



June 23, 2014



Truckee Meadows Community College
Facilities Master Plan 2014





Letter from the President



The TMCC Facilities Master Plan is a key component of our overall planning efforts and supports our educational mission as defined in our Strategic Master Plan.

Facilities master planning is the blueprint for the advancement of the college in the years to come. The plan provides a broad framework for the development of our physical space to accommodate student enrollment in our academic program offerings while considering space for services that support learning. At the same time, the plan defines a sense of community across each of our five sites and the college as a whole.

The college's service area needs have changed over the last decade as the population increased, infrastructure expanded, and new businesses developed. With the economic landscape shifting around the college, there is a need to plan for the best use of our space to maximize program delivery and match local needs. In addition, we have seen a change in the Dandini Research Park through a major road construction project that affects the Dandini Campus; planned renovations for the TMCC IGT Applied Technology Center that will be funded through a federal grant and local partnerships; and outlined an Allied Health Center expansion at the Redfield Campus.

The Facilities Master Plan creates a presence of the college that will continue to encourage access to our sites, academic programs and services for years to come. The plan presents the vision of the college in relation to its buildings, open spaces and stakeholder partnerships.

Your support of the college and this plan is appreciated as we move forward to design TMCC's long-lasting presence in the community.

Sincerely,

Handwritten signature of Maria C. Sheehan in black ink.

Dr. Maria C. Sheehan
President



- ① Dandini Campus
7000 Dandini Blvd.
Reno, Nevada 89512
- ② IGT Applied Technology Center
475 Edison Way
Reno, Nevada 89502
- ③ Redfield Performing Arts Center
505 Keystone Ave.
Reno, Nevada 89503
- ④ Meadowood Center
5270 Neil Rd.
Reno, Nevada 89502
- ⑤ Redfield Health Science Center
18600 Wedge Pkwy., Building B
Reno, Nevada 89511

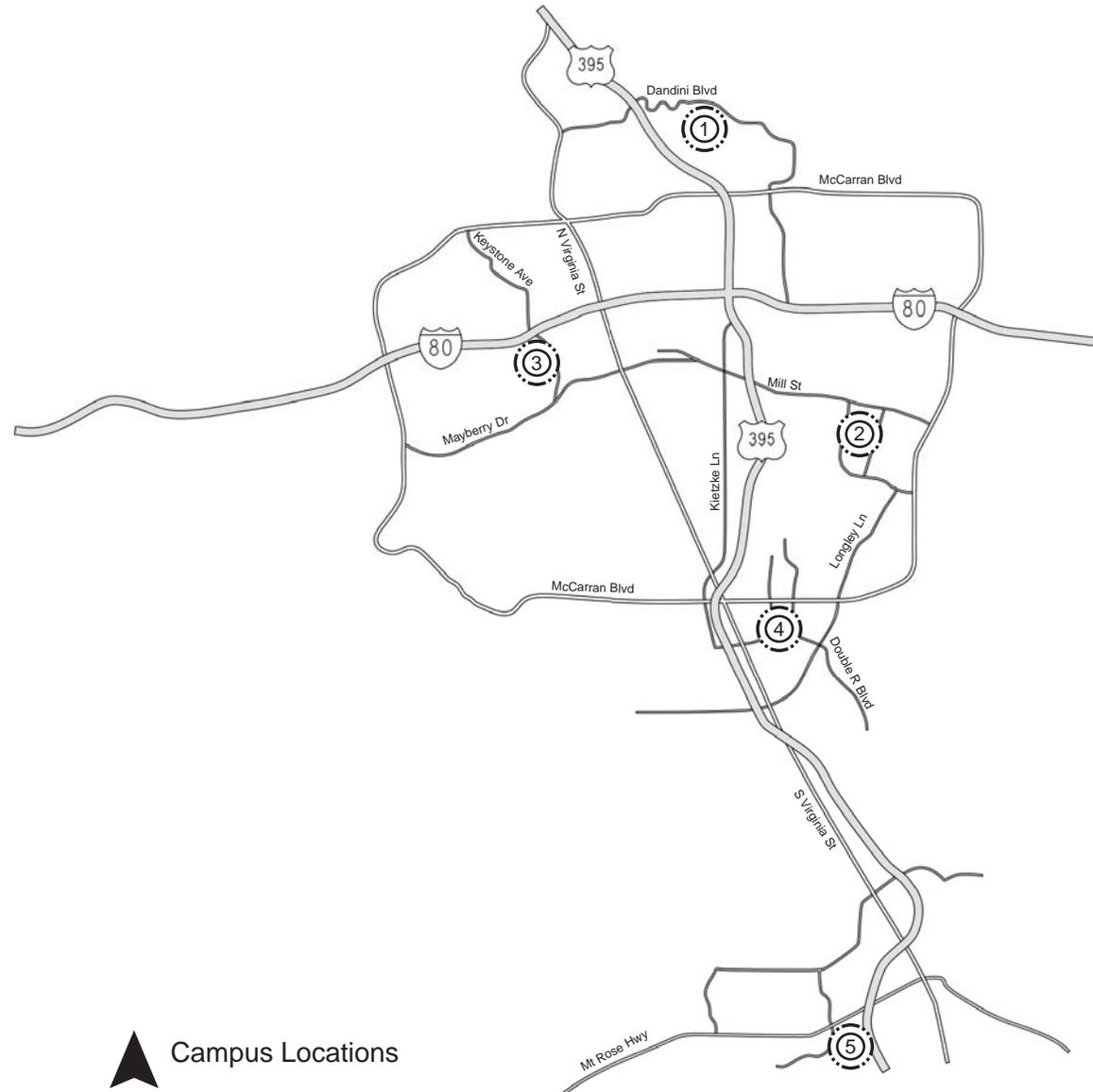


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EXECUTIVE SUMMARY

MASTER PLAN OVERVIEW

The 2014 Truckee Meadows Community College Facilities Master Plan establishes a physical framework in support of TMCC's educational mission. The master plan examines the current use of existing space on all the campuses. The master plan looks internally at the functionality of the academic divisions and administrative departments and makes recommendations which come in two forms: utilization improvements and facility renovations. The master plan also proposes exterior improvements to improve the appearance and infrastructure of each center.

PURPOSE

The purpose of the project is to update the Truckee Meadows Community College Facilities Master Plan published in 2004. The Nevada System of Higher Education (NSHE) Board of Regents requires each institution's master plan to be updated every 10 years. In addition to the NSHE requirement, TMCC is committed to review of the master plan to ensure the document reflects current conditions and the future vision of the College.

This document is the result of a two-phase process to update the 2004 plan. The initial phase focused on classroom utilization and an evaluation of the organization of each building.

Phase 2 centers on exterior planning in the areas of traffic planning, site circulation, parking, landscaping, lighting and other site improvement components. The second phase also includes conceptual development of future capital projects.

SCOPE OF WORK

The scope of work for the project includes tasks related to the following:

- Classroom sizes, purposes and utilization.
- Student Services spaces and effectiveness.
- Improving interior and exterior Student Life spaces.
- Existing pedestrian and vehicular flow and infrastructure.
- Campus access and egress.
- Current parking facilities and capacity.
- Open space, landscape, cityscape, furnishings and lighting levels.
- Projection of Space Needs for TMCC (Overall) and Dandini Campus.

SPACE NEEDS ASSESSMENT

Capacity utilization is based on the compilation of information developed from a variety of inputs, such as enrollment data, space inventory, and standards as determined by NSHE. Functional utilization is based on the current and projected educational need and the type of space currently available.

SPACE NEEDS RECOMMENDATIONS

- Room coding at all campuses should be changed to match current conditions.
- Capacities of all class and class laboratories should be based on actual seat/station counts.
- Space adjustments should be made to include current circulation space into space that can be accounted for in the food service, lounge or other spaces that enhance student life programs.
- Future modernization and renovation work should consider changing

the size of smaller classrooms and laboratories to accommodate the most commonly requested class capacities.

- The College should consider incorporating space that enhances recruitment & retainage of students, including student life spaces.

SITE ANALYSIS RECOMMENDATIONS

Dandini Campus

- Improve parking lots to create more parking spaces.
- Develop a new entrance on the south side of campus.
- Create well-defined pedestrian walkways.
- Improve the central space with smaller scale elements, landscaping, windbreaks, and spatial variety.

IGT Applied Technology Center

- Explore sharing parking with Academy of Arts, Careers & Technology.
- Enhance crosswalk with curb extensions and stutter flash pedestrian beacons.

Meadowood Center

- Promote use of existing on-street parking on Neil Road and Meadowood Lane.
- As need warrants, explore sharing parking with St. Mary's Urgent Care across Meadowood Lane.
- Provide pedestrian sidewalks through the continuous planters.

The site development for the Redfield Health Science Center will be done during the development of the new Health Science Center project. Since the Redfield Performing Arts Center is part of a retail complex, there are minimal opportunities for site improvements.

EXECUTIVE SUMMARY

SPACE PROGRAMMING

Continued development of Academic Focus Centers is a focus of the Master Plan. The planning team consistently heard the need to strengthen each Center as an identifiable place for educational opportunities.

Dandini Red Mountain Building

- A new Student Services location with all services in one location.
- Relocation of the Bookstore, Fitness Center, Art Gallery to spaces adjacent to Student Life spaces. This will facilitate the Student Services consolidation project.
- New science and engineering class labs as required by program growth.

Dandini Sierra Building

- Relocate architecture and CAD drafting to the IGT Applied Technology Center.
- Relocation of the Academic Support Center to the Sierra Building.

Dandini Vista Building

- Relocation of the Writing Center to the Learning Center.
- Relocation and expansion of the Math Tutoring center.

IGT Applied Technology Center

- New instructional space at IGT Applied Technology Center will be developed as a part of the future EDA Grant remodel.
- It is anticipated the EDA Grant will include exterior improvements such as painting, storefront and entrances, lighting, landscaping, parking, and fencing.

Meadowood Center

- Convert two existing rooms into two new classrooms, and divide one large classroom into two.
- Additional classroom and office space as program growth requires.
- Student Life spaces, including a lounge/study area.

CAPITAL PROJECTS

Five projects have been identified as potential capital improvement projects:

Fine Arts Center

- New arts education and performance venue, including a performance theatre, a theater rehearsal/classroom, music education rooms, dance studio, and a variety of support spaces.

Dandini Red Mountain Events Center

- Infill in the existing 3-story Student Center, featuring a flexible room which can be subdivided. The room will be equipped with audio, data and presentation equipment.

Dandini Red Mountain North Entrance

- Addition connecting all four floors of the Red Mountain Building. The new entrance provides improved vertical circulation within the building, and serves as a landmark inside the building to aid in way finding within the Red Mountain Building. The addition has a new conference center, entrance to administrative offices, lobbies, lounges and connections to various portions of the Red Mountain Building.

Dandini Campus Learning Center

- The Learning Center is proposed as a more active, dynamic space with new types of educational and collaborative learning experiences.

Student Services Consolidation

- Relocate the majority of Student Services to the ground floor of the existing Student Center. This move will provide a "One-Stop Shop" for students using services such as Admissions & Records, Financial Aid, Advising, Student Testing, and Counseling.



TMCC Overview

TMCC OVERVIEW

Vision

Truckee Meadows Community College creates the future by changing lives.

Mission

Truckee Meadows Community College promotes student success, academic excellence and access to lifelong learning by supporting high-quality education and services within our diverse community.

Values

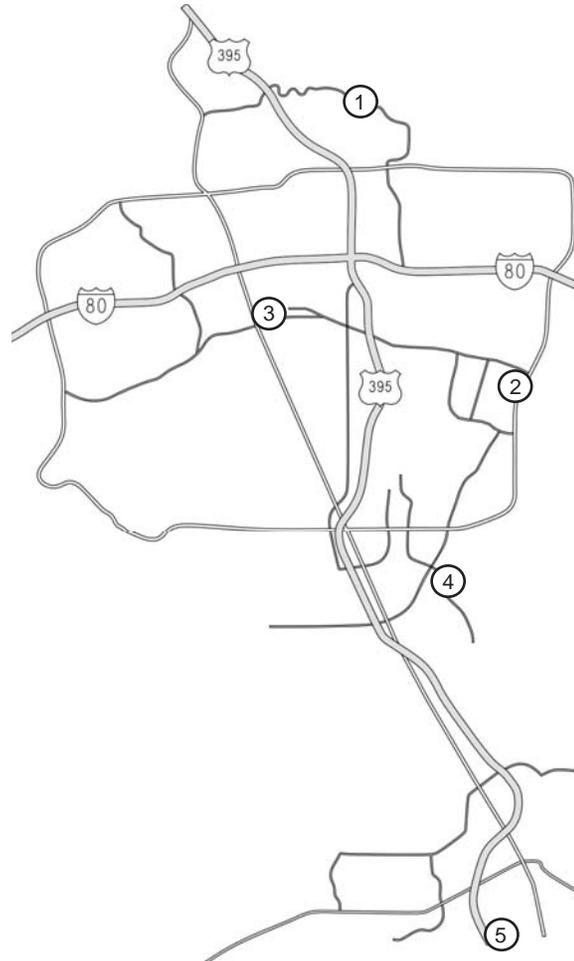
The values upon which Truckee Meadows Community College bases its mission and vision statements are the principles, standards and qualities the college considers worthwhile and desirable. Truckee Meadows Community College is committed to:

- Student access and success
- Excellence in teaching and learning
- Evidence of student progress through assessment of student outcomes
- Nurturing a climate of innovative and creative thought
- Collaborative decision making
- Community development through partnerships and services
- Ethical practices and integrity
- Respect, compassion, and equality for all persons
- Responsible and sustainable use of resources
- Fostering attitudes that exemplify responsible participation in a democratic society

Core Themes

- Student success
- Academic excellence
- Access to lifelong learning

TMCC OVERVIEW



1. Dandini Campus

TMCC's Dandini Campus is home to the student services and administrative functions of the college, including Admissions and Records, Financial Aid, Testing Services and more. This site offers a variety of academic and occupational programs in a variety of areas. In addition, the Dandini Campus houses the V. James Eardley Student Services Center, the Elizabeth Sturm Library, Academic Advisement, open computer laboratories, drop-in child care, academic assistance from the Tutoring and Learning Center and special events.

2. TMCC IGT Applied Technology Center

The TMCC IGT Applied Technology Center provides training for high skill jobs in construction, manufacturing and transportation technologies, including automotive, construction management, renewable energy, machining, fabrication, HVAC/R and welding. These programs are developed with input from local industry and directly meet the needs of the regional workforce. The center's advanced shops and labs allow students to train with the hands-on experience for careers in these industries.

3. The TMCC Nell J. Redfield Foundation Performing Arts Center

The TMCC Nell J. Redfield Foundation Performing Arts Center houses the college's performing arts classes, including dance, music and theater instruction. In addition, the performing arts classes present a variety of performances at the center during the year.

4. Meadowood Center

TMCC's Meadowood Center is conveniently located across the street from Meadowood Mall and on multiple bus routes. In addition to a wide variety of college credit courses offered regularly at Meadowood Center, other programs found at this location include the Workforce Development and Continuing Education division offering over 1,000 professional development and personal enrichment programs, Adult Basic Education including English as a Second Language and High School Equivalency preparation as well as basic literacy programming, Veterans Upward Bound, and a testing center.

5. Redfield Health Science Center

The Redfield Health Science Center is a collaborative campus of Truckee Meadows Community College and the University of Nevada, Reno. General education courses are offered here in addition to nursing, veterinary technology and geothermal courses.

TMCC OVERVIEW

Master Plan Overview

The 2014 Facilities Master Plan of Truckee Meadows Community College (TMCC) establishes a physical framework in support of TMCC's educational mission. The master plan examines the current use of existing space on all the campuses. While anticipating flat growth in the student population for the next ten years, the master plan addresses the changing needs of various programs and the student body. The master plan looks internally at the functionality of the academic divisions and administrative departments and makes recommendations which come in two forms: utilization and facility renovations. The utilization component reviews the use and scheduling of the spaces and increases overall College utilization rates.

Guiding principles of the master planning process include:

- Promote effective utilization of existing capacity.
- Provide ease of access to College services by students and the community.

TMCC Overview

Truckee Meadows Community College is a comprehensive community college located in Reno, Nevada, and is part of the Nevada System of Higher Education. The college serves more than 28,000 students each year in credit and non-credit programs at five college sites and more than 20 community locations.

TMCC is northern Nevada's jobs college, preparing qualified students for jobs in

industries right here in Nevada. In fact, 95% of our students remain in Nevada after completing their studies, helping to build and support our local community. TMCC students, graduates, employees and infrastructure put more than \$678 million into the region's economy each year.

TMCC is continually growing and finding new ways to prepare students for jobs in our community. Offering academic and university transfer, occupational training, career enhancement workshops and classes just for fun, TMCC is the fastest growing college in northern Nevada.

History of TMCC

In 1969, the community college system was established by the Nevada State Legislature. In 1971, Governor Mike O'Callaghan dedicated Western Nevada Community College as one of three community colleges in the Community College Division of the Nevada System of Higher Education. In its infancy, TMCC operated under the name of Western Nevada Community College. The parent campus was located in Carson City. Stead Air Base housed a secondary campus serving predominantly the greater Reno-Sparks area. Both campuses had their own student organizations, faculty senates, and administrative organizations.

In addition to Stead Air Base, space for registration and classrooms was provided by the Washoe County Schools. The first of the multi-phases of construction for a campus on Dandini Boulevard in Reno was completed in 1976. The Dandini Campus became the central hub for the staff, programs and students.

In 1979, the Board of Regents split Western Nevada Community College and established Truckee Meadows Community College. TMCC became the fourth community college within the Nevada System of Higher Education.

Starting in the 1980s, the student demand for courses and programs created a need for more facilities. In addition to expanding the Dandini Campus, the college established the IGT Applied Technology Center (March 1999), Meadowood Center (February 2003), the Nell J. Redfield Foundation Performing Arts Center (September 2003), and the TMCC High Tech Center at Redfield (September 2005).



Project Overview

Purpose + Scope of Work

Purpose

The purpose of the project is to update the Truckee Meadows Community College Facilities Master plan published in 2004. The Nevada System of Higher Education (NSHE) Board of Regents requires each institution's master plan to be updated every 10 years. This requirement necessitates an update to the TMCC document in 2014. In addition to the NSHE requirement, TMCC is committed to review of the master plan to ensure the document reflects current conditions and the future vision of the College.

This document is the result of a two-phase process to update the 2004 plan. The initial phase focused on classroom utilization and an evaluation of the organization of each building. Classroom utilization used existing TMCC data to determine how much instructional spaces are occupied. The utilization component also makes suggestions on increasing classroom utilization in the future. The organizational study documented the current locations of classroom, office, service and support spaces. Organizational plans were developed to indicate the Division or department responsible for each space in the buildings. Based on these diagrams, organizational plans have been proposed to gather like functions.

While Phase 1 was responded to operational and interior improvements, Phase 2 focuses on exterior planning in the areas of traffic planning, site circulation, parking, landscaping, lighting and other site improvement components. The second phase also included development of specifics on future capital projects.

The planning time frame for the project is 10 years. The report utilizes data from

the 2012 and 2013 academic years. The time frame for the study is from 2014 through 2024. Most of the data is not tied to a specific year. Rather it is presented in terms of a potential path of events.

Scope of Work

The scope of work for the project includes the following tasks:

- Review of relevant documents, such as the 2004 Facilities Master Plan, class schedules & utilization information.
- Recommendations regarding existing classroom sizes, purposes and utilization.
- Evaluate Student Services spaces and the effectiveness of their adjacencies.
- Recommendations for improving Student Life spaces, including the events space and interior & exterior spaces for student use.
- Review TMCC's existing pedestrian and vehicular flow and infrastructure and make recommendations for improvement and to accommodate future planned facilities.
- Review campus access and egress and make recommendations.
- Review TMCC's current parking facilities and capacity and make recommendations for improvement.
- Review TMCC's open spaces for landscape, cityscape, furnishings and lighting levels and make recommendations for optimal utilization, safety and aesthetics.
- Projection of Space Needs for TMCC (Overall) and Dandini Campus.

PROJECT OVERVIEW

Goals

The project team received a great deal of input from stakeholders and participants. The following project goals were identified early in the process:

- Increase utilization.
- Find areas where organizational relationships can be improved.
- Maximize use of exterior space.
- Provide rooms that support instructional requirements.
- Solve the problem of the events space that doubles as student space.
- Continue development of centers of academic focus and brand each one.
- Make sure TMCC had the right kind of space.
- Make recommendations for improved parking layout and & vehicular flow, and provide for future expansion.
- Develop a realistic phasing plan for development plan recommendations.

While all the goals are important, the following goals have the highest priority:

Increase utilization

TMCC needs to continue to work on improving utilization. NSHE places a great deal of importance on high utilization of classroom and class laboratories. Higher utilization Future efforts could include the following.

Improve organizational relationships

Faculty offices are not organized by Division in all cases. Many times, a new faculty member is located in an office that

is remote from Division staff and other Division facility. There is also very little quality space for part-time faculty. Faculty space currently lacks collaboration rooms for meeting and small group interaction.

Academic Focus Centers

TMCC currently has a number of Centers with a specific academic focus. These include IGT Applied Technology Center (Division of Applied Industrial Technology), Meadowood Center (Division of Business, Adult Basic Education and Workforce Development Continuing Education), and Redfield Health Science Center (Division of Science). These Centers should be strengthened with more intensive development of specialized instructional spaces where appropriate. While the strengthening of the focus of the centers is important, each Center must continue to support the requirements thorough core classes and electives. Turning the Centers into “silos” which only serve a specific Division is not the vision. TMCC wants to continue to provide core classes and electives so degree-seeking students are not forced to travel throughout the Truckee Meadows to satisfy their requirements.

Right types of space

TMCC wants to continue to provide the best educational experience possible. A high quality educational experience is supported with good spaces for socialization, study and instruction. Instructional spaces should be of the right quantity and size. Social spaces should

be provided in a variety of sizes and levels of privacy. Offices need to be provided for users that are located in the proper place and of the right size. The master plan needs to investigate the current types of spaces and propose new types of spaces where necessary.

Improved parking & vehicular flow

TMCC currently uses an unpaved overflow lot south of Raggio parkway. This lot has 377 spaces, and is located on property owned by the Desert Research Institute (DRI). Should DRI wish to develop this land, TMCC would lose the associate parking area. The north “terraced” parking lots are the oldest lots on campus, dating from the time of the original Red Mountain Building. To accommodate growth, the terraces have been extended to such lengths that it has become inconvenient for users to park in the farthest spaces. In addition, the driveway in front of the new student center often becomes congested with vehicles, and pedestrians crossing paths. The master plan shall make recommendations to provide additional parking, improve vehicular circulation and parking efficiency in the north lots, and provide safe, dedicated pedestrian routes within the parking areas.

PROJECT OVERVIEW

Process

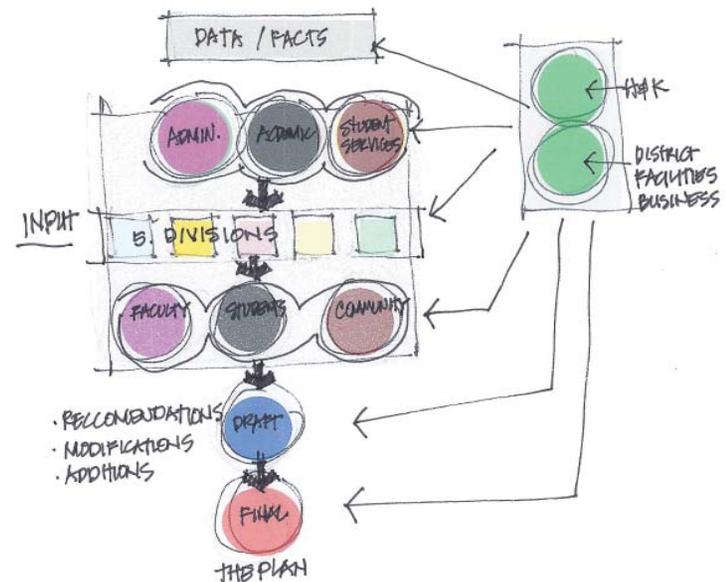
The Facilities Master Plan Update has been developed in a very collaborative process that brought together TMCC staff, faculty, administrators and students in a number of workshops and presentations.

The first meetings were with the Division Deans and College leadership. These initial meetings represented the information gathering portion of the project. Participants reviewed and discussed the overall parameters and goals. The planning team gained an understanding of the TMCC culture and structure.

After the initial meetings the team met with a broader range of stakeholders including Division directors, administrative staff and students. The second set of meetings reviewed current Division structures, instructional programs, space utilization and future needs. Departments such as Student Services and Administrative Services presented their organizational structure, staffing and required proximities. The student group meetings looked at student life space, clubs and student government. Meetings were also held with faculty to review types of instructional spaces, offices and the concept of focus centers. This round of meetings generated a vast amount of data that was processed in later phases.

The information gathering phase was followed by analysis of data collected in the first set of meetings. The data was analyzed in a series of presentations with the stakeholders. Conflicting and unclear information was reviewed and discussed. This analysis portion of the project allowed the planning team to begin the process of assembling the information sets that addresses the tasks in the scope of work

The final portion of the process is the synthesis of the information. The planning team presented space planning, utilization and organizational structure concepts developed based on all the information gathered from the stakeholders. These concepts are in the form of new building plans, and increased utilization, and issues raised in prior meetings.





Space Needs Assessment

Introduction

Effective utilization of academic, classrooms and lab, spaces on a college campus can be measured both mathematically by assessing the capacity of the spaces and functionally by assessing the ability of the space to fit the need of the educational programs being delivered. Capacity utilization is based on the compilation of information developed from a variety of inputs, such as enrollment data, space inventory, and standards as determined by NSHE (Nevada System of Higher Education). Functional utilization is based on the current and projected educational need and the type of space currently available. However, non-academic spaces, such as library, offices, food service, and student services, are better studied based on the student population to be served. NSHE has a limited space standard guideline for these types of spaces. Other State and National guidelines offer a more comprehensive data base for comparison.

A College's educational program description will change over time, new programs are introduced and existing programs are redefined. Space requirements change with these modifications. This study is important in facility master planning to ensure that adequate space for all functions is being provided for the current and future populations. However, the studies are not to be considered absolute required space, but a guideline to ensure that the College has adequate space for the functional area in which it is actively involved.

This master plan assesses not only the effective utilization of these spaces but how well these spaces could meet future needs. In determining future space needs, projected enrollment is based on specific data that is contained in the TMCC FactBook of 2012 and current

and projected capture rates from the surrounding K-12 high schools.

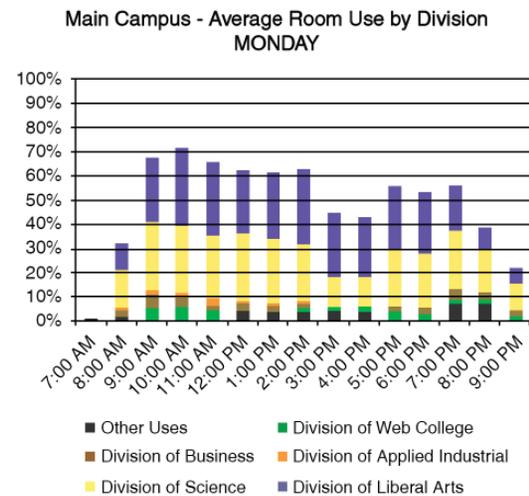
TMCC has utilized its existing spaces to meet its current enrollment demands. There are ample classroom and labs to support its teaching and learning environment. However, the college could effectively utilize its spaces by improving the functionality of these spaces and by adopting better scheduling practices.

Using fall quarter of 2012 enrollment data (provided by TMCC Staff), current space inventories and coding (provided by TMCC Facilities) and space floor plans all TMCC campuses were analyzed for both capacity and functionality, using current educational programs as a base line. Detailed analysis of each campus, including room use by division, every hour of the day for all seven days of the week, was completed.

Representatives from the Academic Divisions, Administration, Students and

Non-Academic areas such as Library, Student Services, Campus Security, and Student life all participated in discussions concerning the existing space, the current capacity on each campus and the functionality of the current space. Many expressed the concern that space was not available for the current types of academic and non-academic functions at the various campuses and the planned future offerings or changes in service. Many voiced the concern that student service functions on the Dandini Campus were scattered and in some instances difficult to find. In addition, many expressed the concern that student life functions had to compete for space in the main assembly area with outside groups and functions. Nearly all expressed the concern that spaces on all campuses were difficult to use, too large, too small or not equipped for the new educational programs being offered.

In order to determine the need, an existing space inventory of TMCC's facilities was also conducted.



Space Capital Analysis Model

A space capital analysis model (CAM) was prepared in order to assess the needs of the College's academic and non-academic spaces with the availability of spaces at the College. The analysis considers Spring 2014 FTE current and projected 10-year enrollment growth (see appendix). These studies analyzed the overall College space on all campuses and specifically the Dandini Campus. Other satellite campuses have limited area for nonacademic space and have been rolled up along with the Dandini Campus to the overall College table.

This model shows a degree of unbalance for the academic space, classrooms

and laboratories, as shown in the initial capacity and utilization models. However, most of the balancing for these two areas can be done through the modernizations, renovations and additions being planned for all campuses.

Significant deficiency in space in the area of food service and the library, and lounge, may be attributable to the way that the space has been designed and calculated. For instance the food service area is calculated without the "dining area" that extends to the rail on the upper floor, this is classified as circulation and is not calculated into the space called "food service"; the library has a significant

floor area that is used for circulation and lounge area that is not calculated into the space of the library; and the lounge areas calculated throughout the Dandini campus have not taken into count the wide corridor areas of some of the buildings. To better balance the space requirements, a review of the coded spaces not making the main headings (codes*50,530,550,555,590,685,710,720,725,730,750,780,880,w02,w05,w06,w07) was completed. This revealed the need to include a percentage adjustment to the total square footage.



Space Capital Analysis Model

Space Analysis Detail Model Summary

Based on TMCC estimated 2014 FTE Enrollment 6069

All Campus Summary

Space Code	Type of Space	First 1,000	Additional	Assignable Square Feet per FTE	Actual Assignable Square Feet	Surplus/(Deficit)
110,115	Classrooms & Classroom Services	9.24	12.4	87,144	74,684	(12,460)
210, 215	Class Labs & Class Labs Services	17	6	49,444	94,211	44,767
310, 315	Office and Service	8.1	8.1	62,154	79,588	17,434
410, 420, 430, 455	Library	10	8.5	47,127	25,901	(21,226)
610, 615, 620	Assembly and Exhibition	4	4	21,075	23,810	2,735
x01, x02, x03, y01, y03, y04	Physical Plant	7	4	26,493	34,668	8,175
650	Lounge	2	2	9,739	1,493	(8,246)
660, 665	Merchandising	1	1	4,227	5,248	1,021
630, 635	Food Service	8.6	8.6	45,179	8,886	(36,293)
680	Meeting	1	1	5,920	9,707	3,787
	Sub-Total			358,502	358,196	(306)
*Actual ASF	Other Square Feet			116,941	209,777	92,836
	Total			475,443	567,973	92,530

* 50, 530, 550, 555, 590, 685, 710, 720, 725, 730, 750, 780, 880, w02, w05, w06, w07

Space Analysis Detail Model Summary - Dandini Campus

Spring 2014 FTE: 3713

Space Code	Type of Space	First 1,000	Additional	Assignable Square Feet per FTE	Actual Assignable Square Feet	Surplus/(Deficit)
110,115	Classrooms & Classroom Services	9.24	12.4	54,278	42,661	(11,617)
210, 215	Class Labs & Class Labs Services	17	6	38,276	50,559	12,283
310, 315	Office and Service	8.1	8.1	37,173	59,753	22,580
410, 420, 430, 455	Library	10	8.5	40,558	22,022	(18,536)
610, 615, 620	Assembly and Exhibition	4	4	17,851	14,717	(3,134)
x01, x02, x03, y01, y03, y04	Physical Plant	7	4	20,851	27,275	6,424
650	Lounge	2	2	8,425	431	(7,994)
660, 665	Merchandising	1	1	3,713	5,134	1,421
630, 635	Food Service	8.6	8.6	39,529	8,886	(30,643)
680	Meeting	1	1	3,713	6,637	2,924
	Sub-Total			264,367	238,075	(26,292)
*Actual ASF	Other Square Feet			95,676	149,068	53,392
	Total			360,043	387,143	27,100

* 50, 530, 550, 555, 590, 685, 710, 720, 725, 730, 750, 780, 880, w02, w05, w06, w07

Space Utilization Improvements

Room Coding

Space inventory is reported to NSHE on an annual basis. The space inventory is based on use coding (Class, Laboratory) contained in the NSHE regulations, and the actual functional use of each space on campus. Each quarter of each year changes of use within a building can take place to accommodate a change in the educational program need, creating a need to modify the space, generating a need to change the inventory list. Using current coding, existing floor plans of each building on each campus, and physical observations of each room on each campus, space inventories were determined to be not in sync with current academic and non-academic use. Correcting the coding issues and issuing the new data will result in an accurate report, a better alignment with current educational program offerings, and the outcome will be a stronger utilization of the current space on all campuses. Additional reorganization of space to accommodate upcoming educational program changes, student services, student life, campus security and administration may affect the recommended coding changes. Coding and inventory adjustments should be completed on an annual basis to ensure accurate reporting.

Each space, depending on its use code, generates a room capacity, which in-turn results in overall capacity of the building and the campus. Actual seat/station counts were conducted in each of the rooms coded as class or class laboratories to determine current capacities. These counts could change on a yearly basis and need to be reviewed before reporting. (See Appendix for additional data)

Scheduling

The utilization studies completed for this Master Plan were comprehensive, quantifiable and based on data and input from a variety of stakeholders. Proper coding of space and the creation of accurate seat/station counts will benefit the scheduling function on all campuses. Scheduling of the College facilities is a critical function in maintaining the maximum functional utilization of space.

The College uses a very efficient scheduling system, CollegeNET "Schedule 25" together with an in-house priority tier system. The in-house three tier system organizes space based on the educational division where tier one is exclusively considered space that is used by a division and no other division can use the space; tier two is a space that is considered first priority for a division and if not used, it can be scheduled by another division; and tier three space is open to all divisions.

Space coding is entered into the College management system, "PeopleSoft", and then transferred to the scheduling system.

The College Catalogue is then produced using some "hands-on" optimizing of the enrollment data balanced with the three tier system.

There is a need for class laboratories to be connected to a division, if exclusively used by the division on a regular basis; however the overall tier system complicates the enrollment data and the coding entry into the scheduling system. The tier system use should be removed and a built in optimizer for the scheduling system

should be considered. Within the optimizer accommodations can be made to respect the tier one use of class laboratories by division.

There is a need for class laboratories to be connected to a division, if exclusively used by the division on a regular basis; however the overall tier system complicates the enrollment data and the coding entry into the scheduling system. The tier system use should be removed and a built in optimizer for the scheduling system should be considered. Within the optimizer accommodations can be made to respect the tier one use of class laboratories by division.

Space Projection - 2024

Based on TMCC estimated 2024 FTE Enrollment	7144
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All Campus Summary

Space Code	Type of Space	Assignable Square Feet per FTE	2014 Assignable Square Feet	Projected Space ADD over Next 10 Years		Surplus/(Deficit)
110,115	Classrooms & Classroom Services	96,826	74,684	5,383	*	(16,759)
210, 215	Class Labs & Class Labs Services	58,864	94,211	4,668	**	40,015
310, 315	Office and Service	64,966	79,588			14,622
410, 420, 430, 455	Library	69,724	25,901			(43,823)
610, 615, 620	Assembly and Exhibition	31,576	23,810			(7,766)
x01, x02, x03, y01, y03, y04	Physical Plant	34,576	34,668			92
650	Lounge	15,288	1,493			(13,795)
660, 665	Merchandising	7,144	5,248			(1,896)
630, 635	Food Service	69,038	8,886			(60,152)
680	Meeting	7,144	9,707			2,563
	Net Square Feet Total	455,146	358,196	10,051		(86,899)
*Actual ASF	Grossing Square Feet	165,262	209,777	3,015		92,836
	Total	620,408	567,973	13,066		5,937

* Square footage projected at Edison Campus for renovation and second story space

** Square footage projected at Redfield Campus for an addition

Recommendations

As a result of these studies and work with the stakeholders generated the following recommendations:

- Room coding at all campuses should be changed to match current conditions. All space utilization reports should contain the new coding. This recommendation establishes accurate base line data for use in reporting utilization reports, a key to maximizing existing spaces.
- Capacities of all class and class laboratories should be based on actual seat/station counts and should be reported this way on all space utilization reports. This recommendation aligns current use of facilities with current data for accurate base line reporting of space.
- Space adjustments should be made to include current circulation space into space that can be accounted for in the food service, lounge or other spaces that enhance student life programs.
- The tier system currently being used for priority scheduling should be removed in any future scheduling processes with one exception, class laboratories that are exclusively used by division on a regular basis. This recommendation will improve functionality of current spaces resulting in meeting current and future demands of the college.
- The College should utilize an "optimizer" compatible with current scheduling program. This will result in a more comprehensive use of current space on all campuses meeting the demand of current and future college populations.
- The College should consider utilizing space during off-peak hours, such as Fridays and weekends, to improve utilization without impacting peak periods.
- Future modernization and renovation work should consider changing the size of smaller classrooms and laboratories to accommodate the most commonly requested class capacities.
- Changes in space configurations to optimize utilization as suggested in Part 5 of this report need to be completely synced with new coding, changing both the "people soft" data and the Schedule 25 information as necessary. This recommendation will result in college facilities that are more accessible, clearly planned for the intended use and organized for current and projected student populations.
- The College should consider incorporating space that enhances recruitment and retainage of students. This would include student life spaces.
- The College should consider modifying the library at Dandini to be more students oriented, part of the student life space, and multi-functional.
- The College should consider changing the food service area to be more "food court" convenient, with a greater variety of offerings, utilizing circulation space to the maximum.



Campus Site Analysis

CAMPUS SITE ANALYSIS

Currently the campus road network does not facilitate easy travel from north to south. Also, the site configuration causes traffic congestion in the north lots, as they end to converge on the loading/drop off zone in front of the Red Mountain Student Center.

RTC's US 395 / Pyramid Highway Connector will direct more traffic onto Raggio Parkway, effectively shifting the "front door" of the campus to the south side. The realigned Dandini Boulevard will help facilitate relocating the two north entrance driveways on Dandini Boulevard.

Campus Loop Road shall become a service road, with limited access. Traffic controls shall be located at either end of the roadway.

East Campus Road shall connect the north & south parking areas and provide service access to the Fine Arts Center. West Campus road shall provide a connection between the south parking lots, the north lots and Dandini Blvd. An east-west access route will connect the East and West Campus Roads.

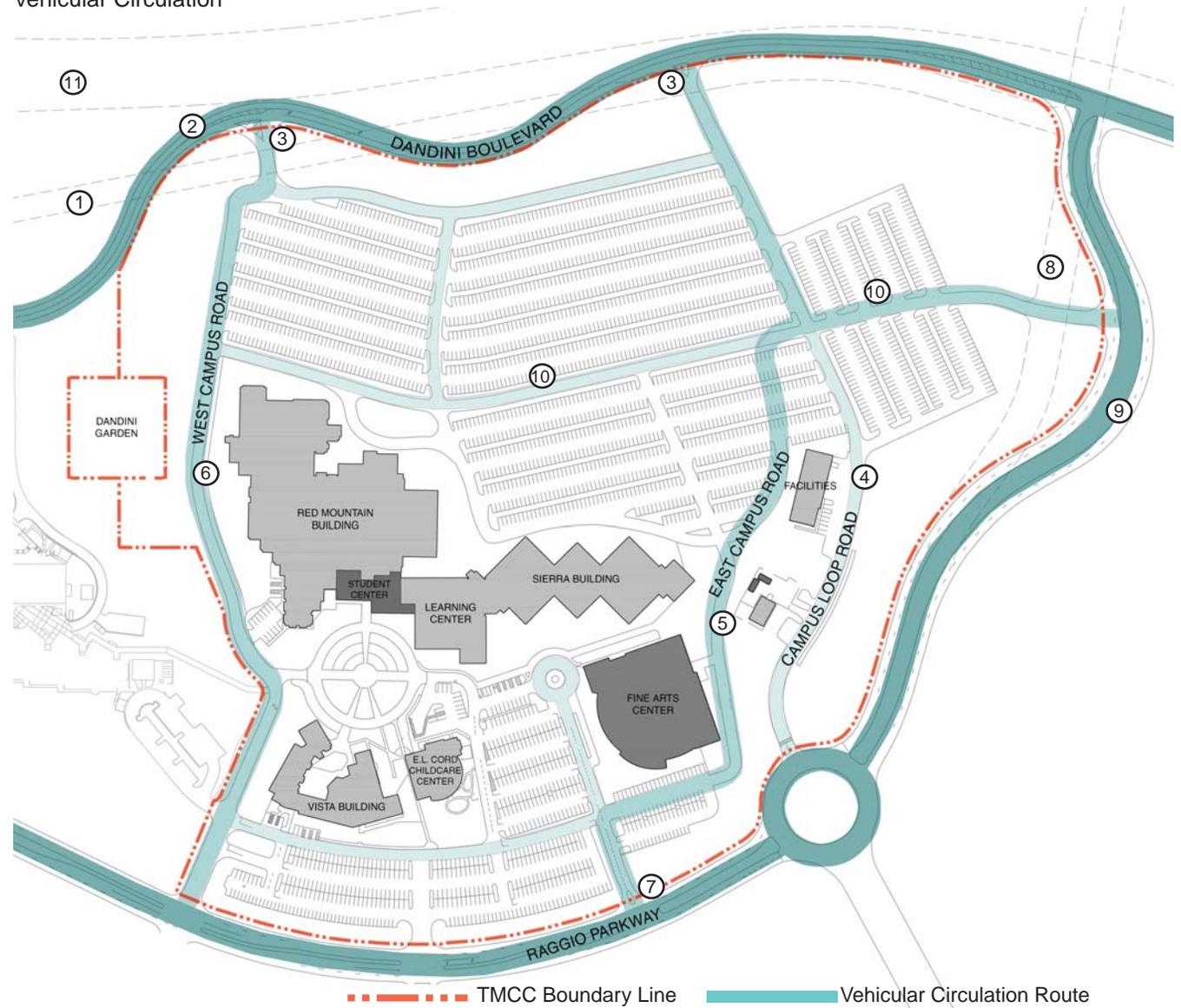
The Master Plan makes the following recommendations & observations:

- ① Proposed RTC Dandini Boulevard Realignment*
- ② Existing Dandini Boulevard
- ③ Relocated entrance driveway
- ④ Controlled-access Campus Loop Road
- ⑤ East Campus Road
- ⑥ West Campus Road
- ⑦ Improved South Entrance
- ⑧ Proposed RTC Raggio Parkway Realignment*
- ⑨ Existing Raggio Parkway
- ⑩ East-West access connection
- ⑪ Proposed RTC 395/Pyramid Connector

*see page 4.08

TMCC Dandini Campus

Vehicular Circulation



CAMPUS SITE ANALYSIS

The Dandini Campus is characterized by a central pedestrian core surrounded by parking areas. The parking areas are located to allow for minimum walking distances to each building, however topography and site configuration have forced parking lot development further from the buildings, especially in the north lots. The pedestrian routes through these parking areas primarily share the drive paths for automobiles. This occasionally causes conflicts between users.

In addition, the lack of night time ambient light on the Dandini Campus, makes the parking areas feel "unsafe".

The Desert Research Institute has received an EDA grant to provide, among other items, improved pedestrian amenities along Raggio Parkway.

The Master Plan makes the following recommendations:

- ① Establish dedicated pedestrian routes within larger parking areas.
- ② Separate pedestrian routes from major traffic routes, using landscaping buffers.
- ③ Provide adequate lighting in outlying parking areas and along pedestrian routes.
- ④ ADA walk/path to DRI (EDA Grant)
- ⑤ Raggio Parkway crosswalks (EDA Grant)
- ⑥ New sidewalk (EDA Grant)

TMCC Dandini Campus

Pedestrian Circulation



CAMPUS SITE ANALYSIS

The Dandini Campus is located on the southern flank of Red Mountain, at an elevation of approximately 4900' above sea level. The existing vegetation is mainly comprised of sagebrush and bitterbrush, with occasional scatterings of pines and junipers. The elevation and wind create climactic conditions which allow a short growing season. However, buildings and landforms have created various micro climates which have allowed certain species to thrive.

RECOMMENDATIONS

- Planting stands of evergreen trees in strategic locations to create windbreaks.
- Using select deciduous species as parking area shading and building accents.
- Use native and water-resistant species in planting area wherever possible.
- Limit lawn areas to gathering and study spaces, protected by buildings or windbreaks.
- Use landscaping as buffers between parking and pedestrian circulation routes.
- Use landscaping elements to define outdoor study spaces.

TMCC Dandini Campus

Landscaping



CAMPUS SITE ANALYSIS

TMCC Dandini Campus

Campus Parking

The parking on the Dandini Campus is characterized by two distinct areas: the older North "terraced" parking and the newer South parking. The campus currently offers 1,547 paved parking spaces on-site. At certain times of the school year the parking lots are filled to capacity, usually for a 2-3 week period at the beginning and end of each semester.

The North parking areas are part of the original campus design, and tend to follow the contours of the existing hillside. As these parking areas were expanded, they were extended farther from the campus core. Navigating these parking areas results in drivers travelling long routes as they search for an open space. The North lots currently provide 762 parking spaces.

The South parking areas are laid out in a configuration which allows for vehicular cross-flow and aids in seeking an open parking space. The orientation of these areas provides convenient access to various buildings on campus. The South lots provide 785 parking spaces.

The college currently uses an overflow lot (377 spaces) south of Raggio Parkway, on land owned by the DRI Research Park which is scheduled for future development.

The college must also plan for the displacement of parking (approx. 120 spaces) caused by construction of the future Fine Arts Center.

The Master Plan makes the following recommendations:

- ① The North "Upper Lots" shall be restriped and reconfigured to maximize efficiency. Includes paving & striping of the dirt lots above Facilities Services (approx. 153 new spaces).
- ② Reconfigure North "Terraced Lots" to improve circulation and efficiency (approx. 220 new spaces).
- ③ New "Campus Loop" surface parking (approx. 400 new spaces). Replaces DRI overflow lot and 120 spaces displaced by the Fine Arts Center.
- ④ Future parking can be provided on the east 14-acre parcel if student growth requires.

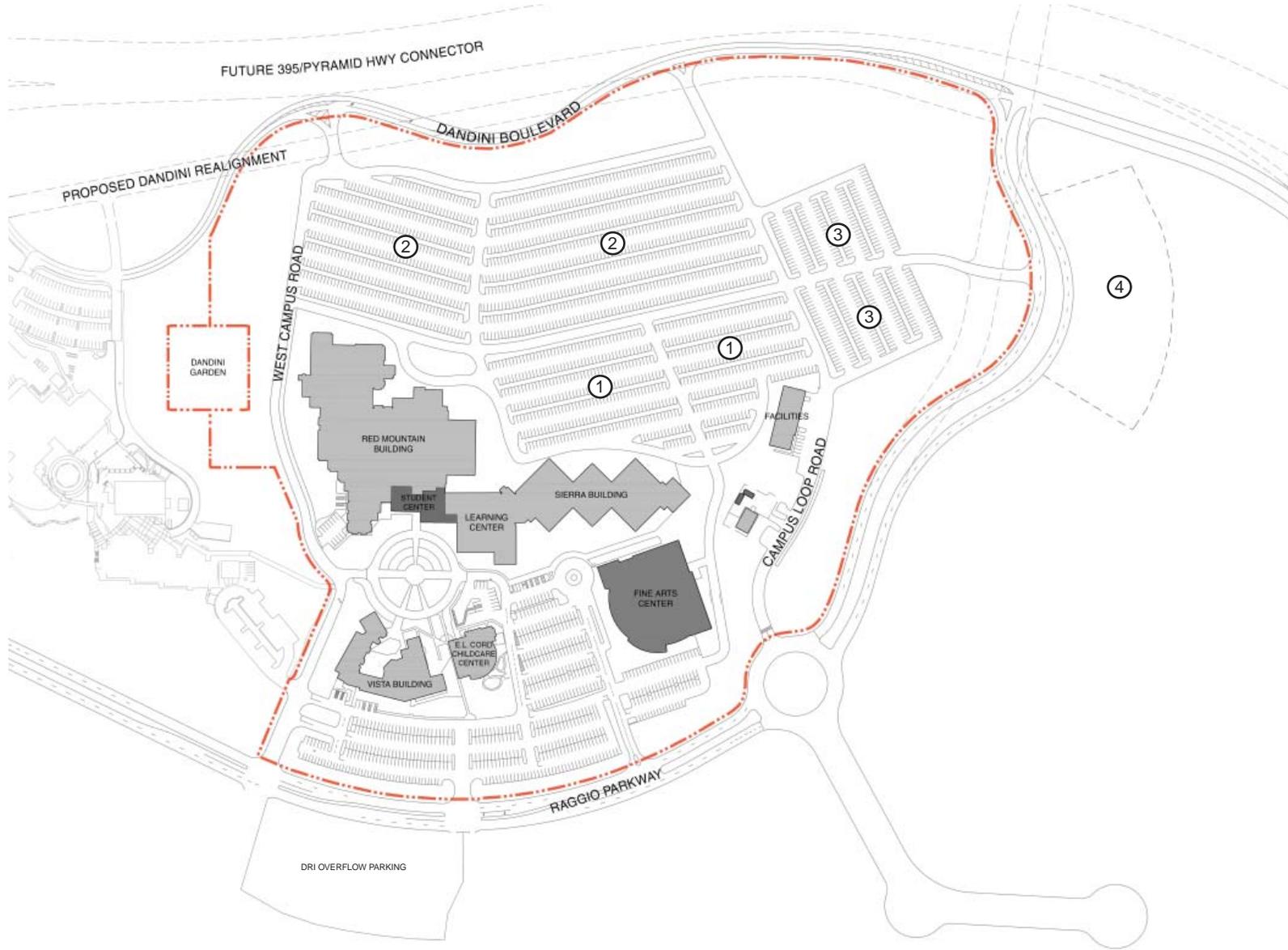


TMCC Dandini Campus
Proposed Parking Summary

	Existing Spaces	Reconfigured Spaces	Net New Spaces
North "Upper Lots"	552	705	153
North "Terraced Lots"	330	550	220
South Parking Lots	785	665	-120
DRI Overflow Parking	377	0	-377
Campus Loop parking	0	400	400
Totals	2044	2320	276

CAMPUS SITE ANALYSIS

TMCC Dandini Campus
Campus Parking

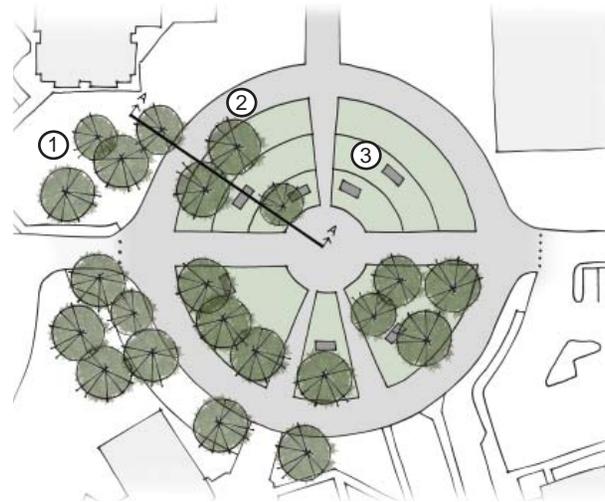


CAMPUS SITE ANALYSIS

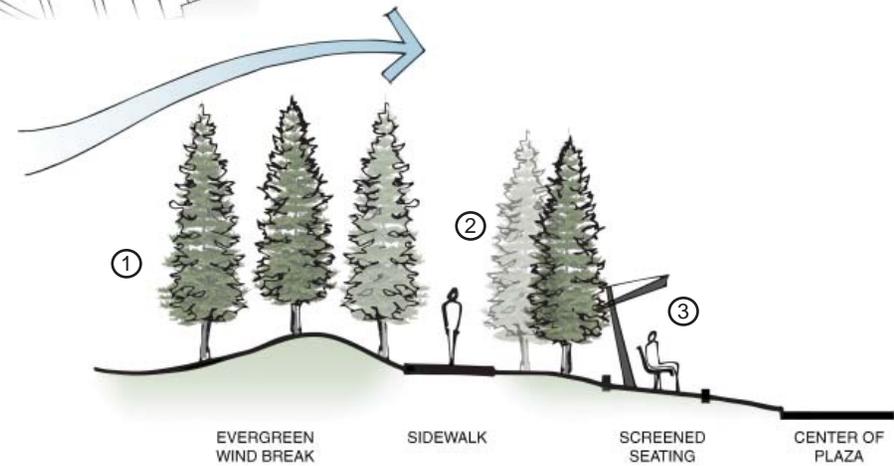
- ① Windbreak: Evergreen trees planted on landscape berm.
- ② Existing walkways become sheltered by windbreak.
- ③ Screened seating areas scattered throughout plaza.
- ④ Reduce quantity of turf to more drought tolerant landscape and hardscape.
- ⑤ Reduce scale of plaza with trees and land forms.
- ⑥ Provide a variety of types of exterior spaces.

TMCC Dandini Campus

Plaza Renovation



Site Plan

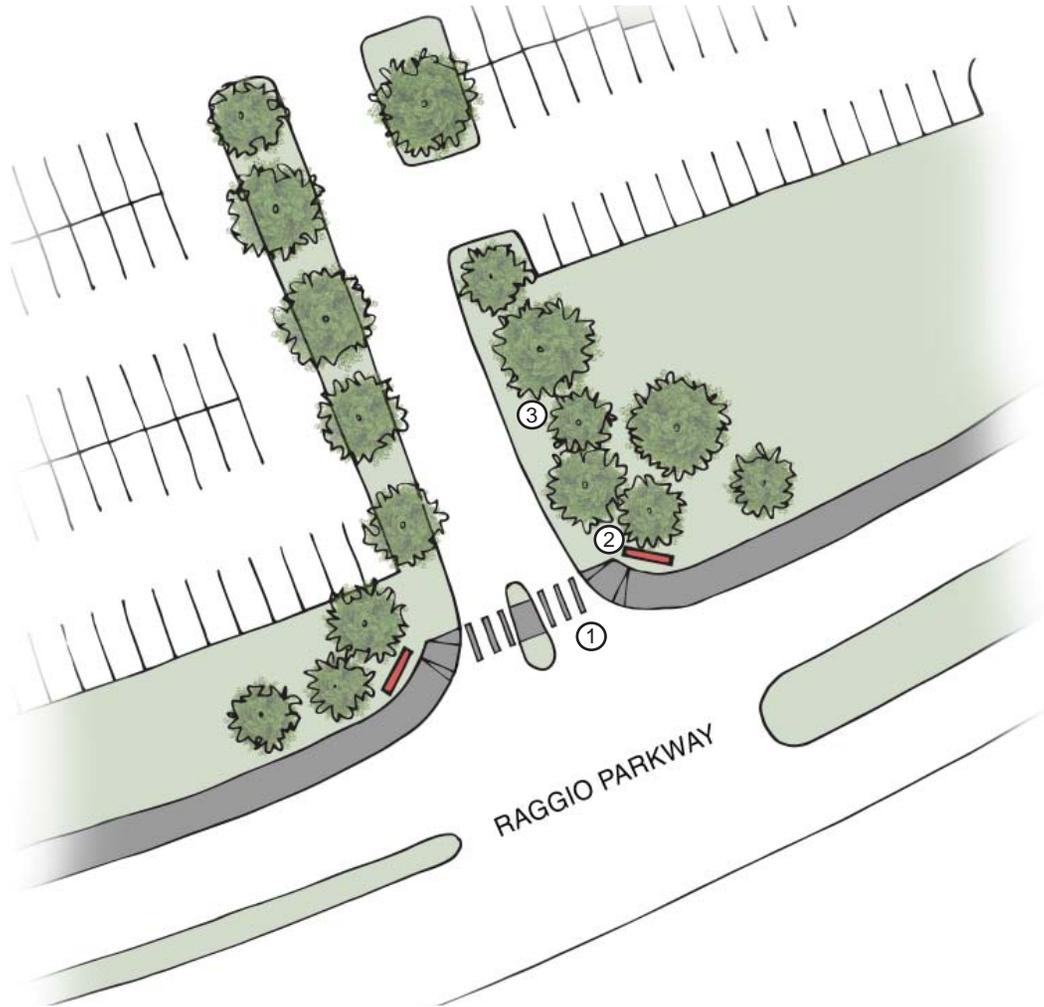


Section

CAMPUS SITE ANALYSIS

TMCC Dandini Campus
South Campus Entrance

- ① Widen entrance to accommodate increased traffic flow.
- ② Prominent TMCC monument sign(s)
- ③ Improved landscaping along both sides of entrance



TMCC Dandini Campus

Pyramid Highway / US 395 Connector

The Regional Transportation Commission (RTC) has a major project planned in the vicinity of the Dandini Campus: the Pyramid Highway/US 395 Connection. The Connection project includes constructing a new freeway from Pyramid Highway to US 395 over the next 20+ years over nine phases. Many of the changes near the Dandini Campus are planned in Phase 1, which could begin construction in 2020 at the earliest. Currently the project is in the preliminary design and environmental documentation stage. The preferred alternative will be presented to the RTC Board and Technical Advisory Committee in 2014 for final concurrence.

Elements of the project that will affect the Dandini Campus are:

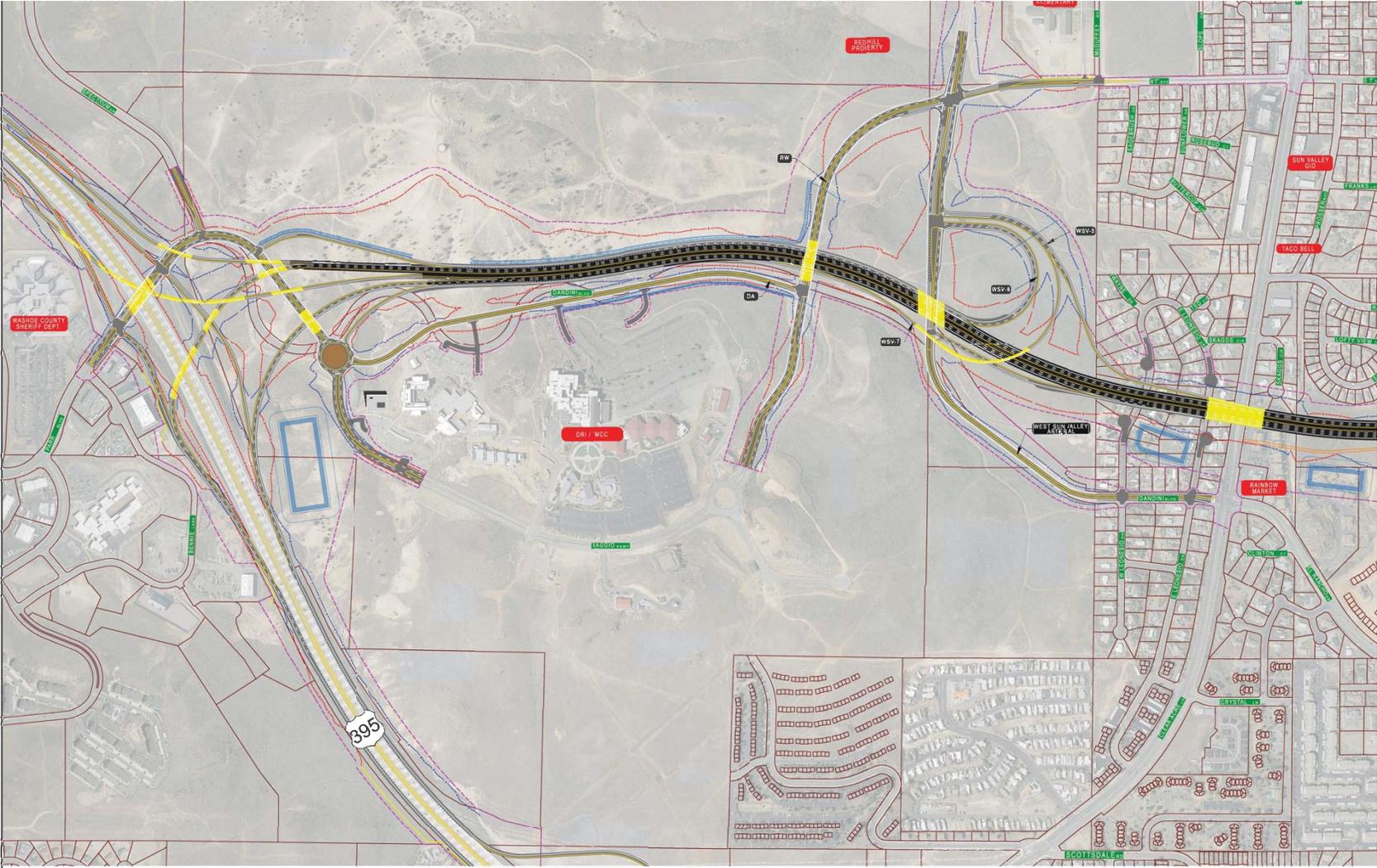
- Additional information about the Pyramid Highway/US 395 Connection can be found at <http://pyramidus395connection.com/maps.htm>.
- The US 395/Dandini Boulevard interchange will be removed to accommodate the US 395/New Freeway interchange. Ramps will be provided within the new interchange to connect to Dandini Boulevard west of the Dandini Campus.
- A roundabout is shown on the preliminary design plans at the Dandini Boulevard/ Raggio Parkway west intersection.
- Dandini Boulevard would be reconstructed (straightened out) and would end at the east Dandini Boulevard/Raggio Parkway intersection. A new roadway would be constructed to access Sun Valley Boulevard.
- An interchange will be constructed to connect the new freeway to Dandini Boulevard. The preliminary interchange location is east of the Dandini Campus.

The construction of the Pyramid Highway/ US 395 Connector will cause the majority of TMCC students to access the campus from the south. This will shift the “front door” of the campus from the north side of the Red Mountain Building to the south side of campus, along Raggio Parkway.

The project will improve campus access from US 395 to the west. The project will also benefit students living in Spanish Springs Valley, north of Sparks, providing a more direct route to TMCC. The College estimates 25% of the students live in the Spanish Springs area.

CAMPUS SITE ANALYSIS

TMCC Dandini Campus
Pyramid Highway / US 395 Connector



CAMPUS SITE ANALYSIS

TMCC IGT Applied Technology Center

Parking

① Explore sharing parking with Academy of Arts, Careers & Technology. Classes end at 3 PM (2:15 on Wednesdays). Approximately 70 spaces in close proximity to TMCC.

② Due to limited parking, as the student population increases, the College should consider adding a parking structure to the southwest corner of the property.



Possible Parking Garage



Parking



Proposed storage

CAMPUS SITE ANALYSIS

TMCC IGT Applied Technology Center

Vehicular and Pedestrian Circulation

① Enhance crosswalk with curb extensions and stutter flash pedestrian beacons and provide sidewalk.

② Improve site lighting by addition additional fixtures along sidewalk.



— Vehicular Circulation

— Pedestrian Circulation

CAMPUS SITE ANALYSIS

TMCC Meadowood Center

Parking

- ① Promote use of existing on-street parking on Neil Road. Approximately 8 spaces adjacent to TMCC.
- ② Define on-street parking. Results in 23 spaces on the North side of the street and 22 spaces on the South side of the street
- ③ Explore sharing parking with St. Mary's Urgent Care. Approximately 130 spaces in close proximity to TMCC.



 Parking

CAMPUS SITE ANALYSIS

TMCC Meadowood Center Vehicular and Pedestrian Circulation

- ① Provide enhanced pedestrian circulation routes through parking areas.
- ② Improve parking area lighting by (A) trimming existing vegetation, and (B) adding additional fixtures.



— Vehicular Circulation — Pedestrian Circulation



Space Program

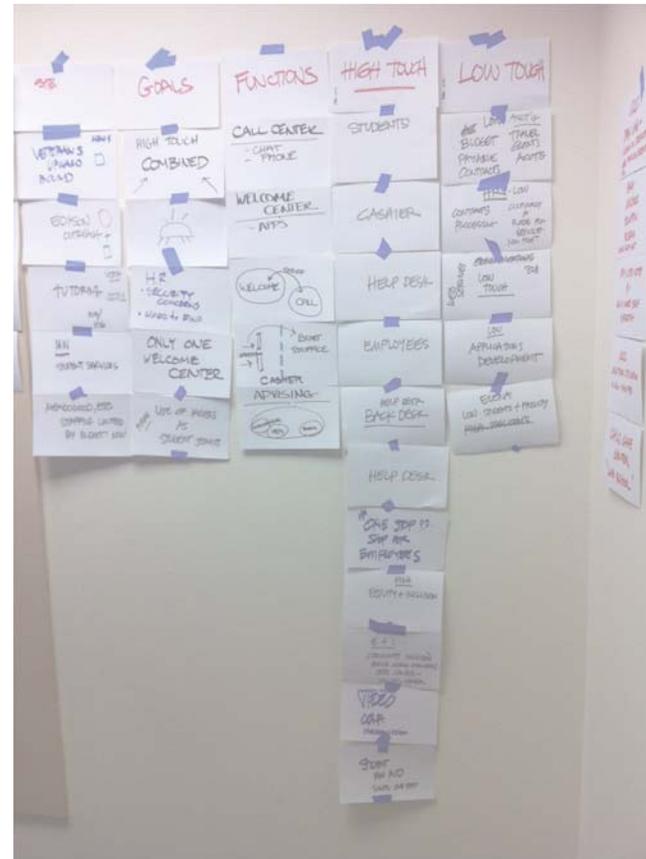
SPACE PROGRAM

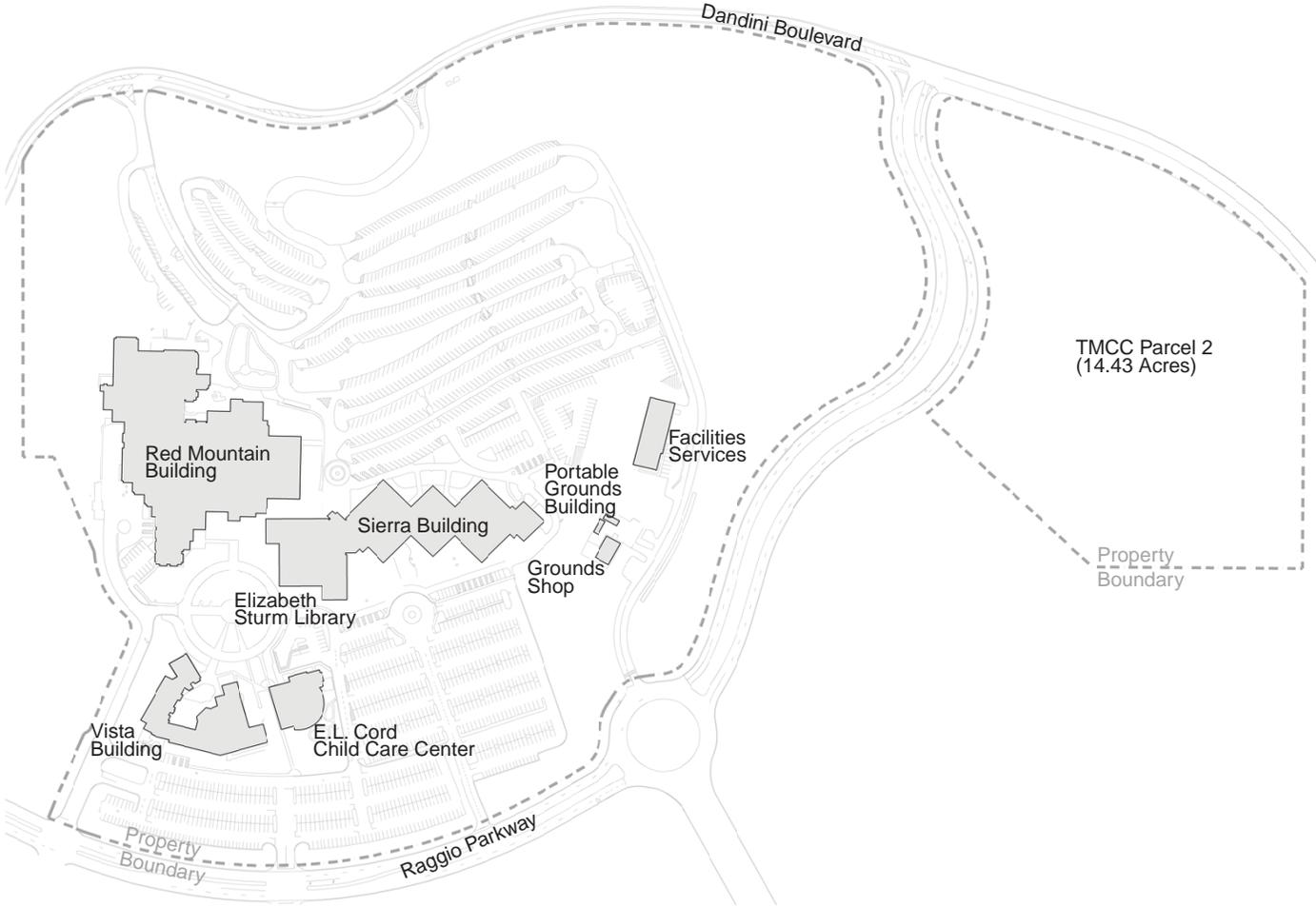
Space Overview

The continued development of the Academic Focus Centers is the foundation of the Master Plan Update. While TMCC has been developing the Centers with a certain academic focus in the past, the planning team consistently heard the need to strengthen each Center as an identifiable place for educational opportunities. The Centers have the following focus:

- Meadowood Center: Workforce Development, Continuing Education & Adult Basic Education
- IGT Applied Technology Center: Technology
- Redfield Health Science Center: Health Sciences
- Dandini Campus: Multi-division Academic Center
- Nell J. Redfield Foundation Performing Arts Center: Performing Arts

The proposed space programming relates to the instructional needs of each Center in this continuing development of an academic focus. The changes in building spaces and organization are proposed to locate resources in their proper place, provide the right type of space and utilize the space to the greatest extent possible.





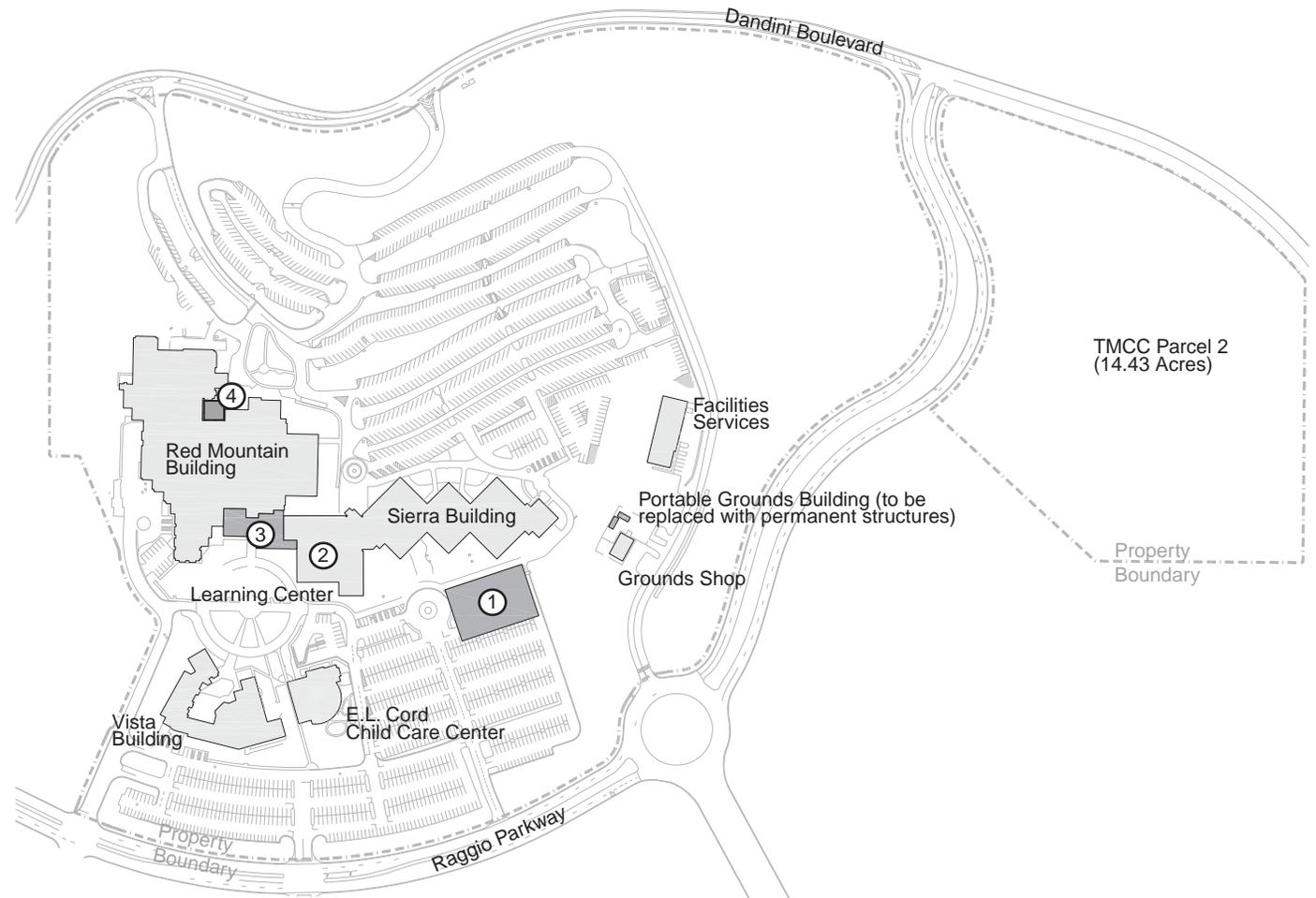
▲ Site Plan
No Scale

SPACE PROGRAM

Dandini Campus - Future Facilities

Legend

- Existing Building
- New Construction
- ① Future Fine Arts Center and Digital Arts & Events Center
- ② Learning Center
- ③ Student Center
- ④ North Entrance



▲ Site Plan
No Scale

Red Mountain Building Space Program

The Dandini Campus is the central hub for the staff, programs and students. The Red Mountain Building is the core of that central hub. The first phase of Red Mountain was completed in 1976. There have been several additions to the building over time. The most current addition was completed in 2004. The building currently houses the Student Center, Student Services, Administration offices, Café & Cafeteria, Bookstore, and Divisions of Science and Liberal Arts Classrooms, Labs and faculty offices.

As the building has grown many functions and spaces have been “buried” within the building, becoming increasingly difficult to locate. Wayfinding in the building is a constant issue with students, faculty and visitors.

Should any moves, renovations or space reallocations be planned for Red Mountain Building, a review of the subject area should be performed to identify potential for maximizing space efficiency.

Student Services

The development of a consolidated Student Services location is needed to create a more cohesive and user friendly experience. The intention is to gather the department functions into one area and organize the various functions based on frequency and type of use. The following planning concepts are proposed for an improved Student Services area:

- Consolidate the 2 floors of Student Services into one floor with a “One Stop Shop” for the high volume functions such as Welcome Center/ Help Desk, Cashier, and Equity & Inclusion.

- Organization of high volume and low volume elements - Student Services Program (high volume) vs. Student Services Business (low volume).
- Easily identifiable and accessible Welcome Center.

Student Center

The relocation of the Student Services functions onto the first floor of Red Mountain will necessitate the relocation of the Student Center (and events space). A new Student Center is proposed in a building addition to the south of the Student Center building. This addition would link the Red Mountain building and the new Learning Center. This two-level addition would include a variety of student life components as described in the preceding overview. The addition would also connect to the existing Cafe and new Bookstore. The addition will complement the highly popular Cafe and provide additional space for eating and socializing. It will be adjacent to the Student Services area and in close proximity to the new Events Center.

Events Center

Although not programmed as a student life component, the new events space on the 2nd floor of Red Mountain will improve the student life experiences by eliminating the regular conflicts between the student center and events. A dedicated Events Center will be constructed by adding a second floor to the high-volume space in the Red Mountain building. The events space will be largely dedicated to the many events that occur on campus. The events space will be a highly flexible room with audio/visual infrastructure.

Art Gallery

A new main Art Gallery is proposed for relocation to the 2nd floor of Red Mountain. The new location will place the Gallery near the Student Center and the Events Center giving it even greater visibility.

Bookstore

The bookstore will need to be relocated as a part of the Student Services consolidation. The new location for the Bookstore is proposed adjacent to the new Student Center.

Police & Public Safety

The Police & Public Safety will relocate to a larger area to the west of their current location, on the 2nd floor of Red Mountain.

Offices

As office moves occur over time, there should be an effort to co-locate like functions together whenever possible.

Conference rooms and collaboration space will be included in the faculty office areas.

Office space will be developed in line with TMCC guidelines.

Other Improvements

The music department and performance dance program will relocate to the Fine Arts Center.

The Fitness Center will relocate to the third floor.

New class Labs for Engineering and other Science programs will be provided.

The new North Entrance connector as described in the Capital Projects section.

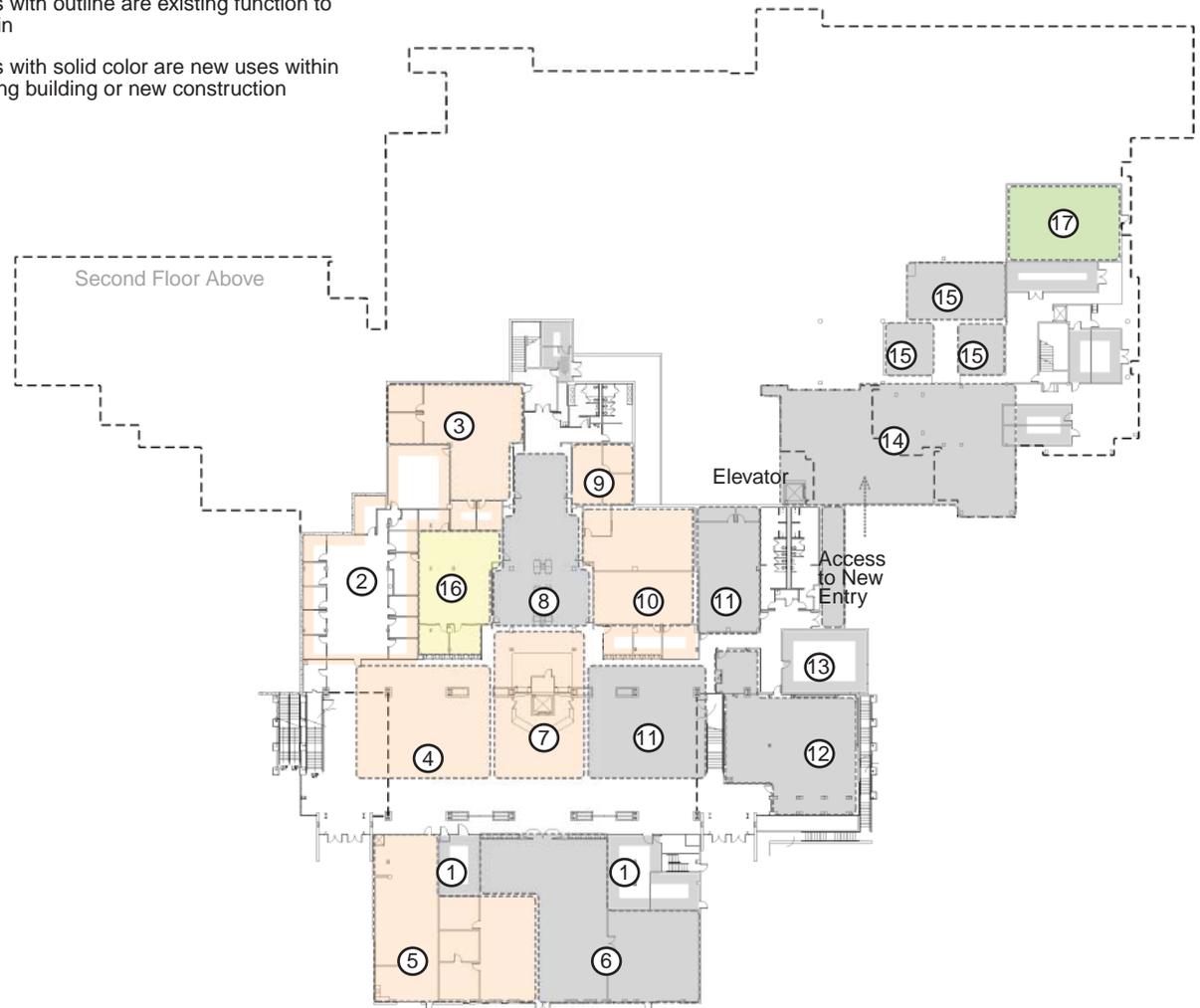
SPACE PROGRAM

Red Mountain Building

Legend

-  Student Services
-  Division of Science
-  Non-Academic Services/Admin.
-  Non-Academic Services/Admin.
-  1 Storage
-  2 Advising
-  3 Re-Entry Center
-  4 Outreach/Student Success
-  5 Counseling Offices
-  6 Financial Aid/DRC
-  7 Information
-  8 Admin/Records/Support
-  9 Veterans Services
-  10 Testing
-  11 Administration Records
-  12 Cashier/Accounting Services
-  13 Electrical
-  14 North Entry
-  15 Conference
-  16 Math Skills Center
-  17 Videography

-  Areas with outline are existing function to remain
-  Areas with solid color are new uses within existing building or new construction



 First Floor Plan
Scale: 1" = 80'

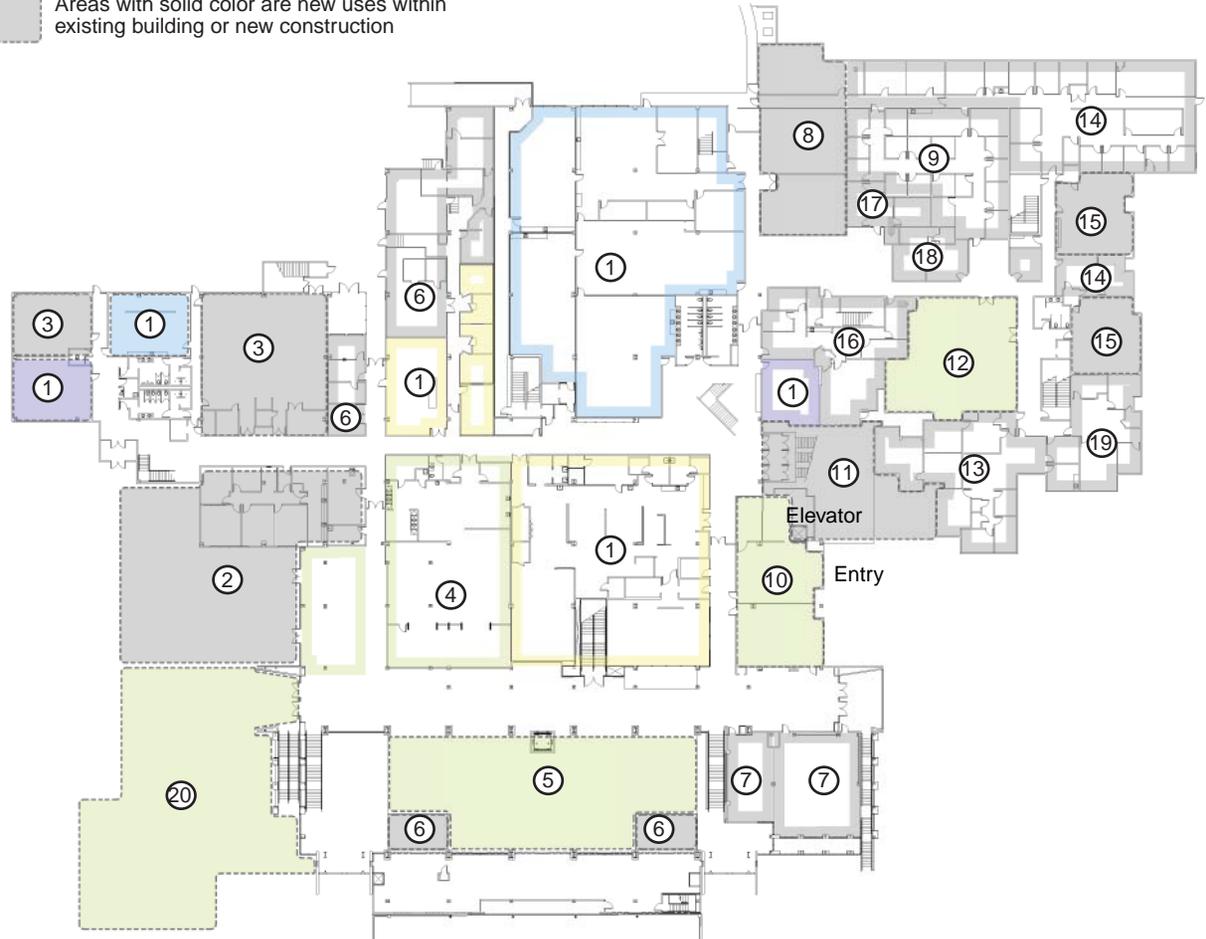
SPACE PROGRAM

Red Mountain Building

Legend

-  Division of Liberal Arts
-  Division of Science
-  General Classroom/Classroom Lab
-  Non-Academic Services/Admin.
-  Student Life
-  Classroom
-  Book Store
-  Police
-  Cafeteria
-  Events Center
-  Storage
-  Meeting Room
-  Human Resources
-  Faculty Offices
-  Art Gallery
-  North Entry
-  Roof Garden
-  Administration Offices
-  I.T. Offices
-  Conference Room
-  Professional Development
-  Faculty Senate
-  Equity & Inclusion
-  Institutional Advancement
-  Student Center

-  Areas with outline are existing function to remain
-  Areas with solid color are new uses within existing building or new construction



 **Second Floor Plan**
Scale: 1" = 80'

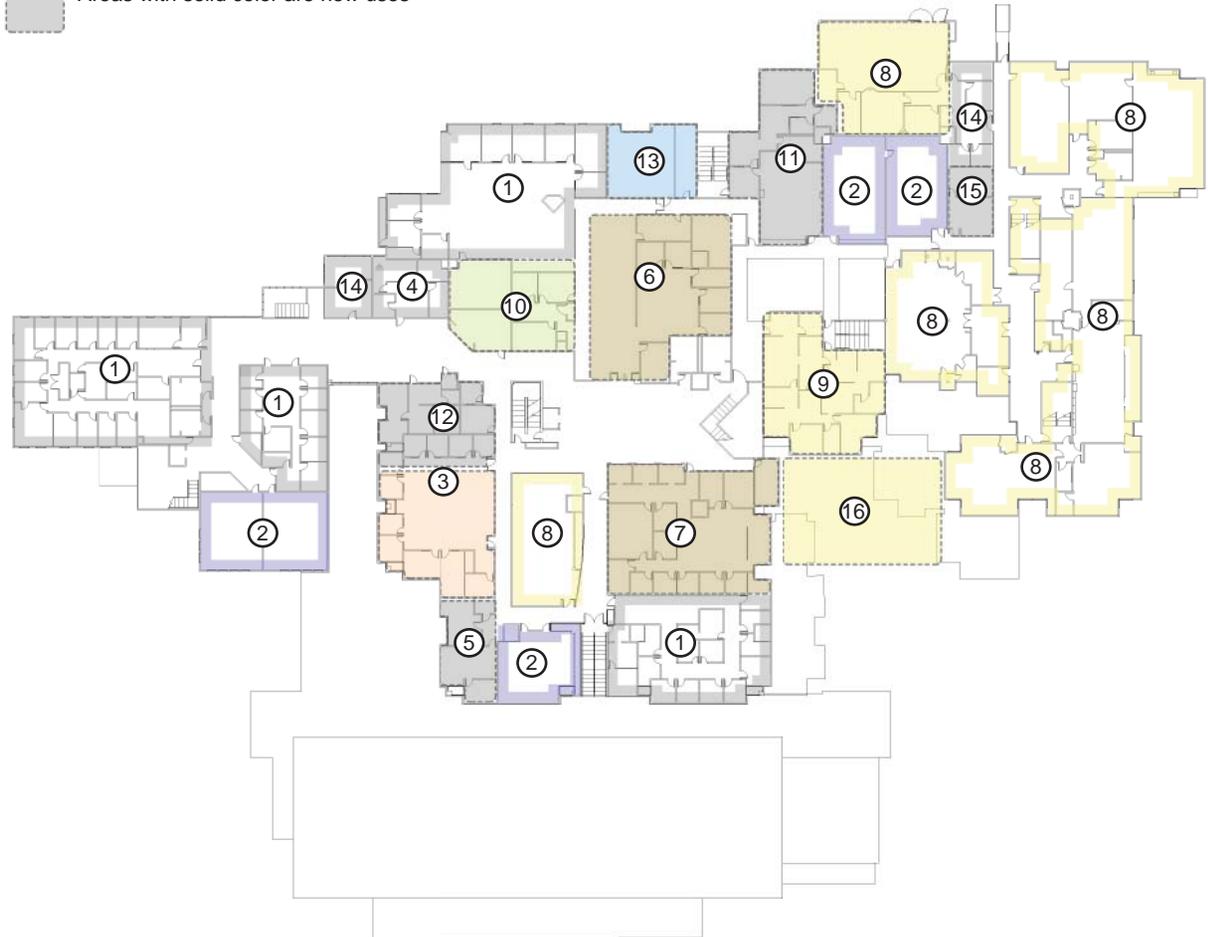
SPACE PROGRAM

Red Mountain Building

Legend

-  Division of Liberal Arts
-  Division of Science
-  General Classroom/Classroom Lab
-  Non-Academic Services/Admin.
-  Student Services
-  Division of Business
-  Student Life
-  Faculty Office
-  Classroom
-  Student Government
-  Budget & Finance
-  Administration Offices
-  Fitness Center
-  Fitness/Dance Studio
-  Science Lab + Support
-  Engineering Lab
-  Student Life
-  TMCC High School
-  Part Time Faculty
-  Music Room
-  IT Offices
-  Conference Room
-  North Entry

-  Areas with outline are existing function to remain
-  Areas with solid color are new uses



 Third Floor Plan
Scale: 1" = 80'

SPACE PROGRAM

Red Mountain Building

Legend

-  General Classroom/Classroom Lab
-  Division of Science
-  Non-Academic Services/Admin.
-  ① Offices
-  ② Dental Classroom Labs
-  ③ Radiology Lab
-  ④ Classrooms
-  ⑤ North Entry

 Areas with outline are existing function to remain



 **Fourth Floor Plan**
Scale: 1" = 80'

SPACE PROGRAM

Sierra Building Space Planning

The Sierra Building is home to the graphics design, photography, and architecture programs. It also houses a number of general classrooms, computer labs used by all students, as well as faculty and administrative offices.

Student Life

With the development of the new Student Center adjacent to the Sierra building, the emphasis on student life spaces within the Sierra building would be smaller, more intimate spaces distributed through the building.

The triangular shaped spaces along the corridor could be developed to provide areas more conducive to socializing and relaxing. These existing spaces can be improved by defining the spaces with carpeting and/or low walls and providing more cohesive furnishings.

Applied Industrial Technology

Relocate architecture and CAD drafting to the IGT Applied Technology Center.

WebCollege

Relocation of the Academic Support Center to Sierra and relocation of ASC staff to the same area.

Offices

As office moves occur over time, there should be an effort to co-locate like functions together whenever possible.

Conference rooms and collaboration space will be included in the faculty office areas.

Office space will be developed in line with TMCC guidelines.



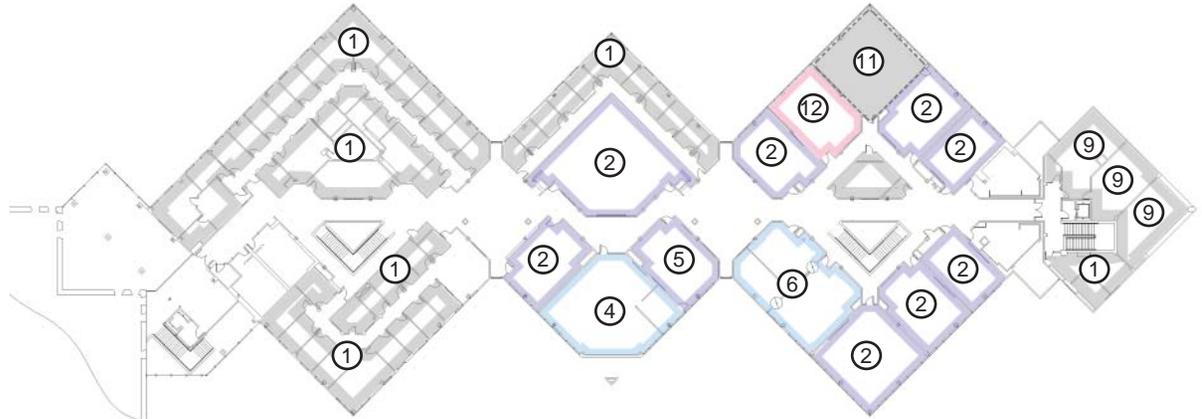
SPACE PROGRAM

Sierra Building

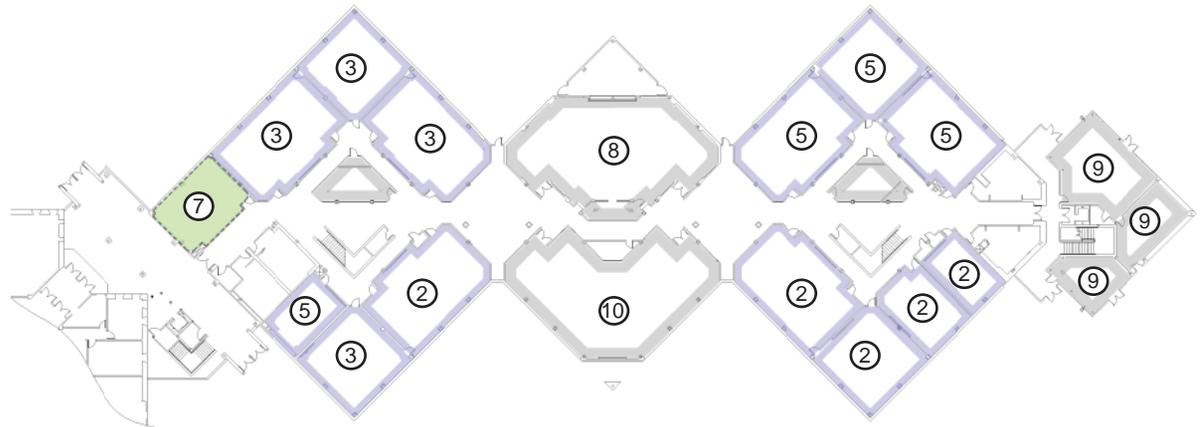
Legend

-  General Classroom/Classroom Lab
-  Division of WebCollege
-  Division of Liberal Arts
-  Non-Academic Services/Admin.
-  Applied Industrial Technology
-  1 Faculty Offices
-  2 Classrooms
-  3 Classroom Labs
-  4 Computer Labs
-  5 Computer Class
-  6 Photo Lab
-  7 I.T. Web/Help Center
-  8 Conference
-  9 Mechanical Rooms
-  10 General Access Computer Lab
-  11 Part Time Faculty
-  12 CAD Drafting Lab

-  Areas with outline are existing function to remain
-  Areas with solid color are new uses



▲ Second Floor Plan
Scale: 1" = 80'



▲ First Floor Plan
Scale: 1" = 80'

SPACE PROGRAM

Vista Building Space Planning

The Vista Building is home to the Math and English programs, including classrooms and departmental offices for such. It also houses a number of general classrooms, the math tutoring center and the writing center.

Writing Center

The Writing Center is relocated to the Learning Center.

Math Tutoring

The Math Tutoring center is relocated and enlarged.

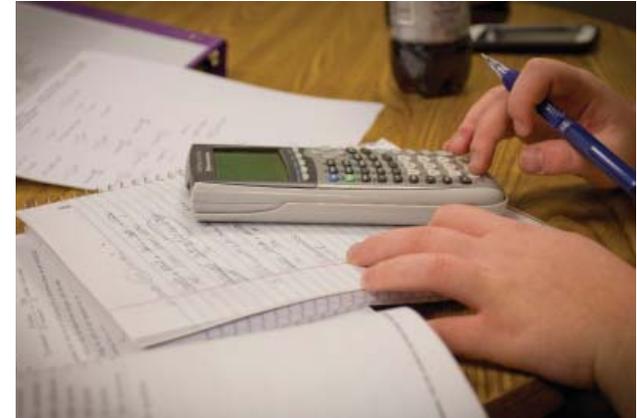
Additional space is given to Division of Business faculty offices.

Offices

As office moves occur over time, there should be an effort to co-locate like functions together whenever possible.

Conference rooms and collaboration space will be included in the faculty office areas.

Office space will be developed in line with TMCC guidelines.



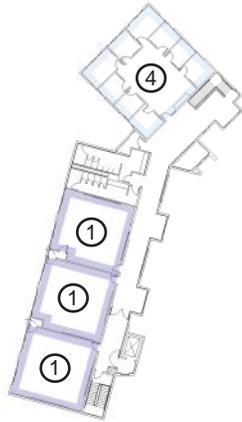
SPACE PROGRAM

Vista Building

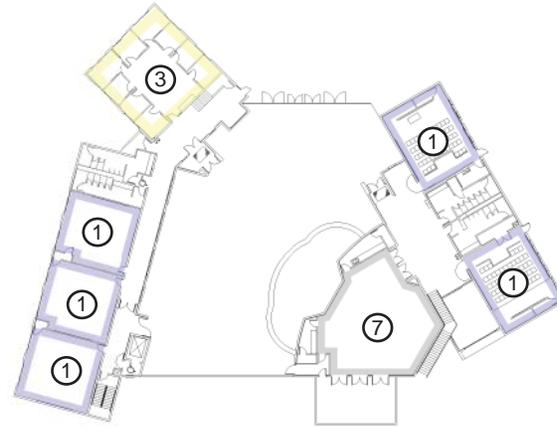
Legend

-  Division of Liberal Arts
-  Division of Science
-  General Classroom/Classroom Lab
-  Non-Academic Services/Admin.
-  Division of Business
-  Classroom
-  Mechanical Rooms
-  Math Offices
-  English Offices
-  Business Offices
-  Tutoring
-  Conference

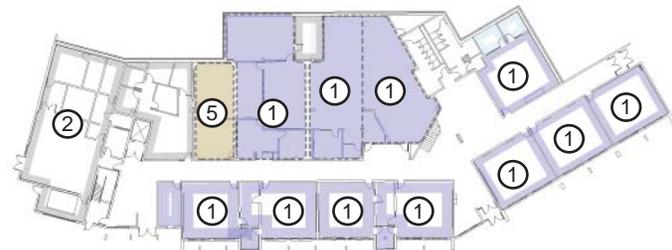
-  Areas with outline are existing function to remain
-  Areas with solid color are new uses



▲ **Third Floor Plan**
Scale: 1" = 80'



▲ **Second Floor Plan**
Scale: 1" = 80'



▲ **First Floor Plan**
Scale: 1" = 80'

SPACE PROGRAM

Elizabeth Sturm Library Space Planning

The mission of the Elizabeth Sturm Library and its branch locations is to support the mission and goals of Truckee Meadows Community College by providing essential information resources to faculty, students, and staff.

The library pro-actively interacts with faculty and administration to enhance the college's teaching mission and curriculum, introduces students to the tools needed to empower them to become independent researchers, critical thinkers, and disseminators of information, and provides resources and training to support distance education.

Services

- Book and Periodical Circulation
 - Computers - The branches provide computers with Internet access to library databases, book catalog and other resources.
 - Laptop Loan Program -The Laptop Loan Program (LLP) allows students to borrow a laptop computer for use inside the library.
 - Copying/Printing - Photocopiers and computer printers are available. There is a nominal charge for copies and printouts.
 - Reference and Research Assistance - During open hours, research assistance is available at the branches. If the branch is closed, contact the Sturm Library reference desk.
 - Instructional Services - The library offers specialized classroom instructional sessions, links to requested Internet resources, customized library assignments and tours.
- Archives - The TMCC Archives is a repository for a wide variety of information related to the college and its history. For access to the archives, please contact Cameron Carr at 775-674-7604.
 - The Human Resources department is located on the second floor of the Library.



IGT Applied Technology Center Space Planning

The IGT Applied Technology Center serves as the primary home for the Division of Applied Industrial Technologies (AIT) which offers a diverse selection of career training programs including:

- Applied Industrial Technologies
- Architecture & Construction Tech
- Manufacturing Technologies
- Transportation Technologies
- Energy Technologies

The facility was originally used as a warehouse/manufacturing facility. Many of the existing spaces, were designed for other uses, and as such, there are many inefficiencies in the floor plan. Should any moves, renovations or space reallocations be planned for the IGT Applied Technology Center, a review of the subject area should be performed to identify potential for maximizing space efficiency.

New instructional space at IGT Applied Technology Center will be developed as a part of the future EDA Grant remodel. The remodel is assumed to include the following components:

First Floor

- Production/Logistics Lab
- Sheet Metal Shop
- New Toilet Rooms
- Food Service
- Student Study Areas

Second Floor

- Expand Mezzanine
- New Classrooms

Outdoor secure storage metal building

Architecture and CAD Drafting Class Labs are currently located on the 2nd floor of the Sierra Building along with the associated faculty. These are the only components of AIT that are not at the IGT Applied Technology Center. It is proposed that Architecture and CAD Drafting relocate to the Center. Space for these programs may not be a part of the EDA Grant program.

It is anticipated the EDA Grant remodel project will include exterior work such as painting, window and door perimeter sealants, storefront and entrances, lighting, landscaping, parking, fencing and the entrance canopy.

Student Life

A small amount of spatial definition in the form of low walls, furniture or other elements should be considered to separate the student life space from the circulation portion of the Lobby. High walls are not desirable, but some separation would help define the space.

The space would benefit greatly from acoustical treatment to reduce the effect of noise in the space. Sound absorbing materials should be considered for the floor, ceiling and walls.

Offices

As office moves occur over time, there should be an effort to co-locate like functions together whenever possible.

Conference rooms and collaboration space will be included in the faculty office areas.

Office space will be developed in line with TMCC guidelines.

SPACE PROGRAM

IGT Applied Technology Center

Legend

- ① Storage Units



▲ Site Plan
Scale: 1" = 100'

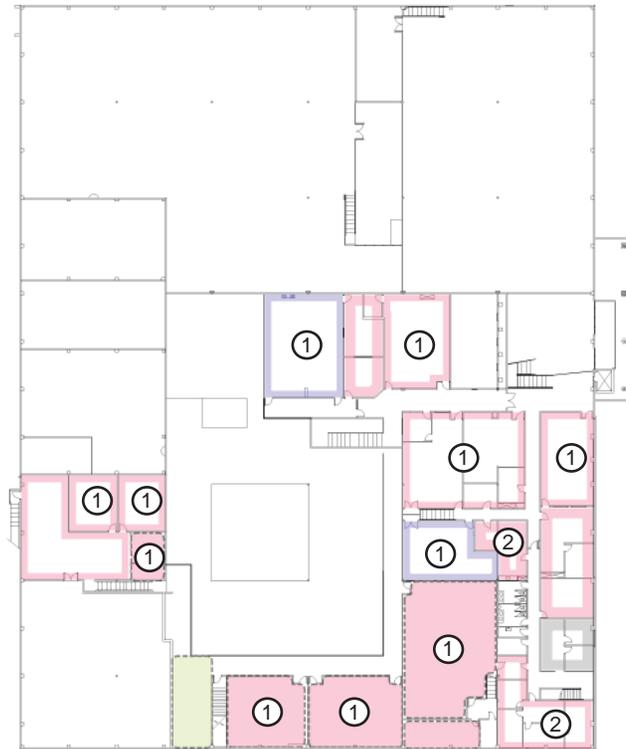
SPACE PROGRAM

IGT Applied Technology Center

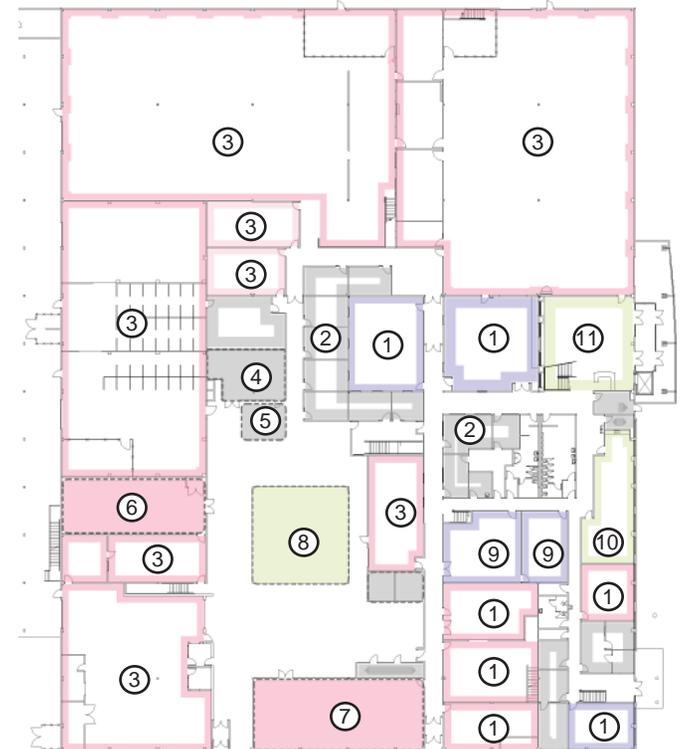
Legend

-  General Classroom/Classroom Lab
-  Non-Academic Services/Admin.
-  Student Life
-  Applied Industrial Technology
-  1 Classroom
-  2 Offices
-  3 Applied Industrial Tech Lab
-  4 Restrooms
-  5 Food Service
-  6 Sheet Metal Shop
-  7 Production/Logistics Lab
-  8 Study Area
-  9 Computer Lab
-  10 Open Computer Lab
-  11 Lobby

-  Areas with outline are existing function to remain
-  Areas with solid color are new uses



Second Floor Plan
Scale: 1" = 80'



First Floor Plan
Scale: 1" = 80'

SPACE PROGRAM

Meadowood Center Space Planning

The Meadowood Center is comprised of two buildings: Meadowood North and Meadowood South.

Meadowood South is used by the Division of Business, Workforce development, Adult Basic Education & ESL. The building also houses space for Veterans Upward Bound and NDOT.

Meadowood North is currently leased to private entities by TMCC.

The College owns two +/- 1-acre parcels immediately north of the Meadowood campus. Should program expansion become a reality, TMCC could consider constructing another building, on one of these sites.

Meadowood South was originally constructed as a professional office building. The College has in-filled old office suites as the need dictated. Some suites are not sized properly for their current use. Commonly, the offices are larger than the College standards.

The Master Plan calls for converting two existing rooms into 2 new classrooms, and dividing one large classroom into two.

Should any moves, renovations or space reallocations be planned for Meadowood South, a review of the subject area should be performed to identify potential for maximizing space efficiency.

Student Life

Should the programs offered at the Meadowood Center continue to expand; additional classroom and office space will be needed. This will make it difficult to provide student life spaces in addition the required academic and support spaces. If possible, a small lounge/study area should be considered. As opposed to the current location in the corridor, this would be a separate space from circulation, with a defined space for socializing.

Offices

As office moves occur over time, there should be an effort to co-locate like functions together whenever possible.

Conference rooms and collaboration space will be included in the faculty office areas.

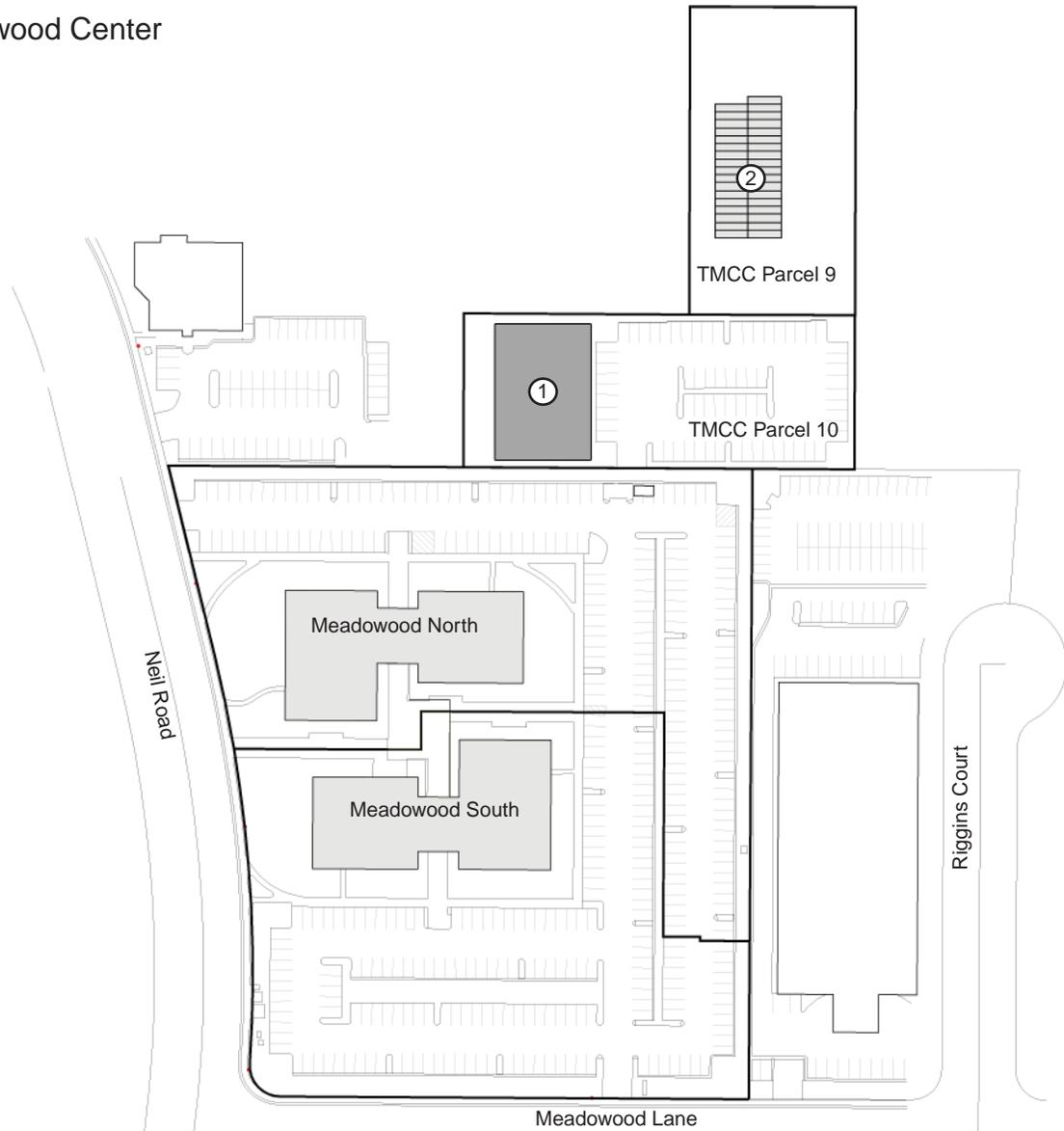
Office space will be developed in line with TMCC guidelines.

SPACE PROGRAM

Meadowood Center

Legend

-  Student Life
-  Existing Building
-  Possible Future Building Site
-  Existing Solar Array



 Site Plan
Scale: 1" = 150'

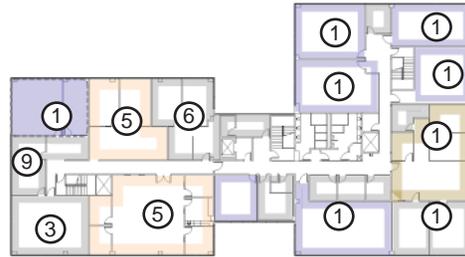
SPACE PROGRAM

Meadowood Center South

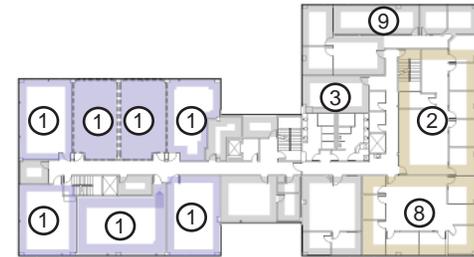
Legend

-  Student Life
-  Student Services
-  General Classroom/Classroom Lab
-  Non-Academic Services/Admin.
-  Division of Business
-  Classroom
-  Massage Classroom
-  Conference
-  Faculty Offices
-  Veterans Upward Bound
-  NDOT Offices
-  Study
-  Workforce Development Offices
-  Tutoring

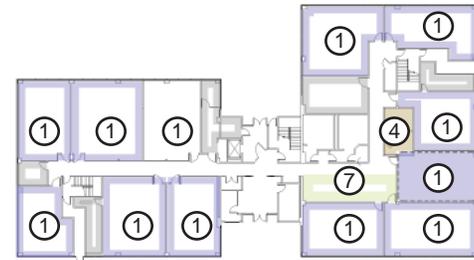
-  Areas with outline are existing function to remain
-  Areas with solid color are new uses



Third Floor Plan
Scale: 1" = 80'



Second Floor Plan
Scale: 1" = 80'



First Floor Plan
Scale: 1" = 80'

SPACE PROGRAM

Redfield Health Science Center

The Redfield Health Science Center is planned as the Health Science Center for the College. While every program may not be located at the Redfield Health Science Center in the short term, the concept would be to continue development of Redfield Health Science Center as an academic focus center. It is anticipated that as the Health Science Center is developed, other instructional space, faculty and administrative personnel will locate to the Redfield Health Science Center.

Currently Nursing and Veterinary Technician courses are offered at Redfield Health Science Center. The College also uses space in the neighboring UNR Redfield Campus for a Geothermal Lab.

An addition is planned for the Redfield Health Science Center, which will add additional classrooms, faculty offices, and another Nursing Lab

Student Life

The student life space in the Open Computer area should be enhanced to give the students a place to truly call their own. The space could be developed as a central activity core, a sort of “living room” for the students. A variety of furnishing types, and groupings, along with “warm” finishes could create a sense of “home” to the students. This would be a welcome addition to a campus which is somewhat remote from the rest of community, and in a demanding program in which the students are often looking to maximize their studying time.

This type of student life space could also support the planned Health Sciences building.

Offices

As office moves occur over time, there should be an effort to co-locate like functions together whenever possible.

Conference rooms and collaboration space will be included in the faculty office areas.

Office space will be developed in line with TMCC guidelines.

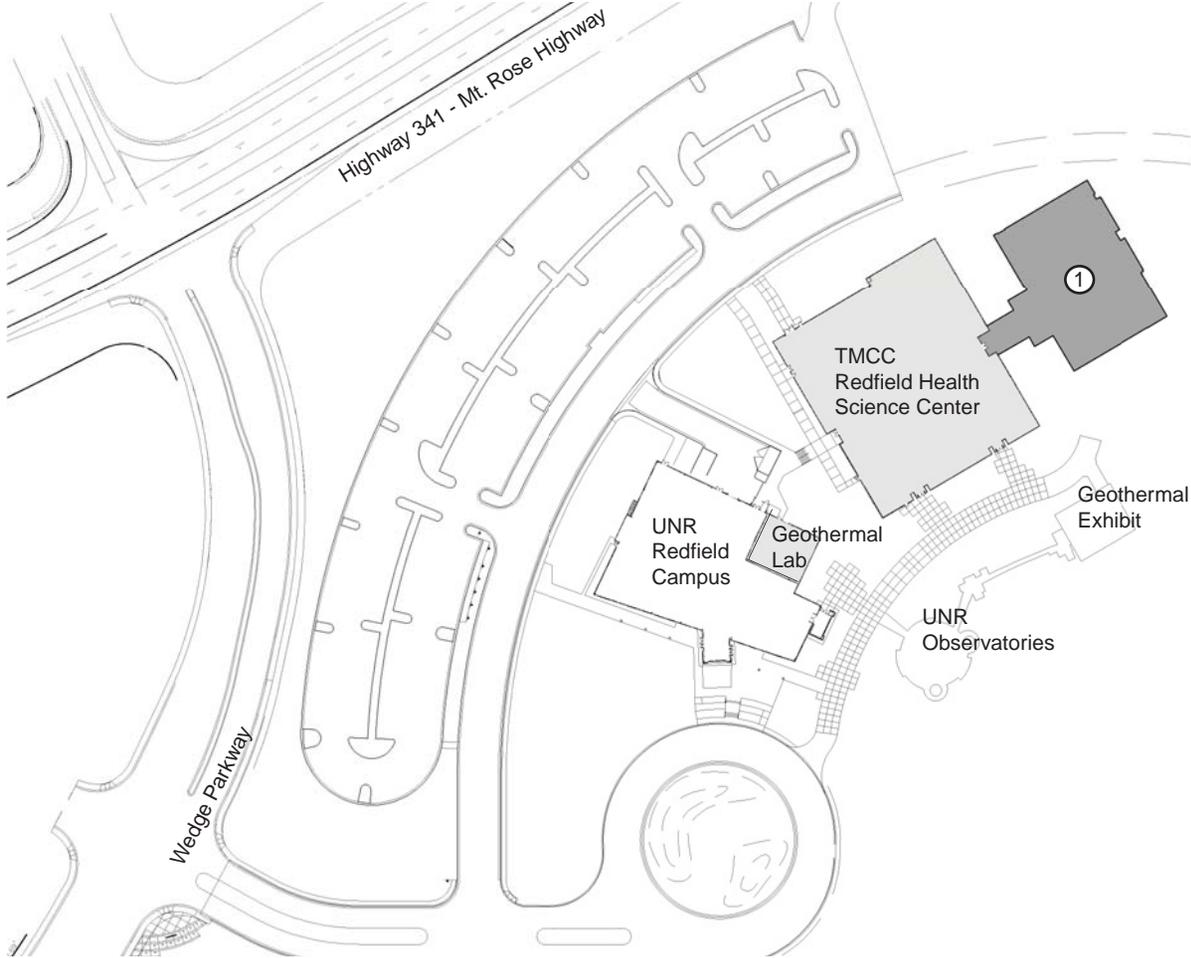


SPACE PROGRAM

Redfield Health Science Center

Legend

- ① Health Science Center



▲ Site Plan
Scale: 1" = 200'

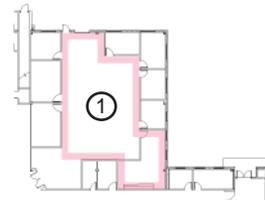
SPACE PROGRAM

Redfield Health Science Center

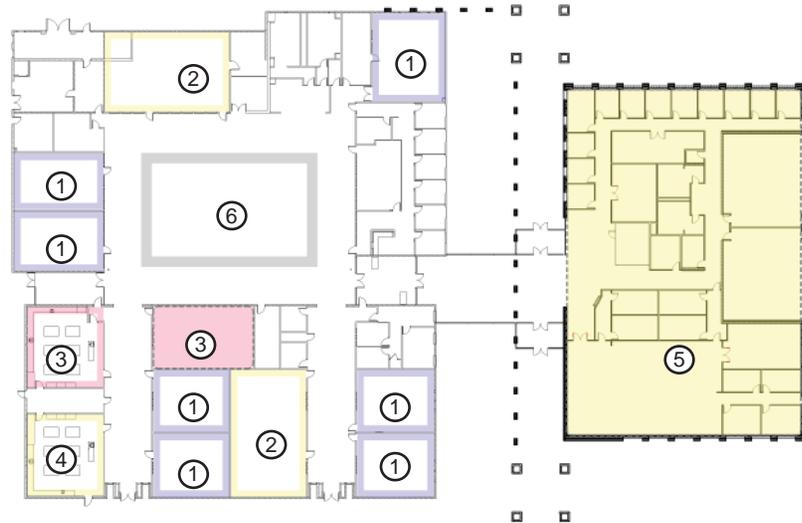
Legend

-  General Classroom/Classroom Lab
-  Division of Science
-  Divisions of Applied Industrial Tech
-  Classroom
-  Nursing Classroom
-  Vet Tech
-  Sceince Lab
-  Health Science Center Addition
-  Computer Lab

-  Areas with outline are existing function to remain
-  Areas with solid color are new uses within existing building or new construction



UNR Redfield Campus - Geothermal Lab
Scale: 1" = 80'

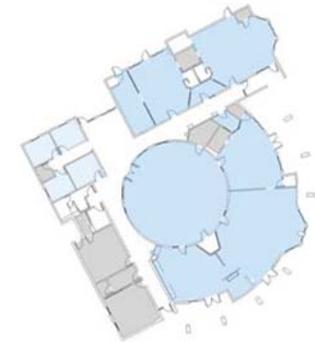


TMCC Redfield Health Science Center + Addition
Scale: 1" = 80'

SPACE PROGRAM

E.L. Cord Child Care Center

The E. L. Cord Child Care Center provides child care for TMCC students, faculty, employees and the public. The Center is also a lab school providing an opportunity to observe children in the child care setting, as a practicum for students enrolled in the early childhood education program. There are currently no improvements planned for this facility.

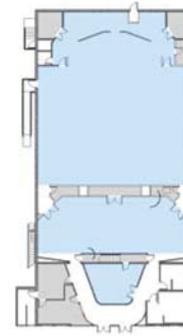


▲ Floor Plan
Child Care Center

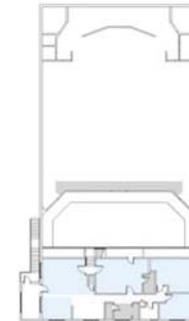
Nell J. Redfield Performing Arts Center

The Nell J. Redfield Performing Arts Center (RPAC) is the performing arts facility for the TMCC campus. The RPAC houses the college's performing arts classes, including dance, music and theater instruction. In addition, the performing arts classes present a variety of performances at the center during the year.

RPAC is located in leased tenant space in a local shopping center in the Reno area. There are currently no improvements planned for this facility; it would be replaced by the proposed Fine Arts Center on the Dandini Campus.



▲ First Floor Plan
Redfield Performing Arts Center



▲ Second Floor Plan
Redfield Performing Arts Center



Capital Projects

CAPITAL PROJECTS

Fine Arts Center

With the emergence of broadly accessible media creation, and its inherent nature of merging the arts, it becomes more necessary than ever to provide students with the resources to experiment with the tangible and live arts foundations. The dramatist, musician and their audiences are aided and supported by the facilities in which they work. The performers are always accompanied by allied design and technical functions that are fields unto their own. The ultimate goal is to focus on the architectural design, technical operation and what it takes for audiences to have rich and captivating experiences, what it takes to inspire and support artists and theatre makers, what it takes to maintain financial viability for the project and the working facility, and what it takes to design and build a successful arts education and performance venue.

Main Theater

A performance theatre used for both educational and College functions as well as provide a regional resource as a performing arts center hosting local and visiting groups. Because of the wide variety of types of performances (drama, amplified and un-amplified music, Broadway, dance, lecture presentations, etc.) the technical systems will need to provide for the selective adaptation to the physical environment to suit any particular use. In a multi-purpose theatre such as is planned at Truckee Meadows Community College the most common variations include those to the acoustic environment and the stage/audience configuration as defined most commonly at the area in front of the stage, as will be enabled with the use of an electro-mechanical orchestra pit lift.

Theater Rehearsal/Classroom

In order to provide a space to teach and rehearse theatre off the main stage a dedicated rehearsal/drama classroom will be provided with suitable accommodations for small dramatic performances.

Music Education Rooms

The comprehensive music education program of spaces will include a large ensemble/choir rehearsal room with sufficient size and volume for large groups, small and larger practice rooms, a keyboard/midi classroom, a complete recording suite with edit rooms. The recording control room would be connected to all performance and rehearsal spaces so recordings can be made from any room. Since all music spaces are acoustical critical environments, care will be taken so the interior acoustic quality is appropriate to each use and sound isolation is provided in and out of the spaces.

Dance Studio

A large dance studio will be provided with an appropriate size to teach and rehearse for performances on stage, a sprung dance floor, mirrors and ballet barres, and will be proximate to changing rooms.







CAPITAL PROJECTS

Learning Center

The Library can become a more active and dynamic space. It can be a place for learning and student engagement. It can provide new types of educational and collaborative learning experiences. The move from a more “traditional” Library to a contemporary “Learning Center” can introduce computer technology and interactive group spaces into the function and program. These are woven into the current book stacks and quiet study areas to create a more active place for learning and collaboration.

The Learning Center can combine with the new Student Center and student life spaces to be the campus focus for students and faculty.

Some WebCollege functions can be located in the Learning Center at a Technology Hub/Help Center.

Human Resources

Human Resources is an administration function that has no relation with the Library or the new Learning Center. Human Resources should be relocated into an administrative location, likely in Red Mountain.

Tutoring Center

The Tutoring Center is relocated to the Learning Center.

Offices

As office moves occur over time, there should be an effort to co-locate like functions together whenever possible.

Conference rooms and collaboration space will be included in the faculty office areas.

Office space will be developed in line with TMCC guidelines.



CAPITAL PROJECTS

Red Mountain North Entrance

The new North Entrance to the Red Mountain Building organizes and unifies a variety of needs and functions at the Red Mountain Building. Replacing the original entry stairs into the building, the Entrance creates a vertical circulation element connecting all four floors of the Red Mountain Building. Both a stair and an elevator extend from the ground to the fourth floor. The ground floor has a connection to the first floor Student Services center, and a new conference center located below the administration offices. Floors 3-4 combine lobby and student life spaces, and offer views of the north side of campus.



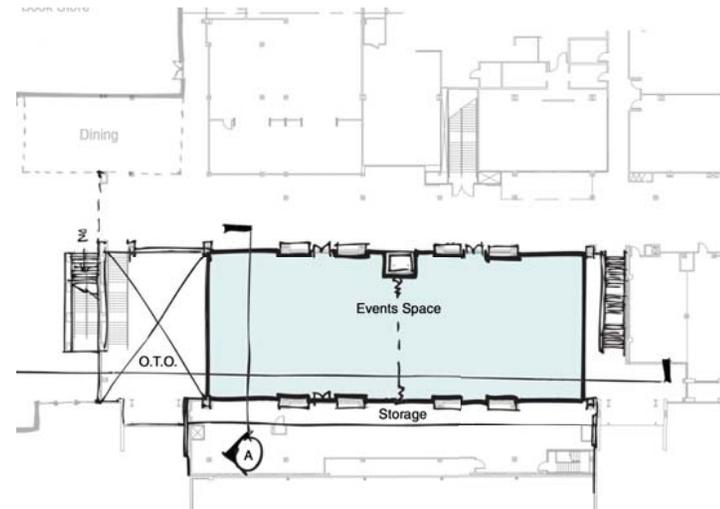
CAPITAL PROJECTS

Red Mountain Events Center

The need for the Events Center stems from a desire to create a dedicated events space on campus. Currently the Student Center is also used as the Events Center when needed, which displaces the students and taxes the resources of campus Facilities.

The Events Center is created by infilling the second floor in the existing 3-story Student Center. The proximity to the Café, the Golden Frog restaurant, and meeting rooms 255 & 256 creates a synergy that makes the second floor of Red Mountain an active, energetic space.

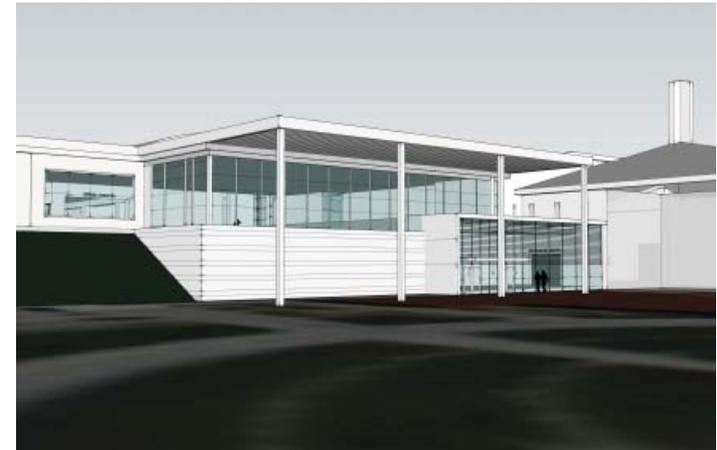
The 6,240 square foot space mimics the area of the Student Center suitable for events functions. The new Events Center features a flexible room which can be divided in half with an acoustic partition. The room will be equipped with audio, data and presentation equipment.



CAPITAL PROJECTS

Red Mountain Student Center

The new Student Center replaces the Student Center displaced by the relocation and reorganization of Student Services to the ground floor of the Red Mountain Building. The new Student Center provides dedicated student life space for the campus. Currently the students are frequently displaced by events also sharing the Student Center space. The new Student Center will connect the Red Mountain Building with the Learning Center (Library). The Center will house gathering spaces, study spaces, and group meeting spaces for students and faculty, as well as the relocated Bookstore.



CAPITAL PROJECTS

TMCC Facilities Master Plan Update

Future Projects

The Capital Projects generated as a result of the Master Planning Process are generally sequential in nature. While the Fine Arts Center and the Learning Center remodel may occur independently of the other projects on the list, the remaining projects should occur in the sequence listed in order to avoid relocating departments or areas more than once.

This list comprises the major Projects. There will be several small projects that may be required as part of the sequence of each of these moves. Each item is a project within itself. A proper space programming phase should be made as part of each Project in order to identify the users' function and space needs when designing the specific project.

PROJECTS

Fine Arts Center

Learning Center Remodel

Second Floor Events Center

Relocate Admissions & Records to 1st Floor

Relocate Fitness Dance Studio to 3rd Floor

Convert 315L to Music Room*

Relocate Police Department

North Entrance Remodel

Relocate Art Gallery

Relocate Student Services to 1st Floor

Student Center

Relocate Bookstore

Relocate Remaining Student Services to 1st Floor

*Not necessary if Fine Arts Center is constructed



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June 23, 2014



Truckee Meadows Community College
Facilities Master Plan 2014
Appendix

Table of Contents

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UTILIZATION

Introduction

The utilization of space is based on a factual compilation of information developed from a variety of inputs. This data has included the Enrollment data from the Fall of 2012 Quarter (Provided by TMCC Administrative Staff), TMCC Space Inventory and space coding (Provided by TMCC Facilities), Existing Floor Plans (Provided by TMCC facilities) and standards from NSHE (Nevada System of Higher Education). The College campuses are also used for non-academic functions. This information came from the College and used in the overall space use discussions. The Fall 2011 Inventory Report for the NSHE report on College Assignable Spaces was also reviewed and discussed.

Overall demographic support, student current and future populations, was provided through the 2012 TMCC FACTBook. In addition a request to the Washoe County School District for current and future demographic information was made. The data was used in determining future high school capture estimates. Data from the Nevada State Demographer's Office was also reviewed for growth in Washoe County and in general the State of Nevada. The following Graph is a summary of the various findings.

Generally, current and future (the next 10 years) growth in student population will maintain a flat, negligible, increase. The strongest indicator of non-growth is in the Washoe County School projection of high school students. Further investigation into capture rates was also pursued.

	Washoe County School District	% Change	Washoe County	% Change	Student Head Count	% Change	FTE
Historic							
2006			406223		12193		6210
2007			418061	3%	12774	5%	6545
2008			425555	2%	13137	3%	6840
2009			436776	3%	13582	3%	7296
2010			421407	-4%	13139	-3%	7152
2011			423701	1%	11616	-12%	6267
2012			423654	0%	12142	5%	
Projected							
2013	4193		431337	2%	11513*		6070
2014	4213	0%	438685	2%	11628	1%	6131
2015	4124	-2%	445948	2%	11861	2%	6253
2016	4229	3%	453126	2%	11979	1%	6316
2017	4072	-4%	460809	2%	12219	2%	6442
2018	4170	2%	468622	2%	12463	2%	6571
2019	4153	0%	476568	2%	12713	2%	6702
2020	4206	1%	484649	2%	12967	2%	6836

* Provided by TMCC on 1/28/13

UTILIZATION

Demographics and Student Enrollment

The following graph, provided by TMCC, shows the history of high school capture rates. An increase of the capture rate to a 2008-09 level could offset any minor decrease in student population over the next ten years, but will not affect, with any significance, the overall flat student growth projection for the next 10 years.

(1) Students enrolled in state-supported classes, also includes students who enrolled in Summer as 1st-time college students.

(2) Total WCSD = honors, advanced, standard, and adult but does not include adjusted diplomas or certificates of attendance. Capture rate numbers come from remedial report which includes the same degrees as the WCSD numbers with one exception: adult diplomas are not included. There are usually so few of these diplomas awarded in a year (20 or fewer) that capture rates are not affected significantly by this exclusion.

(3) This report does not include NV Connections Academy or Alpine Academy. Both schools are state sponsored charter schools headquartered in Reno, but not tracked by WCSD. Also not included is WOLF (WCSD Online Learning for the Future) since it became part of Washoe Innovations in 2011. NOTE: Washoe Innovations was formerly known as Washoe High School. AACT (formerly RTI) is no longer being tracked by WCSD because students are not attending FT. When attending PT, AACT students are counted by WCSD under their "home" high school, and this report does the same.

Washoe County High Schools (3)	2011-12 High School Grads	Fall 2012 1st-time College Students		2010-11 High School Grads	Fall 2011 1st-time College Students		2009-10 High School Grads	Fall 2010 1st-time College Students		2008-09 High School Grads	Fall 2009 1st-time College Students		2007-08 High School Grads	Fall 2008 1st-time College Students	
		# Attending TMCC(1)	TMCC Capture Rate		# Attending TMCC(1)	TMCC Capture Rate		# Attending TMCC(1)	TMCC Capture Rate		# Attending TMCC(1)	TMCC Capture Rate		# Attending TMCC(1)	TMCC Capture Rate
Damonte Ranch	219	58	26%	237	38	16%	231	62	27%	190	48	25%	213	58	27%
Galena	275	59	21%	264	82	31%	290	68	23%	299	64	21%	288	59	20%
Hug	166	44	27%	194	39	20%	189	41	22%	139	45	32%	168	44	26%
Incline	70	3	4%	75	5	7%	84	7	8%	75	17	23%	75	10	13%
McQueen	352	91	26%	407	71	17%	367	105	29%	379	99	26%	367	89	24%
North Valleys	334	96	29%	379	112	30%	345	111	32%	300	92	31%	287	82	29%
Reed	387	104	27%	438	78	18%	438	120	27%	383	120	31%	462	102	22%
Reno	321	56	17%	353	48	14%	366	67	18%	341	58	17%	364	70	19%
Spanish Springs	388	117	30%	440	117	27%	406	106	26%	355	81	23%	367	81	22%
Sparks	172	46	27%	209	50	24%	162	61	38%	140	63	45%	154	25	16%
TMHS	88	36	41%	95	38	40%	96	54	56%	91	40	44%	84	51	61%
Washoe Innovations	71	20	28%	91	34	37%	97	54	56%	75	42	56%	92	40	43%
Wooster	268	64	24%	220	52	24%	236	48	20%	186	47	25%	176	49	28%
TOTAL(2)	3111	794	25.5%	3411	765	22.4%	3311	904	27.3%	2958	816	27.6%	3103	760	24.5%

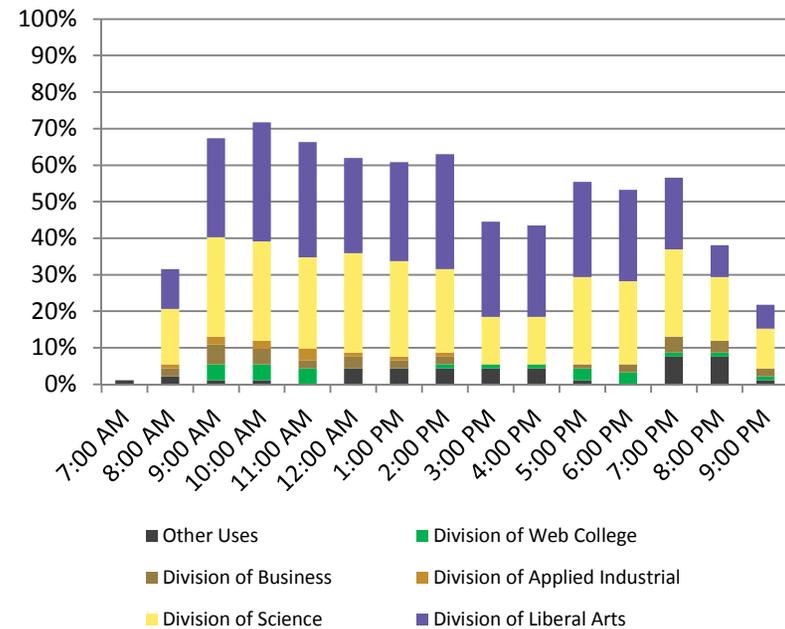
UTILIZATION

Initial Analysis

The consultant completed an initial analysis of the Fall 2012 data and created preliminary utilization graphics for discussion. Analysis of the data included looking at how the College currently uses space on a basis of day's per-week, and hours per day. The study included academic, non-academic use and space used by outside agencies (i.e. the TMCC High School) or inside activity and extra-curricular activity (i.e. student government and other groups) and community functions. The initial studies indicated a dramatic underutilization of space on each campus.

Upon conclusion of the initial analysis, discussion meetings were established with the academic Divisions to determine how the Divisions use the facilities. Discussions meetings were also established with non-academic functions, including Administration, Student Services, Library, Campus Security and Student Life. These meetings confirmed the "perception" of each Division and non-Academic user; "that there is not enough space on any of the campuses". The floor plans were used to confirm and document current functional uses of the spaces. Organizational "cards" were used to generate overall functions and relationships between functions. The data collected at these discussion meetings was used to further analyze space usage on each campus.

**Main Campus - Average Room Use by Division
MONDAY**



UTILIZATION

Scheduling

The College uses a scheduling system, CollegeNET "Schedule25". In addition, the College has developed a Tier system for determining priorities for Academic Division use of space. Tier ONE space is considered exclusive space for a Division; Tier TWO is considered first priority space for a Division, but if not used it can be scheduled for other Divisions; Tier THREE spaces are open to any Division use. The following graph shows the distribution of the current total number of classrooms and laboratory spaces on the campuses that are in the three tier system:

	Tier 1	Tier 2	Tier 3	Grand Total
DNDI	22	49	15	86
EDSN	6	13	3	22
HTCR	3	6	2	11
MDWS	1	19	2	22
RCA	1			1
RPAC	2			2
Grand Total	35	87	22	144

College space coding has been entered into a management system, "PeopleSoft". Currently the College Administration develops the final space utilization for a semester and the College Catalog by "hands on" optimizing the data from enrollment and balancing it with the space coding from PeopleSoft and working it through the Tier designations. Consultant observations of this process developed discussions and lead to advancing the current scheduling system by including a built in "optimizer" and the consideration of dropping the Tier system.

UTILIZATION

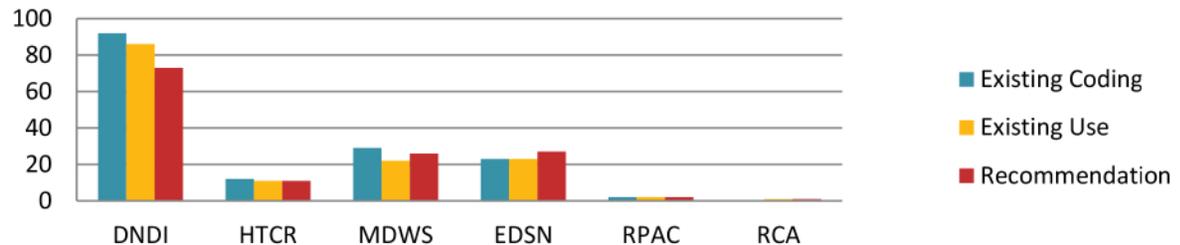
Room Coding Realignment with Current Use

Utilization is driven by how the space is used, it is governed by the capacity of a facility and its' spaces. Utilization is obtained by dividing the amount of use by overall capacity. This report has calculated utilization in two ways. First, the number of rooms being used and second, the number of total seats or stations being used.

The Consultants developed a floor plan for each building on each campus with color designations for each academic Division. The plans were used to complete an on-site analysis of each space on each campus and to confirm current uses of space. This information became very critical in discussing current coding of space, capacity calculations, and non-academic use of space. Observations by the consultant concerning space coding alignments with actual space use were subject for many discussions. The following graphs show the areas on the various campuses with outdated alignments of use. This comparable charting of existing coding with recommended coding affects all aspects of utilization. Adopting the recommended recoding will result in an accurate accounting of space capacity and utilization.

Campus		# of Seats		
		Existing Coding	Existing Use	Recommendation
Dandini Campus (DNDI)				
	Classrooms	49	51	40
	Class Labs	43	86	33
Health Science Center (HTCR)				
	Classrooms	8	8	8
	Class Labs	4	11	3
Meadowood Center (MDWS)				
	Classrooms	15	15	19
	Class Labs	14	22	7
IGT Applied Technology Center (EDSN)				
	Classrooms	6	16	19
	Class Labs	17	23	8
Nell J. Redfield Foundation Performing Arts Center (RPAC)				
	Classrooms			
	Class Labs	2	2	2
Redfield Campus Building A (RCA)				
	Classrooms			
	Class Labs		1	1
Total		158	235	140

Total Instructional Rooms by Campus



UTILIZATION

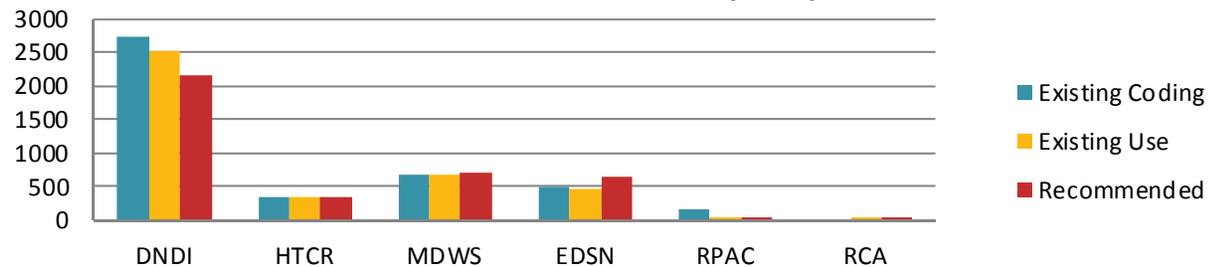
Seat/Station Count Realignment with Current Use

Establishing space capacity can be defined by Assignable Square Feet (ASF, does not include wall thicknesses or adjacent circulation or building utility space) divided by a code related square foot per function or by counting the number of seats in a given room. For the first calculation, generally, classrooms are configured at 20 square feet per occupant and laboratories are configured at 40 square feet per occupant. While this method can be affective for broader planning, it does not accurately account for the specialization and variety of use. The second definition of capacity, and the one used by the consultant in this report, is defined by actual seat or station (i.e. working area in a lab) count with in a space.

The consultants visually confirmed the current number of seats or stations in every instructional room at every site. This comparable charting of existing seating counts with recommended seating counts affects all aspects of utilization. Adopting the recommended capacities will result in an accurate accounting of space capacity and utilization.

Campus	# of Seats		
	Existing Coding	Existing Use	Recommendation
Dandini Campus (DNDI)			
Classrooms	1695	1772	1213
Class Labs	2722	741	869
Health Science Center (HTCR)			
Classrooms	264	264	264
Class Labs	344	82	82
Meadowood Center (MDWS)			
Classrooms	522	531	572
Class Labs	679	139	139
IGT Applied Technology Center (EDSN)			
Classrooms	137	333	182
Class Labs	490	135	229
Nell J. Redfield Foundation Performing Arts Center (RPAC)			
Classrooms	0	0	0
Class Labs	16	16	16
Redfield Campus Building A (RCA)			
Classrooms	0	0	0
Class Labs	0	24	24
Total	6869	4037	3590

Total Instructional Seats by Campus



UTILIZATION

Findings and Assumptions

The information contained in the following charts and graphs are based on the following assumptions and definitions:

- Classrooms are defined under the coding of 110 in the “Post Secondary Education Facilities Inventory and Classification Manual”
- Laboratories (Labs) are defined under the coding of 210 in the “Post Secondary Education Facilities Inventory and Classification Manual”
- One “contact” hour is equivalent to 50 scheduled minutes
- Other instructional uses that are recognized by NSHE as scheduled time are included in charts/grafs that show room use but not in charts/grafs that describe seat/station use
- Other instructional use is calculated by taking the average number of minutes a room is used over the 16 week semester and dividing this average by 50 minutes to create an average number of hours used by each room
- Occupiable times are based on a 98 hour week according to NSHE standards

The final consultant observations are included in the following pages, supported by graphic images:

UTILIZATION

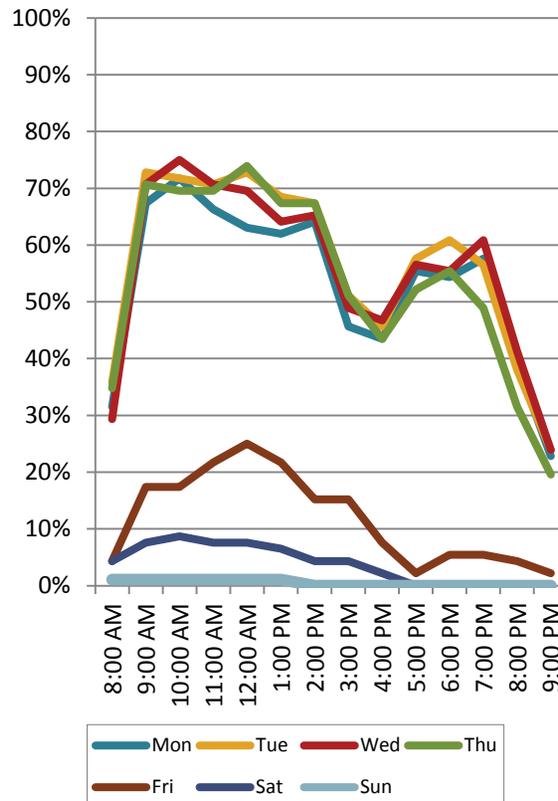
Room Utilization by Campus

Dandini Campus

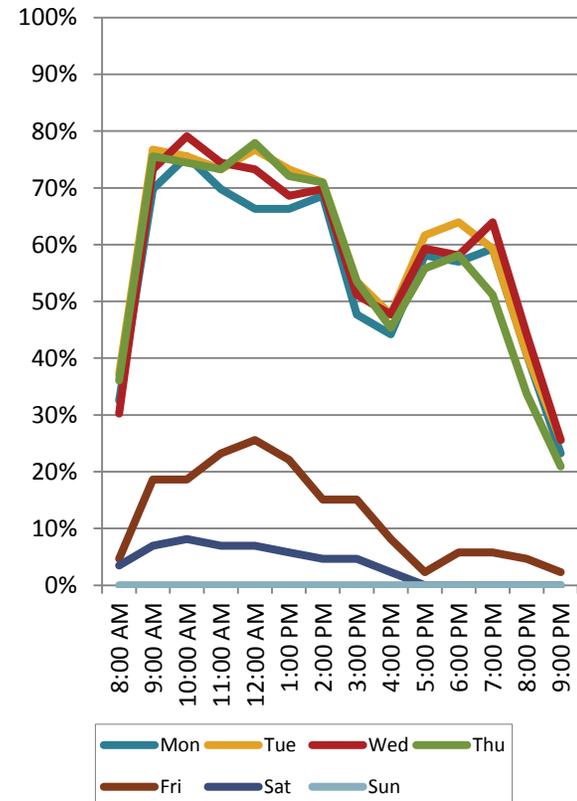
The following two graphs illustrate the misalignment of space coding with the current use and the recommended realignment of coding with actual space usage. Realignment of coding to actual use on the Dandini campus illustrates and confirms the perception that there is very little space available in the time period of

9:00 Am to 2:00 PM on Monday, Tuesday and Wednesday , where the use of space is between 70% and 80%. However, the data also confirms a low utilization after 2:00 Pm and notably on Friday's all day.

Existing Room Codes



Recommended Room Codes



UTILIZATION

Room Utilization by Campus

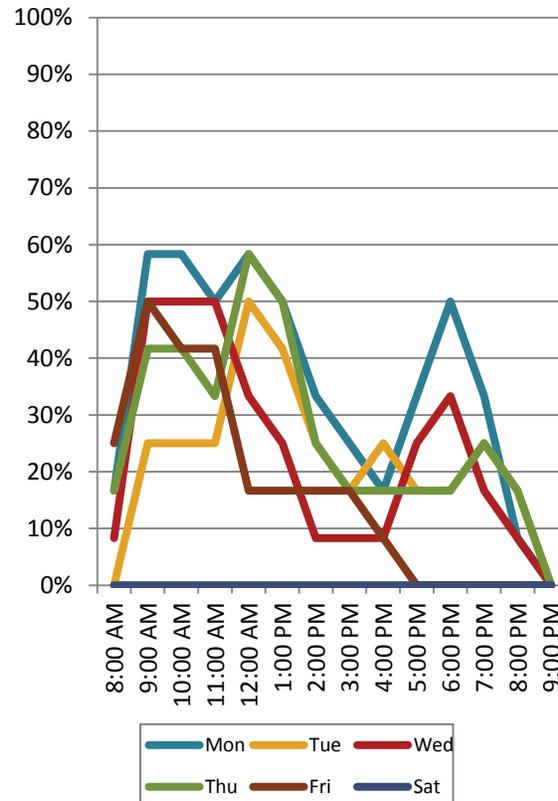
Redfield High Tech Center

The following two graphs illustrate the misalignment of space coding with the current use and the recommended realignment of coding with actual space usage. Although the space at the High Tech Center campus actually shows a better utilization through the realignment of space, overall space utilization is only

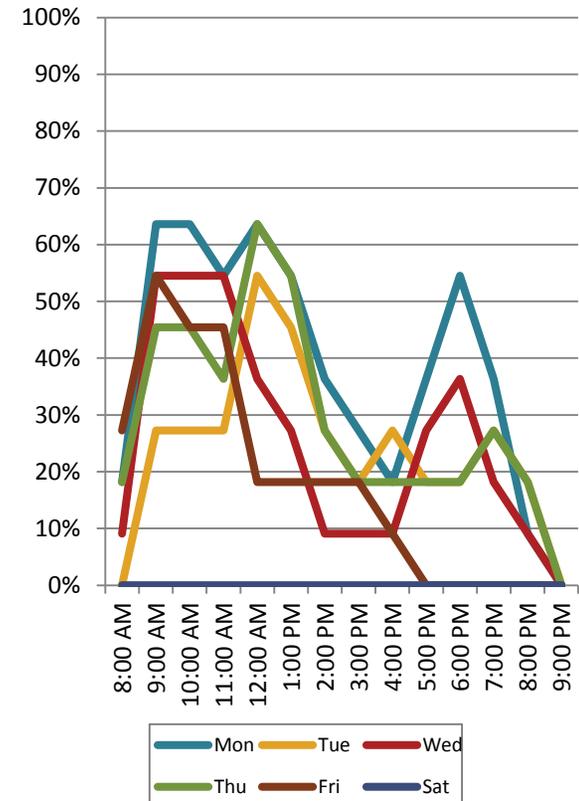
at a peak of 63%, 9:00 Am to 1:00 PM on a few days. However, the functions in this facility serve a very restrictive educational program, nursing, where there are many dedicated labs and lab support areas. In addition, students participate in "hands on" training at local hospitals and clinics as part of the class assignments. This results in the significant swing of space use between Monday and Tuesday, or

Wednesday and Thursday. The specific functional characteristics of the classroom and lab space in this facility restrict usage by other academic divisions. Future growth of this program is dependent on specialized classroom and lab space.

Existing Room Codes



Recommended Room Codes



UTILIZATION

Room Utilization by Campus

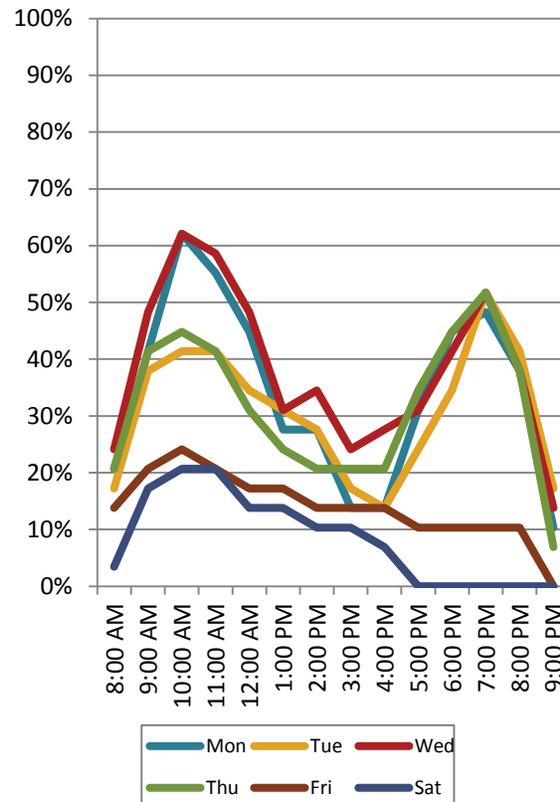
Meadowood Center

The following two graphs illustrate the misalignment of space coding with the current use and the recommended realignment of coding with actual space usage. The Meadowood campus is impacted Monday and Wednesday between 9:00 Am and 12:00 PM, when the campus is nearly 85% utilized. In addition

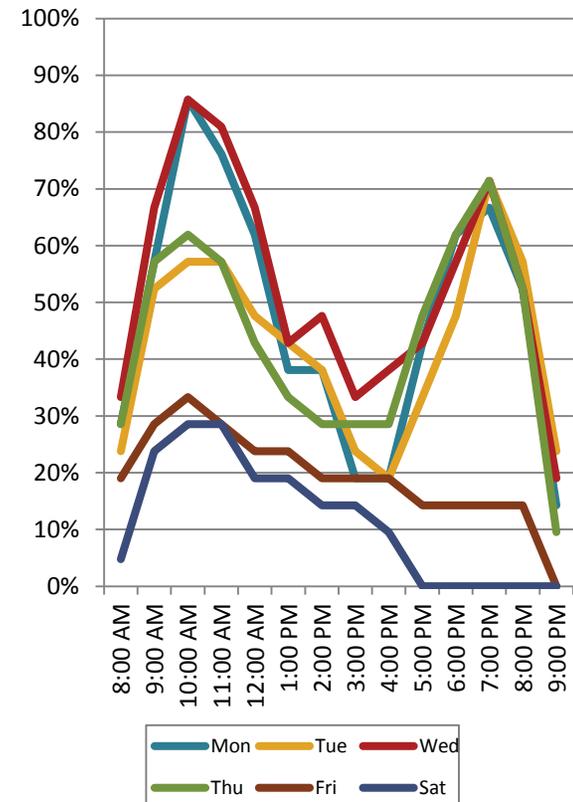
there is an impact during night classes every day of the week between 6:00 PM and 9:00 PM, when the campus is 71% utilized. Meadowood houses various functional spaces that are “community oriented” and not considered academic. Space availability, although available, during impact time periods, typically are not spaces that accommodate the various community functions. Reconfiguration of

current space, and adjustment of program time-lines, both College and Community functions may create a better utilization of space on this campus.

Existing Room Codes



Recommended Room Codes



UTILIZATION

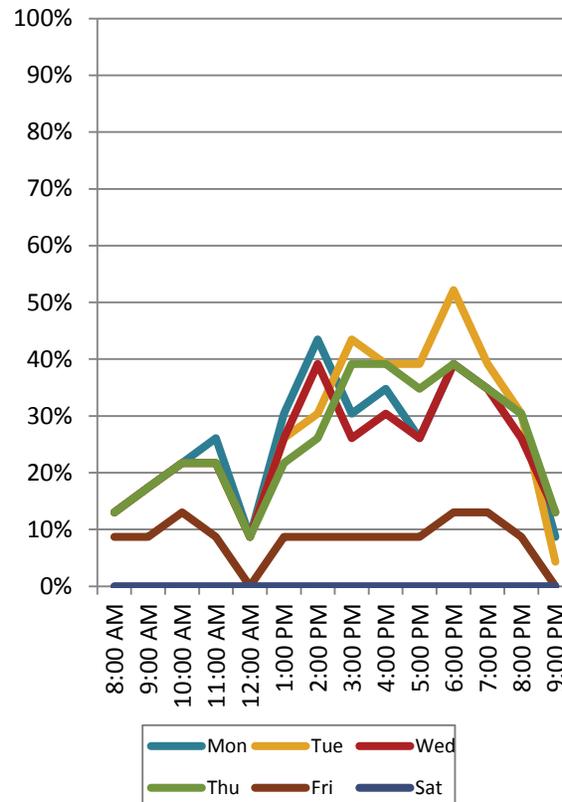
Room Utilization by Campus

IGT Applied Tech Center

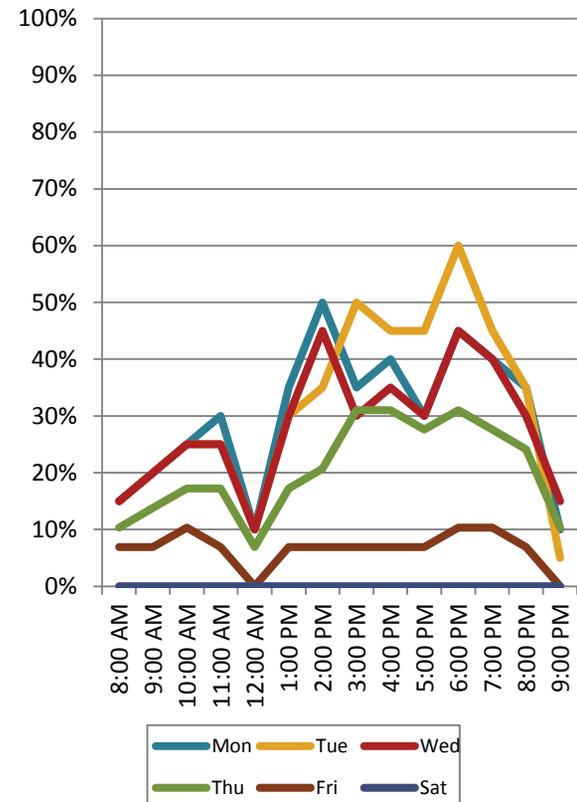
The following two graphs illustrate the misalignment of space coding with the current use and the recommended realignment of coding with actual space usage. Space usage, even with realignment, is low until 1:00 PM every day of the week. The highest usage of space, Tuesday's at 6:00 PM is for a community

oriented program. However, many of the spaces in this facility are dedicated labs for specific use.

Existing Room Codes



Recommended Room Codes

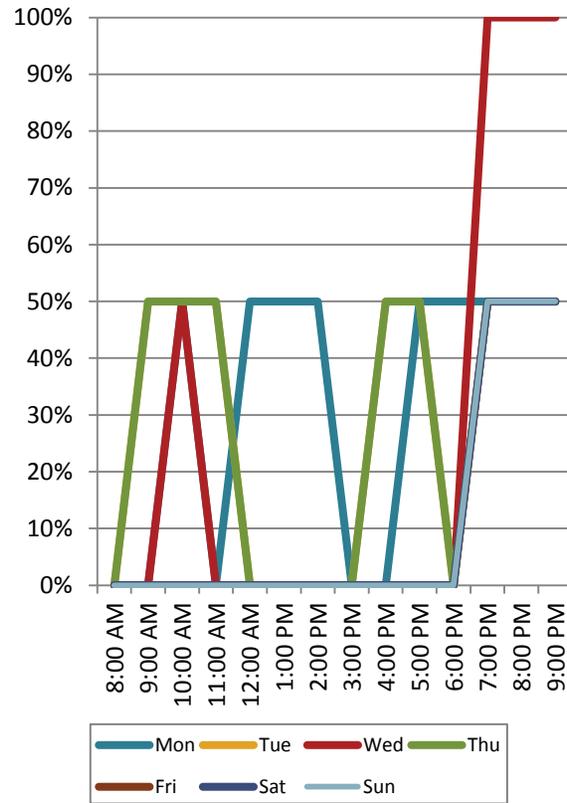


UTILIZATION

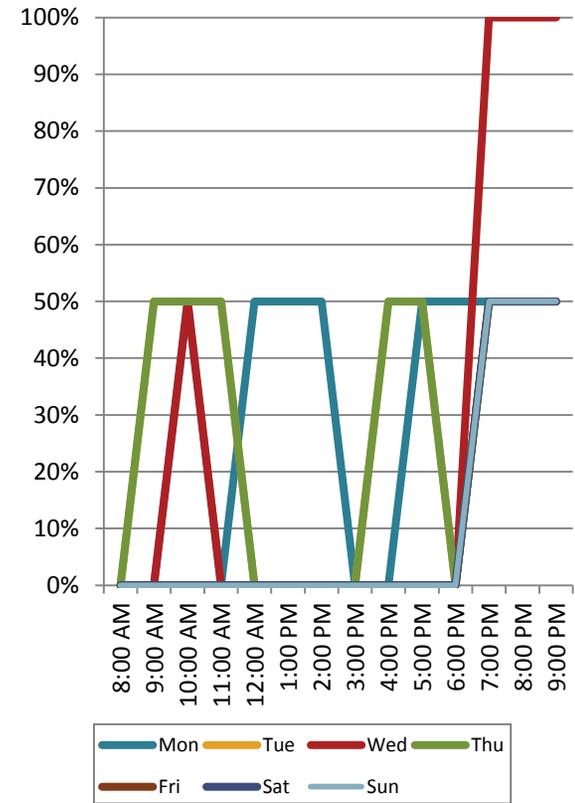
Room Utilization by Campus

Nell J. Redfield Foundation
Performing Arts Center

Existing Room Codes



Recommended Room Codes

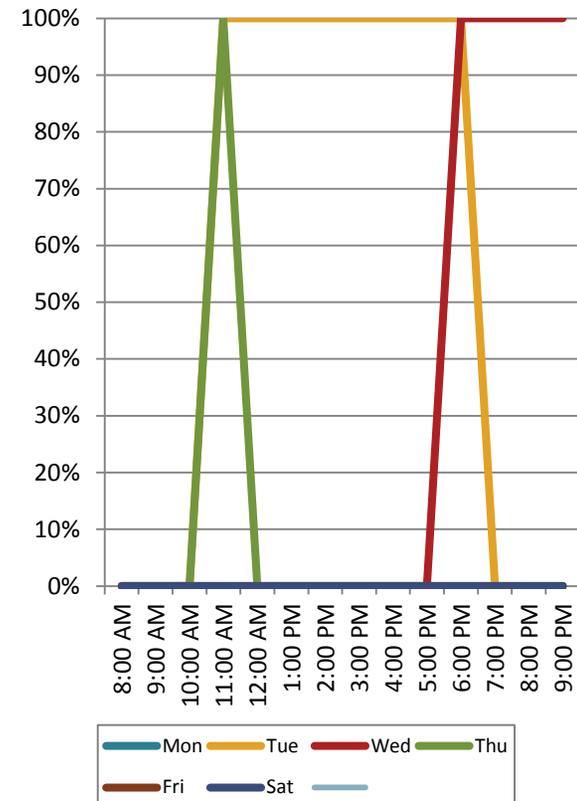


UTILIZATION

Room Utilization by Campus

RCA

Recommended Room Codes



UTILIZATION

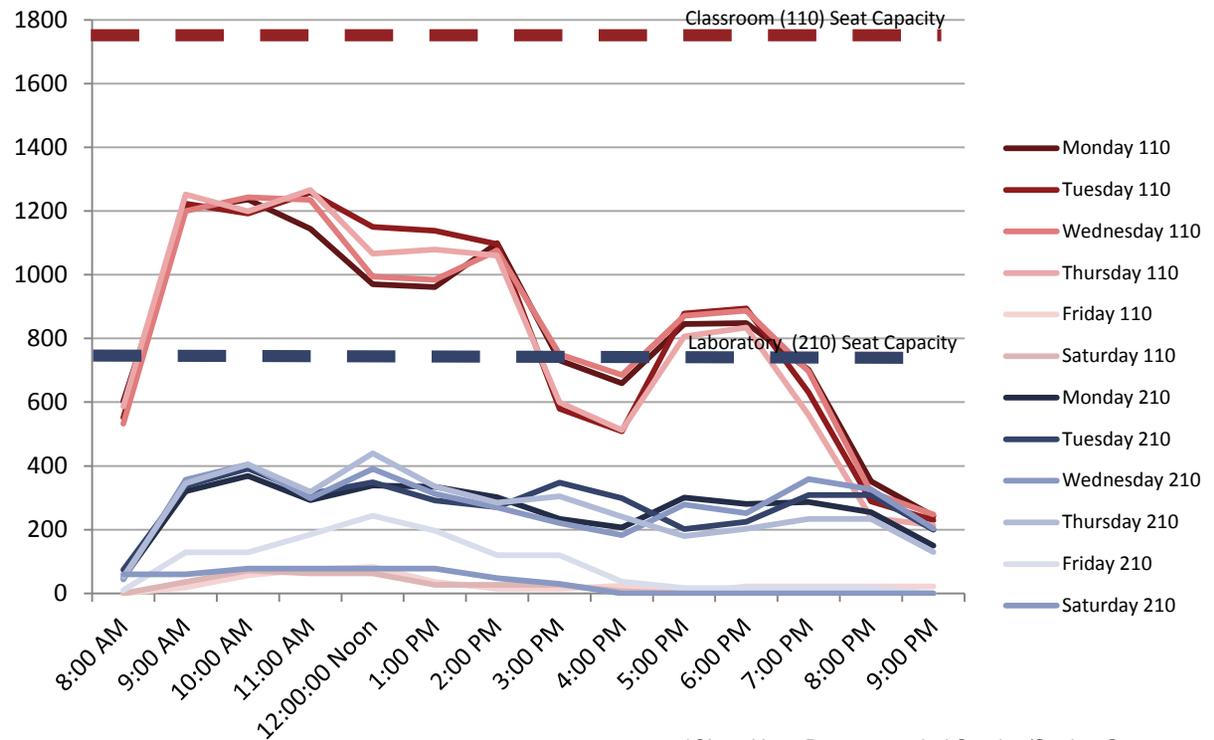
Seat Utilization by Campus

Dandini Campus

Classrooms have an average enrollment of 25 students on the Dandini Campus. The enrollment cap, which sets how many students are allowed to enroll in a class, averages at 28 students while the average seat count in a classroom is 35 seats. Adjustments on either the average seat count or the enrollment caps will alter the overall utilization for the classrooms.

The Dandini Campus has a significant number of rooms used throughout the day for instructional purposes that are not scheduled classes including TMCC High School. While these instructional uses are counted as part of NSHE utilization these uses are not present in the seat utilization chart below and is a contributing factor to the lower utilization.

Dandini - Total Seat Use



*Chart Uses Recommended Seating/Station Counts

Seat utilization charts show the total number of seats being used (solid lines) for classrooms (red) and laboratories (blue) throughout the week compared to the total number of seats available (dotted line).

UTILIZATION

Seat Utilization by Campus

Redfield High Tech Center

During peak hours on Mondays and Thursdays, there is good laboratory seat utilization of the High Tech Center.

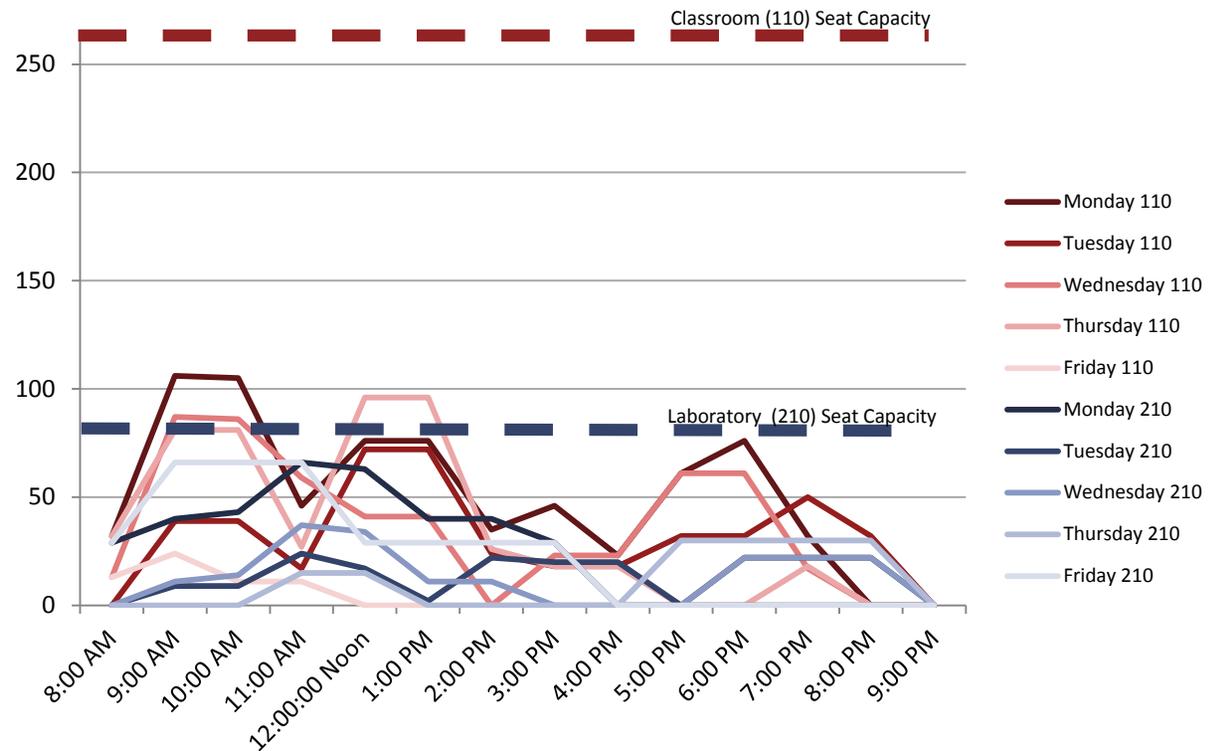
When classes are in session laboratories are at 65% seat utilization. The enrollment cap, which sets how many students are allowed to enroll in a class, averages 23 students while the average laboratory contains 27 stations. Classrooms also

have a discrepancy between the average seat count at 33 seats per classroom while the enrollment cap averages at 25 students. Adjustments on either the average station/seat count or the enrollment caps will alter the overall utilization.

Under-scheduled classrooms are also a contributing factor to the low utilization. As an example classroom 116 has no scheduled class and room 122 is only

used 6 hours a week.

Redfield High Tech Center - Total Seat Use



*Chart Uses Recommended Seating/Station Counts

UTILIZATION

Seat Utilization by Campus

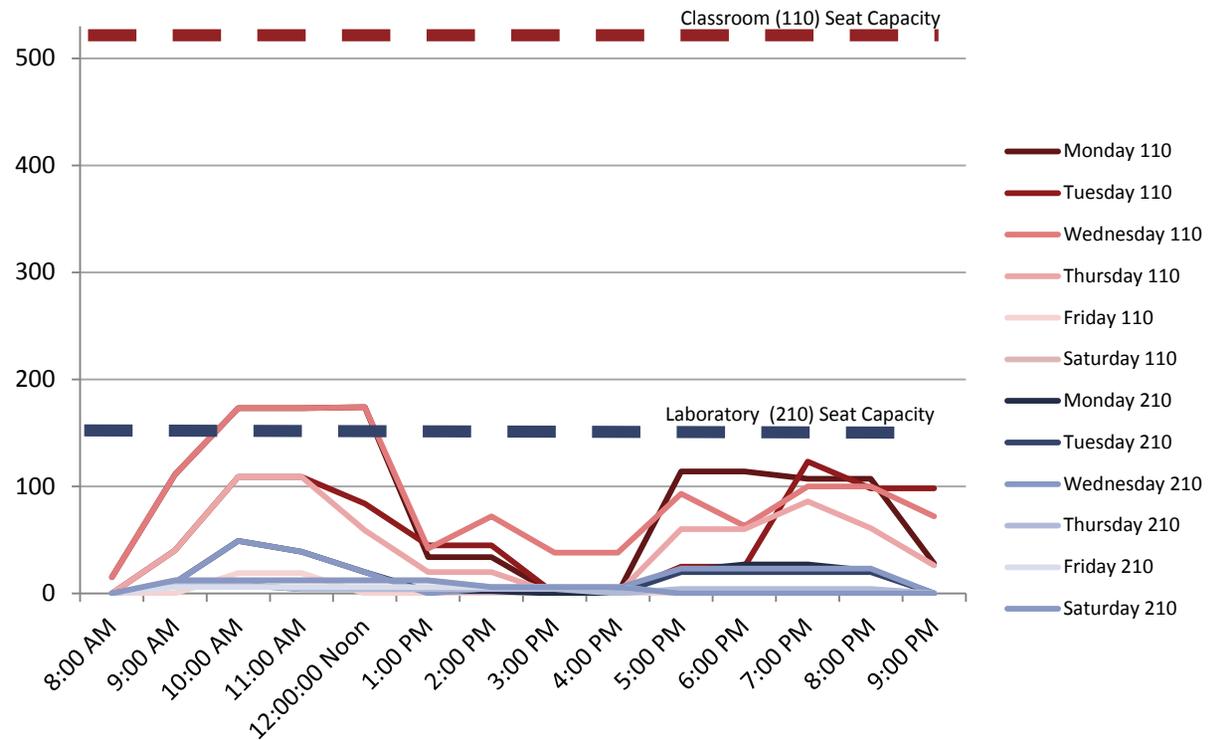
Meadowood Center

Of all the college's campuses and centers, the Meadowood Center has the largest percentage of rooms used for instructional purposes that are not scheduled classes including GED, ELD and ABE workshops. The seat utilization does not include these other organizations and is contributing to the low use rates shown below.

When only counting seats while classes are in session, on average, 63% of the classroom seats and 47% of the laboratory seats are in use. The average fill rate of classrooms while classes are in session maybe attributed to the enrollment cap that sets the number of students allowed to enroll in a course. This cap average on this center is 30 students while the average size is 35 students. The enrollment cap

is not a factor for laboratories where the average cap is 22 students and the average station count is 20 students. The major discrepancy on laboratories is the number of students enrolled in classes which averages 11 students per class in these spaces.

Meadowood South - Total Seat Use



*Chart Uses Recommended Seating/Station Counts

UTILIZATION

Seat Utilization by Campus

IGT Applied Tech Center

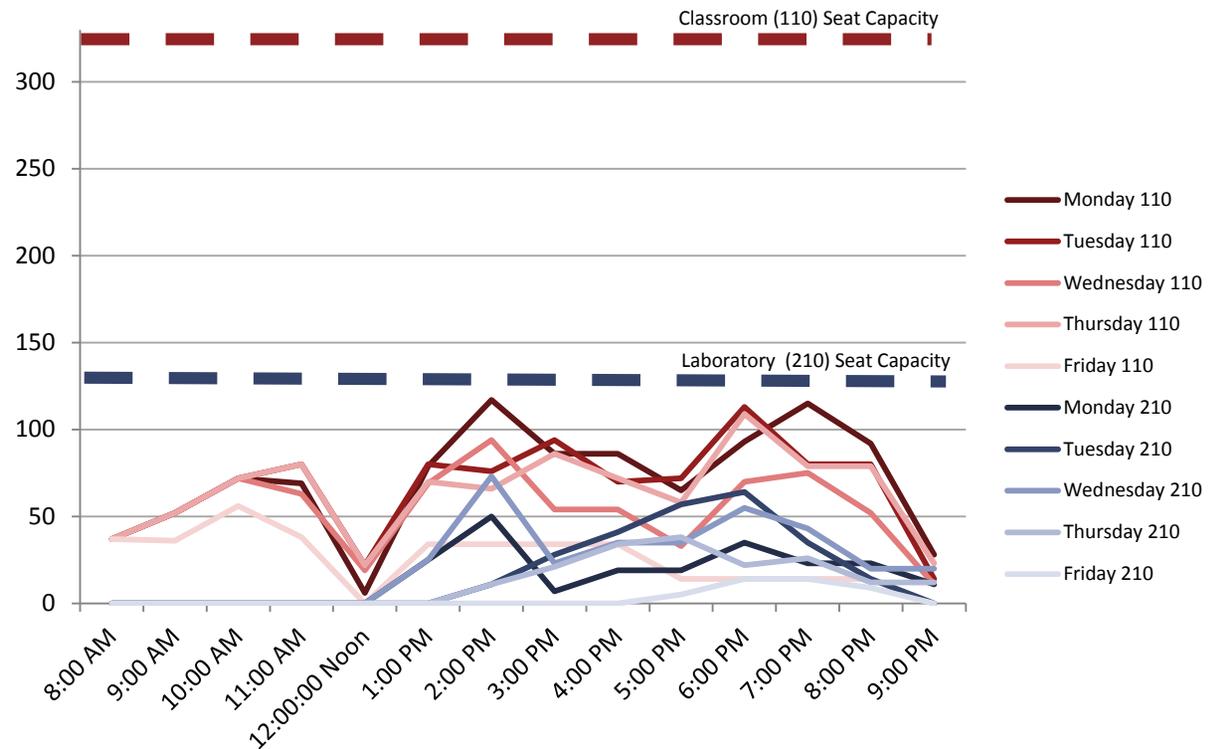
Overall the laboratory seats at the IGT Applied Tech Center are being filled at a much higher level than the classroom seats.

At further review of the data, a significant factor in the underutilized seat court is 78% of the classes offered in classrooms

have an enrollment of less than 20 students; even though, 66% of these classes have an enrollment cap of 20 or above. In addition, classrooms 100, 175, 211 and 212 are not being used.

The laboratory classes are filling at a higher percentages. The specialization of these laboratories may limit the number of classes which can utilize the rooms.

IGT Applied Tech Center - Total Seat Use



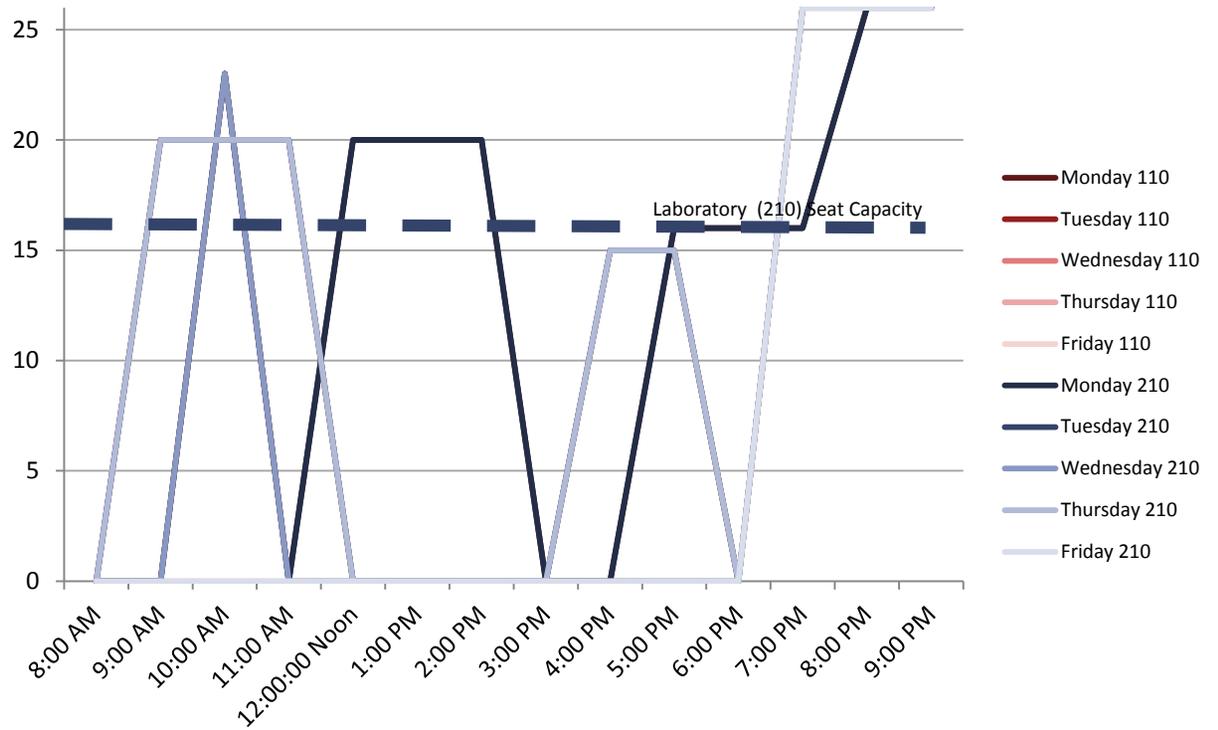
*Chart Uses Recommended Seating/Station Counts

UTILIZATION

Seat Utilization by Campus

Nell J. Redfield Foundation
Performing Arts Center

Redfield Performing Arts Center - Total Seat Use



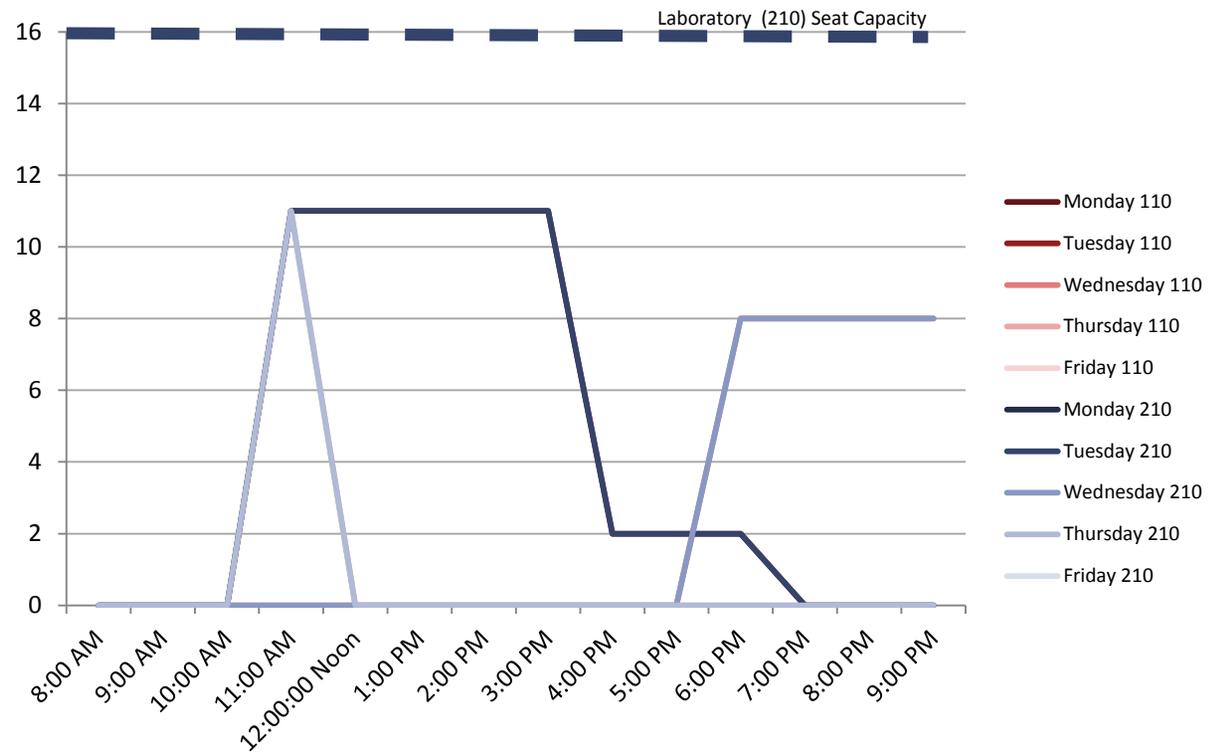
*Chart Uses Recommended Seating/Station Counts

UTILIZATION

Seat Utilization by Campus

RCA

RCA - Total Seat Use



*Chart Uses Recommended Seating/Station Counts

UTILIZATION

Room Size and Requested Class Size

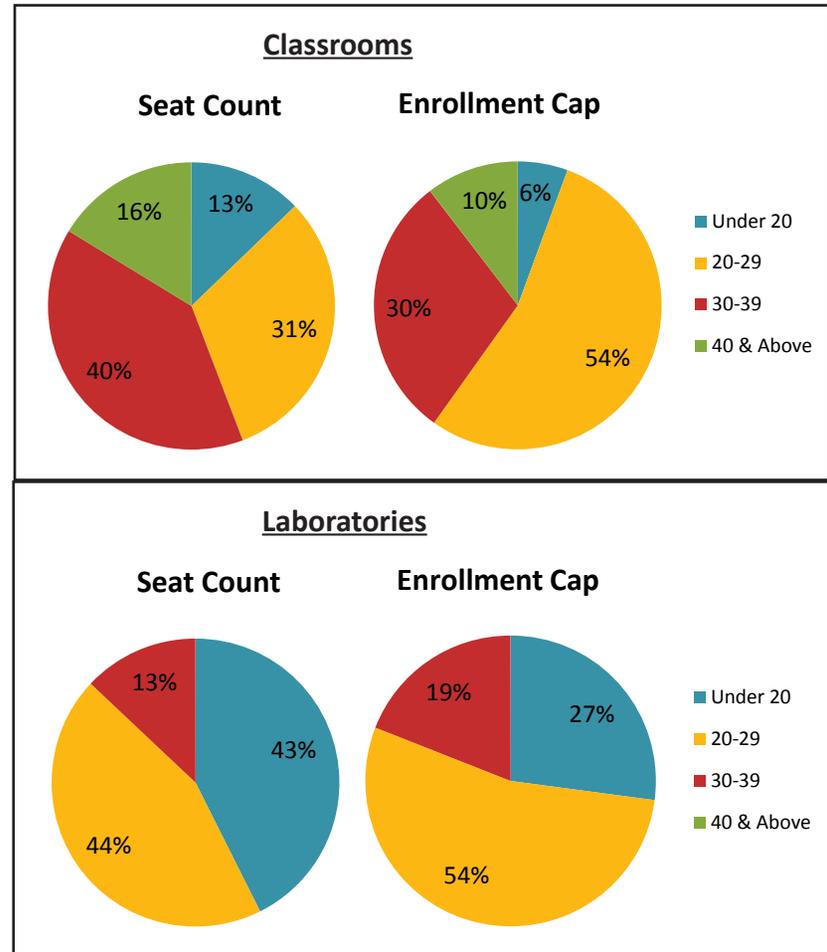
When a new semester is being planned each Division develops a list of class offerings identifying if the class need to be held in a lab or lecture room with an assigned enrollment cap. The college scheduler then places the classes in a suitable room to accommodate the requested student count or enrollment cap.

Ideally, the ratio of the number of rooms with a certain seat count should match the ratio in which enrollment caps are requested. The following charts show the current percentage differences between the actual seat count and the enrollment count in both classrooms and laboratories.

Assuming the policies around setting enrollment caps do not change, the following consultant observations have been made:

- There are more classrooms and laboratories with seat counts under 20 than needed for the enrollment caps being requested. This imbalance has lead to a perception of there not being enough space available when there are opens rooms that are just too small to fit the classes or labs requested. Reduction of these smaller rooms by expanding the number of stations to the 20-29 size will result in better utilization of space.
- The largest segment of enrollment caps being requested is in the 20-29 category for classrooms while the largest percentage of room seat count is from 30 to 39 seats. While this imbalance may cause classes with a smaller student count to be placed in larger rooms, it does allow the college more flexibility of offering larger classes in the future if desired.

- Larger laboratories in the 30-35 station count range may be considered for the Information Systems, Biology, Nursing, Physics, Physical Education and Nutrition to correct the imbalance of larger laboratories being requested.



*Charts Uses Recommended Seating/Station Counts

UTILIZATION

Total Space Need

Classrooms	Average Week Use by Others	Weekly Hour of Scheduled Instructional Use	Total Hours Used / Week	# of Rooms	NSHE Standard	
					# of hours in a 65.3 hr week	% of 65.3 hour week used
EDSN	2	285	287	16	1044.8	27%
HTCR	2	111	113	8	522.4	22%
DANDINI	213	1,884	2,097	51	3330.3	63%
MDWS	356	158	514	15	979.5	52%
College Wide	573.0	2438.0	3011.0	90.0	5877	51%

Laboratories	Average Week Use by Others	Weekly Hour of Scheduled Instructional Use	Total Hours Used / Week	# of Rooms	NSHE Standard	
					# of hours in a 32.7 hr week	% of 32.7 hour week used
EDSN	0	54	54	6	196.2	28%
HTCR	2	57	59	3	98.1	60%
DANDINI	13	887	900	35	1144.5	79%
MDWS	58	78	136	7	228.9	59%
RCA	0	14	14	1	32.7	43%
RPAC	0	44	44	2	65.4	67%
College Wide	73.0	1134.0	1207.0	54.0	1765.8	68%

*Charts Uses Recommended Room Coding

UTILIZATION

Total Space Need

Full Time Equivalent Student (FTES) Capacity
Defined by the Number of Seats / Stations

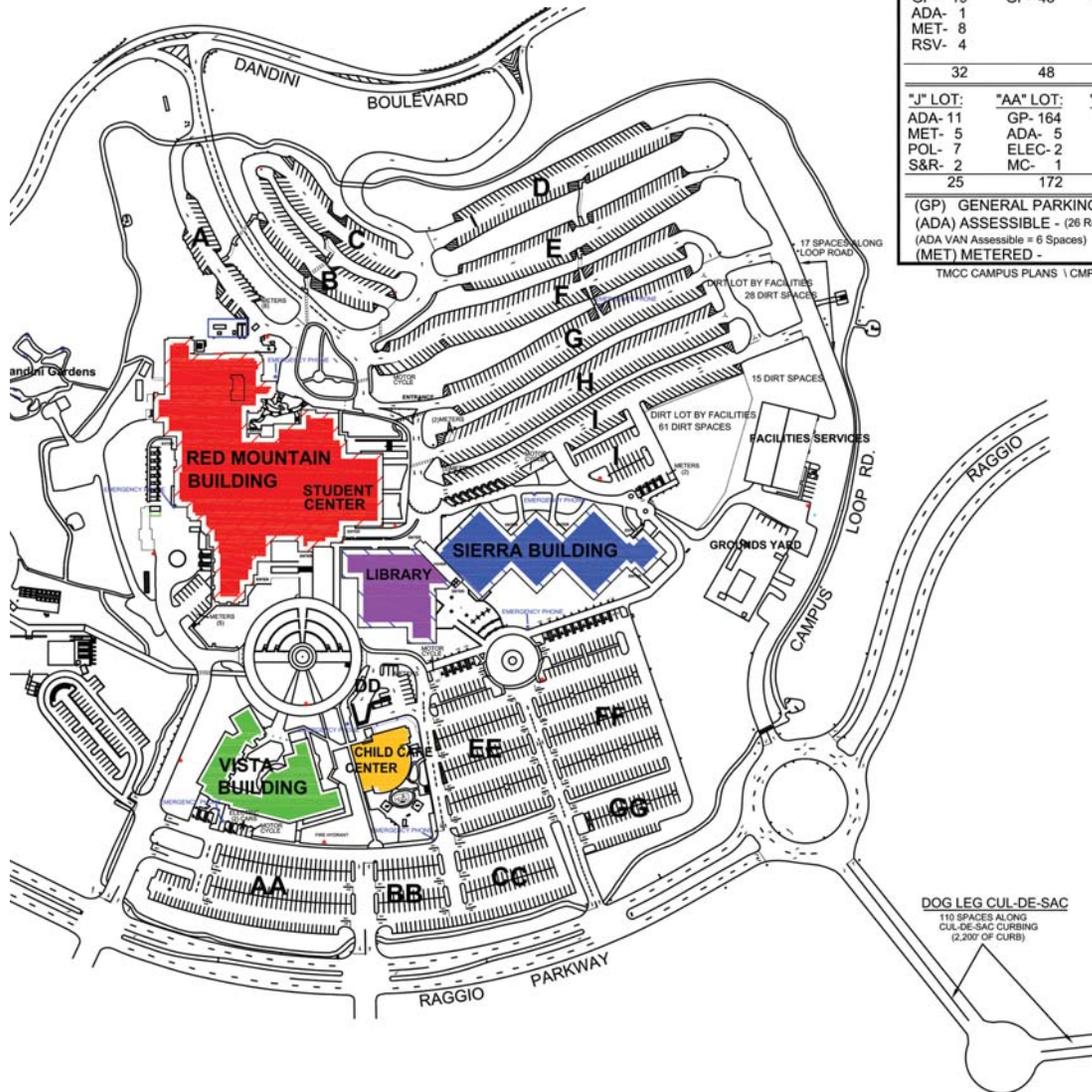
DNDI	5,921	FTES
	69,427	Class student hours/week
	19,385	Lab student hours/week
EDSN	1,088	FTES
	13,047	Class student hours/week
	3,270	Lab student hours/week
HTCR	833	FTES
	10,344	Class student hours/week
	2,145	Lab student hours/week
MDWS	1,629	FTES
	20,805	Class student hours/week
	3,636	Lab student hours/week
RPAC	28	FTES
	419	Lab student hours/week
RCA	42	FTES
	628	Lab student hours/week
Total College	9,540	FTES

* Utilization is defined by 60% of classroom seats filled for 65.3 hours a week and 80% of class labs seats filled for 32.7 hours a week

**Chart uses Recommend Room Coding and Seat/Station Counts

UTILIZATION

Campus Parking Count



"A" LOT: GP- 19 ADA- 1 MET- 8 RSV- 4	"B" LOT: GP- 48	"C" LOT: GP- 47	"D" LOT: GP- 88	"E" LOT: GP- 91	"F" LOT: GP- 106 MC- 3	"G" LOT: GP- 103	"H" LOT: GP- 106 MET- 2	"I" LOT: GP- 114 ADA- 12 MET- 6 MC- 3 EMP- 1
32	48	47	88	91	109	103	108	136
"J" LOT: ADA- 11 MET- 5 POL- 7 S&R- 2	"AA" LOT: GP- 164 ADA- 5 ELEC- 2 MC- 1	"BB" LOT: GP- 50	"CC" LOT: GP- 114	"DD" LOT: ADA- 2 MET- 9 EMP- 1	"EE" LOT: GP- 156 ADA- 5 MC- 2	"FF" LOT: GP- 183 ADA- 10 MET- 2	"GG" LOT: GP- 54	
25	172	50	114	12	163	195	54	
(GP) GENERAL PARKING - 1,443 (ADA) ASSESSIBLE - (26 Required) 46 (ADA VAN Accessible = 6 Spaces) (MET) METERED - 32	(RSV) RESERVED - 4 (POL) POLICE - 7 (MC) MOTOR CYCLES - 9	(S&R) SHIP & REC.- 2 (EMP) EMPLOYEE- 2 (ELEC) ELECTRIC CAR- 2	TOTAL PARKING SPACES 1,547					

TMCC CAMPUS PLANS \ CMPSMAP Updated 11-13

OVERFLOW PARKING NOT INCLUDED IN TOTALS BELOW.

- ON CAMPUS (INCL LOOP RD. & DIRT LOTS NEAR FACILITIES BLDG) - 121
- DOG LEG CUL-DE-SAC - 110
- SO. RAGGIO OVERFLOW - 377

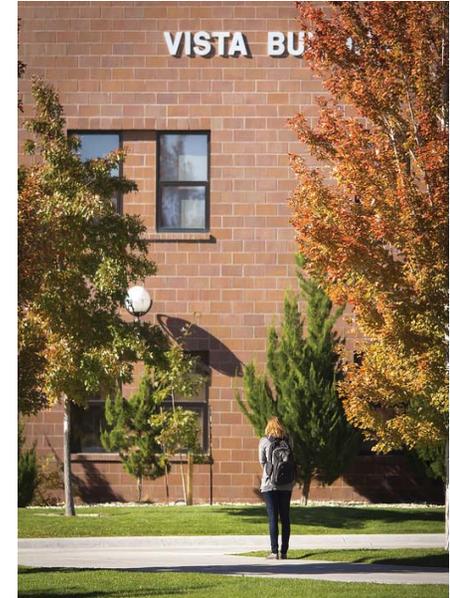
TOTAL OVERFLOW 608

ACADEMIC DIVISIONS
+ ADMINISTRATION

Introduction

This chapter describes the main functional areas within the College, which utilize physical space on the campuses. The academic area is divided into five "Divisions". These Divisions organize the academic program offerings into similar educational components. The remaining five functional areas discussed in this document identify departments, services, or areas that also use a significant amount of space within the College campuses.

This chapter provides an assessment of each area's current use of space, it's location or locations on Campus, and how each area is used. The chapter also offers considerations for future space usage, based on anticipated needs of the program or area.



Student Services

DEPARTMENT SUMMARY

The Student Services provides information, support and advisement in a wide range of areas for current students, new students, prospective students, international students & transfer students. The Student Services department consists of a number of functional areas, including:

- Academic Advisement
- Counseling and Career Services
- Financial Aid
- Student Outreach
- Veterans Services
- Disability Resources
- Student Government

There are currently no Student Services staff located at any of the buildings other than the Red Mountain building. At various times in the past, staff and resources have been provided at Meadowood South and IGT Applied Technology Center, but resources and funding proved unsustainable.

Student Services elements are located in the Red Mountain building. They are currently on the first and third floors of the building.

The separation on two floors is a problem for the department as it causes wayfinding challenges for students and is difficult on the staff. The Welcome Center is adjacent to the events space, which causes difficulties due to noise transmission from the event space. The Welcome Center is also not easily identifiable from the entrances into the building.



The Student Services elements can be categorized as “High Volume” and “Low Volume” in terms of their usage frequency. These terms are not meant to minimize the importance of any of the components. The terms are planning tools to identify elements that are required to be more accessible to the widest range of students. Some of the elements have very little daily interaction with students. This categorization informs the space planning of the department.

High Volume Functions:

- Welcome Center
- Financial Aid
- Advisement & Transfer Center
- New Student Services
- Testing Services
- Retention Support Programs
- Veterans Upward Bound (Meadowood South)
- Disability Resource Center
- Student Government
- Cashier

Low Volume Functions:

- Admissions & Registrar
- Advisement & Transfer Center
- New Student Services.
- Testing Services
- GED Testing
- Retention Support Programs
- Counseling.
- Re-Entry/Job Prep/Career
- Outreach & Recruitment
- Student Outreach
- Disability Resource Center
- Student Government

The development of a consolidated Student Services location is needed to create a more cohesive and user friendly experience. The intention is to gather the department functions into one area and organize the various functions based on frequency and type of use. The following planning concepts are proposed for an improved Student Services area:

- Consolidate the 2 floors of Student Services into one floor with a “One Stop Shop” for the high volume functions such as Welcome Center/ Help Desk, Cashier, and Equity & Inclusion.
- Organization of high volume and low volume elements - Student Services Program (high volume) vs. Student Services Business (low volume).
- Easily identifiable and accessible Welcome Center.
- The Doorway – Elements with the highest volume at the front.
- The UNR Center for Cultural Diversity was cited as a good example of a space for retention, recruiting and outreach.

Student Services

A benefit of a more open and efficient Student Services area is that staff can be cross-trained and serve more than one element.

Student Services requires a clearly defined entry so that those not familiar with the location can easily find the services. The current location suffers from not being easily identified.

Signage is an important part of providing services. Any new planning must have signage that supports wayfinding. Signage could improve wayfinding within the existing Student Services areas

During workshops it was noted that entrance roads and signs lead to the original Red Mountain building entrance much more strongly than to the new Student Center entrance. Changes to this way-finding should be considered to improve access to Student Services.

Student Government is a distinct component of the Student Services department. The Student Government Association (SGA) provides a variety of programs and activities for students. SGA also provides support to student clubs & organizations on campus. There are currently 18 clubs with membership of approximately 200 students. The space program for Student Government includes office space for the SGA officers and space for clubs & organizations. SGA office space includes offices, storage and a conference/work area. Club and organization space includes a multi-use space with mailboxes, computer, meeting space and storage.

There is a perception that the current SGA offices are in a low visibility area. Signage

should be considered to improve the visual access to the SGA offices.

SGA representatives also noted that many of the SGA and club meetings could occur in an empty classroom to minimize the need for extensive club meeting space. It may be desirable for clubs to be considered in room schedules as a way to include the needs of clubs and organizations in the existing space inventory.

OFFICES

- As office moves occur over time, there should be an effort to co-locate like disciplines together whenever possible.
- Conference rooms and collaboration space will be included in the office area.
- Office space will be developed in line with TMCC guidelines.

FUTURE CONSIDERATIONS

With the continued development of academic focus centers at locations other than the Dandini campus, delivery of Student Services at each Center may be more important. It should be noted that only certain high volume services will be required at the centers. It is possible a small administrative space at each center can accommodate staff for the future. The level of high volume services is much more intensive at the beginning of semester. If a flexible space is provided at each center it could accommodate Student Services during the high volume times and meet other needs when not required for Student Services. In summary, the space planning for future Student Services outside of the

Dandini campus appears to be more of an issue of staff resources than physical space.

TMCC also utilizes self-service kiosks at Meadowood South and IGT Applied Technology Center, in addition to the Student Services areas in Red Mountain. The use of kiosks should be considered as a part of services expansion on the Dandini campus and into the academic focus centers. With development of the kiosks, including the ability to accept payments, the kiosks may provide an acceptable level of service for a range of students. It was also noted in discussions with staff that there are times it is most preferable to have person-to-person contact, especially for students that may not be as familiar with technology such as a kiosk.

The workshops also raised the question of whether counseling could be provided by the kiosks. This is a concept that will require more consideration, but it has the possibility of reducing the space needs for counseling at the academic focus centers.

Student Life

SUMMARY

Student Life is defined as the spaces that allow for socialization, studying, relaxing and eating. These are not instructional or administrative spaces. Although called "Student Life", they are really for all who are on campus, such as students, faculty, staff and the community.

A student survey was put forth in the Spring of 2013, seeking student input in evaluating the current Student Life spaces in the TMCC facilities. The results and summary are located in the appendix.

Red Mountain

The current Student Center space on the first floor of the Red Mountain building is a quality space with adjacencies to the Bookstore and Café. It is also in close proximity to the Library. A major shortcoming with the Student Center is that the space is also used as an events space. Since this is the only large space for events, the student social space is regularly disrupted. This turnover of the space uses Facilities Department staffing resources to set up and take down events. Until a new events space is completed the Student Center will be compromised by the multi-use nature of the space.

Adjacent to the Student Center on the first floor of Red Mountain are the Fitness Center, Bookstore and the Art Gallery.

There are Student Life spaces on the second floor of Red Mountain. The Cafe and adjacent dining areas open onto the Student Center. There are also the Atrium and other small lounge areas, which are generally a part of the circulation corridors.

Sierra

The existing student life spaces in the Sierra Building are located on the first floor and the second floor along the main corridor. These are the triangular shaped areas that are adjacent to the corridors. These spaces have lounge furniture located against the walls of the alcoves. There is no spatial definition between the student life spaces and the corridor.

Vista Building

There is a small vending area with a few tables and chairs on the first floor. The space is an extension of the corridor.

The exterior plaza offers opportunities for student life. It is challenged by the same wind and weather issues as the Quad. Future consideration should be given to a possible enclosure of some, or all, of the plaza.

IGT Applied Technology Center

The student life space is a portion of the Lobby with tables, chairs and vending. The amount of space is adequate for the program. The room is well used at the higher volume instructional periods. The space is a very active space, as it is a part of the main entrance to the building. It is a two-story high space that has an exposed steel ceiling.

Meadowood

The Meadowood buildings were originally designed as professional office buildings. As such, they do not have large lobby or waiting areas. The existing student life space in Meadowood South is located in a wide area along the first floor corridor. It is a study area with tables, chairs and

lounge furniture. As an extension of the corridor, it does not provide an inviting environment for studying, relaxing, and socialization.

Redfield Health Science Center

The student life space at the Redfield Health Science Center consists of a large open space designated as an Open Computer Lab. The space has a few tables where students can study, using their own computers. In its current configuration and furnishings, the space does not support relaxing and socializing. There are also small study tables and seating areas along the corridor walls.

Overview

The goal is to create a variety of high quality interior and exterior common use spaces for programmed or casual use.

In the near-term, improvements can be made in the existing spaces with improved furniture, display of student art, and upgraded finishes. Consideration should be given to creating spatial separation through furnishings or movable walls.



Student Life

The longer range goal is to have each Center provide these types of Student Life experiences:

- Active areas that foster socialization - spaces where students can “hang out” and relax.
- Workspaces where students can work collaboratively in small groups.
- Quiet areas that support more focused study.
- A variety of spaces with different settings – atria, outdoor spaces, small rooms and social rooms.
- Areas that are identifiable as being for the students and not part of other functions or uses.
- Furnish student spaces with quality furniture that is comfortable, functional, and able to be easily reconfigured.
- Improvement of the circular Quad at the Dandini campus. While well-developed, the space is problematic due to wind exposure. Consideration should be given to roofed structures, windscreens, landforms, and landscaping to define a variety of defined spaces (small, medium, large and extra large).
- Improvement of the exterior plazas at the Vista, Sierra, and Red Mountain buildings. As with the Quad, these spaces suffer from wind exposure. Emphasis should be on landscaped and built barriers and buffers to create usable outdoor “pockets” which are protected from the wind.



DANDINI CAMPUS STUDENT LIFE

Student Center

The relocation of the Student Services functions onto the first floor of Red Mountain will necessitate the relocation of the Student Center (and events space). A new Student Center is proposed in a building addition to the south of the Student Center building. This addition would link the Red Mountain building and the new Knowledge Center. This two-level addition would include a variety of student life components as described in the preceding overview. The addition would also connect to the existing Cafe and new Bookstore. The addition will complement the highly popular Cafe and provide additional space for eating and socializing. It will be adjacent to the Student Services area and in close proximity to the new events space. The addition will create an active area with opportunities for socialization and activity. This area will be the center of the Dandini campus' student life.

Events Center

Although not programmed as a student life component, the new events space on the 2nd floor of Red Mountain will improve the student life experiences by eliminating the regular conflicts between the student center and events. A dedicated Events Center will be constructed by adding a second floor to the high-volume space in the Red Mountain building. The events space will be largely dedicated to the many events that occur on campus. The events space will be a highly flexible room with audio/visual infrastructure.

Art Gallery

A new main Art Gallery is proposed for the 2nd floor of Red Mountain. The new Gallery will replace the first-floor space taken by the Student Services relocation. The new location will place the Gallery near the Student Center and the Events Center giving it even great visibility.

While the Student Center addition will be the focus of student life on the Dandini campus, consideration should be given to smaller types of spaces in the other portions of all the buildings. These are not anticipated to be highly developed spaces, but would be small alcoves off corridors that would provide spaces for socialization and interaction throughout the building. These have not been specifically programmed, but would be developed as the needs are identified.

Student Life

Sierra Building

With the development of the new Student Center adjacent to the Sierra building, the emphasis on student life spaces within the Sierra building would be smaller, more intimate spaces distributed through the building.

The triangular shaped spaces along the corridor could be developed to provide areas more conducive to socializing and relaxing. These existing spaces can be improved by defining the spaces with carpeting and/or low walls and providing more cohesive furnishings.

IGT Applied Technology Center

A small amount of spatial definition in the form of low walls, furniture or other elements should be considered to separate the student life space from the circulation portion of the Lobby. High walls are not desirable, but some separation would help define the space.

The space would benefit greatly from acoustical treatment to reduce the effect of noise in the space. Sound absorbing materials should be considered for the floor, ceiling and walls.

Development of a small number of smaller, more intimate spaces should be considered. These would be a different type of space than the Lobby. They would be less subject to noise and distraction. The spaces would probably be adjacent to the corridors which would make them easily accessible and identifiable.

Occupants also voiced a desire for a higher level of food service than the vending machines. A full-service café is not feasible given the frequency of use.

Possibilities suggested by the occupants included a light-meals/coffee cart staffed only during the higher volume times, or possibly coordination with food truck vendors to make the Center a regular stop during lunch and dinner hours. The food truck concept could also make the Center a hub for others in the area to get meals without leaving the neighborhood.

Meadowood Center

Should the programs offered at the Meadowood Center continue to expand additional classroom and office space will be needed. This will make it difficult to provide student life spaces in addition the required academic and support spaces. If possible, a small lounge/study area should be considered. As opposed to the current location in the corridor, this would be a separate space from circulation, with a defined space for socializing.

If TMCC expands into Meadowood North, consideration should be given to constructing a connector linking the two buildings. This connector could provide space for a variety of student life spaces and associated services, such as a lounge, a coffee cart or small café.

Redfield Health Science Center

The student life space in the Open Computer area should be enhanced to give the students a place to truly call their own. The space could be developed as a central activity core, a sort of "living room" for the students. A variety of furnishing types, and groupings, along with "warm" finishes could create a sense of "home" to the students. This would be a welcome addition to a campus which is somewhat remote from the rest of community, and

in a demanding program in which the students are often looking to maximize their studying time.

This type of student life space could also support the planned Health Sciences building.



Student Life Survey

A component of the Master Plan is to review and make recommendations regarding student life spaces on Campus.

PROCESS

A student survey was put forth through Survey Monkey, seeking thoughts on the quality of student life spaces that are currently in TMCC facilities (i.e. spaces for studying, socializing, relaxing, eating, club meetings, etc.). Questions included priorities and opinions on the types of group space and personal space the students use most (or that they would like to see further developed), along with thoughts on exterior and interior spaces.

The Survey was done during the Spring 2013 semester. There were 111 responses, mostly from those who attended classes at the Dandini campus. There were 3 respondents each Meadowood & IGT Applied Technology Center. There were no responses from the either Redfield High Tech Center or the Redfield Performing Arts Center. 16 persons did not indicate which campus they attended.

CONTENTS

The Survey asked the students what types of student life spaces they would prefer: formal or informal; large or small study areas; open or confined spaces; interior versus exterior study spaces. It asked about what amenities the spaces should contain. The Survey also sought input on how the study spaces in the Library could be improved when the building is reconfigured as the Knowledge Center.

EXTERIOR SPACES

In general, the respondents indicated that they would use outdoor spaces if the spaces were relaxing, provided some shade during summer months, and were somewhat secluded for quiet study. The respondents recognized during the traditional school year, the weather is quite unpredictable, and often inhospitable for outdoor study, especially at the Dandini Campus. Outdoor spaces that provided some protection from the elements would be desirable. Adequate Wi-Fi capability is essential for the students who wish to study outdoors.

STUDY AND SOCIAL SPACES

49% of the respondents indicated they prefer casual interior study spaces. Spaces where the furnishings allow the students to feel relaxed are preferred. Being able to rearrange the furniture into small groups is seen as advantage. There was no consensus on the question of enclosed study rooms versus open study areas, with 24% preferring them, and 25% ranking them least important. Similarly, the survey did not reveal any true consensus on any of the following topics:

- Furniture forms or defines spaces.
- Spaces combining collaboration and individual study.
- Furnish spaces with better furniture would help.
- Spaces that are screened, but separated from others.

- Spaces which combine study and food. Respondents appear to value variety over any specific type of study space. Differing circumstances dictate different needs. Across the campus there is a desire for casual areas, with a more relaxed setting. There is also a desire for quiet space for more individual focused study. The students also appear to value areas for “down time”, where they can be more social, eat a quality meal or snack, and even take a short nap between classes.

TECHNOLOGY

The need for technology varies with the needs of the students, and only 14% rated this as a top priority. That said, there is a common complaint that the computer labs aren't always open or available when the students need them. Again, an improved Wi-Fi network with access to some type of network printers is a common thread.

LIBRARY

The respondents were not unified in their use of the Library. While 30% ranked study tables with Wi-Fi as a high priority, there was no consensus as to where these tables should be located. 17% thought they should be physically separated from the rest of the Library, 18% thought they should be screened but not separated from the rest of the facility, and 24% felt that casual furniture within a larger space would be best. As to be expected, given the current trends in library usage, 50% (the largest response from this section) felt that housing book stacks in the Library was least important.

Division of Applied Industrial Technologies

DIVISION SUMMARY

The Division of Applied Industrial Technologies (AIT) offers a diverse selection of career training programs including:

Applied Industrial Technologies

- Architecture & Construction Tech
- Manufacturing Technologies
- Transportation Technologies
- Energy Technologies

Public Safety

- Criminal Justice
- Emergency Medical Services
- Fire Academy
- Paramedic

Veterinary Technology

Safety Center

Instructional space is located in Redfield Health Science Center, Sierra and IGT Applied Technology Center.

Office space is in Redfield Health Science Center, Sierra and IGT Applied Technology Center.

Veterinary Technology classes are taught at Redfield Health Science Center.

Since 2003, the College has entered into an inter-local agreement with Washoe County, the City of Reno and City of Sparks, to establish the Regional Public Safety Training Center (RPSTC). The agreement outlines the operation and use of the RPSTC for training and educational purposes. TMCC provides credit and non-credit courses, training and workshops related to fire science and fire academy, EMS or paramedic, police academy and criminal justice programs. TMCC will continue to work with the partners

as these related programs grow or their functional needs require modification.

AIT also uses the Geothermal Lab in the UNR Redfield building.

Tier 1 Class Labs - IGT Applied Technology Center and Redfield Health Science Center.

Tier 2 Classrooms - Redfield Health Science Center, Sierra & IGT Applied Technology Center

New instructional space at IGT Applied Technology Center will be developed as a part of the future EDA Grant remodel. The remodel is assumed to include the following components:

First Floor

- Production/Logistics Lab
- Sheet Metal Shop
- New Toilet Rooms
- Food Service
- Student Study Areas

Second Floor

- Expand Mezzanine
- New Classrooms

Outdoor secure storage metal building

Architecture and CAD Drafting Class Labs are currently located on the 2nd floor of the Sierra Building along with the associated faculty. These are the only components of AIT that are not at the IGT Applied Technology Center. It is proposed that Architecture and CAD Drafting relocate to the Center. Space for these programs may not be a part of the EDA Grant program.

It is anticipated the EDA Grant remodel project will include exterior work such as painting, window and door perimeter

sealants, storefront and entrances, lighting, landscaping, parking, fencing and the entrance canopy.

OFFICES

- Offices are currently located in IGT Applied Technology Center & Sierra.
- Offices are proposed to be located in IGT Applied Technology Center.
- The Dean will be located in the AIT faculty office area.
- As office moves occur over time, there should be an effort to co-locate similar disciplines together whenever possible.
- There will be office space for part-time faculty. It will include a common work area, conference and collaboration space and individual storage.
- Conference rooms and collaboration space will be included in the faculty office area.
- Office space will be developed in line with TMCC guidelines.

FUTURE CONSIDERATIONS

Less than 10 years

- Expand programs in Manufacturing & Logistics Technology at IGT Applied Technology Center.
- New instructional space for the Veterinary Technology program at Redfield Health Science Center.

More than 10 years

- New program in Aviation Maintenance (possibly at Reno-Stead Airport).



Division of Business

DIVISION SUMMARY

The Division of Business offers classes in the following:

- Accounting
- Adult Basic Education/ English as a Second Language (ABE/ESL)
- Administrative Professional
- Business
- Economics
- Entrepreneurship
- Logistics
- Management
- Marketing
- Real estate
- Workforce Development & Continuing Education (WDCE)

In addition to the instructional programs, the Division of Business manages the Fitness Center in the Red Mountain Building. The Division also provides physical fitness, physical therapy and massage classes.

The Division of Business also houses the summer school office and is the center for the business plan competition.

The Meadowood Center is comprised of two buildings: Meadowood North and Meadowood South.

Instructional space is located in Red Mountain, Sierra and Meadowood South.

Office space is located in Red Mountain, Sierra and Meadowood South.

Meadood North is currently leased to private entities by TMCC.

TMCC also owns vacant land adjacent to Meadowood North.

The Division of Business does not have any Tier 1 Class Labs.

General classrooms are located in Sierra and Meadowood South.

Division of Business instructional rooms and faculty will remain at Dandini campus. Some components of the Division of Business are housed at Meadowood South, but many Business components at the Dandini campus. Business classes that are currently taught at Meadowood may be moved to Dandini over time to increase utilization for other programs.

Meadood South will become primarily the ABE/ESL & WDCE focus center.

Meadood North could be used for future program expansion, if necessary. The vacancy rate at the time of publication is around 30%. Meadowood North generates revenue for TMCC, so the loss of revenue from conversion to TMCC instructional and support space would need to be evaluated.

OFFICES

- Offices are currently located in Meadowood South, Red Mountain and Sierra.
- Division of Business offices will be located on the Dandini Campus. It is proposed that the Division of Business faculty will be located in one common area.
- The Dean will be located in the Business faculty office area.
- ABE/ESL & WDCE offices will remain at Meadowood.
- There will be office space for part-time faculty. It will include a common work area, conference and collaboration space and individual storage.

- Conference rooms and collaboration space will be included in the faculty office area.
- Office space will be developed in line with TMCC guidelines.

FUTURE CONSIDERATIONS

Less than 10 years

- Growth in Adult Basic Education/ English as a Second Language, and Workforce Development & Continuing Education.

More than 10 years

- If programs expand to fill Meadowood North, a single-story student life space connecting the two buildings should be considered.

The College owns two +/- 1-acre parcels immediately north of the Meadowood campus. Should program expansion become a reality, TMCC could consider constructing another building, on one of these sites.

Division of Liberal Arts

DIVISION SUMMARY

The Division of Liberal Arts consists of four departments:

- English
- Humanities
- Social Sciences
- Visual and Performing Arts

In addition, the Child Care Center is under the Division of Liberal Arts.

Instructional space is in Red Mountain, Sierra, Vista and Nell J. Redfield Foundation Performing Arts Center and the E.L. Cord Child Care Center.

The Liberal Arts department also rents additional dance studio space in the Reno area.

Office space is in Red Mountain, Sierra, Vista and Nell J. Redfield Foundation Performing Arts Center, and the E.L. Cord Child Care Center.

Tier 1 Class Labs in Red Mountain, Sierra and Redfield Performing Arts Center.

Tier 2 Classrooms in Sierra and Vista.

Art Galleries

The art galleries are managed by the Liberal Arts Division, but are also considered a Student Life component, contributing to the "home-like" feel of the gathering spaces.

A new main Art Gallery is proposed for the 2nd floor of Red Mountain. The new Gallery will replace the first-floor space taken by the Student Services relocation.

Consider small spaces for art installations at all Academic Focus Centers. These could be as simple as an alcove off a corridor or a small room.

Tier 1 Class Labs to remain in Red Mountain and Sierra.

New Art Galleries with better visibility and access – consider small spaces for art installations at all Academic Focus Centers. These could be as simple as an alcove off a corridor or a small room.

Relocation of the Writing Center from the Vista Building into a more prominent location in the Knowledge Center.

The development of a new Fine Arts Center is included in the 2004 Facilities Master Plan. The complex is also a part of TMCC's future facility planning. The Center would be located on the Dandini campus.

OFFICES

- It is assumed the faculty at Redfield Performing Arts Center will remain at that facility until performing arts space is developed at the Dandini campus.
- The Child Care Center faculty offices will remain at the Child Care Center.
- Offices are proposed to be located at the Dandini Campus.
- As office moves occur over time, there should be an effort to co-locate like disciplines together whenever possible.
- There will be office space for part-time faculty. It will include a common work area, conference and

collaboration space and individual storage.

- Conference rooms and collaboration space will be included in the faculty office area.
- Office space will be developed in line with TMCC guidelines.

FUTURE CONSIDERATIONS

Less than 10 years

- Expand visual arts installation space in the Centers.
- Install wood floor in the Lobby of Redfield Foundation Performing Arts Center to allow it to be used for dance instruction.
- New Fine Arts Center on the Dandini campus.



Division of Sciences

DIVISION SUMMARY

The Division of Sciences consists of six departments: Allied Health, Biology, Computer Technologies, Math, Nursing and Physical Sciences. The Division offers course in the following:

- Biology
- Computer Technologies
- Culinary Arts
- Certified Nursing Assistant/Clinical Lab Specialist
- Dental Assisting
- Dental Hygiene
- Mathematics
- Nursing
- Nutrition
- Physical Sciences
- Radiologic Technology

Instructional space is in Meadowood South, Red Mountain, Sierra, Vista and Redfield Health Science Center.

Office space is in Red Mountain, Redfield Health Science Center at Redfield, Meadowood South and Sierra.

Tier 1 Class Labs in Red Mountain, Sierra, and Redfield Health Science Center:

- Red Mountain 220, 223, 250, 301, 302, 303, 304, 310, 320, 410, 413, 414, and 415
- Sierra 106, 110, 111, and 112.
- Redfield Health Science Center 108, 117, and 121

Tier 2 Classrooms in Red Mountain, Meadowood South, Sierra, and Redfield Health Science Center.



Development of additional class labs are required to respond to Division growth. New labs are required for science classes such as Organic Chemistry, Science, Engineering, Technology and Math (STEM). Robotics class labs (probable remodeling of existing labs) are required for growth in the Engineering program.

The proposed addition to the Redfield Health Science Center will provide additional classrooms, faculty offices & support space for Nursing.

OFFICES

- Offices will be located at Redfield Health Science Center for those faculty related to programs at Redfield Health Science Center. Offices will be in the Red Mountain building for Dandini- based science programs.
- The Dean's office will be in the Science faculty office area.
- As office moves occur over time, there should be an effort to co-locate similar disciplines together whenever possible.
- There will be office space for part-time faculty. It will include a common work area, conference and collaboration space and individual storage.
- Conference rooms and collaboration space will be included in the faculty office area.
- Office space will be developed in line with TMCC guidelines.

FUTURE CONSIDERATIONS

The Redfield Health Science Center is planned as the Health Science Center for the College. While every program may not be located at the Redfield Health Science Center in the short term the concept would be to continue development of Redfield Health Science Center as an academic focus center. It is anticipated that as the Health Science Center is developed, other instructional space, faculty and administrative personnel will located to the Redfield Health Science Center. The lack of public transportation is an issue for relocating some programs, such as CNA. Those programs will remain at the Dandini campus until these types of logistical issues can be resolved and additional funding is available for construction.

Less than 10 years

- Building addition at Redfield Health Science Center.
- New class Labs for Engineering and other Science programs at Red Mountain.

More than 10 years

- Continued development at Redfield Health Science Center.
- Possible joint use Science building with DRI. The possibility of a joint use Science building has been raised previously. If the program aligns itself with the Science programs remaining at Dandini, such a project could be a economical option for both institutions.

Division of WebCollege

DIVISION SUMMARY

WebCollege has both administrative and academic staff that serve two different purposes. The different requirements between the administrative and academic staff within the Division are unique to TMCC.

Academic departments are:

- History
- Political Science and Law
- Women's Studies

The administrative part of WebCollege is responsible for the Academic Support Center (ASC). The ASC consists of the following:

- Information Desk
- Issue Student identification cards
- Student Lockers
- Proctoring/Test Center
- Scheduling & Catalog
- Switchboard
- Part-Time Faculty Support/Orientation
- Part-Time Faculty/Student Help
- Part-Time Faculty Support
- Mail
- Keys for Faculty

Instructional space is in Red Mountain and Sierra.

The Academic Support Center is in Red Mountain.
Academic offices are in Red Mountain and Sierra.

Administrative office space is in Red Mountain and Sierra.

WebCollege instructors use Tier 3 classrooms at Dandini, Sierra and Vista.

No new instructional space is required at the Dandini campus for WebCollege academic departments.

OFFICES

Academic Faculty

- As office moves occur over time, there should be an effort to co-locate similar disciplines together whenever possible.
- There will be office space for part-time faculty. It will include a common work area, conference and collaboration space and individual storage.
- Conference rooms and collaboration space will be included in the faculty office area.
- Office space will be developed in line with TMCC guidelines.

Administrative Staff

- WebCollege administrative staff are separated from each other and the Academic Support Center. The staff should be brought into a location that puts the Dean and staff in one location. This location should also be adjacent to the Academic Support Center.
- It is recommended that WebCollege organizational structure be reviewed, as some responsibilities may be better served by alignment with Student Services or Administration (such as Student ID Cards, Switchboard, Proctoring/Test Center, Scheduling and Information Desk). With the proposed concept of a new Student Services area, some

of the ASC functions may benefit from location in those areas.

- Separate from the current WebCollege organizational structure, the locations of the Department functions should be reviewed. It may be that some of the functions may be better served by adjacent or proximity to functions that are under Student Services or Administration.

FUTURE CONSIDERATIONS

Less than 10 years

- Improvements to Distance Education offices and instructional space.
- Relocation of the Academic Support Center to a more prominent location and relocation of ASC staff to the same area.
- Evaluations of space locations and reporting assignments for WebCollege administrative functions.



Library/Learning Center

SUMMARY

The planning team suggests the Library can be a more active, dynamic and fun place to be. It can provide new types of educational and social experiences. The move from a more “traditional” Library to a contemporary “Learning Center” can introduce computer technology and interactive group spaces into the function and program. These are woven into the current book stacks and quiet study areas to create a more active place for learning and collaboration.

The Learning Center can combine with the new Student Center and student life spaces to be the campus focus for students and faculty.

The existing Library is located at the west end of the Sierra building.

The following functions are in the Library:

- Circulation
- Reference
- Open Study Areas
- Computer Kiosks
- Classroom
- Technical Services
- Periodicals
- Main Stacks
- Study Tables
- Staff Offices
- Human Resources Department

There are small library spaces at IGT Applied Technology Center, Meadowood South, and the Redfield Health Science Center.

The transition to a Learning Center will require new functions to be introduced. Some of the existing functions will be re-

purposed to support the new concept.

Learning Center functions will include:

- Technology Hub
- Computer Lab
- Group Study Rooms
- Conference Rooms
- Circulation
- Reference
- Classroom
- Technical Services
- Main Stacks/Periodicals/Reference
- Staff Offices

The Learning Center's space program would allow for these opportunities:

- Highly collaborative spaces as the focus of the open areas.
- Quiet study in study carrels removed from the main area.
- Group study rooms would have a 5 person average with some larger rooms. Group study rooms would be fully outfitted with computer technology.
- The existing quiet study areas would be revised to electronic commons and collaborative learning.
- The existing Library Instruction room would be revised into group study rooms.
- A new room would be added for Library Instruction. This room could serve other student and faculty needs when Library Instruction is not occurring.
- Possible distance learning component.
- Acoustical improvements

- Make better use of the exterior plaza by minimizing interior/exterior barriers.
- Improve the entry image and integrate the Library into the development of the new Student Center.

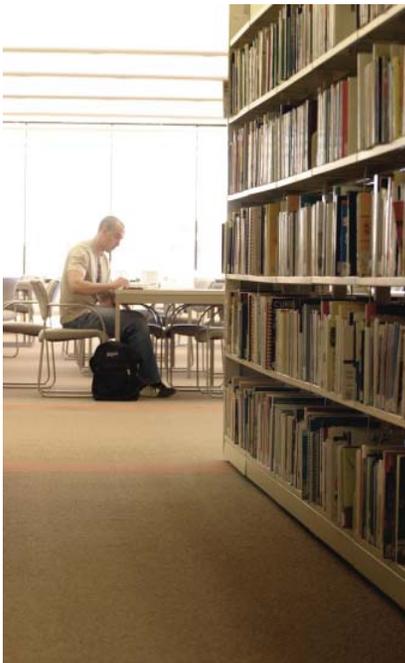
OFFICES

- Conference rooms and collaboration space will be included in the faculty office area.
- Office space will be developed in line with TMCC guidelines.

FUTURE CONSIDERATIONS

Human Resources is an administration function that has no relation with the Library or the new Learning Center. Human Resources should be relocated into an administrative location.

The change to a Learning Center concept is also proposed for the IGT Applied Technology Center, Meadowood South and the Redfield Health Science Center. While those centers would not have the full range of components, it is envisioned that each academic center can have a “mini Learning Center” with a technology hub, group study rooms and collaborative spaces. These satellite technology hubs could also be used as area for additional Student Life, Student Services, or WebCollege uses.



Administration

DEPARTMENT SUMMARY

Administration includes:

- President and administrative staff
- Vice President's and administrative staff
- Institutional Advancement/Foundation
- Institutional Research
- Police/Public Safety
- Human Resources
- Equity and Inclusion
- Facilities Operations and Planning
- Accounting Services
- Budget and Planning
- Information Technology Operations
- Information Technology Services
- Finance and Administration Services.

Locations of administration staff are as follows:

Red Mountain

- President's Office
- Institutional Advancement/Foundation
- Institutional Research
- Police/Public Safety
- Equity and Inclusion
- Accounting Services
- Budget and Planning
- Information Technology Operations
- Information Technology Services
- Finance and Administration Services

Sierra

- Vice President of Academic Affairs
- Vice President of Finance & Administrative Services
- Finance and Administration Services

Library

- Human Resources

Facilities Buildings

- Facilities Operations and Planning

Administrative departments are spread out on the Dandini campus. The President's office is difficult to find and is not conducive to entertaining community members or potential donors.

Administrative functions are many times interspersed within academic areas creating confusing and inefficient relationships. Administrative areas lack necessary restrooms, conference rooms (with A/V and conferencing technology) and lounges and collaboration spaces.

The Police Department needs more space for its operations. The department needs more office space and an improved system of questioning and processing individuals. An Emergency Operations Center (EOC) needs be developed within the public safety area. The department also needs access to a loading dock.

The hazardous materials area is not compliant with applicable regulations. The hazardous materials area is located on the first floor of the Red Mountain building, beneath the classrooms on the north end of the building.

In large part, the administrative functions are proposed to remain in their current locations. Potential improvements are as follows:

President's Office and Support

- The President's Office, Institutional Advancement/Foundation, Institutional Research and their respective support staff remain in their current location. There will be minor remodeling in the area. The Master Plan proposes a building addition on the ground floor that will include a new entry lobby and a new second floor entrance to the President's Suite.

Academic Affairs

- The Vice President's office and support staff are proposed to relocate to the second floor of the Red Mountain building. They will be located in general proximity to the President's Suite.

Finance & Administrative Services

- The Vice President's office and support staff are proposed to relocate to the second floor of the Red Mountain building. They will be located in general proximity to the President's Suite.



Administration

Police & Public Safety

- The Police & Public Safety will relocate to a larger area to the west of their current location, on the 2nd floor of Red Mountain. The enlarged space will allow adequate room for police functions. The ability to separate and process individuals is necessary for proper law-enforcement protocols. A properly secure evidence locker is needed, as well as adequate space for the Emergency Operations Center (EOC).
- The Police Move will make room for the Bookstore relocation, as discussed in Student Services.
- The hazardous materials area needs to be relocated to a space with adequate access, ventilation and security. The space should be a permanent, low-cost structure, ideally located near a service or workshop area.
- There are no public safety spaces at any of the Centers. It is proposed that there is a small space at each of the centers to act as a substation. This space could also function as an EOC as needed.
- With facilities in a number of different locations, staffing is a challenge. The College should consider the use of video surveillance to provide a level of security at each of the Centers. There is not a comprehensive system in place for video surveillance for Dandini or any of the Centers.

Human Resources

- Human Resources will relocate to the second floor of Red Mountain. The move will provide better access for TMCC employees.

Equity & Inclusion

- Equity and Inclusion will remain in their current location.

Facilities Operation & Planning

- Facilities Operation & Planning will remain in their current location. There are two existing portable buildings near the Grounds Shop, which will be replaced with permanent structures.
- The hazardous materials area should be relocated to the area near the Grounds Shop.

Information Technology Office

- ITO will remain in their current location.

Information Technology Services

- ITS will remain in their current location.

OFFICES

- As office moves occur over time, there should be an effort to co-locate like functions together whenever possible.
- Conference rooms and collaboration space will be included in the faculty office areas.
- Office space will be developed in line with TMCC guidelines.

FUTURE CONSIDERATIONS

Less Than 10 Years

- Addition on the first floor of Red Mountain for a new entry lobby and a new second floor entrance to the President's Suite.
- Considerations need to be made for incremental growth of the various administrative groups. A small amount of growth space appears to be adequate for the 10-year planning time frame.
- Storage space for records and files is lacking. The College may consider off-site storage for documents. Electronic filing should also be considered as a means to reducing paper storage needs in the future.



Office Space

SUMMARY

The current arrangement of faculty and administrative offices is a varied collection of sizes, groupings and locations. While the administrative offices tend to be clustered in groups related to the occupant's function, the faculty offices present a random "patchwork quilt" organization. Some departments are located in a centralized area and have their faculty gathered together with adequate support services nearby. Many departments have faculty scattered across the campuses, with offices assigned where space was available.

In many instances, the office or administrative group has moved into an area that had been vacated by another user. The move was often made without any reorganizing tenant improvement. The result has been many faculty and/or administrative staff moving into an office that is disproportionate in size to the College's organizational structure. This has often led to inefficiencies in the space plan due to arrangement and size of offices. This is particularly relevant in Meadowood South, where the college moved into existing office space that was never intended for college faculty.

The majority of the TMCC faculty is part-time. Currently part-time faculty are not given an office and must share small spaces within their department work areas, or a small area on the third floor of the Red Mountain Building.

FUTURE CONSIDERATIONS

The Master Plan offers the following recommendations for improving the faculty & administrative office arrangements on all campuses:

- The Facilities Services Department has prepared Facilities Space Guidelines for various positions within the College workforce. The planning team recommends full implementation of these guidelines for future office space allocation, i.e.: administration, faculty, part-time, full-time, non-academic, classified and professional positions. Extensive remodeling is not proposed for each office area. In areas where a tenant improvement is being planned, remodeling and reorganization should be in accordance with the Facilities Space Guidelines.
- The College should consider small scale relocation projects to begin the process of gathering department and Division staff into common areas. This could be done with one Division in a preliminary design effort prior to commencing detailed design or construction.
- Plan office space so faculty have offices closer to their academic peers, while enforcing the Space Guidelines. This will foster collaboration within academic work groups.
- Provide dedicated areas in each building for part-time faculty offices and work centers.
- Conference rooms and collaboration space will be included in the faculty office area.

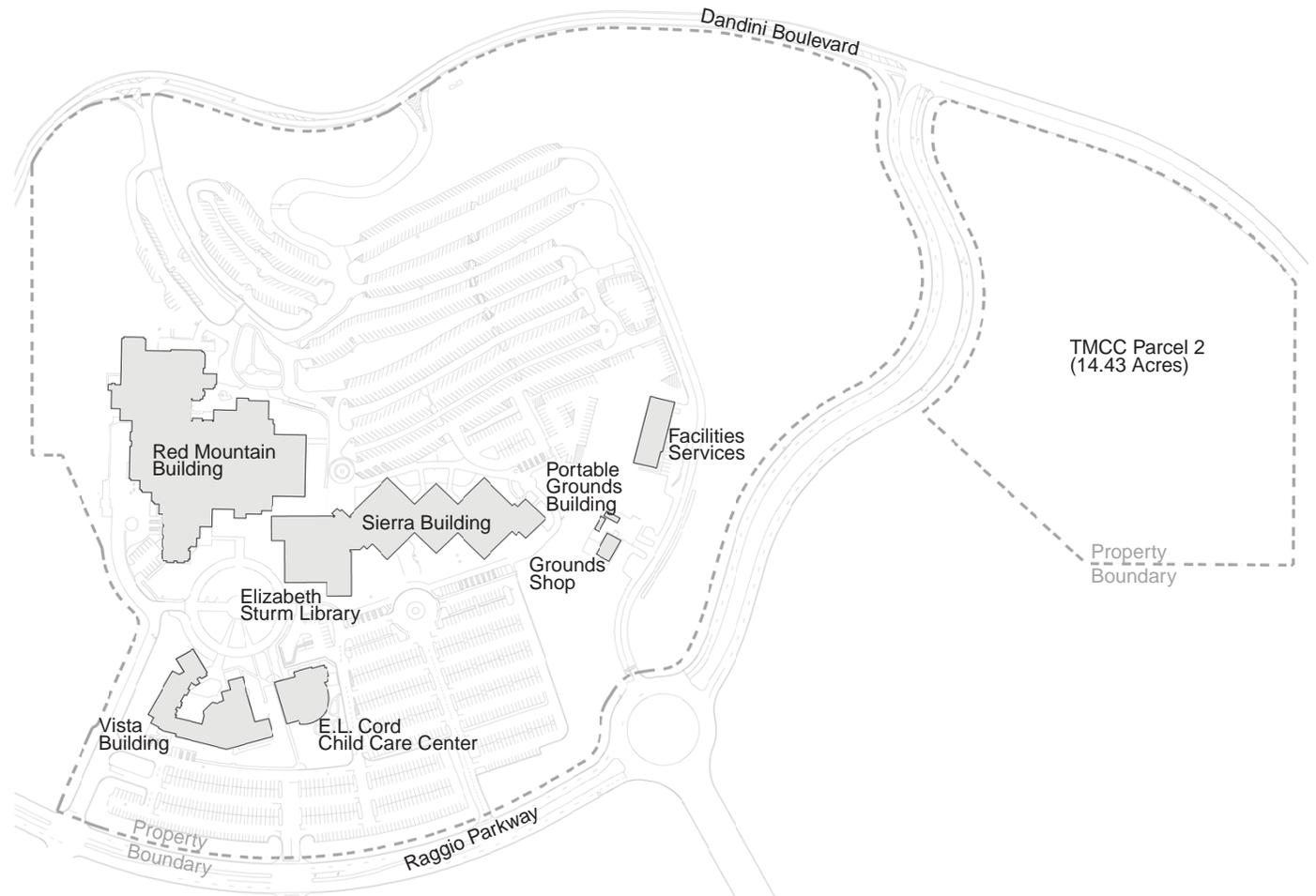


EXISTING PLANS

Existing Dandini Campus

Legend

Existing Building



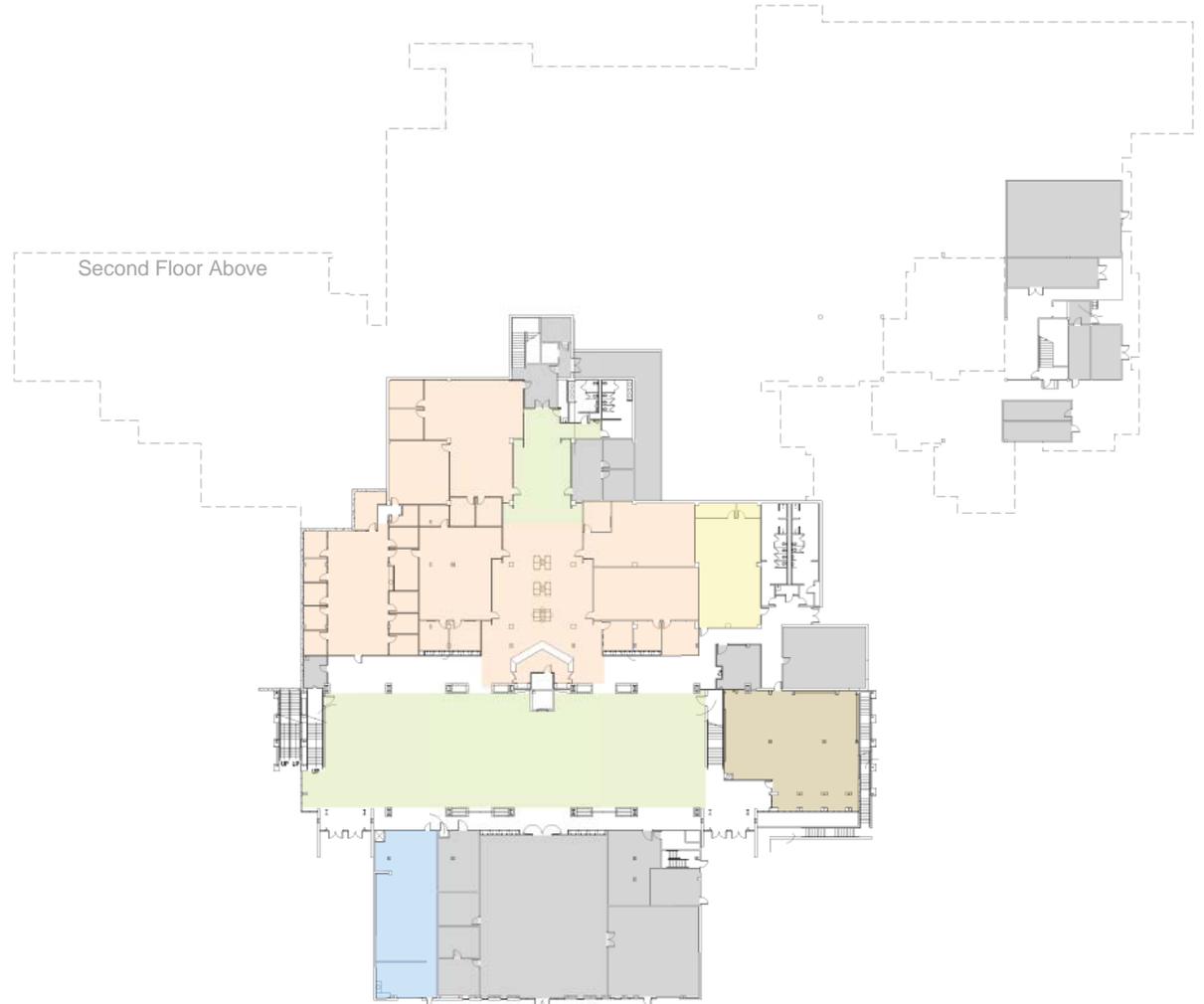
Site Plan
No Scale

EXISTING PLANS

Existing Red Mountain Building

Legend

-  Division of Liberal Arts Classroom
-  Division of Science Classroom
-  Division of Business Classroom
-  Student Services Office
-  Student Life Common Area
-  Non-Academic Services / Admin.



 **First Floor Plan**
Scale: 1" = 80'

EXISTING PLANS

Existing Red Mountain Building

Legend

-  Division of Liberal Arts Classroom
-  Division of Liberal Arts Office
-  Division of Science Classroom
-  Division of Science Office
-  Division of Business Classroom
-  Division of Business Office
-  Division of WebCollege Office
-  Student Services Office
-  Student Life Common Area
-  Tier 3 Classroom
-  Non-Academic Services / Admin.



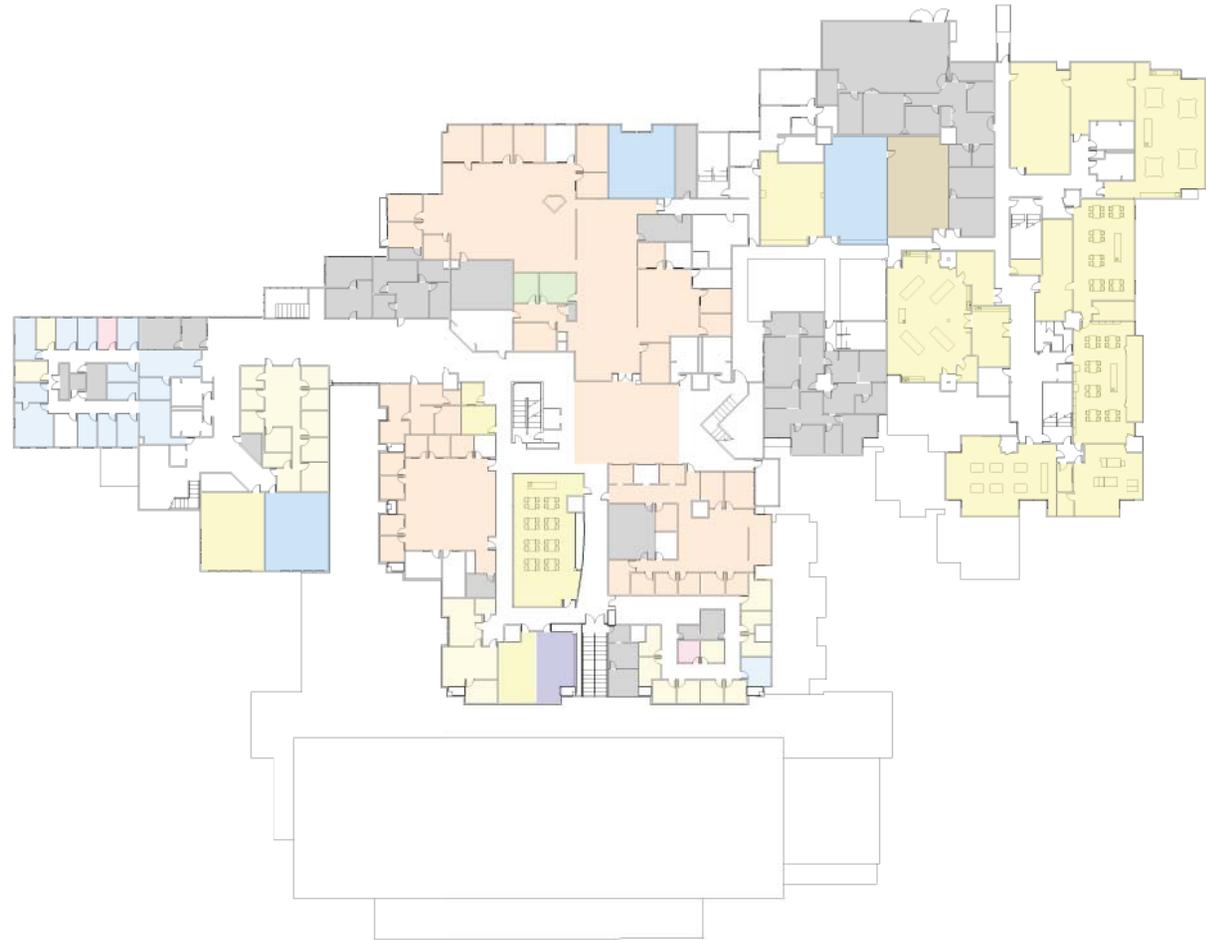
 **Second Floor Plan**
Scale: 1" = 80'

EXISTING PLANS

Existing Red Mountain Building

Legend

-  Division of Liberal Arts Classroom
-  Division of Liberal Arts Office
-  Division of Science Classroom
-  Division of Science Office
-  Division of AIT Office
-  Division of Business Classroom
-  Division of WebCollege Office
-  Student Services Office
-  Tier 3 Classroom
-  Non-Academic Services / Admin.



 Third Floor Plan
Scale: 1" = 80'

EXISTING PLANS

Existing Red Mountain Building

Legend

-  Division of Science Classroom
-  Division of Science Office
-  Tier 3 Classroom
-  Non-Academic Services / Admin.



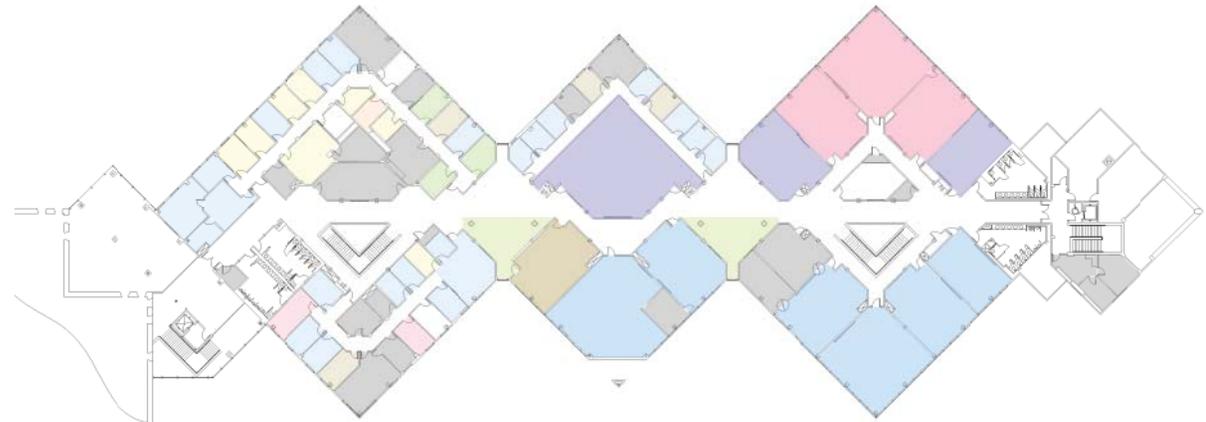
➤ Fourth Floor Plan
Scale: 1" = 80'

EXISTING PLANS

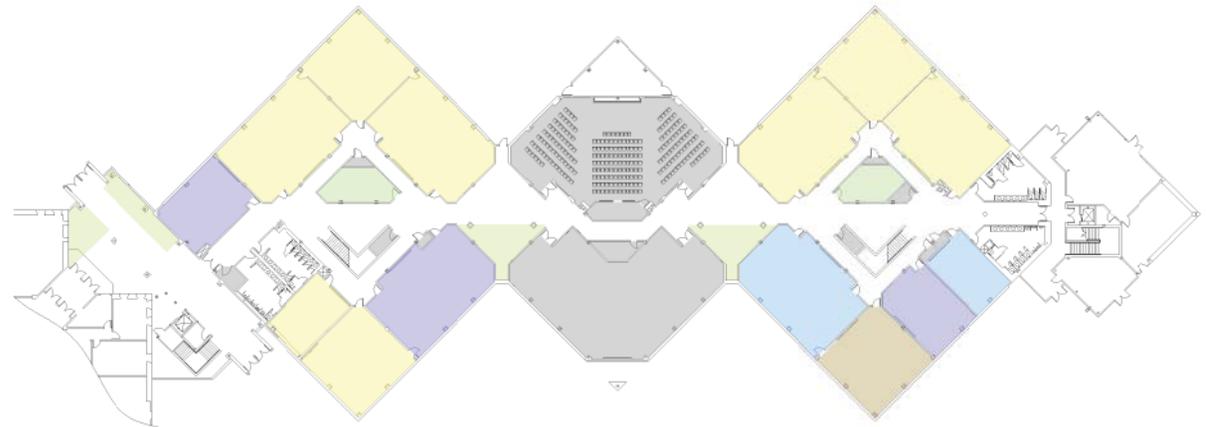
Existing Sierra Building

Legend

-  Division of Liberal Arts Classroom
-  Division of Liberal Arts Office
-  Division of Science Classroom
-  Division of Science Office
-  Division of AIT Classroom
-  Division of AIT Office
-  Division of Business Classroom
-  Division of Business Office
-  Division of WebCollege Classroom
-  Division of WebCollege Office
-  Student Services Office
-  Student Life Common Area
-  Tier 3 Classroom
-  Non-Academic Services / Admin.



▲ Second Floor Plan
Scale: 1" = 80'



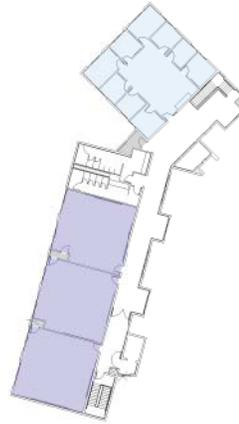
▲ First Floor Plan
Scale: 1" = 80'

EXISTING PLANS

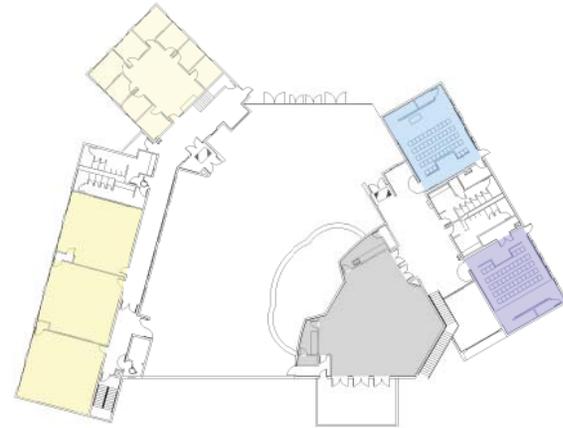
Existing Vista Building

Legend

-  Division of Liberal Arts Classroom
-  Division of Liberal Arts Office
-  Division of Science Classroom
-  Division of Science Office
-  Division of WebCollege Office
-  Tier 3 Classroom
-  Non-Academic Services / Admin.



▲ Third Floor Plan
Scale: 1" = 80'



▲ Second Floor Plan
Scale: 1" = 80'



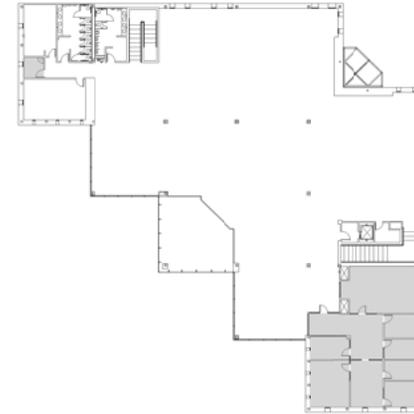
▲ First Floor Plan
Scale: 1" = 80'

EXISTING PLANS

Existing Elizabeth Sturm Library

Legend

-  Tier 3 Classroom
-  Non-Academic Services / Admin.



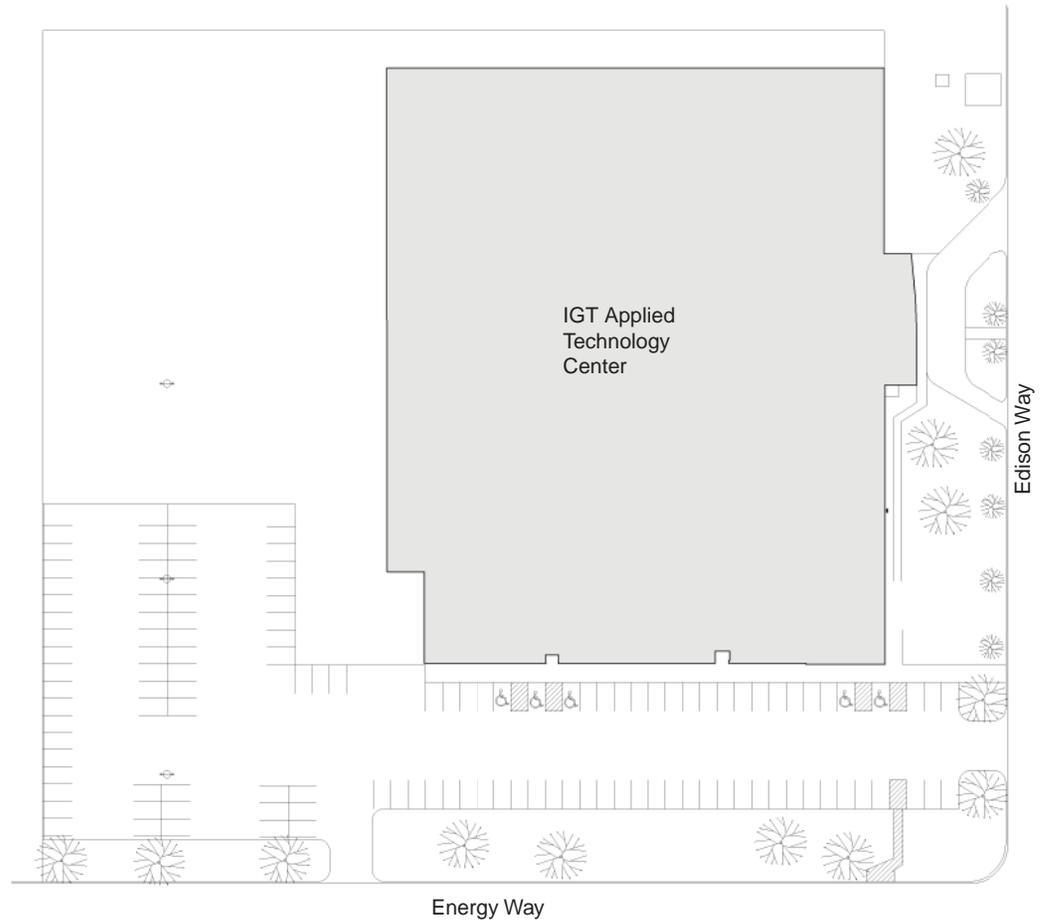
 **Second Floor Plan - Library**
Scale: 1" = 80'



 **First Floor Plan - Library**
Scale: 1" = 80'

EXISTING PLANS

Existing IGT Applied Technology Center



▲ Site Plan
Scale: 1" = 100'

EXISTING PLANS

Existing IGT Applied Technology Center

Legend

-  Division of Science Office
-  Division of AIT Classroom
-  Division of AIT Office
-  Division of WebCollege Office
-  Student Life Common Area
-  Tier 3 Classroom
-  Non-Academic Services / Admin.



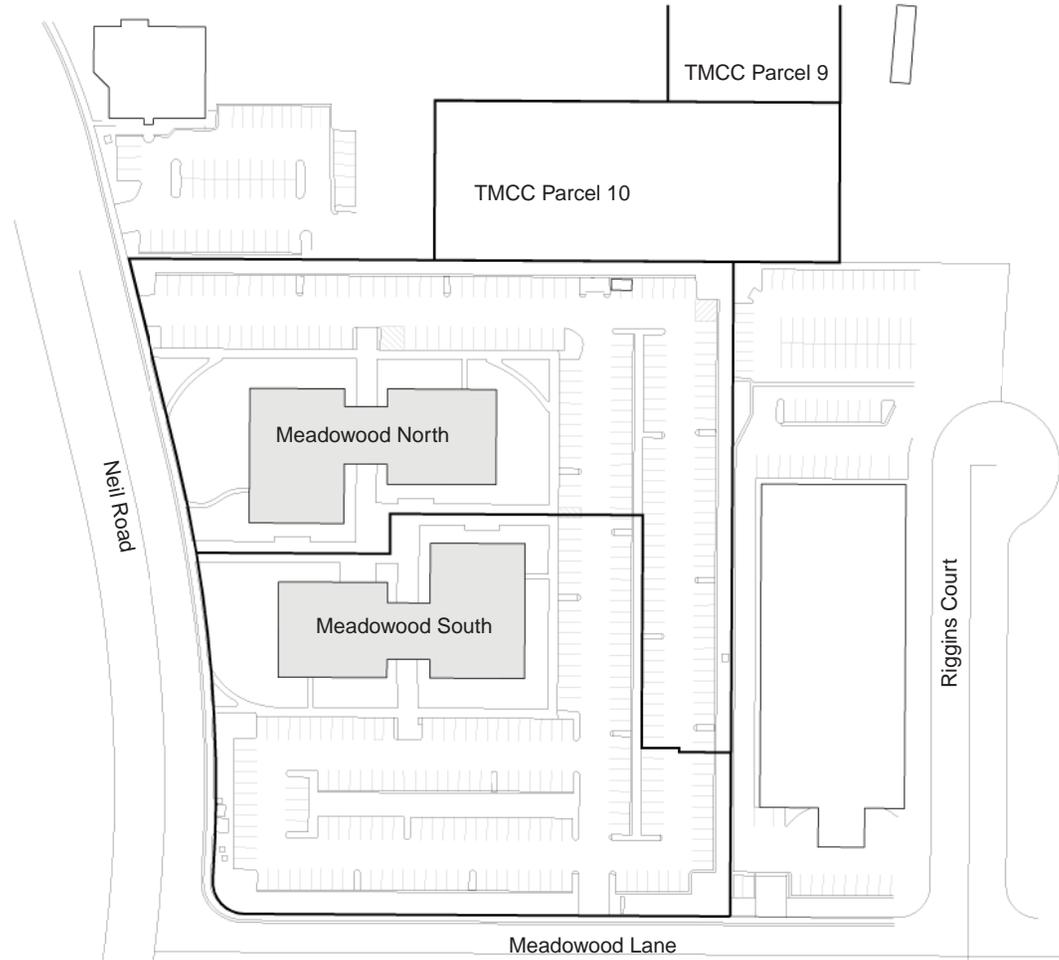
▲ Second Floor Plan
Scale: 1" = 80'



▲ First Floor Plan
Scale: 1" = 80'

EXISTING PLANS

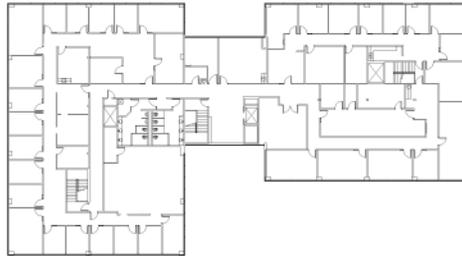
Existing Meadowood Center



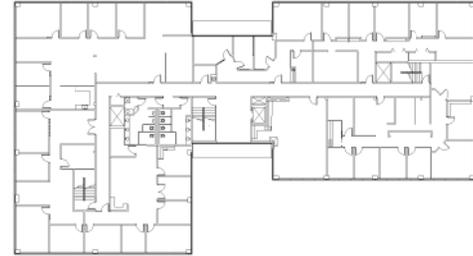
▲ Site Plan
Scale: 1" = 150'

EXISTING PLANS

Existing Meadowood Center North



▲ Third Floor Plan
Scale: 1" = 80'



▲ Second Floor Plan
Scale: 1" = 80'



▲ First Floor Plan
Scale: 1" = 80'

EXISTING PLANS

Existing Meadowood Center South

Legend

-  Division of Liberal Arts Classroom
-  Division of Science Office
-  Division of Business Classroom
-  Division of Business Office
-  Student Services Office
-  Student Life Common Area
-  Tier 3 Classroom
-  Non-Academic Services / Admin.



▲ Third Floor Plan
Scale: 1" = 80'



▲ Second Floor Plan
Scale: 1" = 80'



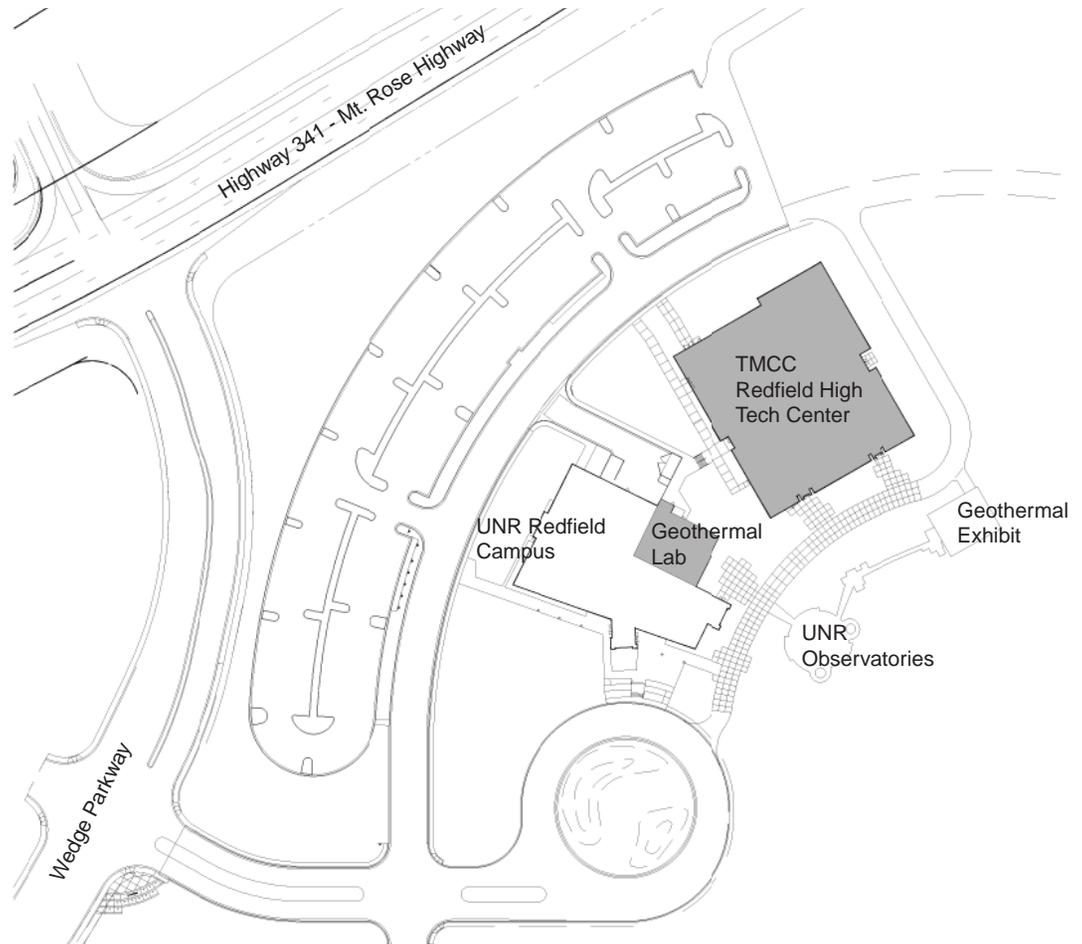
▲ First Floor Plan
Scale: 1" = 80'

EXISTING PLANS

Existing Redfield High Tech Center

Legend

Existing Building



Site Plan
Scale: 1" = 200'

EXISTING PLANS

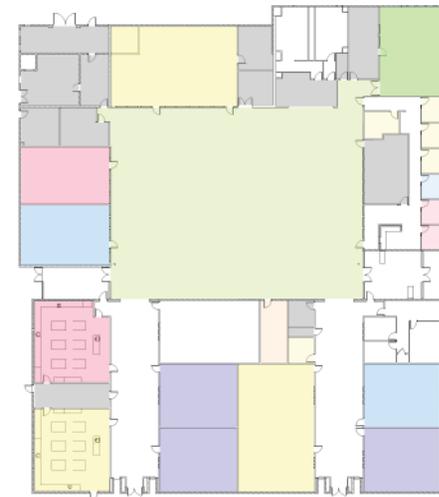
Existing Redfield High Tech Center

Legend

-  Division of Liberal Arts Classroom
-  Division of Liberal Arts Office
-  Division of Science Classroom
-  Division of Science Office
-  Division of AIT Classroom
-  Division of AIT Office
-  Division of WebCollege Classroom
-  Student Services Office
-  Student Life Common Area
-  Tier 3 Classroom
-  Non-Academic Services / Admin.



▲ First Floor Plan - Geothermal Lab at UNR Redfield Campus
Scale: 1" = 80'



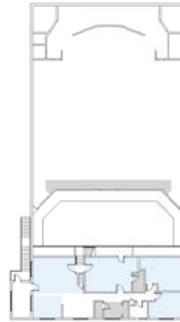
▲ First Floor Plan - TMCC Redfield High Tech Center
Scale: 1" = 80'

EXISTING PLANS

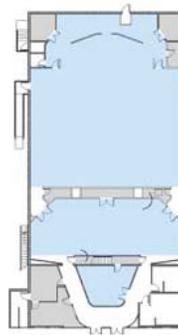
Existing Redfield Performing Arts Center

Legend

-  Division of Liberal Arts Classroom
-  Division of Liberal Arts Office
-  Non-Academic Services / Admin.



 **Second Floor Plan**
Scale: 1" = 80'



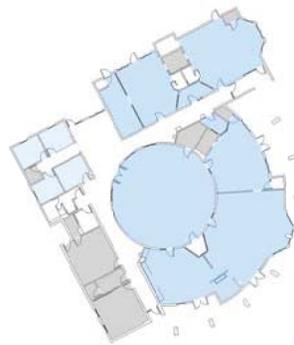
 **First Floor Plan**
Scale: 1" = 80'

EXISTING PLANS

Existing Child Care Center

Legend

-  Division of Liberal Arts Classroom
-  Division of Liberal Arts Office
-  Non-Academic Services / Admin.



 First Floor Plan - Child Care Center
Scale: 1" = 80'



TRANSPORTATION CONDITIONS

MEMORANDUM

Date: March 10, 2014

To: Max Hershenow, H+K Architects
Lee Murray, H+K Architects

From: Katy Cole, PE, Fehr & Peers

Subject: TMCC Facilities Master Plan – Transportation Conditions

SJ13-1480

This memorandum summarizes the existing transportation setting and provides transportation and parking recommendations for the following three Truckee Meadows Community College (TMCC) campuses:

- IGT Applied Technology Center
- Meadowood Center
- Dandini Campus

TRANSPORTATION CONDITIONS

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IGT APPLIED TECHNOLOGY CENTER

EXISTING TRANSPORTATION SETTING

The IGT Applied Technology Center is located on Edison Way between Energy Way and Joule Street in Reno, NV. The campus has a drop-loop on Edison Way and there are full access driveways to/from the parking lot on Edison Way and Energy Way. The campus is located across the street from the Washoe County School District's Academy of Arts, Careers and Technology school, which is a high school.

Roadways

Edison Way and Energy Way provide access to the IGT Applied Technology Center each roadway is described below:

Edison Way: Edison Way has one travel lane in each direction with a two-way center left turn lane. There is on-street parking on both sides of the street. The posted speed limit in the campus vicinity is 35 mph except during school start and end for the Academy of Arts, Careers and Technology school. Edison Way is classified as a "collector" roadway by the City of Reno and a "moderate access control arterial" by the Regional Transportation Commission (RTC).

Energy Way: Energy Way has one travel lane in each direction with a two-way center left turn lane. There is on-street parking on both sides of the street. The posted speed limit in the campus vicinity is 35 mph. Energy Way is classified as a "local" roadway by the City of Reno.

Table 1 shows the annual average daily traffic volume on Edison Way from 2008-2012.

TRANSPORTATION CONDITIONS

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TABLE 1
ANNUAL AVERAGE DAILY TRAFFIC VOLUMES NEAR IGT APPLIED TECHNOLOGY CENTER

Location	Annual Average Daily Traffic (AADT) ¹					
	2008	2009	2010	2011	2012	Annual % Change ²
Edison Way: 0.1 Miles North of Rock Blvd	2,600	2,200	2,100	1,900	1,700	-7%

Notes: ¹ Data from Nevada Department of Transportation's (NDOT) 2012 Annual Traffic Report

² Annual % Change is calculated using the 2008 and 2012 volumes and averaging the percent change by 5- years.

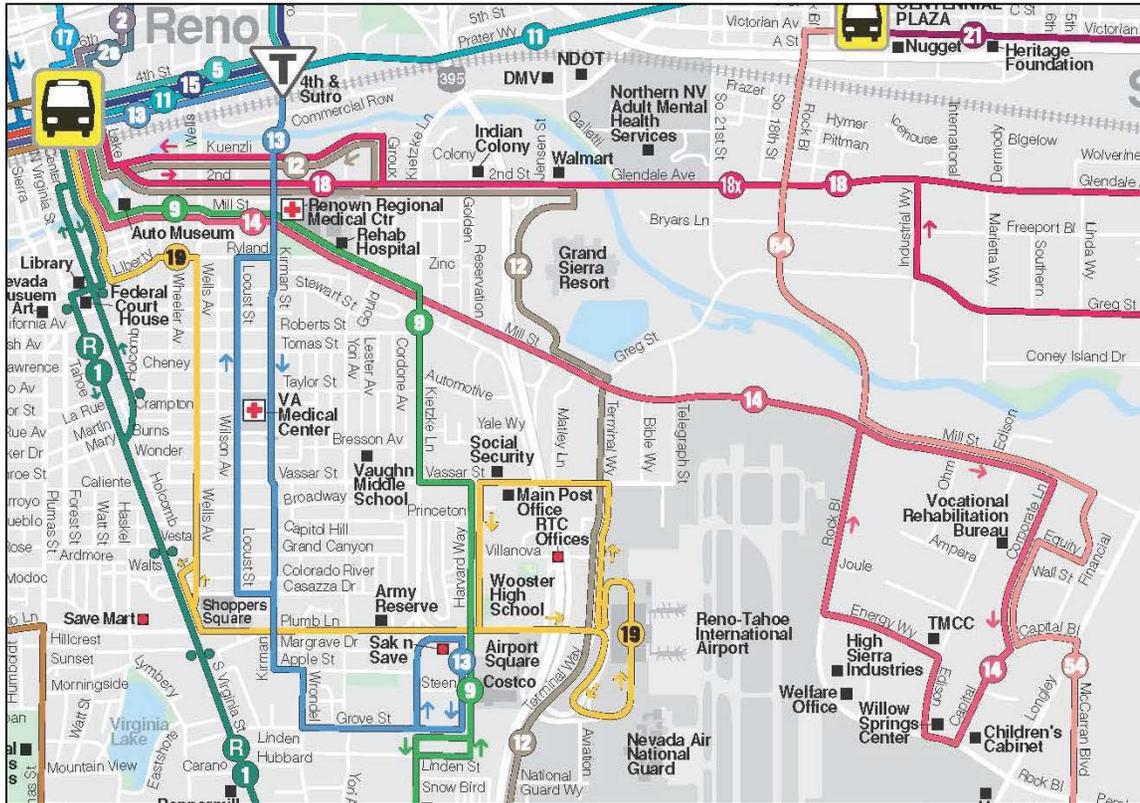
Source: Fehr & Peers, 2014

We observed traffic conditions in the campus vicinity, and in general, traffic volumes are low. However, during the start and end of the school day at the Academy of Arts, Careers and Technology school there is a significant amount of drop-off/pick-up traffic on Edison Way. In addition, vehicles park along Edison Way in the afternoon waiting to pick-up students. The Academy of Arts, Careers and Technology starts at 8:00am and ends at 3:00pm (2:15pm on Wednesdays).

Transit

RTC Ride Route 14 travels adjacent to the IGT Applied Technology Center. Route 14 provides a connection between the Center and Downtown Reno's 4th Street Station via Mill Street, Corporate Lane, Capital Way, Edison Way, Energy Way, and Rock Boulevard as shown on the system map image below. On weekdays between 6:15am and 6:15pm, Route 14 is scheduled every half-hour. There is a RTC bus stop on the northwest corner of the Edison Way/Energy Way intersection.

TRANSPORTATION CONDITIONS



RTC Ride System Map: Route 14

Bicycle and Pedestrian Facilities

Currently, there are not striped bicycle lanes on Edison Way or Energy Way near the IGT Applied Technology Center. Bicycle lanes are identified as a proposed improvement on Edison Way from Mill Street to Rock Boulevard in the *Reno Sparks Bicycle and Pedestrian Master Plan (2011)*.

There are no sidewalks on Edison Way and Energy Way adjacent to the IGT Applied Technology Center. The only sidewalk in the campus vicinity is on the east side

of Edison Way adjacent to the Academy of Arts, Careers and Technology school. There is a marked mid-block crosswalk that provides access from the northeast edge of the IGT Applied Technology campus to the Academy of Arts, Careers and Technology school.

TRANSPORTATION RECOMMENDATIONS

Figure 1 displays our transportation and parking recommendations for the IGT Applied Technology Center.



TRANSPORTATION CONDITIONS

We understand that parking is typically not problematic, but occasionally students, staff, and visitors do have trouble finding parking in the surface parking lot. One opportunity is to explore sharing parking with the Academy of Arts, Careers and Technology. The Academy of Arts, Careers and Technology has approximately 70 parking spaces that are in close proximity to the IGT Applied Technology Center. These parking spaces are mostly empty after school ends at 3:00pm (2:15pm on Wednesdays).

To enhance the pedestrian connection between the IGT Applied Technology campus to the Academy of Arts, Careers and Technology school, we recommend enhancing the existing mid-block crosswalk by installing "curb extensions" and Rapid Rectangular Flashing Beacons (RRBF) (also called "stutter flash beacons"). In addition, we recommend connecting the crosswalk to the IGT Applied Technology Center front door by installing a sidewalk as shown on Figure 1. The recommended treatments are described in additional detail below.

- Curb Extensions (also known as "bulb-outs") – the sidewalk at a crosswalk that extend into the parking lane). They increase pedestrian visibility pedestrian is standing on the outside of the blocked by parked cars. In addition, they shorten distance and they reduce right-turning vehicle
- Rapid Rectangular Flashing Beacons (RRFB) – activated beacons that alert drivers to the have rapid flashing LED lights that are visible are similar to an emergency vehicle's flashing shown that they have high driver compliance the device is active. This device has been used throughtout Reno including on Viginia Street and on Kietzke Lane.



Curb extensions are areas on roadway (into the on-street to motorists because the parking lane and is not the pedestrian crossing speeds.



RRFBs are pedestrian pedestrians presence. They during day and night and pattern. Studies have with drivers yielding when at several locations and Sierra Street near UNR

Enhancing the pedestrian connection is very important

if parking is shared

TRANSPORTATION CONDITIONS



between IGT Applied Technology Center and the Academy of Arts, Careers and Technology. The connection would also improve pedestrian conditions for students who currently walk between the two campuses.

MEADOWOOD CENTER

EXISTING TRANSPORTATION SETTING

Meadowood Center is located on Neil Road between Marvel Way and Meadowood Lane south of McCarran Boulevard in Reno, NV. The campus is across the street from Meadowood Mall. There are two building owned by TMCC: the north building is leased and is composed mostly of professional offices, and the south building is the TMCC Meadowood Center. The buildings have a surface parking lot and there is signage designating separate parking for the TMCC Meadowood Center and the office building.

Roadways

McCarran Boulevard, Neil Road, and Meadowood Lane provide access to the Meadowood Center and each roadway is described below:

McCarran Boulevard: McCarran Boulevard has three lanes in each direction and left-turn and right-turn lanes at major intersections near Meadowood Center. The posted speed limit on McCarran Boulevard in the campus vicinity is 35 mph. McCarran Boulevard is classified as a “major arterial” by the City of Reno and a “high access control arterial” by the RTC.

Neil Road: Neil Road has one lane in each direction and a two-way center left turn lane. Neil Road was improved as a “complete street” by the RTC and it includes bike lanes and on-street parking. The posted speed limit is 35 mph. Neil Road is classified as a “minor arterial” by the City of Reno and a “low access control arterial” by the RTC.



Meadowood Lane: Meadowood Lane has one lane in each direction, a speed limit of 25 mph, and on-street parking on both sides of the street. It does not have any lane striping except at intersections. Meadowood Lane is classified as a “local” roadway by the City of Reno.

Table 2 shows the annual average daily traffic volume on McCarran Boulevard and Neil Road near the campus from 2008-2012.

TABLE 2
ANNUAL AVERAGE DAILY TRAFFIC VOLUMES NEAR MEADOWOOD CENTER

Location	Annual Average Daily Traffic (AADT) ¹					Annual % Change ²
	2008	2009	2010	2011	2012	
McCarran Blvd: 0.1 Miles West of Neil Rd	18,000	18,000	16,000	16,000	16,000	-2%
Neil Rd: 0.1 Miles South of McCarran Blvd	9,800	8,900	8,500	8,400	8,300	-3%

Notes: ¹ Data from Nevada Department of Transportation’s (NDOT) 2012 Annual Traffic Report

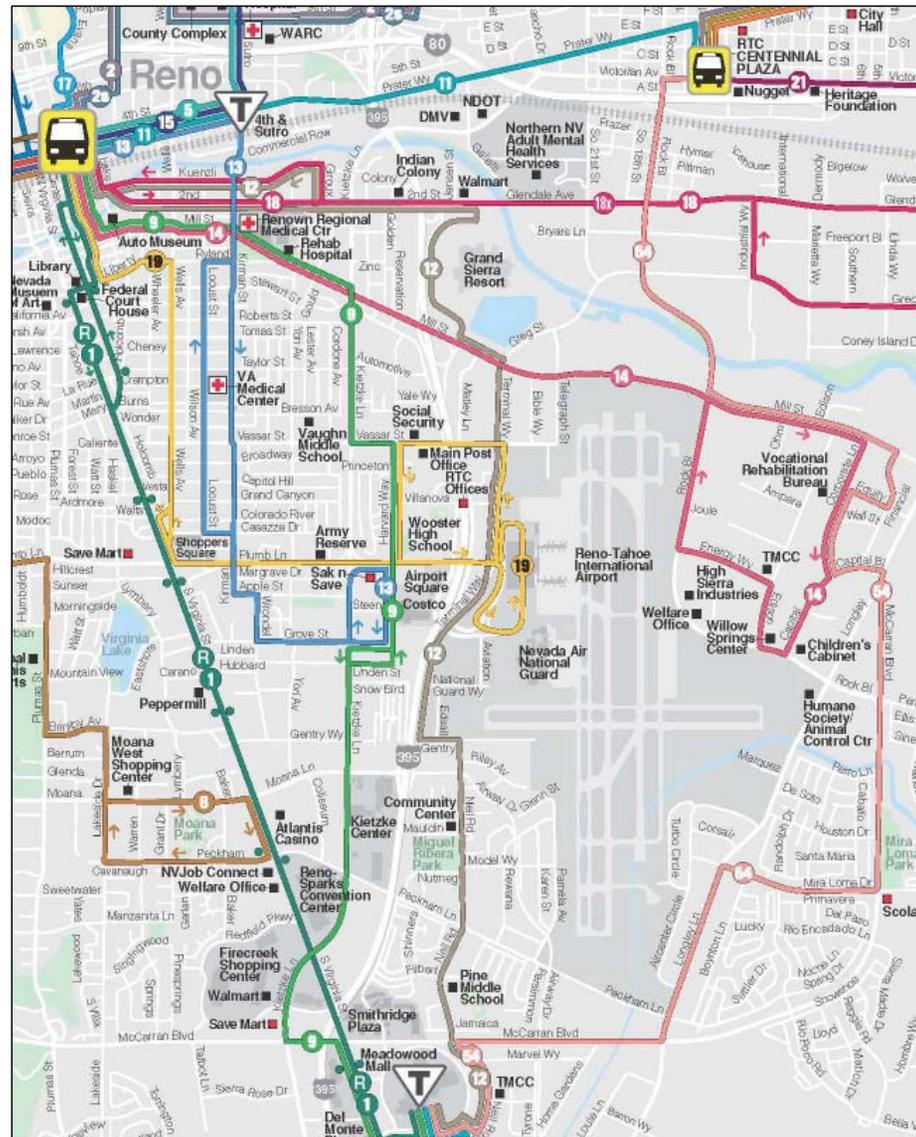
² Annual % Change is calculated using the 2008 and 2012 volumes and averaging the percent change by 5- years.

Source: Fehr & Peers, 2014

Transit

RTC Ride Routes 12 and 54 travel adjacent to Meadowood Center on Neil Road. Route 12 provides access between the Meadowood Mall Transit Center and Downtown Reno 4th Street Station via Neil Road, Terminal Way, Mill Street, and 2nd Street as shown on the system map image below. On weekdays between 5:45am and 5:45pm, Route 12 is scheduled every half-hour. Route 54 connects the Meadowood Mall Transit Center and the Sparks Centennial Plaza Transit Center via Neil Road, McCarran Boulevard, Longley Lane, Mill Street, and Road Boulevard as shown on the system map image below. On weekdays between 5:30am and 6:30pm, Route 54 is

TRANSPORTATION CONDITIONS



RTC Ride System Map: Routes 12 and 54

scheduled every hour. In addition to the routes that travel immediately adjacent to Meadowood Center, the Meadowood Mall Transfer Station is within walking distance and provides access to several more transit routes including RTC Rapid, which provides bus rapid transit service to Downtown Reno.

Bicycle and Pedestrian Facilities

Currently, there are striped bicycle lanes on Neil Road adjacent to Meadowood Center.

There are sidewalks on both sides of Neil Road and Meadowood Lane adjacent to Meadowood Center. There is a striped crosswalk across Neil Road at

TRANSPORTATION CONDITIONS



Meadowood Lane which connects Meadowood Center to the mall.

TRANSPORTATION RECOMMENDATIONS

Figure 2 displays our transportation and parking recommendations for Meadowood Center.

We understand that parking can occasionally be challenging at Meadowood Center. There are three opportunities shown on **Figure 2** to increase the parking supply for Meadowood Center:

- Explore sharing parking with St. Mary's Urgent Care, which is located across Meadowood Lane, south of Meadowood Center. There are approximately 130 parking spaces that are in close proximity to Meadowood Center.
- Work with the City of Reno to provide striping on Meadowood Lane. Currently, on-street parking is available on the street; however, it appears to be underutilized possibly because people don't realize that it is on-street parking. The available parking would be apparent if a centerline stripe and parking space markings were striped as shown on **Figure 2**. Approximately, 45 on-street parking spaces could be designated on Meadowood Lane between Neil Road and Riggins Court.
- Neil Road also provides on-street parking. There are 8 parking spaces that are very convenient to the Meadowood Center entrance. Students, faculty, and staff could be reminded that these parking spaces are available for their use.

DANDINI CAMPUS

EXISTING TRANSPORTATION SETTING

The TMCC Dandini Campus is located on Dandini Boulevard in north Reno. The Dandini Campus is TMCC's main campus and includes multiple buildings and student amenities. The campus has access on Dandini Boulevard and Raggio Parkway. The Dandini Campus has two driveways (one inbound and one outbound) on Dandini Boulevard that provide access to the north parking area. There are three

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two-way driveways on Raggio Parkway that provide access to the south parking area. In addition, the Campus Loop Road connects to the two-lane Raggio Parkway roundabout and provides access to the TMCC facilities department and the north parking area. Currently, there are no direct campus connections between the north parking area and south parking area. If someone wants to travel between the two parking areas they must use the Campus Loop Road and Raggio Parkway.

One of the primary challenges on the campus is parking. During the first several weeks of the school year parking demand exceeds parking supply. The campus currently has 1,547 permanent parking spaces and 608 overflow parking spaces. The overflow parking spaces are located as follows:

- 121 spaces on-campus (spaces that are marked in unpaved areas in the northern parking area).
- 110 spaces along the Raggio Cul-De-Sac (aka. Hockey Stick area).
- 377 spaces in an overflow parking lot that is south of Raggio Parkway.

The overflow parking lot south of Raggio Parkway is on Desert Research Institute's (DRI) property. DRI plans on constructing the first phase of their Research Park Master Plan on this property, which will result in TMCC losing the overflow parking lot.

A Fine Arts Center is also planned on the Dandini Campus, south of the Sierra Building. The Fine Arts Center would be constructed on a portion of TMCC's surface parking and would result in the loss of approximately 120 parking spaces. In total, TMCC will lose approximately 500 parking spaces with the future developments.

Another challenge with the Dandini Campuses parking is that the north parking area is characterized by several long terraced parking aisles. The aisles are difficult to circulate through and in efficient.



Roadways

Dandini Boulevard and Raggio Parkway provide direct access to the Dandini Campus. The US 395/Dandini Boulevard/Parr Boulevard interchange provides access from US 395 and Clearacre Lane/Sun Valley Boulevard also provides access to the Dandini Campus. Dandini Boulevard and Raggio Parkway are described below:

Dandini Boulevard: Dandini Boulevard is a windy two lane roadway that extends from US 395 to Sun Valley Boulevard. West of US 395, Dandini Boulevard changes names and becomes Parr Boulevard. East of Sun Valley Boulevard, Dandini Boulevard changes names and becomes El Rancho Drive. The posted speed limit on Dandini Boulevard is 35 mph. Dandini Boulevard is classified as a “minor arterial” by the City of Reno and a “moderate access control arterial” by the RTC.

Raggio Parkway: Raggio Parkway is a four lane roadway with turn lanes at intersections. It was recently repaved by DRI. Raggio Parkway is approximately one mile in length and connects to Dandini Boulevard west of DRI and east of TMCC. The posted speed limit is 25 mph; however, speeds on the roadway are typically higher. Raggio Parkway is currently under DRI’s jurisdiction, although DRI is working with the City of Reno to transfer ownership; therefore, the City of Reno does not have a classification. The RTC classifies Raggio Parkway as a “moderate access control arterial.”

Table 3 shows the annual average daily traffic volumes near the Dandini Campus from 2008-2012.

**TABLE 3
ANNUAL AVERAGE DAILY TRAFFIC VOLUMES NEAR MEADOWOOD CENTER**

Location	Annual Average Daily Traffic (AADT) ¹					Annual % Change ²
	2008	2009	2010	2011	2012	

TRANSPORTATION CONDITIONS



Dandini Blvd: 200 Feet East of US 395	8,700	8,000	8,000	8,000	6,900	-4%
Dandini Boulevard: .3 Miles West of Sun Valley Blvd	NA	NA	3,000	NA	3,800	+9%

Notes: ¹Data from Nevada Department of Transportation’s (NDOT) 2012 Annual Traffic Report
²Annual % Change is calculated using the 2008 and 2012 volumes and averaging the percent change by 5- years (3-year for Dandini Blvd west of Sun Valley Blvd).
 Source: Fehr & Peers, 2014

RTC Planned Improvements

The RTC has a major project planned in the vicinity of the Dandini Campus: the Pyramid Highway US 395 Connection. The Connection project includes constructing a new freeway from Pyramid Highway to US 395 over the next 20+ years over nine phases (as shown on **Attachments A and B**). Many of the changes near the Dandini Campus are planned in Phase 1, which could begin construction in 2020 at the earliest. Currently the project is in the preliminary design and environmental documentation stage. The preferred alternative appears to be Alternative 3, which will be presented to the RTC Board and Technical Advisory Committee in 2014 for final concurrence.

Elements of the project that will affect the Dandini Campus are:

- The US 395/Dandini Boulevard interchange will be removed to accommodate the US 395/New Freeway interchange. Ramps will be provided within the new interchange to connect to Dandini Boulevard west of the Dandini Campus.
- A roundabout is shown on the preliminary design plans at the Dandini Boulevard/ Raggio Parkway west intersection.
- Dandini Boulevard would be reconstructed (straightened out) and would end at the east Dandini Boulevard/Raggio Parkway intersection. A new roadway would be constructed to access Sun Valley Boulevard as shown on **Attachment C**.
- An interchange will be constructed to connect the new freeway to Dandini Boulevard. The preliminary interchange location is east of the Dandini Campus.

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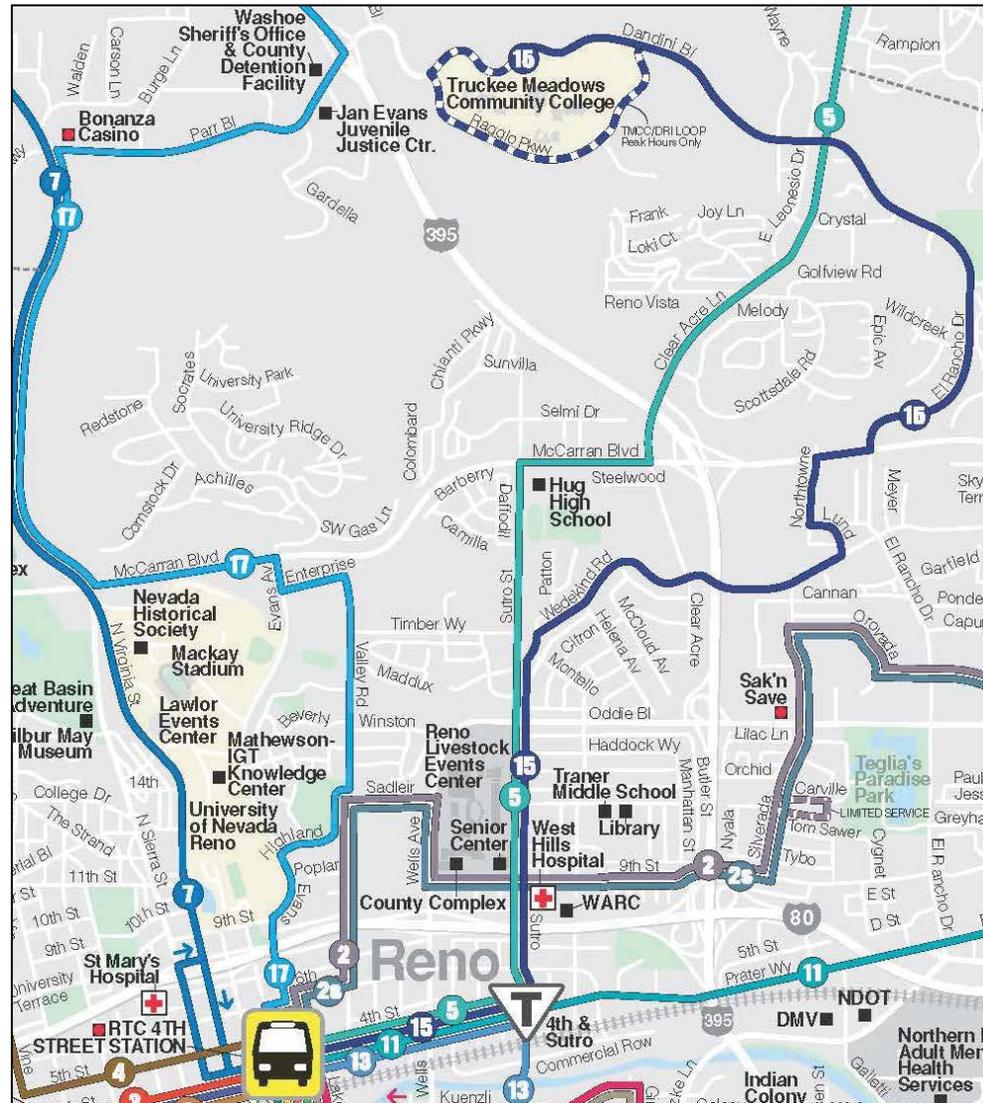


- **Attachment D** shows how vehicles entering and exiting the Dandini Campus would travel through the area once the Connection project is complete.
- Additional information about the Pyramid Highway US 395 Connection can be found at <http://pyramidus395connection.com/maps.htm>.

Transit

RTC Ride Route 15 travels adjacent to the Dandini Campus. Route 15 provides a connection between the Dandini Campus and Downtown Reno 4th Street Station via Dandini Boulevard, El Rancho Drive, Wedekind Road, Sutro Street, and 4th Street as shown on the system map image below. On weekdays between 6:15am and 6:15pm, Route 14 is scheduled every half-hour. There is a RTC bus stop on the northwest corner of the Edison Way/Energy Way intersection.

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RTC Ride System Map: Route 15



Bicycle and Pedestrian Facilities

Currently, there are not striped bicycle lanes on Dandini Boulevard or Raggio Parkway. Bicycle lanes are identified as a proposed improvement on Dandini Boulevard in the *Reno Sparks Bicycle and Pedestrian Master Plan (2011)*.

There are no sidewalks on Dandini Boulevard or Raggio Parkway adjacent to the Dandini Campus; however, DRI has plans to install sidewalk on the north side of Raggio Parkway adjacent to DRI and the Dandini Campus in 2014. There is a marked mid-block crosswalk on Raggio Parkway that provides access between the Campus and the overflow parking lot south of Raggio Parkway. The crosswalk includes RRFB (“stutter flash beacons”).

TRANSPORTATION RECOMMENDATIONS

Figure 3 displays our transportation and parking recommendations for the Dandini Campus. The existing transportation/parking concerns as well as recommendations to address those concerns are as follows:

Parking Supply

As discussed, parking is challenging on the Dandini Campus, particularly during the first month of the semester. In addition, the existing overflow parking lot south of Raggio Parkway is on DRI’s property and they plan on constructing the first phase of their Research Park Master Plan on this property, which will result in TMCC losing the overflow parking lot (377 spaces). A Fine Arts Center on the Dandini Campus will also result in the loss of approximately 120 existing surface parking spaces. In total, TMCC will lose approximately 500 parking spaces with the future developments.

We recommend the following to improve parking conditions (also shown on **Figure 3**):

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- Reconstruct the north parking lot to be more efficient and accommodate more parking spaces. A full reconstruction including grading, fill, and retaining wall would be necessary to take full advantage of the land and provide the maximum number of additional parking spaces. In addition, we recommend that the reconstruction include curb and gutter to better designate the parking areas. Figure 3 shows approximately 370 new parking spaces as a result of reconstructing the north parking area.
- Construct a new surface parking lot east of the Campus Loop Road. The parking area would require grading, fill, and potentially retaining walls. The size and number of parking spaces will be somewhat dependent on the earthwork requirements; however, we recommend maximizing the size of the parking lot. Figure 3 shows approximately 280 new parking spaces.
- ***The parking improvements shown on Figure 3 would result in approximately 650 new parking spaces (a total of 1,535 spaces in the north lot).***
- The approximate cost for constructing surface parking spaces is \$3,000-\$5,000 per space (with minimal grading). Not accounting for significant earthwork, we estimate the cost to reconstruct the north parking lot and add the new parking lot as \$6.1 Million (\$4,000*1,535 spaces). Note that the cost to construct a stand-alone parking garage is \$30,000-\$40,000 per space; therefore, a surface parking lot is a more economical solution).
- The City of Reno has landscaping requirements for on-site parking lots per the Reno Municipal Code 18.12.1205(e). Reno requires 25 square feet of landscaping per space plus an addition 10 square feet of landscaping for every space in excess of 600 spaces.



North Parking Area Circulation

The vehicle and pedestrian circulation within the north parking area is challenging. The parking aisles and circulation roadways have been restriped over the years in an attempt to improve vehicle circulation. The parking aisles are terraced and are generally separated into two areas: the south terraced area and the north terraced area. The south terraced area is closest to the majority of the campus destinations. The aisles are mostly one-way and are very long, which adds to driver frustration, because it is difficult to get from one aisle to the next. There are also two unpaved areas that are used for parking in the south terraced area. The north terraced area has a combination of one-way and two-way aisles and several confusing intersections. The pavement condition is poor throughout the entire north parking area.

In addition to the concerns with vehicle circulation through the parking aisles, there are also concerns with the vehicle access to/from Dandini Boulevard. There are two driveways on Dandini Boulevard, one inbound and one outbound. Driver visibility as they exit onto Dandini Boulevard is a concern. In addition, the inbound eastbound movement from Dandini Boulevard is a concern during ice/snow because of its location at the bottom of the hill and on a curve.

Vehicle circulation between the north parking area and south parking area is also difficult. Currently, the only way to get between the two sides of campus in a vehicle is to exit the north parking area onto Dandini Boulevard or Raggio Parkway and reenter campus on Raggio Parkway. There are not direct connections.

Pedestrian circulation is also challenging since the north parking area roadway/parking aisle network is not well aligned. There are several marked crosswalks for pedestrians within the parking area, but there are still several pedestrian/vehicle conflicts.

We recommend the following to improve circulation within the north parking lot and to/from the south parking lot (also shown on **Figure 3**):

- Relocate the Dandini Boulevard driveways and change them from one-way only to two-way operations. The new locations provide additional visibility for vehicles exiting the Dandini Campus.

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- Construct a new 2-lane campus circulation road on the west side of the campus from Dandini Boulevard to Raggio Parkway. This connection will improve circulation from the north parking area to the south parking area.
- Connect the north parking area to the south parking area east of the Sierra Building and proposed Fine Arts Center via a new 2-lane roadway.
- Construct a new 2-lane roadway to connect Raggio Parkway (east of the Raggio roundabout) to the north parking area. Note that the roadway will need to be at least 150 feet south of Dandini Boulevard to comply with City of Reno driveway spacing standards for a “minor arterial” roadway. The RTC also has access guidelines. Based on the RTC’s guidelines for a “moderate access control arterial,” the driveway would need to be at least 300 feet from Dandini Boulevard. This distance would present a challenge due to the topography of Raggio Parkway.
- Reconstruct the north parking area to better align the parking aisles and internal circulation roadways.
- Provide pedestrian walkways and crosswalks to connect parking areas to campus buildings as shown on **Figure 3**.

Traffic Volumes on Campus Loop Road

Currently, Campus Loop Road provides the only direct access from the north parking area to Raggio Parkway. The Facilities department is located on Campus Loop Road, south of the north parking area. Parking for the Facilities department is along Campus Loop Road and it requires vehicles to back directly onto the roadway when leaving. One of the recommendations to improve the north parking area circulation would connect Campus Loop Road directly to Dandini Boulevard (currently, the connection is indirect and circuitous). Staff has concerns that this improvement as well as providing additional parking in the north parking area would increase traffic on Campus Loop Road and have negative impacts on accessing the Facilities department. We recommend the following improvements on Campus Loop Road to reduce the effect of increased traffic:

- Perform a daily roadway count on Campus Loop Road to establish the “baseline” traffic condition so that campus staff can monitor changes to the traffic volume. We recommend that two counts be performed: one (3-day minimum) count during the second week of a semester and one (3-day minimum) count during the second month of the semester once traffic and parking

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conditions have calmed down. The count should be performed using machine traffic counting equipment and would cost approximately \$500-\$800.

- Install traffic calming devices on Campus Loop Road in two locations near the Facilities department to reduce vehicle travel speeds. The most effective traffic calming devices for these locations are speed humps/bumps and/or speed radar feedback signs. Speed radar feedback signs are signs that measure and display a driver's speed as they pass the sign. They typically blink if the driver is going too fast.
- Install raised crosswalks on Campus Loop Road from the new parking lot to the Dandini Campus. The raised crosswalks enhance pedestrian circulation and act as a traffic calming device to slow traffic (they function similar to a speed hump).
- Reconstruct the Facilities department's parking so that it does not require vehicles to back onto Campus Loop Road. **Figure 3** shows a conceptual location for a new Facilities parking lot (south of the building). The lot would have a driveway that connects to Campus Loop Road as opposed to having individual parking spaces access the roadway.