University of Washington Tacoma

Campus Master Plan Update

Fall 2008

University of Washington Tacoma

Campus Master Plan Update

Fall 2008

prepared by

MITHŪN

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**Contact Ysabel Trinidad, UW Tacoma Vice Chancellor for Administrative Services, for more information regarding the document supplement and/or other planning documents referenced within the Campus Master Plan Update.*

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**special thanks to Nancy Rottle's Fall 2007 Landscape Urbanism/Regional Planning Studio who presented "Green Infrastructure Frameworks for the UW Tacoma Campus"*

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Introduction

Chancellor's Message

Based on UW Tacoma's vision of becoming a major metropolitan university with a strong research focus, this 2008 Campus Master Plan Update will guide the creation of a distinctive urban campus that honors the University of Washington, creates new opportunities for students and the community, and celebrates the unique historic and natural assets of the South Sound. This document serves as a framework for the growth and development of the UW Tacoma campus and will provide direction and a sense of place for our community. It reflects the values and goals of our strategic plan and supports our transition to a full service four-year institution.

As the South Sound's only public university, UW Tacoma is committed to providing access to higher education for qualified students from the South Sound, particularly diverse, and historically underrepresented students. The University's current student body numbers approximately 3,000, is drawn primarily from Pierce and surrounding counties, and is expected to expand to at least 10,000 students at full build-out of the campus. This growing and increasingly diverse group of students will continue to be taught by a dedicated and primarily full-time faculty offering degree programs at the bachelor's and master's levels. Over the next ten years, UW Tacoma students also will have access to expanded University services, including new undergraduate and graduate programs, housing options, academic support programs, and student life activities.

The Master Plan is a critical tool for accommodating this projected growth and pursuing the University's commitment to building a more differentiated and comprehensive institution. Both the Master Planning process and the plan itself reflect the sure knowledge that UW Tacoma's future direction must be determined not only by the values, aspirations, and traditions of the University, but also by the expectations, and needs of community and regional partners. These expectations and needs are incorporated into the Master Plan and include: the facilitation of new economic development opportunities, the need for efficient and effective transportation options, the incorporation of sustainable practices in construction and operations, and the creation of a safe, accessible campus that is integrated fully with the life and fabric of the South Sound.

Finally, I would like to express my appreciation to Ysabel Trinidad, for her leadership of this process, and to the many staff (both at UW and at UWT), faculty, students and citizens of Tacoma who contributed to the creation of this document. In addition, and on behalf of the entire UW Tacoma community, I also must express my sincere thanks to the design firm Mithun, Inc. for the guidance they have provided in this process.

UW Tacoma's future is in part a function of creative individuals who can imagine what the university will look like. Dreams, aspirations and hard work will shape UW Tacoma's future. It is my hope that this master plan will serve as a catalyst for that future.

Patricia Spakes
Chancellor

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Executive Summary

In 1993, the University of Washington Tacoma's first Campus Master Plan was completed and set the initial vision for a new higher education campus located in the Warehouse District of downtown Tacoma. This location positioned UW Tacoma to be an active participant in the redevelopment of a vital urban district.

Two subsequent major construction phases created the campus' current learning spaces, faculty and staff offices, university library, and open space to support the University's mission to provide upper level degree programs to a population of 2,000 student FTEs. Anticipating steady growth of the campus, the University then completed a 2003 Master Plan that further developed the framework of the future campus and corresponding architectural and landscape guidelines.

UW Tacoma continues to expand its programs and services. In the Fall of 2006, UW Tacoma began to enroll freshmen and sophomores and receive requests from the student body to provide housing. With UW Tacoma's transition from a two-year, upper division and graduate commuter campus to a full, four-year institution with student housing and associated support such as recreation and a student center, an update to the 2003 Master Plan is required. This includes an update to the long term plan as well as articulation of the next phases of development specific to meeting the new mission.

The major goals of the 2008 Campus Master Plan Update are to enhance the urban character of the existing campus and provide opportunities to strengthen a sense of community as a four-year, residential institution by providing:

- A central open space (the 'heart' of campus) and various smaller green spaces throughout the campus;
- Pedestrian connections up the hill and improved on north/south streets;
- An integration of uses (between residential, student life, and academics) that will accommodate at least 10,000 FTEs;
- Housing facilities accommodating approximately 12% of the student population;
- A pathway and open spaces aligned with a view of Mt. Rainier leading into the campus from the corner of 17th Street and Tacoma Avenues;
- Safer routing of vehicular traffic as Market Street remains open through the campus, and 19th Street between Market and Fawcett is closed to vehicular traffic. The plan accommodates Market Street remaining open, but also could respond to closing Market Street in the future, if appropriate;
- Careful consideration of accessibility on north-south walkways and east-west access through buildings by elevator; and
- Opportunities for retail and private development.

In conjunction with this master plan, an infrastructure master plan has been developed with a focus on identifying strategies for centralized or decentralized service, infrastructure upgrades as the campus grows, and sustainable strategies for energy, carbon, and water. The master plan integrates many of these strategies such as filtering stormwater with rain gardens and developing sustainability guidelines for buildings.

Site Context

UW Tacoma is an urban campus which, along with the historic building fabric, establishes its unique character and sense of place. UW Tacoma is dedicated to interdisciplinary and innovative teaching and scholarship and to engaging the community in mutually beneficial partnerships.

Downtown Tacoma

The UW Tacoma campus is nestled within the varied and culturally rich fabric of Downtown Tacoma neighborhoods. To the south of campus is the Tacoma Dome District and the Brewery District, which through redevelopment of the historic brewery buildings and its direct adjacency to the Museum District, is becoming an active arts community. On its north side, the campus connects to the Upper Tacoma Business District, which is the City of Tacoma's civic and financial center. Residential neighborhoods and St. Joseph's Medical Center are located directly west of campus.

Figure 1 | UW Tacoma Vicinity Map 1

Zoning

UW Tacoma is located within the DMU (Downtown Mixed Use) zone. This zone allows for a variety of activities to occur within buildings, including educational services, retail, residential, and industrial use.

There are historic and conservation overlay zones east of Market Street, and the University will continue to respect the historic buildings and features on its site. The existing height limit for the overlays is 85 feet.

The following are the existing height limits for Downtown Tacoma zones:

Downtown Commercial Core	400 feet
Downtown Mixed Use	***100 feet***
Downtown Residential	90 feet
Hospital/Medical	150 feet
Residential Commercial Mixed Use	60 feet
Multiple Family R4	60 feet
Multiple Family R5	150 feet
Combined Shoreline	100 feet
Warehouse Residential	100 feet
Urban Center Mixed Use	120 feet

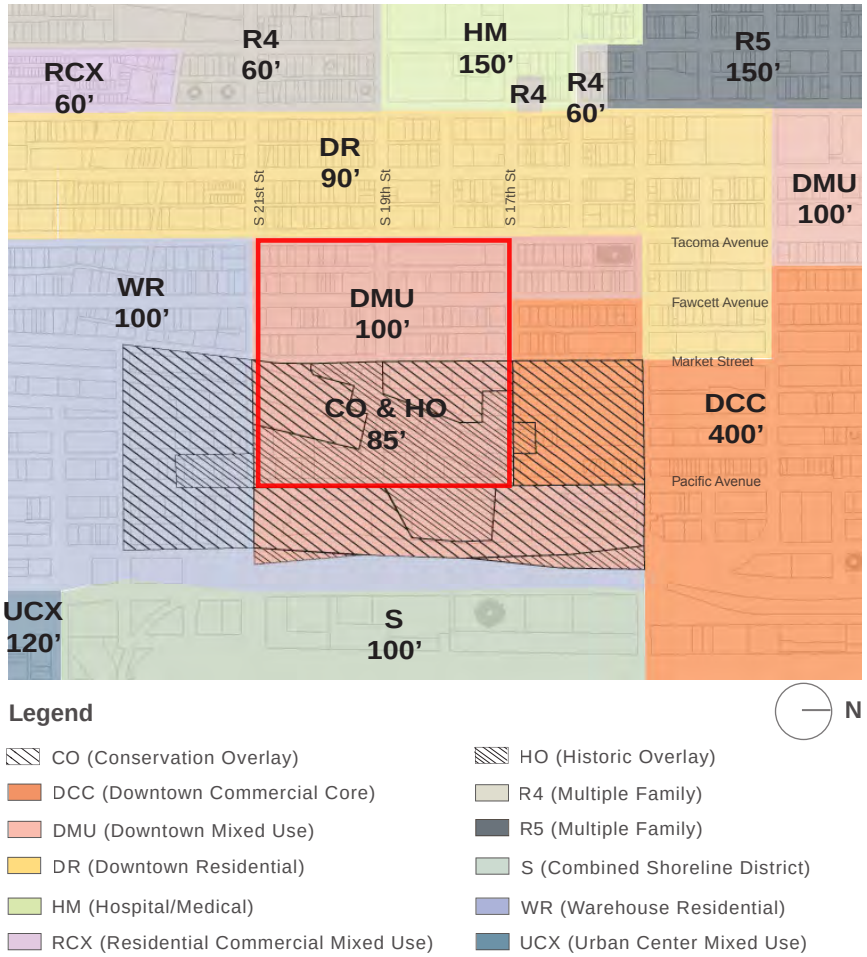

Figure 2 | UW Tacoma Zoning Map

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The Campus

As stated in the 2003 Campus Master Plan, "The eight block, downtown site of the UW Tacoma Campus is unified by its orthogonal downtown street grid and steep east to west topography. Its upper and lower halves are sharply contrasted by their differing uses and character. The lower, core area is located across Pacific Avenue from the city's restored Beaux Arts railroad station and the new State Historical Museum and is part of the Union Depot/Warehouse Special Review District. An inactive diagonal rail right-of-way, located to achieve a relatively flat rail road gradient, further accentuates the tough, industrial feel of the lower site. Note that this right-of-way has since been designated for a future bicycle and pedestrian path. The upper site is essentially open and undeveloped. Together, the two halves afford remarkable opportunities to create a unique and exciting urban educational institution for the 21st century."

Topography

Also from the 2003 Campus Master Plan: "The 46-acre overall site area is sloped significantly with an east-facing orientation. This slope facilitates dramatic views and presents challenges for building design as well as vehicular and pedestrian accessibility. Generally the fairly uniform slope equates to two building stories per east-west block, or one-story to mid-block court. This grade change offers a variety of opportunities in the stacking of functions by creating two potential entry levels in each building, as well as allowing for stepped, terraced buildings and mixed uses to exist."

Figure 3 | UW Tacoma Vicinity Map 2

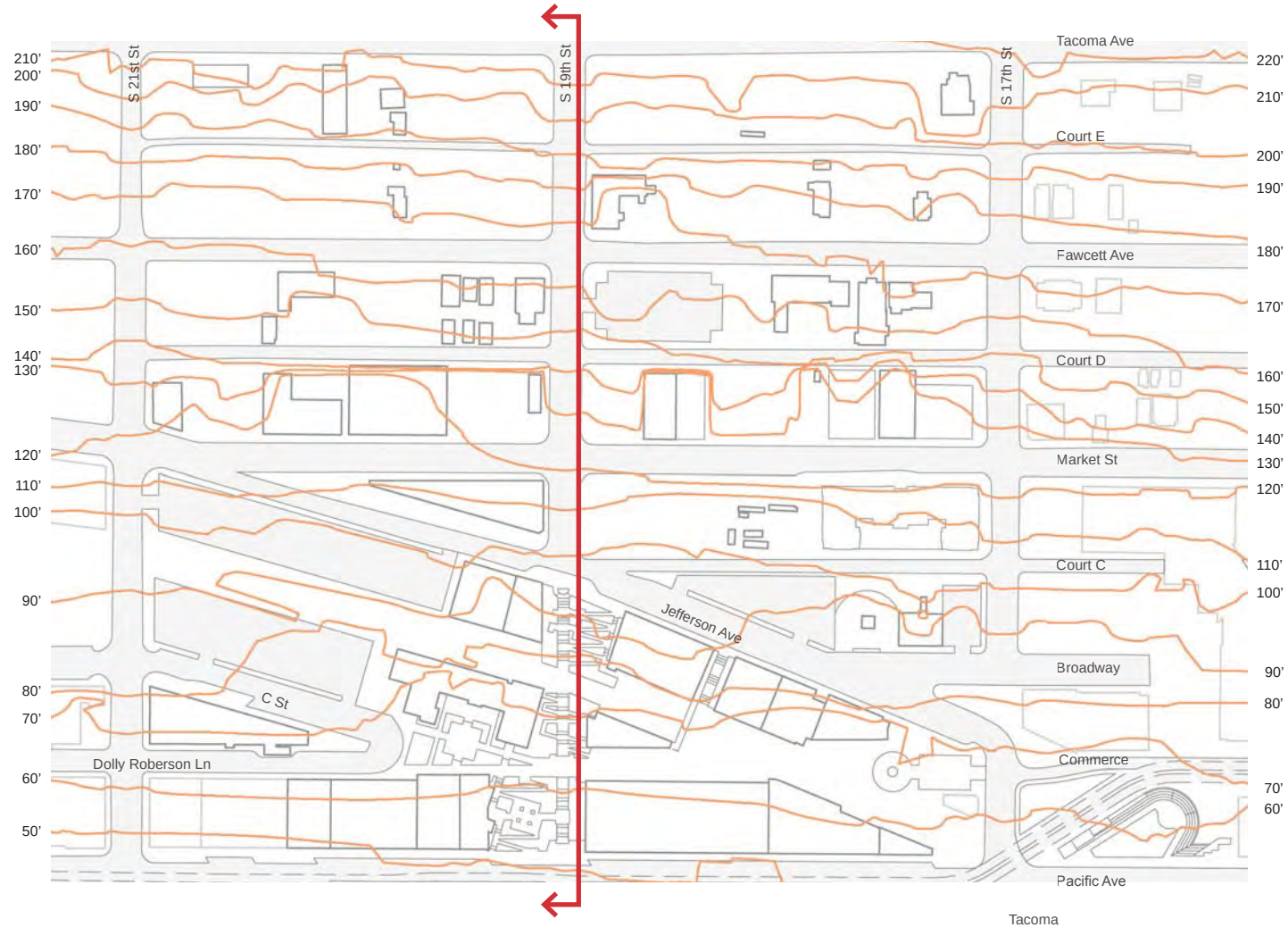

Figure 4 | Topographical Site Plan
Scale: 1"=100'-0"

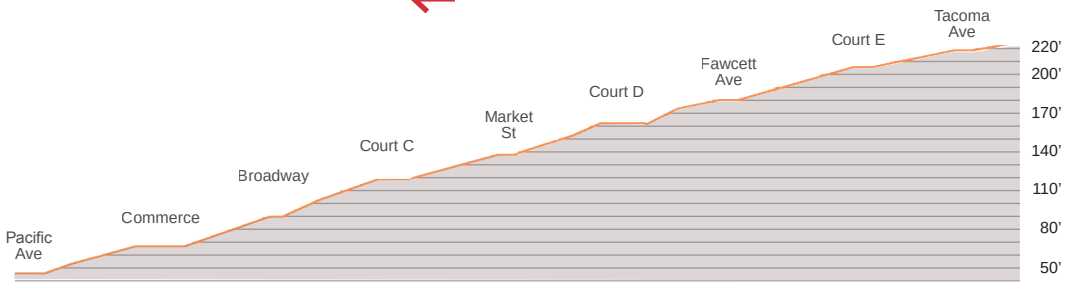

Figure 5 | Topographical Section
Horizontal Scale: 1"=100'-0"
Vertical Scale: 1"= 50'-0"

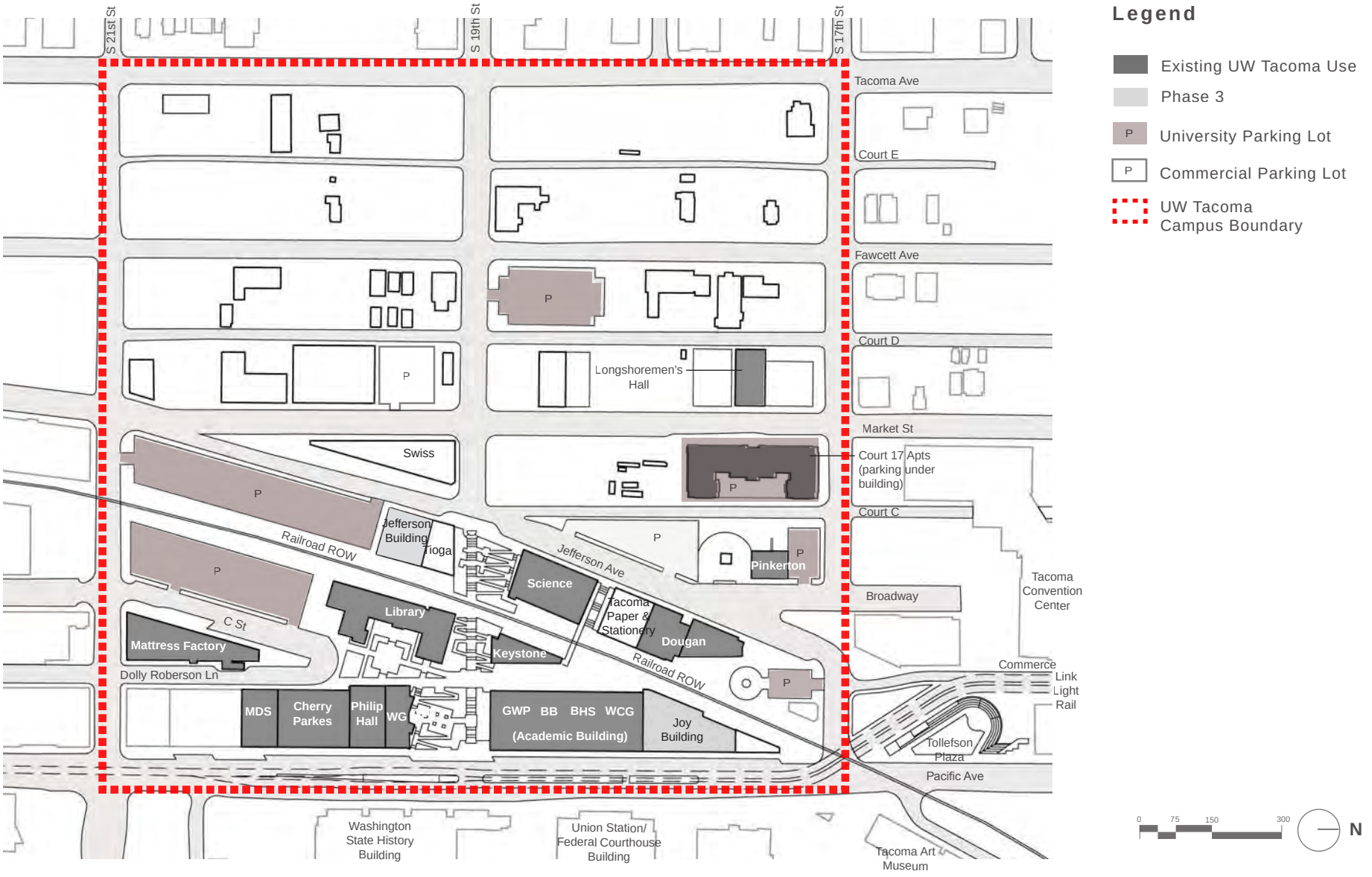

Figure 6 | UW Tacoma Campus Map

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Campus Facilities

Many of the buildings on the UW Tacoma campus are repurposed warehouses and industrial buildings adapted for academic use. The character of these buildings is highly valued, and as new buildings are constructed on the campus, careful attention must be paid to how the new buildings integrate with the existing campus context. Between 1993-2003, the campus grew to include 12 buildings.

Since the 2003 Master Plan was completed, three buildings have been added to the campus. The following buildings have been brought online to address UW Tacoma's growing need for student activity and community spaces.

Longshoremen's Hall

The Longshoremen's Hall, located on Market Street across form the Court 17 apartments, is approximately 10,000 square feet and features a collaborative learning space, a large event and recreation area, a gaming center, outdoor recreation courts, and an on-line gaming room.

This building is an interim accommodation responding to an immediate need for student activity and recreation space on the UW Tacoma campus. When a new student recreation center is built, Longshoremen's Hall may be used for other university functions, and in the long term, will be replaced by new development.

William W. Philip Hall

William W. Philip Hall is a 20,000 square foot assembly hall that meets UW Tacoma's need for a large multi-purpose gathering space. The site is east of the library, flanked on the south by the Cherry Parkes Building, to the north by the Walsh Gardner Building and to the east by Pacific Avenue. The building was designed to function as an assembly space for lecture events, banquets, career fairs, student exhibits, and various gatherings for approximately 350 to 500 people. When event space is not needed, the space is used as a student commons.

McDonald & Smith Building

The McDonald & Smith Building (MDS) was purchased by UW Tacoma in 2006, and is a 36,000-square-foot building with residential apartments and three retail tenants, including the Clover Park Technical College Downtown Center.

Media Services and the Student Multimedia Lab have moved to this building, and the upper two floors will be converted into upper-division student housing.

Longshoremen's Hall

William W. Philip Hall

Phase 3

A predesign has been completed for the next construction phase (Phase 3) at UW Tacoma, and the schematic design process has begun for two new academic buildings, scheduled for completion of construction in 2012. The images shown to the right are schematic renderings of each building.

Joy Building Renovation

The Joy Building is located on Pacific Avenue directly adjacent to UW Tacoma's West Coast Grocery Building (WCG). Constructed in 1892, it is a three-story building with approximately 47,700 square feet. This building renovation will provide UW Tacoma with a mix of classroom, office, and retail space.

Jefferson Avenue Building

The Jefferson Avenue Building will be located south of the Tioga Building and across the railroad right-of-way from the existing Library. It will provide 37,000 square feet of classroom, office, and library expansion space.

Joy Building, courtesy of THA Architecture Inc.

Jefferson Avenue Building, courtesy of THA Architecture Inc.

Process

UW Tacoma's Building Advisory and Design Review Committee guided the master plan team through three phases to develop the 2008 Campus Master Plan Update.

Phase One: Information Gathering

1. Meet with the following UW Tacoma campus representatives and stakeholders to learn what is valued about the campus, what needs to be improved, and the future vision of UW Tacoma
   - UW Tacoma students, faculty, and staff
   - Neighboring community members
   - The City of Tacoma and municipal service providers (transit, utilities, etc.)
   - Regional higher education institutions
2. Define square footage needs for the full build-out of the campus (10,000 student FTEs)

Phase Two: Master Plan Alternatives

1. Develop Master Plan Alternatives
2. Present options to UW Tacoma campus representatives and stakeholders

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Phase Three: Master Plan Refinement and Documentation

1. Prepare Master Plan Update based on the feedback received in Phase 2
2. Present the Master Plan Update to all stakeholders (Campus, Community, City of Tacoma and UW Board of Regents)

Community Involvement

Because of UW Tacoma's prominent role in downtown Tacoma and its impact on the city (i.e. relative to transportation, circulation, etc.), the master planning process included a wide variety of community participation. The following is a list of groups who provided valuable input:

City of Tacoma

City of Tacoma Mayor and City Manager
City of Tacoma City Council
City of Tacoma Landmarks Review Committee
City of Tacoma Planning Commission
VIA Architecture – planning consultants for the City of Tacoma Downtown Plan

Tacoma Community

Clover Park Technical College
Downtown Merchants Group
Hillside Development Council
Historic Tacoma
Metro Parks
New Tacoma Council
Pierce Transit
Sound Transit
South Downtown/Dome District Group
Tacoma Avenue Coalition
Tacoma Community College
Tacoma-Pierce Chamber of Commerce
Tacoma School of the Arts
Tacoma Streetcar Advisory Committee
Tacoma Power
Tollefson Plaza/Century Park Group
UW Tacoma Community Advisory Committee

UW Seattle

UW Regents, President, Provost, and Sr. Vice President for Finance and Facilities
UW Architecture Commission
UW Landscape Committee
UW Capital Projects Office
UW Capital and Space Planning Office
UW Campus Engineering
UW Environmental Health and Safety
UW Environmental Stewardship Advisory Committee

UW Tacoma

UW Tacoma Administrative Services
UW Tacoma Chancellor's Leadership Council
UW Tacoma Campus-wide Open Forum
UW Tacoma Faculty Forum
UW Tacoma Facilities Services
UW Tacoma Staff Association
UW Tacoma Real Estate Office
UW Tacoma Campus Safety
UW Tacoma Community Advisory Board

City of Tacoma Planning Projects

Downtown Tacoma Economic Development Strategic Plan

"The City of Tacoma would like to increase commercial investment in the city and provide more job opportunities for the region's residents. In order to provide a blueprint for increased investment, the City of Tacoma's Community and Economic Development Department is partnering with AngelouEconomics, an economic development consulting firm, to develop an economic development strategic plan for downtown Tacoma.

As an additional component, The Community and Economic Development Department's Planning Division has contracted with VIA

Architects to review the long-range planning and zoning of the downtown. The overall vision for downtown will be defined consistently for both plans and will be supported by a combined public outreach effort."

Source: http://www.cityoftacoma.org/Page.aspx?cid=7906

Concurrent UW Tacoma Planning Projects

Infrastructure Master Plan

A new plan for campus infrastructure was required to support the goals and vision for the full build out of the campus. Mechanical, electrical, and civil engineers worked with UW Tacoma and Engineering Services at UW Seattle to develop strategies for the growth of the campus and the application of sustainable systems, and provide life-cycle cost assessments. See page 81 for more information.

Library Master Plan

The UW Tacoma Library was originally designed to support a 2,000 FTE campus. With the growth of student enrollment and the additional charge of supporting freshmen and sophomores, the library must expand and organize itself to best support the future of UW Tacoma. See page 43 for more information.

Evaluation of Transportation Needs

Enrollment growth, expansion of the campus, and increased development of downtown Tacoma will greatly impact parking demand and traffic patterns. These studies identify strategies for parking and transportation systems that support travel by auto, bicycles, pedestrians, and public transit. See page 74 and document supplement for more information.

Campus Life Study

Under the guidance of UW Tacoma's Division of Student Affairs and the Campus Life Advisory Committee, a comprehensive study of the existing and potential campus life facilities at UW Tacoma was implemented to provide direction over the next 5-10 years as more lower division students enroll and the university develops student housing facilities.

Through analysis of student surveys, focus groups, market research, and projected costs, this study makes recommendations for the appropriate type, make-up, size, function and operation of campus life facilities on the UW Tacoma campus. This study will be posted on the UW Tacoma website in 2009.

Accessibility Study

The campus-wide accessibility study provides a detailed evaluation of UW Tacoma's campus buildings, grounds, pathways, and university managed parking lots to confirm that these adequately meet the accessibility needs of all individuals and that the University is in compliance with all applicable, local, state, and federal statutes. It also provides a prioritized list of recommended improvements that include wayfinding aids, non-mandated items, and accessibility guidelines for use in the planning and design of future campus expansions and renovations. This study will be completed in Spring 2009.

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Guiding Principles

UW Tacoma Mission, Vision and Values

Mission

The University of Washington Tacoma educates diverse learners and transforms communities by expanding boundaries of knowledge and discovery.

Vision

Within the next ten years, UW Tacoma will become a more comprehensive institution that will respond with distinction to the needs of the region, state, nation and the world. UW Tacoma will achieve distinctiveness as an urban campus of the University of Washington through its commitment to three principles:

- Access to an exceptional university education;
- An interdisciplinary approach to knowledge and discovery in the 21st century;
- A strong and mutually supportive relationship between the campus and its surrounding communities.

As the campus grows, UW Tacoma will strengthen its learning culture, research, institutional structures, and academic and co-curricular programs necessary to embody these three commitments and to uphold the standards of excellence, shared governance and academic freedom that are hallmarks of the University of Washington. It will also develop and implement assessment plans that serve as measurable benchmarks for institutional progress.

The core values of the institution—Excellence, Community, Diversity and Innovation—will shape the specific goals and methods UW Tacoma chooses to address these commitments and build its distinction as a campus.

Values

UW Tacoma's fundamental purpose is to educate students for life as global citizens. UW Tacoma is a distinctive expression of the University of Washington that provides access to an exceptional education for citizens who choose to live and learn in the South Puget Sound region.

UW Tacoma recognizes that an excellent education connects knowledge across disciplines. At UW Tacoma, excellence is founded on integrity, dedication and collaboration. UW Tacoma believes that learning is a vehicle that advances students toward fulfilling lives and meaningful careers.

The UW Tacoma community of learners is strengthened by a diversity of voices. Listening to the University community, the UW Tacoma has identified four core values that guide it: Excellence, Community, Diversity, and Innovation. The University shares these values and strives to live them.

Guiding Principles of the Master Plan

To create a plan for a physical campus environment which supports the institution's mission, vision, values, and future needs, the 2008 Campus Master Plan Update's Guiding Principles use the visionary principles and core values from the UW Tacoma Strategic Plan as the framework.

Enhance and Develop the Campus

Create a Unique Sense of Place and Identity

Create an aesthetic quality appropriate to the campus as a whole. In response to enrollment growth, the campus should retain and improve the character of the existing campus, open spaces, and views, while developing new facilities and outdoor spaces to support anticipated future needs for programs, activities, services, and gathering. Identify the elements and character of the existing buildings that should be expressed throughout campus as it grows. Design buildings and landscapes that consider and embody state-of-the-art campus and urban planning as well as architectural best practices in an historic, multi-use district.

Guiding Principles

Develop Quality Facilities

Provide facilities that inspire, function well, and are flexible and efficient. Develop facilities, outdoor spaces, and infrastructure that are flexible, adaptable, enduring and responsive to technological advancements.

Respect Its Stature

Honor the stature of the University of Washington and the historic structure of downtown Tacoma through a harmonious marriage of environmental design, planning, spaces, and form with the surrounding community.

Ensure Stewardship

Ensure stewardship of the existing campus, maintaining and protecting the value of UW Tacoma's physical resources, character, history, and open space. Changes to the campus should improve and enhance the value and quality of the campus, encouraging preservation of historic resources while allowing for the development of new forms and styles of building, ultimately creating a rich, multi-faceted, inspiring learning environment.

Cultivate Funding

Develop a compelling, comprehensive, well-conceived, inspiring plan to cultivate funding. Support communication to stakeholders and funding decision-makers of current needs, as well as long term plans tied to student enrollments and projections and regional economic and workforce benefits. Explore opportunities for public-private partnerships particularly for buildings and spaces that lend themselves to such ventures such as student union, performing arts, library, or sports and recreation facilities. Recognize that a growing campus presents many opportunities for the naming of buildings, interior features, objects, spaces, or outdoor areas in recognition of individuals or organizations who are the University's benefactors.

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Communicate Resources

Provide a variety of communication tools and methods (maps, wayfinding, signage) to inform, orient and direct diverse users and casual visitors of the campus.

Respect and Conserve the Environment

Value the environment and strive to promote sustainability through the conservation of existing buildings, adaptive reuse and design of new resource-efficient structures, and the operations and practices implemented throughout the campus. Strive for natural light in buildings. Become a model and learning laboratory of sustainability.

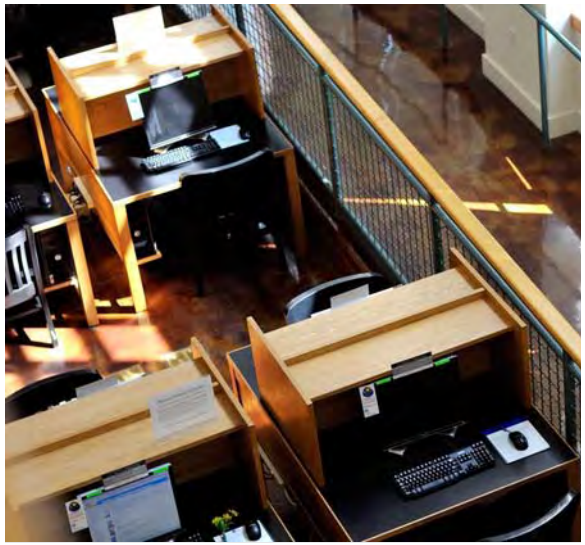
Include Public Art and Sculpture

Provide sources of inspiration for students, faculty, staff and the community.

Access to an Exceptional University Education

Create a Model Environment of Innovation

Develop a learning laboratory of sustainability; represent an outstanding example of conserving historic buildings and adapting them to contemporary use. Provide new buildings to facilitate and support innovations in learning,



research and service to the community. Innovation can be realized through an environment which is flexible and responsive to new directions in learning and the nature of new disciplines.

Develop Interactive Learning Spaces

Provide collaborative, flexible, multi-functional classrooms and other learning spaces of varying capacities capable of supporting a variety of pedagogical approaches to teaching and learning.

Provide Accessibility

Ensure access to and within the campus, maximize appropriate vehicular travel, emphasize universal access pedestrian routes, and promote the design of environments usable by all people.

Promote Safety

Create a safe and healthy environment, with personal and workplace safety considerations integral to planning and design of circulation elements, buildings, and open spaces. Employ design elements that support emergency response/preparedness activities; provide service access that does not conflict with pedestrian traffic.

Encourage Efficiency

Encourage efficiency and economy in campus operations, with advantageous locations for facilities and adjacencies of uses.

Maximize Flexibility

Provide maximum flexibility in the design of exterior and interior spaces in order to best accommodate future growth and be able to respond to and take advantage of emerging opportunities.

Anticipate Trends in Technology

Develop the campus that over time will remain at the leading edge. Incorporate infrastructure that is flexible and adaptable.

Connect Knowledge Across Disciplines

Activate the Campus

Support the transition to a full-service, 4-year university, with the development of a 24-7 campus environment inclusive of student housing, student services, activities, recreation, and culture. Ensure spaces that promote active and passive activities which are safe.

Create a Live/Learn Community

Create a live/learn community through the integration of academics with student life,

housing, recreation, and culture. Support learning, sharing, and discovery that occur within and beyond the classroom. Prepare students for participation in a global economy.

Provide Adjacencies that Promote Collaboration and Interaction

Maximize opportunities for interaction between students, faculty, staff, and the neighboring community. Create a level of density and proximity of disciplines that overlaps and blurs boundaries.

Create Bonds with the Community

Value the Community

Recognize the importance of the surrounding communities, and strive to achieve synergistic working relationships with these communities. Promote community access and participation that is diverse to improve the quality of life and public benefits for all.

Develop Community Interaction

Encourage and support the development of student, faculty and staff housing in the adjacent community. Subscribe to work-study relationships and possible development of adjacent business incubator space. Provide learning opportunities, cultural activities,

and recreational activities on campus that are accessible to the community. Support appropriate commercial activity. Encourage collaborative ventures with the community through public-private partnerships as one option for the funding of facilities.

Support Public Circulation through the Campus

Support pedestrian, bike and wheelchair access along and through the railroad right-of-way. Continue to support improvements to public transportation and maintain porous campus boundaries.

Support Diversity

Grow a Diverse Student, Faculty and Staff Community

The UW Tacoma student body includes a significantly diverse community, representative of different ethnic groups, cultures, ages, and family structures. Provide a wide variety of services to support the needs of these students.

Celebrate and Enhance Diversity

Identify locations for activities, exhibits, memorials, art, and other cultural activities representing a diversity in form and tradition.

The campus should express the nature of a dynamic institution of higher learning serving a diverse student body in an urban environment.

Needs Assessment

Introduction

To anticipate future growth of the campus, the master plan team estimated square footage needs for UW Tacoma to support 10,000 FTEs as a 4-year public university in an urban setting (See the UW Tacoma Campus Master Plan Program on page 37). The following pages of this Needs Assessment chapter will discuss in more detail the assumptions that have determined the Academic, Campus Life, and Housing space needs for the full build-out of the UW Tacoma campus.

The process to determine square footage needs included programming meetings with the UW Tacoma Building Advisory and Design Review Committee and data collection from the UW Capital and Space Planning Office and the UW Tacoma Office of Institutional and Research Planning to understand existing enrollment and staffing levels, existing space usage, and future projections for how enrollment, staffing, and space needs will change in the future.*

The master plan team also studied several comparable institutions and applied both the Washington Higher Education Coordinating Board (HECB) space planning model and the Facilities Evaluation Planning Guide (FEPG) to enrollment projections to ascertain space implications of the campus' new mission.

Impact of Transitioning to a 4-Year Campus

Transitioning to a 4-year campus from a 2-year commuter campus has major impacts throughout UW Tacoma's physical and organizational structure. Not only does a 4-year institution bring more people onto the campus at one time, but it also requires major adjustments and additions to curricula and programming. For example, students entering UW Tacoma at the junior level typically will have an academic major. The enrollment of freshmen requires the development of a General Studies curriculum. To support the new curriculum, larger classrooms are needed for introductory courses, the Library needs to expand its curricula-supporting collections, and more academic support services are necessary.

Also, with students living on campus, an increased variety of spaces to support campus life are needed. These types of facilities such as a student and recreation center require extended hours of operation, dedicated staff, and an increase in the scope of facilities management and grounds services.

It is also recognized that this campus will continue to have a significant proportion of commuting students, including those with young children. Continuing provisions of services and programs to accommodate this population is important.

As the campus grows, its financial models will change for infrastructure support, operations, and how the campus relates to the UW Seattle campus. While a connection to UW Seattle will always be important and needs to be maintained, the campus may need to provide more on-site operations and gain independent recognition through various accreditation organizations such as the Northwest Commission on Colleges and Universities (NWCCU) and the American Association for Sustainability in Higher Education (AASHE) Sustainability Tracking and Assessment Rating System (STARS).

** Calculations and planning models are based on Fall 2007 data.*

UW Tacoma Campus Master Plan Program – 10,000 FTEs

Academic Space Needs (see pages 41-44)	**ASF**
Total Classroom and Lab Space	371,100
Faculty, Staff, and Graduate Student Offices	234,600
Library/Study	118,400

Campus Life Space Needs (see page 45-46-)	**ASF**
Athletics/Special	140,300
General Use	150,100
Health Services	8,000

Service Space Needs (see page 47)	**ASF**
Facilities Management/Support	50,800

Total Academic/Campus Life/Service Space Needs	**1,073,300 ASF**
Building Efficiency (0.63)	**1,698,200 GSF**

Housing Space Needs (see page 48-49)	**ASF**
Freshmen & Sophomores	187,500
Juniors & Seniors	184,300

Total Housing Space Needs	**371,800 ASF**
Building Efficiency (0.7)	**531,200 GSF**

Covered Outdoor Space Needs (see pages 46-47)	**GSF**
4 Sports Courts	39,400
1 Loading Dock	500
Grounds Storage	12,000

Uncovered Outdoor Space Needs (see pages 46-47)	**GSF**
1 Recreational Playfield	54,000
Truck Staging for Dock	4,800
Standard Vehicles	30,000

Total Outdoor Space Needs	**140,700 GSF**

Total Academic/Campus Life/Service Space Needs	**1,698,200 GSF**
Total Housing Space Needs	**531,200 GSF**
Total Master Plan Building GSF	**2,229,400 GSF**

Figure 7 | Master Plan Program

Planning Models and Comparable Institutions

The Master Plan program was evaluated through the Higher Education Coordinating Board (HECB) and Facilities Evaluation Planning Guide (FEPG) models for campus planning and the square footage distribution relative to FTEs at comparable institutions. Institutions identified as comparable to UW Tacoma are branch campuses of a larger public university located in an urban setting within proximity of a larger metropolitan area (UW Tacoma is 35 miles from Seattle and the University of Washington Seattle campus):

- Rutgers University Camden– 5 miles from Philadelphia, 60 miles from the main New Brunswick campus;
- Rutgers University Newark – 10 miles from New York City, 25 miles from the main New Brunswick campus;
- Indiana University Northwest (Gary, Indiana) - 30 miles from Chicago, 200 miles from the main Bloomington campus;
- Indiana University Southeast (New Albany, Indiana) - 5 miles from Louisville, 90 miles from the main Bloomington campus; and
- Central Washington University was included in the comparable study to represent a Washington state-funded university with close to 10,000 FTEs, on-campus housing, and the range of student activity spaces that align with the vision for UW Tacoma Campus Life.

The following table shows a comparison of the UW Tacoma Master Plan program for academic, campus life, and service space needs (column J) to the square footage totals at comparable institutions (columns A-E) and square footage totals calculated with the HECB and FEPG planning models (columns G-H).

Since the comparable institutions vary with the number of students enrolled, a multiplier was applied to convert each institution's square footage to a comparable 10,000 FTEs. Similarly, the column labeled, "UW Tacoma - Projected Existing" (column F) shows the existing UW Tacoma square footage totals at 2,173 FTEs projected out to 10,000 FTEs by a common multiplier (approximately 4.6).

As another comparable, the 'Average' column (column I) averages the data in columns A-H.

The total GSF for 10,000 FTEs in this analysis ranges between approximately 1.5 - 2 million GSF.

The UW Tacoma Master Plan program for academic, campus life, and service spaces (showing 1,073,300 ASF and 1,698,200 GSF in column J), as determined by programming meetings and analysis specific to UW Tacoma's projected needs for 10,000 FTEs, is on par with the total square footages at comparable institutions and the square footage amounts calculated by the planning models.

			A	B	C	D	E	F*	G	H	I		J
			Central Washington University	**Rutgers - Newark**	**Rutgers - Camden**	**Indiana - Southeast**	**Indiana - Northwest**	**UW Tacoma- Projected Existing**	**UW Tacoma - HECB**	**UW Tacoma - FEPG**	**Average**		**UW Tacoma- Program**
Total Headcount			**10,260**	**13,351**	**12,467**	**15,007**	**14,864**	**12,209**	**12,209**	**12,209**	**12,822**		**12,300**
Headcount to FTE Ratio			1.03	1.34	1.25	1.50	1.49	1.22	1.22	1.22	1.28		1.23
Total FTEs			**10,000**	**10,000**	**10,000**	**10,000**	**10,000**	**10,000**	**10,000**	**10,000**	**10,000**		**10,000**
Mark up factor (to 10,000 FTEs)			1.1857	1.3086	2.4137	2.4272	3.0845	4.6019					
	Undergraduates		91%	64%	72%	87%	88%	82%	82%	82%	81%		82%
	Graduates		9%	36%	28%	13%	12%	18%	18%	18%	19%		18%
Square Foot Estimates by Space Type													
Academic	Classrooms and Labs		365,600	363,800	267,900	290,600	352,700	365,400	249,400	305,800	320,200		371,100
	Faculty & Staff Office		169,000	392,600	354,800	202,500	282,500	398,100	173,600	234,600	276,000		234,600
	Library/Study		108,100	163,600	236,500	136,100	284,300	69,500	114,700	100,800	151,700		118,400
Campus Life	Athletics/Special		100,400	95,500	127,900	60,400	144,500	46,500	32,500	140,300	93,500		140,300
	General Use		159,800	149,200	185,900	165,300	153,800	85,600	160,000	149,100	151,100		150,100
	Health		7,800	2,600	2,400		12,700	900		8,000	5,700		8,000
Service	Facilities Management		67,700	25,400	41,000	45,600	39,200	63,500	36,500	47,700	45,800		50,800
	Total Projected ASF		**978,400**	**1,192,700**	**1,216,400**	**900,500**	**1,269,700**	**1,029,500**	**766,700**	**986,300**	**1,044,000**		**1,073,300**
	ASF/FTE		98	119	122	90	127	103	77	99	104		107
		Existing ASF						265,000					
		Existing Building Efficiency						0.58					
		Existing ASF/Projected ASF						25.7%	34.6%	26.9%			24.7%
	Building Efficiency		0.65	0.65	0.65	0.65	0.65	0.63	0.62	0.63	0.64		0.63
	Total Projected GSF		**1,505,231**	**1,834,900**	**1,871,400**	**1,385,400**	**1,953,400**	**1,630,900**	**1,227,000**	**1,564,500**	**1,621,600**		**1,698,200**

** based on Fall 2007 data*

Figure 8 | Comparable Institutions & Planning Models

Enrollment Projections

With UW Tacoma's admission of freshmen and sophomores and the general trend of increasing enrollment at State of Washington universities, total student FTEs at UW Tacoma are projected to more than double over the next ten years.

UW Tacoma will also maintain its mission to accept a high rate of transfer students from local community colleges and other higher education institutions, and the overall undergraduate-to-graduate ratio is expected to remain the same. Thus, as shown in the Class Mix chart to the right, the highest percentage of students on campus will be upper level students.

The current headcount-to-FTE ratio is 1.23 and is not expected to change. This relationship is based on the mix of full-time students and part-time students. Since most classes will mainly occur during traditional work hours, most students will choose to enroll full-time.

Ten Year Enrollment Growth Chart*

Year	New FTE	Total FTE	Headcount (1.23 * FTE)	Growth Rate
2007/2008		2,173	2,653	
2008/2009	260	2,433	2,993	12.1%
2009/2010	235	2,668	3,282	9.8%
2010/2011	235	2,903	3,571	8.9%
2011/2012	280	3,183	3,915	9.8%
2012/2013	280	3,463	4,259	8.9%
2013/2014	335	3,798	4,672	9.8%
2014/2015	335	4,133	5,084	8.9%
2015/2016	335	4,468	5,496	8.2%
2016/2017	335	4,803	5,908	7.6%
2017/2018	335	5,138	6,320	7.0%

Figure 9 | Enrollment Projections

Class Mix*

	Mix		2017 FTEs	10,000 FTEs	12,000 FTEs
Freshmen	10.2%	524	1,020	1,224	
Sophomores	8.2%	421	820	984	
Juniors	37.1%	1,906	3,710	4,452	
Seniors	23.0%	1,182	2,300	2,760	
5th Year	3.5%	180	350	420	
Graduate	18.0%	925	1,800	2,160	

Figure 10 | Class Mix

**Based on Fall 2007 data*

Academic Space Needs

As enrollment increases and the campus expands, a significant amount of space must be dedicated to academics to maintain UW Tacoma's focus of academic excellence. There are many existing academic programs that are in demand and are anticipated to grow including Sciences, Business, Nursing, Social Work, and Urban Studies. Also, new programs will be added such as Information Systems, Writing, Arts in the Community, Human Rights and Justice Studies.

Spaces needed to accommodate growth of academic programs:

- Science Building (with wet and dry labs, classrooms)
- Studio Arts & Performing Arts Facilities
- Communications studios/editing facilities
- Clinical teaching labs for Nursing
- General Classrooms
- Computer Labs
- Faculty Offices
- Graduate Student Offices
- Library Expansion

Sciences & Engineering

The existing Science Building is currently at capacity, and the Science and Engineering programs are anticipating significant demand for studies in Pre-Health professions, Environmental Science & Engineering, and Allied Sciences.

Studio Arts & Performing Arts

A component of the City of Tacoma's economic development plan involves UW Tacoma's support to establish a creative arts district in the neighborhood to the south of the campus footprint. To leverage this adjacency, UW Tacoma must build appropriate teaching spaces for the studio arts. The campus does not currently have appropriate teaching facilities for courses in painting, sculpture, drawing, and printmaking.

Performing Arts needs will not be addressed in the near future, but will need to be considered in the long term. Developing relationships to utilize community theatres for performance space will enhance the cultural partnership between UW Tacoma and the Tacoma community until the need for a dedicated performing arts facility is clearly identified.

Communications Studios/Editing Facilities

The Communication major requires that students develop the technical skills to write, edit, and produce media in print, Web, and broadcast forms in preparation for careers. Given the pervasiveness of technology in the mass media, it is critical for the university to provide teaching and learning spaces that provide students the type and quality of equipment and software that they will likely encounter in their work. This would entail multimedia labs with appropriate software and peripherals, as well as audio and video production and post-production facilities. The campus anticipates substantial growth in the number of faculty and students in this field, and will need to expand the lab and studio space currently in use.

Clinical Labs for Nursing

It is likely that the campus will add an undergraduate degree in nursing within the next few years. This will require teaching facilities that allow for simulation of clinical activities. These specialized spaces require equipment such as hospital beds, medical equipment, and simulated patients. Accommodation for this type of specialty space will be critical to the program.

General Classrooms

Classroom space must grow proportionally with enrollment growth. The correct 'mix' of classroom types should be provided to support the variety of class sizes and activities that are used to facilitate instruction and learning. Three types of classrooms were identified as important to the UW Tacoma campus:

Large lecture classrooms

- Classrooms where information is delivered to a large number of students (60-100) primarily by lecture where typically little or no group work is required of the students during class.
- UW Tacoma will continue to provide a balance of large lecture classrooms to seminar and collaborative classrooms that favors smaller class sizes and more interactive classroom environments since these are more valued by the campus community.
- Because many of the existing lecture classrooms are located in converted warehouse buildings, their spatial configurations conform to the constraints of the existing building, affecting sightlines and flexibility of the classroom; therefore, all large lecture classrooms should be placed in new academic facilities to gain spatial efficiency and benefit from the most state-of-the-art practices in classroom design. The existing classrooms should be repurposed for smaller spaces, such as offices and meeting rooms.

Seminar classrooms with movable tables/chairs

- Classrooms configured to allow for lecture, class discussion, and group work for small to medium class sizes (15-50 students).

Core-curriculum (collaborative) classrooms

- Enhanced seminar classrooms sized for approximately 35-40 students that promote

collaboration and interdisciplinary study by providing moveable tables and chairs, moveable whiteboards, and multimedia classroom technology.

- The existing core-curriculum classroom (Cherry Parkes 105) is highly valued and has been identified as a model for future classrooms for courses in a variety of disciplines.

Computer Labs

Computer labs should be provided for all disciplines. Specialized labs with GIS and multimedia capability should also be available.

Faculty Offices

The growth of the student body and the growth of academic programs correlate with proportional growth of faculty offices.

Graduate Student Offices

Currently, dedicated office space is not provided for graduate students. This space will be provided to offer graduate students the resources they need to succeed in their research and develop collegiality among fellow students and faculty.

University Library

A Library Master Plan has been developed to map out how the library should manage its growth and define itself as a library of the 21st century. The library's mission is to support the academic curricula at UW Tacoma. An increase in the number of students, the addition of freshmen and sophomores, and growth in the number of programs offered at UW Tacoma will require the collections to grow significantly. The existing library building was originally designed to support a 2,000 FTE campus. The library will need to move to a new location to support the growth of the campus.

Also, with students increasing their demand for group study spaces and computers/media as tools for research and study, libraries are adapting their services and spaces to support a "Learning Commons" environment. A Learning

Commons provides opportunities for active learning with computer workstations, classrooms for library staff to provide instruction on how to access accurate information, and clustered work areas for students to work together in groups. Additional services such as a Visual Resource Center and the Teaching and Learning Center may also be included.

Academic Program Summary

The following summarizes the academic square footage needs and assumptions for 10,000 FTEs:

Academic Spaces	ASF
Classrooms	180,200
Teaching Labs	114,600
Open Labs	11,800
Computer Labs	41,400
Research Labs	23,100
Total Classroom and Lab Space	371,100
Faculty, Staff, Graduate Offices	234,600
Library/Study	118,400

Figure 11 | Academic Program Summary

Assumptions:

- Classrooms
  - 15% large lecture rooms
  - 65% with moveable tables and chairs
  - 20% collaborative (like Cherry Parkes 105).
- Teaching labs for art, computer science/ engineering, sciences, and nursing.
- Open/drop-in labs for art, computer science/ engineering, and sciences
- Computer labs (15 general, 3 specialized)
- Faculty and graduate research labs for art, computer science/engineering, and sciences
- Faculty, staff, and graduate student offices
- Library includes the Teaching & Learning Center

Campus Life Space Needs

With the addition of student housing, there is a corresponding need for student services and activity spaces that support a 24-hour live/learn environment on the campus. The types of spaces that have been identified to support campus life include:

- Assembly
- Athletics/Fitness (intramural and club sports)
- Child Care
- Exhibition
- Food Service
- Health Services
- Lounges
- Media Production
- Meeting Rooms
- Recreation

Ideally these spaces will be collocated, easily accessible by students, and connected by outdoor gathering spaces. Efficiencies could be gained by incorporating many of these spaces into a student center and recreation facility. A student center will provide a central location for students to congregate and meet, nurture the rapid growth of student clubs and organizations, and provide other 'student-owned' spaces that are not shared with administrative functions.

Not only will it be used by on-campus residents, but a student center will also be a comfortable base for commuter students to spend time between classes and a point of destination for visitors to the campus. As private development occurs around the campus, some of these services (i.e. assembly, child care, food service, health service, and recreational facilities) may be provided through vendors and community partnerships.

Assembly

A large event/gathering space for 1,000 people has been identified as an important campus need for the rapidly growing campus. The existing Assembly Hall (completed in 2008) accommodates 300 – 500 people.

Fitness & Recreation

Recreation and fitness programs require a wide range of spaces. Intramural and club sports teams utilize gyms and sports fields for their games. Weight and equipment rooms are required for training and general fitness. Multi-purpose studio space would ideally be shared among aerobics, yoga, martial arts, and dance programs. Necessary service spaces include equipment storage and locker rooms.

Food Service

A variety of food service options are currently provided by retail operations near the campus. The feasibility of offering daily meal plans would promote a common dining experience for residents.

Health Services

Health Services require spaces for the care and treatment of the campus community. Spaces are also needed for health education, counseling and wellness programs.

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Campus Life Program Summary

The following summarizes the campus life square footage needs and assumptions for 10,000 FTEs:

Fitness/Special Construction Spaces	ASF
Non-instructional fitness	130,300
Media production	10,000
Total Fitness/Special Construction	140,300

General Use Spaces	ASF
Assembly	33,000
Exhibition	5,000
Food Service	16,000
Child care	35,000
Lounges & Recreation	48,100
Meeting Rooms	13,000
Health Services	8,000
Total General Use	150,100

Recreation Open Space	GSF
4 Sport Courts (Basketball, etc.)	39,400
1 Playfield (Soccer, Lacrosse, etc.)	54,000
Total Recreation Open Space	93,400

Figure 12 | Campus Life Program Summary

Assumptions

- Fitness, recreation, and lounge square footage needs are based on the FEPG planning model, which calculates these spaces relative to total campus headcount, as these facilities will be available for use by the campus community, in addition to students.
- Existing media production and exhibition space is projected to grow proportionally with the rate of campus growth.
- Assembly square footage represents a large theater or event/gathering space for 1,000 people. The addition of this venue plus Philip Hall should meet the campus needs for meeting space (conference and meeting rooms associated with academic programs are included in the academic square footage calculations).
- Food and health services square footages are based on the services offered at other regional campuses with comparable number of on-campus residents.
- Child care assumptions are based on the HECB planning model. This service could be provided as part of an education program, through public/private partnership, or by an off-site vendor.
- Recreational playfield, if placed on the campus footprint, will be 300' x 180' which does not meet NCAA regulations, but will be appropriate for club and intramural sports.

Service Space Needs

As the campus grows, new buildings are built, and more functional open space is developed around them. Space dedicated to facilities management and support must also expand to provide the necessary tools, materials, supervision, and maintenance to the campus. Some services are managed through UW Tacoma operations (such as printing), and some services (such as custodial) are currently provided by contractors. The UW Tacoma campus will need to evaluate the most effective model(s) for the delivery of campus services and support as the campus grows to its full build-out. The following square footages assume campus operations in the long-term. Storage of materials and vehicle staging may be located outside the campus footprint to prioritize adjacencies of academic and campus life spaces.

Service Program Summary

The following summarizes the facilities management/support square footage needs and assumptions for 10,000 FTEs:

Facilities Management Spaces	ASF
Central Storage	18,000
Shop	32,800
Total Facilities Management	50,800

Outdoor Spaces	GSF
1 Loading Dock	500
Grounds Storage	12,000
Truck Staging for Dock	4,800
Standard Vehicles	30,000
Total Outdoor Spaces	47,300

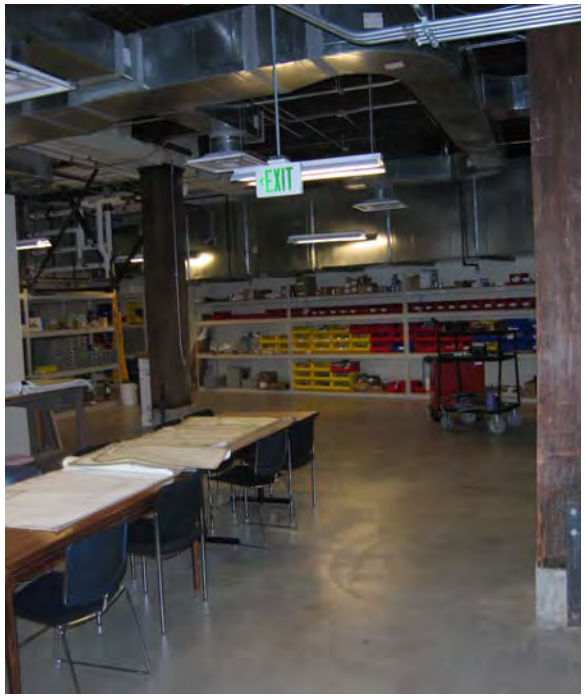
Figure 13 | Service Program Summary

Assumptions:

Central storage and shop square footage was based on the FEPG planning model, which calculates these spaces as a percentage of the total gross square feet of campus facilities.

The UW Bothell campus was used as a comparable for anticipating needs for materials receiving, loading and storage. Given the urban character of the UW Tacoma campus with significantly less grounds to maintain, the square footage needs reflected may need to be adjusted.

Standard vehicles square footage was calculated based on the Society of College and University Planning's (SCUP) Campus Facilities Inventory Report for Public 4-Year Institutions at 5,000 - 10,000 FTEs.



Housing Space Needs

Most of UW Tacoma's students are 'place-bound' meaning that they come from the South Puget Sound Region and maintain ties to their home community throughout their college experience. Even though many live within commuting distance to campus, there is demand for on-campus housing. UW Tacoma students want to have a residential campus experience that gives them independence and 24-hour access to campus life and the urban context of Tacoma.

The campus identified an on-campus housing target of 12% of the total (headcount) undergraduate student population. On-campus housing is not planned for graduate level students who may choose housing that is near the campus.

Live/Learn

Given the interdisciplinary nature of the UW Tacoma academic curricula, housing on campus should promote the concept of a 24-hour academic community. Housing facilities should be designed with a combination of study and social areas, multi-purpose spaces, and outdoor gathering spaces. The addition of classrooms and student services on the ground floors will tie housing communities to the academic core of campus.

Housing Types

Four to eight single occupancy bedrooms configured within a suite is the preferred type of housing based on students' desire to have their own space while also being part of a community by suite, by floor, and by the larger housing community. Additional needs for student housing are differentiated between lower level (freshman and sophomore) and upper level (junior and senior) students.

Freshmen and Sophomores

Housing for freshmen and sophomores should be designed to promote development of community and acclimation to university life. The location of housing for freshmen and sophomores should be more central to the campus core and student life spaces such as the student center, dining facility, and recreation center. To encourage eating in a common dining facility, suites for lower level students should provide kitchenettes (with a microwave and small refrigerator) as opposed to a full kitchen. Living units for resident advisors (RAs) should also be placed on each floor to provide guidance and to program community-building programs and events.

Juniors and Seniors

As students transition from underclassmen to upperclassmen, they will gain more independence. Upper level housing should be located along the perimeter of campus and should be designed for apartment-style living with full kitchens and less community-building space per floor. A large commons space should be provided on the ground floor, and more private study space should be available.

Housing Program Summary

The following tables summarize the assumptions for number of beds and the amount of square footage needed for housing at ten years and the full build-out at 10,000 FTEs:

Beds

	Fall 2017	10,000 FTEs
Total Number of Beds	**648**	**1,261**
12.5% of total undergraduate headcount		
Freshmen and Sophomores	355	691
35% of total Freshmen		
25% of total Sophomores		
Juniors and Seniors	293	569

Square Footage

	Fall 2017	10,000 FTEs
Freshmen and Sophomores		
Total # of 4 bedroom suites	89	173
Total Residential Suites ASF	88,800	172,800
Total Laundry & Common Areas ASF	7,600	14,700
Total Freshmen and Sophomores ASF	96,400	187,500
Juniors and Seniors		
Total # of 4 bedroom suites	73	142
Total Residential Suites ASF	87,800	170,800
Total Laundry & Common Areas ASF	7,000	13,500
Total Juniors and Seniors ASF	94,800	184,300
Total Housing ASF	191,200	371,800
Total Housing GSF	**273,000**	**531,200**
(0.7 Building Efficiency)		

Figure 14 | Housing Program Summary

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Campus Development Plan

Concept

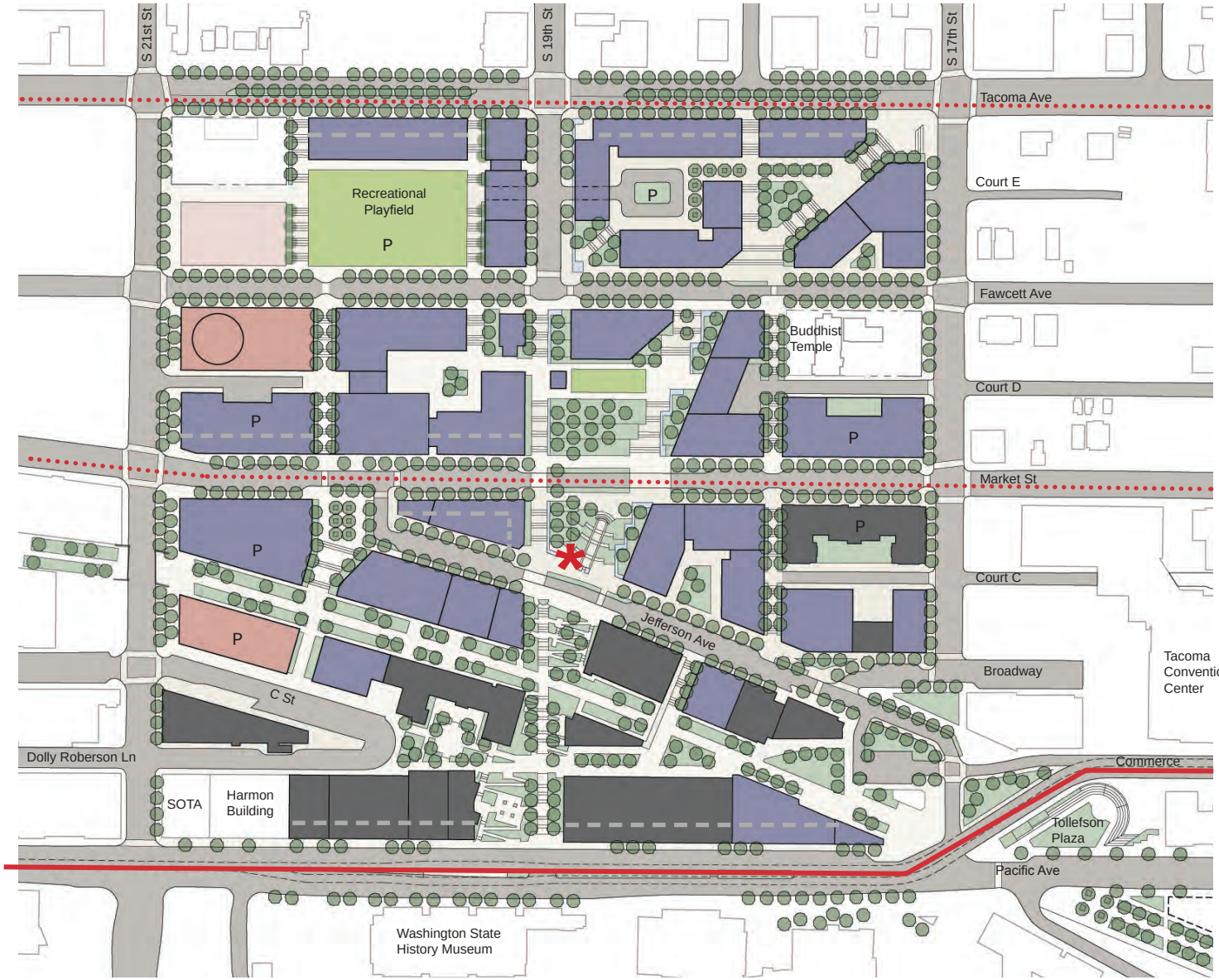
The general concept for the Campus Development Plan builds upon the 2003 Plan in that it recognizes and enhances the urban character of the existing campus by aligning development predominantly with the street grid. The plan provides opportunities to strengthen a sense of UW Tacoma's community as a full, four-year institution by providing a central open space, various smaller green spaces throughout the campus, pedestrian connections up the hill, and an integration of uses between residential, student life, and academics.

A significant difference of the 2008 Campus Development Plan from the 2003 Plan is that Market Street remains open through the campus. As described in more detail in following pages, traffic-calming measures, particularly in proximity to the central open space, will be implemented along Market Street, and 19th Street between Market and Fawcett will be closed to vehicular traffic to promote a more pedestrian-friendly environment.

While providing for Market Street to remain open, the plan also will accommodate closing Market Street in the future, if deemed feasible.

The Campus Development Plan shows the amount of built square footage needed to accommodate 10,000 student FTEs (with new construction built to an average of four stories).

Parking may be built below new buildings and potentially underneath the recreational playfield. Retail locations may be located at street level primarily along Pacific Avenue and Tacoma Avenue, with a lesser presence on Market Street.



Legend

Academics & Services

- Existing UW Tacoma
- Future UW Tacoma
- Facilities - Warehouse/CP
- Facilities - Grounds Storage
- Japanese Language School Memorial Garden
- Retail

Transportation

- Existing Public Transit
- Potential Public Transit
- P — Potential Parking (underground)

0 75 150 300 N

Figure 15 | UW Tacoma Campus Development Plan

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Campus Development Plan Alternative

With a campus presently constrained to a 46-acre area, real estate becomes a precious commodity for the full range of services needed to support the scope of the University. And, if the rate of students seeking higher education degrees continues to increase, UW Tacoma may potentially face total enrollments greater than 10,000 FTEs.

An alternative to the Campus Development Plan is to increase the amount of academic buildings and housing facilities on campus and locate elements such as the recreational playfield, structured parking, and facilities management off-site. With average building heights of four stories, this will allow for an increased on-site capacity of 12,000 FTEs.

Figure 16 describes the space needs for functions and services that could potentially be located off-site (built as dedicated UW Tacoma space or shared through community partnerships).

Figure 17 reflects the on-site configuration for 12,000 FTEs.

		ASF	GSF	Acres
Health Services		9,600	14,800	0.17
Multi-purpose Event Space		33,000	50,800	0.58
	# spaces			
Structured Parking	1,000		325,000	2.00
Facilities				
Grounds Storage			12,000	0.28
Standard Vehicles			36,000	0.83
Recreation				
Sports Field (non-regulation)			54,000	1.24
Intercollegiate Div 2 Sports			617,000	13.76
Administration			2,000	
Coaching			3,600	
Lockers/Support			9,700	
Training/Conditioning			2,500	
Gym (Basketball/Volleyball)			36,000	
Baseball Field			194,000	
Softball Field			57,800	
Soccer/Track & Field			268,200	
	# of courts			
Tennis	6		43,200	
			GSF	**Acres**
Grand Total			**1,109,600**	**19**

Figure 16 | Potential Off-site Functions

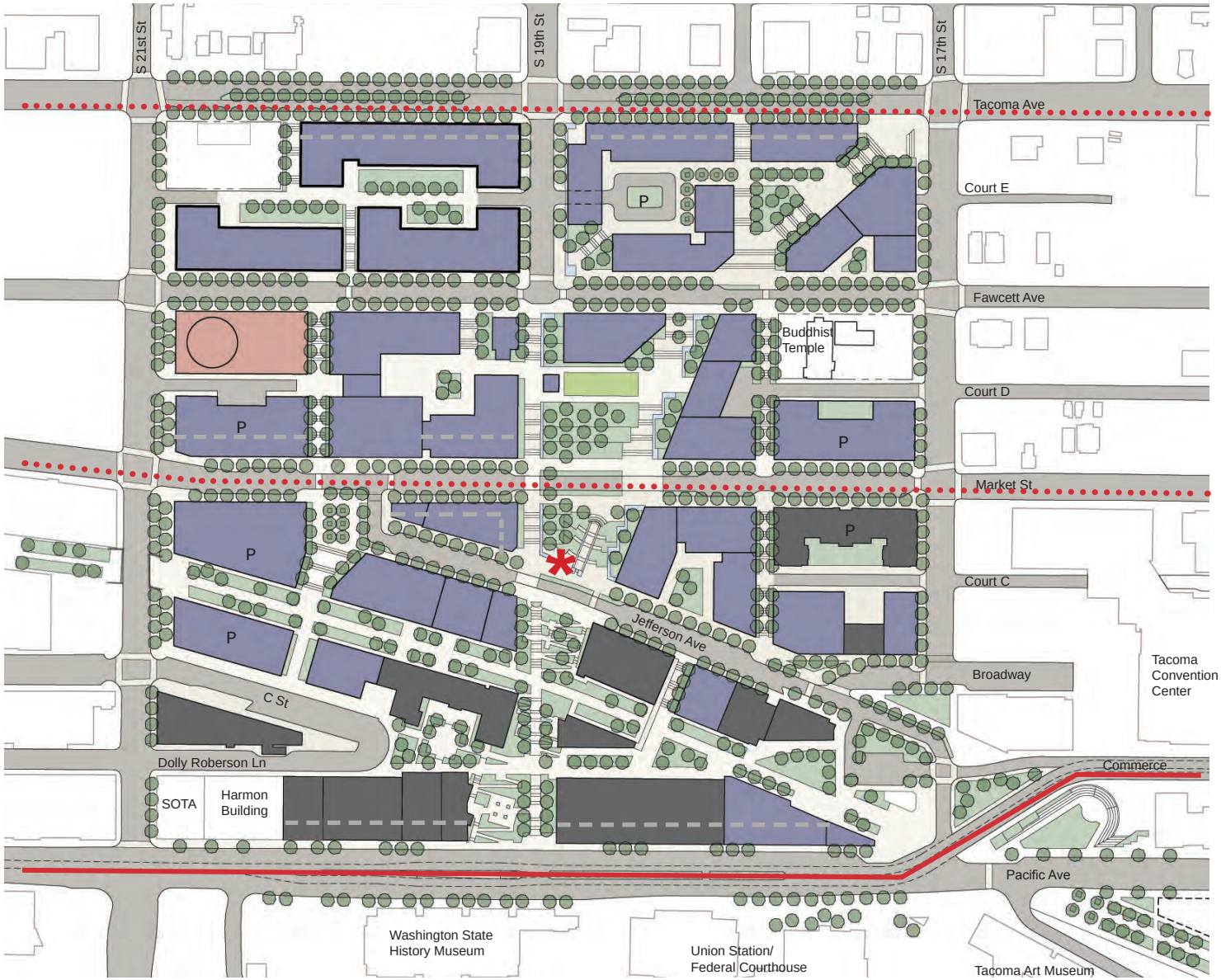

Figure 17 | UW Tacoma Campus Development Plan Alternative

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Scale

In order to strengthen a sense of campus community, provide convenience, and relate to the context of the existing campus, it's important that the non-residential functions dedicated to UW Tacoma remain ground-related. While the actual height of new buildings will vary, an average height of four stories is ideal for academic uses. This scale allows people to retain contact with the campus, neighboring buildings, and open spaces, and thus reinforces a sense of place for the campus community. Having functions in close proximity to one another and lower to the ground orients the campus to the pedestrian and facilitates navigation and management of class schedules and meetings.

Due to the increasing development of downtown Tacoma and the potential for density around UW Tacoma to increase as the campus reaches its full build-out potential, some buildings west of Market Street (and outside of the historic overlay zone) could be built as high as eleven stories with the upper stories developed through public/ private partnerships. An increase in the height limit for the Downtown Mixed Use zone portion of campus (currently set at 100 feet) will be required. (See zoning information on page 17.)

The potential for increased density also supports the location of housing above academic spaces. Building to a campus average of six to eight stories (with potential heights ranging from nine to eleven stories outside of the historic overlay zone) could allow the capacity of the campus to grow to 15,000 FTEs. Buildings should be sited carefully to minimally affect the view corridors of adjacent neighborhoods.

The following sections show the scale of the campus buildings at approximately four stories (10,000 FTEs) and the scale of the buildings with mixed use development, ranging in heights up to eleven stories west of Market Street.

Figure 18 | Massing Study (building heights at four stories)

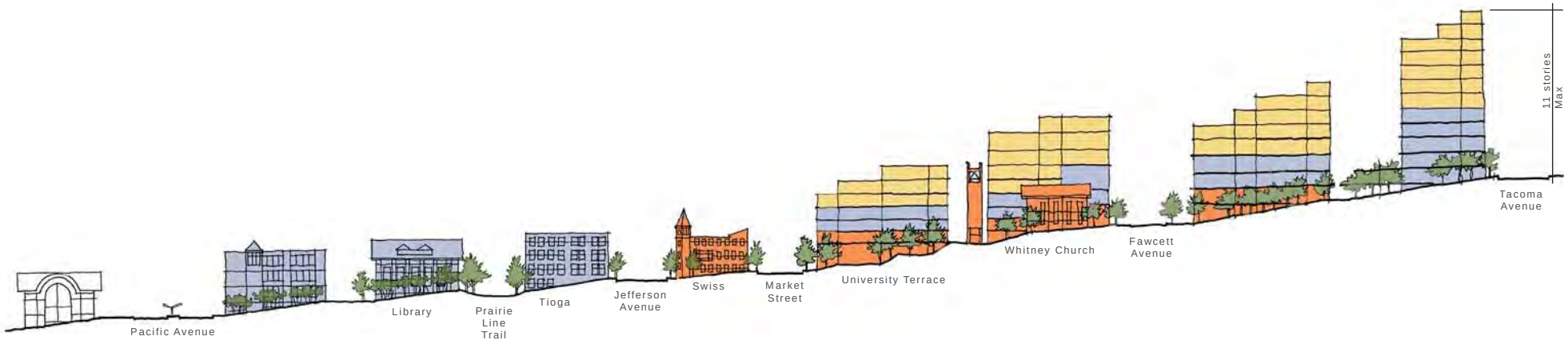


Figure 20 | Section B - Mixed Use Development above Market Street (15,000 FTEs)

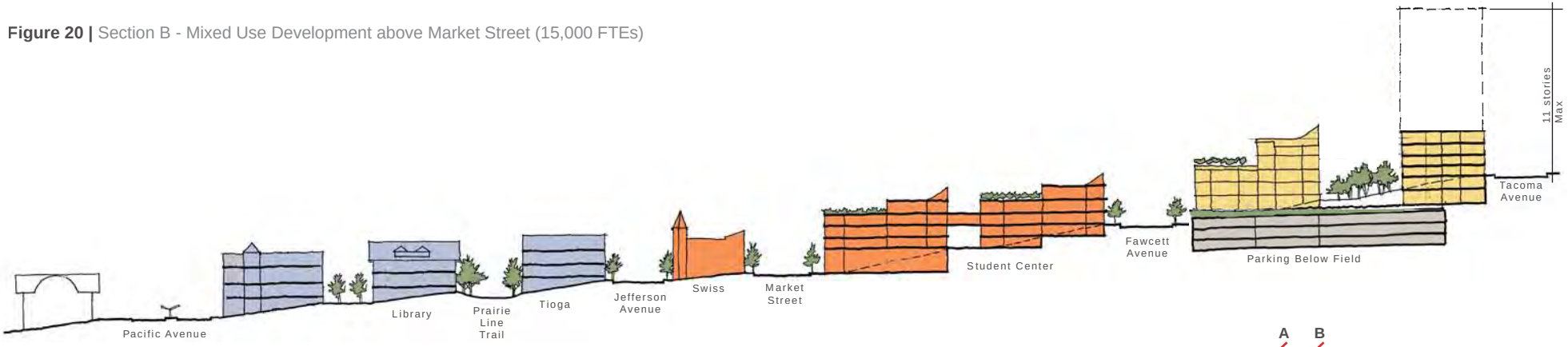
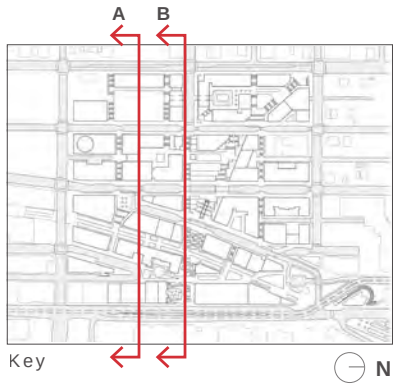


Figure 19 | Section A - 10,000 FTEs



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Mixed Use

The plan is designed to be flexible so that as the campus needs change over time, buildings may be assigned to different uses. The academic, community and student activity, and housing zones reflect preferred adjacencies identified by UW Tacoma's Building Advisory and Design Review Committee and community groups.

The central open space is to be fronted by academic buildings, student activity, recreation facilities, and other common use spaces. A potential student center and recreation facility is sited on the south side of 19th Street in anticipation of possibly using adjacent existing buildings in that area as student activity and community space. Housing is proposed along the western edge of campus, but within close proximity to the campus core.

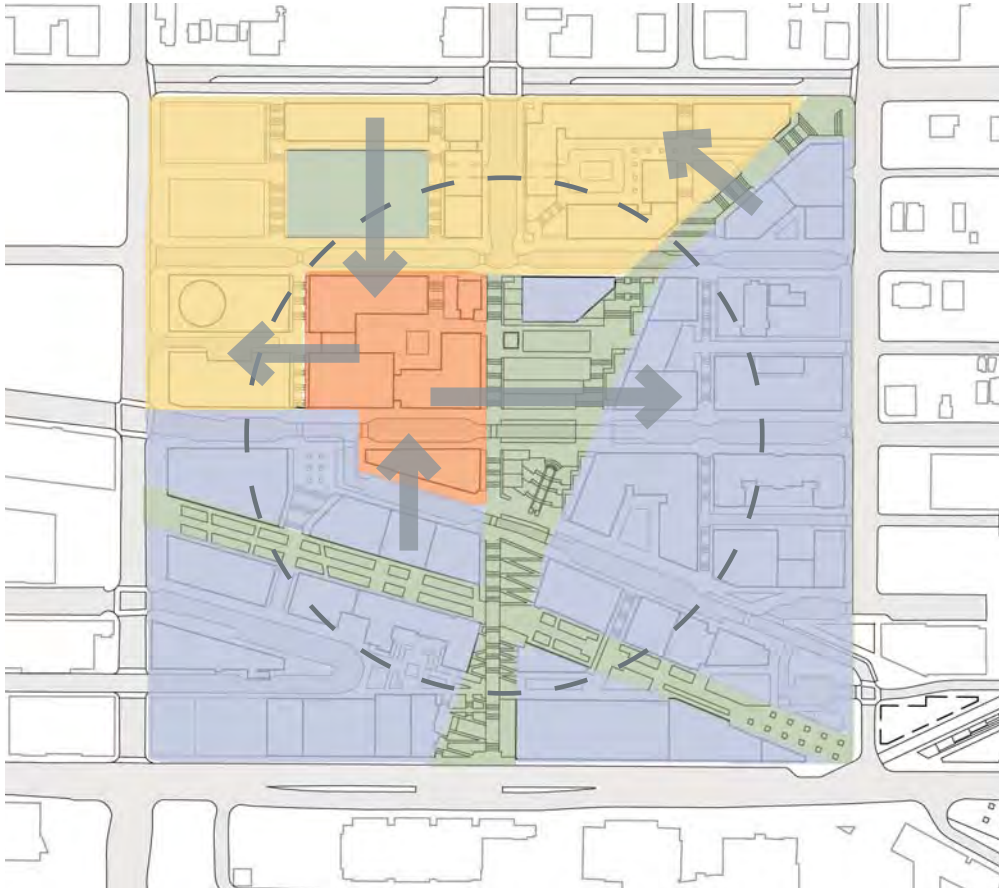


Figure 21 | Mixed Use Diagram

Gateways and View Corridors

Reminiscent of the first urban universities of Europe (ex. Bologna, the Sorbonne) where learning and work were intertwined with city life, UW Tacoma is a campus that is integrated within the fabric of downtown Tacoma. The campus streets follow the city grid, and traffic runs through as a connection point to Downtown and greater Tacoma. The streets themselves act as sequential, continuous entrances into campus and should be improved with landscaping, street trees, pedestrian walkways, lighting and signage to strengthen UW Tacoma campus identity and environment. Future development at these intersections should also contribute to the identity to the University and the spirit of a campus entrance.

Gateways

There are five key intersections that are strong entry points to the campus:

1. **Pacific Gateway (**Pacific Avenue and South 19th Street) – an existing and successful entrance with signage on Pacific Avenue.
2. **Tacoma Gateway (**Tacoma Avenue and South 19th Street) - the 19th Street axis serves as the “spine” of campus, and the intersection at Tacoma Ave should also be developed as a major entrance into campus.

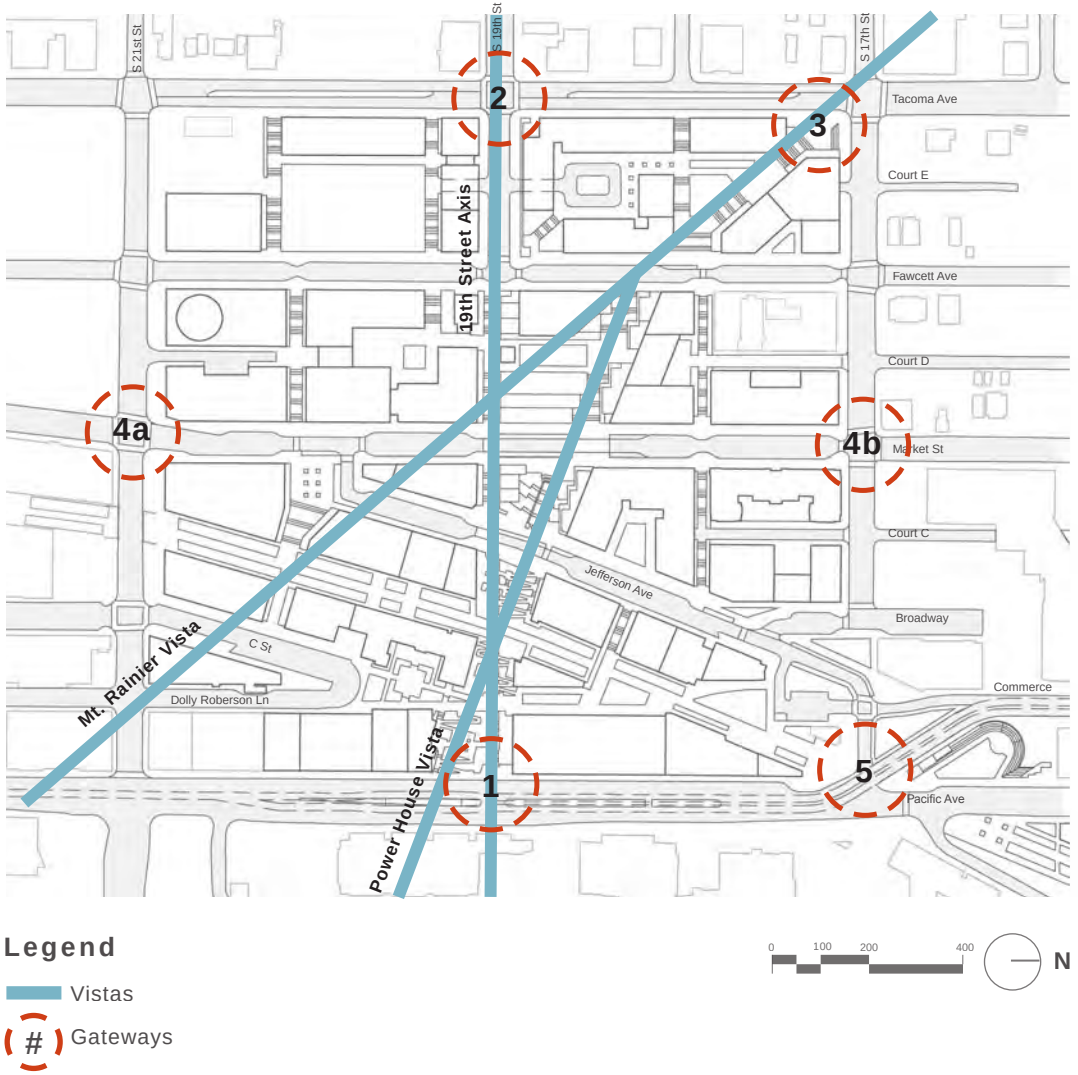


Figure 22 | Gateways and View Corridors Diagram

3. **Takomah Grove Gateway** (Tacoma Avenue and South 17th Street) - should be developed in conjunction with the introduction of the Rainier Vista at this intersection including a pedestrian space opening into the vista diagonal. The 2003 Master Plan located the Japanese Language School Memorial Garden at this site, but the Master Plan Update has relocated the memorial east of Market Street to become part of the central open space. This gateway may still incorporate the elements and spatial organization of a grove as outlined in the 2003 Master Plan and integrate with the design of the Rainier Hillclimb as described on page 68.
4. **Market Gateways -** anchors the north/south axis through campus serving as a connector from the Brewery/Arts District to Downtown. The intersection of Jefferson Avenue, Market Street, and South 21st Street (4a) should be planned to include open space as well as recognition of the potential mixed use, commercial, academic and housing that may exist in this vicinity (see Market Plaza, page 68).
5. **Jefferson/Prairie Trail Gateway** (Pacific Avenue, South 17th Street, the future Prairie Line Pedestrian/Bike Trail, and the streetcar corridor) - this is the most complex entry and requires consideration in concert with the potential extension of the trail across Pacific Avenue, possible reconsideration of the open spaces to the north at the convention center and the art museum, and modification of the vehicular circulation. The goal is to provide safe pedestrian and bicycle access into and from the campus, to provide visibility into the campus and create an environment of landscape, public art and buildings celebrating the presence of the University as a neighbor to downtown Tacoma.

View Corridors

There are three important view corridors identified in the 2003 Master Plan. All are included in the 2008 Master Plan Update. These include the South 19th Street axis, the Mt. Rainier Vista and the Power House Vista. The development and refinements of the plan for the central open space on campus contribute to framing all three vistas. The development of the Pacific Gateway and Takomah Grove Gateway should be conceived to function as gateways to both the campus and the vistas.

Community Access - “Porous Borders”

Community access is provided through the open street system and the Prairie Line Pedestrian/ Bike Trail that crosses campus. The streets allow to and through access for automobiles, service, emergency, pedestrians, bicyclists and public transportation, including Pierce County Transit and the Sound Transit Link Light Rail. It will be especially important to improve these streets to serve pedestrian circulation by repairing sidewalks and adding street trees and landscape buffers between traffic and pedestrians (see description of South 21st Street setback on page 62). The improvement of perimeter streets will also provide benefits to neighboring communities (see description of Tacoma Avenue on page 62).

UW Tacoma’s existing buildings are now located on active streets, and in many cases, retail activity occupies the street level with academic uses above. This mix will continue with the full build-out of the campus, particularly within new development on Tacoma Avenue and in the

area of the Market Street and South 21st Street intersection, possibly extending north into a new student center.

The planned central open space at the heart of the campus, including the Japanese Language School Memorial Garden, will be open and attractive to both the University and larger community. The terraced design of the open spaces may provide a venue for amphitheater seating for outdoor performances and activities.

The campus will strive to maintain porous borders, a mix of retail, open spaces and trails, as well as educational programs, lectures, events, and activities. This will be reinforced with the development of a student and recreation center that will maintain the integration of campus and community that is highly valued at UW Tacoma.

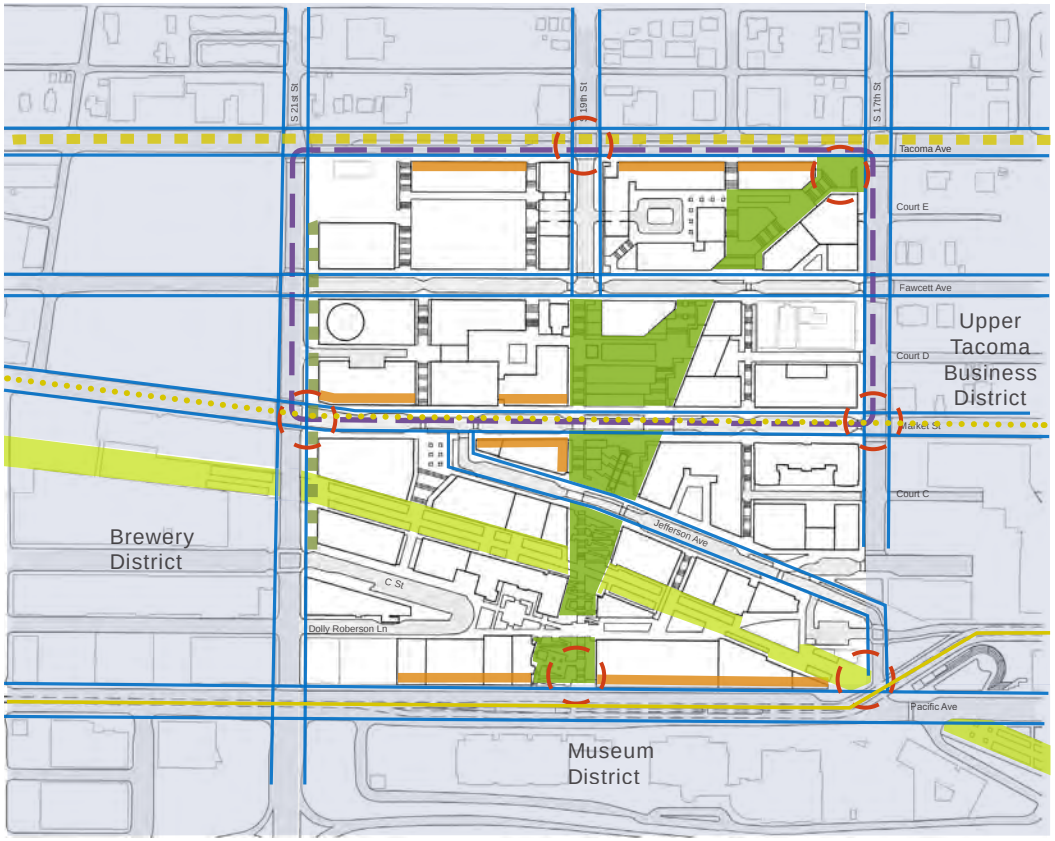


Figure 23 | Community Access Diagram

Landscape Design and Open Space

The following summarizes the open space elements as defined in the 2003 Campus Master Plan (shown in quotes, modified in **boldface**) and includes relevant updates including a setback on South 21st Street, a new plan for Market Street, the conversion of the railroad right-of-way into an urban pedestrian and bike trail, and the additions of the Japanese Language School Memorial Garden and a recreational playfield.

Streetscapes

Perimeter Streets - Tacoma Avenue, South 17th Street, South 21st Street, and Pacific Avenue

"The perimeter streets while under the jurisdiction of the City, are important to the Campus in that they define the edge of the city/campus interface....**The campus side of the street should include** street trees and broad sidewalks. Parking is provided....North-south perimeter streets feature important building entries. With some exceptions along Pacific Avenue, perimeter streets will not have loading docks or garage entrances."

Tacoma Avenue - Boulevard with Potential for Mass Transit

"Tacoma Avenue is envisioned as a grand boulevard with street trees planted along each curbside and a central planted median. It forms an important campus edge and an important gateway to and from downtown." It is also a major north/south transit route and possibly may include a future streetcar line.

South 21st Street - New Plan for Setback

"South 21st Street is a significant gateway to the University and the City via its connection to Highway 705 and Route 509 Waterway Bridge." However, this steep street doesn't currently portray the character of a significant portal to the University or the City. As future development occurs up the hill (west), the buildings should be set back from the north curb line to allow for wider sidewalks, planting areas and a double row of street trees providing a consistent and inviting edge to the campus (see Street Section A).

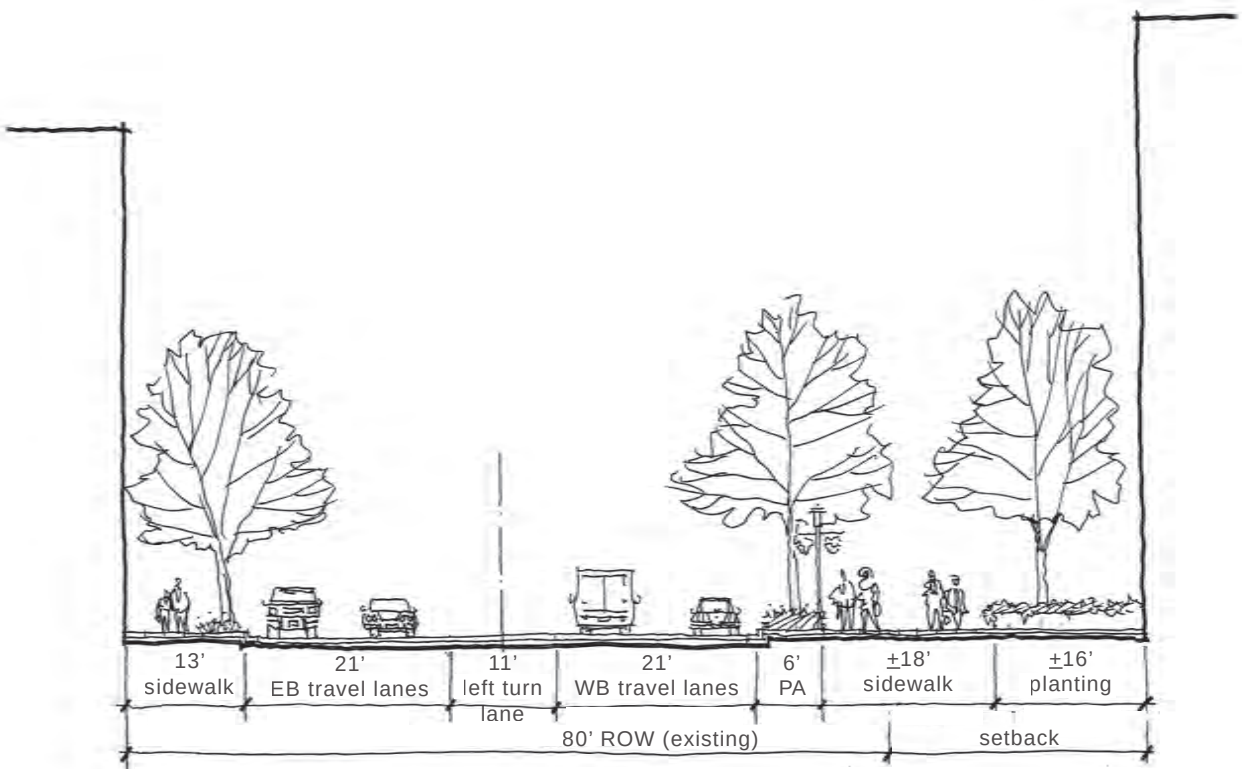
Thoroughfares - Jefferson Avenue, Market Street, and Fawcett Avenue

Jefferson Avenue, Market Street, and Fawcett Avenue "provide the primary vehicular circulation routes through campus and remain open to public traffic. Parking is maintained. Building frontages along thoroughfares may have primary entrances and orientations. Except for the east side of Jefferson Ave, driveways and loading docks are excluded from thoroughfares."

Market Street - New Plan

The Master Plan Update shows that Market Street will remain open to vehicular circulation. Since Market Street runs through the middle of the campus' central open space, the character of the street should respond, respect and enhance its surroundings. Market Street should not be a barrier, but rather seamless, promoting a strong and safe pedestrian connection between the upper portion of the open space (University Terrace) and the lower portion (Japanese Language School Memorial Garden). Wider sidewalks and a narrow roadway for vehicles are recommended as street-calming measures.

The street is to be animated with trees and planting areas/raingardens, pedestrian amenities such as seating, pedestrian-scaled lighting, kiosks/wayfinding elements and special paving. The design should encourage outdoor dining, artworks, vendors and be enhanced with



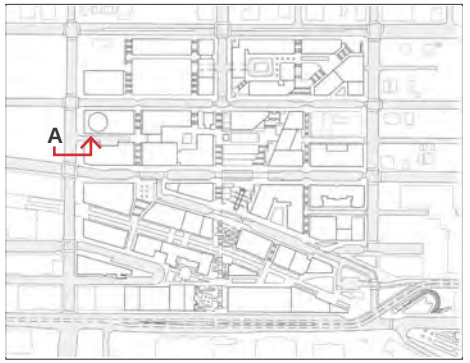


Figure 24 | Street Section A - S. 21st Street Looking West

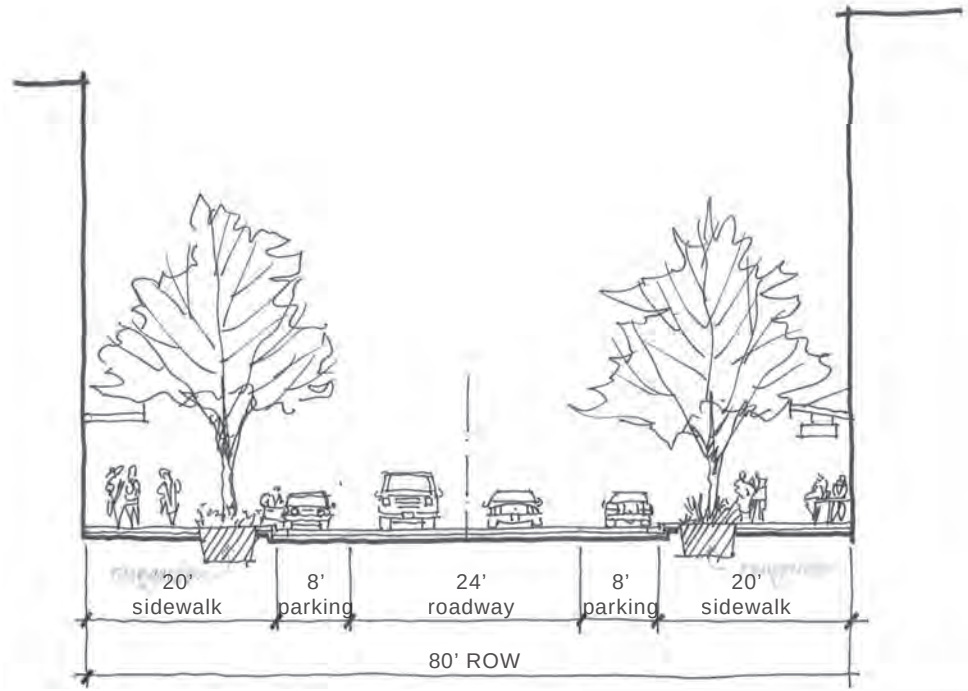


Figure 25 | Street Section B - Market Street Looking South, between S. 17th Street and University Terrace

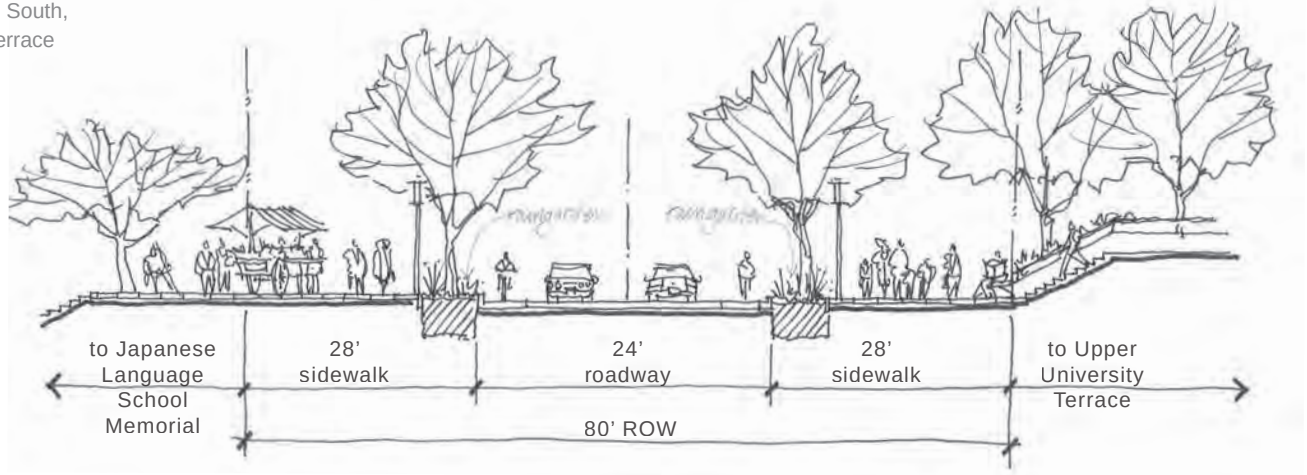


Figure 26 | Street Section C - Market Street Looking South at University Terrace

Market Street contd.
seasonal events and displays (see Street Sections B & C).

When location of transit stops on Market Street are determined, transit shelters should be provided or integrated into new buildings conveniently accessible to the transit stops. It is ideal to place transit stops proximately to the north and south of the central open space.

South 19th Street
("Tacoma Gateway" in the 2003 Master Plan)
19th Street between Fawcett Avenue and Jefferson Avenue will close to vehicles, so that the east-west axis, or spine, through the middle of campus may continue from the Snoqualmie Hillclimb that begins on Pacific Avenue and become integrated as part of the central open space (see Street Section D).

Courts
"Courts are conceived to be functional but friendly urban spaces mixing pedestrian movement with mid-block loading and servicing functions, bicycle storage, as well as some short term or assigned parking. Secondary building entrances and windows open onto the courts."

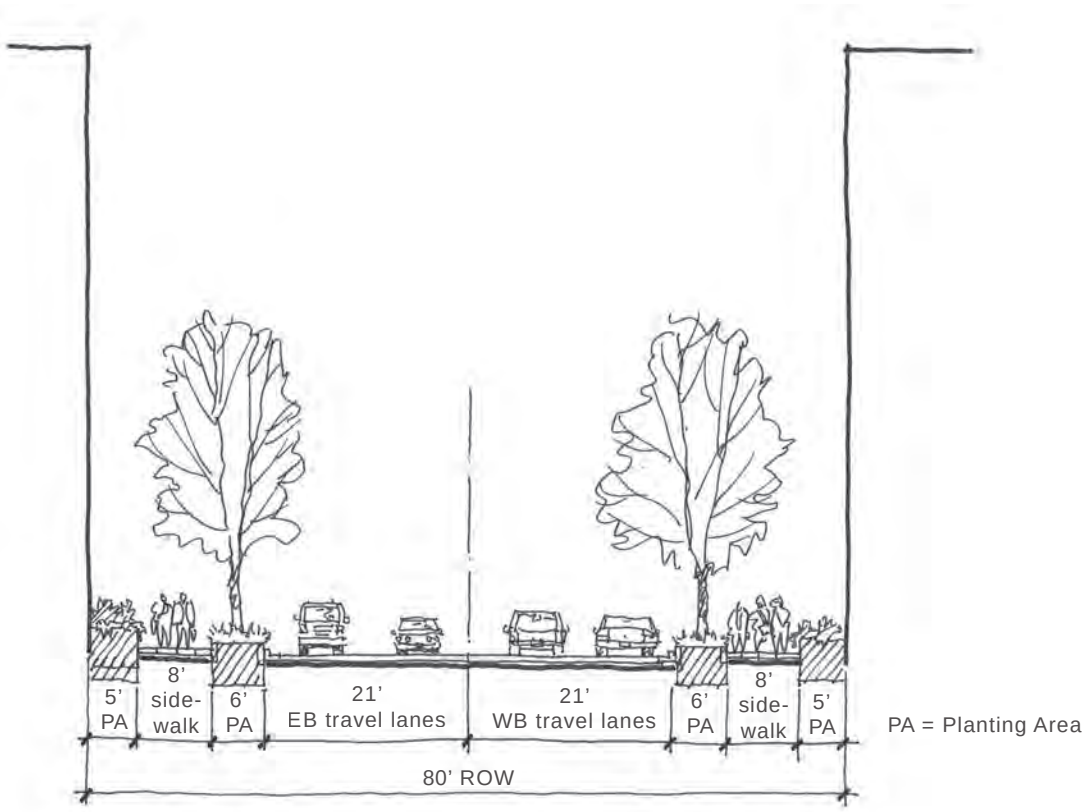
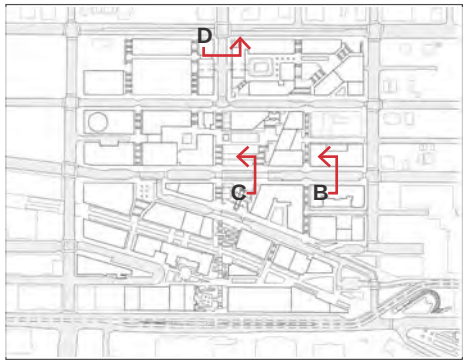


Figure 27 | Street Section D - S. 19th Street Looking West



The Prairie Line Trail Burlington Northern Santa Fe Railroad Right-of-Way

The deactivated 80' wide railroad right-of-way (R.O.W.) is an incredible asset and component to the overall open space framework of the campus. Transecting the campus along the north/south grain of the hillside, the corridor provides a relatively level and wide green space that could be designed as an urban park. A 20' wide trail will be maintained through the R.O.W. for a public pedestrian and bicycle trail that extends north toward the Thea Foss Waterway and extends south through the Brewery District and beyond.

The abandoned track alignment articulates a gentle curve or sweep through the R.O.W., which becomes the armature of the design. The trail is to be reflective of the historic industrial character of the R.O.W., interspersed with rhythmic and complementary native plantings. The typical section of the corridor includes: narrow pedestrian walks paralleling buildings that line the edge to provide access to the buildings; linear plantings that reinforce the linearity of the trail; and the 20' wide trail which will accommodate both pedestrians and bicycle traffic (see Street Section E).

The City of Tacoma and UW Tacoma must work together in the design and development of this corridor, so that the design respects and reflects the past function and history of the corridor, and the design elements integrate well with the existing context of the campus. The intersection of the trail and South 21st Street needs particular attention due to the heavy vehicular traffic that travels on South 21st Street to and from the interstate. An underpass developed at this site would be ideal to allow the trail to continue across South 21st Street without pedestrian and vehicle conflicts.

An important element to be incorporated into the design of the trail is the use of water and its role in the overall stormwater management program to be implemented on the campus. The Prairie Line Trail is an ideal stormwater treatment collection corridor for water coming down and through the steep slopes of the campus. Water features and a runnel running the length of the trail will display the water systems, enriching the experience of the user. Linear raingardens will filter and clean water, improving its quality prior to its release into the Thea Foss Waterway.

Site furnishings such as seating areas, bike racks, wayfinding/signage, lighting, art and paving should be developed to campus standards. The trail corridor should feel safe and inviting to the user. The south and north entries of the trail onto the campus should inform the user that they are entering the UW Tacoma campus, and the design of the north entry should be looked at holistically with the realignment and narrowing of 17th Street, improvements to Tollefson Plaza and the intersection crossings at Pacific Avenue.

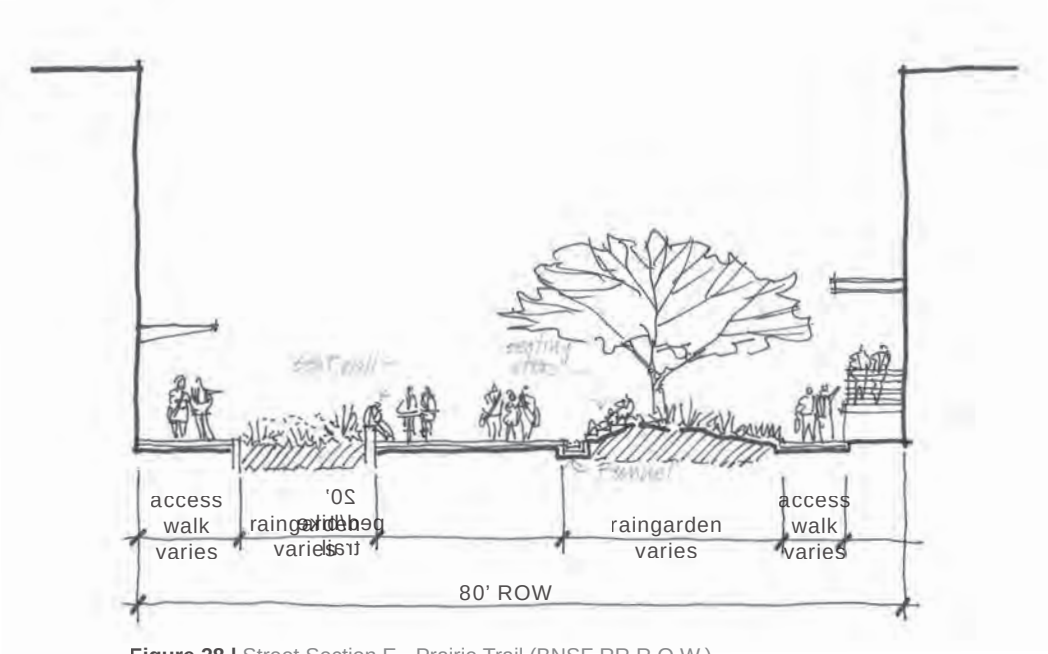
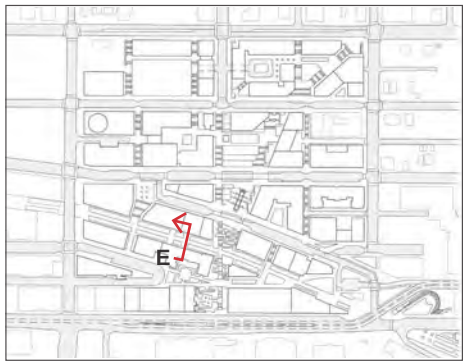


Figure 28 | Street Section E - Prairie Trail (BNSF RR R.O.W.)



Key

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Fall 2008

Hillclimbs

"**The Rainier Hillclimb and the (existing) Snoqualmie Hillclimb** connect the two main pedestrian upper and lower gateways to the **central open space in the heart of campus.**"

Rainier Hillclimb

"The Rainier Hillclimb is envisioned as a series of broad stairways surrounded by greenery." "Located specifically to afford spectacular views...columnar trees will reinforce view corridors and continue into a new pedestrian belvedere that forms the northern boundary of the **University Terrace.**" The use of access ramps that "zig-zag" up the slope will be limited or altogether eliminated in the design. Universal accessibility is to be accommodated through a series of elevators and bridges along the north side of the open space to be incorporated into the design of future buildings and define the edge of the hillclimb.

Passages

"Passages are secondary pedestrian routes up and down the campus. These pedestrian stairways link the service courts, are adjacent to academic and residential buildings, and provide east-west alternative routes to the **University Terrace** and hillclimbs. They are predominantly green and intimately scaled corridors in keeping with their function as alternative routes through campus."

Plazas

Complementing the large open spaces are a number of smaller plazas, located throughout the hillside campus. Generally these plazas provide places for students, faculty and others to meet, gather for events or just sit to study or relax. Each plaza will have its own character, some more garden-like and green, and some more urban and hardscaped. In all cases, the plazas must be inviting, safe and offer a degree of flexibility and comfort for an individual or informal group.

Market Plaza

Market Plaza is located at the south end of Jefferson Avenue and is created by the realignment of Jefferson Avenue as it intersects into Market Street mid-way between South 19th and 21st Streets. The plaza is in the heart of the retail district along Market Street. It is a place of respite with a variety of seating and tables. A canopy of light and lacy trees provide soft and filtered sunlight to the predominantly hardscaped plaza.

Academic Plazas

Small plazas may be formed by the shape of new academic buildings. Plazas of this type are shown on the west side of Jefferson Avenue, north of the Japanese Language School Memorial Garden, and at Fawcett Avenue and South 17th Street. The space should be integrated with the streetscape character while creating a forecourt for new structures.

Library Square (Gillenwater Plaza)

"Library Square has been constructed as part of the lower campus development and forms an outdoor seating and meeting place in front of the Library building, with a convenient adjacency to **Philip Assembly Hall**." The only change to the structure of the square is to perhaps evaluate the square planting bed in the center of the space. Reconfiguring the planting bed may allow for better flow of pedestrian traffic and flexibility of use.

Student Center Plaza/Court

The Student Center Plaza is somewhat of a hybrid, a combination of plaza and court. Since it is aligned with Court D, limited vehicular access may be allowed. However, it is to be predominantly pedestrian-oriented. The space is a major outdoor room surrounded by the student center and recreation facilities. In fact the design of the plaza should reflect the quality of a strong interior/exterior connection.

Joy Plaza

The Joy Plaza will be developed along the Prairie Trail, across from the Joy Building and adjacent to the Dougan Building. As the Joy building is renovated and the development of the Prairie Trail begins, the Joy Plaza should be designed as an integral component of the campus' open space system. This plaza, unlike many of the hardscaped plazas on campus, will predominantly be composed of a soft, green space/lawn. The Joy Plaza is seen as a major part of the gateway experience into the campus from the north along the Prairie Trail, therefore the quality of its design and use of materials should speak to the quality of the University.

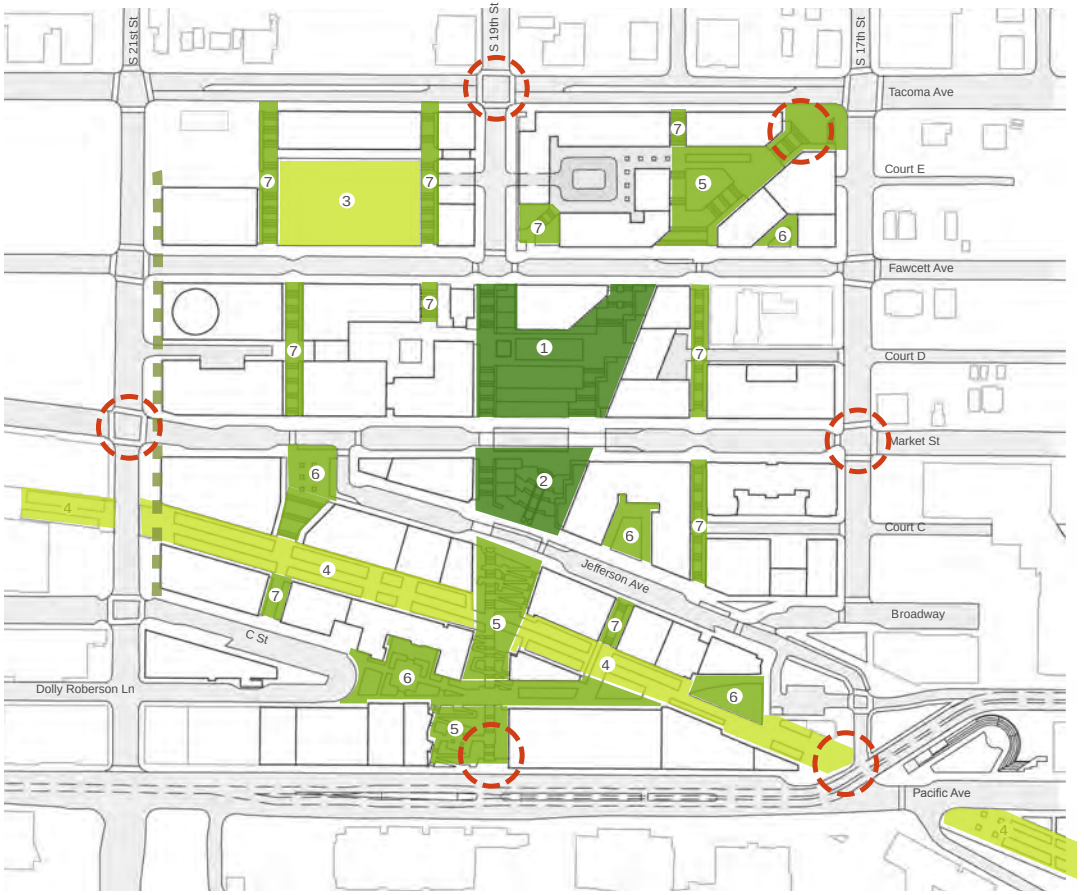

Figure 29 | Landscape Design & Open Space Diagram

Recreational Playfield

A recreational playfield is an important component of student life on campus, yet it is not an easy thing to accommodate on a site with steep topography. A recreational playfield may be located along Fawcett Avenue between 19th and 21st Streets. This location will provide a desirable adjacency to the student center, recreation facilities, and student housing. And to facilitate building a large level surface on the sloping site, the field will be built over a structured parking garage. The size of the field (180 'x 300'), is large enough to accommodate informal field games, but does not meet NCAA requirements for intercollegiate athletics.

Central Open Space - the 'Heart of Campus'

As with the earlier plans, there continues to be the desire to establish a large open space or "heart of campus" central to the campus buildings and services. The establishment of this space will be a link from the existing UW Tacoma spaces below Jefferson Avenue to the west side of campus. The central open space is composed of two types of spaces. The space on the east side of Market Street includes the Japanese Language School Memorial Garden, and the space west of Market street will be the University Terrace.

Japanese Language School Memorial Garden

Built in 1922, a Japanese Language School was located at Tacoma Avenue and South 17th Street, the heart of 'Japan town' in Tacoma before World War II. The school was a place for Japanese children to study language and Japanese culture. During the war, the building was also used to gather people of Japanese descent before sending them to internment camps.

While this building served as a significant historical landmark for Tacoma, it fell into disrepair and had to be removed. In order to preserve its heritage, UW Tacoma has planned for a Japanese Language School Memorial Garden to be featured prominently on the campus.

The design, by Nakano Associates, is a composition of three large Japanese gates and ten meditation benches, through which one enters to a gathering space for ceremonies or quiet reflection. On three granite plaques, the history of the school, its teachers and the school song will be engraved, and a water feature will also be incorporated into the design of the garden.

Figure 30 | Rendering of Japanese Language School Memorial Garden, courtesy of Nakano Associates

University Terrace

The open space above Market Street will serve as a large, active outdoor gathering space (though more modest in size than the space proposed in the 2003 plan) that includes a flat grassy area for students, which could also serve as a stage for an outdoor amphitheater aligned with the Mt. Rainier Vista. A bell or clock tower could also be included to serve as a 'touchstone' for the campus. The open space slopes toward Market Street in a series of level terraces and grander stairs. The terraces could be planted with native vegetation (refer to planting guidelines in the 2003 plan) to provide smaller and more intimate gathering spaces for students. A light and lacy canopy of trees gives the space a sense of volume, while allowing filtered sunlight to penetrate into the space. As part of the campus-wide stormwater management program, water should be introduced into the space and expressed in a series of cascading runnels/ weirs. The student center, recreation facilities, and academic buildings will frame this space, and it will be no more than a five to ten minute walk from student housing.

Campus Development Plan

Figure 31 | University Terrace Study - Plan

Figure 32 | University Terrace Study - Section

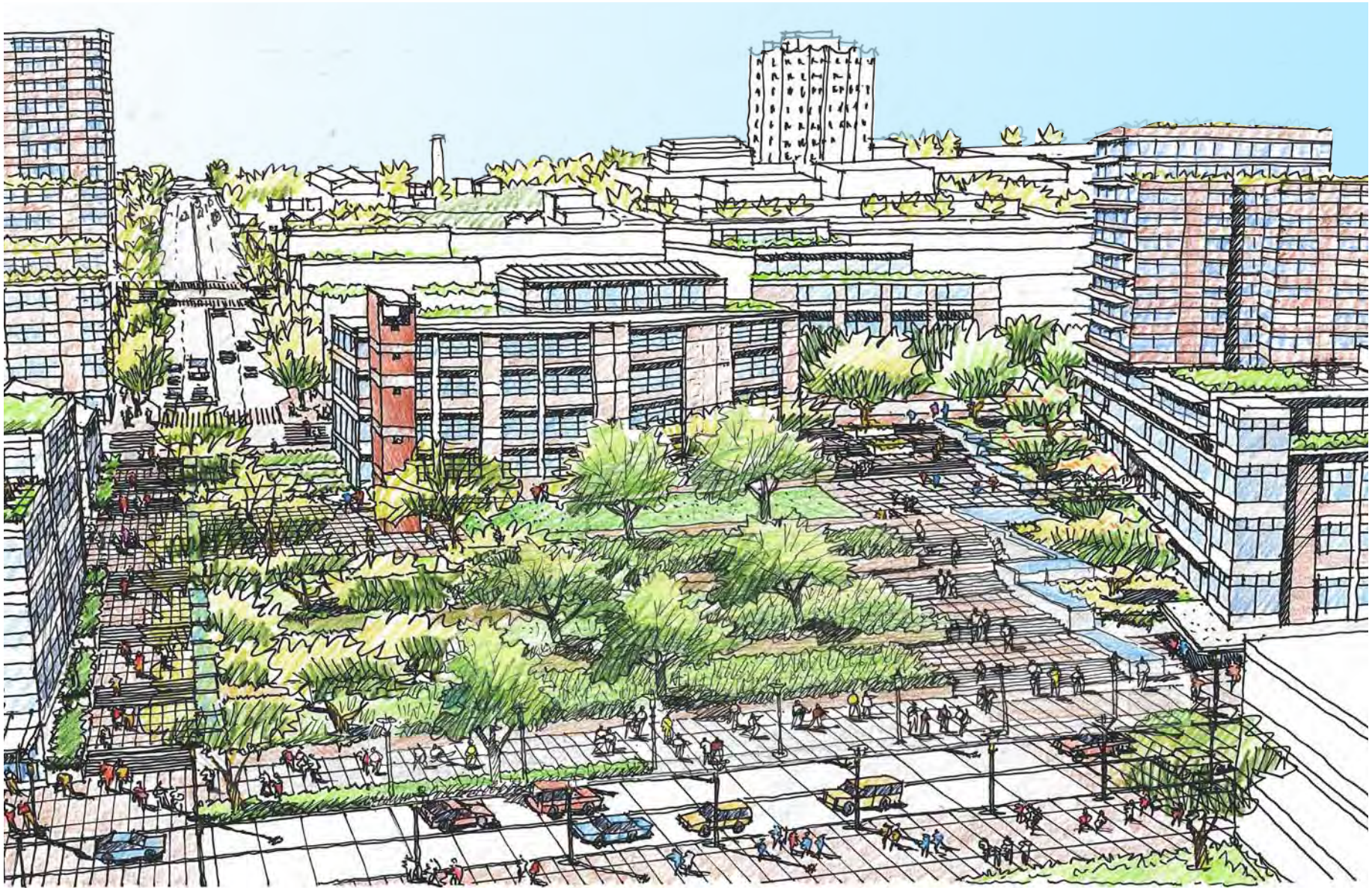

Figure 33 | University Terrace Study - Perspective Drawing

Evaluation of Transportation Needs Summary

The Campus Master Plan Update includes, as a supplemental section at the end of this document, an Evaluation of Transportation Needs prepared by Fehr & Peers/ Mirai. This study includes an evaluation of existing conditions, future conditions and proposed improvements to transportation systems including, streets, parking, vehicles, transit service, and pedestrian and bicycle circulation.

The focus of this study is to evaluate the impacts of the Campus Master Plan Update on the surrounding transportation system. The analysis looks at the context of the Campus Development Plan within its surrounding environment- examining not only the effect of the campus on the surrounding transportation system, but also how the development of the surrounding land uses will affect the operation of the campus.

The analysis of existing and future transportation needs is an important part of the master plan process, establishing the existing challenges for the transportation system and identifying the strategies and actions that will be needed to provide a transportation system that supports travel by auto, bicycle, pedestrian and transit.

Proposed improvements to existing roadways include:

- Widening South 21st Street between Market Street and Tacoma Avenue;
- Modifying Pacific Avenue to better support vehicular and public transit circulation;
- Installing traffic lights on South 17th Street;
- Building an underpass where the Prairie Line Trail meets South 21st Street;
- Creating a bicycle corridor along Fawcett Avenue;
- Developing a transit corridor along Market Street;
- Pedestrian improvements on all streets within and bordering UW Tacoma.

Circulation

"A comprehensive network providing multiple connections and clarity of wayfinding is critical to the circulation of the campus." The existing street grid geometry determines to a great extent the overall circulation of the campus. In the north-south direction the existing streets and mid-block courts form the framework for all levels of circulation including vehicular, service, emergency, pedestrian, and bicycle access.

Vehicular Circulation and Parking

"An initial assumption in the conception of the University of Washington Tacoma was its role as a commuter campus serving the south Puget Sound region. Consistent with this role, the challenge continues to be responding to a changing set of conditions and use patterns over time."

Current parking demand exceeds supply, and with the addition of on-campus housing, residents will want dedicated parking options.

"Current development in the City of Tacoma suggests that future campus growth will parallel a new civic focus on activating the city core as a pedestrian-friendly place."

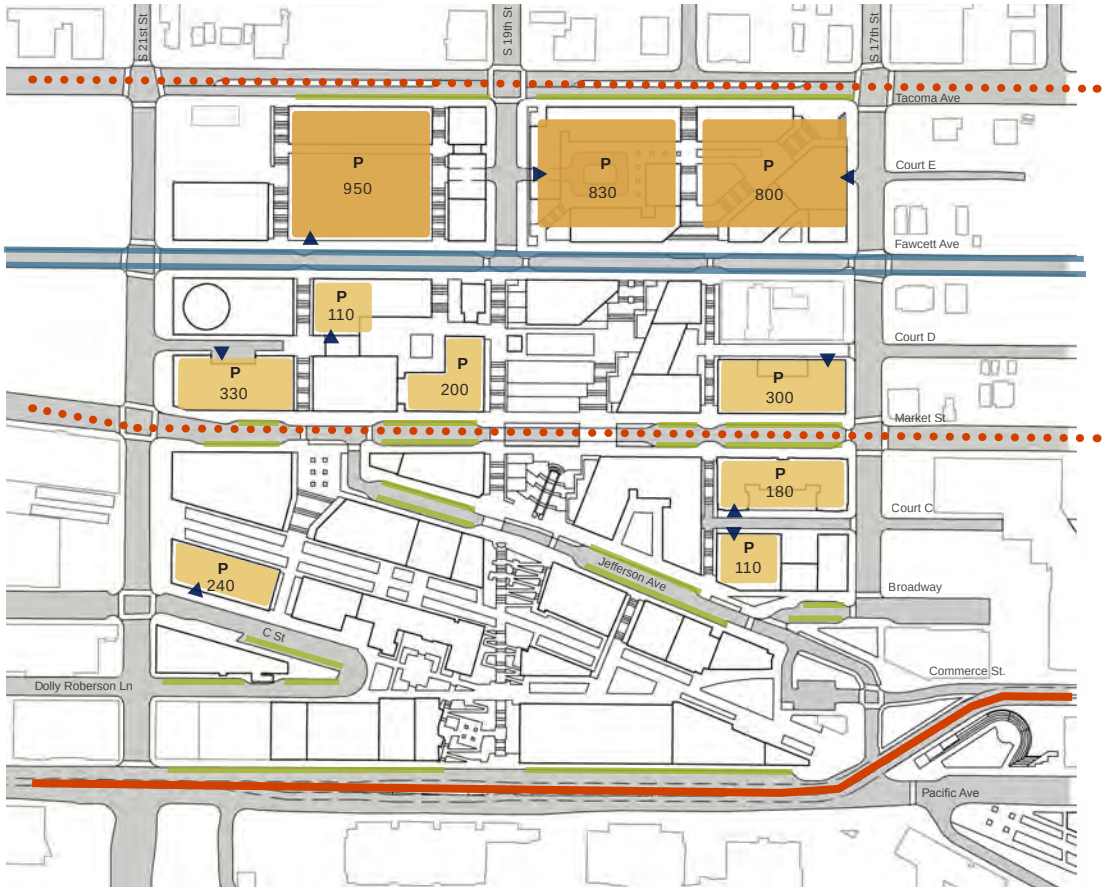

Figure 34 | Parking Diagram

"In particular, the construction of new urban housing and a light rail system can potentially reduce automobile commuters, and reinforce the campus as an urban district within a walkable, bike-able city."

UW Tacoma's current mix of surface and structured parking provides approximately 550 spaces for 2,173 FTEs, or a 25% ratio of parking to student FTEs.

It is difficult to predict parking needs for the full build-out of the campus. UW Tacoma will plan for a 15% - 30% ratio of parking spaces to student FTEs (1,500 - 3,000 parking spaces). The actual number of spaces will depend on a range of factors including the financial feasibility of structured parking, the cost of commuting by single-occupancy vehicle, the number of on-campus residents, availability of offsite parking options, and growth in public transit service. It is assumed that most parking structures will include University uses above them such as housing, student services or academic uses.

Approximately 200-300 spaces could be available as street parking (depending upon final street designs/upgrades), and potential locations for structured parking include:

- Between Tacoma Avenue and Fawcett Avenue
  - 950 spaces (4 floors built under the playfield and housing west of the playfield)
  - 830 spaces (4 floors built under housing and court)
  - 800 (4 floors built under housing, and Rainier hillclimb)
- Between Fawcett Avenue and Market Street
  - 330 spaces (3 floors built under housing at South 21st Street)
  - 110 spaces (3 floors built under building at Market Street and South 19th Street)
  - 200 spaces (3 floors built under building on east side of Fawcett)
  - 300 spaces (3 floors built under building at South 17th Street)
- Between Market Street and Pacific Avenue
  - 180 spaces (3 floors built under Court 17 apartments, existing)
  - 110 spaces (3 floors built under building adjacent to Pinkerton)
  - 240 spaces (3 floors built under building on C street (replaces existing surface parking)

Service and Emergency Circulation

Service and emergency vehicles will mainly be able to access buildings and loading zones via mid-block courts. This form of access is similar to the mid-block alleys existing in most of the blocks. This allows main entrances of buildings and street parking to be located along major thoroughfares.

Figure 35 | Service and Emergency Circulation Diagram

Pedestrian and Bicycle Circulation

A hierarchy of pedestrian circulation is established through the variety of open spaces developed through the site.

Major pedestrian routes include the 19th street axis, which functions as the central spine of campus, the Snoqualmie and Rainier hillclimbs that lead pedestrians through the central open space and along the Mt. Rainier Vista corridor, and the Prairie Line pedestrian and bicycle trail.

Minor pedestrian routes include the various links between the streets (running east-west) established in “an array of walkways, stairs, inclined paths, bridges, and ramps that climb or traverse diagonally up and down the slope, providing much of the unique character of the open space on campus.”

“The steep topography of the campus and prevalent vehicular traffic on surrounding streets combine to make bicycle commuting a challenge. Nevertheless, the City of Tacoma and UW Tacoma can work together to improve bike access.” The conversion of the railroad right-of-way into a pedestrian and bike trail, and street improvements such as dedicated bicycle lanes on Fawcett Avenue will greatly improve bicycle circulation through campus.

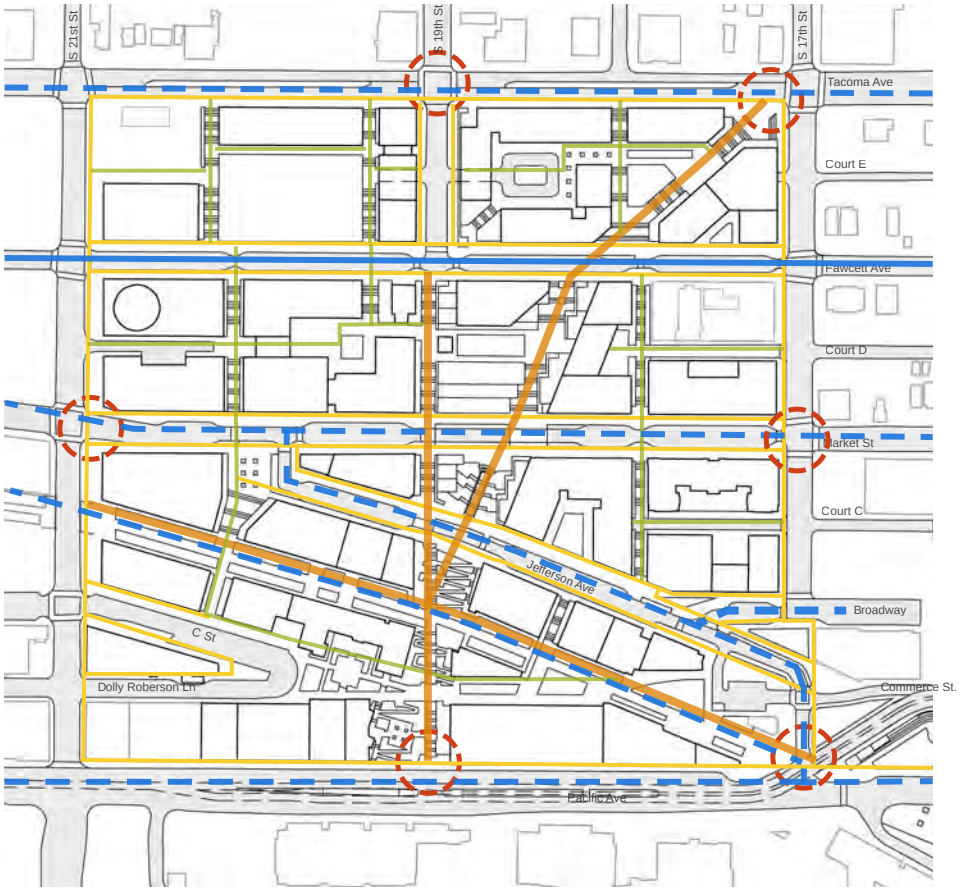

Figure 36 Pedestrian and Bicycle Circulation Diagram

Barrier-Free Accessibility

The campus must be accessible to the wide variety of users that visit, work, and live there. This is a challenge, given that each block includes a fifty-foot change in grade from east to west, totaling two hundred feet between Tacoma Avenue at the high point of the campus and Pacific Avenue towards the waterfront. The open space that exists between the railroad right-of-way and Jefferson Avenue includes a wheelchair-accessible ramp system, but it is inconvenient for users and a detriment to the quality of the open space. It is recommended that this ramp solution not be continued further up the hill as the campus grows. Rather, as modeled by an existing bridge that connects the Keystone Building to the Science Building, a series of semi-public, transparent corridors/ bridges within and between buildings and accessible by elevator is a reasonable solution to provide east-west access throughout the campus.

North-south streets and mid-block corridors will provide access, and sidewalks will be designed to meet ADA requirements. It is important that the central open space is accessible as well. The University Terrace studies show a level gathering area that can be accessed from the

Figure 37 Barrier-Free Accessibility Diagram

north and south. Accessible parking spaces will be included in all new parking structures, along public streets and in mid-block courts.

Sustainability

In developing policies and plans to advance sustainability on the campus the following should be considered:

- The design of new buildings and adaptive reuse of existing buildings will meet a minimum LEED® silver rating.
- Reduction of energy use by utilizing more efficient building and infrastructure systems and alternative energy sources.
- With increased public transportation access to the campus, less dependence on the automobile will be encouraged. The City of Tacoma is initiating metered parking on city streets, and the amount of on-campus parking will be kept to a minimum with the goal of providing "Park & Ride" access on Sound Transit light rail or Pierce County Transit from the Tacoma Dome and other transportation centers near the campus.
- The topographic conditions and proximity to the Thea Foss waterway provide the opportunity for a stormwater management system to collect water from streets and roofs, store and filter the water through the landscape, and reuse and distribute portions to the waterway. This stormwater management system will be a visible, positive part of the streets and open spaces and be incorporated into landscape design.

As a member of the "American College and University Presidents' Climate Commitment," the UW is committed to developing a comprehensive plan to achieve climate neutrality. The following chart shows the variety of strategies UW Tacoma could employ to reach carbon neutral status by year 2040. Significant savings could be achieved by making buildings more energy efficient, utilizing alternative energy sources, and purchasing green power for electricity needs not met by on-campus generation.

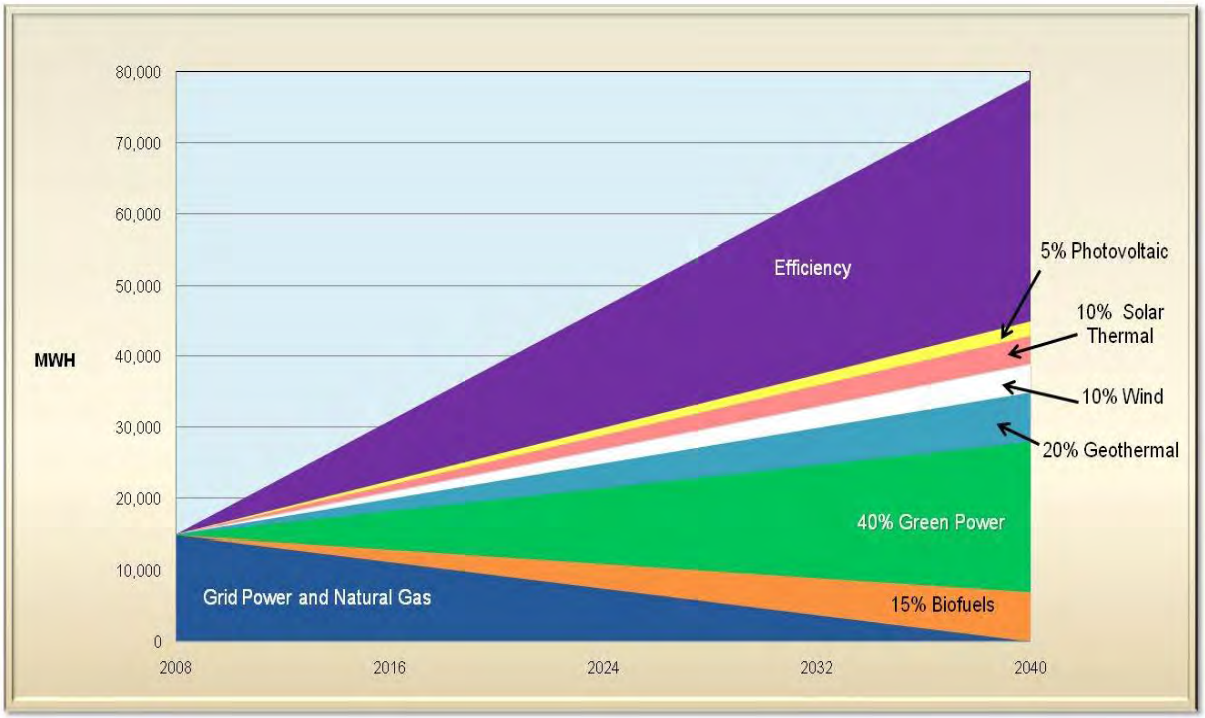

Figure 38 | Carbon Campus Neutral Strategy, courtesy of PAE Consulting Engineers, Inc.

Infrastructure Master Plan

A new Infrastructure Master Plan (IMP) has been developed in a parallel effort to the Campus Master Plan Update. Prepared by PAE Consulting Engineers, Luma Lighting, and Magnusson Klemencic Associates, the IMP addresses the most recent development strategies for the growth of the campus, focuses on application of sustainable systems, and includes life-cycle cost assessments.

The goals of the Infrastructure Master Plan are:

- Robust, reliable, redundant systems;
- Inform strategies for energy distribution (central or distributed) and how these systems should be sized and located;
- Understand interim servicing of existing buildings to inform construction phasing;
- Reduce carbon footprint;
- Develop a carbon-neutral (or carbon-negative) master plan option with innovative and informative sustainable strategies;
- Consider campus security (exterior lighting);
- Explore alternative fuel options;
- Use natural systems to mitigate run-off;
- Demonstrate innovations of systems to promote leadership and education within the campus community.

Utilidor System

Campus utilities are currently routed through walkable utility tunnels. These tunnels house water, electrical, and telecommunications piping and cable. Not only does this series of tunnels allow for the orderly distribution of campus infrastructure, but it also enhances the security and connectivity of the campus as a whole. The utilidor system (as shown on page 82) should expand as the campus develops and should be utilized as recommended by the civil, mechanical, electrical, telecommunications, and lighting infrastructure plans.

Civil Infrastructure

In order to maintain reliable water service to the campus over the next twenty years, older pipes are recommended to be replaced as roadwork occurs in those locations. Four fire hydrants should also be added to designated locations on Fawcett Avenue and Market Street.

To significantly reduce waste generation, mitigate stormwater runoff, and provide alternatives to purchasing potable water, the capture and reuse of stormwater and grey water is highly recommended. This means that for demands such as toilet flushing or grounds irrigation, stormwater or greywater (sink and shower wastewater) could be used instead of potable water.

A centralized water balance option is recommended, which combines each building's rain leaders and flow fixture waste lines into one location at the end of campus on Hood Street. This location provides flexibility to handle all possible stormwater from on and off the campus. The utilidor can then be used to route the grey water back to each building.

Road, sidewalk, and curb conditions are also part of the campus stormwater management system. Recommendations for road improvements include:

- Permeable paving at sidewalk areas and parking areas along north-south corridors;
- Cleansing swales and curbless street edges at north-south corridors;

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Mechanical Infrastructure

The recommendation for mechanical infrastructure development is the implementation of a condenser water loop. In this system, condenser water circulates through piping powered by a central pump station, and buildings draw heat from, or reject heat to the loop. Supply and return campus water loops would be installed to serve all campus buildings through the utility tunnel system. This option, compared to others, has a low life cycle cost, is energy efficient, and the infrastructure to support this option can be phased.

Electrical Infrastructure

Normal electrical power recommendations include:

- Bringing two utility feeders to the campus from the Nisqually substation;
- Looping the existing radial feeder;
- Establishing a primary selective loop configuration for future development west of Market Street;

For emergency electrical power, the plan recommends a semi-distributed system of 480 volt generators, strategically located to serve groups of buildings.

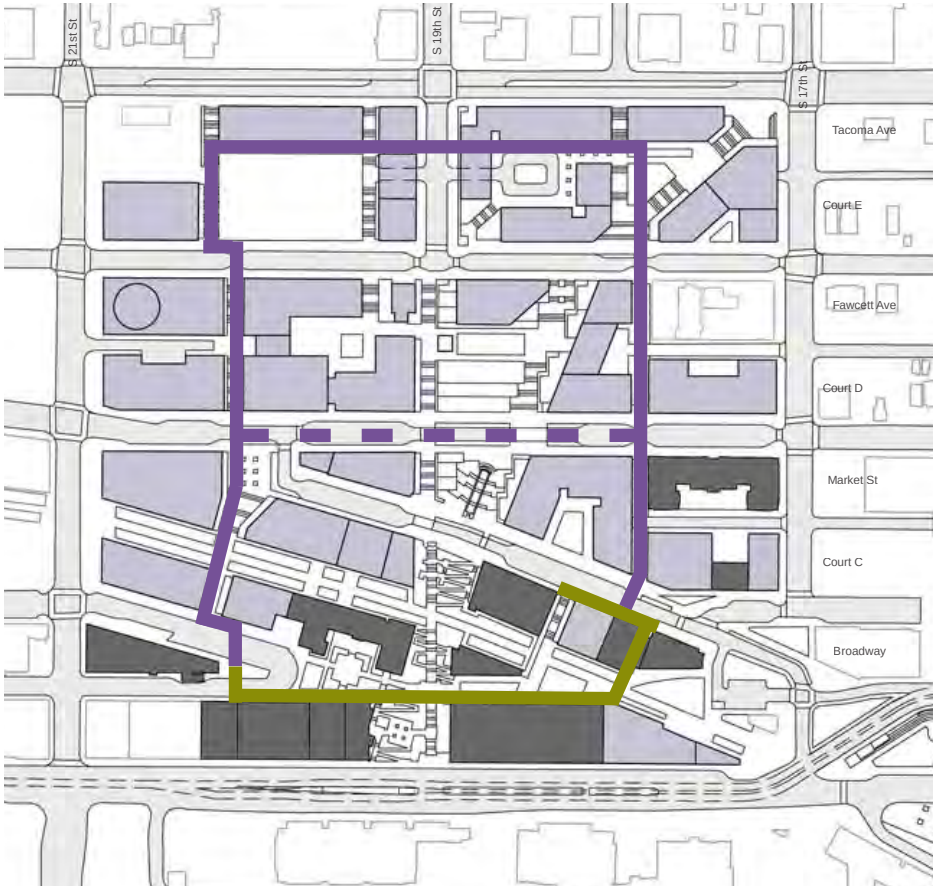

Figure 39 | Existing and Proposed Utilidor Routes

Telecommunications Infrastructure

The existing main router room (MRR) for Qwest, Comcast and Click! Networks is in the Walsh Gardner Building. As the campus expands west, additional Hub Centers will be placed on campus for telecommunications support and will be connected to the MRR through the utilidor system. A second MRR should be developed to serve as a redundant back up and a second campus point of presence for utility providers.

Lighting Infrastructure

Because existing lighting on campus is too varied, the lighting plan makes recommendations to unify lighting equipment and source selection and minimize maintenance. Additional consideration is given to lamp color, glare, performance and application. It is recommended that the campus development utilize one type of luminaire to unify pedestrian spaces. As the campus is expanded to the west, a new contemporary luminaire could be selected to define the new campus. Lighting fixtures should be energy efficient and not cause light pollution. (More lighting design guidelines are listed on page 91.)

Interior and exterior daylighting is important to campus development, and should be given careful consideration. Interior daylighting is subject to building orientation and architecture. The campus orientation is not necessarily conducive towards “easy” daylighting as most of the buildings may be north-south oriented on the long axis. Careful consideration should be given to maximize the use of natural light in buildings. Exterior daylighting and the interplay of buildings on the campus is also an important consideration. Building adjacencies need to accommodate solar access and preserve views.

Design Guidelines

General Architectural Design Guidelines

The following guidelines are intended to provide criteria to the designers of buildings and landscape for evaluating the suitability of proposed designs and the fulfillment of the goals and objectives of the Campus Master Plan. The spirit of these guidelines should be considered general and flexible and open to interpretation to foster innovative design solutions which are responsive to program needs. An over-arching, guiding principle to be followed in the construction of new buildings, the adaptive reuse of existing structures, and the expansion and development of new open spaces is to conserve the qualities of the campus that are cherished, while providing new development that respects, expands, improves and advances these aesthetic qualities.

- Maintain continuity with the context of surrounding buildings, or especially west of Jefferson Avenue, contribute to the establishment of a new context.
- Conserve valued elements of existing buildings and established open spaces; enhance their presence with the new development.
- Express function in the design concept of the building through form and organization. Also consider flexibility of use and the possibility of an adapted reuse during the life of the building.
- In adaptive reuse of existing historic structures celebrate the juxtaposition of the historic structure and the contemporary functions to be housed within.
- Express the structural rhythm of the structure.
- Express entrances, places of gathering, transition from outside to inside and protection from weather.

- Avoid literal interpretations of historic buildings when designing new buildings. Additions to existing historic buildings may be similar to the existing, or contrast.
- Promote low maintenance and operating costs.
- Express a sense of permanence and provide for opportunities for buildings to age well.
- Building design, placement and site development should accommodate convenient pedestrian circulation and universal access.
- Buildings proposed adjacent to open spaces should be designed to consider impacts on the spaces from light and glare, shadows, height, bulk and scale.
- Exterior lighting should be designed to consider impact of light and glare on surrounding buildings and spaces on the campus and in the community consistent with the needs of safety and security.
- Depending on the context and nature of existing buildings and existing or planned for open spaces, new buildings may be background or foreground. They may stand alone or be part of a larger grouping. Almost always, buildings will be conceived in concert with pedestrian circulation, the streetscape, open space and often will form new open space or contribute to the improvement of existing streets.
- The scale of the buildings should be considered in two ways:
  - First, the overall scale- form, size, footprint, height and profile- must be considered in relation to existing or planned surrounding buildings and open space. Usually buildings will be “in scale”, similar to their surroundings and appropriate to the development area and use, unless the planned building or site is a landmark deserving special prominence.
  - Second, a building should be experienced at various scales, one superimposed on another that is either reinforcing or contrasting. The overall scale of a building and smaller, more intimate levels of scale simultaneously should be perceived and understood. Elements that contribute to legibility at more intimate scales include windows, entrances, bases and roof edges.
- Detailing should convey a building’s function, contemporary use of technology and the nature of materials, structure and systems used. Details should also address scale by helping to make the buildings sensitive to the pedestrian through providing multiple levels of perception at varying distances.
- Where appropriate, green roofs should be considered, especially if terraced buildings are developed up the hill west of Jefferson.
- Roof-mounted equipment should be screened from view with some carefully reviewed exceptions in which systems are visually acceptable and appropriate to the building type.

Materials Guidelines

As stated in the 2003 Master Plan:

- Material choices encourage integrity of materials in their natural state.
- Major exterior building materials:
  - Face brick, metal and glass;
  - Brick should be used for walls and piers, not as cladding to frames;
  - Metal should be in natural finishes or finished in colors natural to metal;
  - Clear, non-colored translucent or fritted glazing
- Minor/accent exterior building materials:
  - Concrete, precast concrete/cast stone, wood, metal finished in non-metal colors.

Public Art Guidelines

As stated in the 2003 Master Plan, “The University of Washington has an extensive collection of art on its Seattle campus, and the Tacoma campus is expected to continue this tradition.

The University of Washington Tacoma Art Commission (UW TAC) commissions artists to create both temporary and permanent art projects for interior and exterior sites on campus. Funding to support this program is established by state law and is generated from a ½% allocation on all new capital construction projects and renovation projects with budgets of more than $200,000. These funds are pooled and are used to support the campus-wide programs.

In an effort to integrate public art on the campus in a meaningful way, UW Tacoma strives to develop programs that engage different aspects of the University community (academic departments, student groups, staff members, etc.). UW Tacoma is also structured to be responsive to campus planning, and is intent on installing artwork that relates to the physical and educational context. Artists may be teamed with architects, landscape architects and planners to collaborate on a design of a building or landscape, and to integrate artwork into that design. Functional elements on campus may also be designed by artists as part of this program.

During the original master planning of the campus, the artist Buster Simpson developed an approach to the program of public art for the campus as it develops in the future. His focus was on identifying and celebrating the campus environment’s existing character as an historic warehouse district, and the emphasis for future development of the art program should be sympathetic to the rich textures and variety of such as the reuse of the existing cobbles and granite curbing, developed in concert with Simpson’s recommendations.”

General Landscape Design Guidelines

- Building programs will include specific site planning, design and landscape/horticultural requirements. Design and maintenance will be developed concurrently to ensure a successful, sustainable landscape.
- Projects should include adequate funding for open space and landscape improvements associated with individual projects. However, funding of open space and landscape improvements should not be associated only with building projects. The realization of the University Terrace and Japanese Language School Memorial Garden will require funding independent of building project funding.
- Landscape will be utilized to enhance campus boundaries and relations to surrounding communities, form gateways, views and axes. These landscape elements may include trees, plants, walls, monuments, art forms, lighting, stairways or other landscape architectural elements.
- Diversity in spatial form and scale is encouraged to realize variety in the character of spaces.
- Site furnishings such as lighting, benches, waste receptacles, bicycle parking, recycling containers, signs, and fences will conform to established campus standards to act as unifying elements in the campus fabric and improve the visual quality of spaces. This will not preclude the occasional use of custom-designed elements that will reinforce special aesthetic or functional aspects of particular spaces.
- Sculpture, fountains or other art will be incorporated in existing and new open spaces to enhance their visual quality, spatial identity and provide for aesthetic stimulation. See “Public Art Guidelines” on page 88.
- Circulation between buildings and spaces on the campus and connecting to the community should be safe, convenient, direct and visually attractive. Corridors will be appropriately paved, landscaped and defined for all users, including when possible, the physically restricted. Directly connect campus pedestrian routes to public transit and rail, major external routes and the pedestrian/ bicycle route on the vacated railroad right of way to facilitate commuting by walking.
- Surface service and parking areas will be designed to function properly and appropriately and may also serve, as in the case of the courts, as appealing open space with paving design and planting. Access to service must not necessitate backing across pedestrian circulation.
- Building and service facilities will be designed to protect adjacent open spaces from unpleasant noise, air impurities, or other environmental impacts which may preclude use and enjoyment of the area. For safety and aesthetic reasons, major building service areas requiring substantial truck access should be below grade or separated from pedestrian circulation areas.
- Bicycle storage will be designed and located to minimize impacts on open space and landscape resources, but will be conveniently close to destinations.
- It is appropriate to have open spaces that provide shade as well as direct sunlight.
- Planting design and maintenance will consider personal safety on campus. Night lighting of corridors will be provided, but as low as possible to preserve tree canopies and avoid light pollution, yet maintain priority of safety needs.

Hardscape Guidelines

As stated in the 2003 Master Plan, “The selection of hardscape elements should reinforce the sense of place and the hierarchy of open spaces, while reflecting the site’s historical past.”

Paving

- Streets, sidewalks, paths, ramps, walkways, gathering spaces: asphalt, poured concrete with dark grey color; unit pavers (stone, precast, brick).
- Areas of special significance may receive finer grain scoring or infill with contrasting color/material treatment for emphasis
    - Significant existing street paving (particularly brick and cobblestone) and curbs to be preserved and restored where feasible;
    - Salvaged site pavement and artifacts to be utilized to greatest possible extent.

Curbs, seat walls, steps and lighting fixture bases

- Concrete, stone;
- May have stone copings

Concrete or stone steps

- On major pedestrian axes: steps with generous tread/riser ratio, typically collected into flights of six or fewer risers separated by landings for ease of movement;
- On minor routes: tread/riser ratio to be no steeper than 6”R x 12” T; steps collected into flights of eight or fewer risers.

Railings

- Handrails for steps and inclined paths to assist users. Single rails preferred to minimize visual prominence (unless guardrail is required).
- Barrier rails: as required for railroad right-of-way, and guardrails in landscape areas should be open and unobtrusive in appearance.
- Guardrails: for overlooks and raised edges in paved areas may combine open rail and solid parapet (brick, concrete, stone).
- Exterior railings should be consistent with or complement existing railings placed on site by UW Tacoma.

Lighting Fixtures

- City streets and campus entrances: Tacoma historical fixture (post-mounted);
- Elsewhere: catenary or modern fixture selection.

Free-standing benches

- Standard bench in primary pedestrian circulation areas; not prescribed for individual gardens and smaller courts.

Information kiosk

- A standard has been developed which derives from the industrial context of the site.

Lighting Signage and Graphics

As stated in the 2003 Master Plan, “The dense, urban character of the Tacoma Campus heightens the importance of all the systems that apply to wayfinding, particularly in view of nighttime classes and activities. At the same time, the larger scale order of the campus lends its own visual clarity to the choreography of movement up and down the hillside site. The Master Plan provides a rich hierarchy of public spaces, giving ample opportunity for buildings and functions to have clear addresses and access. The use of the City’s original street grid as a form-giver, with buildings establishing street walls and consistent geometric lines, creates a sense of orientation for pedestrians and vehicles.

Thus, while lighting and signage should be carefully developed to enhance wayfinding, the architectural qualities of the campus offer a strong starting point for the overlay of lighting and graphics. In addition, the following guidelines provide a framework for future design effort in these important visual systems.”

Lighting

- Lighting of space – arcades, walks, courts, terraces – is emphasized over lighting of building surfaces. Exceptions: specific landmarks such as the Library, the corner tower of Swiss Hall, and walls immediately adjacent to building entrances.
- Use of the historic Tacoma Street Light Standards is a feature of the campus district east of Jefferson Street. Other areas of campus should use a consistent, contemporary street light, to be chosen as part of the initial development of Phase 3.
- Luminaires near historic buildings should be approved by the Tacoma Landmarks Commission.
- Lighting sources should be chosen for long life, ease of maintenance and replacement, energy efficiency, and long-term availability.
- Lighting guidelines in the Infrastructure Master Plan should also be followed.

Signage and Graphics

- Existing and proposed campus signage serves several distinct needs, and each type has somewhat different requirements;
- Monumental Signage: gateway graphics, such as the walls bearing the University Seal at Pacific Gateway Plaza and at Jefferson Gateway, should follow closely the character of the existing monuments;
- Wayfinding: directories, exterior building signage, and interior wayfinding signage will comply with the standard campus signage program;
- Interior code signage and room identification signage will comply with standards established in existing buildings.

Crime Prevention Through Environmental Design (CPTED) Guidelines

CPTED is an international crime prevention concept widely used as a means to evaluate and modify the physical security of the environment. An evaluation of the UW Tacoma campus on July 23, 2008 produced the following guidelines to help reduce the opportunity for crime to occur.

- Manage overgrowth of foliage by replacing grasses, bushes, and planters with low growing varieties and removing dense plant growth along walkways.
- Maintain lighting throughout campus, trim foliage so lighting is not obscured, and establish a regular lamp replacement schedule.
- Replace existing bollards with low bollards or low walls (not to exceed 18” in height) to deter vandalism.
- Place emergency kiosks throughout the campus.
- It is ideal to place the campus security office at a central location, so that it is more visible and accessible to the campus community.

Phasing and Implementation

Adaptive Reuse and New Construction Opportunities

The reuse of existing buildings at UW Tacoma is highly valued for maintaining the history, character, and aesthetic quality of the site, as well as promoting sustainability, and should be encouraged as the campus grows. Adaptive reuse sites in the process of development or potential sites not yet developed include:

- Joy Building
- McDonald & Smith Building
- Pagni & Lenti Building
- Swiss Hall
- Tacoma Paper & Stationery (TPS)
- Tioga Building
- Whitney Church

The majority of the development as the campus expands towards Tacoma Avenue will be new construction for academics, housing, and student services. New buildings should provide for flexibility and the possibility of changing uses over time. The adaptive reuse precedence already initiated on the UW Tacoma campus and the "restore the core" program on the UW Seattle campus illustrate the desirability of considering the potential of both mixed use and changing use in the design of new buildings.

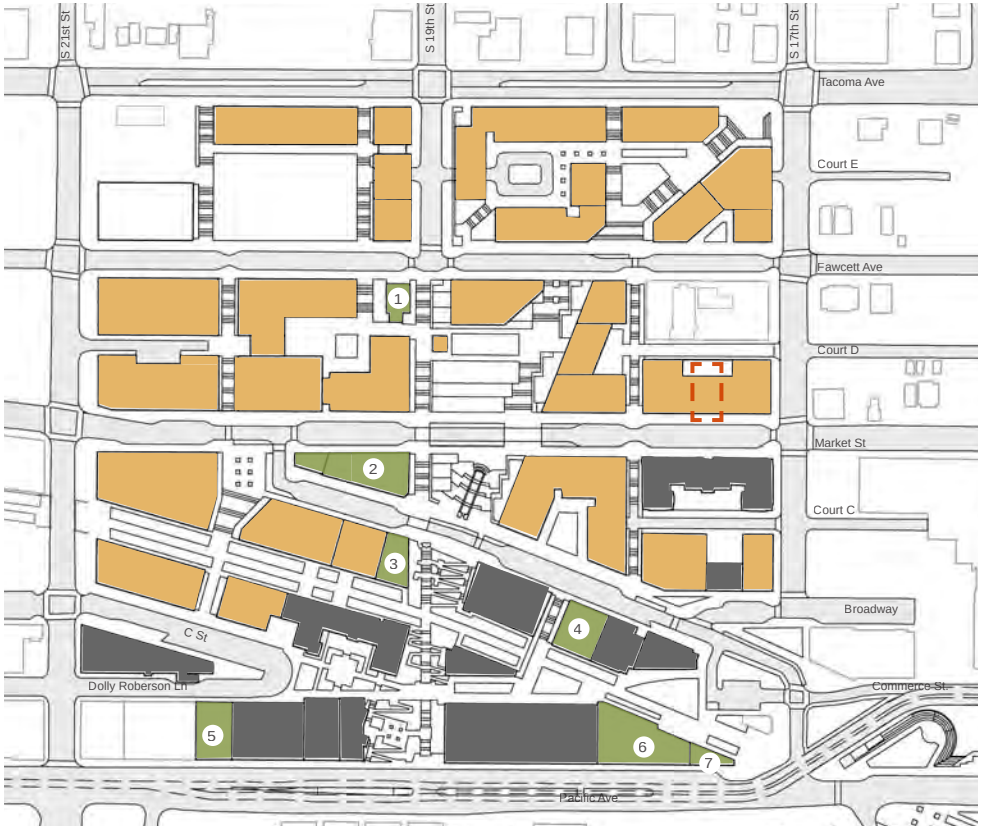

Figure 40 | Adaptive Reuse and New Construction Opportunities Diagram

One should imagine that a building constructed today or tomorrow to serve a specific purpose will be adapted for other uses in 10, 15 or 30 years.

Because classrooms are difficult to place efficiently in the existing warehouse buildings (typically due to existing column placement which affects sightlines), it is recommended that existing classrooms should be relocated to newly constructed facilities allowing the vacated space to be used for more appropriate purposes such as program and office space and small meeting rooms. Also, with the new development of a student recreation center adjacent to the central open space, Longshoremen's Hall, currently serving student recreation needs, could be replaced with new construction for housing or academic use.

Street Vacations and Modifications

As building and renovation projects are scheduled, corresponding street improvement projects should be identified to achieve the master plan vision for open space, improve circulation and safety for the campus community, and overall strengthen UW Tacoma campus identity and environment. All streets should

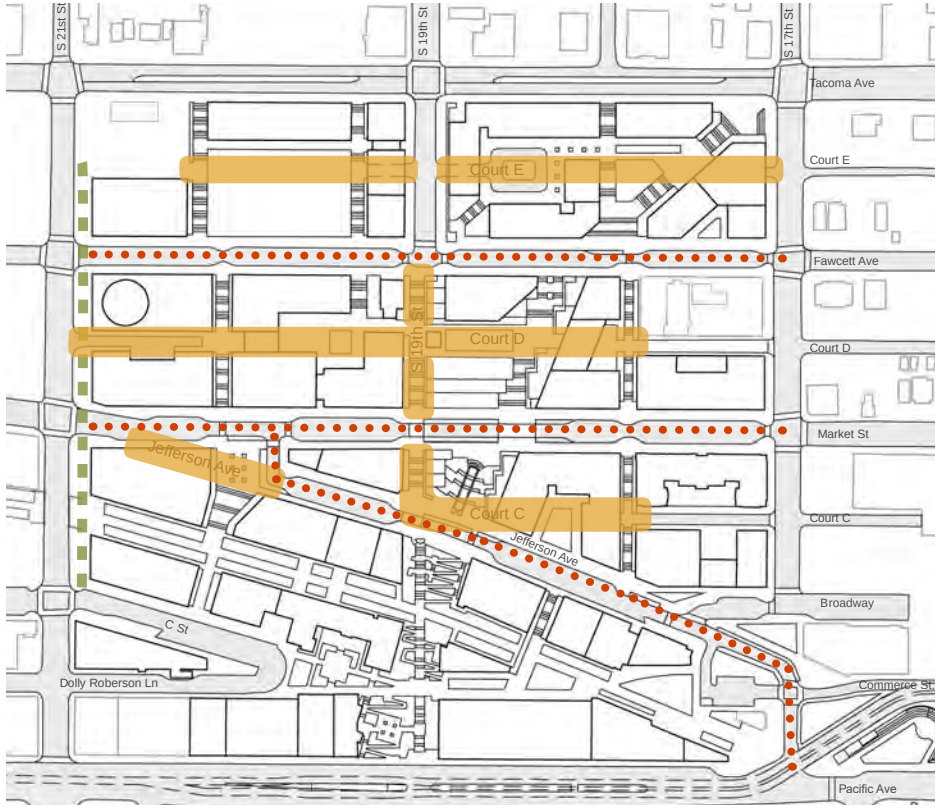

Figure 41 | Street Vacations and Modifications Diagram

be improved with landscaping, street trees, pedestrian walkways, lighting and signage.

The majority of existing north-south alleys, as shown, will be vacated to through traffic but will provide service and emergency access within much of the area. For example, Court D will serve the interior of the blocks between South 21st Street and South 19th Street, and Court E will serve the interior of the block between South 18th Street and South 19th Street.

South 19th Street will be vacated between Fawcett Avenue and Jefferson Avenue, so that it may be incorporated into the design of the central open space and complete an important pedestrian corridor through the campus towards Pacific Avenue. The southern intersection of Jefferson Avenue, South 21st Street and Market Street should be realigned slightly north to allow for safer vehicular and pedestrian circulation. New buildings on University property along South 21st Street will be setback to accommodate landscape and stormwater management systems. This setback also recognizes the function of South 21st and major arterials.

Street-calming measures to provide safer and more secure pedestrian circulation will be accomplished where feasible on Market Street, Jefferson Avenue, and Fawcett Avenue by narrowing the vehicular right-of-way and providing room for sidewalks and landscaping. Over time, as the campus achieves its full build-out, traffic patterns will most likely change due to increased pedestrian activity and street-calming measures across campus streets. The vacation of additional streets may then be re-evaluated.

Enrollment projections show that in the next ten years, the campus will grow to approximately 5,000 FTEs and will need to expand substantially above (west of) Jefferson Avenue to provide additional academic space, student housing, a student center, student services and recreation. In phasing this development over the next ten years, it is important to prioritize buildings that will help define the central open space between Pacific Avenue and Jefferson Avenue, which includes the Japanese Language School Memorial Garden and University Terrace, to establish a strong sense of place in the center of the campus.

Academic buildings and infrastructure projects will be publicly-funded, and the 5,000 FTE campus plan on page 98 shows the buildings that may be developed for Phases 4 and 5. Other projects will be funded through auxiliary funding, student activity fees, and fundraising efforts. See pages 99-100 for more information.

UW Tacoma may also address an increase in parking demand by developing additional surface parking on sites that are slated for development in phases beyond 10 years. The 5,000 FTE campus plan shows that there is a 1,000 - 1,500 parking space capacity for surface and structured parking at this stage of development. This translates to providing a 20% - 30% ratio of parking spaces to student FTEs.

Soil Contamination Sites

As shown to the right*, existing soil contamination in the southeast quadrant of the campus may take some time to remediate, therefore much of the new development during the next ten years will most likely follow a counter-clockwise direction, towards the northwest part of campus.

Further studies should be implemented to examine the soil conditions west of Market Street. It is also recommended that a detailed geotechnical report including contaminated soil and construction water handling recommendations be obtained prior to construction in all areas of campus.

** This map is based upon information reported in the Draft Supplemental Remedial Investigation Work Plan (March 5, 2006), which is currently under review by the UW Department of Ecology.*

Figure 42 | Soil Contamination Sites Diagram

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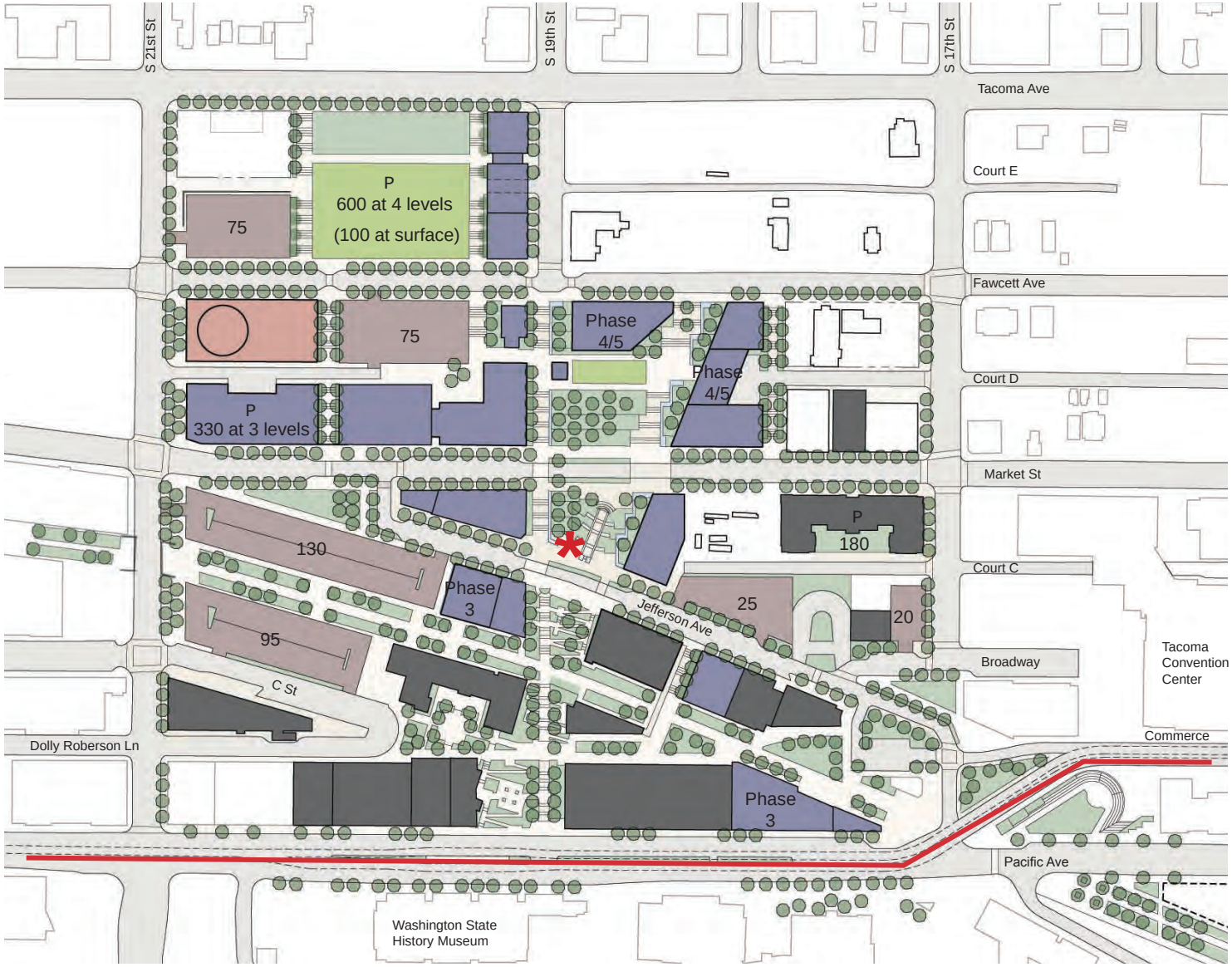

Legend

Academics & Service

- Existing UW Tacoma
- Future UW Tacoma
- Facilities - Warehouse/CP
- Japanese Language School Memorial Garden

Transportation

- Existing Public Transit
- P — Potential Parking (underground)
- # — Surface Parking (with no. of spaces)

0 75 150 300 N

Figure 43 | UW Tacoma Campus Development Plan - 5,000 FTEs

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Phasing Plan

Due to the dramatic increase in FTEs and services that are anticipated for UW Tacoma in the next ten years, a significant amount of square footage must be added to meet space needs. This phasing plan is meant to serve as a guide to identify when different projects should come online and where to apply the appropriate funding. State-funded projects are funded through biennium cycles. The table to the right shows an estimated timeline of Phases 3, 4, and 5 relative to State of Washington biennia.

	2009-11	2011-13	2013-15	2015-17	2017-19	2019-21
Phase 3	construction	occupancy				
Phase 4	pre design	design	construction	occupancy		
Phase 5			pre design	design	construction	occupancy

Figure 44 | Phases 3-5 Biennia Schedule Estimate

Phase 3

As of this document's publication, Phase 3 projects are in the design phase. A renovation to the Joy Building and new construction of a building on Jefferson Avenue adjacent to the Tioga Building will provide additional classroom, office, and library expansion space. With approval by the State of Washington, construction is expected to begin in 2009.

Phases 4 and 5

With the design of Phase 3 projects underway, UW Tacoma must begin to identify the next set of projects for Phases 4 and 5. These projects are anticipated to proportionally add academic and library expansion space as the student population grows. Academic buildings that will help form and frame the central open space have been identified as projects for Phases 4 and 5. A major infrastructure project will also need to be funded as part of Phase 4, since by that time, housing and student recreation facilities will have been added to campus and enough infrastructure capacity will need to be put in place for the steady increase of more facilities. See the Infrastructure Master Plan for more information on phasing campus development.

Auxiliary Projects

Two housing facilities are anticipated to be built within the next ten years. As more students enroll at UW Tacoma, more student activity fees can be pooled to fund student activity and recreation spaces.

Figure 45 is an outline for potential phasing of state-funded projects, auxiliary projects, and other types of spaces that will need to be built to accommodate 5,000 FTEs in approximately ten years.

Phase		Building Area (GSF)							Year Sub-Total	Running Sub-Total (Non-Residential)	FTE ** Student
Description	Year*	Unassigned/ Retail	Residential	Academic	Library / Study	Student Life	Facilities Management	Central Plant?			
Existing	2007	80,200	0	287,500	26,200	50,000	15,200		459,100 **	378,900	2,173
Phase 3 ($60 million budget request)	2011	11,900	136,500	55,200	17,900	30,000			252,000	482,000	3,183
	2013	7,000	0			67,000	14,300		88,000	563,300	3,798
Phase 4 ($80 million budget request)	2015	0	0	65,000	40,000	0		TBD	105,000	668,300	4,468
	2017	6,000	136,500			100,000			242,500	768,300	5,138
Phase 5 (budget tbd)	2019	0	0	65,000	40,000	0	14,000		119,000	887,300	
Additional to complete '5,000 FTE Plan'			0	31,400	-23,000	-1,500	0		6,900		
TOTAL 5,000 FTE Plan		**105,100**	**273,000**	**504,100**	**101,100**	**245,500**	**43,500**		**1,272,300**	**894,200**	
Additional for full build-out	TBD	34,900	258,200	454,300	86,200	226,700	36,900		1,097,200	804,100	4,862
TOTAL (10,000 FTEs)		**140,000**	**531,200**	**958,400**	**187,300**	**472,200**	**80,400**		**2,369,500**	**1,698,300**	**10,000**
PERCENT OF TOTAL BUILD-OUT		6%	22%	40%	8%	20%	3%				

Legends & Notes

FTE = Full-Time Equivalent
GSF = Gross Square Feet

*year of occupancy
**based on Fall 2007 data

state funded project
auxiliary project

Figure 45 | Potential Phasing Plan