the allocation and division of the parking landscape lends the area a much more comfortable feel and sense of scale. Pockets of parking are created for ease of access to classrooms and to reduce the typical massive size of parking.

Similarly, the collaboration between architecture and landscape architecture heightens the campus' identity and character. The campus will provide a sense of pride to the occupants and a sense of comfort to its users.

To realize these goals, the master plan allows for a gradual and easy process of phasing. It is also sensitive to the burden of limited budgets and an ever shifting timeline. Therefore, the sequence of phasing tries to be as holistic as possible and to minimize disruptions to the daily operations of the community college.



SMCC Main Master Plan - Phasing & Implementation



5 YEAR PHASING - PREPARATION

- EXISTING BUILDINGS
- AREA OF PREPARATION
- DEMOLISHED BUILDINGS
- NEW BUILDINGS
- OUTDOOR CONSTRUCTION
- AREA OF MODERNIZATION

Great attention and efforts were paid to the phasing sequence. Often, areas of construction are disturbed only once to minimize Campus disruptions.

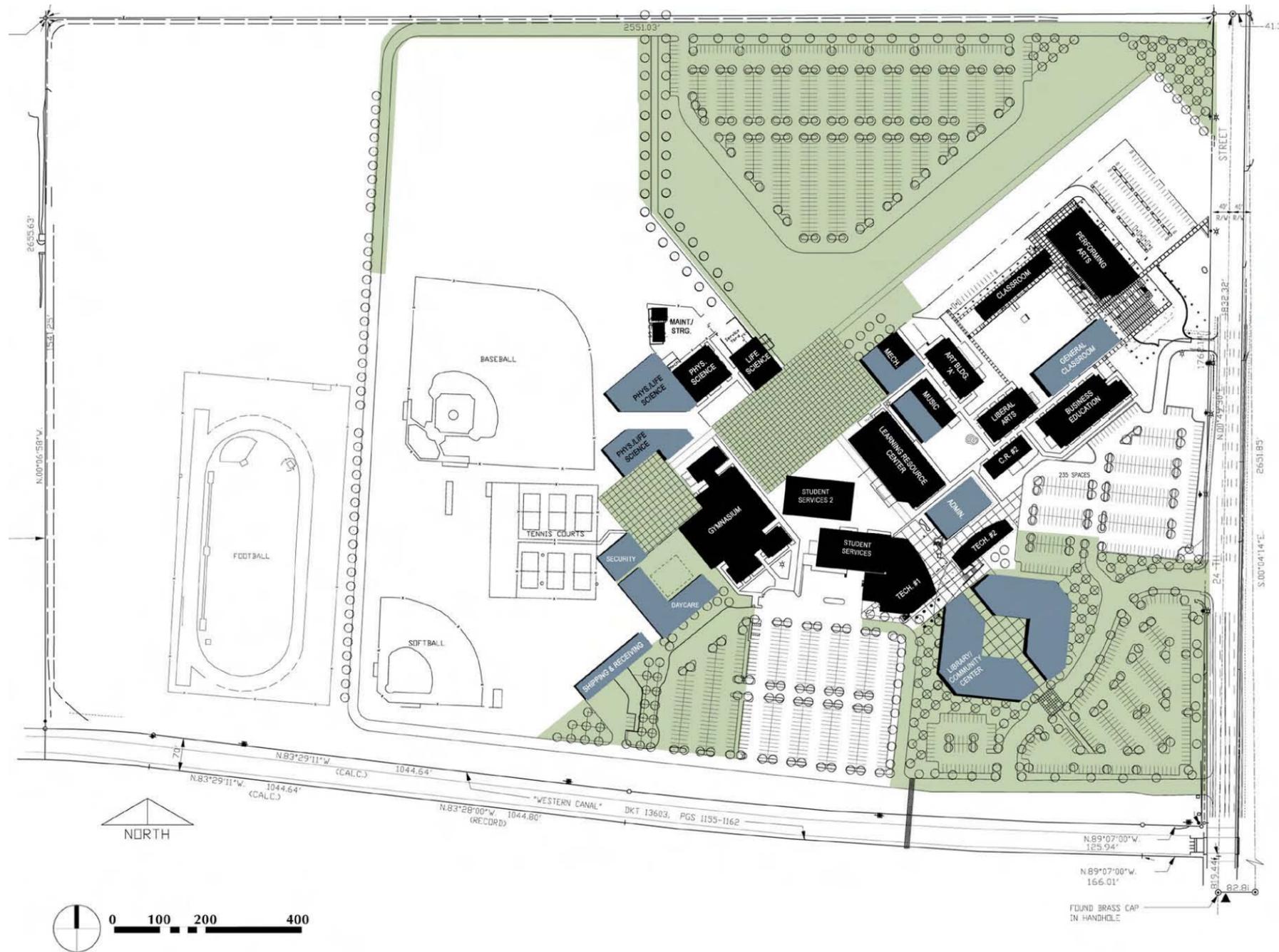
First, the parking location and circulation strategy needs to be more efficient. In many instances, it will be a matter of re-striping and enlarging the existing surface parking. A North parking lot will be added to offer convenient parking north of the campus. Additional parking will be added south of the existing entry drive. Eighty-seven inefficient stalls will be removed from the 755 existing stalls and an additional 842 stalls will be added. The sum of 1,058 stalls are required for the projected student and staff growth.

Second, the existing entrance road makes for an awkward entry sequence and the bus drop-off is congesting the main entry drive. The first impression of a visitor driving into the campus should be clear and with visible signage. The bus stop will be moved to the West edge of the South parking lot. This location offers more queuing spaces for the growing number of buses and an unobstructed exit from the campus. Additionally, a day care drop-off, will be located on the West edge of the South parking lot (south of the Bus stop).

Furthermore, the outer loop road will be extended to prepare the campus for future growth and development.

5 Year Phasing - Preparation

SMCC Main Master Plan - Phasing & Implementation



5 YEAR PHASING - CONSTRUCTION

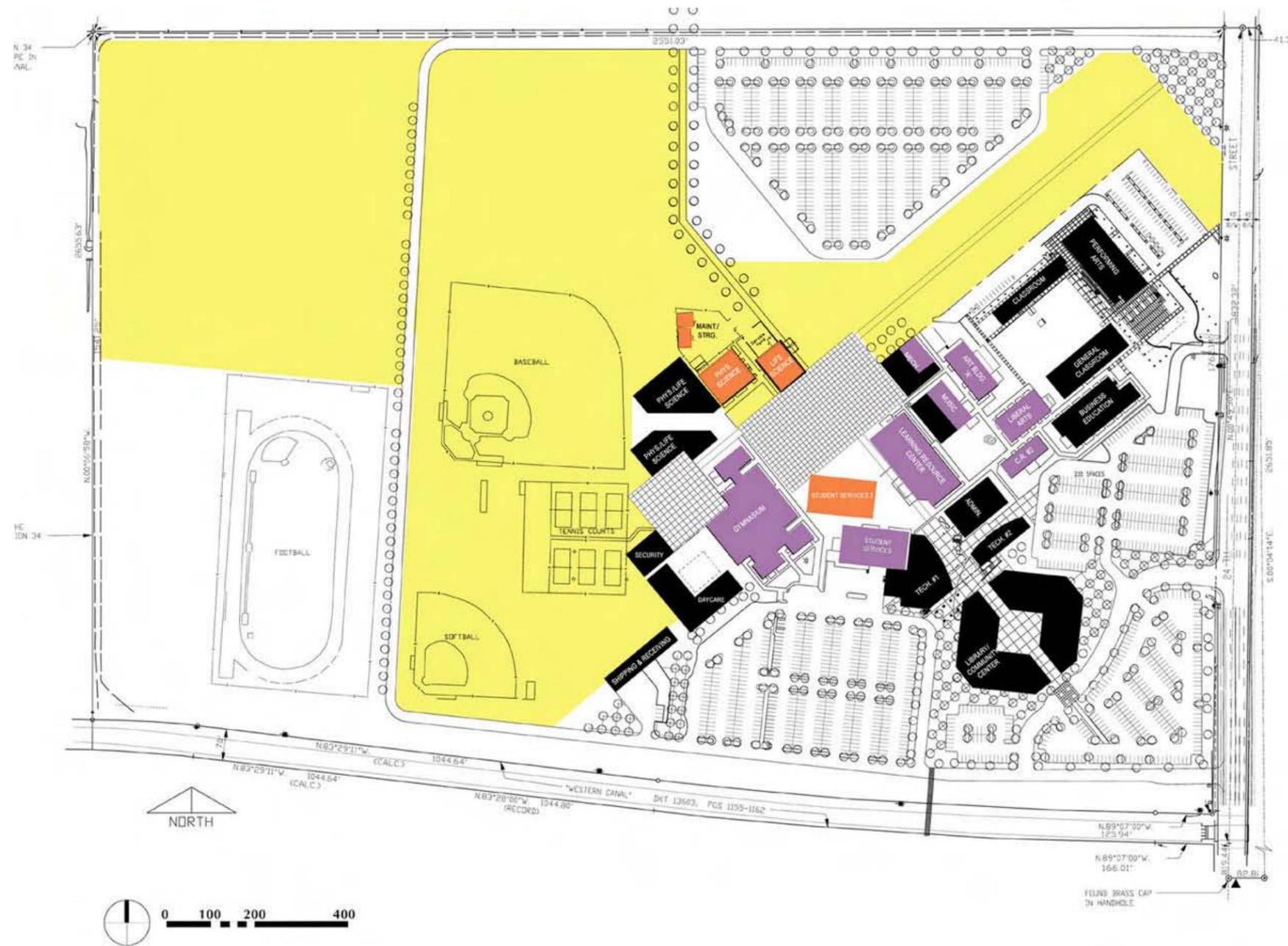
- EXISTING BUILDINGS**
- AREA OF PREPARATION**
- DEMOLISHED BUILDINGS**
- NEW BUILDINGS**
- OUTDOOR CONSTRUCTION**
- AREA OF MODERNIZATION**

The initial construction phasing strengthens the existing campus with new buildings and by improving older buildings. The improved infrastructure provides a sound base for future expansion. Some of the opportunities are:

- A Life Science & Physical Science building will be built to offer more space and up-to-date equipment.
- A much needed new daycare center and security offices will be added.
- More general and applied classrooms are available as buildings are added and modernized.
- The campus begins to reach out toward the southeast corner with a library/ community center. The population growth in South Phoenix and the demand for improved library services triggered the inclusion of a library site for the area in the last successful City bond initiative. Discussions have begun between College personnel and the City of Phoenix to create a joint public/college library on the SMCC site.
- The Mechanical Yard will be expanded, both in size and capacity. A convenient Shipping & Receiving area is provided on the southwestern corner. Being near the loop road, it has quick and easy access.

5 Year Phasing - Construction

SMCC Main Master Plan - Phasing & Implementation



10 YEAR PHASING - PREPARATION

- EXISTING BUILDINGS
- AREA OF PREPARATION
- DEMOLISHED BUILDINGS
- NEW BUILDINGS
- OUTDOOR CONSTRUCTION
- AREA OF MODERNIZATION

The first five years will strengthen the existing campus with much needed classroom space and will improve campus infrastructures for future expansion.

This phase continues the effort of reaching out to the community and to reorganizing the athletic fields. With new buildings already in place, the older facilities could now be modernized (remodeled).

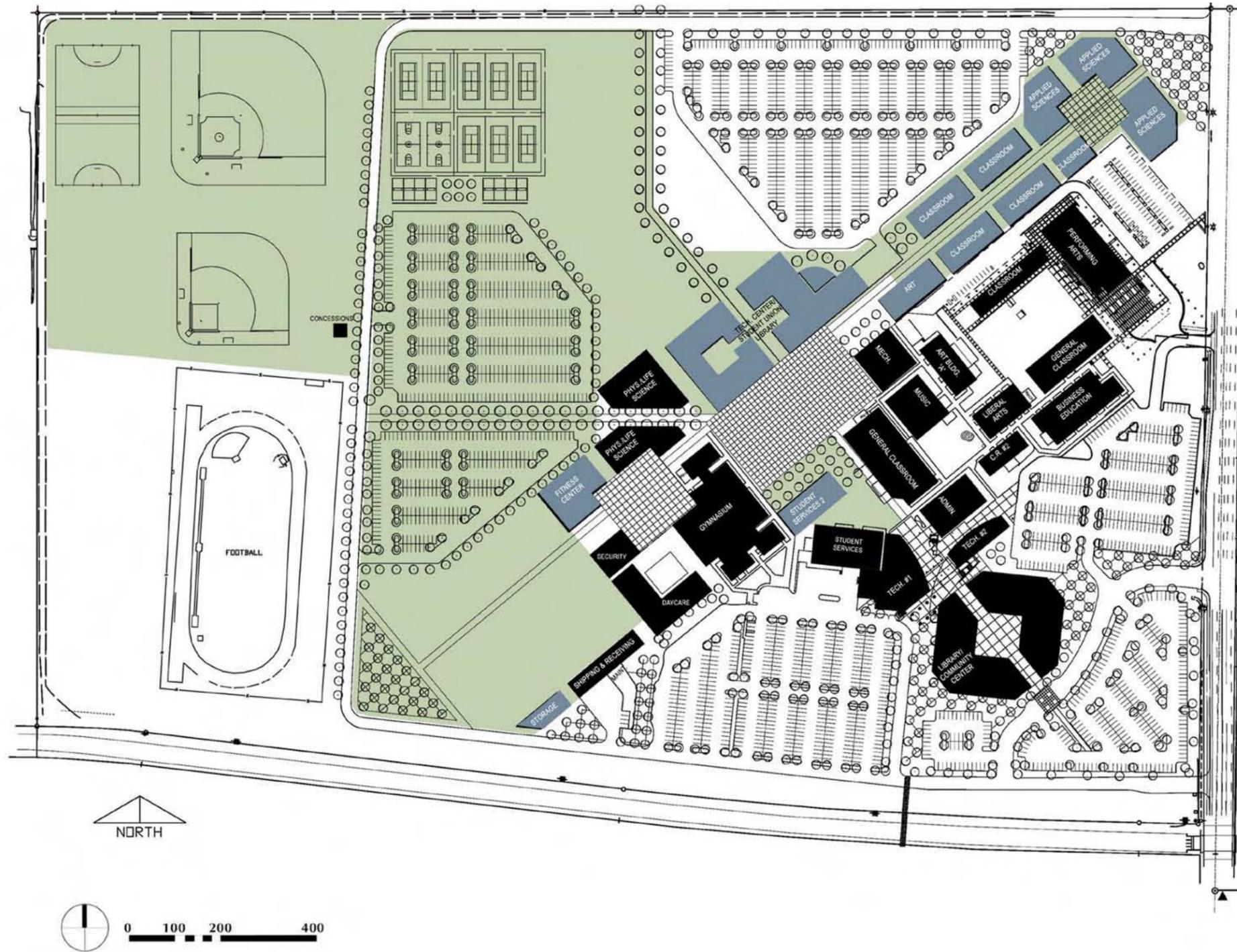
Sensitive to working with the existing infrastructure, the running track will remain in its present location. The athletic facilities will be repositioned and consolidated in the northwest quadrant of the campus.

To accommodate the growing development, 624 new stalls will be added to the existing 1,510 stalls. A total of 2,134 stalls will be available for this phase.

The consolidation of the construction area helps with the cost by not reworking the same site twice. At a projected growth of 7% a year, there will be a projected 2,640 students with an additional 103,275 a.s.f. of necessary class room space.

10 Year Phasing - Preparation

SMCC Main Master Plan - Phasing & Implementation



10 YEAR PHASING - CONSTRUCTION

- EXISTING BUILDINGS
- AREA OF PREPARATION
- DEMOLISHED BUILDINGS
- NEW BUILDINGS
- OUTDOOR CONSTRUCTION

At this phase, the 'pocket parking' strategy is in place to promote easy access to every quadrant of the campus. The campus is taking shape with the development of the Applied Sciences axis.

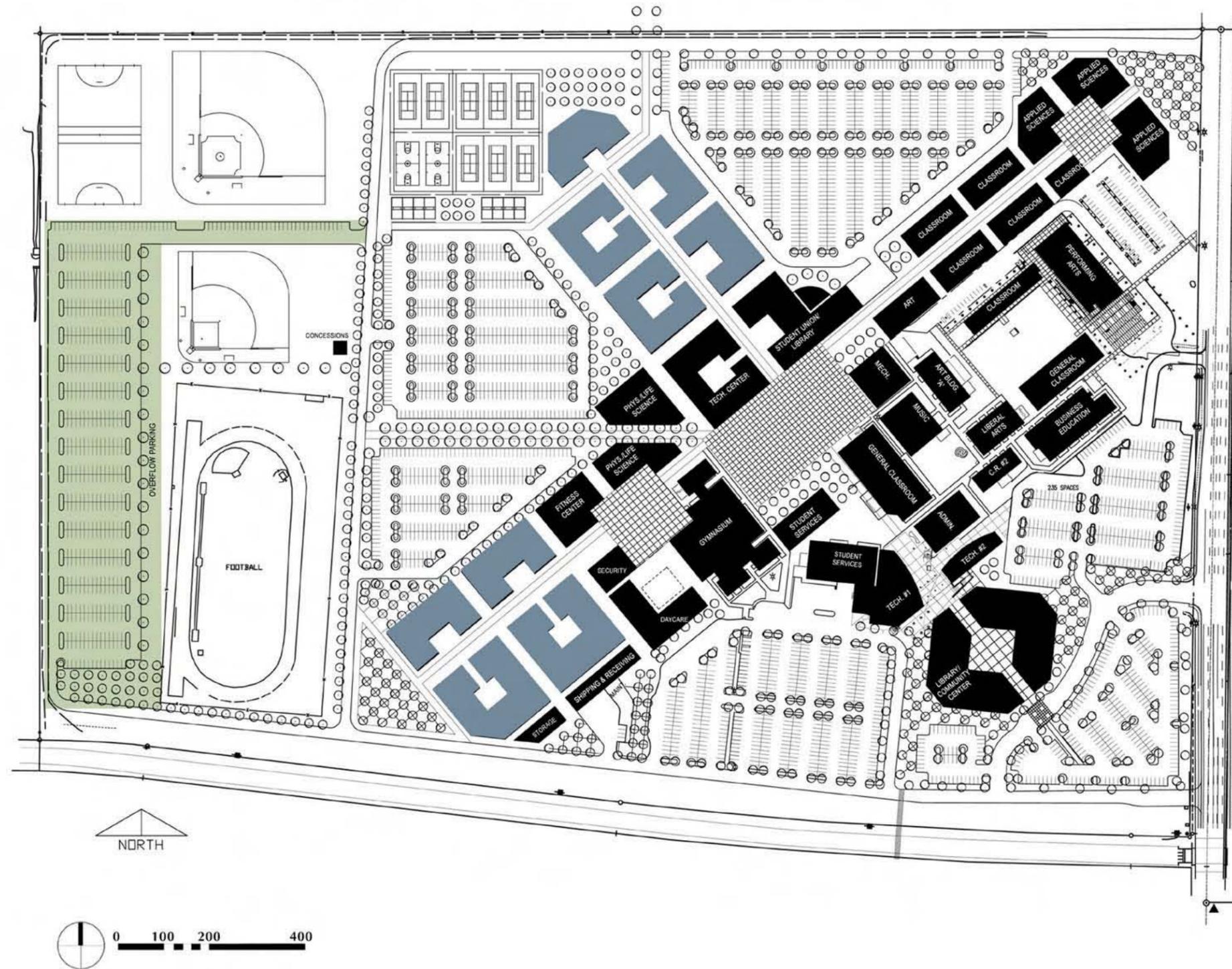
The new Learning Resource Center/Student Union/Library complex will anchor the heart of the campus. The buildings will not only help define the edge of the campus plaza, but they will also offer a palette of diverse and dynamic program functions. This mixture will maintain the beat of the campus with the lively interactions. On the ground floor, an open passage can still offer an open view through the LRC to the distant mountains.

The athletic fields are efficiently and conveniently grouped together. A new fitness center along with the existing Gym and other campus amenities will help to create a unique outdoor gathering space. Visitors can access any of these facilities through the new re-directed outer loop road. The outer loop road will permit visitors to access several of the campus facilities without causing disruption to the main campus core.

This phase emphasizes the connections to vehicular, pedestrian and community visitors by extending the campus corners toward 24th Street and creating a connection to the north.

10 Year Phasing - Construction

SMCC Main Master Plan - Phasing & Implementation



20YEAR PHASING - MASTER PLAN

- EXISTING BUILDINGS
- AREA OF PREPARATION
- DEMOLISHED BUILDINGS
- NEW BUILDINGS
- OUTDOOR CONSTRUCTION
- AREA OF MODERNIZATION

The final master plan vision gives the community college a sense of place and orientation. The buildings contribute to the whole by defining zones of function, such as public and semi-public. Furthermore, the buildings act as an ensemble to create outdoor rooms and to promote student interactions. The efforts are reinforced with creative and sensitive usage of landscape architecture.

An overflow parking of 530 new stalls is provided west of the running track. This location also anticipates the potential development of a SMCC football team.

Higher density of buildings, both in number and in height, will help the community college to be efficient with the finite amount of land. The master plan vision and building footprints define a clear, orderly, and phase-able framework. At the same time, it allows future design professionals the freedom of filling in the footprints according to their particular program, schedule and budget.

20 Year Phasing - Master Plan Vision

SMCC Main Master Plan - Phasing & Implementation

Summary of Phasing & FCI Relationships

As a whole, the condition of SMCC is in the "poor" classification. There are eleven buildings which are greater than 40% FCI (Facility Condition Index).

Condition	FCI%
Excellent	0 to 5%
Good	6 to 10%
Fair	11 to 20%
Poor	21% & above

The following chart, breaks down the 5 and 10 year phasing process. SMCC's 5 and 10 year FCI (2007/2008 and 2012/2013) is based on the following 3 assumptions:

1. The campus spends \$7,178,085 now to take care of the current backlog of deferred maintenance.
2. The campus continues to spend \$60,000 per year for future maintenance.
3. The campus brings 172,574 SF of new space on-line by 2007/2008 and an additional 150,350 s.f. of new space by 2012/2013.

Given these 3 assumptions, the campus-wide FCI should be 5.2% in 5 years (2007/2008) and 4.5% in 10 years (2012/2013).

	5 Year Phasing						
	Demolish	FCI %	Modernize	FCI %	Add. To Existing	FCI %	New Building SF
Daycare/ Offices/ Classrooms	1,350	52.55					13,500
Security/ Storage							5,400
Shipping and Receiving/ Maintenance							7,000
Life Sciences and Physical Science							25,000
General Classroom Space							12,056
Joint Library/Community Building							100,000
Administration							9,150
MISAP (H)	850	0					
Mechanical / Storage					5,080		
WAC	4,768	96.84					
Racquetball	7,205	-					
Music					4,288		
TOTAL							172,106

	10 Year Phasing						
	Demolish	FCI %	Modernize	FCI %	Add. To Existing	FCI %	New Building SF
Mechanical			3,920 (orig. structure)	14.29			
Music			5,280 (orig. structure)	48.61			
Gymnasium			33,202	44.56			
Class room 2			4,083	52.43			
Liberal Arts			6,523	50.96			
Art Building			6,871	48.33			
Student Services 2	10,935	3.91					8,400
Student Services 1 (re-use)			12,768	17.68			
LRC (re-use)			20,268	50.86			
Storage							3,665
Maintenance	1,125	1.18					
SMCC/ Storage	1,260	1.18					
Physical Science	8,209	46.82					
Concessions/ Restrooms							850
Life Science	6,483	48.95					
Fitness Center							12,513
Tech Center							50,554
Gen. Classroom (1)							8,400
Gen. Classroom (2)							8,400
Gen. Classroom (3)							8,400
Gen. Classroom (4)							8,400
Gen. Classroom (5)							4,400
Applied Science (1)							10,919
Applied Science (2)							11,570
Applied Science (3)							13,879
Art Building							8,400
TOTAL							150,350

* The numbers in the table reflect 5 and 10 year phasing projection of demolition, modernization/re-use and new building construction. -The square footage represented in the "Total" column mirrors the square footage represented in the 5 and 10 year master plan phasing. -The "Total" number attributed to each phase includes circulation, support and laboratory spaces. The Master Plan provides development "footprints" as framework for growth. Density can be achieved with additional floor levels to accommodate future program requirement and/or needs.

Inspired design appropriately adopts forms based on the fundamental principles of the physical surroundings, which include both the macro and the micro views. The horizontal and the vertical elements take their queues from the physical characteristic of nature.

Innovation

Innovation can be defined as a design in harmony with the existing environment. It is imaginative, contains the highest level of craftsmanship throughout the use of local materials, and advances through its contribution to the transformed environment. It is not merely a reproduction of ancient examples. As a work in progress, the design for the SMCC campus is a collaboration among the issues of technical requirements, budget, materials and the physical environment.

Natural Surroundings

If our impressions of the immediate environment are artfully depicted, then landscape and architecture will often become something innovative. The distinction between indoors and outdoors should disappear. Architecture is not only perceived but also experienced, as it becomes an aspect of everyday life.

Architecture, exploration, innovation, history, natural surroundings, relationships and the commitment of time, are all inseparable aspects of the journey from an idea to a purposefully built campus. The effectiveness of our efforts must create a broader context and vision for the ultimate success of SMCC that will inspire the future generations of students. Comprehensive design requires going beyond the obvious in order to set the stage for the three-dimensional foundation of everything to follow.

Purpose and Intent

A comprehensive master plan establishes the broad vision of the campus, potential land use locations, and, some criteria for development decisions. Design guidelines provide a detailed image of the comprehensive plan goals, yet they allow greater flexibility and creativity in addressing design issues. These guidelines convey design criteria to designers for architecture, landscape architecture, parking, circulation and overall site considerations. Guidelines assist designers in achieving quality design and will enhance the proposed developments.



Innovative building envelope



Surface and material texture



Thoughtful usage of water



Integrated outdoor shades space



Integrated canopy & defined threshold



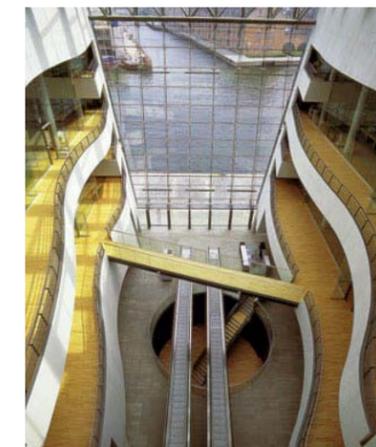
Playful usage of colors



Creative usage of materials



Variety in building fenestration



Indoor & outdoor relationships

Design Guidelines

Introduction

A. SMCC Quality and Character: Site development with sustainable design principles preserves and promotes regional identity, culture, ecology, and creates a sense of place. The basic premise of sustainable site development is the respect of the existing, built campus environment and culture. The master plan will cultivate and enhance the sense of place throughout the phasing process. A sustainable site development philosophy must incorporate the following principles:

1. Enhance the character and culture of the SMCC campus and community.
2. Consider the culture and texture of existing built landscape and history.
3. Develop the infrastructure and the architecture to reinforce the 20-year master plan vision.
4. Site buildings to create outdoor rooms.
5. Clarify, strengthen and promote a main campus plaza.
6. Promote a multi-level campus and higher density for economy and efficiency.

B. Public Art: Artwork should encourage cultural preservation through artistic interpretation. At the same time, public art should promote the creation of attractive and useable public spaces.

Guidelines include but are not limited to:

1. Landscape enhancements such as sculpture, decorative paving and bridges
2. Architectural features such as shade screens
3. Site improvements such as gates, bike racks, benches, trash receptacles, and bus stops.
4. Community artwork

Site Plan

A. Security: Life, health and safety issues are important issues in the development of the campus for students, staff members and visitors.

1. Provide adequate security and lighting for pedestrians from building exits and entrances, pathways and parking areas.
2. Promote the visibility of entranceways, parking lots and pathways through smart site design.

B. Pathways and Streetscape: Site development shall include pathways and streetscape improvements. These improvements are considered as those architectural or functional facilities or structures that occur on site but are not part of the building and that encourage and facilitate human interaction with the built environment. Examples of this include but are not limited to light fixtures, sculptures, fountains, benches, planters, pedestrian and bicycle paths, parking structures, trash receptacles and fences. Provide pathways and streetscape with continuity between adjacent uses by including cohesive landscaping, shading elements, decorative paving, shading elements, street furniture, public art and integrated infrastructure elements.



Integrated public art



Creating shaded outdoor rooms



Novel interpretation of site furnishing



Creatively defined public realm



Playful patterning of hardscape design

Design Guidelines

C. Alternative Transportation: Integrate alternative modes of transportation including pedestrian, cycle and bus.

D. Service Areas: Trash and Refuse Collection Areas

Service areas include loading areas, trash storage, recycling containers, and site maintenance equipment. Optimally, trash and refuse collection areas will be screened and secured. Service roads will be used specifically for deliveries, trash pickup, and other service activities in order to minimize visual impact to SMCC campus users.

1. Provide access to service areas such that service vehicles will not interfere with regular pedestrian and vehicular traffic.
 - a. When feasible, the location of service areas should be coordinated with adjacent properties so that the size and number of driveways and other paved surfaces can be minimized.
 - b. Central service handling areas also should be considered.
2. Service areas should not be visible from major pedestrian ways.
 - a. Where possible service areas shall occur below grade in a network of underground service passageways.
 - b. Locate service areas along the rear of a site. Trash areas, including large dumpsters, shall be screened from view of major pedestrian routes, using a wall, fence or hedge.
 - c. For larger storage facilities, consider using appropriate enclosures that blend with the architecture.
 - d. Combine service areas with other properties, when feasible.

E. Outdoor Lighting: The character and level of lighting is a special concern of the SMCC campus. Exterior lighting should illuminate spaces and areas to ensure campus security standard.

1. Exterior lights should be simple in character and with adequate intensity to provide visual security.
 - a. The design of a fixture should be simple in form and detail.
 - b. Lights that cast a color similar to that of daylight are preferred.
 - c. Lighting fixtures should be appropriate to the building and its surroundings in terms of style, size and intensity of illumination.
2. Prevent glare onto adjacent properties by using shielded and focused light sources that direct light onto the ground or building surfaces.
 - a. The use of downlights, with the bulb fully enclosed within the lamp housing, or step lights that direct light only on to walkways, is strongly encouraged.
 - b. Lighting shall be carefully located so as not to shine into residential living space (on or off the property) or into public rights-of-way.
 - c. Lighting is to be placed and shielded to limit glare and to limit the emission of light beyond the development
3. Minimize the visual impacts of site and architectural lighting.
 - a. Unshielded, high intensity light sources and those that direct light upward are inappropriate.
 - b. Shield lighting associated with service areas and parking lots.
 - c. Where safety or security are a concern, the use of motion sensors lighting are strongly encouraged.
 - d. Security lighting will be considered on a case-by-case basis.

Exterior lighting & bollards precedents



Design Guidelines

F. Pedestrian Systems: Continuity of pedestrian routes is a high priority for the SMCC campus. Pedestrian's connectivity between buildings and the larger campus is important. In addition, pedestrian routes should provide safe, uninterrupted access to all pathways and major open spaces on the campus. The character of the public linkages presents the greatest opportunities to establish controls and image perception of the SMCC campus. It is from these linkages that all persons on the campus or passing through, will sense the integration between scenic mountain views, campus plazas, campus gateways and the 24th Street edge.

G. The campus should be designed to provide an attractive street edge and to encourage pedestrian activity within and through the campus. This applies to landscaping, open space, signage as well as to the building facade. A network of convenient and safe pedestrian paths shall connect areas within the project and to adjacent properties. These shall provide continuity, visual interest, shade and site furnishings for pedestrian use.

1. Develop projects to encourage pedestrian activity.
2. Building entrances should be clearly identified.
3. Provide waiting areas or courtyards to give buildings and pedestrian circulation continuity
4. Landscaping that identifies pedestrian ways or provides a separation between automobile routes is strongly encouraged.
5. Benches or sitting opportunities in the areas around the buildings are also encouraged.
6. Sidewalks, paths and bike lanes that are protected from traffic are encouraged.
7. Provide pedestrian walkways that connect public transportation system shelter to buildings in safe and convenient manner.
8. Internal routes within large projects should be provided to connect with external pedestrian systems.

H. Vehicular Circulation and Parking: Large areas of parking are an anticipated part of campus growth and developments. Their impacts on the surrounding environs should be minimized. Safe, efficient and convenient parking within the project shall be provided.

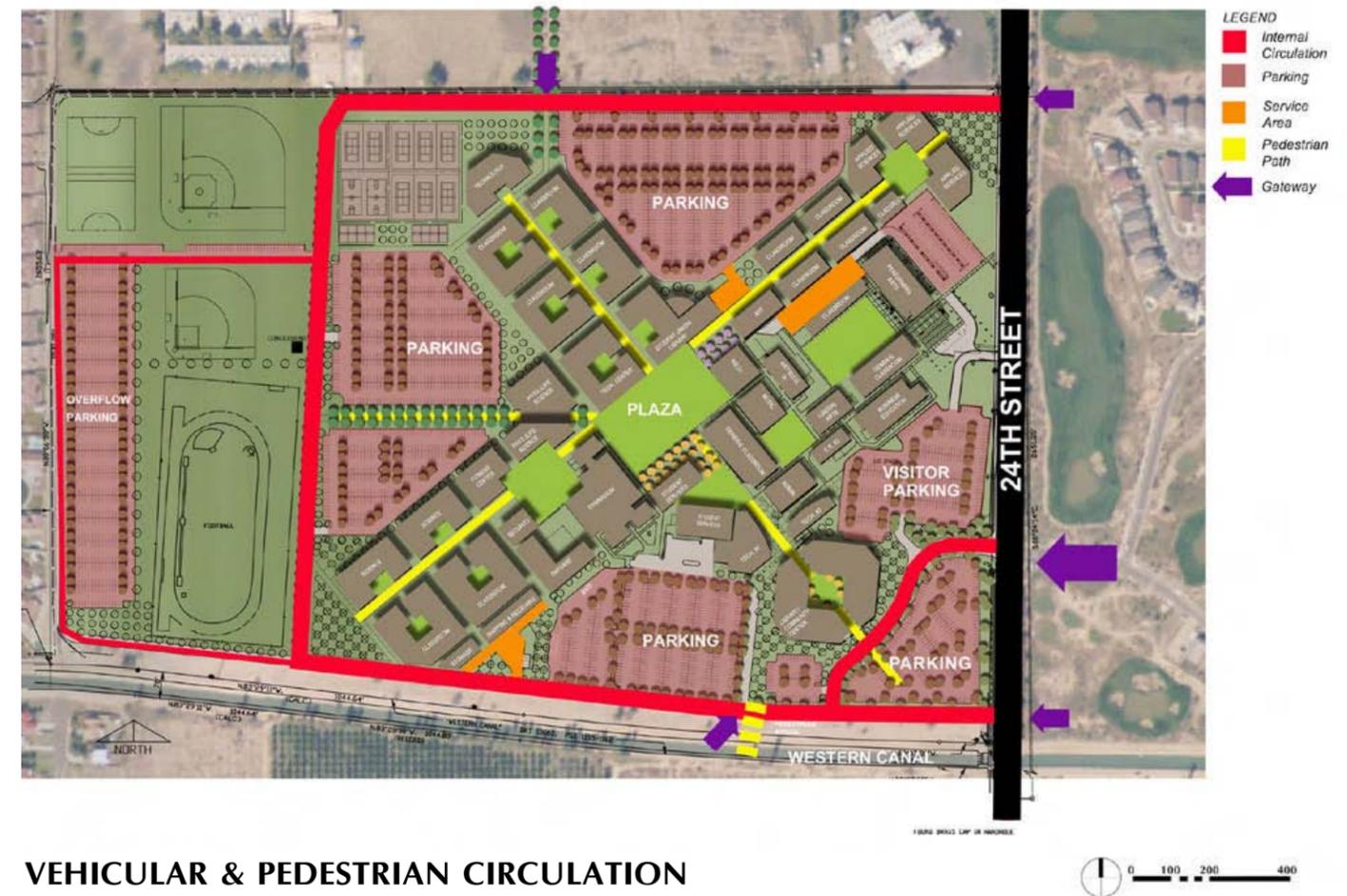
1. Vehicles, pedestrians and mass transit's access to different parts of the campus should be convenient and efficient.
2. Pedestrian drop-off areas should be convenient, safe and well lit. These shall be incorporated to the overall circulation pattern.
3. On-site parking areas should be located where their visual impacts will be minimized
4. Screen a parking area from view of the public right-of-way with plantings, fences and walls.
5. Provide landscaped "islands" in the interiors of lots.
6. Access for emergency vehicles shall be incorporated into the design of the project
7. Use paving materials that will minimize the impact a driveway will have on a streetscape.

I. Bike Circulation

1. Provide parking in safe and well-lit areas adjacent to building entrance.
2. Bicycle paths shall run adjacent to pedestrian pathways that traverse the central Gateway

Architectural Character

The SMCC Design Guidelines will help to achieve the campus vision of creating a place of architectural, aesthetic and academic distinction. The purpose and intent of these guidelines and standards are not to stifle innovative architecture or development, but to assure respect for the existing campus fabric and to reduce adverse impacts on the campus experience. Architectural details for the SMCC campus will explore new materials, technologies, and techniques. These will be respectful of the colors and materials currently used and will explore uses of alternative materials that will enrich the cultural and architectural development of the campus. Regardless of stylistic treatment, a new building should follow the quality and design standard set by the Technology Center and the Performance Art building.



VEHICULAR & PEDESTRIAN CIRCULATION

Design Guidelines

A. Building Design: New building designs can draw upon fundamental characteristics of traditional building and the culture of the southwest are encouraged, yet should be seen as products of their own time. The design of the structures and their materials shall be visually harmonious with the overall appearance, history, and cultural heritage of the southwest.

1. Building
 - a. Design all sides of buildings
 - b. Provide for variety and diversity; express uniqueness of structure, location or program requirements
 - c. Explore new building techniques that are environmentally friendly
2. Function/ Appearance
 - a. Use color theme that is harmonious with SMCC campus and will enhance the existing buildings
 - b. Design projects with durable, low maintenance and energy conscious materials.
 - c. Incorporate elements that provide transition between built structures and the people that are using them i.e. trellises arcades, and lighting.
 - d. No building facade (whether front, side, or rear) will consist of architectural materials inferior in quality, appearance, or detail to any other facade of the same building. The intent of this is not to exclude the use of different materials on different buildings' facades, but rather to preclude the use of inferior materials on sides that face adjoining property, and thus, might adversely impact existing or future development.
 - e. Stucco, concrete, brick or other materials with similar texture and appearance are considered appropriate of the SMCC character. Reflective surfaces may be acceptable based on overall architectural treatment and use in relation to the site.
3. Height
 - a. Future buildings should be multi-level to conserve land and to be economically efficient.
 - b. The heights will be dictated by campus growth and needs and will be built within the master plan prescribed footprints.
4. Ground Floor
 - a. Encourage outdoor seating areas and window openings to strengthen indoor and outdoor relationships. These help to create a dynamic campus experience.
 - b. Incorporate the use of shade structures such as canopies or awnings over windows or doors
 - c. Develop total design concept - design should unify all design elements.



Minimize solar gain with dominant ratio of solids to void in building mass



Canopy to link and define indoor / outdoor spaces



Horizontal sunscreen



Free-standing shading umbrella



Vertical fins sunscreen



Overhangs for sun protection



Interior screen and massing as solar control

Design Guidelines

B. Sustainable Architecture:

The buildings should be sensitive to the environment and their natural patterns.

- o Sun alignments
- o Prevailing winds
- o Water as an oasis
- o View corridors
- o Local materials



Sculptural interpretation of shading element



Integrated water feature

1. Climate

Consider the year-round altitude and azimuth of the sun when designing exterior wall space, window sizing and placement, overhangs, and interior layout. For example, overhangs can be designed to provide shading during the summer months while admitting sunlight during the winter months when the sun's path is lower. Windows and shading devices can be placed strategically, in concert with the overhangs to maximize solar heat gains in the winter while minimizing solar gains in the summer.

- Shape buildings to be conscious of wind. Buildings can be shaped to divert wind in cold climates. In hot climates, buildings can be shaped to catch summer breezes, while the interior could be laid out to efficiently circulate these breezes.
- Use landscape to provide desired microclimate for buildings. Landscape elements such as trees, plants and berms can protect buildings from solar gains and harsh winds. Earth-sheltering techniques such as recessing the building below grade can also provide beneficial climactic protection for buildings.
- Encourage state of the art building technology
- Incorporate the latest technologies to energy efficient building techniques



Sunshading element precedents

2. Building Envelope

- The thermal mass of a building is a vital factor that must be considered in heating and cooling strategies. In general, the greater the mass of the exterior wall and roof, the greater the thermal transfer time between the exterior and the interior.
- The color of the building's exterior surfaces is also an important factor when it comes to heat gain. In general, light colored, reflective materials are preferable in hot climates, while dark colored, absorptive materials are preferable in cold climates.
- Windows are an extremely influential factor in climactic design. Window type, size, and placement have tremendous effects on solar heat gains, passive cooling, and natural lighting. All these effects must be weighed and balanced when deciding upon window types and placement.
- Roof overhangs, awnings, and blinds are just some examples of shading devices that could be used to prevent unwanted solar heat gains. These devices could be placed and used strategically according to the sun's altitude and azimuth. Site orientation should optimize passive solar heating and natural cooling where warranted.
- Utilize a vocabulary of natural indigenous materials and colors to enhance views and accentuate the regional context.
- Ensure that building orientation is determined by the climactic conditions of the site: sun, shade, wind, watersheds, and vegetation.

Utilities

Utilities that serve properties may include telephone and electrical lines, ventilation systems, gas meters, propane tanks, air conditioners, alternative energy sources and fire protection, telecommunications and alarm systems. Adequate space for these utilities should be planned in a project from the outset and they should be designed such that their visual impacts are minimized.

A. Visual Impacts: Minimize the visual impacts of utilities and service equipment.

- Provide adequate space for utilities. It should not be "left over" space that is exposed to public view.
- Locate utilities in the rear of a project and screen them.
- Any utility device or piece of service equipment should have a matte or non-reflective finish and be integrated with a building's colors.
- Heating, ventilating and air-conditioning ductwork or other fixed machinery shall be either screened from view or located so that such items are not visible from highway.

B. Screening:

- Screen rooftop appurtenances (such as mechanical equipment and antennas) from view.
- Use landscaping to screen a satellite dish that is mounted on the ground.
- A small satellite dish that is mounted to a structure should be located to the rear of a structure.

SMCC Main Master Plan - Signage Guidelines



Signage

The purpose of a signage program is to establish a coordinated exterior signage program that affords SMCC prominent recognition while achieving a unified overall attractive campus appearance. In addition, controlled way finding and identity signage are major factors in creating the design character of the overall campus. The way finding and identification graphics of SMCC play a major role in the unification of the project as a whole. Signage deals will elements that will direct the visitor and create a sense of orientation through banners, paving patterns, building colors, sculpture, public art, and fountains.

Vehicular Signage

To be located at major intersections and along the Interstate-10 frontage, this style of signage guides the visitor to the SMCC Campus. These signs will be constructed of metal with decorative metal accents that reflect the overall theme of the SMCC. Additionally orientation signage will be placed at major parking entrances to orient students and visitors.

Major Site Identity

To be located along the Western Canal and urban entries off of 24th Street, the major site identification signs are at an urban scale relating to the site and relate to the speeding vehicles. These signs are meant to be seen from vehicles on 24th Street approaching the Campus.

Secondary Project Identification

SMCC secondary entrance monuments will be large and vary in longitudinal heights. They will be located at entrances off of 24th St. These signs will appear to be part of the site work rather than afterthought and will be illuminated internally or from ground lights. Although of a smaller scale, these signs serve as visitor orientation guides for secondary drop-off areas such as the Performing Arts Center. Materials for signage will be a mixture of masonry, decorative metal and integrated tile or other elements.



Informational Signage

Directory and Campus Maps

Directories will be located in key areas where people gather. They are intended as more than just a map of the Campus and will incorporate campus information, displaying upcoming events and class information.

This signage will be made out of metal with layers of Plexiglas accented to maintain overall SMCC theme. The individual panels will be internally illuminated for night visibility and the artwork changeable.

Pedestrian Scale Signage

This style will be used to direct pedestrians to different points in the campus. This smaller scale sign is located at major entrance points in the campus to guide pedestrians to administration buildings, student services or the library. The visitor will be met by a series of signs located along major paths and in gathering areas of courts to guide them throughout the campus.

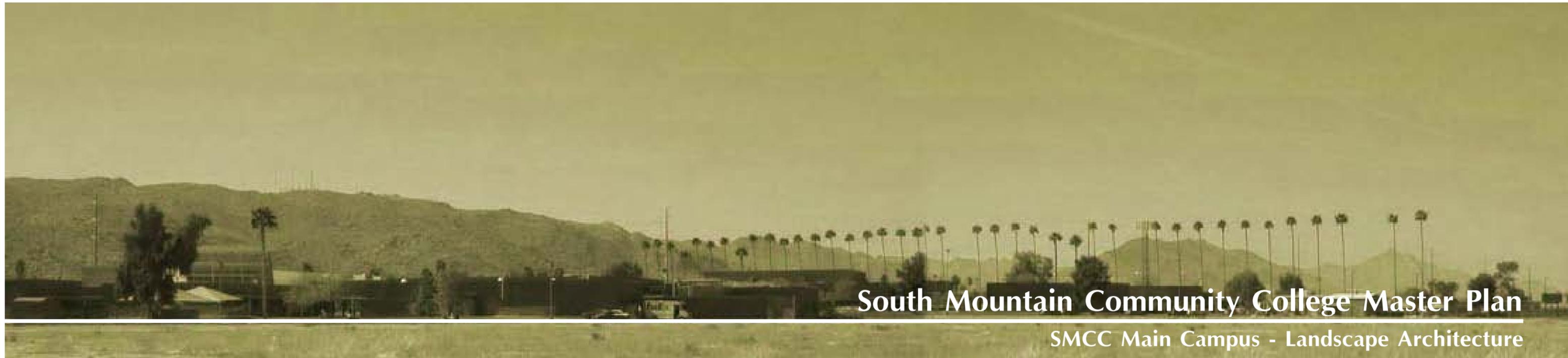
The pedestrian signs will indicate points of interest and comfort areas such as public restrooms, elevators, accessible route ramps etc. The directional signage will incorporate decorative elements that help link the signage together with the architecture and landscaping elements.

Building Mounted Signage

This style of signage shall be incorporated to the overall architecture theme of the building. Careful attention will be paid so that the signage does not blend into the colors of the building and are easily identifiable.

Landscape and Color

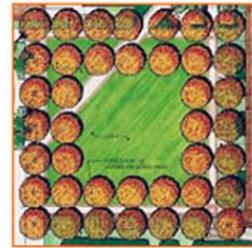
Signage not only comes in the forms of signs and words but also by recognition of materials and color. By using particular shades of color to identify building use, students and visitors will more easily recognize the general areas that they wish to be in. Landscaping can also trigger memory by sight or sense of smell such as the orange garden or the rose garden. The use of building color and landscaping will help to create a more harmonic campus with various points of interest.



South Mountain Community College Master Plan

SMCC Main Campus - Landscape Architecture

Generalized Campus Landscape Concept



Building on the goal of celebrating the history of the South Mountain region's cultural landscape, several landscape "textures" and themes seem especially appropriate. It is suggested that each texture could also have some basic interpretive material that could explain the significance and history of each landscape pocket. Future landscape designers are encouraged to embrace the following patterns and be thoughtful in the application to future campus spaces.

- **Japanese Flower Garden:** normally considered a formal garden, or even suggesting a garden that frames traditional tea ceremonies, perhaps even more appropriate might be an area or courtyard that mimics the longstanding tradition of agricultural production rows of cut flowers. Support from the Japanese-American community could be sought to generate the final built form of this landscape node.

- **Pecan Grove:** Towering shade for three seasons and a beautiful deciduous winter silhouette characterize this regional texture. A large, campus-wide space that can support this grand scale and texture seems most appropriate.

- **Cottonwood Bosque:** Seen for generations in barrio neighborhoods and along canal banks, this towering collection of native trees could also be developed into a natural "riparian" setting of boulders, rocks, naturalistic water features, and native rushes and grasses.

- **Citrus Groves:** Organized in small, limited courtyards, the memory and legacy of citrus production could be memorialized in limited quantity. It is suggested that as many as three areas or courtyards could be designated so as to have an orange, lemon, and grapefruit grove.

- **Sonoran Plaza:** too often the idea of Sonoran landscape is represented in mock fashion rather than in the splendor of its full setting. In addition to Palo Verde trees, a full complement of large boulders and desert plant material understory with the possibility of butterfly, hummingbird, and cactus wren habitat being brought into the campus environment.

- **Sky Line or Sky Grid:** The traditional use of towering Mexican Fan Palms to mark the edge of a farmer's field is compelling, yet to translate to more immediate campus needs, the possibility exists to create a towering central courtyard space.

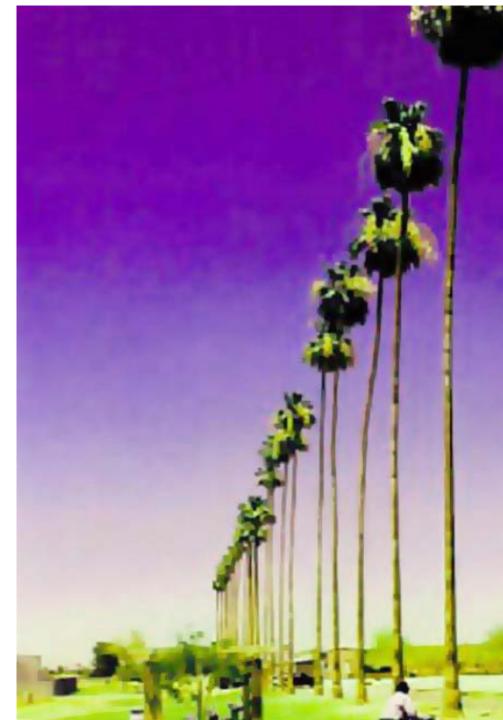
Campus Landscape Introduction

Overview: The Landscape Master plan for the South Mountain Community College Campus is intended to provide recommendations and guide campus growth in a logical, orderly fashion. For most of the campus, landscape development has been piecemeal, "ad hoc", and not connected to any greater overall campus plan.

Thoughtful, orderly landscape development of outdoor spaces is the most significant goal of this master plan. The current condition of the campus is seriously deficient in accommodating the needs of students in outdoor spaces that contribute to an overall sense of well-being, create shade, shelter, and enclosure, and impart a "sense of place".

Campus Landscape Master Plan Goals:

- Provide for logical outdoor campus spatial organization and building amelioration which can be implemented incrementally as future building projects are realized.
- Promote the use of outdoor areas as an enhancement to the overall academic experience. Areas conducive to outdoor socializing, study, recreation, and learning are foremost.
- Create campus identity and character through the creation of Sonoran region plant displays that showcase the rich and varied landscape traditions of the South Mountain area over time.
- Provide landscape design guidelines that reinforce safety and security for all campus users and visitors.
- To establish campus standards for walkways, malls, plazas, and outdoor recreation and gathering areas that are enjoyable, maintenance responsive, and water-wise.



Landscape Architecture

Campus Landscape Hierarchy



· Currently underutilized as a campus resource, the southern perimeter of the SMCC campus is a resource for a future community hike-bike-walk connection along the canal bank.



· An existing loading dock faces into a large public parking lot with no landscape screening or amelioration.



· Unrelenting pavement at building edges and interstices is harsh, hot, and full of glare. Building edges deserve to be softened and provide a cooler micro-climate.

The South Mountain Community College Campus can be categorized by 6 distinct areas or levels of hierarchy:

- **Campus perimeter:** The important public perception of 24th street, the canal bank to the south, and neighboring uses to the east and west. In the main, only the 24th Street perimeter is likely to be fixed as a perimeter edge for decades to come.

The other campus edges have been the subject of much discussion regarding land acquisition and expansion, leaving their limits somewhat in doubt for the next decade. Developing the north, west, and south campus boundaries with landscape identity elements serves little public need at this point in time. It is recommended, however, that the 24th Street landscape treatment should be bolstered and enhanced soon. Continuing the existing desert & low water use theme is prudent here, while also adding some enhancement and verticality to the streetscape. The row of existing fan palms on the east side of 24th street should be mirrored by SMCC on the west side of 24th Street to create a civic boulevard of consequence.

- **Parking Lots:** existing and future parking lots are the first impression of the campus experience. As illustrated herein, desert trees are most appropriate and will be themed by location. Because limiting maintenance is a priority in these areas, landscape development should be kept to simply trees and gravel, with shrubs used only where screening of refuse areas or undeveloped areas is a must.

By eliminating hundreds of shrubs and attendant watering systems, maintenance efforts can be focused on the trees and the benefits well developed shade canopies can bring to the college. Elimination of shrubs also advances Crime Prevention Through Environmental Design [CPTED] concerns in parking areas. All parking lot trees are to receive a scheduled pruning and feeding application on a consistent basis to realize the above goals.

- **Building Interstices:** The outdoor spaces immediately adjacent to building entries, and areas in and around individual buildings. These areas are heavily used and are more visible than perimeters or parking lots, suggesting that more density of plant material can be expected. Plant selections should remain arid-adapted and Sonoran materials, but some shrub plantings are expected to emphasize pedestrian entries or provide directional flow or buffering. Lawn is to be eliminated and avoided in nearly every case, unless by occupancy, use, or proximity to high visibility and high use areas, the use of turf can reasonably be justified.

Campus Landscape Hierarchy

- **Campus Circulation:** linear walkways, malls, and outdoor circulation spines. These spaces on the existing campus are narrow and provide challenges for the landscape designer and campus landscape maintenance crew. In the future, new buildings adjacent to campus circulation should consider more thoughtfully the realities of lack of sun / heavy shade, the need for these narrow spaces to handle deluge rain storms, and the heavy pedestrian traffic these landscape areas are subjected to. It is recommended that all small-scale plantings be eliminated to reduce maintenance and that only large shrubs [natural habit type, no shearing] and small trees be utilized along these corridors. Typically no turf is expected.

- **Active College Recreation:** ballfields, track, tennis, and other outdoor recreation areas. These spaces will certainly need to receive appropriate levels of landscape maintenance, especially as outdoor recreation continues its rise in popularity, as well as welcoming members of the community onto the campus after normal classroom hours.



· Adjacent to campus recreational uses, this gigantic lawn area has little designated uses, is not regularly populated by campus users, yet commands great time, water, and resources to maintain.

At the present time, there is a tremendous amount of undesignated open space planted in turfgrass that serves no clear purpose or program. By far the worst offender in terms of water and maintenance intensity with little or no population enjoying it, these areas should be eliminated adjacent to the legitimate turfgrass uses of ballfields, track & field, and football. These areas are ideal for xeriscape and could well become retention areas for the newly reorganized parking districts recommended in this master plan.



· One of the few existing outdoor campus courtyards, this space has little green amelioration, shade, or human scale elements that welcome campus users.

- **Campus Quads & Plazas:** campus commons and "outdoor rooms". By eliminating or reducing maintenance and resource concerns elsewhere on campus, these key outdoor spaces can now be the recipient of a high level of landscape treatment where people logically congregate and pass by. Lawn to luxuriate in, flowering trees, and oasis shrub treatments are the norm here. As described herein, themed approaches will create identity and variety and will have multiple use characteristics to offer to the campus population.

If the guidelines of this master plan are successfully carried out, these spaces will be renowned throughout the valley as "Must See" destinations as has historically been the case with the South Mountain region with the Japanese flower gardens,

All future campus landscape development will likely follow this hierarchy with landscape treatments organized according to each of the six component hierarchies.

Landscape Architecture - Concepts



The distinctive row of existing Washingtonia robusta palms already on campus could likely be transplanted to the Central Plaza and lend even greater identity to this important new campus outdoor space

Campus Central Plaza

Components to consider:

- Tall Washingtonia robusta palms that are exclusive to this space and no other on campus. The height and "sky grid" of these stately palms will create a point of reference within the campus.
- An area of "deep green" around the entire perimeter where benches, study tables, and outdoor living can be accommodated. Most campus users prefer to locate themselves in shade and comfort on the perimeter of a plaza to observe others and pedestrian movement.
- Paving for this plaza could be considered to be "art paving" of the highest quality on campus. Arizona flagstone of various colors and designs would be an excellent campus focal point. Shady groves of trees can flank this court on the periphery.

Campus Central Plaza

Important to the pulse of campus life of any great learning institution are gatherings and celebrations of great variety in a central plaza. Whether a ceremony of great gravity such as graduation, or a celebration of the season such as Cinco de Mayo, a football pep rally, or a show of national patriotism at an outdoor assembly, the need for a Campus Central Plaza of great character and comfort is obvious.

Traditional campus elements of such a plaza include a campus clock tower with chimes, a major placement of public art, a large paved plaza of prestige materials, and a formal arrangement of tall or large trees. Newer elements to consider beyond traditional choices include themed lighting including laser displays, state of the art music amplification, a dais for music and rock concerts, and display of digital /video media.



Music & Liberal Arts Courtyard

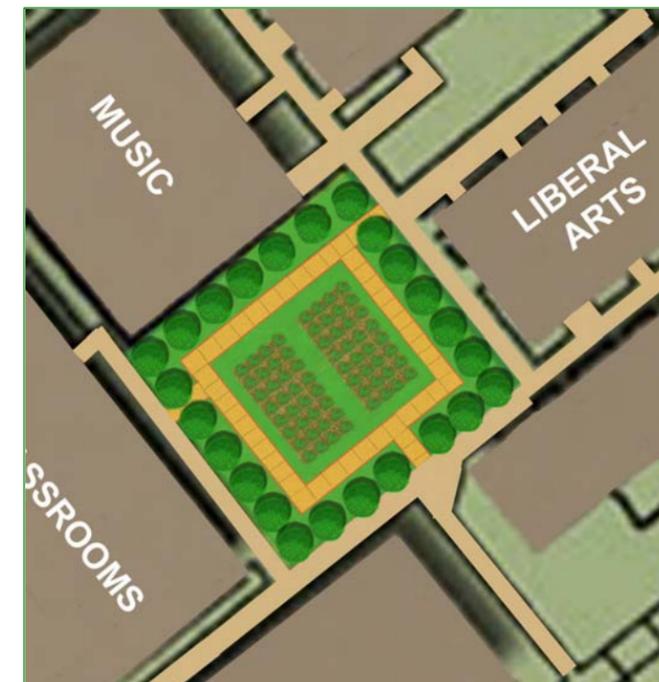
The area adjacent to the planned Music and Liberal Arts buildings is a quiet courtyard sequestered somewhat from the rest of the campus. It may be a courtyard that could have a small outdoor music performance and should be calming and quiet.

This courtyard is of an "arts" character and will likely be a good candidate for the limited use of lawn and will be developed in a manner conducive to strolling and relaxation as a formal garden. It is recommended highly that this space be developed with the help and commitment of the Japanese- American community to display and celebrate the legacy of the Japanese flower gardens that have inhabited this region for more than 70 years.

Music & Liberal Arts Courtyard

Components to Consider:

- Mature Orange Trees to give spring blossom fragrance and winter fruit color. Trees to be well trimmed-up to create canopy shade for benches and tables on the perimeter.
- Use of hybrid bermuda grass lawn or perhaps even the use of Zoysia turf, a grass with oriental character.
- A formally arranged walkway, pedestrian in scale and limited in scope to emphasize green character of courtyard.
- Potential for a limited pergola system that could support flowering vines: Grewia, wisteria, and other desert tough selections.
- Garden plots of flowering annuals to be rotated on a seasonal basis. These plots could be sponsored by local garden clubs, student groups, and cultural organizations.
- An interpretive history display that could include photographs of the famed Baseline Japanese flower gardens that were once a Phoenix tourist attraction

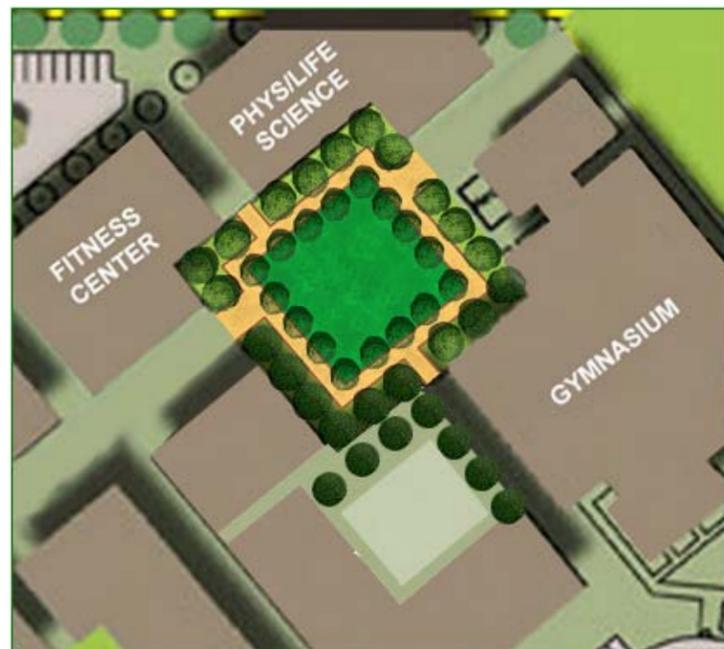


Campus Sports Courtyard

Surrounded by planned physical fitness facilities, this campus quadrangle will likely have the potential to harbor not only daily campus life, but also to feature demonstrations of physical activity such as Tai Chi, tumbling, martial arts demonstrations, and gymnastics.

Shady in the summer and open and sunny in the winter, deciduous canopy trees are the best selection for this area. Featuring gorgeous fall color for about 3-4 weeks in late November, Chinese Pistachio trees are an excellent choice for this campus quadrangle.

An arrangement of benches and study tables can be easily accommodated on the perimeter of the quad with a limited lawn area for campus sports activities.



This courtyard will be a favorite spot around Thanksgiving time due to the brilliant fall color of the Chinese Pistachio Trees.

Campus Sports Courtyard

Components to consider:

- Limited use of hardscape paving. Integrally colored and textured concrete to cut glare and soften paving.
- Decorative paving edges with sports and fitness theme.
- Possibility of a "par course" or exercise stations to be arranged on the perimeter of the courtyard.
- Shady groves of deciduous trees to admit sun in winter, provide shade in summer.
- Keep lawn area limited in size in the center for easy mowing and watering. Could be slightly depressed or terraced to provide much needed storm water retention capabilities.
- Arid region shrubs and ground covers with crushed granite to be utilized on the courtyard perimeter.

Perimeter Transitions

Components to Consider:

- Campus paving color and texture to extend out through driving lane of asphalt parking lot to alert motorists of this entry and pedestrian crossing.
- Interior Building Courtyards are relatively lush and water intensive, while the building perimeter areas facing parking areas will be relatively arid using native tree plantings:

Palo Verde
Ironwood
Mexican Ebony
Acacia smallii

And native Sonoran shrub and ground covers:

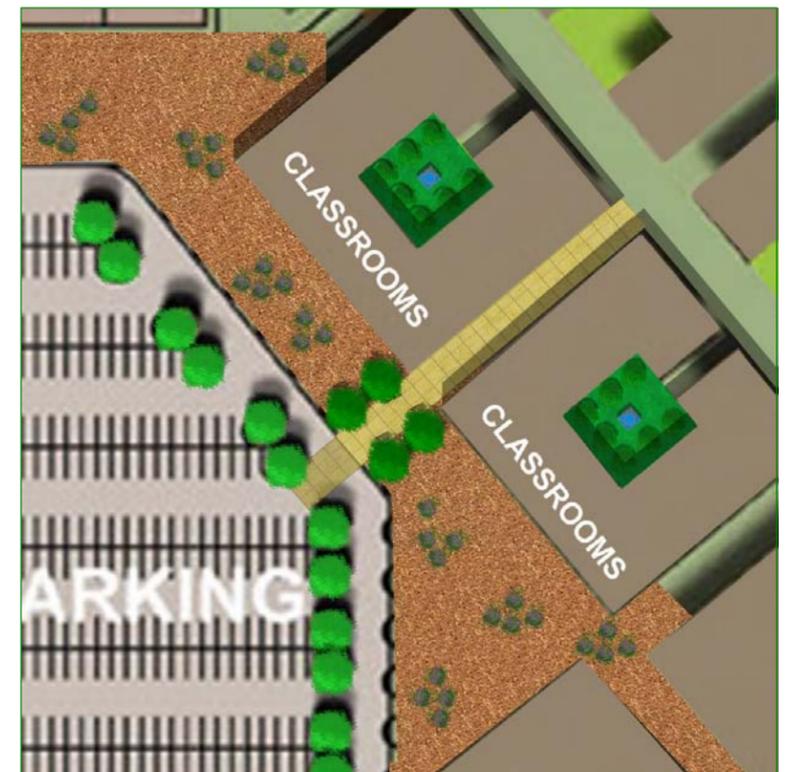
Jojoba
Brittlebrush
Creosote
Desert Spoon
Agave
Golden barrel cactus

- Parking Lot areas are to use minimal resources for water and maintenance while affording the maximum shade for these hot zones. Groves of native sweet Mesquite are highly recommended for this objective.

- Entry to campus courtyards to be "greened up" with canopy trees.

Campus Perimeter Transition Zones

The South Mountain Community College Campus will be water wise and utilize its maintenance resources wisely by adopting an arid transition zone from "green" interior courtyards to "Sonoran" building perimeters that face the exterior of the campus. Even though arid, this transition zone can be colorful, textured and highly attractive, but should acknowledge by design a need for reduced water and maintenance activity.



Landscape Architecture - Concepts

Tree Grove Parking

Parking Legend:

-  - Existing Acacia Parking
-  - Mesquite Parking
-  - Ironwood Parking
-  - Palo Verde Parking
-  - Jacaranda Mall
-  - Cottonwood Parking

In order to enhance perimeter parking areas, a tree grove thematic approach should be pursued. Each parking area will be defined by a particular desert tree that will create an area identity and a memorable landscape aesthetic. Each parking lot will be unique from its neighbors.

This approach will also assist visitors who are new to the campus and who may need help remembering where they left their car. If landscape islands are made large enough, Tree plantings can mature to canopies that can also provide some vehicle shading from the intense summer heat.

In addition, a dominant east-west axis that leads to the athletic and recreation area to the west of the academic campus will be identified by a distinctive landscape element, the "Jacaranda Mall". This landscape spine of trees will give character to a pedestrian oriented mall distinctive from the Ironwood dominated parking area that surrounds it.



Performing Arts Courtyard

The area will receive the new Performing Arts Center and is likely the outdoor courtyard to be most often seen by members of the visiting public due to attendance of concerts and performances.

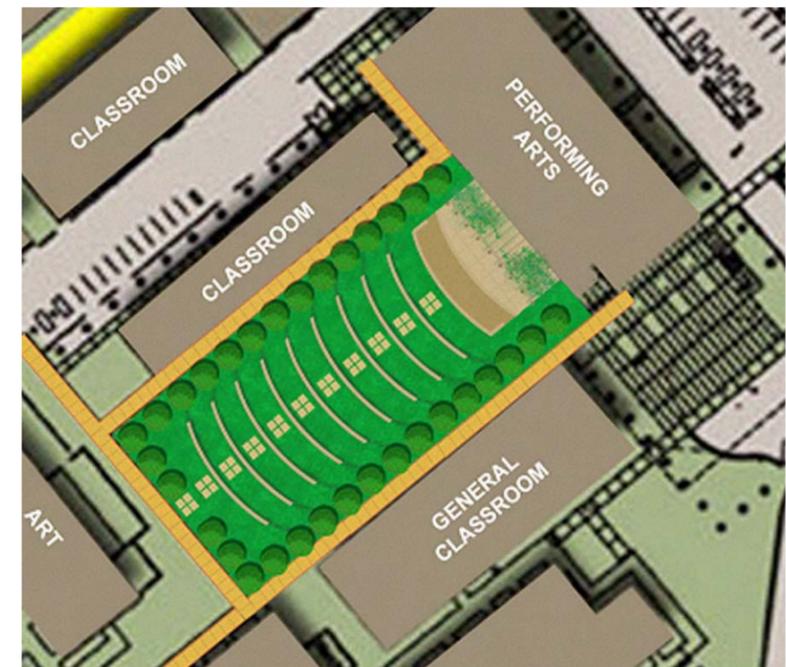
In keeping with overall landscape recommendations of applying landscape efforts of water, maintenance, and capital expense where most people congregate, this courtyard ranks high on the list of priority for intensity.

This courtyard is a natural for an outdoor amphitheater space. In addition to outdoor performances and small college ceremonies, this space would function well as a green retreat during non-performance times as well. Plans for developing this area should include soft and subtle night lighting to enhance public use for desert night celebrations.

Performing Arts Courtyard

Components to Consider:

- Mature Orange Trees to give spring blossom fragrance and winter fruit color. Trees to be well trimmed-up to create canopy shade while allowing pedestrian circulation on the perimeter.
- Use of hybrid bermuda grass lawn with Arizona sandstone pavers set with-in turf grass to form an "aisle".
- A "stage" area of Arizona sandstone pavers will also serve as a patio terrace when not used for performances.



Practical Pecan Grove Points

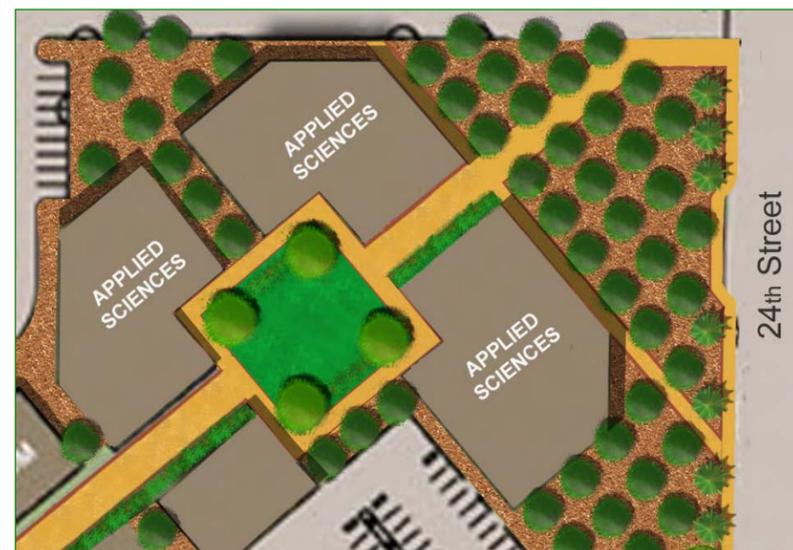
Flood irrigation is best for deep watering.

The "Western Schley" variety is by far the best nut quality for Maricopa County, but needs a few "Wichita" variety trees mixed in as a pollinizer.

Aphids attack these trees in the spring and will secrete a residue that is sticky on pavements and automobiles, but once a year spraying for aphids is usually enough to control this minor concern for a tree that is a great historical legacy to the area.

Northeast Pedestrian Entry Grove

A welcoming pedestrian entry will be developed at the northeast corner of the campus and will feature a shady grove of Pecan trees [Carya illinoensis] planted in an agricultural grid. Pecan groves are a natural choice for this location as they are common throughout the South Mountain region. Some wonderful grove examples exist immediately north of the campus along 24th Street.



The diagonal pathway from the academic core will logically be extended to 24th Street and will allow wheelchair and bicycle entry as well. The possibility exists at this entry point to provide a bus bay pull-off on 24th Street, or to designate this as a pedestrian drop-off and pick-up point for motorists.

In planning an entry grove of Pecan trees in this location, allowing space and room for a single row of palm trees on the campus edge seems appropriate and neighborly as there is an existing row of palm trees on the east side of 24th street.

At the time of implementation of this entry grove landscape, a complete streetscape evaluation and planning exercise should be executed for 24th Street to insure harmonious design for both sides of this significant boulevard.



The Pecan Tree

Pedestrian Entry Considerations:

Care must be taken with hardscape treatments at these pedestrian entry points with regard to ADA accessibility, night lighting [possibly soft uplighting of grove trees], and the potential for pedestrian drop-off/pick-up, and bus bay opportunities.

The possibility of a pick-up and drop off point is a helpful consideration.

The pedestrian diagonal axis terminates in a plaza on 24th Street.

From a master planning standpoint, the main idea is that passersby see pedestrian entry points as obvious campus gateways: welcoming, easily identifiable, and encouraging to pedestrian, wheelchair, and bicycle use.



The Cottonwood Tree

Southeast Pedestrian Entry Grove

A pedestrian entry to the campus at the southeast corner will be a welcoming link to the community. With the increase in multi-family housing along the Baseline Road corridor over the last several years, a pedestrian / bicycle / ADA entry point will become increasingly more important.



A grove of trees seems appropriate for a landscape expression at the southeast corner of the campus and should have a distinct and separate identity from any other outdoor space on campus. The Western Cottonwood Tree [Populus fremontii] is native to Maricopa County and will offer gracious summer shade and allow winter sun to shine through its canopy for this special location.

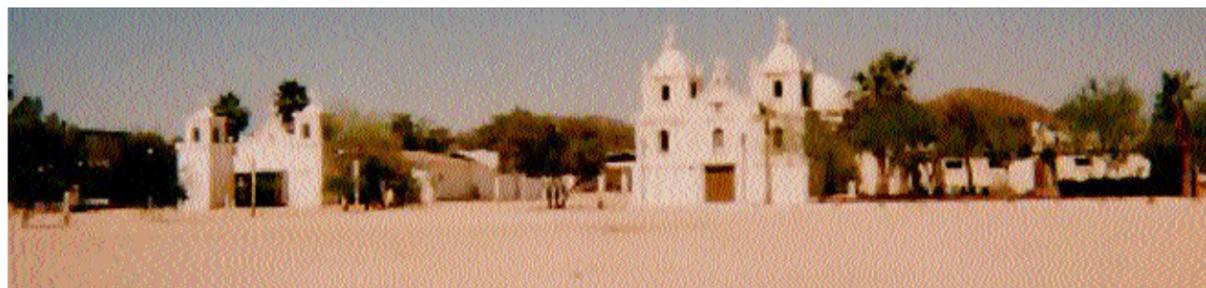
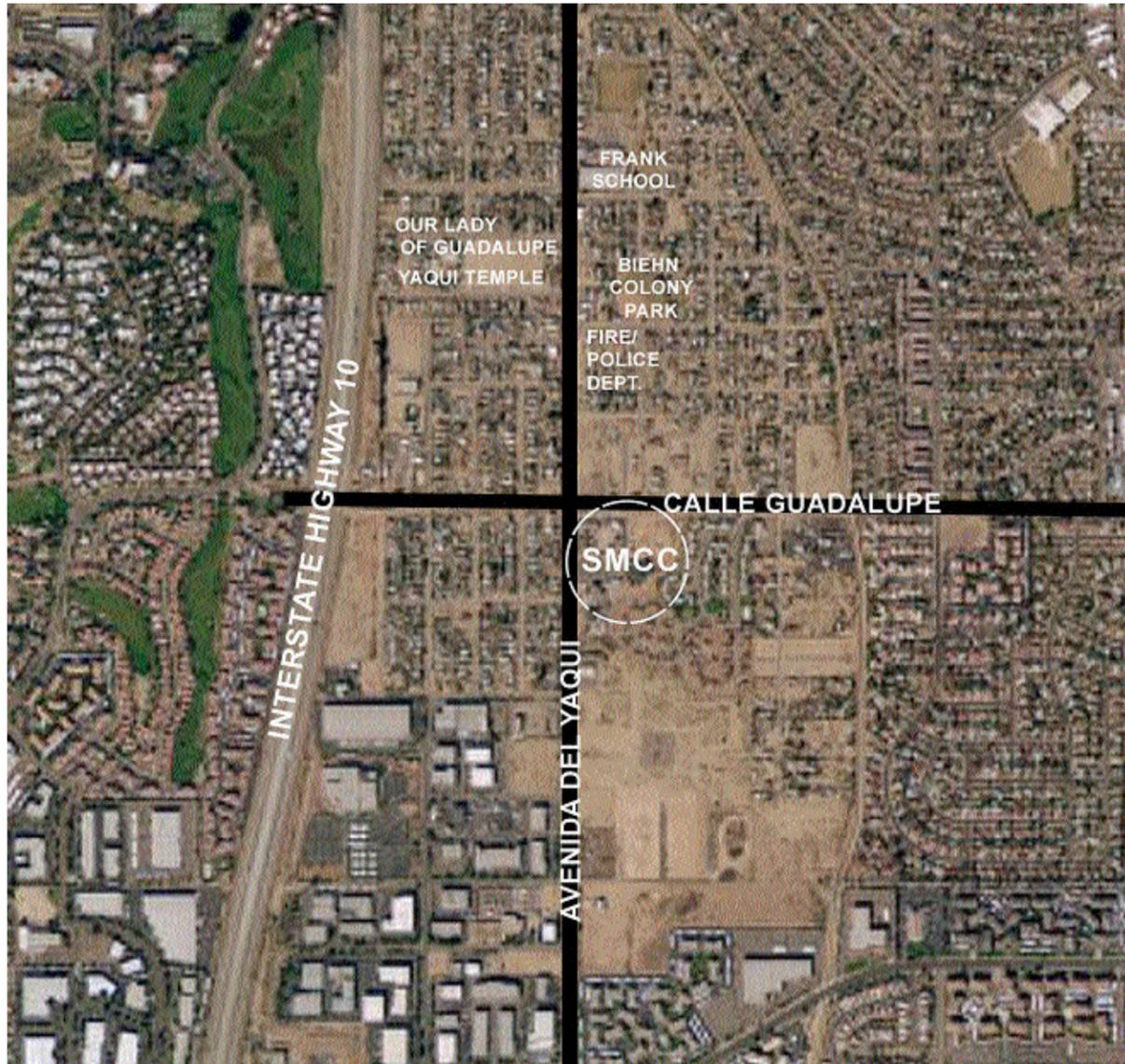
A grove informally spaced rather than the grids used for fruit and nut tree farming, seems the most natural arrangement for this species. Cottonwood trees also offer a fall color accent that will be distinctive in a show of bright yellow foliage. Seen along irrigation canals for generations, Cottonwood Trees at this pedestrian entry point makes logical sense being near the canal that forms a southern boundary to the campus.



South Mountain Community College Master Plan

SMCC Guadalupe Center

SMCC Guadalupe Center



Our Lady of Guadalupe & Yaqui Temple

History

“Guadalupe is the home to the Yaqui Indians. The Yaqui Indians have endured many turbulent times beginning with wars fought against the Spanish and Mexicans. The Yaqui were trying to protect the land that they lived on near the Yaqui River. When Porforio Diaz defeated them, the Yaqui's were sent down to the jungles of Yucatan. But during the Mexican Revolution, the Yaqui's joined up with Pancho Villa. When Villa's army was defeated, the Yaqui's headed to the United States for safety.

Many of the Yaqui's came up to the Salt River Valley to work on the construction of canals in the area. A community sprung up south of Tempe, which became Guadalupe. The town is named after the Virgin of Guadalupe, the patron saint of Mexico.

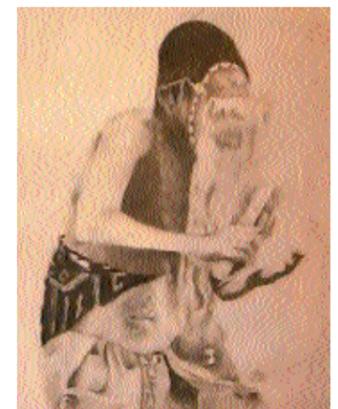
The town was incorporated in 1975. The small town will remain this size due to its surrounding borders. The city of Phoenix is to its west, the city of Tempe is on its north and south and the Salt River Project's Highline Canal is on its east.

Guadalupe is a residential community with a sprinkling of retail and service businesses. In 1983, a Mexican style-shopping plaza was built called El Tianguis. This shopping area has encouraged visitors to come to the area and sample the restaurants and shops.”

Carl Chapman



SMCC Guadalupe Center



Ceremonial Dancers



Town of Guadalupe Multi-purpose Building

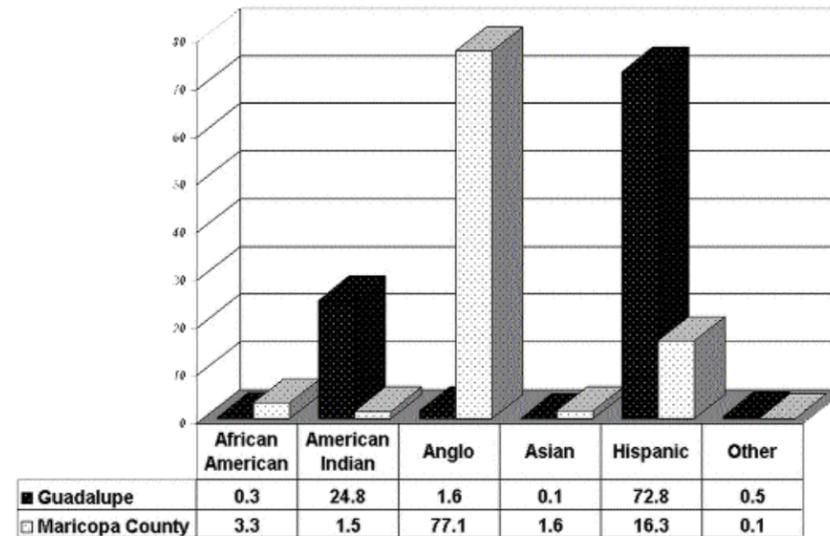
SMCC Guadalupe Center - Demographics

The Town of Guadalupe is a small enclave of 5,228 residents, surrounded by the City of Tempe. Population has increased slightly to 4%, but the proportion of whites has decreased by one-third since the 1990's and the proportion of American Indians has increased by 5%. Residents of the Town of Guadalupe are primarily Hispanic (72.8%) and American Indian (24.8%).

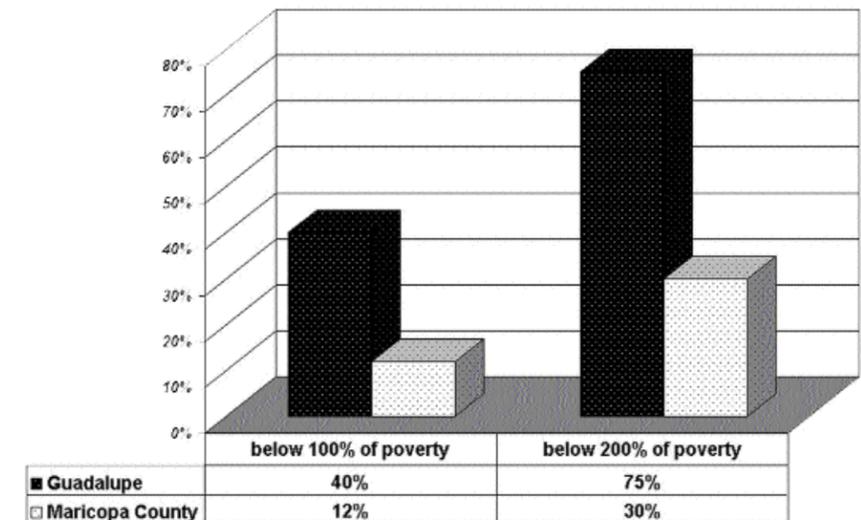
In comparison to other cities in the Valley, the inhabitants of Guadalupe are low both in the income and the education attainment categories. Moreover, 41% of the population is under the age of 19 and 27% are female householders with no husbands.

In this context, SMCC Guadalupe Center is even more valuable to the inhabitants than to the average community. The education opportunities allow the students to improve their education beyond the core classes, as well as offering flexible schedules to fit into their working hours.

Population Facts



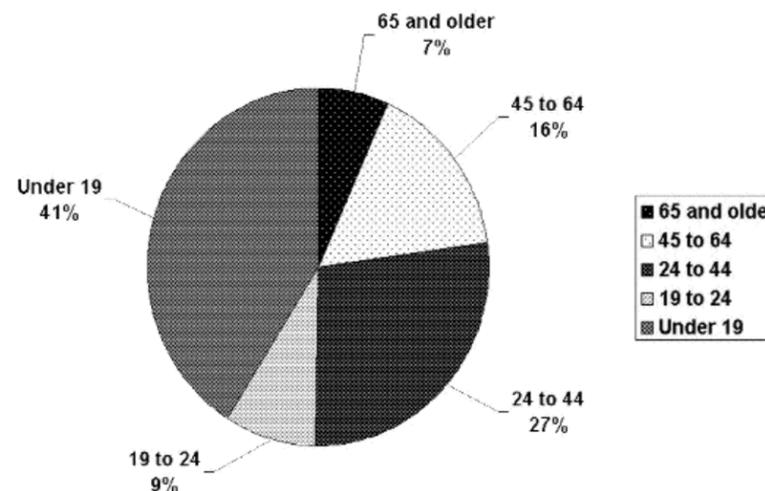
Guadalupe Median Household Income



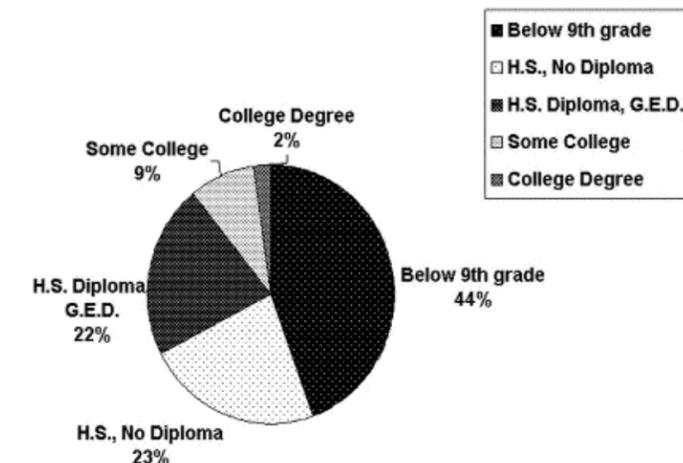
Types of Households



Guadalupe Age Distribution



Guadalupe Educational Attainment



SMCC Guadalupe Center - Site Context & Environment

1 MONUMENTAL MULTI-PURPOSE BUILDING WITH HUMAN SCALE ARCADE

2 MULTI-PURPOSE BUILDING ATTEMPTS TO DEAL WITH STREET RECOGNITION THROUGH SCALE AND ORIENTATION

3 EXPANSION POSSIBILITY AT REAR OF EXISTING SMCC

4 LACK OF CONNECTION TO EXISTING SENIOR CENTER

5 NON-DESCRIPT PEDESTRIAN LINK TO NEIGHBORHOOD AT REAR OF SITE

6 SMCC BUILDING DOES NOT ENCOURAGE ANY OUTDOOR FUNCTION

7 SMCC BUILDING DOES NOT ENCOURAGE LINKAGES WITH ADJACENT BUILDINGS

8 REAR OF SMCC COULD BE LANDSCAPED TO BE AN AMENITY TO THE FACILITY

9 STRENGTHEN PEDESTRIAN LINKAGE BETWEEN NEIGHBORHOOD AND CAMPUS

10 TRANSITIONS BETWEEN SERVICE DRIVE & BUILDING COULD BE ENHANCED

NOT TO SCALE

SUNSHADING DEVICES PROVIDE COOL OUTDOOR GATHERING AREAS

LIGHTNESS, PARTIAL TRANSPARENCY AND COLORS SATISFY BOTH FUNCTION AND AESTHETIC ISSUES

Context

The existing SMCC Guadalupe Center is located on the southeast corner of Calle Guadalupe and Avenida Del Yaqui. It is a part of the Town of Guadalupe complex, which consists of :

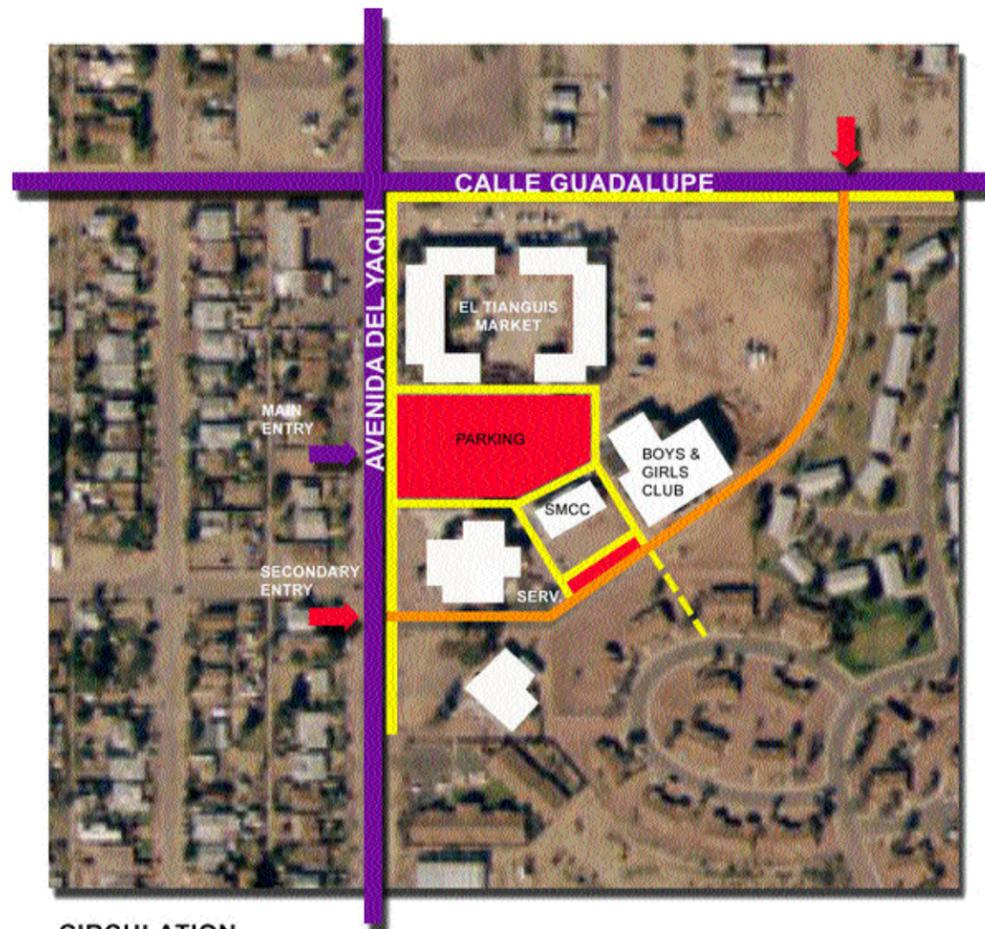
- SMCC Guadalupe Center** (5,000 s.f.)
 - Provides education and training for students and community
- Town of Guadalupe Multi-purpose Building** (17,000 s.f.)
 - Maricopa County Library - Guadalupe Branch
 - Town Museum
 - Sheriff Substation
 - Day Care Center
 - Town's Administration Offices
 - Magistrate Court
 - Social Services Office

- Boys & Girls Club of the East Valley** (24,000 s.f.)
 - After-school and summer programs for youth
 - Tutoring in computer education sports, peer leadership, life skills, health arts and recreation.

SMCC Guadalupe, the Boys & Girls Club and the Multi-Purpose Building were finished at the end of October 2000. El Tianguis Mercado, a commercial / retail establishment, is north of the complex. Unfortunately, the connections between the buildings and the neighborhood are weak. Moreover, private and public zones, pathways, outdoor spaces should be strengthened to enhance the experience of being in a unique location. A holistic strategy for future growth and development is necessary, because the city requires a strong cultural and civic landmark.

South Mountain Community College Master Plan

SMCC Guadalupe Center - Site Analysis Existing



CIRCULATION

LEGEND

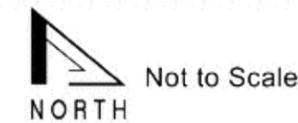
- █ Major Street
- █ Guadalupe Center Parking
- █ Service Driveway
- █ Pedestrian Path
- ← Main Entrance
- ← Secondary Entrance



OPEN SPACE

LEGEND

- █ Parking Lot
- █ Desert Landscaping
- █ Outdoor Meeting Area
- █ Undeveloped Areas



The current Guadalupe Center is built around a parking lot, lacking presence from Avenida Del Yaqui. The visual character of the Guadalupe Center, furthermore, doesn't readily convey its civic institution stature to the passerby.

Urbanistically, there is no existing outdoor, shaded space for the students to gather and to enjoy. A lack of cohesiveness among the built structures does not encourage social interactions and pedestrian movement. A gathering plaza would not only be functional, but it would be an important collective symbol in the tradition of the plaza in front of Our Lady of Guadalupe Cathedral and the Yaqui Temple. Easier site accessibility to the immediate community would further energize the Guadalupe Center. The pedestrian would experience a comfortable and welcoming walk to and from the Center.

The existing SMCC Guadalupe building can readily expand to its immediate south. The footprint would allow an additional 5000 s.f., unless a multi-level addition is considered. The current location, however, does not have enough parking spaces and the solution would only satisfy the short term needs.

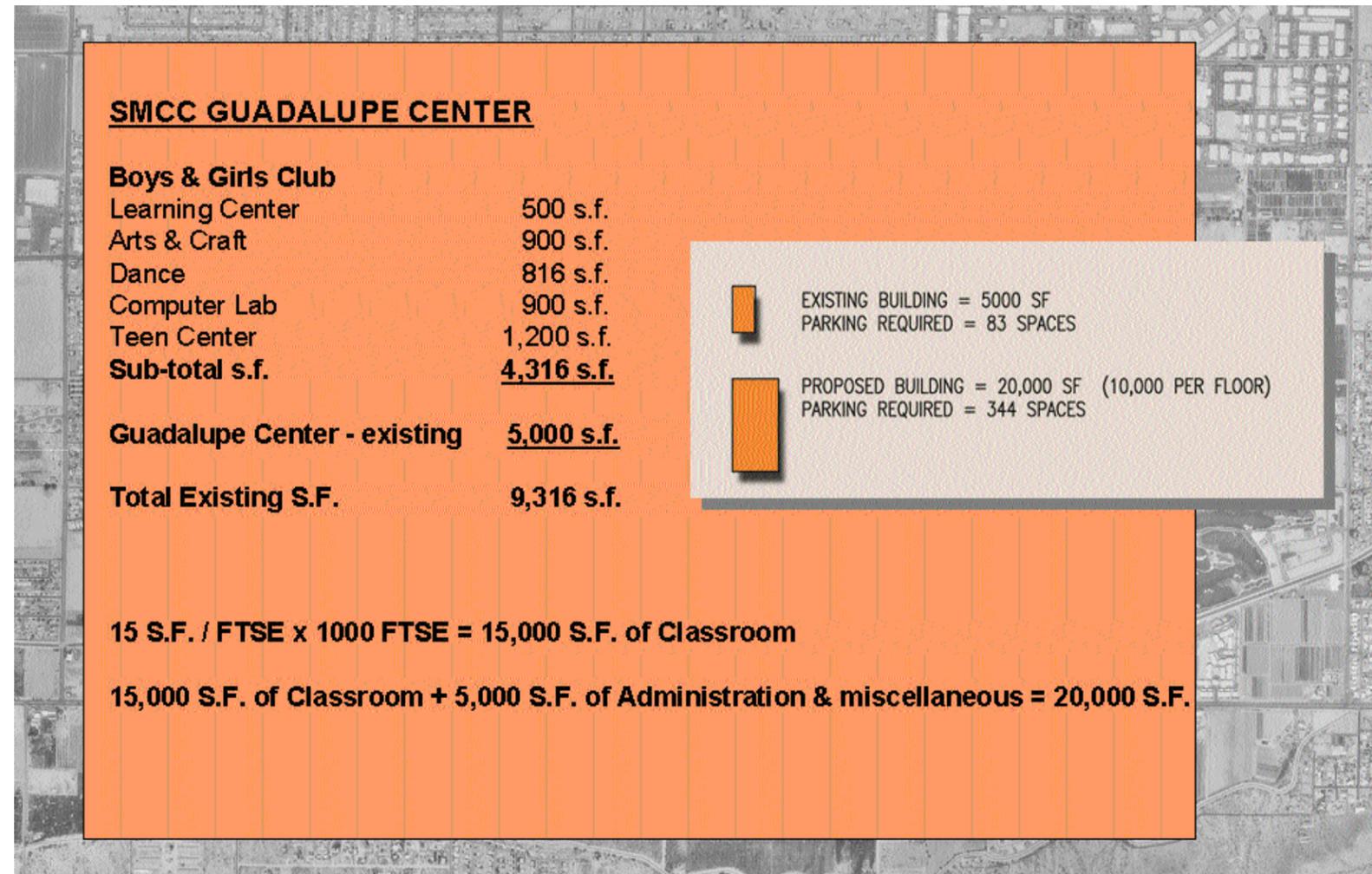
In addition, it is becoming a hazard with the overflow parking. Students and visitors are parking in the vacant dirt lot North of the Boys & Girls Club. This area is poorly lit and much dust is generated from the increased traffic.

SMCC Guadalupe Center - Square Footage Projection

The SMCC Guadalupe Center currently experiences a desperate lack of space, despite being built in late October 2000. The classrooms have overflowed into the adjacent Boys & Girls Club and other nearby facilities. When all of these used spaces are added together, doubling the existing 5,000 S.F. would barely satisfy the current need.

The design charette discussion concluded that a growth to 1,000 FTSE in the next 10 years would be most realistic. An estimated 15,000 S.F. of classroom space, 5,000 S.F. of administration space and 344 parking space will be required.

The future development of the Guadalupe Center should be considered on both the urban scale and the building scale. The place should have the presence of a higher education institution, connect with the neighborhoods, provide a gathering area and define a sense of place. Through this synergy, a unique pride for the center will be generated and cultivated.



SMCC Guadalupe Program Outline

Day & Evening Classes:

- Art Humanities
- Business-Personal Computers
- Communications
- Computer Information Systems
- Critical & Evaluative Reading
- English
- English as a Second Language (ESL)
- Geology
- History
- Mathematics
- Psychology
- Reading
- Religious Studies
- Sociology
- Spanish
- Yaqui Culture

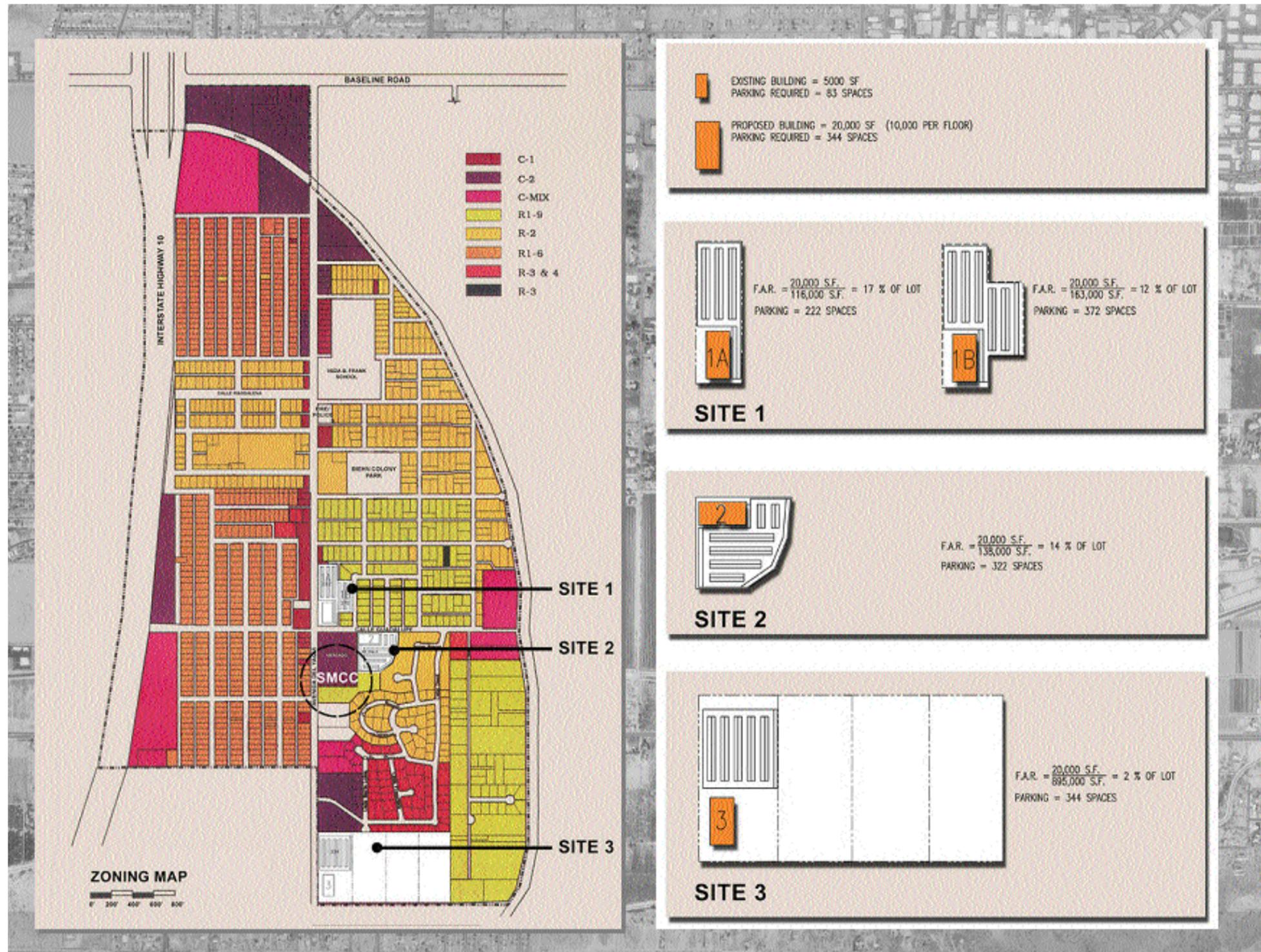
Resources:

- Accessibility to Academic Software
- Computer-Assisted Learning
- Student Disability Resources
- ESL-Conversation/Language Lab & Tutoring
- Project Lee (ESL)
- Tutoring
- Math Videos

Study Skills Assistance:

- English
- Computers
- Grammar
- Note-taking
- Software
- Test-taking Skills
- Textbook Reading
- Time Management
- Study Smart
- Video Supplementary Instruction
- Workshops/Seminars/Training

SMCC Guadalupe Center



Site Options Analysis

To deal with the student growth projection, three site options were analyzed for their opportunities and potentials. The sites were derived from a meeting with Guadalupe's Town Manager Thomas Morales, Guadalupe Center Director Raul Morales and Attorney/Father David Myers.

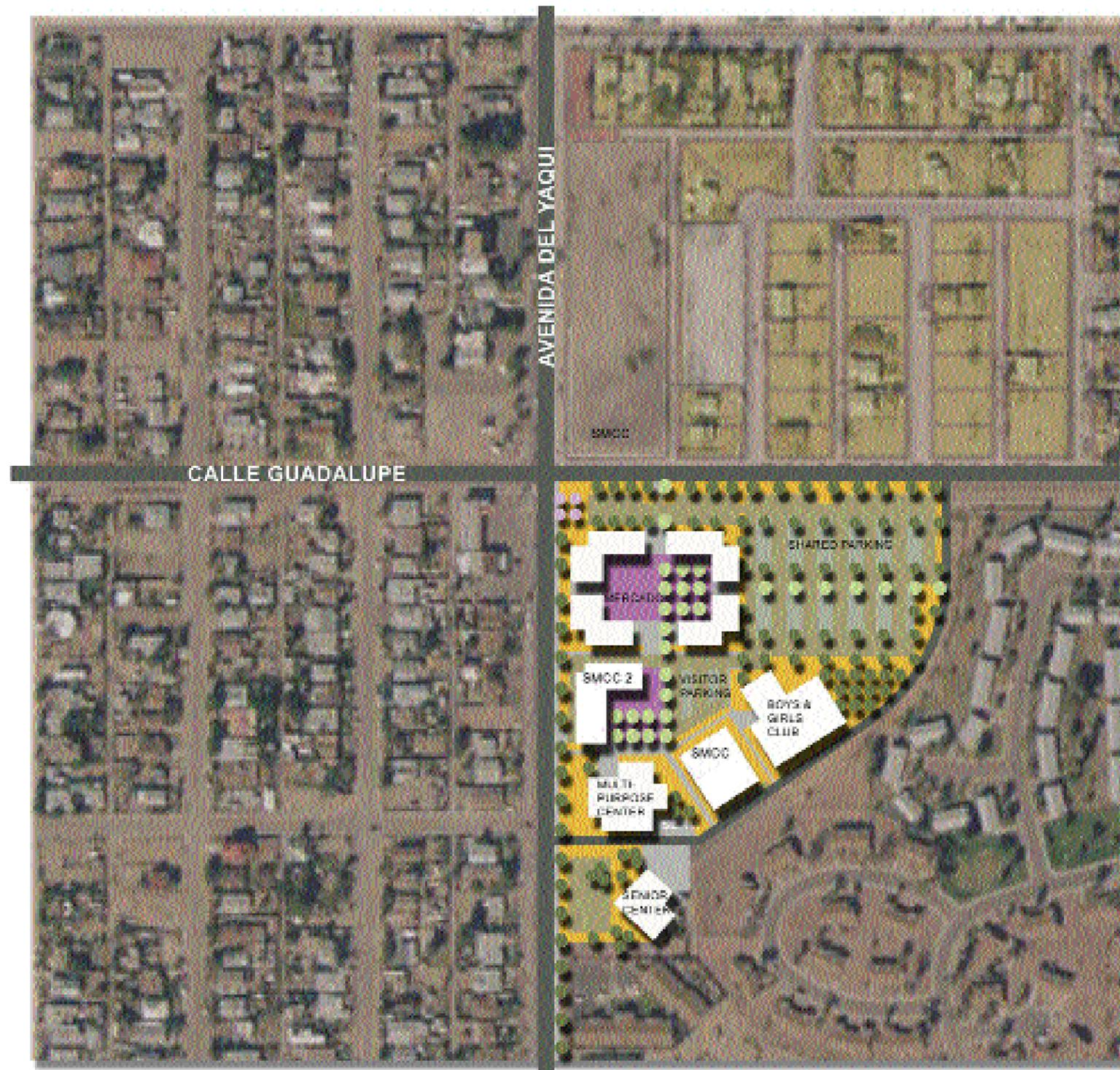
'Site 1' is on the northeast corner of Calle Guadalupe and Avenida del Yaqui, 'Site 2' is North of the Boys & Girls Club and 'Site 3' is at the Southern gateway of the City of Guadalupe.

Except for 'Site 3', the other sites would need to work in combination with other sites to achieve the required amount of parking. Still, it is important to look beyond the parking requirement. The site that offers the most value to the community and to SMCC Guadalupe Center is the one which would also enhance the existing urban fabric. Therefore, close proximity to the Guadalupe Center is important, because the project can take advantage of the existing amenities and facilities.

'Site 1' is owned by the Presbytery of Grand Canyon (Presbyterian Church). The Presbytery manages the property through the Biehn Colony Trust. They have expressed their support for an educational facility.

'Site 2' is owned by the City and growth to the North of the Boys & Girls Club is possible. If the new building is here, then more parking is required to function properly.

'Site 3' can be acquired with the City's help through a land swap deal. Here, more land would be available for growth. This site however is far from the city center and doesn't engage with the inhabitants or existing institutions.



Master Plan Vision

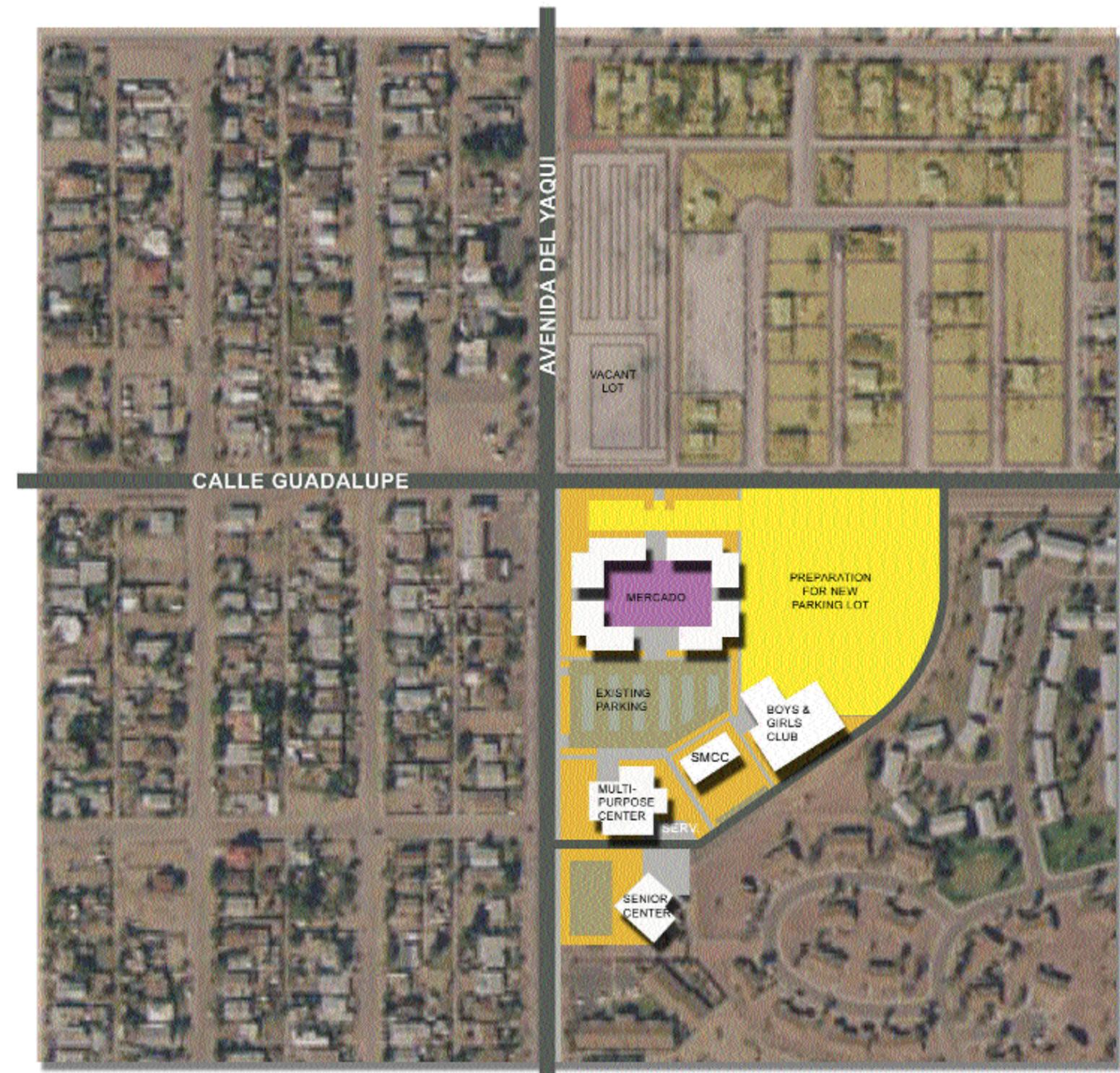
The master plan vision for SMCC Guadalupe hopes to bring more value to the community by working with the existing built structure. Even though there were other site options and studies, it would be more effective to help work with the existing site and strengthening it.

The new building can help enhance the presence of the Town of Guadalupe civic institutions by defining a strong edge along Avenida del Yaqui and by creating an inviting gathering space for the entire complex. The experience for the visitors begins from the Avenida's automobile view to the pedestrian's Center Plaza view. The buildings become an ensemble, working together to create outdoor rooms and to reinforce pedestrian connections.

The previous, prominent parking is now reduced to a visitor size parking. The impression of the place is no longer that of a parking lot, but a place of arrival. New parking spaces are accommodated on the North side of the Mercado and the Boys & Girls Club.

Through an easy phasing plan, the Town of Guadalupe and SMCC Guadalupe Center can gain enormous value through sharing and consolidating their resources.

SMCC Guadalupe Center - Phasing & Implementation



Guadalupe Center



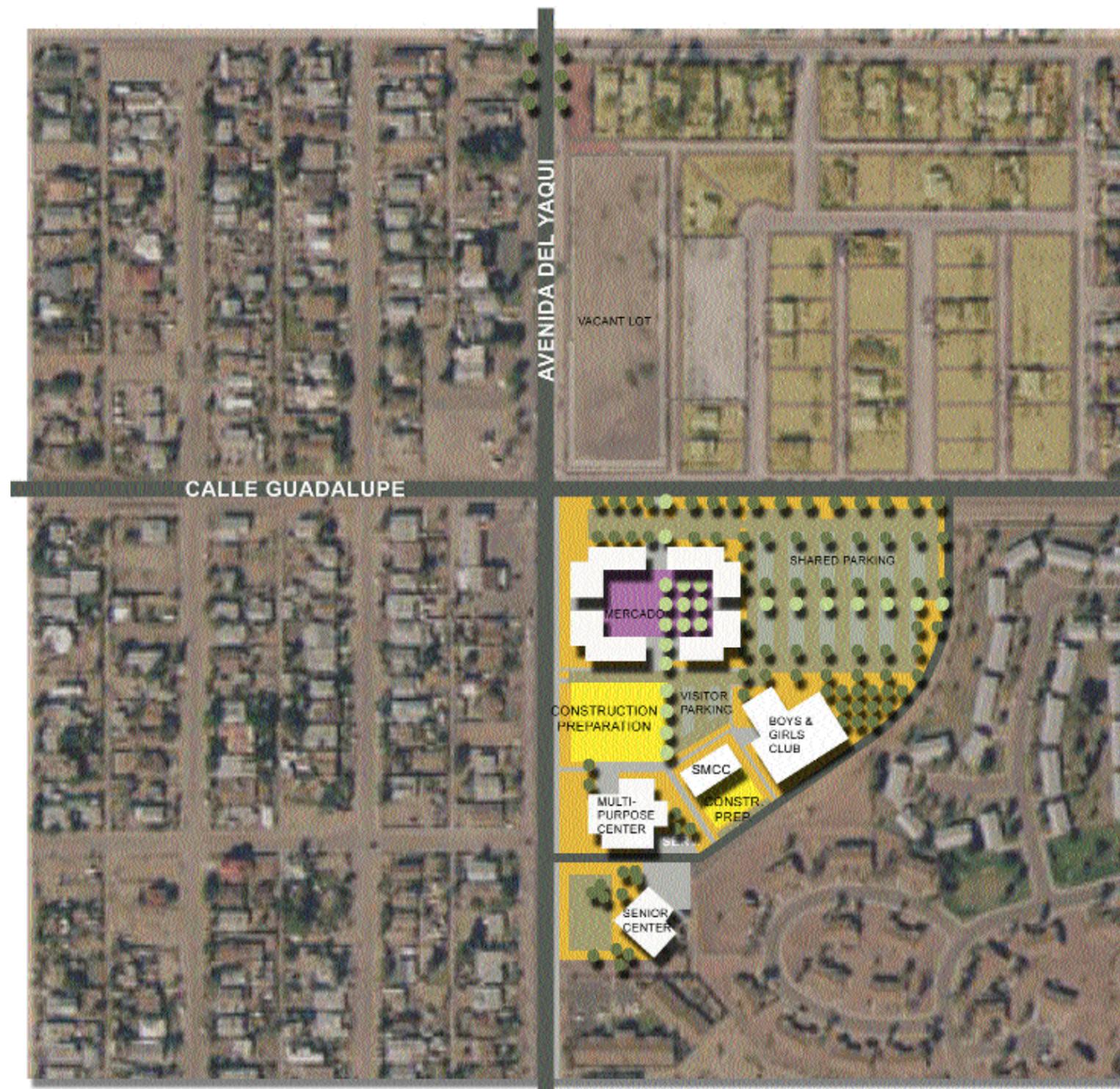
- Parking**
- Landscaping**
- Outdoor Gathering Space**
- Construction Preparation**
- New Building**

This phase is intended to commence as a preparatory step for the future construction of the classroom buildings and the reallocation of the existing parking. Currently there are insufficient amounts of parking and the entrance courtyard does not serve pedestrian uses.

- The immediate need of SMCC Guadalupe Center is additional parking and additional surface parking will be provided to north and to the east of the Mercado.
- The Guadalupe Center and the adjacent businesses would immediately benefit from more parking.
- The integration of the architecture and the landscape architecture will offer an inviting destination to the students, staff members and visitors.
- The master plan addresses simultaneously the lack of parking, the dust pollution, the inadequate outdoor lighting, the internal traffic congestion and the illegal parking in the firelanes.

5 Year Phasing - Preparation

SMCC Guadalupe Center - Phasing & Implementation



Guadalupe Center



- Parking**
- Landscaping**
- Outdoor Gathering Space**
- Construction Preparation**
- New Building**

In this phase, the existing parking facing Avenida del Yaqui will be prepared for construction. The new surface parking to the east of the Mercado will provide a convenient locale for students, faculty, and others users. Shaded and defined pathways will traverse the site to link pedestrians from the parking areas to building structures.

- The new parking will provide more value to the businesses and enhance the currently undeveloped street edge.
- The parking area facing Avenida del Yaqui can be prepared for a new SMCC classroom building.
- The existing SMCC building could be enlarged to have more administrative spaces and conference type amenities if the budget allows.

5 Year Phasing - Construction & Preparation

SMCC Guadalupe Center - Phasing & Implementation



Guadalupe Center

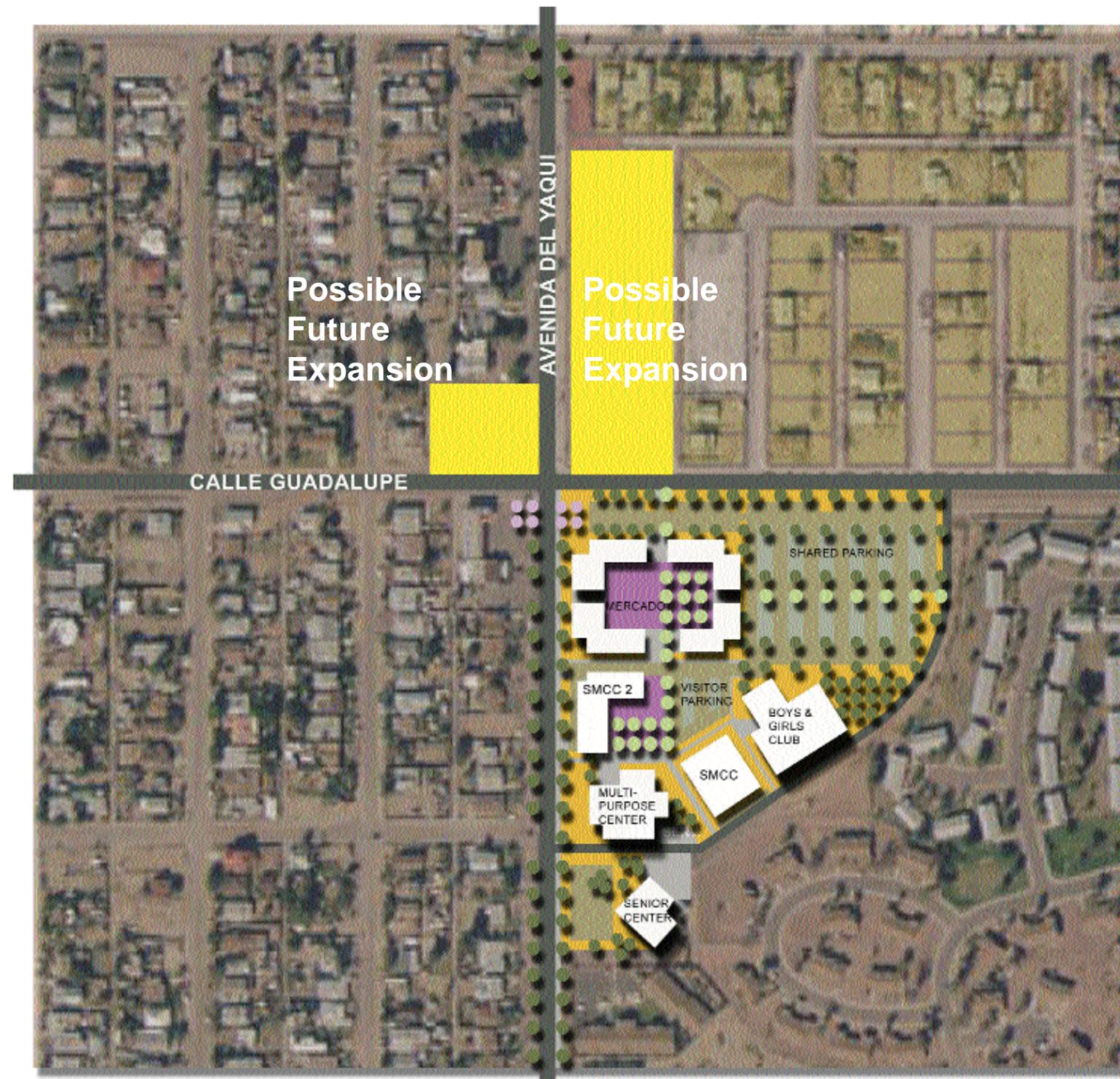


- Parking*
- Landscaping*
- Outdoor Gathering Space*
- Construction Preparation*
- New Building*

- With the new SMCC building in place, outdoor gathering spaces are created.
- Relationships between the buildings are enhanced and pedestrian scale spaces are established.
- By increasing the campus density, synergy will be created through a variety of program functions. The remaining spaces can be allocated for future growth or for useable open space.
- Landscape architecture and architecture work together to give a sense of place and orientation to the visitors. The buildings further defines the street edge
- Streetscape creates a buffer along buildings and shaded pathways for pedestrians.
- The project defines itself in both the automobile scale and the pedestrian scale. A new, closer bus stop should be discussed with the transit authority, making it more convenient for the visitors.
- By increasing the campus density, synergy will be created through a variety of function. The remaining spaces in Guadalupe can be allocated for future growth or useable open space.

5 Year Phasing - Construction

SMCC Guadalupe Center - Phasing & Implementation



Potential Expansion

In this phase, the framework for future expansion is being laid out. The density of the southeast quadrant of the campus will reinforce the identity of Guadalupe Center. By expanding north across the intersection, the campus identity takes on the role of becoming a community icon that creates both a point of interest and a source of community pride that activates the Avenida del Yaqui. The campus now starts to activate and expand a mixed use center that activates the Avenida Del Yaqui.

- The main building becomes a one-stop shop consisting of administration, computer labs, conference and meeting spaces.
- The SMCC 2 building becomes a building that is dedicated as a classroom building. This building serves as an example of the buildings footprint. However by increasing the number of stories, a higher density can be achieved to help conserve land.
- The majority of the buildings in Guadalupe are single story structures. While a two level campus building may be acceptable, a three story structure would seem out of context at the present time.
- SMCC 2 Building complements the Mercado building in assisting to create outdoor gather spaces for the Guadalupe Center.
- Street edge is strengthened by creating a continuous facade that is engaging to motorists and pedestrians.
- Presently the Guadalupe Campus inconspicuous. Through this effort of increasing the street facade density, the campus plays a major role in creating an identity for the city's street edge. The Guadalupe Center can become a 'billboard' for cultural and technical education.
- Specialty paved walkways, shaded canopies, and trees will link SMCC Guadalupe Campus, Tianguis and the Guadalupe Center. This will become a stronghold of the community

By energizing the intersection of Avenida del Yaqui and Calle de Guadalupe, the campus create a mixed-use center that will be enjoyed by students as well as the community residents.

10 Year Phasing

SMCC Guadalupe Center - Phasing & Implementation



10-15 Year Phasing

Construction Option

At this phase, the street edge has been defined on the south east quadrant. Pedestrian plazas community spaces are in place. Attractive, convenient, shaded parking is provided. Now, the goal is to continue the densification of Guadalupe, increasing community utilization, and creating useable public spaces for community members and students within a scholastic environment. The northeast quadrant above the Tianguis Mercado will be engaged to strengthen the community backbone along the Avenida del Yaqui by increasing the density and enlivening the street edge. The reinforcement of the Avenida del Yaqui and Calle Guadalupe's intersection would require a mixed-use component of retail, restaurants, incubators, as well as community facilities.

- the Street edge will be strengthened with buildings to lend a human scale for pedestrians along Avenida del Yaqui.
- The impression of the Guadalupe campus will be that of a unique cultural, educational and commercial partnership. The development will engage the public, promote involvement and heighten the awareness of its offering to nearby inhabitants.
- Convenient parking will be provided along the boulevard, but the majority will be screened behind developments.
- There will be a continuing effort to infill the Town of Guadalupe's commercial and educational backbone.
- Possible mixed-use option: commercial/retail on the ground level and educational facilities built above in the expansion area along the boulevard.
- The optional renovation of the Mercado and integration of Guadalupe Campus facilities within this structure may be advantageous to everyone. This will create a true mixed use market place that is enlivened by the presence of the college.
- By investing renovation funds in the Mercado and adding classroom space on an upper level, the Mercado will be infused with new meaning and added purpose to the prominent intersection; an ideal meeting plaza for students as well as the Town of Guadalupe.
- The ideal solution will be to keep the academic buildings in the south east quadrant, this will decrease infrastructure costs and increase pedestrian accessibility.
- Other options include additional classroom buildings across Calle Guadalupe. Specialty paving and shade trees will created a pedestrian friendly atmosphere.
- The street edge could be enliven with additional retail and small commercial establishments, providing future jobs and training.

Landscape Architecture - SMCC Guadalupe Center

Guadalupe Branch Campus

Components to consider:

- Streetscape development should be carefully coordinated with civic and municipal officials to create an identity for the campus distinct from the town. Perhaps a flowering, vertical branching tree such as Jacaranda would be a distinctive break from the existing street trees of Mesquite, Palo Verde, and Ficus within the town proper.

- As with the main campus, parking areas will be identified by groves of desert trees: Ironwood, Palo Verde, and Mesquite.

- Campus courtyards should receive a higher level of maintenance, greener [perhaps flowering or even semi-tropical] plant material, high end paving textures, sculpture placements, and the possibly of human-scaled water features due to their high visibility and heavy human occupancy.

- Turf areas do not currently exist on campus and should continue to be eliminated in favor of more urban hardscape and Sonoran desert 'crushed' granite treatments.

- All landscape guidelines and principles from the main campus will apply to this campus in terms of creating pedestrian linkages from parking into campus walkways and malls. Anticipating future bus pullouts and shaded groves of trees nearby to shelter transit riders and serve as landscape nodes that welcome pedestrians, bicyclists, and wheelchair bound visitors.

Landscape Development Overview

The existing branch campus of SMCC at the Town of Guadalupe has tremendous potential for landscape identity and form. What exists on campus right now only hints at the tremendous potential of landscape improvements to create a meaningful streetscape identity, to enliven and shelter the campus, make the open spaces more accommodating of human occupancy, cut solar glare dramatically, create shade for micro-climate cooling, and introduce seasonal change for variety and interest.



As illustrated diagrammatically above, the campus streetscape must have its own distinct identity, campus perimeters need tree selections to define and buffer the campus from adjacent uses, parking lots must be defined by thematic tree selections, and human scaled landscape courts must be developed inside and between major buildings.

To be a good neighbor, Guadalupe campus officials should attempt to work with neighbors across both major streets as well as Town officials to implement our distinctive campus streetscape on both sides of the street to better enhance the two main boulevards.

Guadalupe Courtyards

Components to consider:

- Paving materials for courtyards should be of a higher quality than other campus walkways and paving. Flagstone or integrally colored concrete will help cut solar glare. For select areas, "art paving" treatments can be considered.

- Provisions for sound amplification should be discretely integrated into the plaza. The design of the fountain could well allow use as a platform or dais for speakers and performances.

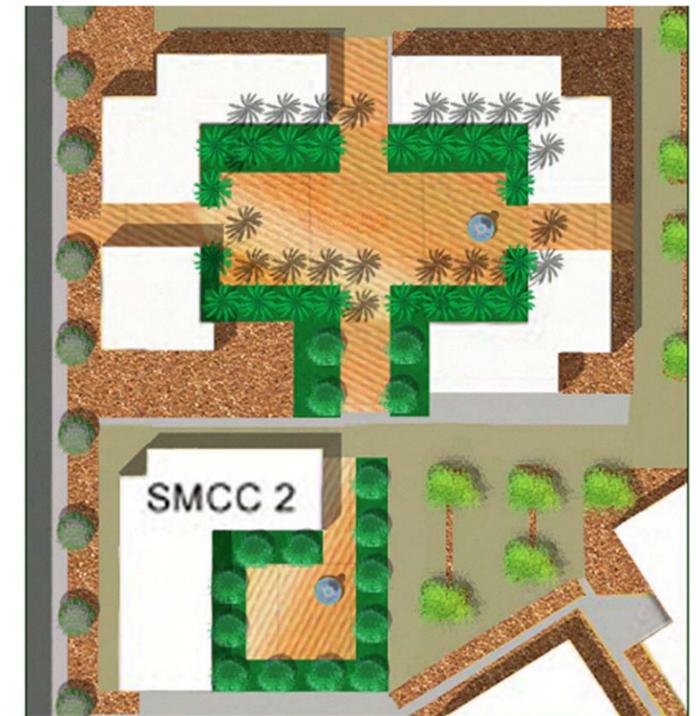
- Information kiosks, newsstands, water features, and freestanding sculpture elements should be located at plaza edges to allow for maximum use of paved areas for assembly use.

- A full complement of site furnishings should be integrated into the plaza perimeter green areas: picnic tables, conversation areas with benches, drinking fountains, informational signage, lighting bollards, and the potential for internet connections.

- In addition to the tall Mexican fan palms, *Washingtonia robusta*, courtyard plant materials should contrast with the Sonoran desert treatments on the public edges, offering cooling oasis plant selections similar to urban courtyards of historic Mexico: *Ficus nitida*, *Hibiscus*, *Citrus*, *Bougainvillea*, and *Tecomaria*.

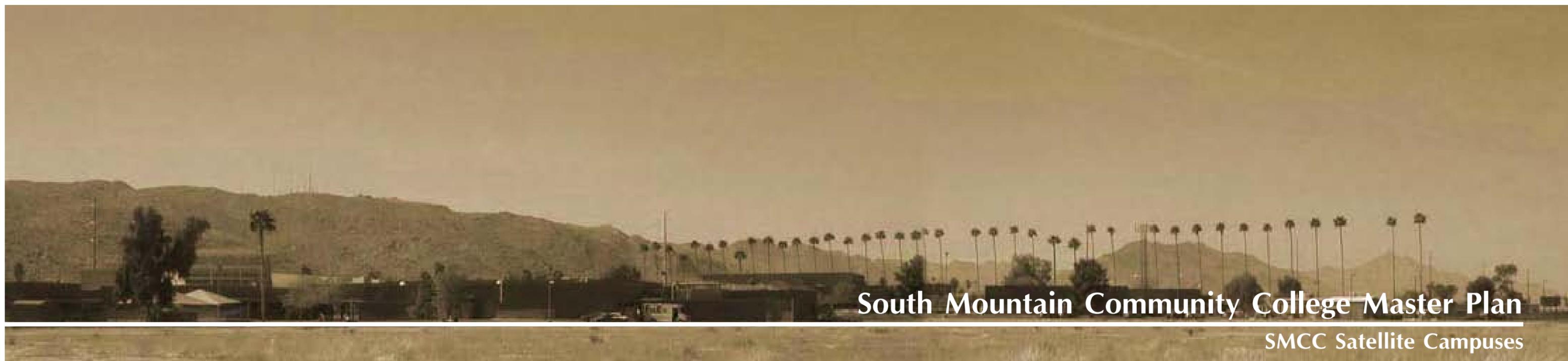
Campus Courtyards

The existing Mercado courtyard dates back to about 1978 and was intended to accommodate festival events in a new retail shopping area. Unfortunately, the large masses of concrete unrelieved by landscape planting have not been conducive to human activity over the intervening years. Similar to the SMCC main campus, it is suggested that this courtyard be



considered as the primary branch campus courtyard "living room". This unifying central space will be identifiable at a considerable distance by the use of very tall Mexican Fan Palms. To soften and humanize this gathering space, a balance in use must be created between larger paved areas accommodating gatherings and festivals contrasted by smaller, green perimeter spaces that can offer daily users comfortable seating, picnic tables and information kiosks.

It may well be appropriate to introduce the sound of flowing water with a modest fountain and it is highly recommended that freestanding sculpture and art reflective of the heritage and tradition of Guadalupe be prominently displayed.



South Mountain Community College Master Plan

SMCC Satellite Campuses

SMCC Satellite Campuses - Ahwatukee Foothills & Laveen Village

In addition to the Guadalupe Education Center, there are two potential areas in the Phoenix metro area where future SMCC satellite campuses could be developed. One is the Ahwatukee Foothills Village area south and east of South Mountain Park and the other is the Laveen Village area west of 27th Avenue and south of the Salt River.

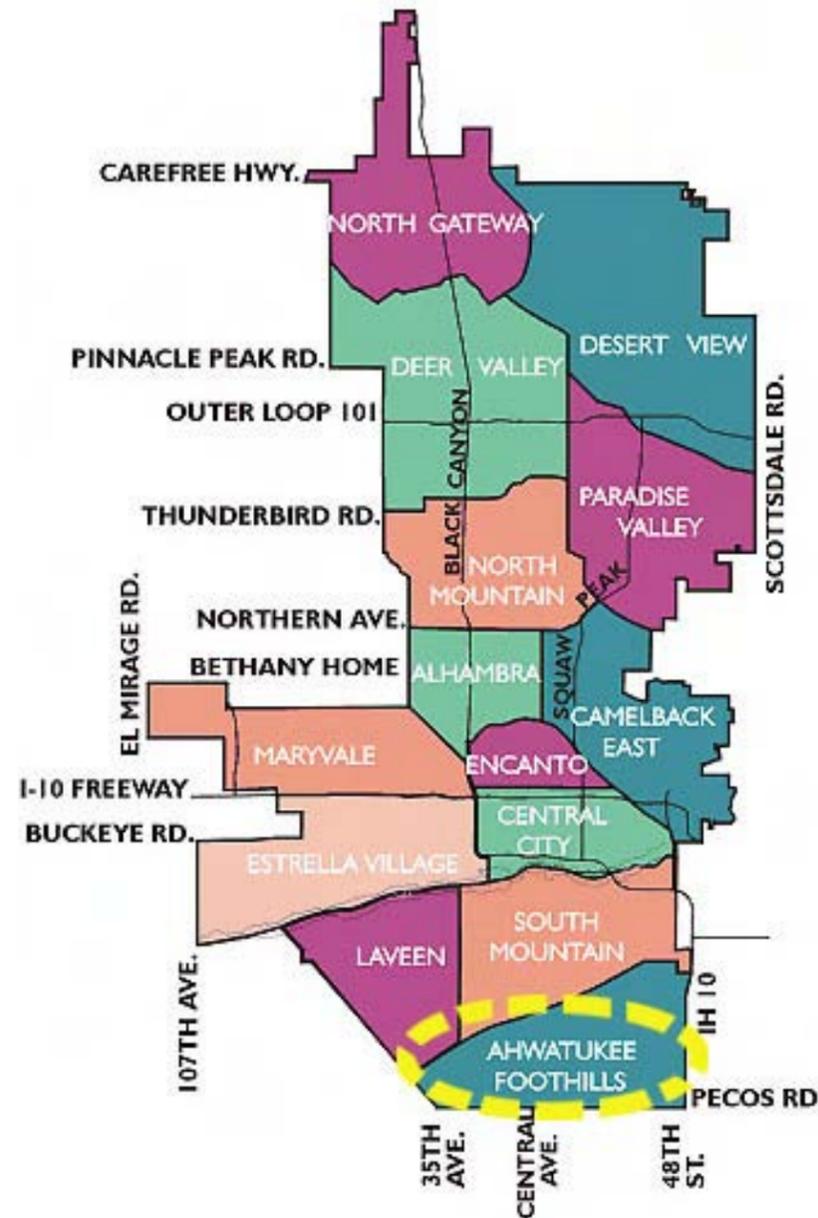
Ahwatukee Foothills Village

The Ahwatukee Foothills Village is bounded by I-10 to the east, South Mountain to the north, and the Gila River Indian Community to the west and south. Although most people are only aware of the Ahwatukee Foothills for its planned community developments, the village has its own local history. The village is named after the once existing Ahwatukee Ranch that included one of the most beautiful and lavish houses in Phoenix when it was built in 1922. The ranch's landscaping included cacti, citrus, date palms, and flowers.

The name "Ahwatukee" is derived from the Crow Indian language meaning "house of my dreams." Many of the residents moved to the village to their own dream house where they could raise their family in the serene desert setting. The village is known for its family atmosphere and is served by both the Kyrene and Tempe Union school districts. The area has many special features, as follows:

- Master planned communities with golf courses and lakes. A planned community encourages unified development and compatible land uses.
- Numerous natural washes and trails for hiking, biking, walking, and jogging.
- Extensive use of indigenous desert landscaping throughout the planned community development.
- Views and access to the South Mountain Park desert mountain preserve area.

Phoenix Urban Village Map



Satellite Campus Projections:

The gross area projection for the Ahwatukee Foothills campus of SMCC is assumed to be similar to the Guadalupe Center which is approximately 20,000 GSF. The rough breakdown of that area projection is 15,000 GSF for instructional spaces and 5,000 GSF for administrative and support areas.

There are several campus location opportunities that will need to be explored, as follows:

- The Ahwatukee Foothills YMCA has been discussed as a potential site for a joint use facility. The advantage of this location is the already existing infrastructure, recreational facilities, and parking that could be utilized and shared. The Y's location on Desert Foothills Parkway between Pecos Road and Chandler Blvd. is ideal because it can be accessed from several directions.
- The Gila River Indian Community has been keen on having a post-secondary educational facility on or near their tribal population center. A cooperative agreement with them would result in a stand-alone campus or educational center with a strong tribal identity. A location that also had easy access from the Ahwatukee residential areas would be ideal.
- The purchase of a vacant tract of land for a new education center would be another desirable alternative, albeit an expensive one. A tract of land of 10 - 20 acres, depending on location and available utilities, could be difficult to find and not easily affordable. Commercial land rates in the Ahwatukee Foothills area tend to be an expensive investment.

SMCC Satellite Campuses - Ahwatukee Foothills & Laveen Village

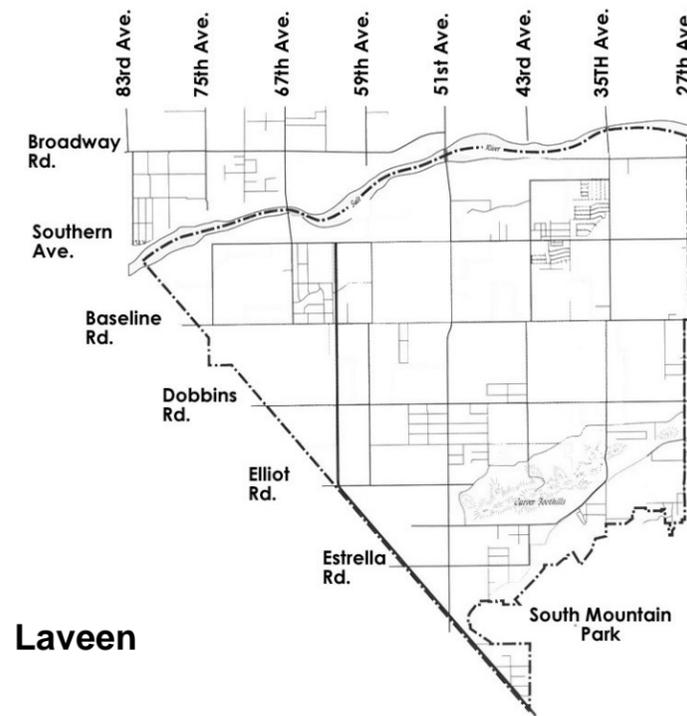
Laveen Village was first homesteaded in the late 19th Century and during much of the 1900s cotton fields and dairies provided the economic base of the area. The area's rural character accounts for its neighborly traditions. Today, the area's diverse population is anticipating tremendous growth potential.

Laveen Village extends from the Rio Salado (Salt River) to the South Mountain Park Preserve, the largest municipal park in the country. The Laveen area has a strong farming community identity with an industrial edge that provides local employment. Cotton and alfalfa fields extending to the horizon and bordered by irrigation canals and unpaved roads give Laveen its rural appeal. To the east of 27th Avenue is the South Mountain Village that showcases historic South Phoenix with its varied living and working environments. To the west is the Gila River Indian Community which is characterized by open space and gaming establishments with a view corridor that captures the Sierra Estrella Mountains.

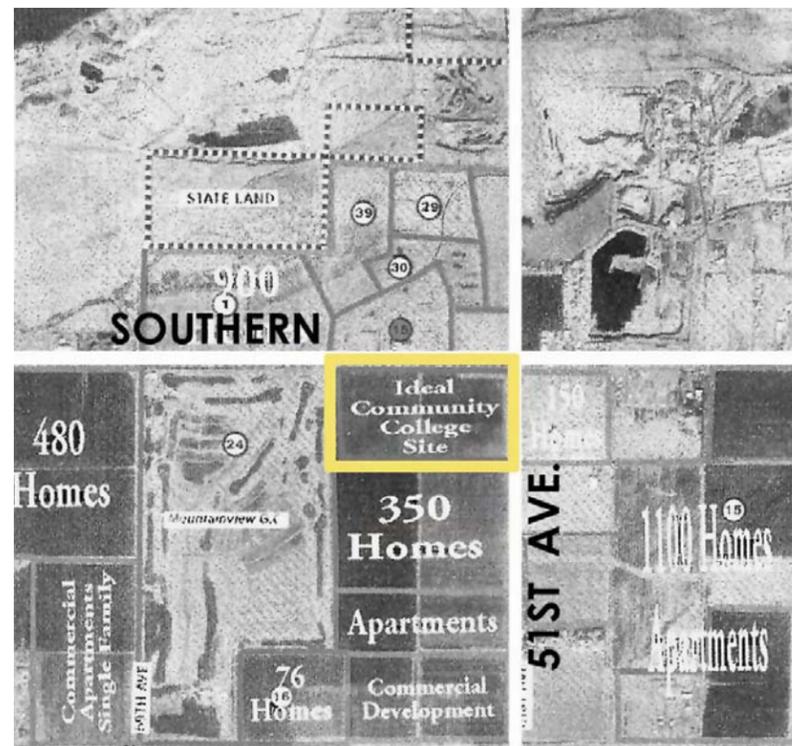
The proposed freeway Loop 202 will link the Village to nearby freeways in an area that is only 20 minutes from downtown Phoenix. Many quality residential developments have already been approved for Laveen Village. Some distinctive features of the area include the following:

- The South Mountain Park Preserve which has over 16,000 acres of pristine desert environment. Altogether, the hiking, biking, horse trails, picnic areas, and the natural beauty of South Mountain Park make it one of the city's great assets.
- The rural and open character of the landscape. The agricultural fields, irrigation canals, and Carver Foothills make the area unique. Development planning emphasizes maintaining and enhancing the rural atmosphere.
- The Baseline/Dobbins Scenic Drives offer dramatic views, multi-use trails, and pristine desert landscapes.

The current area planning studies, such as the Laveen Southwest Growth Study and the Laveen Watercourse and Town Center Plan, address the special issues of the future Laveen Village development. These plans represent both a stewardship of community values and a guideline for new development to insure that the rural character is preserved. The planned town center is slated to include a 40-acre community park.



Laveen



The statistical projections for the area are as follows:

- Population projections for the year 2020 are 56,332 people, a 480% increase over the 2000 population of 9,656.
- Household projections for the year 2020 are 17,353 residences, an 530% increase over the 2000 households of 2,751.
- Employment projections for the year 2020 are 4,608 jobs, a 150% increase over the 2000 job count of 1,795.

(Source: Village Area - Village GIS Coverage, Phoenix Planning Department, October 1997 and Projections - Whole traffic Analysis Zones, Maricopa Association of Governments, July 1997.)

Satellite Campus Projections

The gross area projection for the Laveen campus of SMCC is assumed to be similar to the Guadalupe Center which is approximately 20,000 GSF. The rough breakdown of that area projection is 15,000 GSF for instructional spaces and 5,000 GSF for administrative and support areas.

There are several campus location opportunities that will need to be explored, as follows:

- A vacant tract of land on the southwest corner of 51st Avenue and Southern Road has been tentatively identified as an "ideal community college site" by the developer, The Benjamin Group. This 80 acre tract of land has ideal access to the proposed extension of Loop 202 - the South Mountain Freeway - which is planned to be about a mile west of the site with Southern Road exits from both directions.
- A cooperative development along with the Phoenix Parks Department on property in close proximity to the Laveen Conveyance Channel would be an alternate solution. This location would be planned in concert with and be an integral part of a new nature conservancy park. It would also have easy access from the future Loop 202 via Baseline or Dobbins Road.
- The opportunity exists to be included in the proposed development of the Laveen Village Town Center Plan. Located near the intersection of the Loop 202 and Dobbins Road, the new Town Center will be the commercial and cultural focal point for the area. The rare opportunity to be a part of this dynamic plan is very exciting and desirable.