



PULLMAN CAMPUS MASTER PLAN UPDATE

2012



HANBURY EVANS WRIGHT VLATTAS + COMPANY

MAY 2012

VOLUME 2

a collaborative effort

The 2012 Campus Master Plan Update is the result of a collaborative effort led by the University's Office of Capital Planning and Development and Hanbury Evans Wright Vlattas + Company. The process was guided by a Steering Committee and a Campus Master Planning Committee composed of University faculty, staff and students. The plan incorporates ideas generated through on-site workshops, stakeholder interviews, planning team meetings, presentations and reviews with University executive staff and the Board of Regents.

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enrollment and space planning

comprehensive square footage projections

*ASF: Assignable Square Feet

	2011			2020		2030	
Modified Scenario	Existing ASF	Existing ASF/ student	Proposed ASF/Student Benchmark	Projected ASF	New ASF	Projected ASF	New ASF
Enrollment	19,221 16,348 undergrads			21,150 16,700 undergrads		26,000 18,000 undergrads	
SPACE USE CLASSIFICATION							
Classrooms	199,477	10.38	11.00	232,650	33,173	286,000	86,523
Laboratories	1,162,517	60.48					
Non-scheduled Open Labs	203,904	10.61	8.00	169,200	-34,704	208,000	4,096
Scheduled Teaching labs	169,744	8.83	9.31	196,907	27,163	242,060	72,316
Research	788,869	362 sf/\$100,000	700 sf/\$100,000	1,374,661	585,792	2,749,322	1,960,453
Offices	1,055,288	267.22	210	1,199,205	143,677	1,474,200	418,912
Staff Other offices	528,862						
General	320,570						
Faculty	206,096						
Library/Study	381,635	19.86	20.00	423,000	41,365	520,000	138,365
Special Use	987,163	51.36	54.00	1,142,100	154,937	1,404,000	416,837
General Use	685,314	35.65	37.00	782,550	97,236	962,000	276,686
Central Support	768,027	39.96	8% of other space	566,203	-201,824	953,488	185,461
Health Care	118,984	6.19	6.53	138,110	19,126	169,780	50,796
Residential	1,464,386	215.00	350.00	2,220,750	756,364	3,185,000	1,720,614
2011 = 6,811 resident students		35% of Students	30% of Students				
Unclassified	67,139	3.49	3.49	73,877	6,738	90,818	23,679
TOTAL ASSIGNED SQUARE FEET	6,890,170	358.47	175.00	8,500,000	1,600,000	12,200,000	5,300,000
TOTAL GROSS SQUARE FEET	10,620,579	552.55		13,100,000	2,500,000	18,800,000	8,200,000

In the fall of 2011, enrollment at the Pullman campus was 16,348 undergraduate students and 2,873 graduate, professional and post doctoral students. Campus facilities at that time totaled 10,620,579 gross square feet (GSF) of space. The plan represents a conceptual framework for growth necessary to accommodate projected enrollment in 2020 and 2030, as well as the corresponding increase in faculty and staff. The plan also anticipates the need for renewal and replacement of aging and inadequate facilities.

Based on lengthy discussions with WSU leadership about the future of graduate research and undergraduate education the following projections were made:

• **ENROLLMENT AT 2020**

- 16,700 undergraduates
- 4,450 graduate students

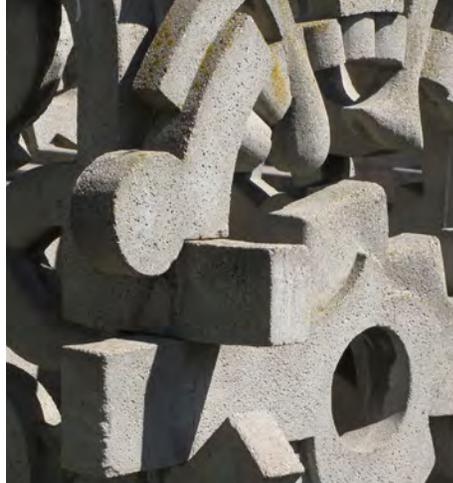
Potential campus facilities target of 13.1 million total GSF*

• **ENROLLMENT AT 2030**

- 18,000 undergraduates
- 8,000 graduate students

Potential campus facilities target of 18.8 million GSF*

*Includes facilities that would be relocated / reconstructed on other properties owned by WSU in Whitman County



- 12. Information Technologies
- 13. Facilities Maintenance
- 14. Architectural and Landscape Character
- 15. Wayfinding
- 16. Transportation Access and Parking

As part of the master planning update effort, the planning team

- Conducted meetings with WSU faculty and staff, student representatives, members of the Board of Regents and members of the City of Pullman staff and City Council
- Conducted two open forums in the CUB to obtain broad University input
- Toured campus facilities and grounds, photographing and cataloguing existing conditions
- Reviewed previous planning documents and coordinated with on-going planning efforts for Martin Stadium and the Moscow Pullman Regional Airport
- Engaged in multiple events for feedback with WSU constituents, including the Steering and Master Planning Committees, Deans and Department Heads, the President, Provost and Executive Staff
- Developed 2-D and 3-D graphics to present and study existing conditions on campus and to evaluate design options

An iterative cycle of analysis and feedback ensured that the final plan represents a collaborative effort between the planning team and the University to address WSU's needs and future growth.



focus areas overall



focus area 1

NORTH CAMPUS DISTRICT



main themes

- Relocate family housing and WSU Children's Center
- Define dedicated expansion for athletics and recreation program needs
- Establish campus loop road connection to North Fairway Road
- Redefine arrival from the north on Stadium Way



Proposed Plan Focus Area 1



focus area 2

WEST CAMPUS DISTRICT



main themes

- Preserve character of historic campus
- Use surface parking lots as infill building sites
- Use new buildings to shape quadrangle spaces
- Minimize conflicts between pedestrians and automobiles
- Create better town / gown interface
- Move Welcome Center to campus
- Realign Stadium Way and Grimes Way
- Create a signature open space for campus



Proposed Plan Focus Area 2



proposed actions

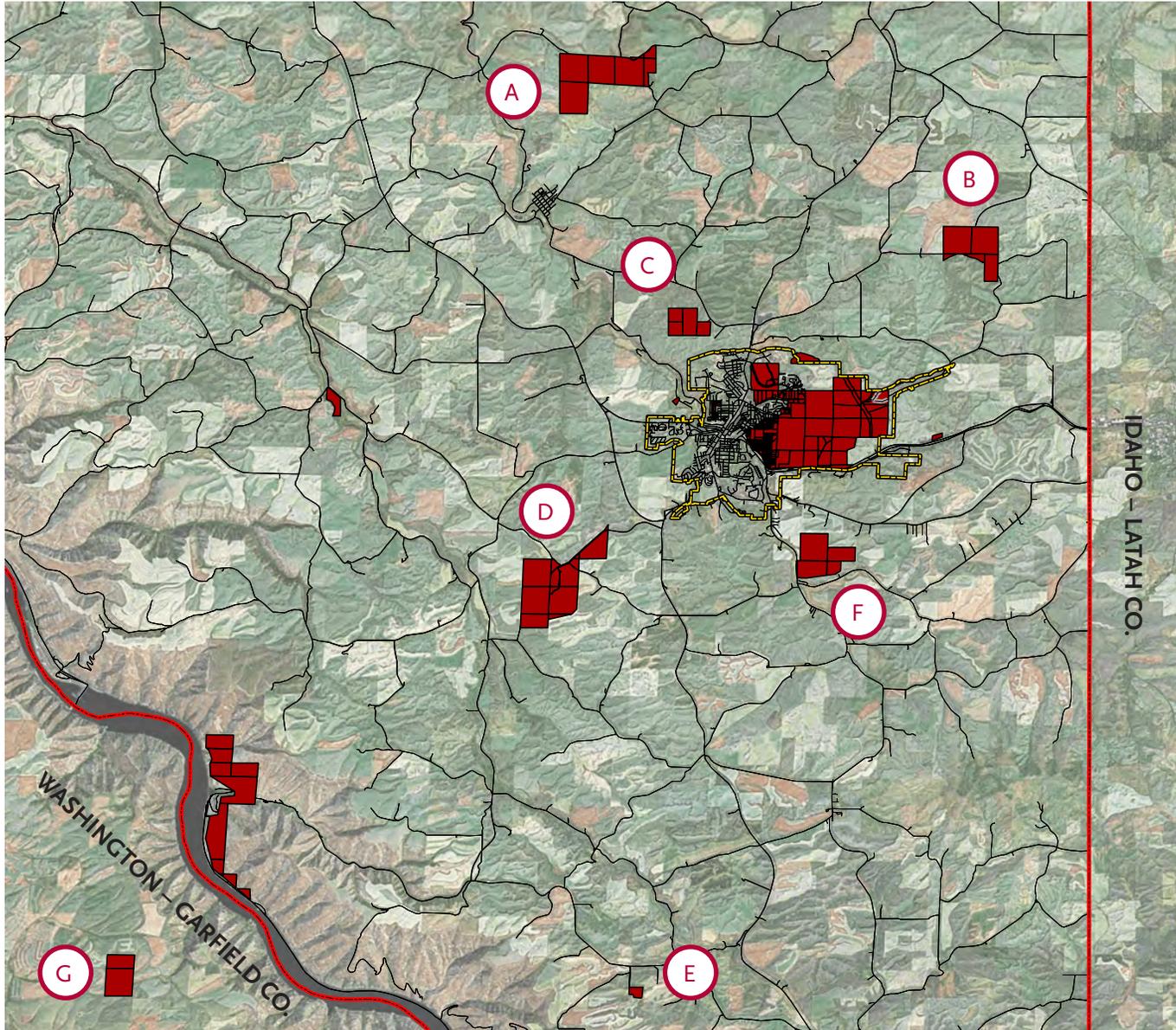
- A. Student life building with parking deck below. Potential location of future hotel conference center as a town/gown interface.
- B. Green roof terrace connects to new residence halls to mitigate topographic site conditions
- C. Interim relocation site for WSU Visitor Center until future bypass shifts primary arrival of campus to Airport Road
- D. Landscape buffer to mitigate views from Main Street to College Avenue steam plant and service yard; remove abandoned oil tanks
- E. Preserve historic campus lawns
- F. Renovate steam plant façade to remove abandoned infrastructure components; consider future potential use of alternative green technology energy production
- G. New residence halls replace outdated academic buildings; College of Engineering and Architecture relocate to Grimes Way transitional research zone
- H. Realign intersection at Stadium Way / Nevada Street / Olympia Avenue; demolish Health and Wellness Services building and relocate to the existing WSU Children's Center building. Relocate the Children's Center to the corner of Terre View Drive and North Fairway Drive
- I. Create new academic quadrangle to accommodate future growth of the sciences; first phases used as surge space for renovation or replacement of Fulmer and Heald Halls
- J. Replace Neill Hall
- K. Replace Fulmer Hall
- L. Cleveland Hall Addition
- M. Replace Heald Hall
- N. New academic buildings fronting new central green space
- O. Realign access to existing parking structures
- P. Realign Stadium Way and Grimes Way to create pedestrian mall and central green space; close Stadium Way to automobile traffic. (In the interim Stadium Way will serve as a transit mall.)
- Q. Demolish public safety building; future Fine Arts Museum with green roof as civic space. Public safety office moves to the Old Bookie
- R. Demolish Johnson Tower to create new quadrangle
- S. Redevelop Wilson Road extending Terrell Mall to Stadium Way
- T. Complete landscape improvements on Terrell Mall
- U. Construct addition to Martin Stadium for Athletics operations, press box and premium seating
- V. Demolish Annex to create pedestrian promenade to Martin Stadium
- W. Expand Martin Stadium seating
- X. Close Stadium Way at North Fairway Road to Grimes Way; create pedestrian mall



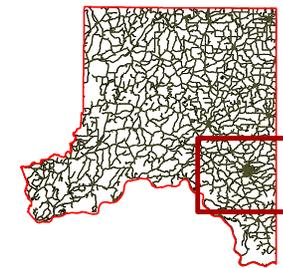
Perspective View of Proposed Focus Area 2

whitman county properties

EXISTING PROPERTIES



- A. Smoot Hill
- B. Cunningham Farm
- C. Palouse Conservation Research Station
- D. Tula Young Hasting Farm
- E. Colton Natural Area
- F. Spillman Farm
- G. Wawawai



OPEN SPACE FRAMEWORK



open space framework

The 2012 Campus Master Plan Update recommends four goals to address these issues:

goal 1

ESTABLISH A NETWORK OF FORMAL AND INFORMAL OPEN SPACES

- Preserve historic campus core quads and mature trees
- Use new buildings to create formal quad spaces and courtyards; buildings should shape the space not occupy it
- Take advantage of topography; extend vistas and axes to take advantage of views to the Palouse
- Interconnect informal spaces with pedestrian malls

goal 2

CREATE A SIGNATURE OPEN SPACE AT THE CORNER OF GRIMES WAY AND STADIUM WAY

- Remove parking at Bustad Hall
- Reroute Stadium Way along the face of Bustad Hall and link with Grimes Way at Alumni Way
- Close Grimes Way between Alumni Way and Stadium Way
- Establish a quadrangle suitable for gatherings and passive recreation

goal 3

CREATE A PEDESTRIAN MALL ON STADIUM WAY

- Close Stadium Way to automobile traffic from North Fairway Drive to Grimes Way
- In the near term, create a transit and pedestrian mall maintaining routes for Pullman Transit
- Long term strategy: Reroute transit vehicles to campus loop road
- Consider how pedestrian malls can facilitate game day access and tailgating

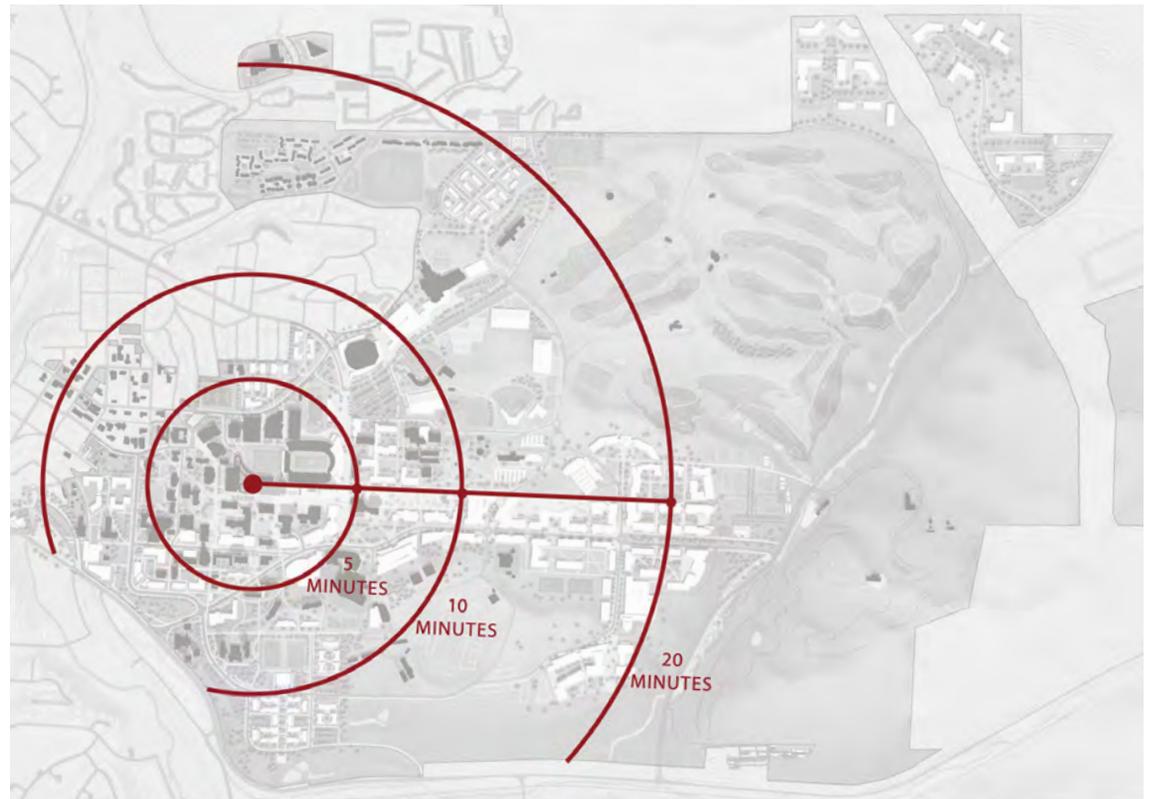
goal 4

CREATE A NETWORK OF PEDESTRIAN PATHWAYS

- Redefine Terrell and Library Malls incorporating additional landscaping, art, seating, and shade
- Redefine service vehicle access on pedestrian malls; limit times and types of vehicles
- Convert Wilson Road into an extension of Terrell Mall to the Alumni Center
- Collaborate with UREC to define running trails around the perimeter of campus
- Link pedestrians to the arboretum and downtown
- Standardize pathway materials, signage and lighting to enhance ease of use and safety

WSU's physical character, or sense of place, results from the blending of numerous characteristics – topography, architecture, landscape, and broader geographic context, as well as its physical relationship to its host community.

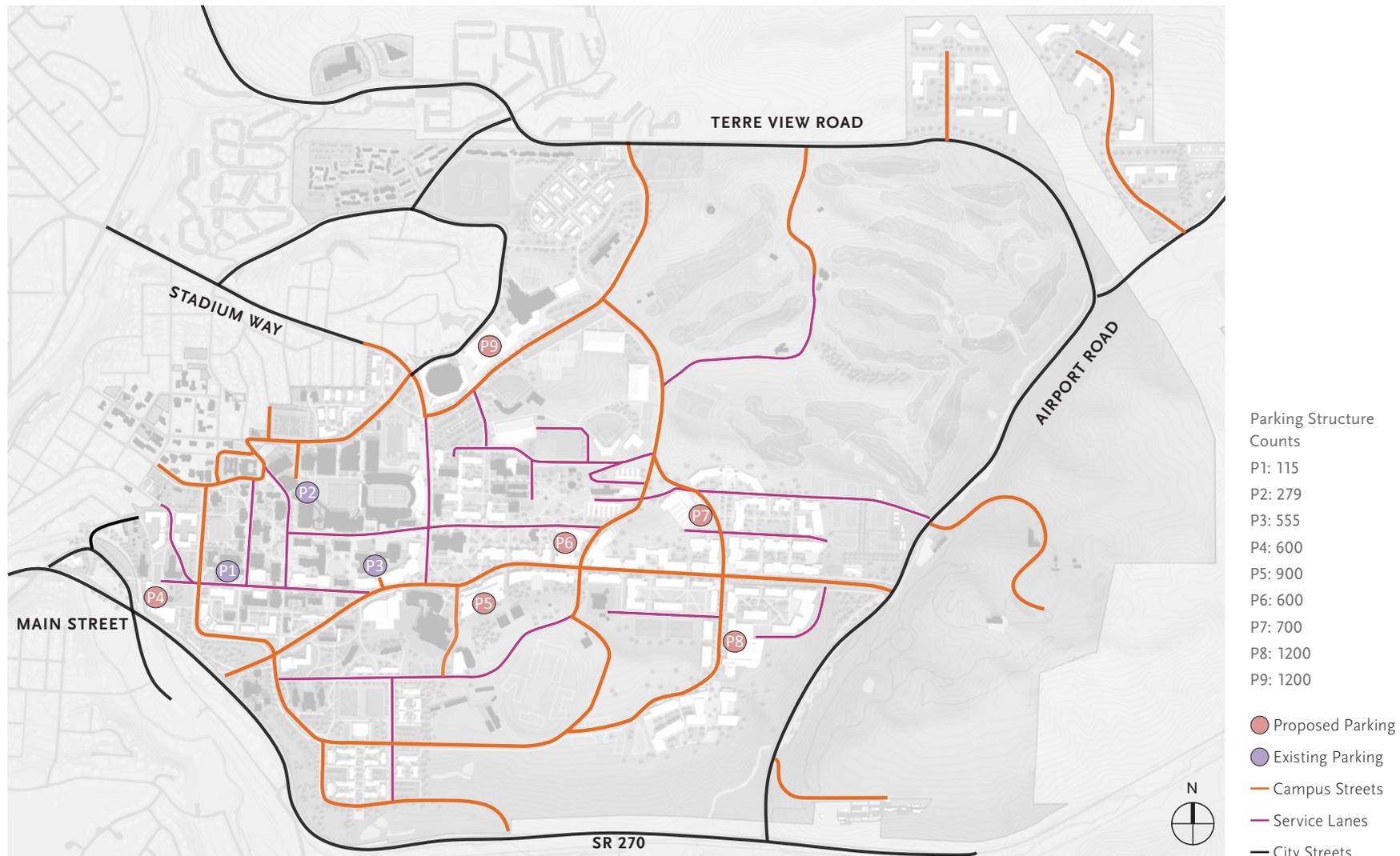
Verticality is WSU's most striking feature, creating a campus that is both scenic and physically demanding. Stadium Way is crossed by five pedestrian bridges in less than one mile. At class-change time, pedestrian travel between the east and west campus takes longer than the 10-minutes allowed, however, the terrain also allows the campus populace to experience the reality of the Palouse hills. These features could be enhanced through careful placement of future buildings so that views up and down hills and out to the landscape are shown to best advantage.



walking radius diagram

transportation, access and parking

ROADWAYS + PARKING



roadways and parking plan

The existing and future transportation network on the campus – the streets, sidewalks and paths – provide the framework around which the campus will develop. There is already a strong network, particularly in the historic campus core, but the plan envisions stronger future connections. As with all transportation, and particularly on any university campus, the challenge is to balance the need for access with local circulation. The University's population is expected to grow substantially, with a disproportionate increase in researchers and graduate students who have different travel patterns than undergraduate students. At the same time, the campus will become more spread out as the center of gravity shifts east, further necessitating quality connections to allow and encourage the mixing of disciplines and researchers. The plan seeks to achieve this balance by strengthening east-west pedestrian corridors, limiting vehicle traffic at the campus core, and introducing a shuttle to promote campus movement. The plan continues to provide convenient parking, recognizing that driving to campus is the only option for many.

While Stadium Way serves as the campus primary access, it also provides an opportunity for a relatively high-speed cut through for community members (whether affiliated with the university or not). The four-lane roadway impedes east-west movement for pedestrians and bicyclists on the campus. This barrier has long been recognized with various “loop roads” in previous plans sought to reduce some of the Stadium Way load while ensuring continued access for all.

This plan makes the bold, long-term suggestion that Stadium Way serve as an access point rather than a thoroughfare. Important to its closure will be the creation of alternative routes to ensure continued access for vehicles and transit to all part of campus. This ultimately will require development of a loop road to the east of Stadium Way to provide continued connectivity to the off-campus segment of Stadium Way and to provide access to new academic and research buildings in campus areas that currently have few or no such facilities.



While the phasing of the plan was not studied in detail, there are several options that allow traffic along Stadium Way to be restricted in the near term in concert with or independently of other plan related improvements. As service and emergency vehicles would maintain access in all scenarios, the primary concern would be circulation of Pullman Transit vehicles. If public access along Stadium were restricted, Pullman Transit would need to retain access until the loop is completed. While funding may allow construction of some of the loop in the near term, it is likely that much of the loop will not be constructed for many years, coinciding with the construction of new research and academic facilities.

As part of the loop road construction, through traffic would be diverted off Olympia Avenue to a new road to the south. This would serve as the southern portion of the loop as well as connect to a new road that will provide access to the southeastern portion of the new research campus.

transportation, access and parking

ROADWAYS + PARKING



With the closure of a portion of Stadium Way and the completion of the loop road, the plan anticipates Grimes Way being upgraded as a new entrance to campus. While two travel lanes would be sufficient support day-to-day activities, this upgrade may need to be designed for a three- or four-lane cross-section to support game-day activities.

There are other minor adjustments to campus vehicle circulation envisioned by the plan. As part of the closure of Stadium Way, for example, Grimes Way will be realigned near its intersection with Stadium Way such that traffic on southern Stadium Way will continue onto Grimes Way. This will allow the creation of a large civic green to serve as both gathering space and as a focal point at the end of Grimes Way. Additionally, it is envisioned that Spokane Street will be realigned south of Washington Street. The new alignment would follow the existing Washington Street roadbed but would curve to the south, providing an improved connection to Stadium Way at the existing Nevada Street intersection.



Although off-campus roadways were not part of the plan study, it will be important to evaluate the impacts of campus growth on these roads. While the plan envisions a reduced reliance on the automobile, no doubt there will be an increase in vehicle trips to and from campus. As the campus grows east, it is not unreasonable to anticipate that some portions of Airport Road would need to be widened. Much of the extent of local improvements may hinge on the proposed northern and southern bypass roads and the alignments selected if one or both are constructed.

Provisions for parking remain a critical issue in the plan, as the reality is that driving will continue to be a primary mode of travel for people coming to

and from campus. The illustrative plan anticipates that up to 4,300 spaces could be lost to accommodate new building construction, while anticipated campus growth suggests additional demand of roughly 9,600 spaces in 2020 and 13,900 spaces in 2030. While there is potential for future parking deficits exists, there currently is an excess of parking spaces. This will provide short-term flexibility for early phases of plan implementation, for example, lot closures related to the greening of Stadium Way.

To meet the transportation needs of the growing campus, it will be necessary to reduce reliance on the single occupant vehicle (SOV). At build out, nearly all of the parking on campus will need to be in structures – an option that can be up to 10 times as expensive to build and maintain as surface spaces. Moreover, if the campus tried to “build its way out” by constructing a large amount of new parking, it would also need to build wider streets to accommodate increased commuter traffic. Rather, WSU should exploit its transportation demand management (TDM) program to reduce future parking demand.

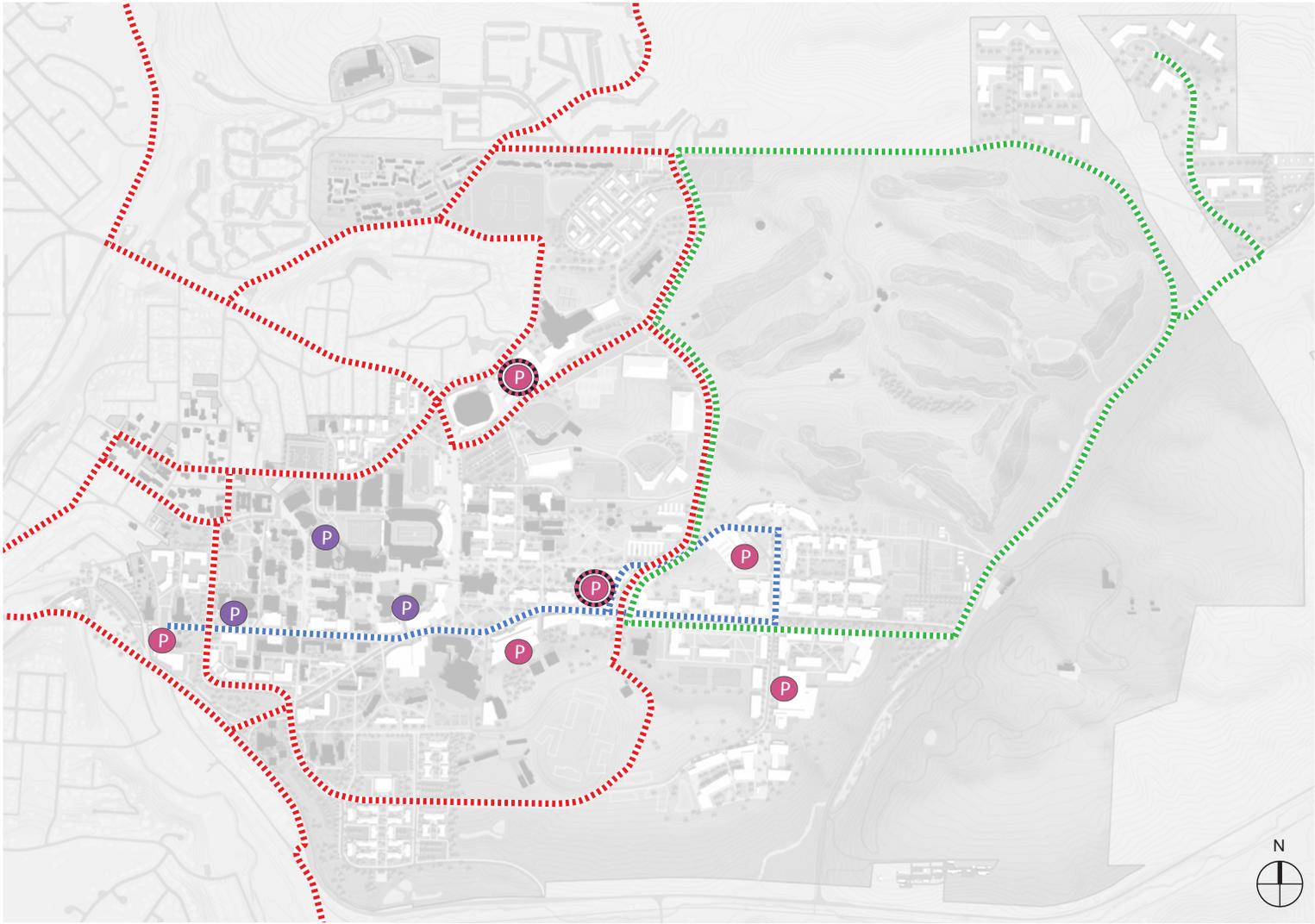
The plan envisions a staged approach to vehicle accommodation that focuses on TDM and the promotion of alternative parking. TDM measures would include enhanced promotion of the Pullman Transit system, as well as measures to support walking and bicycling to campus. Most important would be the development of rideshare tools to allow individuals to carpool more easily, as well as supportive measures such as an emergency ride home (ERH) program that would guarantee a ride home (or to another location) if, for example, a family member gets sick, or individual has to work unscheduled overtime.

The plan also calls for supplementing the parking on the main campus. This includes the creation of park-and-ride lots. Currently, there are two such lots, though both are under-utilized. One is located on Terre View Road at the Chief Joseph student apartments and one is located on Merman Drive adjacent to the Valley Road playfields. As these lots fill, the University could look for additional locations adjacent to Pullman Transit routes. It may also be beneficial to develop a park-and-ride system that would capture the large number of WSU commuters who live in Moscow. Depending upon demand, the University may also seek to establish remote lots. These would serve primarily as resident student vehicle storage lots but could also serve as a low-price parking alternative. In addition, the plan assumes that interim surface lots will be constructed within the campus core as conditions warrant. (Much of the parking in the eastern research district, for example, is assumed to be surface parking at first.)

While future TDM participation levels will depend upon the success of the University’s TDM programs and exogenous changes, the plan envisions that up to 10 percent of those who might otherwise park on campus will be parking in remote locations and another three to five percent will be using community park-and-ride by 2030. Over time additional commuters will eschew the SOV, resulting in roughly 20 percent participating in a TDM program and by carpooling, taking the bus, walking or bicycling to campus. The plan estimates that the ratio of main campus parking spaces will decrease from roughly 0.40 per person today to about 0.33 by the year 2030.

transportation, access and parking

TRANSIT



- Proposed Parking
- Transit Hub
- Existing Parking
- Pullman Transit
- Research Park Shuttle
- WSU Shuttle

transit plan

Improved pedestrian circulation is at the core of the plan. The “pedestrian-ization” of the campus core recognizes the importance of pedestrian travel in campus daily activities. Not only will these changes improve pedestrian safety, they will speed travel for walkers in those places where they currently share space with vehicles. The plan also envisions creation of new iconic spaces and buildings which, in addition to enhancing the overall campus, aid in pedestrian navigation by providing reference points. The grid-like structure of the plan east of Stadium Way will improve pedestrian circulation by increasing connectivity.

In areas where vehicles will remain, the plan envisions more pedestrian-scale streets with narrower streets and elimination of on-street parking. The new research campus will have a neighborhood feel with wide sidewalks along tree-lined streets. Buildings will have small set-backs to promote activation of the street. Grimes Way will become a key east-west link anchored by a new green and a landmark building at the intersection of Stadium and Grimes. While the emphasis will be the more formal paths and walks adjacent to buildings, the pedestrian network will connect to a series of paths and trails ensuring the continued connection with the landscape that is important to so many of WSU's students and employees.

While bicycles currently are not a dominant mode of transportation, their use is anticipated to increase. The Green Bike program has met with great success, and there are plans to continue the addition of bikes and stations. Private bicycle usage likely will increase in response to parking changes as well as the growth in academic and research along Grimes Way. The plan calls for the installation of bike lanes in key locations, particularly where vehicle speeds or volumes are high. It also will be key to examine locations where grades are sufficiently steep that an uphill bike lane is warranted, for example, Nevada Street south of Stadium Way. For much of the campus, however, vehicle speeds will be low so bicycles will be able to share the street.



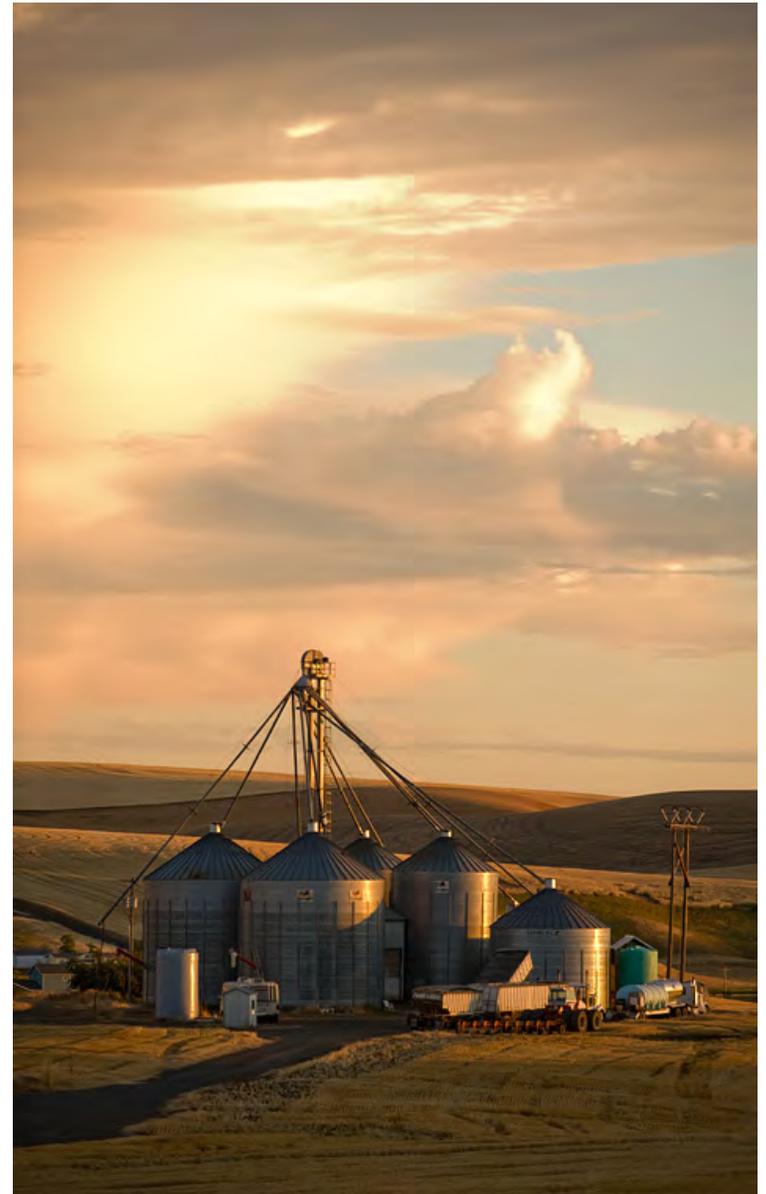
As additional portions of the campus are closed to vehicles, it will be important to establish regulations indicating where bicycles are allowed and where they are prohibited or must be walked to ensure pedestrian safety. The key will be to provide viable bike routes through the campus.

One of the best ways to increase bicycle use is to adopt bicycle-friendly policies. Requirements such as showers in new buildings, in addition to the provision of secure covered bicycle storage, are important. Similarly, policies to guide roadway design will ensure that future campus streets and upgrades will accommodate bicycles through bike lanes or other design elements.

a sustainable campus

As Washington State’s only Land Grant University, WSU desires to be a leader in sustainability. To maximize such opportunities, the plan reinforces several strategies that contribute toward achieving an environmentally responsible living environment:

- Site selection and development that supports efficient land use, effective storm-water management, and a pedestrian-focused community with easy access to transit locations, bike paths and campus connections.
- Preservation and re-establishment of natural land features and vegetation.
- Building masses that contribute to shading exterior spaces, opportunities for natural day-lighting for interior spaces, and preservation of significant view corridors.
- Opportunities for a landscape composed of native species or drought-resistant plant material.
- Dedicated program and site space that support the collection, storage and removal of recyclable materials.
- Project budgets that allow the University flexibility in material and building system choices on a per-project basis. This allows the University to evaluate the life-cycle costs, principles of sustainable development and the social impact of each option.
- WSU is committed to providing new facilities that are responsible in the use of natural resources. These projects shall comply with the USGBC LEED rating system as a point of reference, and LEED Silver certification will be the minimum goal for the project. Additional opportunities for LEED compliance will be considered in every aspect of the design and every economical attempt will be made to provide the maximum level of sustainability possible.









In specific response to environmental opportunities this plan recommends the following actions for consideration by the University:

1. Utilization of finish materials that the students can see and touch. These provide visible and physical evidence of the University's commitment to the environment, and “pride of place” for the students. Students' desire to be environmentally conscious is a lifestyle not a special action. Examples of this include:
 - Finishes that promote the use of recycled materials, such as tiles made from recycled soda bottles.
 - Finishes that use rapidly renewable materials sources that are also highly durable in student environments, such as cork or bamboo flooring.
 - Lighting that mitigates light pollution, in particular site lighting standards and exterior building lighting.
 - Natural outdoor environments that encourage habitats for birds, butterflies, and other visible evidence that the environment is desired by animals as well as people.

2. Develop visible icons that can become sources of campus identity regarding commitment to the environment. The natural features of the sites, as well as opportunities regarding the environment, can provide a significant source of campus identity that is aligned with environmentally responsible actions. Examples of this include:
 - The enhancement of natural features such as the stream channels, Palouse remnants and hilltops across campus.
 - The prominent placement and celebration of physical features that provide visible reminders of the campus' commitment to the environment. Good examples of this include solar-powered lighting, photovoltaics, biomass and windmills for energy sources.
3. Creating an environment of sites and buildings that educate students, staff, and the public. As an institution of higher education, WSU can use the development of any project as an opportunity to create a three-dimensional textbook out of the built and natural environments. Examples include:
 - Design features that are visible to the students, faculty staff and visitors and that communicate, sometimes through written explanation (signage, general literature, etc.), the intent and the commitment of the University. Once communicated and established, these features will become known and appreciated by the broader community.
 - The natural landscape as an educational tool through the identification and explanation of the native plant species on site.
 - Allow capital projects the opportunity to “test” products and processes. While there is always risk associated with using new materials and processes, there can also be rewards. The University is an environment of exploration and discovery, and projects of this magnitude allow the opportunity to test, even in a limited application, within the project.

