

CHAFFEY COLLEGE

# FONTANA CAMPUS MASTER PLAN

NOVEMBER 5, 2021



DLR Group



Chaffey College



# TABLE OF CONTENTS

<b>Project Overview and Introduction</b>	<b>01</b>
<b>Campus Context and Site Analysis</b>	<b>02</b>
<b>Campus Program and Space Needs</b>	<b>03</b>
<b>Campus Vision Plan</b>	<b>04</b>



## VISION

Chaffey College: Improving lives through education.

## MISSION

Chaffey College inspires hope and success by improving lives and our community in a dynamic, supportive, and engaging environment of educational excellence where our diverse students learn and benefit from foundation, career, and transfer programs.

# ABOUT CHAFFEY COLLEGE



Chaffey Community College District (Chaffey CCD) is a single-college district that serves the growing communities of western San Bernardino County. Chaffey College has a rich history as one of California's earliest colleges. Founded in 1883 as a private institution, Chaffey College has been a publicly funded college since 1916. Today, Chaffey College is nationally recognized as a center of learning excellence. It serves more than 20,000 students annually on three campuses, at many teaching sites in its communities, and online. It offers a full complement of general education, transfer level, and career and technical education classes leading to an associate degree or career technical certificate. Students are supported in these instructional programs with a full range of services.

# ACKNOWLEDGMENTS

Thank you for all of the participants who provided thoughts, ideas, and comments throughout the planning process. For an overview of all campus engagement, see Chapter 08, or click the links below.



## CAMPUS-WIDE SURVEY RESULTS



## FOCUS GROUP SUMMARY



## WORKSHOP- BASED PROCESS

### EXECUTIVE COMMITTEE

- Henry D. Shannon, Ph.D. Superintendent/ President
- Laura Hope, Associate Superintendent, Instruction and Institutional Effectiveness
- Lisa Bailey, Associate Superintendent, Business Services and Economic Development
- Alisha Rosas, Interim Vice President, Student Services/Executive Director, Equity, Outreach, and Communications
- Melanie Siddiqi, Associate Superintendent, Administrative Services

### CORE GROUP

- Ashira Murphy, Executive Assistant
- Mike Fink, Director, Technical Services
- Mike Villegas, Bond Consultant, Safeworks CM
- Myriam Arellano, Manager, Accounting
- Troy Ament, Executive Director, Facilities and Construction
- Sarah Riley, Manager, Facilities Development
- Samir Shah, Manager, Measure P Bond Program
- James Rogers, Senior Project Manager/CM

### WORK GROUP

- Annette Henry, Faculty Coordinator, Kinesiology, Nutrition, and Athletics
- David Nimri, Faculty, Computer Science
- Heather Nishioka, Manager, Community Partnerships and Advancement
- Jason Chevalier, Dean, Fontana Campus and Language Arts
- Kevin Baccari, Faculty, Mathematics
- Rich Levine, Manager, Maintenance
- Roni Osifeso, Educational Program Assistant
- Sam Gaddie, Sustainability and Environmental Officer
- Sean Connelly, Faculty, English
- Sergio Lopez, Manager, Grounds
- Sonia Diaz, Instructor, Math & Science/Biology
- Yolanda Friday, Dean, Economic Development and Business and Applied Technology

# 01 PROJECT OVERVIEW AND INTRODUCTION

THE MASTER PLAN FOR THE NEW FONTANA CAMPUS WILL BE A HIGH LEVEL, STRATEGIC, AND TACTICAL GUIDE FOR THE PHYSICAL DEVELOPMENT OF THE NEW CAMPUS.



## PURPOSE OF THE PLAN

Opened in 1996, the existing Chaffey College Fontana Campus is located in central Fontana at the intersection of Merrill Avenue and Sierra Avenue. **One of several projects funded from the Measure P Bond Program outlined in the Vision 2025 Facilities Master Plan includes the expansion of the Fontana Campus**, which is a high growth area in the District's service area. To further that objective, the District purchased five (5) parcels of vacant land three miles south of the current Fontana campus, located at the intersection of Sierra Avenue and Under Wood Drive. The College will relocate existing Fontana Campus' programs to the new property. **This Fontana Campus Master Plan provides a vision for the new property.**

The purpose of this master plan is to:

- Create a vision for a new Fontana Campus that aligns with the strategic direction of Chaffey College.
- Support academic planning to relocate, expand, and add new programs to the new Fontana Campus.
- Establish a road-map for informed decision making around project implementation.

## KEY ELEMENTS TO THE PLAN

### INCORPORATING PAST PLANNING

The Fontana Campus Master Plan is informed by past planning completed by the College such as Vision 2025, and the College's Sustainability Plan.

### A COLLECTIVE VISION

The Fontana Campus Master Plan is an ambitious yet realistic vision for the College, crafted by listening to the needs of campus and community stakeholders.

### DATA-INFORMED

The Fontana Campus Master Plan is informed and supported by analyzing space needs and physical site conditions.

### FLEXIBLE FRAMEWORK

Planning is an ongoing process, and requires a flexible framework in place that can respond to current and future needs. The Fontana Campus Master Plan is developed with the ability to adapt to the changing needs of the institution.



## MEASURE P

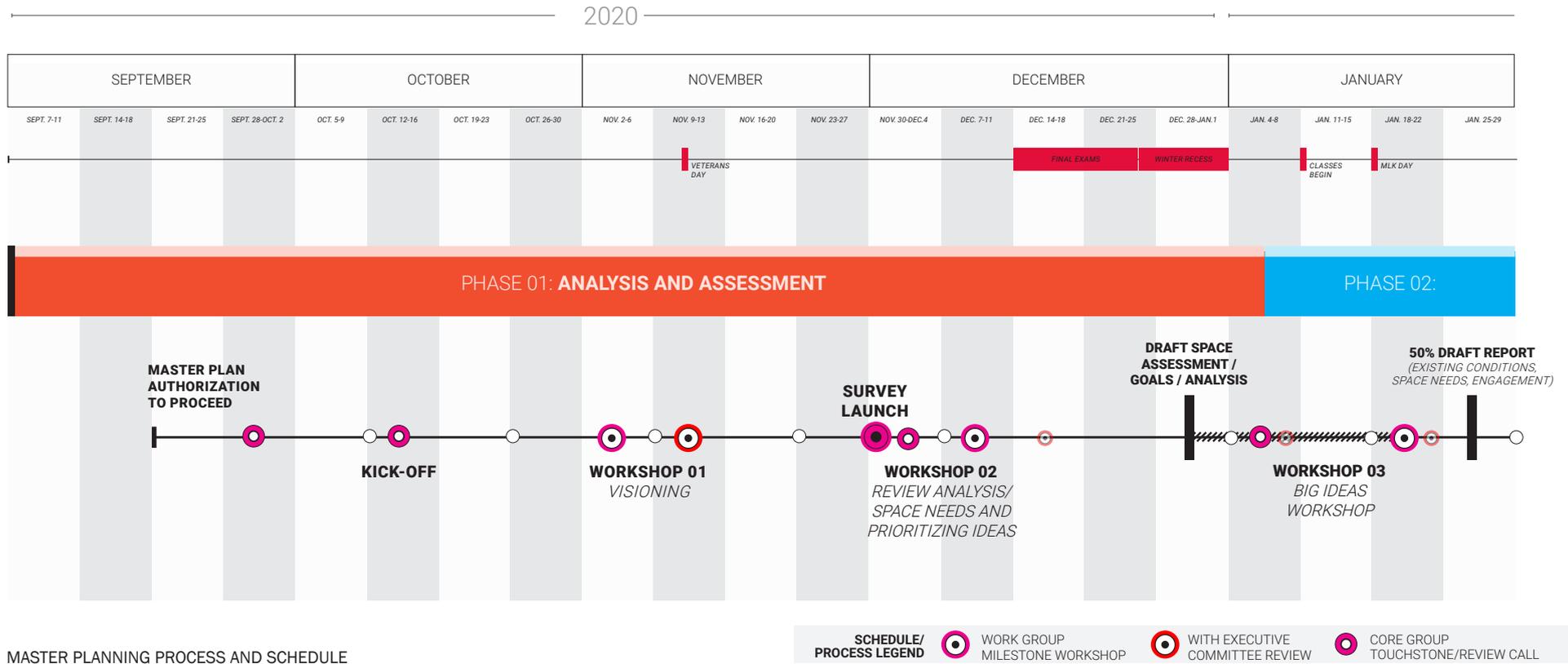
In November 2018, voters in the District approved Measure P – a general obligation bond. Measure P will provide Chaffey College with up to \$700 million for significant upgrades to vocational, science, computer classrooms, and labs; student safety; and facilities supporting veterans and other student services. The projects that will be funded from Measure P are outlined in the District's Vision 2025 Facilities Master Plan addendum, approved by the Governing Board in June of 2018. The District plans to implement the Master Plan over the next 5-10 years.

[VISIT THE MEASURE P WEBSITE](#)

# PLANNING PROCESS AND SCHEDULE

The planning process began in September 2020 and concluded in June 2021. The project was completed during the COVID-19 pandemic and was fully remote. The Master Plan was developed through a comprehensive planning process led by College administrators. It comprises four phases of work:

**Phase 01 - Analysis and Assessment:** The planning process began with collecting baseline data and working with campus stakeholders to create a vision for the new campus and define objectives for the plan. The planning team analyzed the site conditions to shape the physical requirements of the site plan. The planning team also partnered with College leaders to define space needs and parking analysis once the enrollment and campus's program was determined.



MASTER PLANNING PROCESS AND SCHEDULE

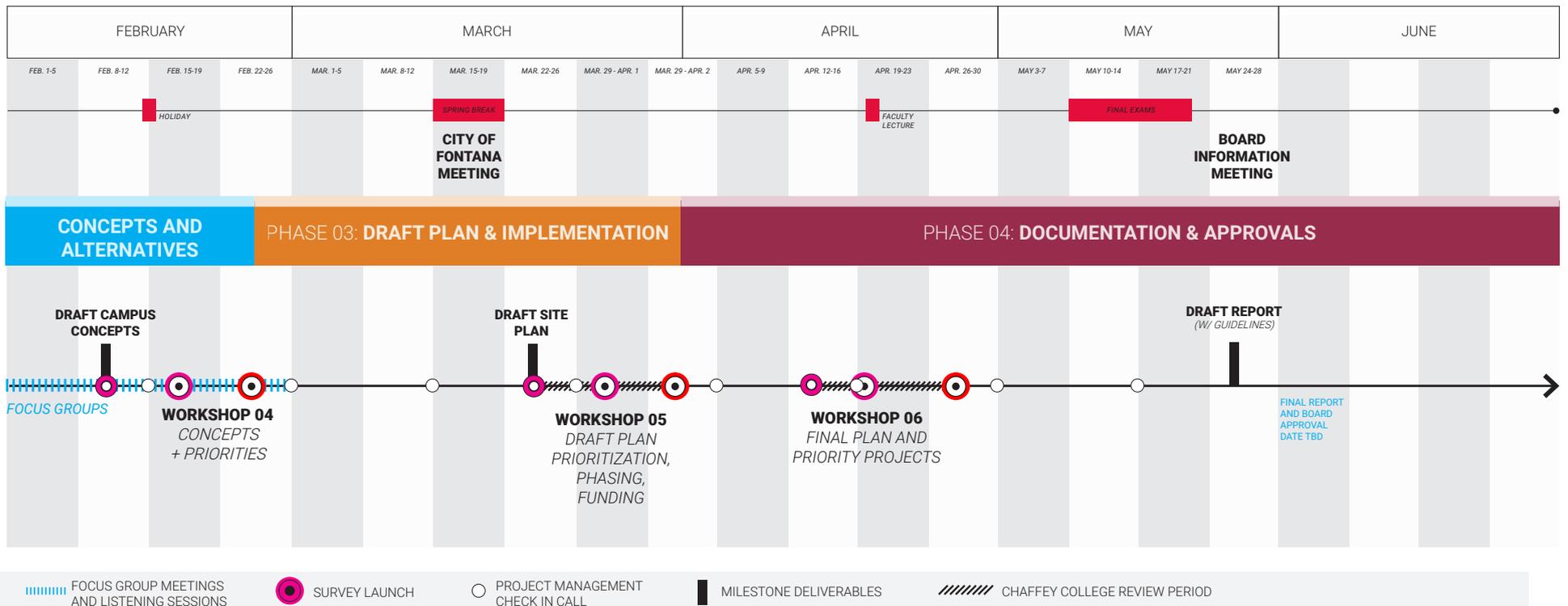
**Phase 02 - Big Ideas and Concepts:** In this phase, the planning team and stakeholder groups explored a range of planning and design strategies for the campus to synthesize the best ideas of the concepts into a single draft plan.

**Phase 03 - Planning for Implementation:** Once the draft site plan was established, it was refined as the planning team received feedback from campus

stakeholders. The planning team and College collaborated on program priorities to develop a desired phasing for the campus over the next 20 years.

**Phase 04 - Documentation and Approvals:** The planning team documented the final Master Plan and presented the plan to the campus community plan for final feedback. The Master Plan was presented to the Board of Trustees in May 2021 and was approved in June 2021.

2021



## ENGAGEMENT OVERVIEW

Through stakeholder engagement, the planning process defined goals, prioritized planning solutions, and encouraged participatory decision-making.

A master plan is strengthened by the inclusion of participants who have a vested interest in the future success of the campus. The collaborative approach to the new Fontana Campus Master Plan provided opportunities for campus stakeholders to envision a new campus through a dynamic process that crafted a shared vision for the future.

Interactive workshops, focus group sessions, surveys, and presentations were used to connect with stakeholders. These interactions included interactive workshops where stakeholders worked alongside the planning team to progress the plan in real-time.

A structure for planning and approvals was established at the beginning of the project to establish roles, responsibilities, and focus to standing committees. This structure allowed for comprehensive input from the campus as well as coordination with concurrent planning efforts.

### ENGAGEMENT STRUCTURE

**DECISION  
MAKING**

**Executive  
Committee**

**PROVIDES  
INPUT**

**Core  
Group**

**Working  
Group**

**ENGAGEMENT**

**Campus-Wide  
Survey**

**Focus  
Groups**

**PARTNER  
COORDINATION**

**City of  
Fontana**

**Outside Partner  
Coordination**

## FOCUS GROUPS

The planning team met with five focus groups – sustainability, faculty, staff, students, and the Fontana Advisory Committee. Each focus group answered a series of high-level questions about successful and unsuccessful elements of other Chaffey College campuses, and completed an activity voting on images which they believe would be appropriate or inappropriate for the new Fontana Campus. Throughout the sessions, active discussions captured ideas and desires. In summary, the focus groups stated the following views:

### SAFETY

- Site lighting throughout campus
- Campus police presence is important
- Safe and convenient access from campus to bus stop

### ACCESSIBILITY + EQUITY

- Plan for Universal Design
- The campus should have multi-cultural representation and support
- Full service resources for students

### TECHNOLOGY

- Hybrid courses to continue
- Use newest technology, but be able to adapt and change quickly

### FLEXIBILITY IN SPACE

- Provide large, flexible classrooms
- Provide ample student spaces and dining throughout the campus
- Lounges create space to build campus community

### SUSTAINABILITY

- Reduce water use
- Implement a green building program for facilities
- Design buildings for reduced energy use

### COLLABORATION SPACE

- Provide space for student clubs
- Storage for students and programs
- Collaboration and meeting spaces



[VIEW ALL FOCUS  
GROUP RESULTS](#)

## CAMPUS-WIDE SURVEY

A campus-wide survey was administered in December 2020. The survey drove a large portion of the Master Plan's engagement process and outreach. Due to the pandemic, this survey was in lieu of a campus forum for visioning. The purpose of the survey was to gather feedback about the campus from the current campus users (faculty, staff, students). Topics focused on services and resources, circulation, wellness, dining and retail, and points of interest.

## SURVEY PARTICIPANTS

The Chaffey College Fontana survey had an overwhelming response rate, with **952 participants total**: 740 students, 133 faculty, and 79 staff. The response rate of the faculty attributed to around 30% of the overall faculty population.

WHO TOOK THE SURVEY?



## SURVEY KEY FINDINGS



Hours of operation and lack of parking are barriers to learning.



People love the libraries and want more places to study.



The great thing about the existing Fontana Campus is the small, community-feel.



Students want more outdoor space which can be used for extended periods of time.



Students want to display diversity and culture through arts and food.



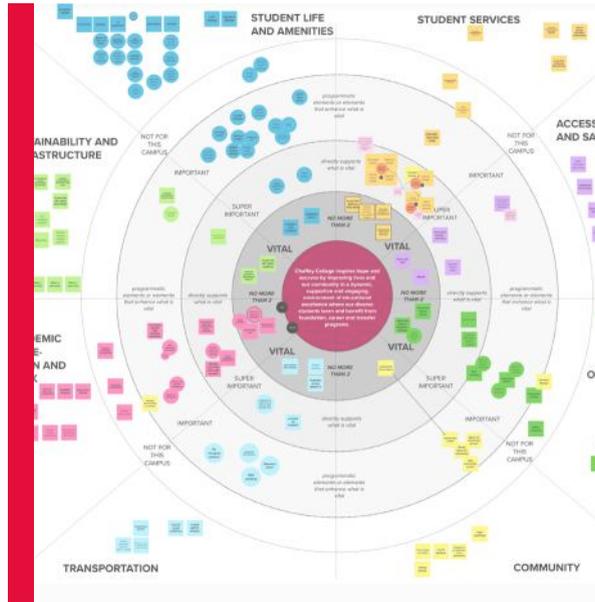
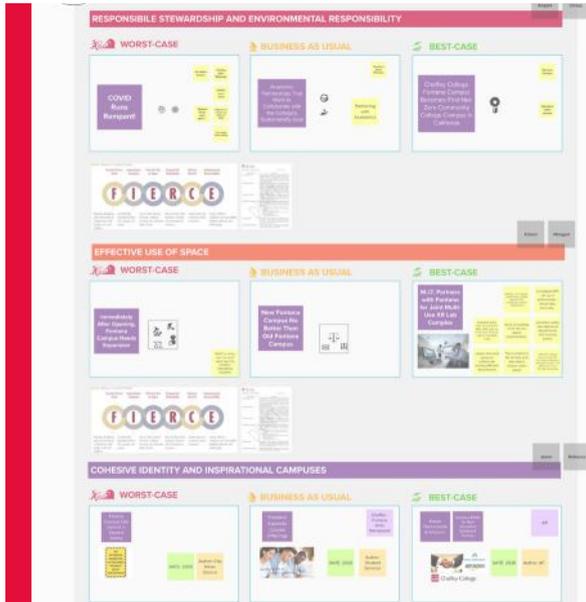
The new campus should prioritize safety and accessibility.



[VIEW CAMPUS-WIDE SURVEY RESULTS](#)

This page is left intentionally blank.

# WORKSHOP-BASED APPROACH



## VISIONING

### WORKSHOP 01

Campus stakeholders participated in various activities to envision a new campus by identifying successful and unsuccessful elements of other campuses and pondering what future students may expect. Participants were asked to stretch their thinking around stewardship and environmental responsibility, effective use of space, and campus identity in a headline activity.

## PRIORITIZING IDEAS

### WORKSHOP 02

After a large volume of ideas was collected in Workshop 01 and the campus-wide survey, stakeholders worked to prioritize those ideas from ‘vital’ (must be considered first) to ‘important’ (considered as supporting other efforts). The ideas identified as ‘vital’ were translated into the plan’s guiding principles (see chapter 04). Some ideas were identified as low priority and not applicable to the new campus.

## BIG IDEAS

### WORKSHOP 03

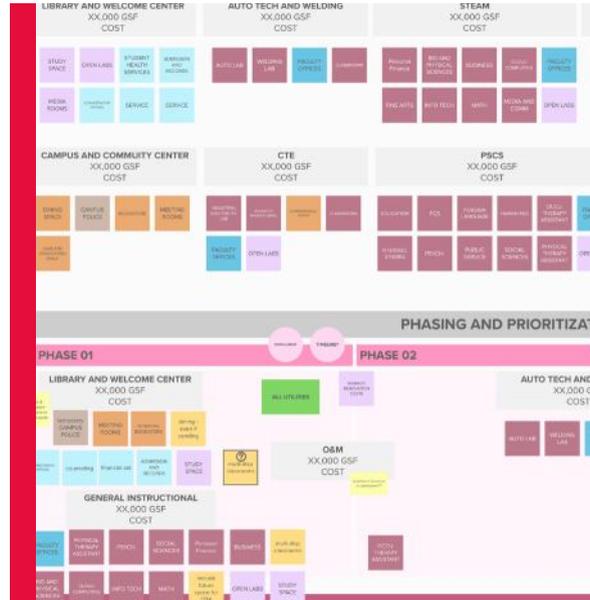
After the campus program and needs were established, small participant groups worked together to ideate a future campus. The activity revealed critical adjacencies, circulation elements, open space integration, and desired edge conditions. These “Big Ideas” were translated directly into the site planning concepts.



## CONCEPTS

### WORKSHOP 04

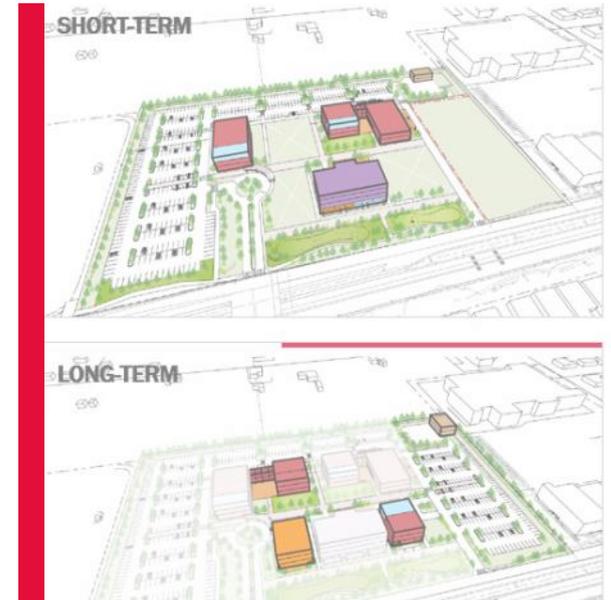
During the Concepts Workshops, the planning team presented three site planning concepts and alternatives. Each of the themed concepts organized the framework of the campus differently, testing different ideas for discussion. Participants were tasked with choosing the best ideas from each concept that would form the draft site plan through an activity.



## DRAFT PLAN

### WORKSHOP 05

Stakeholders reviewed the draft site plan and provided feedback on the plan's strengths and weaknesses. This feedback was integrated into the final site plan. Campus leadership also worked to identify priority programs that need to be located on the new campus in the first phase.



## FINAL PLAN & IMPLEMENTATION

### WORKSHOP 06

During the final workshop, the planning team presented the final site plan with phasing diagrams for final feedback. The City of Fontana also reviewed the plan for initial comments. [In May 2021, the final plan was presented to the Board of Trustees and was approved in June 2021.](#)

# 02 CAMPUS CONTEXT AND SITE ANALYSIS

## CAMPUS CONTEXT

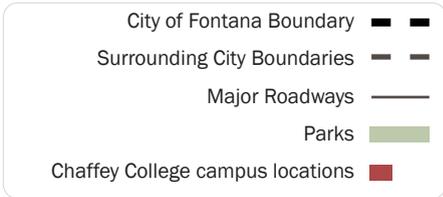
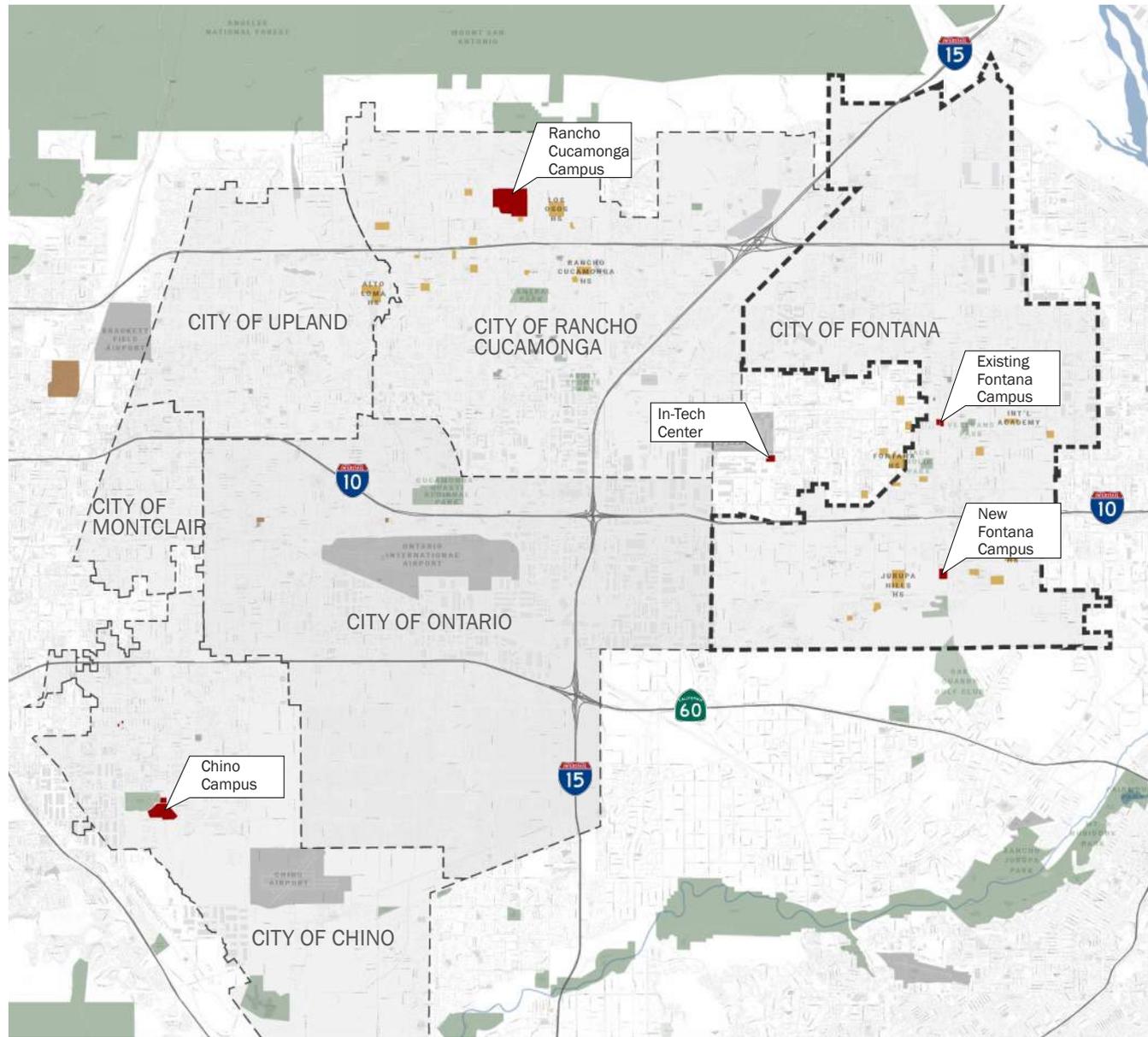
### DISTRICT INFORMATION

The District Service Area encompasses 310 square miles and includes Chino Hills, Fontana, Gusti, Montclair, Mt. Baldy, Ontario, Rancho Cucamonga (Alta Loma, Cucamonga, and Etiwanda), and Upland. Chaffey College has campuses in Rancho Cucamonga, Chino, and Fontana and serves four school districts: Chaffey Joint Union High School District, the Chino Unified School District, the Fontana Unified School District, and the Upland Unified School District.

Since its establishment in 1883, Chaffey College has integrated itself in the region through various partnerships and communities [a firm educational platform]. The College serves 29,000 students in various academic, career, and vocational programs delivered in person and online.



As the College continued to grow geographically, the College’s service area expanded to have a heavier regional presence with many academic and career opportunities. From an academic perspective, the College supports dual enrollment opportunities for students at 25 local high schools within four high school districts, including Chaffey Joint Union High School District, Fontana Unified High School District, Upland High School District, and Chino Valley High School District. Partnerships with local manufacturing and distribution companies, ranging from minor to large employers, have provided a career perspective with an excellent employment platform for current and future students.



CHAFFEY COLLEGE DISTRICT AND SERVICE AREA

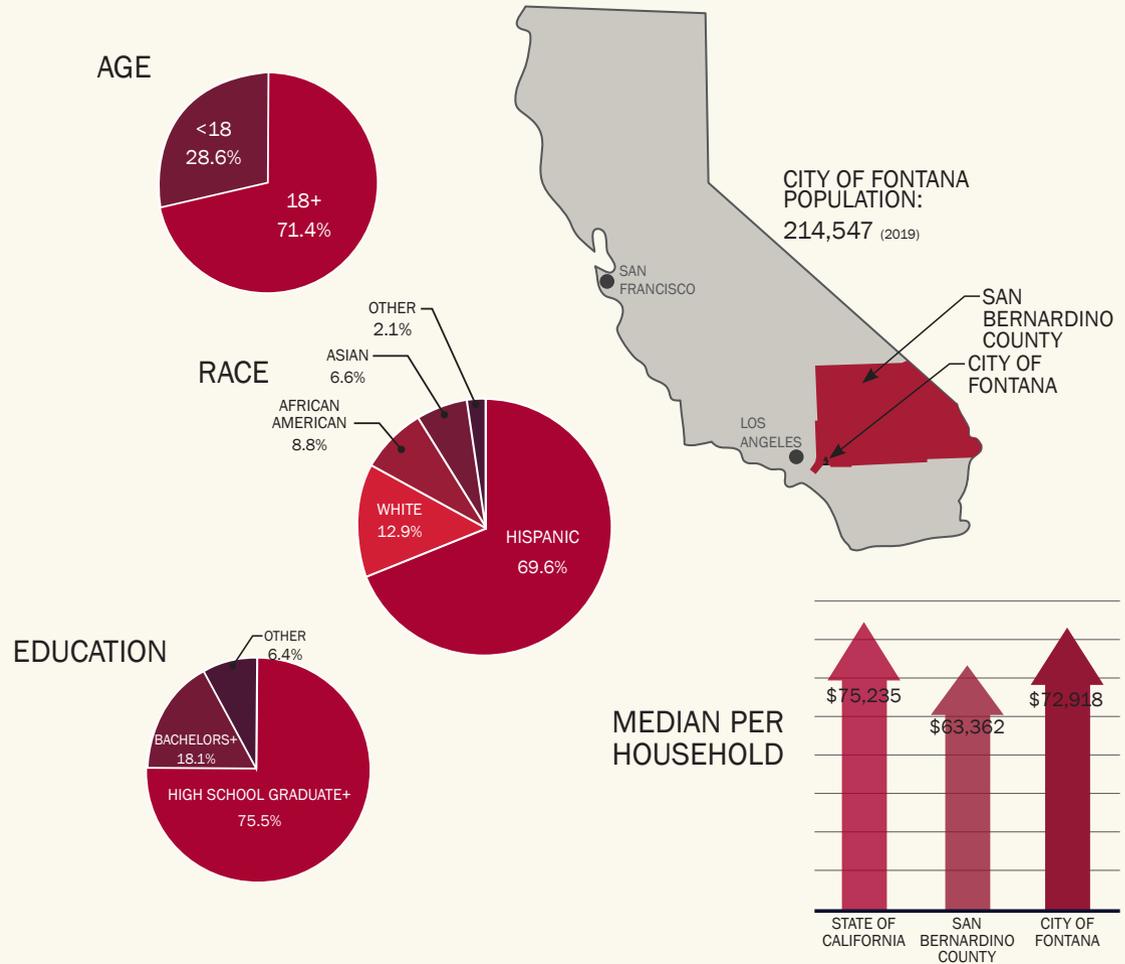
## CITY OF FONTANA

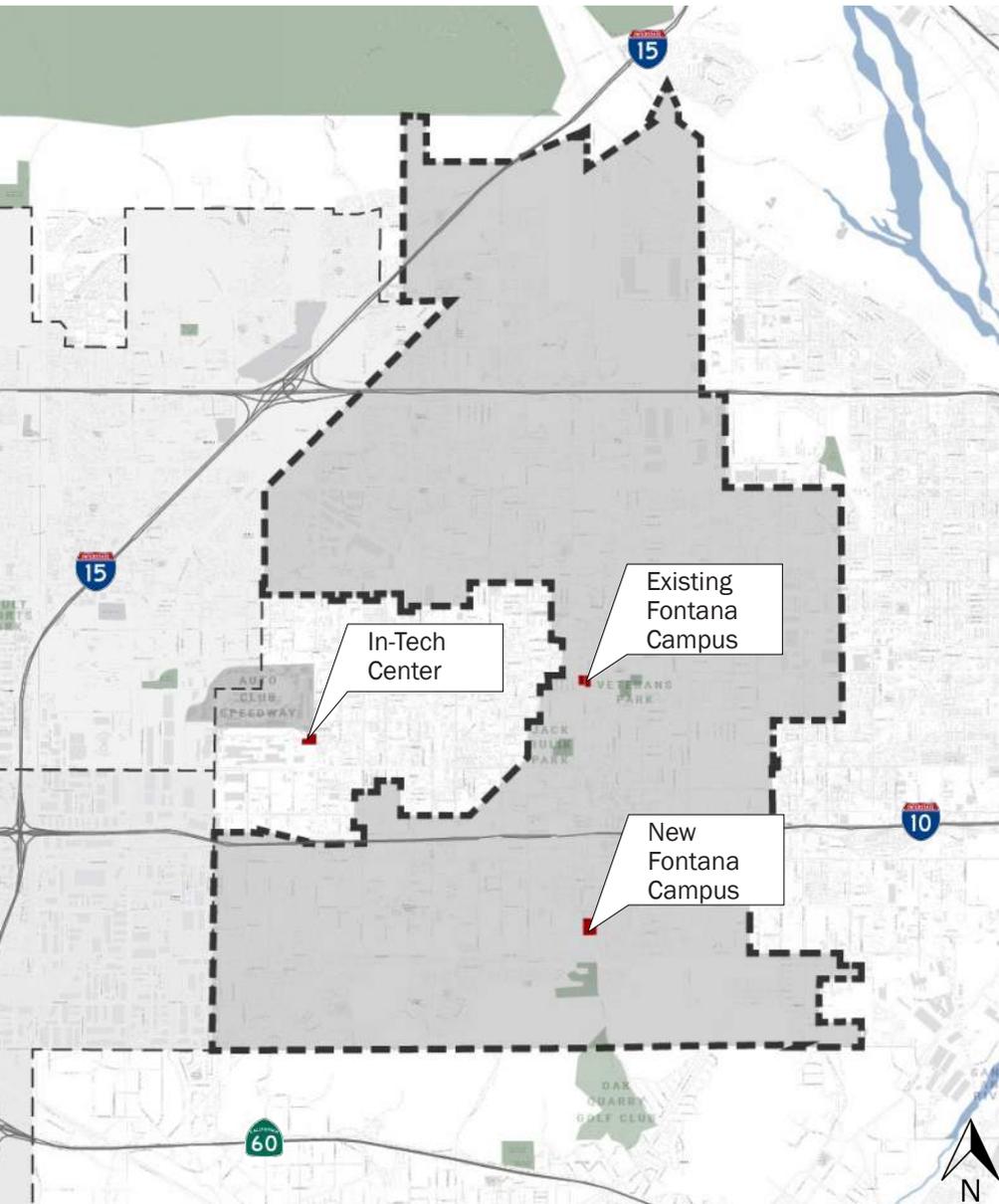
As part of City's General Plan Update 2015-2035, the vision for Fontana, also known as Fontana Forward and Fontana 5.0, was focused on developing and supporting a flourishing community with viable opportunities within the realms of jobs, housing, and local amenities to promote an excellent quality of life to all community members. Principles included high-quality development, connecting people and places via alternative modes of transportation, and ensuring fairness and opportunity. The City also wants to embrace lifelong learning that promotes and supports educational achievement to create a highly qualified workforce for 21st-Century jobs.

Over the past 20 years, the City has seen a growth in population and re-urbanization in certain key node areas. The visioning process of the General Plan was an essential step for the City to engage with the community to generate public input on placemaking qualities and opportunities. Within the General Plan, a land use policy and a future land use map was developed to guide decision making on the pattern, distribution, density, and intensity of land use over time, helping the City achieve the vision. In correlation with the mission of the City and the General Plan, Chaffey College's presence within Fontana has helped maintain that initiative, providing educational opportunities to the local community and a viable economic workforce.

## CITY OF FONTANA DEMOGRAPHICS

INFORMATION PROVIDED BY U.S. CENSUS BUREAU





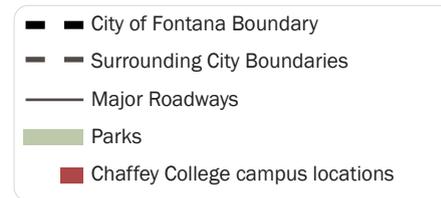
CITY OF FONTANA



EXISTING FONTANA CAMPUS

### THE EXISTING FONTANA CAMPUS

The existing 50,000 square foot Fontana campus, spread out on eight-acres in central Fontana, serves Chaffey Community College District’s eastern side. Since opening the campus in 1996, the College has served as a prominent partner with the City of Fontana and will continue to do so with the new Fontana campus, just three miles south of the current Fontana campus.



## NEW FONTANA CAMPUS SITE INFORMATION

The vision for a new campus is set to become a comprehensive, vibrant, and inspirational learning environment that is safe, accessible, and sustainable. It will enhance not only the community vibrancy to South Fontana, but also act as an economic stimulator for future commercial development. As a destination for students, faculty, staff, and community members, the campus will provide a platform for future success. The site also provides great views and access to the Jurupa Hills Regional Park, an important local amenity and landmark.

The planned southern campus will be close to two other significant future projects -- a 155-unit multi-family housing development to the south and a large industrial warehouse development to the west.



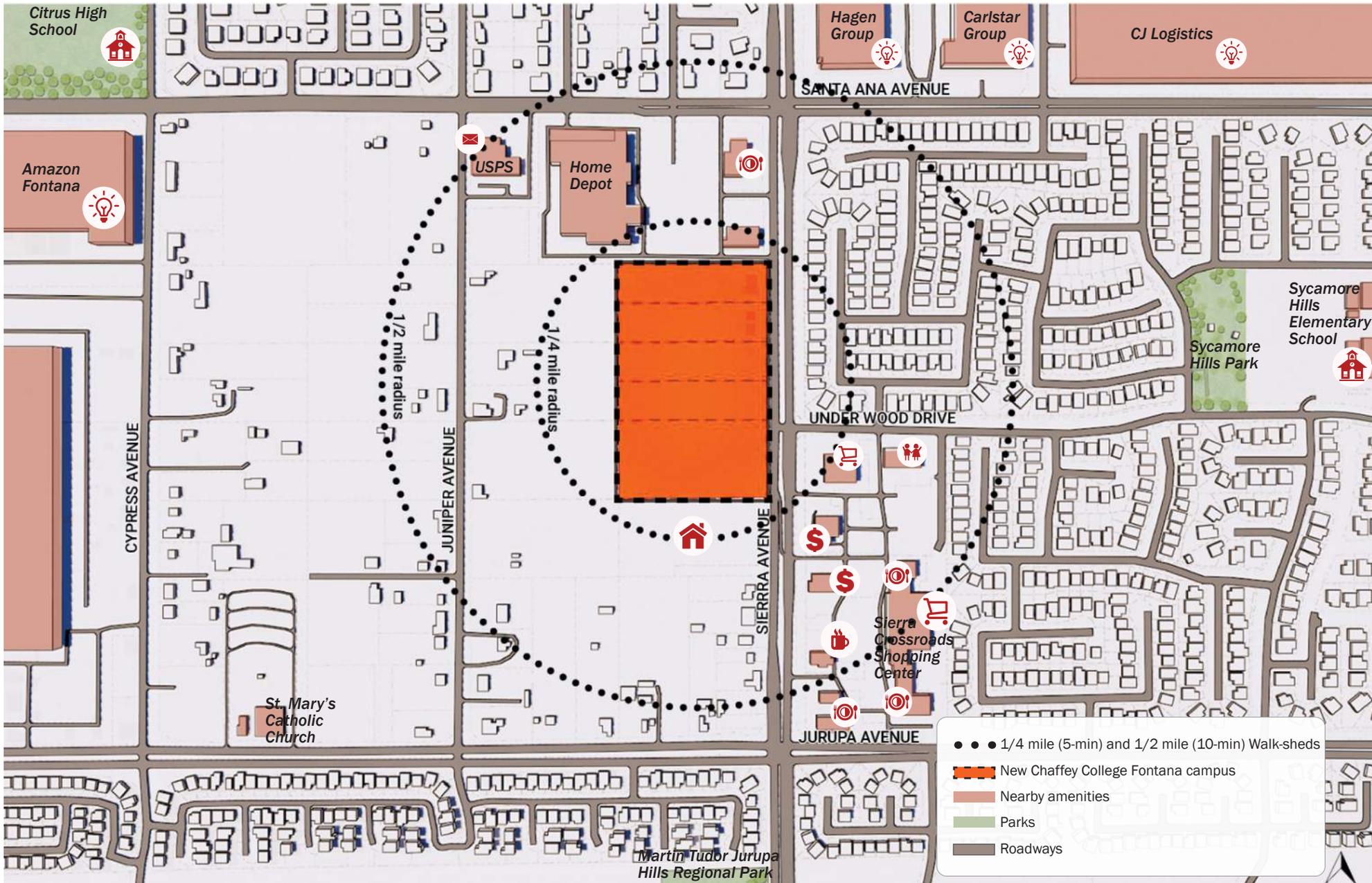
1 NORTH VIEW OF SIERRA AVENUE



2 SOUTH VIEW OF SIERRA AVE SHOWING JURUPA HILLS



3 UNDER WOOD DRIVE ACROSS FROM THE SITE

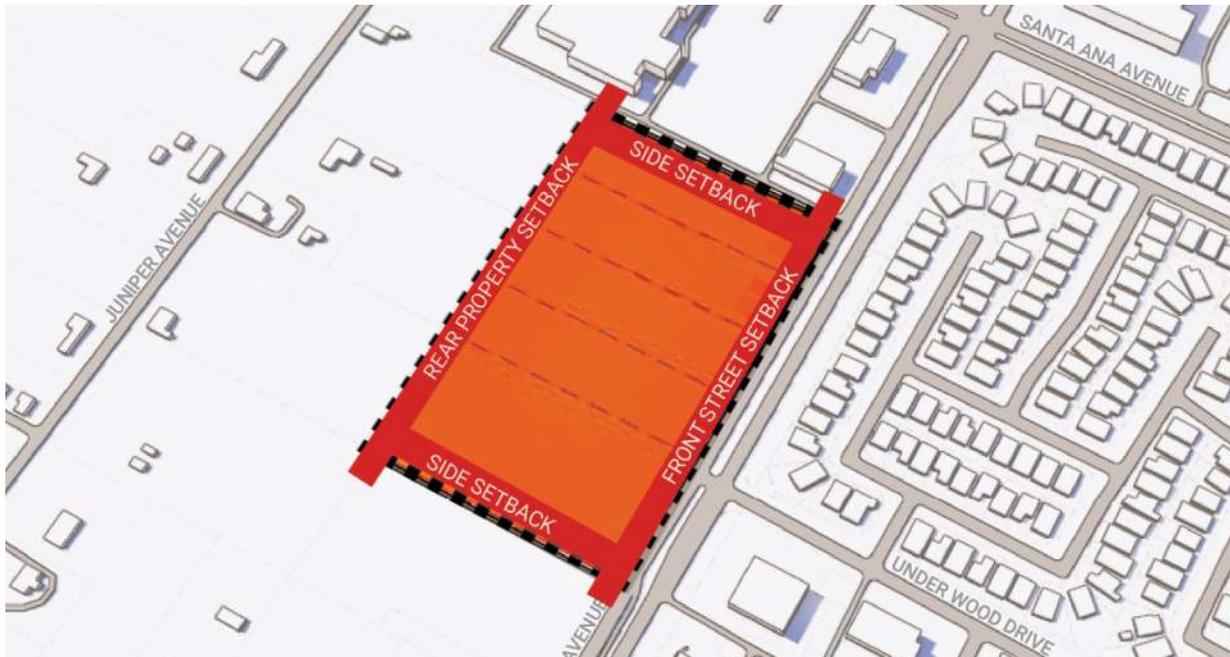


SURROUNDING AMENITIES

## CITY OF FONTANA DESIGN GUIDELINES AND DRIVERS

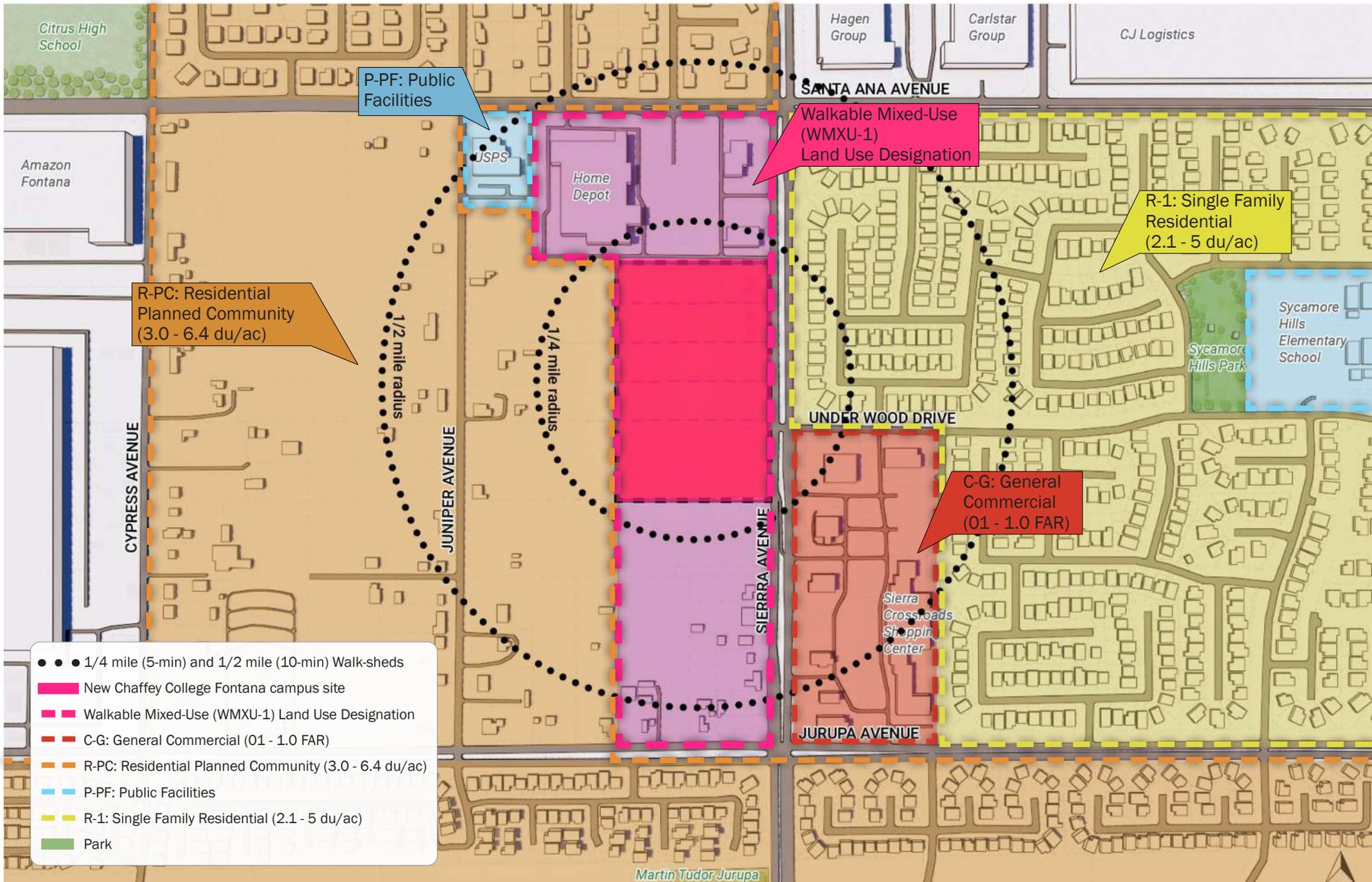
The Fontana Forward Vision includes a complete and flourishing community of opportunity – with excellent quality of life and city services, high educational achievement and jobs for Fontana residents, transportation choices to connect city destinations, and local entertainment centers. As part of that vision, the City allocated an overlay of form-based code districts and designated areas, including several transitional districts throughout the downtown and further north and south along Sierra Avenue. The transitional district is adjacent to more intense commercial uses providing a transition to more sensitive uses and a mixture of commercial office, retail, personal services, and residential.

In addition, the general land use plan for the City of Fontana includes walkable mixed-use designations intended for the creation and development of areas which encourage residents and visitors to walk, bike, and take transit for work, recreation, and entertainment. **As a state agency, the College is not required to follow these standards, however, many of the standards were used as a baseline for the new Fontana campus site, addressing important planning and place-making standards.**



CHAFFEY COLLEGE SITE ZONING ANALYSIS

TRADITIONAL DISTRICT			
Site	14.3 acres		
BUILDING DEVELOPMENT CODE			
Building Types	Min.		Max.
	18' or 1 story		40' or 3 stories
Setbacks	Front		Side/Rear
	Min. (ft)	Max. (ft)	Min. (ft)
Front Street	10	30	-
Side Street	10	15	-
Side (Interior)	-	-	5
Rear Property/ Rear Yard	-	-	20
Parking	65% of cumulative parking requirements per FMC		
Open Space	Min. 5% of total acreage		
FAR (building/ site ratio)	2.0 Max.		



CHAFFEY COLLEGE SITE ZONING ANALYSIS

## PEDESTRIAN CIRCULATION

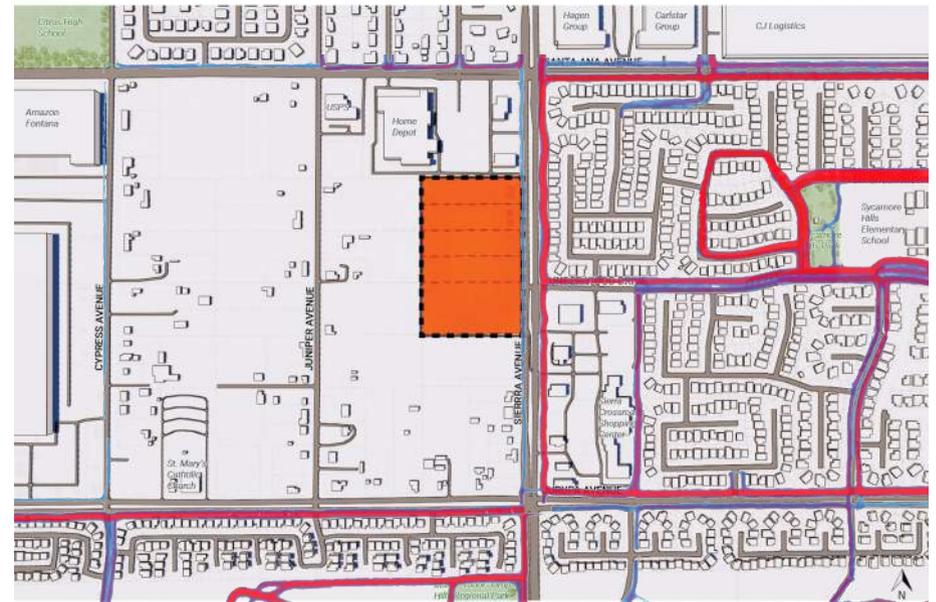
Creating an accessible, attractive, and safe pedestrian environment is a critical part of prosperous communities. Efforts from the City have prioritized walkable land use designations and a broad array of athletic and recreational activities through local parks, trails, and open spaces. One of the Fontana Forward principles is to connect people and places by providing safe and efficient transportation choices, including improved pedestrian infrastructure and well-maintained streets to connect people to city destinations. The campus framework is designed to prioritize the pedestrian experience through a series of open spaces protected from the wind and sun and a circulation framework limiting pedestrians and vehicles' interaction.

### Opportunities

- Sidewalk accessibility surrounding site that connect to all nearby community amenities
- Ability to design safe and viable pedestrian connection to community
- Nearby connection to Jurupa Hill trails

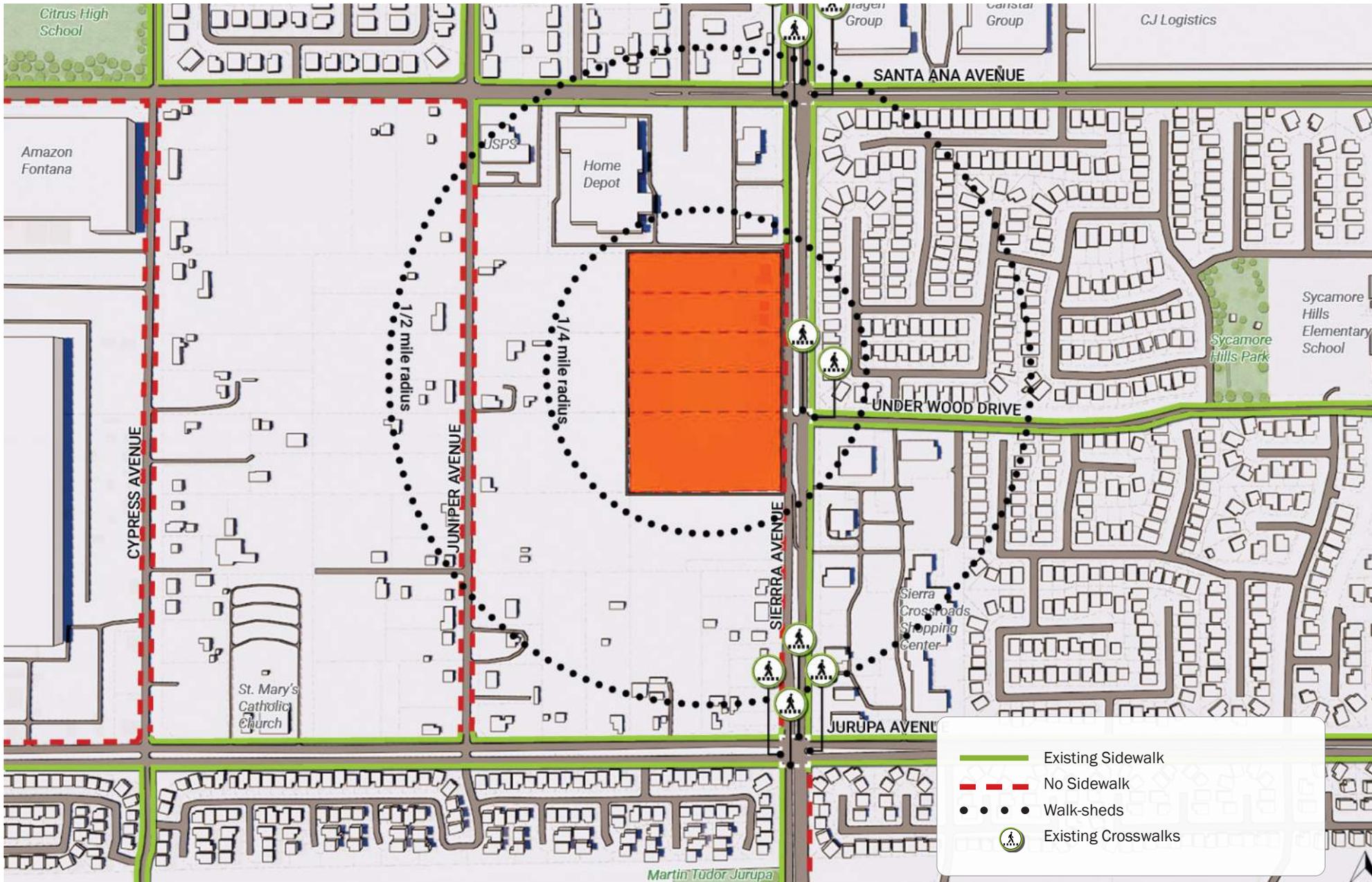
### Challenges

- Lack of sidewalk along campus edge
- Lack of ADA infrastructure
- Lack of crosswalk infrastructure on the south side of Under Wood Avenue intersection will need to be addressed



PEDESTRIAN HEAT MAP

- Popular pedestrian movement
- Moderate pedestrian movement



PEDESTRIAN INFRASTRUCTURE

## BICYCLE CIRCULATION

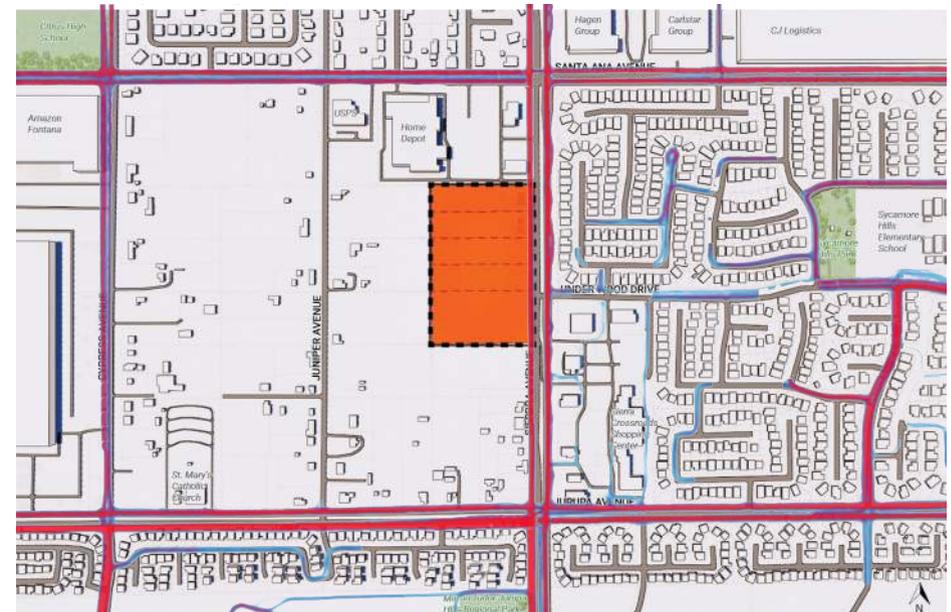
As part of Fontana's principles to provide efficient transportation choices, this includes safe bicycle transit options, an essential aspect of the future of Fontana. Creating policies and physical conditions that promote healthy lifestyles through easy access to physical activity, healthy food, and medical care are essential to an equitable and sustainable community. Utilizing the campus proximity to the Jurupa Hills, nearby residential neighborhoods, schools, and commercial businesses provides nearby points of interest within the mile radius that could benefit from safe bike infrastructure. As part of future infrastructure plans for the City of Fontana, Class IV separated bike lanes have been designated to the north and south of the campus along Sierra Avenue, providing the most optimal bike facilities for all levels of users.

### Opportunities

- Future bicycle infrastructure to help improve regional connectivity to the campus

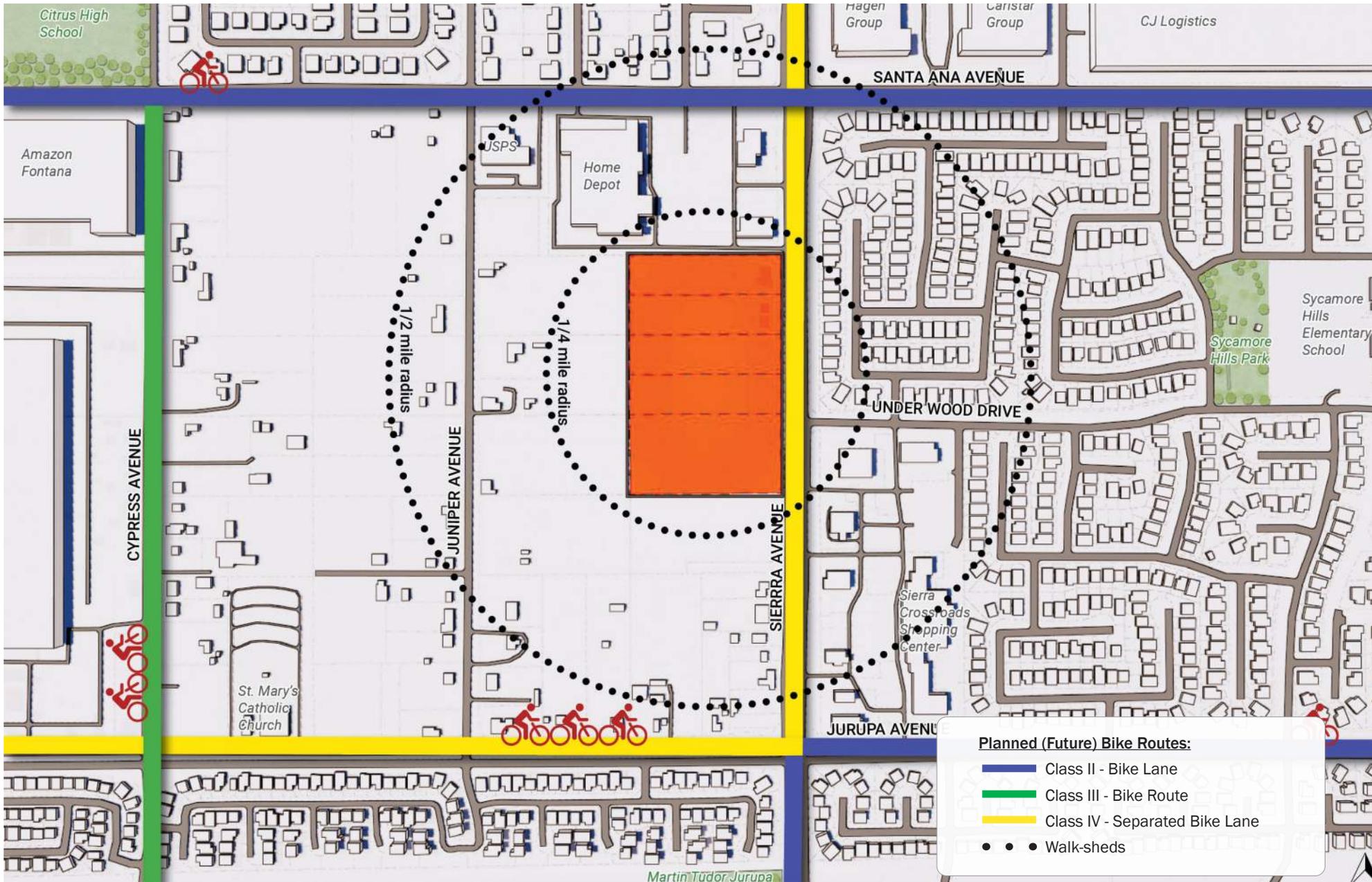
### Challenges

- No infrastructure currently in place along Sierra Avenue



BICYCLE HEAT-MAP

- Popular bicycle movement
- Moderate bicycle movement



BICYCLE INFRASTRUCTURE

## **VEHICULAR CIRCULATION**

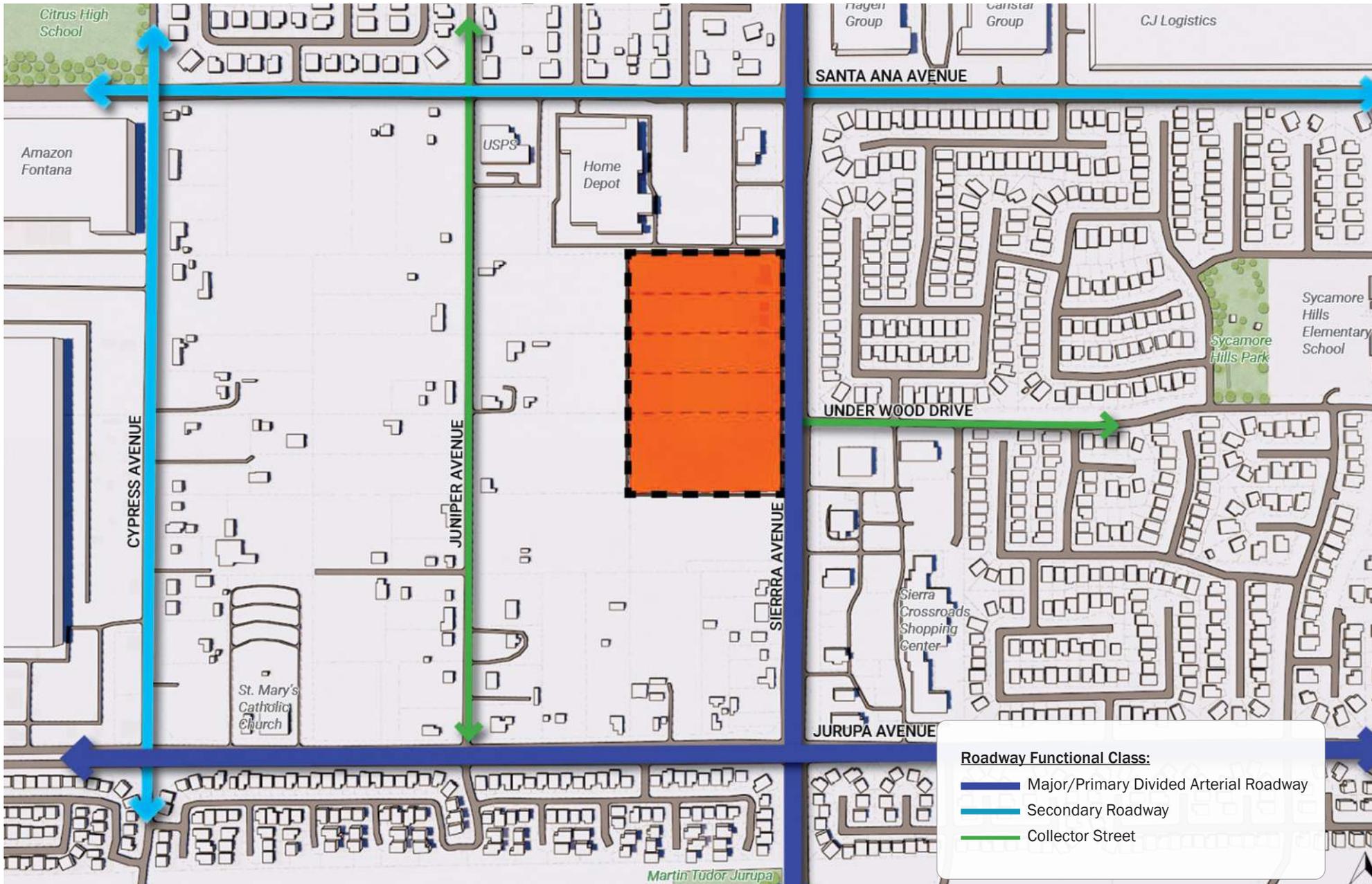
The designation of Sierra Avenue as a major divided arterial roadway provides a challenge in terms of lessening the communities' dependency on automobiles. However, ultimately there is an understanding that the surrounding interconnected street system can benefit from levels of service improvements for all modes of transportation. Those improvements can then increase flow conditions and safety while decreasing speed and car density. In addition, the campus can benefit from being located alongside a main thoroughfare road that connects to downtown Fontana, with an established intersection at Under Wood Drive. Integrating improved pedestrian and bicycle safety across Sierra Avenue in crosswalks and roadway signalization will provide ample visibility to the campus and the surrounding local community partners.

### Opportunities

- Main entry point and gateway opportunity at the Under Wood Drive intersection
- Discuss with the City of Fontana for interest of the College to rename Under Wood Drive to Chaffey Way

### Challenges

- Sierra Avenue is a major divided roadway with only one 4-way entry/exit access point at the intersection of Under Wood Drive
- Posted speed along Sierra Avenue and lack of crosswalk infrastructure on the south side of the intersection will need to be addressed
- Signal Modification Required
- Alignment with the city of Fontana fire department requirements



**Roadway Functional Class:**

- █ Major/Primary Divided Arterial Roadway
- █ Secondary Roadway
- █ Collector Street

VEHICULAR INFRASTRUCTURE

## **TRANSIT CIRCULATION**

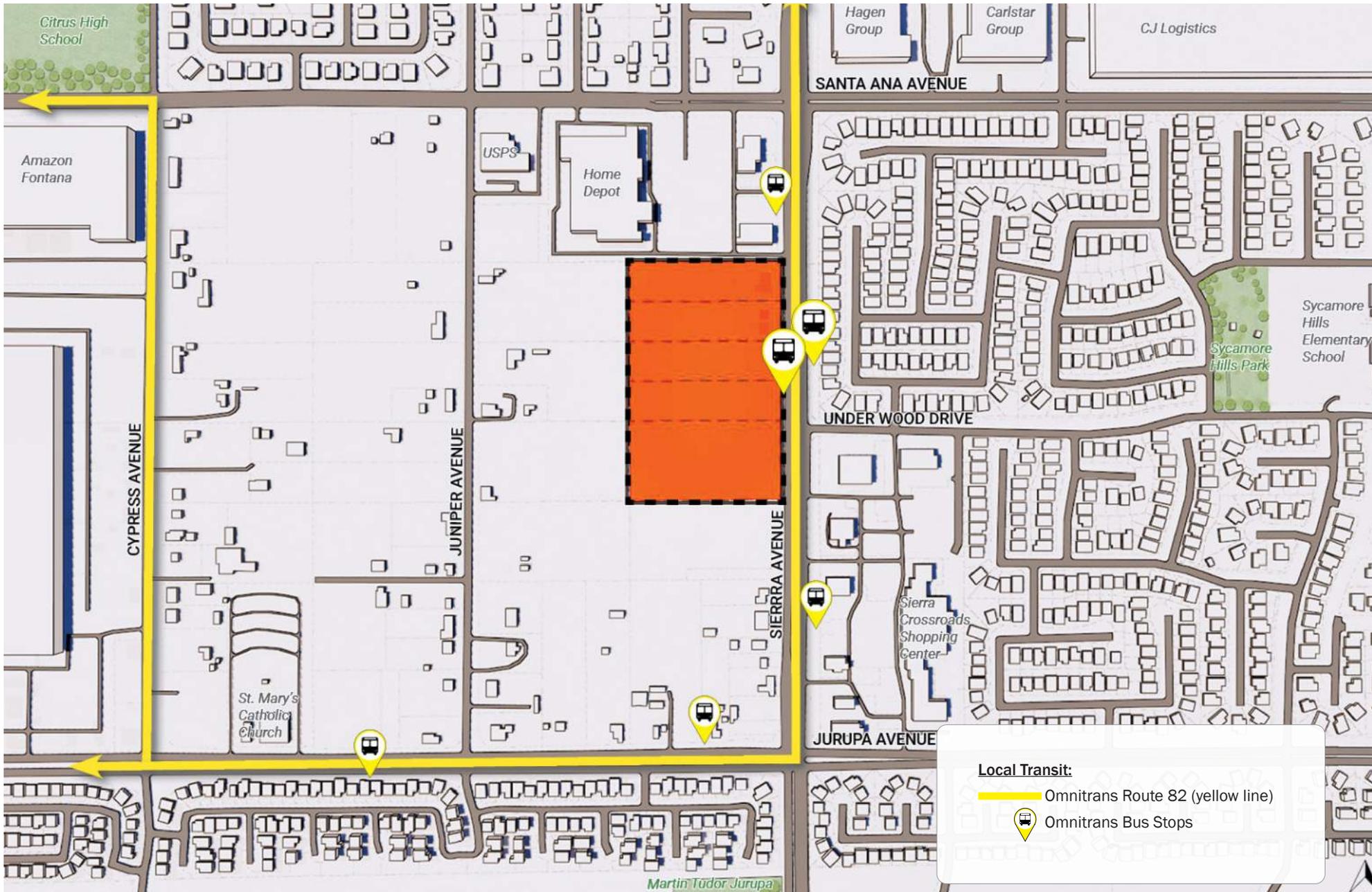
As part of the City of Fontana's initiative to change the approach to transportation, it is an important aspect of the site to integrate various multi-modal options to and from the campus. An infrastructure network that supports a combination of these choices serves people who live, work, play, and learn and allows them to access the variety of land uses in different ways. Focusing on access to mass transit and convenient service options will improve local ridership and provide the opportunity to take some cars off the road, and relieve local traffic congestion. With the regional Omnitrans bus system currently operating in Fontana and along Sierra Avenue, the transit system will provide consistent and efficient public transportation options for students, faculty, staff, and visitors.

### Opportunities

- Bus stop location on west and east-side of Sierra Avenue across from the campus currently provides well utilized local transit access options

### Challenges

- Per Omnitrans, the future bus stop and turn out lane are to be relocated south of Under Wood Drive to serve the campus and the housing development



TRANSIT INFRASTRUCTURE

**Local Transit:**

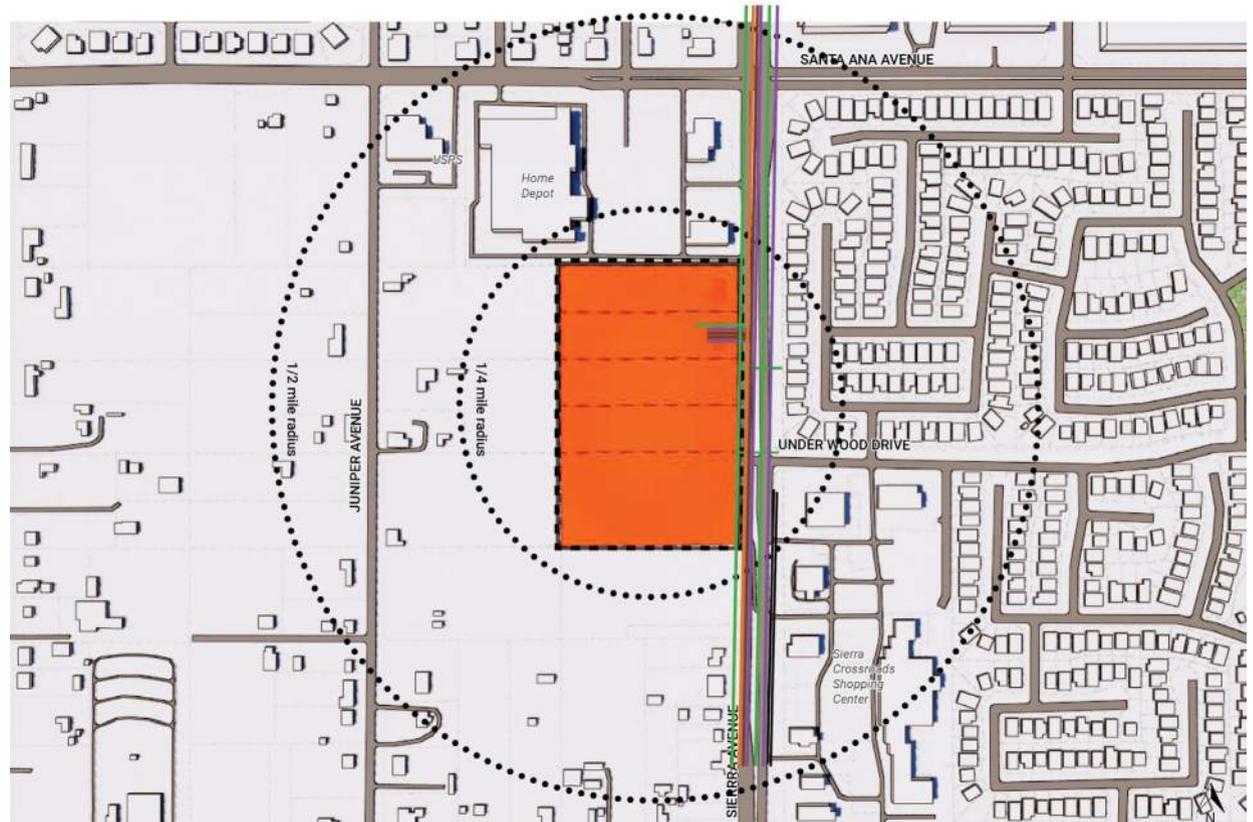
-  Omnitrans Route 82 (yellow line)
-  Omnitrans Bus Stops

## UTILITIES

The College completed a survey and underground utility study prior to the start of the master plan. The survey located major utilities, all of which are located along Sierra Avenue. As part of the planning process, the planning team and College met with the housing development team to coordinate on the sewer planning, currently being completed. The College provided high-level data to estimate the anticipated sewer flow. (See *appendix for sewer report*) The College also met with various utility companies to discuss coordination and process once the College begins to implement construction.

### Southern California Edison:

- The City may require under-grounding of poles. If under-grounding is required, there will need to be a street improvement plan.
- One point of service for the whole site should be centrally located; it could be placed at the main entrance at Under Wood Drive. The location is not required now, but a location closer to Sierra Avenue would be more practical and less expensive.



EXISTING UTILITY INFRASTRUCTURE

**Fontana Water Company:**

- There will need to be a main extension and size increase to serve the property.
- Fire Department will determine the size of the main based on Fire Flow requirements.
- Recycled water stops at the south of our site and could be extended for campus irrigation.

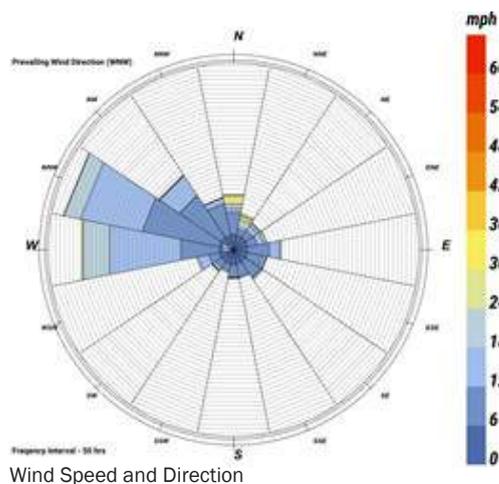


EXISTING WATER INFRASTRUCTURE

## ENVIRONMENTAL ANALYSIS

The new campus site is located in ASHRAE Climate Zone 3B, experiencing warm and dry weather for most of the year. The temperature varies from 26° F in the winter months to 110° F during the summer months.

The wind experienced at any given location is highly dependent on local topography and other factors, and instantaneous wind speed and direction vary more widely than hourly averages. The average wind speed in Fontana typically ranges between 4 and 10 mph. The winds are typically strong during midday/afternoon. The wind patterns for this site are typically Westerly winds. **Campus users reported feeling strong winds throughout Fontana, and expressed a desire for outdoor spaces that are protected from the strong winds.**



## ENVIRONMENTAL DESIGN OPPORTUNITIES:

- **Building Orientation:** Elongate blocks E/W to create shaded campus pathways and open spaces.
- **Shading:** Narrow N/S pathways for shade. This will help reduce surface heat up and shade pedestrians.
- **Urban Heat Island:** Decrease Urban Heat Island by increasing building heights, increasing presence of vegetation, planning for light colors, and high albedo for roofs and parking areas.
- **Green Areas:** Campus green areas will act as heat sinks (transpiration) and wind modifiers, while filtering/controlling dust, reducing pollution. The green areas located upwind on the edge of urban areas will help cool the incoming prevailing winds.

## ENVIRONMENTAL DESIGN CHALLENGES:

- **Heat Gain:** Minimize heat gain through design by orienting the buildings along E/W axis, optimizing wall/window ratios, identified landscape areas and tree selections, and site materials.
- **Strong Winds:** The site may experience Santa Ana winds between October and March. These are strong, dry, warm winds that blow westward through Southern California toward the coast. These winds with average speed of 40mph could dry out vegetation and create critical fire weather conditions.

This page is left intentionally blank.

# 03 CAMPUS PROGRAM AND SPACE NEEDS

## NEW FONTANA CAMPUS PROGRAM

### ACADEMIC PROGRAMS

**Physical Therapy Assistant:** This program was approved through the College's Program Initiation process and would situate a unique health care career at Fontana, which is meaningful given the proximity to Kaiser Fontana and the lack of competition for the program within the local region. Starting salary is \$60,000, and Accreditation groundwork has begun.

**Cloud Computing:** This program was approved through the College's Program Initiation process and is an extension of Cyber Security, which is growing momentum. Starting salary is \$80,000, and an existing faculty member is poised to develop the curricula. The costs associated with starting the program can be covered by SWP, but additional faculty will be needed to expand the program once it is initiated at Fontana in approximately three years.

**Automotive Technology:** This existing program is currently housed at Rancho. It has been determined that the existing building cannot be inexpensively retrofitted and updated, making a new structure necessary. Because a new structure is inevitable, Fontana may be a better location given the partnership opportunities in Fontana if the faculty are willing to relocate the program in three years.

**Advanced Manufacturing:** This existing program has an inextricable link to the In-tech Center, and so expanding the hub for this program extends the relationship at the new campus location. Additionally, manufacturing has strong job placement opportunities in the Fontana region.

**Industrial Electricity:** This existing program is currently housed at the Chino Technology Center, but for the same reasons that it makes sense to situate Advanced Manufacturing, Industrial Electricity can also benefit from potential partnerships in Fontana and will relieve the College from maintaining a separate site in Chino at the Technology Center.

**Transfer Degrees:** The College will continue to focus transfer education efforts in Business, Psychology, and Sociology, which are the three most popular transfer degrees.

**Economic Development/Continuing Education:** As a result of intended growth for Economic Development, it will need a home beyond the In-tech Center, and Fontana was discussed as a potential site – perhaps include English as Second Language (ESL) as well.

## ACADEMIC PROGRAM SHIFTING

### Existing Fontana Campus (Relocated)

All academic programs and services

- Arts and Sciences
- Business and Math
- Information Tech
- Humanities and Social Sciences

### Relocated from Rancho Campus

Automotive Technology

### Relocated from In-tech Center

Advanced Manufacturing  
Economic Development

### Relocated from Chino Tech. Center

Industrial Electricity

### New Programs

Cloud Computing  
Physical/Occupational Therapy Assistant  
Welding



# CAMPUS ENROLLMENT PROJECTIONS

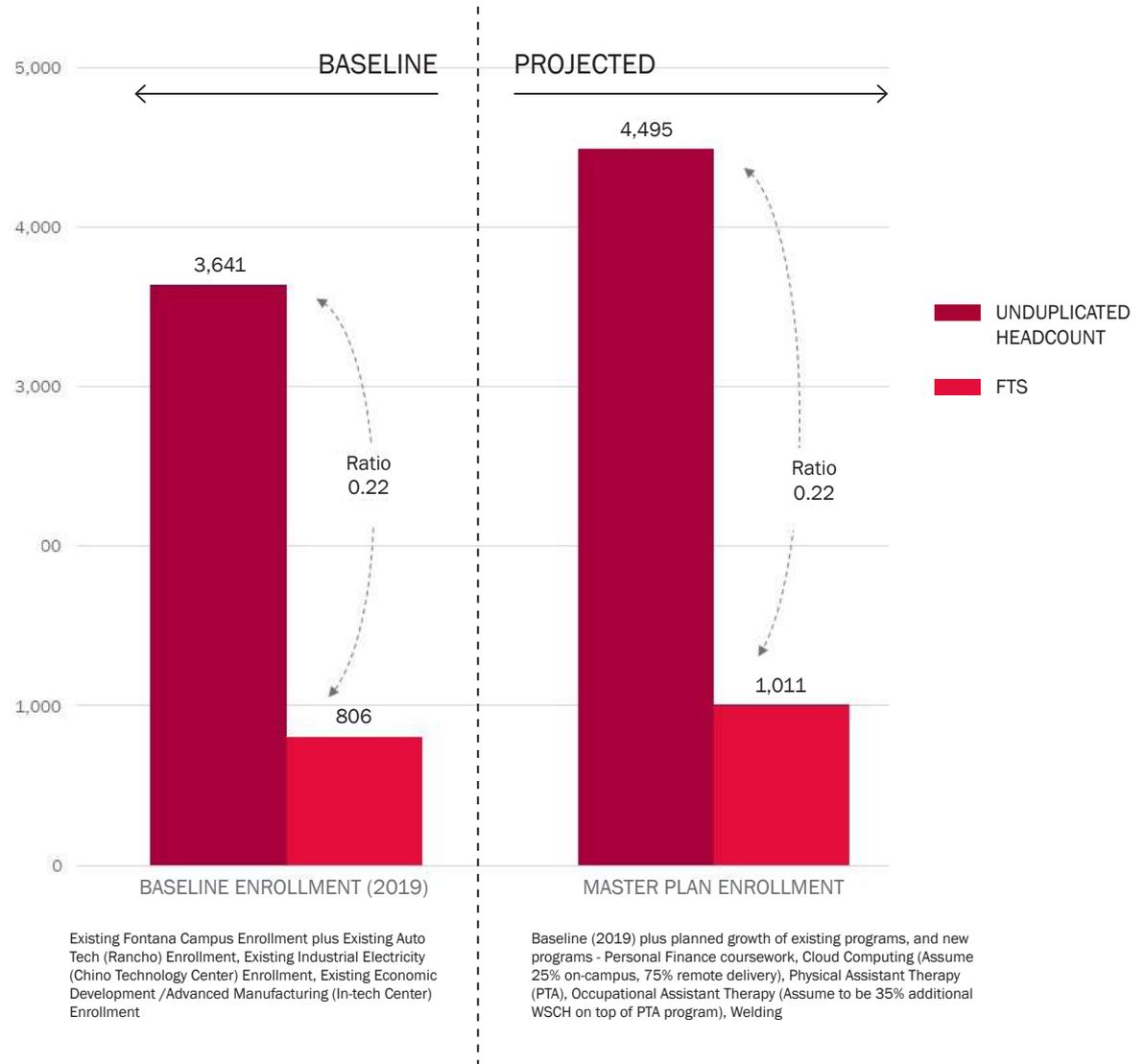
## ENROLLMENT

2019 was established as a base year, which includes the current enrollment for the Fontana Campus programs as well as the existing programs identified to be relocated to the new campus. The baseline enrollment is 3,641 unduplicated headcount, or 806 full time students (FTS).

Projections to 2030 represent the long-term enrollment goals for each program as projected by campus leadership, including new programs that will be on the new Fontana Campus. The long-term projected enrollment is planned for 4,495 unduplicated headcount or 1,011 FTS.

The projected enrollment and weekly student contact hours were the basis of planning for future space needs.

## TOTAL CAMPUS ENROLLMENT



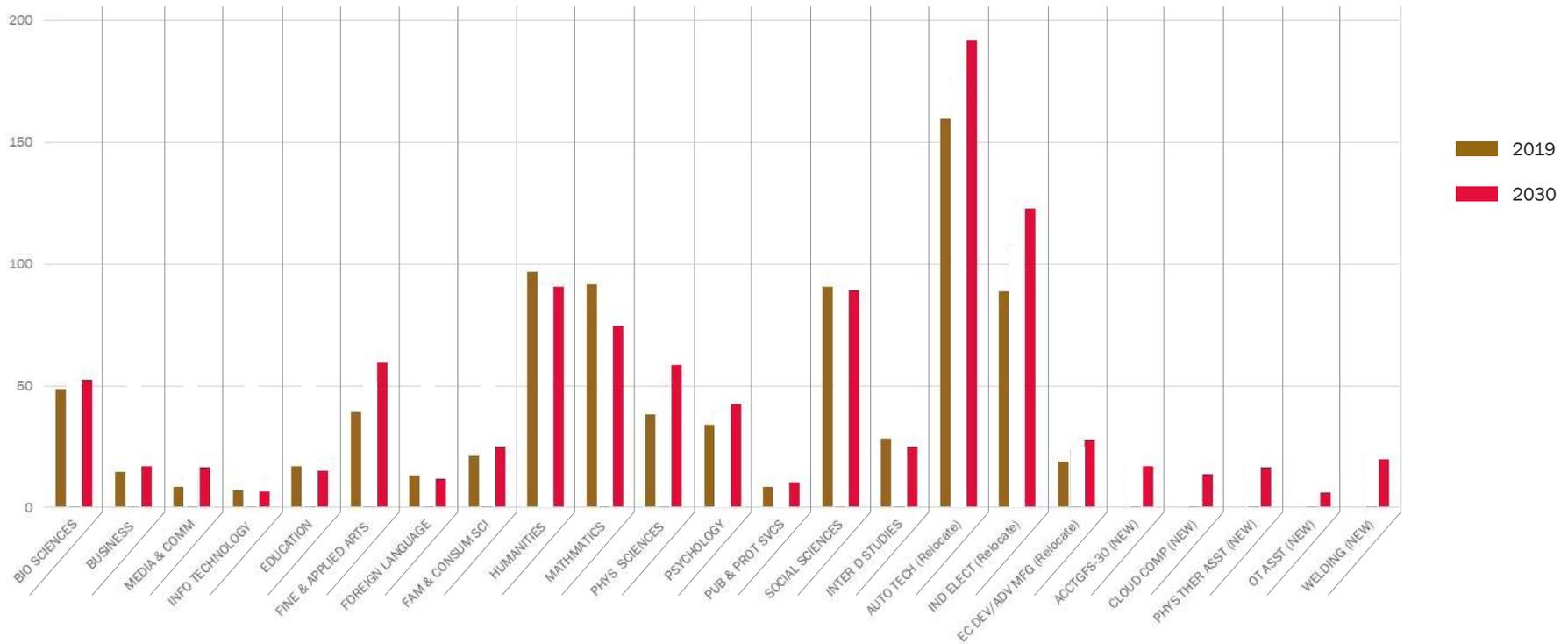
### ENROLLMENT BY PROGRAM

Outlining program enrollment changes reveals what programs may need additional or less space over time when compared to the program’s weekly student contact hours (WSCH).

**There is planned growth in the sciences, arts, psychology, cloud computing, and CTE programs such as automotive technology, industrial electricity, and advanced manufacturing.**

Details for enrollment baseline and projections by program are included in the table located in the appendix.

### ON-SITE STUDENT ENROLLMENT FTS



BASE YEAR (2019) INCLUDES RELOCATED PROGRAMS  
 MASTER PLAN ENROLLMENT INCLUDES RELOCATED + NEW PROGRAMS

## SPACE NEEDS BY TYPE

### METHODOLOGY

**A space needs analysis enables the planning team and the College to identify the types of space it needs today, the types of space it may hold in excess today, and the how much space will be needed in the future to align with enrollment projections.**

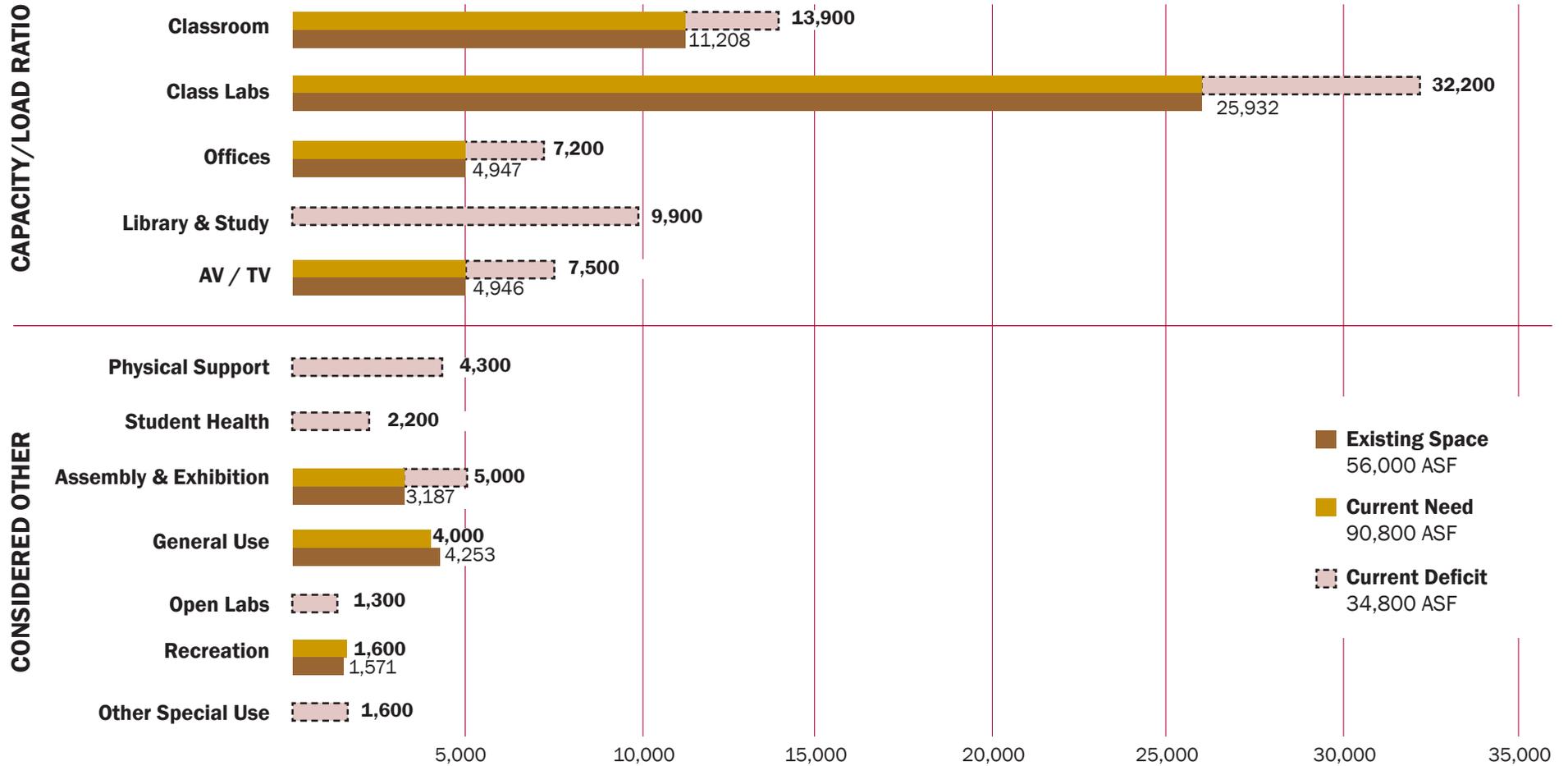
The analysis for the Fontana Campus Master Plan studies spaces are measured by the California Community Colleges Chancellor's Office (CCCCO), including classrooms, instructional labs, offices, library and study, and AV/TV. These space types are measured by Space Capacity/Load (CAP Load) targets, which is the relationship between the amount of space available and the number of students participating in campus programs.

In addition several 'other' space types are not analyzed by the CCCCCO in relation to utilization and efficiency, but are important as part of the college's inventory related to campus experience and operations. These spaces include student space, exhibit and assembly space, and campus support space. These other space categories are analyzed using current, classification-specific metrics informed by Association for Learning Environments (A4LE) standards, peer institutions, and national trends in higher education as defined by organizations such as Society for College and University Planning (SCUP), Leadership in Educational Facilities (APPA), and others. Similar to those defined by CCCCCO, these metrics also determine whether a surplus or deficit of space exists, and provide the data to inform the amount of space needed to support the desired programs.

### CURRENT DEFICITS

The analysis revealed that before enrollment growth is applied there is a deficit in many space types. Some space types such as physical support space, student health, open labs, and library/study are simply not present at the existing Fontana campus, and should be planned for on the new campus to support a complete and comprehensive campus experience. Other space types are undersized in relation to the enrollment it supports, such as classrooms, class labs, AV/TV, and assembly space. In total, the deficit of space today is over 34,000 assignable square feet (ASF). This deficit is planned to be covered on the new campus to ensure the relocated programs are right-sized in their new location.

**ACCOUNTING FOR 2019 DEFICIT**



NOTE DIFFERENCE IN SCALE FROM NEXT CHART

## PROJECTED SPACE NEEDS

This deficit grows significantly for the College to meet its long-term enrollment growth targets. **By the master plan enrollment target, the campus will need 136,100 ASF in physical space on the campus.**

For state-mandated Cap Load categories (Instructional, Lab, Office, AV/ TV and Library), a Cap Load Ratio of 120% was chosen as a planning target. While a 100% Cap Load theoretically meets the existing demand for a campus population in any given space category, there are some limitations to using this as a planning target for a new campus. Increasing the number up to 120% provides the flexibility that is needed for additional growth should enrollments exceed expectations, and also allows for innovation in program offerings and/or potential partnerships not yet defined.

*Each space type is outlined in the following pages.*

FTE: FULL-TIME EQUIVALENT

DGE: DAY-GRADED ENROLLMENT

DGS: DAY-GRADED STUDENT

## SPACE METRICS:

### CLASSROOMS

20 ASF/Student Station

66% Station Utilization

48 hours/week

### CLASS LABS

ASF/Student Station based on program

85% Station Utilization

27.5 hours/week

### OFFICES

175 ASF/Instructional Staff FTE;

150 ASF/Staff FTE

### LIBRARY/STUDY

Reader stations - 50 stations at 27.5 ASF + 0.10 station; Staff Stations - 3 FTE @ 140 ASF per station + .002 / DGE

### AV/TV

Base Allowance - 3,500 ASF + 1.50 ASF/DGE

### OPEN LABS

1.50 ASF/ Student FTE

### STUDENT-CENTERED SPACE

5 ASF/ Student FTE

### RECREATION

No new projected recreation space; Existing recreation space will be relocated to the new campus.

### SPECIAL USE

2 ASF/ Student FTE

### ASSEMBLY

Based on 3,000 SF multi-purpose meeting spaces.

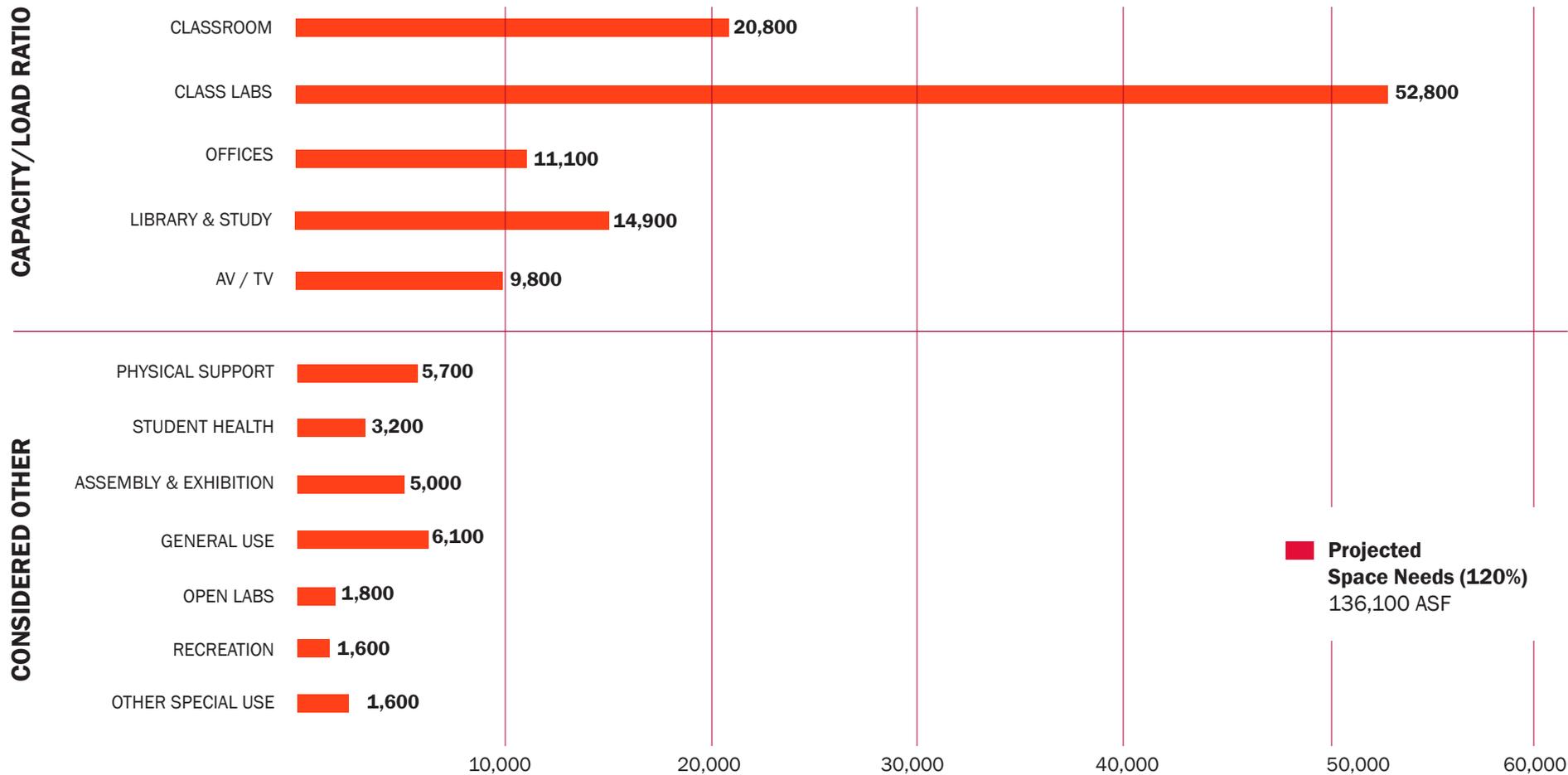
### STUDENT HEALTH

0.60 ASF/ Student Headcount

### PHYSICAL SUPPORT

5% of total square footage

### SPACE NEEDS ASSESSMENT BY SPACE CATEGORY



NOTE DIFFERENCE IN SCALE FROM PREVIOUS CHART

## CAPACITY/LOAD RATIO

### CLASSROOMS

Weekly Student Contact Hours (WSCH) were calculated using the factors outlined in the California Community College Board of Governors (CCCCO BOG) and Chancellor's Office Policy on Utilization and Space Standards for an institution with < 140,000 WSCH which states that classrooms shall not be used less than 48 hours per 70-hour week. The base year space need was established using the Fall 2019 schedule for the courses taught on the existing Fontana campus as well as the courses taught for the programs to be relocated from other campuses.

#### Caveats:

- The classroom space needs associated with the new welding program were established by benchmarking against other welding programs of similar student size and activity level.
- A similar process was followed for the Economic Development and Advanced Manufacturing program which supports training for individuals who are out of work. While there are no scheduled courses, it is anticipated that the students will be on campus eight (8) hours/day, five (5) days/week and require both classroom and class laboratory space.

#### Classroom Size and Features

Campus stakeholders expressed a need for spaces that can easily allow for changes in programs and curriculum. **The College is planning to use 40-45 capacity flat-floor classrooms as a typical module for planning purposes.** This results in an 800-900 square foot classroom. This mid-size classroom will allow for flexibility in space use and furniture arrangement.

**It will be important to plan classrooms for hybrid learning environments as a standard classroom model.** Students reported a desire for online lectures and hybrid classes to continue in a post-pandemic campus. Online and remote learning can be more accessible and convenient for many students, given they have adequate technology and wifi access at home. On-campus, a focus on creating technology-rich learning spaces is already happening at other Chaffey locations in both classrooms and labs.

As the College is implementing the series of academic buildings overtime, **larger and smaller classrooms may be planned to support the specific programmatic needs** within each academic building. This will be explored within programming for each building.

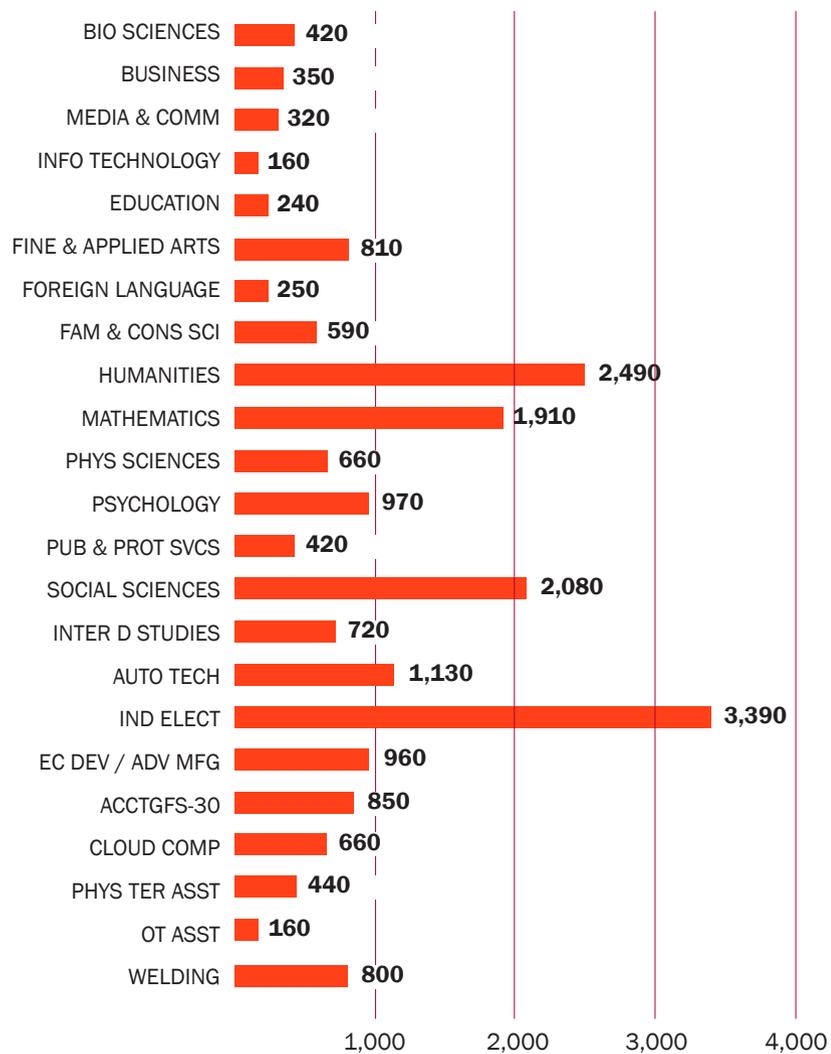
### CLASS LABS

Class Laboratories are program specific and the CCCCCO BOG has developed a schedule outlining station size standards by area of study. Weekly Student Contact Hours (WSCH) for class laboratories were calculated for the base year and the master plan years using the factors outlined by the BOG.

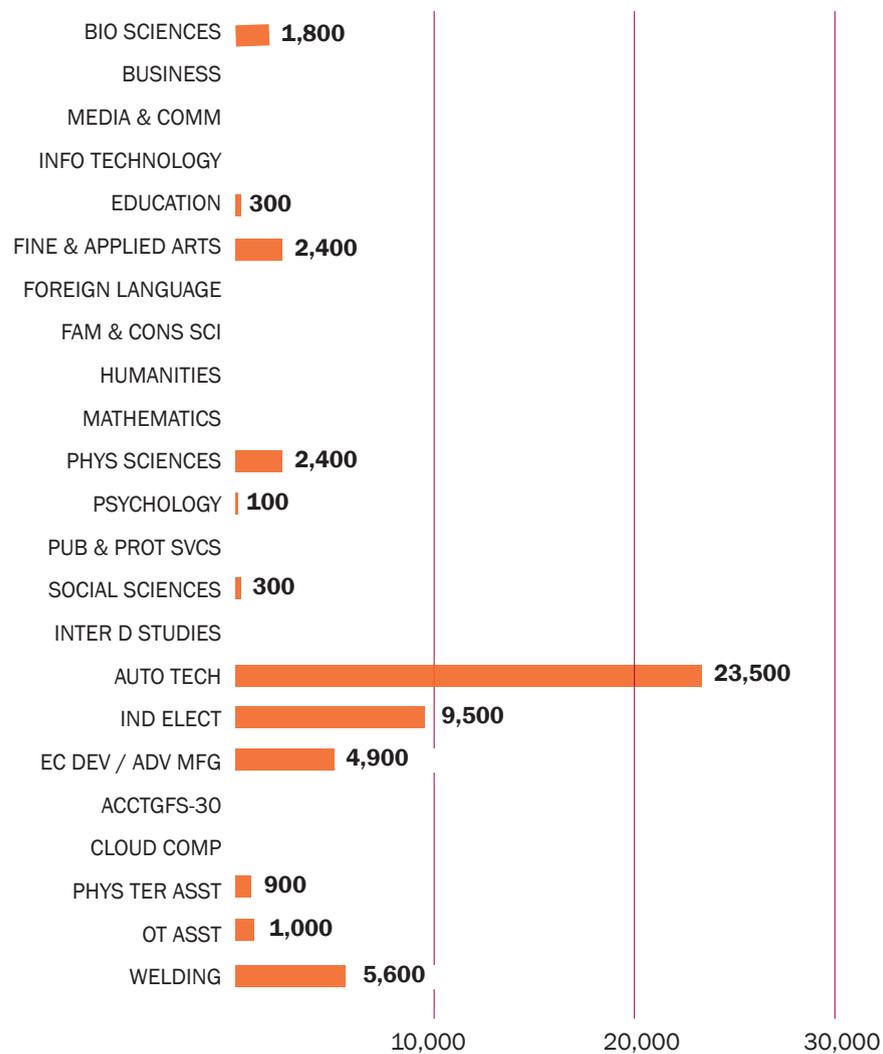
#### Caveats:

- Class laboratory space for the welding program was established by benchmarking similar sized programs. A factor of 224 ASF per student station as determined to best support the activities associated with the courses anticipated for this program.
- Class laboratory space for the Economic Development/Advanced Manufacturing program fell into two categories: equipment intensive (mechanical and electrical) and information technology training (computer lab). For the equipment intensive lab, a factor of 165 ASF/student station was used and for the computer lab, a factor of 40 ASF/student station was used.

### CLASSROOM



### CLASS LABS



## OFFICES AND WORKSPACE

Office space is calculated based on two categories of staff. Instructional Staff FTE as outlined by the CCCCCO BOG are factored at 175 ASF/faculty and staff FTE. Office/Workspace for all other staff was factored at 150 ASF/staff FTE.

### Office Configuration and Features

In the plan, faculty offices are arranged as centralized spaces at the top floor of each academic building. Campus stakeholders expressed a desire for multi-purpose workspace that includes a variety of space types to support a range of activities, including:

- Secure, and confidential spaces for faculty to work independently and meet with students privately.
- Lounge and community space for informal interactions between faculty of different disciplines and to meet more informally with students.
- Collaboration areas for meetings and small group sessions with students.

## LIBRARY

Library and Study space need is developed based on three factors: collection size, staff spaces, and reader stations. It has been determined no library collection will be on the new campus; therefore, it was removed from the analysis.

Reader stations are factored with a base increment of 50 stations at 27.5 ASF with additional stations added at a rate of 0.1 station per Day Graded Student for institutions with < 3,000 DGE. For institutions with a DGE ranging between 3,000 – 9,000, the additional DGE over the 3,000 base is factored at the lower rate of 0.09 stations/DGE.

Staff Stations are factored with a base increment of 3 FTE at 140 ASF per station. Additional FTEs are factored at a rate of .002 /DGE for the first 3,000 DGE with the incremental DGE over the 3,000 threshold factored at a slightly lower rate of .0015.

## AV/TV

A base increment of 3,500 ASF is the initial increment outlined by the CCCCCO BOG. In addition, there is 1.5 ASF/DGE applied for institutions with a DGE enrollment of < 3,000 students. For institutions with a DGE ranging between 3,000 – 9,000, the additional DGE over the 3,000 base is factored at the lower rate of 0.75/DGE.

*\*The baseline (2019) Day Graded Student Enrollment was provided by Chaffey College for the Fontana Campus and projected at the same rate for Master Plan Enrollment.*

## **SPACES CONSIDERED “OTHER”**

### **STUDENT-CENTERED SPACES**

Student-centered space includes dining facilities, bookstores, student lounges, and student government, clubs, and organization offices and space. While sometimes referred to as a center or a union, quite often these spaces are dispersed throughout a campus.

### **ASSEMBLY**

Assembly space is defined as any room designed and equipped for the assembly of a large number of people. For the new campus, this space type includes spaces planned for events, general student gatherings, and community-sponsored activities. Per discussions with College leadership and campus stakeholders, the campus will require two large multi-purpose meeting spaces.

### **OPEN LABS**

Open labs can resemble class labs with the exception that they are irregularly scheduled or are not scheduled at all. This can include open access labs and may provide equipment that serves the particular needs of a discipline for group instruction. It is key for these spaces to typically not be scheduled in a formal manner.

### **STUDENT HEALTH SERVICES**

Student health care includes both medical and counseling services to serve the campus population. This is a critical component to the new campus and will be present adjacent to a suite of student services.

### **SPECIAL USE**

Activities supporting other special use (e.g. media production, demonstration, faculty development and support centers, departmental resource rooms, etc.) are varied in use and are not included in the CCCCCO BOG guidelines.

### **PHYSICAL SUPPORT**

The physical plant space supports the campus including maintenance shops, central storage, shipping and receiving, landscape services, vehicle maintenance and storage space, and custodial services. For purposes of planning the new campus, the total ASF was factored at 5% factor was to derive the space needed to support the campus, this is in keeping with industry standard for a campus of this size and complexity.

# 04 CAMPUS VISION PLAN



**CAMPUS PLANNING VISION STATEMENT**

**The new Fontana Campus will be a vibrant and inspirational learning environment that is safe, accessible, and sustainable. The campus will be a destination for students, the surrounding community, and partners to learn, collaborate, and prepare for their future success.**

**MEASURE P GUIDING PRINCIPLES**

To support and frame the success of the projects completed as part of the Measure P bond programs, a set of guiding principles were established. These became the framework for the vision and objectives created for the new Fontana Campus Master Plan.



**CAMPUS VISION FRAMEWORK**



## PLANNING OBJECTIVES



### INSTRUCTION AND WORK SPACES

*Prioritize flexible / hybrid / multi-purpose learning and working environments.*

- Group faculty together in large, multi-purpose shared spaces that accommodate both privacy and collaboration.
- Inspire users with high-quality educational and work-spaces designed to meet their needs.
- Instructional spaces should be large and “tech-rich.”
- Use the campus environment as a “living lab.”

### CAMPUS LIFE AND AMENITIES

*Provide a range of environments (indoors and outdoors) for collaboration, study, dining, physical activity, computing, virtual engagement and special events.*

- Represent the Fontana campus and community culture.
- Design amenity space for flexibility, comfort, and well-being.



## STUDENT SERVICE SPACES

*Design a campus experience where students and staff feel supported and inspired to be their best.*

- Centralized hub with comprehensive service offerings.
- Provide spaces that promote student health and wellness on the campus.
- Provide a front-door student services space that is welcoming and accessible.



## COMMUNITY OUTREACH

*Provide a welcoming environment for the community on the new campus.*

- Provide easily accessible community event space.
- Place partnership spaces on the campus perimeter.
- Create a sense of place for the community outdoors.

## PLANNING OBJECTIVES



### ACCESSIBILITY AND SAFETY

*Plan a campus environment that prioritizes a safe and equitable experience for all.*

- Plan for well-lit outdoor spaces that connect the campus.
- All campus spaces should be easily accessible to provide an equitable campus experience.
- Increase the visibility of campus safety office/officers.

### OPEN SPACE AND LANDSCAPE

*Outdoor spaces should be welcoming for college and community and support collaboration, programs and events.*

- Plan a variety of open spaces that accommodate both large and small gatherings.
- Outdoor spaces should be flexible, maintainable, and multi-purpose.
- Outdoor spaces should be protected from wind and sun.
- Provide charging and wifi outdoors.



## CIRCULATION AND PARKING

*Plan and design for a safe campus environment that supports all modes of circulation.*

- Ensure sufficient and convenient parking for campus users.
- Support alternative modes of transit that are on- and near the campus.
- Provide clear points of entry into the campus.
- Integrate safe pedestrian pathways throughout the campus.



## SUSTAINABILITY + INFRASTRUCTURE

*Put sustainability on display in the physical environment.*

- Plan for up-front sustainable infrastructure.
- Buildings should be designed to LEED Silver or better; with a focus on reducing energy use.
- Use trees and landscape to mitigate urban heat island impacts.
- Plan for a majority native and drought-tolerant plantings.
- Design for smart irrigation controls

## CAMPUS FRAMEWORK

The Campus Vision Plan was developed based upon:

- Listening to the needs of campus stakeholders
- An analysis of campus space needs and the physical site conditions
- The intent to address each of the planning principles and planning objectives

A major driver of the plan is to create a collegiate campus where students and staff feel supported and inspired to be their best. To achieve this, organization of the site plan is designed to support academic success:

- A strong “front-door” is created with an iconic Welcome Center/Library positioned to be closest to Sierra Avenue, the tallest building on the campus.
- The organization of circulation for both pedestrians and vehicles provides simple wayfinding and equitable access throughout the campus. The major pedestrian promenade provides ease of access and direction for campus visitors and new students. In addition, clear drop-off/pick-up locations provide safe and protected spaces for students to wait.
- Academic buildings are arranged around the perimeter of the campus quad. Front doors to each of the buildings face the quad, for easy wayfinding.
- The central campus quad provides a dynamic and vibrant outdoor space for events, recreation, learning environments, and community engagement.
- A public-facing Student and Community Center is placed at the perimeter of the campus and adjacent to the main entry as away to directly engage with the community on the campus.

## PLANNED BUILDINGS

- A** Welcome Center/Library
- B** Instructional Building I
- C** Automotive Technology Building
- D** CTE Building
- E** Operations and Maintenance Building
- F** Instructional Building II
- G** Student and Community Center



- NEW CONSTRUCTION
- PROMENADE
- DROP-OFF
- WAITING AREA

## BUILDING USE

To follow the vision of a collegiate appearance, an iconic building will be located as the “front door” of campus. The Welcome Center/Library is placed centrally on the campus, with a grand yet welcoming appearance. As the tallest on campus, this building will be the obvious front door for new campus visitors. The primary function of the Welcome Center/Library student services functions including health services, a satellite location for campus police, as well as library and study space.

To facilitate a vibrant campus atmosphere, academic buildings are located along the edge of campus to create a centralized quad space. Adjacent to the quad, academic buildings are massed to form protected outdoor courtyard spaces.

Faculty Offices shall be located as a consolidated space in each academic building. These multi-purpose spaces in each academic building will enhance cross-disciplinary collaboration between faculty, and easier access for students to interact with faculty.

In an effort to encourage community interaction on the new campus, a Student and Community Center is located in close proximity to the main entrance, main drop-off, and parking area. It will have a dominant facade facing the public realm on Sierra Avenue. This building will be the primary location of student spaces on campus, such as dining, retail, meeting spaces, and clubs and organizations.

The Operations and Maintenance building shall be located in the northwest corner of the campus, away from the most populated areas. This building will house campus police, central deliveries, operations and maintenance, and their fleet space.



BUILDING USE

## VEHICULAR CIRCULATION AND PARKING

The main entrance into campus will be at the signaled intersection of Sierra Avenue and Under Wood Drive. To enhance the iconic entrance, the drive will be lined with a tree allée and monument gateway signage. A main-entry drop-off area is designated at the roundabout, while also leading into the main parking lot circulation. To develop equally dispersed parking access, the parking lot surrounds the campus on the south, west, and north sides. A central-loop provides seamless connection throughout.

A secondary access point into the campus is along Sierra Avenue, along the north edge of campus. This entry will be a right-in right-out, for individuals coming from the north and heading south towards Under Wood Drive. The campus is limited to two access points based on the proximity to surrounding developments, but an additional access point into the retail plaza to the north (for emergency purposes only) could be planned with the adjacent property owners. A secondary drop-off area is provided along with access to the main parking lot.

The campus is planned to have approximately 700 parking stalls, which includes approximately 30% compact stalls. The parking allotment was calculated per the Institute of Transportation Engineers metrics for Junior and Community Colleges. Handicap-accessible parking stalls are equally distributed throughout the campus. Locations were strategically placed for easy access to all buildings throughout the campus, with minimal conflicts between pedestrians and vehicles.

Working with the City of Fontana Fire Department, it was decided that all drive aisles (indicated in light royal blue on the plan) should be a minimum of 26', and all emergency lanes (shown in light orange on the plan) should be a minimum of 30'.

Three limited access emergency fire-lane drives are provided along the campus's east, central, and west corridors. The areas will be designed to operate and aesthetically feel like pedestrian promenades. However, they will also be designed at a minimum of 30' and should withstand heavy-duty vehicles and provide easy access in case of emergency.

Access to the Operation and Maintenance building can be from either of the two access points, although more conveniently from the secondary-access point. Sufficient area is provided for large vehicles and semi-trucks to access the loading dock area, while being away from the primary views of the central campus. The main campus buildings will primarily be serviced from the Operations and Maintenance building. However, supplemental service was considered. The west buildings may be accessed from the west fire-lane corridor or parking lot, while the east building may be accessed from the east fire-lane corridor. The Auto/Tech Building will have vehicular access into and through the building with incorporating pavement, curb cuts, and special building design.

Along Sierra Avenue, the Omnitrans bus stop will be relocated south of the Under Wood Drive intersection with a shelter and turn-out lane. This stop will serve both the campus and housing development to the south.



- PARKING LOT
- - - DROP-OFF
- - - LIMITED ACCESS (30')
- - - DELIVERIES
- AUTO BUILDING
- BUS STOP
- PUBLIC ROADS
- \* DROP-OFF
- ADA ADA PARKING
- COMPACT PARKING

CIRCULATION

## PEDESTRIAN AND BIKE CIRCULATION

Pedestrian circulation throughout the campus is a primary organizational component of the plan. A central pedestrian promenade extends from the north parking lot, through central campus / quad area, through the south parking lot. The prominent connection between the two main drop-off areas provides clarity on circulation for any new visitor to campus.

Secondary pedestrian corridors are located along the west and east edges of the central campus, also located on the emergency fire-lane access drives. The secondary corridors also extend from the north to the south parking lots.

At each end of the pedestrian corridors are designated crosswalk locations. Additional crosswalk locations are provided at strategic locations between the parking lot and central campus. Enhanced crosswalks clearly define where pedestrians will be crossing vehicular circulation. Pedestrian circulation is identified throughout the parking lots with walkways within the medians, leading to the main corridors. Circulation routes shall be clearly defined to minimize risk for pedestrians in an vehicular area.

Public pedestrian circulation along Sierra Avenue is provided, connecting individuals from developments to the north and south. Access points from the public realm are identified to connect pedestrians into the core of the campus. A clear path is identified from the main drop-off area to the public bus stop along Sierra Avenue.

For both campus users and the surrounding public, a wellness walk is located on the property edge. The wellness walk limits pedestrian and vehicular conflicts, but allows the community a way to feel connected to the campus. An eight to ten-foot trail will accommodate walks and bikers, and still provide a sufficient landscape buffer with shade.

Bicycle parking locations are identified at strategic locations on campus to include the public bus stop, primary and secondary drop-off locations, and the main library building. Secure and visible bike racks shall be provided to encourage bicycle transportation to and from the campus.



-  PRIMARY
-  SECONDARY
-  PARKING LOT
-  CROSSWALK
-  PUBLIC ACCESS
-  WELLNESS WALK
-  BIKE PARKING

NORTH →

CIRCULATION

## OPEN SPACE

The iconic central quad space enhances the ideal collegiate feeling of the campus. This critical space creates a vibrant and comfortable campus environment by providing learning and socializing spaces, both formal and informal, or light recreational use. Being centrally located on campus, as indicated with the dashed outline, the quad is easily accessible and visible from all buildings within the campus core. The open quad space allows a space for the students, campus users, and the community to come together in a vibrant environment.

Nestled between the academic buildings along the west are strategically located outdoor plazas and learning spaces. Two-story building connections enclose the outdoor spaces providing protection from wind, creating a pleasant outdoor environment. The outdoor plazas shall be developed with flexible use, providing spaces for socializing, studying, and learning.

Along the north facade of the Automotive Technology Building is an outdoor workspace. While still situated on the central campus, this location is ideal to be in close proximity to the parking lot and out-of-view from the central quad.

An outdoor plaza will be located on the western edge of the Library/Welcome Center as a space for socialization. The central location engages with the central quad green space.

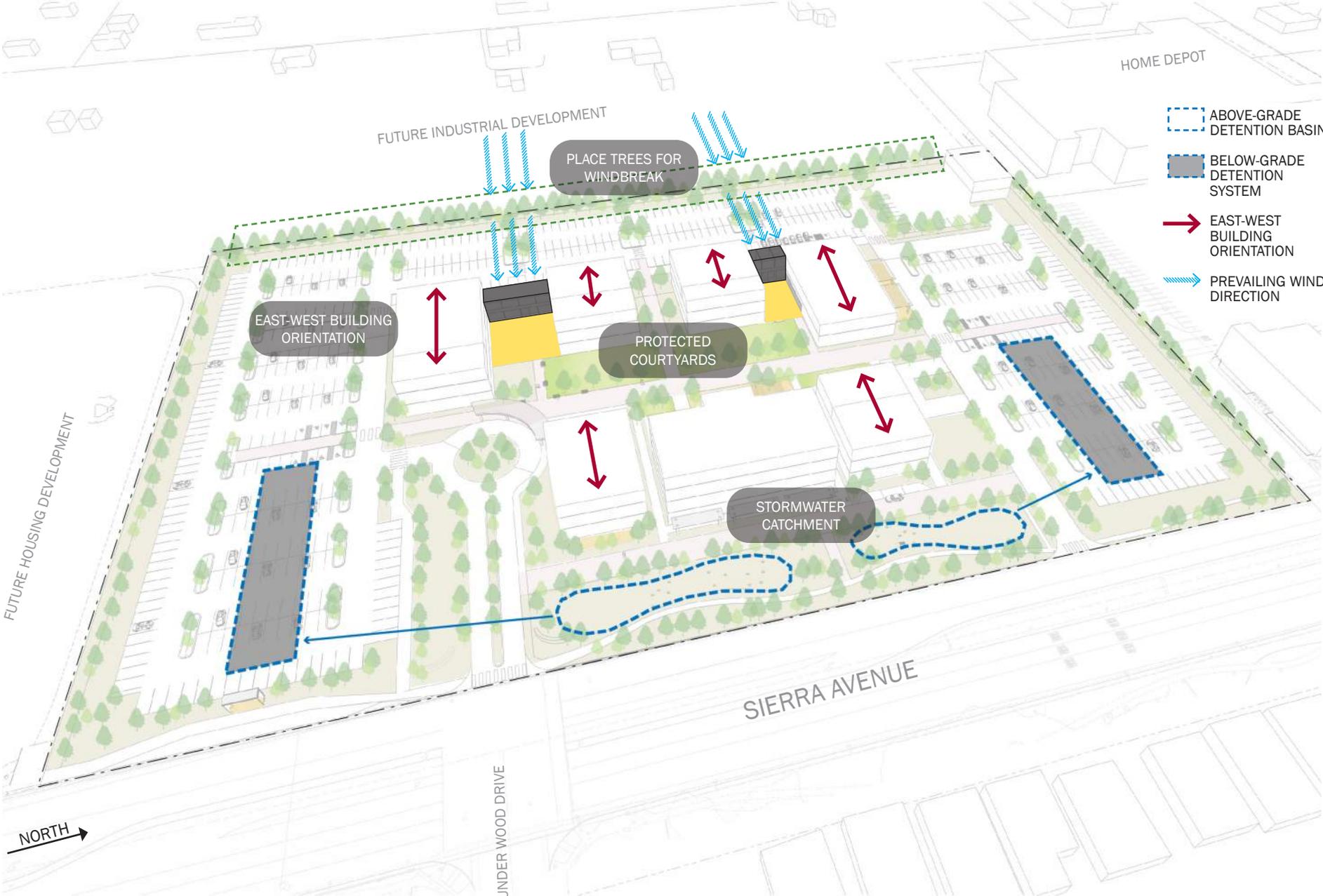


OPEN SPACE

## **SUSTAINABILITY**

Stormwater management will be provided as detention basis located along Sierra Avenue. Native plantings, including trees and shrubs, shall provide an enhanced landscape entrance into the campus. In addition, a below-grade detention system shall be located in both the north and south parking lots. Five-foot diameter pipes connect to the above-grade detention basis as an overflow system.

The prevailing wind comes from a consistent west direction. In order to avoid wind tunnels on campus, wind blocks shall be considered with building location and orientation, along with natural vegetation. Building connections are provided for the academic buildings along the western edge to create a comfortable outdoor plaza atmosphere. A continuous vegetation border provides an additional wind-block layer along the western property edge. Buildings are also off-set from each other to avoid long narrow passageways.



## IMPLEMENTATION PLAN

The Campus Vision Plan represents an overall picture of the future developed campus. It is critical to understand the construction of the new campus will occur over a long period of time in a series of phases. The short-term and long-term phases are outlined within the next section.

In order to be successful and practical, a master plan must be flexible and responsive to the changing dynamics that are extremely prevalent in higher education today. Shifts in funding availability, program changes, and enrollment fluctuations may cause a plan to occur out of sequence or different than imagined within this document.

With flexibility and responsiveness deriving the implementation strategy, the phasing has been developed with the following in mind:

- Concentrate on building the student base; bring programs to attract and grow student population.
- Focus on unique programs and programs that don't have a home today.
- Short-term needs a WOW factor to attract students.
- Short-term needs multi-purpose spaces that can be easily converted in the future.
- Short-term needs a general-purpose instructional building that can be easily converted as new programs are brought to the campus.
- All major utilities will need to be completed in the short-term.
- Specialized spaces should be placed in their permanent homes, and not be planned in temporary spaces.
- The use of temporary/modular buildings for early phases isn't preferred; although it may be an option for O&M.
- Maintaining support spaces on each campus is expensive.
- Design-Bid-Build and Design-Build Strategies are under consideration



## SHORT-TERM PHASE

*In the short-term, the campus implementation projects will house new programs on campus, relocate unique programs from other campuses, and provide most of the campus' site work and infrastructure.*

### 1. WELCOME CENTER AND LIBRARY

This first project will be the iconic front-door building located along Sierra Avenue.

Programs will include: Library and Media Spaces, Student Services, Health Services, Campus Police Satellite location, Administrative Offices, Meeting Spaces, and Temporary Dining and Bookstore.

Size: 51,000 GSF

Levels: 4 Stories

Mid-Point of Construction: 2027; Estimated Cost: \$53.6M

### 2. INSTRUCTIONAL BUILDING I

The second project is an instructional building located in the southeast corner of central campus.

Programs will include: Science labs, Cloud Computing, Information Technology, Physical Therapy Assistant, Occupational Therapy Assistant, Business, Accounting, Math, Psychology, Social Sciences, Open Labs, and Faculty Offices.

Size: 28,000 GSF

Levels: 3 Stories

Mid-Point of Construction: 2028; Estimated Cost: \$25.9M

### 3. AUTOMOTIVE TECHNOLOGY BUILDING

The third project is a two-building facility including a connection corridor in the northeast corner of the central campus. Programs will include Automotive Technology, Welding, and Faculty Offices.

Size: 50,000 GSF

Levels: 2 and 3 Stories

Mid-Point of Construction: 2031; Estimated Cost: \$56.6M

### 4. TEMPORARY O&M

A temporary structure will be house the Operations and Management along with the Campus Police. The structure shall be located in the northeast corner of the property, but not at the future location of the structure. This shall be provided early in the construction process.

Size: 8,000 GSF

Levels: 1-2 Stories

Mid-Point of Construction: 2027; Estimated Cost: \$4.4M

### 5. SITE AND INFRASTRUCTURE

Infrastructure including all drives and campus entry points, parking lots, site utilities, and green spaces for most of the site shall be completed in the first phase of the construction process.

Estimated Cost: \$22M



PHASE 01

## LONG-TERM PHASE

*In the long-term, the remainder of the planned programs will transition to the new campus, as well as the remainder of the site work.*

### 6. CTE AND TRAINING BUILDING

Located adjacent to the Instructional Building I, this new building will be built with a two-story connector. Program will include Industrial Electricity, Advanced Manufacturing, and Faculty Offices.

Size: 32,000 GSF

Levels: 3 Stories

Mid-Point of Construction: 2034; Estimated Cost: \$38.6M

### 7. INSTRUCTIONAL BUILDING II

An additional instruction building will be located along Sierra Avenue with a connection to the Welcome Center. Programs will include Education, Family & Consumer Sciences, Arts, Languages, Humanities, Media and Communications, Public Service, Interdisciplinary, Open Labs, and Faculty Offices.

Size: 20,000 GSF

Levels: 3 Stories

Mid-Point of Construction: 2037; Estimated Cost: \$22.5M

### 8. STUDENT AND COMMUNITY CENTER

With a prominent location along Sierra Avenue and the main drop-off, this building will be an addition to the Welcome Center/Library. Programs will include Dining, Bookstore, Meeting Spaces, and Multi-purpose rooms.

Size: 20,000 GSF

Levels: 3 Stories

Mid-Point of Construction: 2040; Estimated Cost: \$26.6M

### 9. PERMANENT O&M

A permanent structure will be construction to replace the temporary structure. Programs will include Operations and Maintenance and Campus Police.

Size: 8,000 GSF

Levels: 1-2 Stories

Mid-Point of Construction: 2040

Estimated Cost: \$11.2M

### 10. SITE AND INFRASTRUCTURE

Infrastructure will include the remain site with parking, secondary drop-off, and plaza/green spaces.

Estimated Cost: \$3.9M



PHASE 02



## CAMPUS VISION PLAN

- (A)** Welcome Center/Library
- (B)** Instructional Building I
- (C)** Automotive Technology Building
- (D)** CTE Building
- (E)** Operations and Maintenance Building
- (F)** Instructional Building II
- (G)** Student and Community Center

This page is left intentionally blank.

## CAMPUS ENTRY



**WELCOME CENTER / LIBRARY**



## CAMPUS QUAD



This page is left intentionally blank.

