



**Washington  
State  
University  
Tri-Cities**

**Campus  
Master Plan**

Updated  
DRAFT  
July 2008

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### **Executive summary**

In 1997, Ira Fink and Associates, Inc., in association with Integrus Architecture, developed a master plan for WSU Tri-Cities campus after thorough interviews with campus administrators, faculty and students. Since that time, changes have occurred on the campus and new, previously unforeseen needs have arisen. The 2008 Tri-Cities Campus Master Plan Update addresses changes in academic priorities as they relate to land use. The recent addition of lower level undergraduate students provides a new emphasis for the campus that is reflected in this updated master plan. Also, while research programs that focus on biosciences are university-wide, the new BioProducts, Sciences and Engineering Laboratory building will provide a new focus to this program. The strategic planning process will articulate how best to provide services and facilities that will enrich campus life and improve academic performance, which guides the master planning process.

WSU Capital Planning and Development is working with TVA Architects on additional plans for the campus as a participant in the Tri-Cities Research District (TCRD) master planning process. WSU supports economic development in the Tri-Cities region. Its presence provides a point of attraction for young adults to come to Tri-Cities. Opportunities for campus development and academic program partnerships are strengthened through participatory planning in TCRD. In late 2008, the TCRD plan will be completed and may serve as an auxiliary or supplemental plan that provides additional detail to the 2008 Tri-Cities Campus Master Plan.

The Washington State Patrol (WSP) has determined the need for a crime lab for Eastern Washington where DNA testing and other forensic research can be accomplished. WSU will provide the land for this facility, which will provide internship and research opportunities to WSU faculty and students. This is a WSP funded project, but WSU has demonstrated support for this project through making a site available for the crime lab.



## **INTRODUCTION**

The WSU Tri-Cities (WSUTC) Campus Master Plan provides a framework for future decision making in light of its mission, current programs, student characteristics, and educational demands for services and activities. It is a guide to the physical evolution of the campus and responds to the academic plans, and goals of WSU Tri-Cities. The Campus Master Plan is intended to influence and assist in the daily management of the physical facilities of the university.

### **Master Plan Goals**

- Update the 1997 Master Plan and evaluate new perspectives and vision for the future.
- Provide an environment for academic planning.
- Provide a flexible plan that can adapt to new research and technologies.
- Identify land use and facility opportunities and constraints.
- Recognize fiscal operating opportunities and constraints.
- Inventory and analyze infrastructure so that future utility locations and demands can be met.
- Create a campus that demonstrates sustainable practices and environmental stewardship.
- Build durable and thoughtfully designed buildings that exhibit timeless academic integrity.
- Create a sense of community through building placement and organization.
- Identify sites for new buildings and facilities with careful attention to safety and accessibility.

## **Planning process**

The 1997 Campus Master Plan is the foundation for the 2008 Master Plan. In 1997, Ira Fink and Associates, Inc., in association with Integrus Architecture, developed a campus master plan for WSU Tri-Cities campus after thorough interviews with campus administrators, faculty and students. In the early spring of 2008, representatives from WSU Campus Planning and Development (CPD) met with WSUTC staff to discuss any new priorities for the campus and updates to the plan. The addition of all level undergraduate students in 2007 appears to have provided a new emphasis for the campus that is reflected in this updated master plan.

### **Planning Assumptions**

The following assumptions, some carried over from the 1997 Plan and others developed from the recent interviews with WSUTC staff, form the basis of this updated Master Plan:

1. Enrollment at WSUTC will grow, primarily due to entering freshmen classes of about 70 – 100 students each year.
2. The increase in undergraduate students will eventually require the campus to provide housing and other amenities for a resident student population. A study is needed to determine what enrollment threshold would make it economical to develop a housing program.
3. No additional major buildings will be built between the CIC and the BSEL so that a central corridor and views of the river are protected. The Army Corps of Engineers and the City of Richland own the land between the campus and the riverfront.
4. Facility support services will be located outside of the academic core, but in a location that provides access for maintenance of all buildings and grounds.

5. A pedestrian corridor that runs east and west will be developed by the thoughtful placement of new academic buildings.
6. The area west of George Washington Way will be used for non-academic purposes.
7. The property located to the southwest of the intersection of George Washington Way and First Street will be used for laboratory and shared facilities, co-located with a WSUTC private partner. This area may require additional remediation prior to reuse in addition to that done in the early 1990's by WSU and others.
8. To preserve land development opportunities for future campus growth, the land area north of the CIC will be held in reserve, unless needed for parking purposes.
9. The hillside immediately to the east of First Street provides an opportunity for student housing.
10. Student socializing facilities such as a student union or recreation center could be located on the campus or as part of a development adjacent to the campus.
11. For planning purposes, buildings will be two to three stories in height and will occupy as small a "footprint" as possible.
12. Landscaping and pedestrian amenities will be located to enhance the outdoor experience by maximizing views, providing protection from the intense summer sun and strong winds, and providing areas for studying, socializing and recreation.
13. A space management plan will be part of the analysis of all proposed buildings.



*WSU Tri-Cities is located in south central Washington State*

### **CONTEXT**

Washington State University Tri-Cities is a branch campus within the Washington State University system. The Tri-Cities area, which includes the three neighboring cities of Kennewick, Pasco and Richland, is in south central Washington around the confluence of the Columbia, Snake and Yakima Rivers near the Washington-Oregon border. The campus is located on the northern edge of the city of Richland, along the western banks of the Columbia River.

A line of mountain ridges, including the prominent Rattlesnake Mountain are located to the south and west of the campus. Hanford Nuclear Reservation is located to the north of Richland. Several major highways link the Tri-Cities to other urban centers in the state, including Spokane, Walla Walla, Yakima, and Portland, Oregon.





*The Tri-Cities consists of the cities of Richland, Pasco and Kennewick*

The core campus is located on approximately 110 acres bounded on the west by a major city thoroughfare, George Washington Way; on the north by First Street; on the south by Sprout Road; and on the east by a thin strip of city property bordering the Columbia River. The campus also owns an irregularly-shaped 55-acre parcel to the west of George Washington Way which extends in a narrow sliver some distance south of the main campus. In addition, the campus owns approximately 30 acres of land south of Sprout Road which is currently leased to Hanford High School as their athletic fields. The total campus property in the Tri-Cities is approximately 200 acres.

The surrounding properties are primarily industrial. The Port of Benton owns significant land to the north and west, with other properties privately owned industrial or research complexes. The City of Richland has designated a large portion of this area as the Business Research Park or as Medium Industrial. However, a small section of residential land borders the southeastern edge of the campus, near the Columbia River.



*WSU Tri-Cities property boundaries are in red*

## **HISTORY**

WSU's presence in the Tri-Cities began in 1918 with the establishment of a cooperative extension in the area. Shortly after World War II, the General Electric Company became the contractor

of the Hanford Site for the Atomic Energy Commission and established the General Electric School of Nuclear Engineering to provide educational opportunities for their workers. Over time, universities in the Pacific Northwest were invited by the Atomic Energy Commission to establish degree programs based on course work offered at the GE School.



*The Hanford Site stretched along the Columbia River to the north of Richland (photo circa 1945)*

As an outgrowth of these programs, a consortium was established, known as the Center for Graduate Study and made up of the University of Washington (UW), Washington State University (WSU), Oregon State University (OSU), and the University of Idaho (UI). Courses were generally in technical fields and taught by adjunct faculty. The University of Idaho later dropped out of the consortium when they began to center their activities on a similar program with the Idaho National Engineering Laboratory at Idaho Falls.

After the departure of the UI from the consortium, reorganization of the academic structure occurred in 1968. Each academic program became sponsored by a single university and students were able to complete all course work for the master's degree in Richland. In 1969, a new building to house this reorganized Center, now known as the "East Building", was built on a site near the Columbia River in Richland where the WSUTC campus is situated today. A small number of permanent full-time faculty were hired to coordinate the programs.

By the early 1980's, in addition to graduate programs, undergraduate academic programs were also being offered in the Tri-Cities. Some of these were sponsored by Central Washington University (CWU) and by Eastern Washington University (EWU), with classes held at Columbia Basin College in Pasco. In 1985, the five universities – WSU, UW, OSU, CWU, EWU – came together as the Tri-Cities University Center at the Richland site, with UW as the fiscal agent.

After the state's Higher Education Coordinating Board (HECB) developed a system of higher education branch campuses in 1989, both the UW and WSU established formal branch campus operations. At this time, the Tri-Cities University Center was disbanded and the property became the home of the WSU Tri-Cities campus. This action followed a site selection process undertaken by a WSU-appointed citizens' advisory committee. The initial academic programs concentrated on the areas of Agriculture, Business, Engineering and Science.

A second building, the West Building, was completed on the campus in 1992. It was the first construction following site acquisition by WSU. A third building, the Consolidated Information Center (CIC), was completed in 1997. The most recent construction, the BioProducts, Sciences and Engineering Laboratory (BSEL), was dedicated in May 2008.





*The East and West Buildings, circa 1993*

Two other Master Plans for the campus have been completed since 1989. The first, “Tri-Cities University Center Master Planning Report” was prepared by McKinley Architects of Seattle, Washington, just prior to the campus’ purchase by WSU. It was used to site the West Building. The second study was generated through a contract with the State of Washington Arts Council resulting in a report entitled “WSU Tri-Cities, Richland Areas Master Plan and Art Concept”. That document influenced the location and development of the new main campus road, University Drive. It was prepared by an artist, Jody Pinto, in 1995 as a Washington State Arts Commission Percent for the Arts project.

## **CURRENT ACTIVITIES**

### **Enrollment**

WSUTC only accepted upper level undergraduates and graduate students until 2007, when it welcomed its first freshman students. Because the campus has historically catered to part-time students who worked full-time jobs, most of the courses are held in the evening. The average student age is 30 years, and 75% reside in one

of the surrounding counties. The campus also has a total of over 350 faculty, 300 of which are part-time adjunct faculty, and approximately 70 staff.

Currently, WSUTC serves a broad, co-ed student enrollment of approximately 1,200. The campus student population has remained steady since the 1990’s with a population between 1,200 and 1,300. The recent change to include lower level undergraduates has not yet substantially increased the campus population, though this will likely change as programs develop. This master plan assumes a goal to increase enrollment to 2,400 full-time equivalent (FTE) students in the short-term, with an ultimate FTE student population of 5,000 at site capacity.



*WSU Tri-Cities welcomed its first freshman class in 2007*

### **Academic Programs**

As a branch campus, WSUTC provides programs in areas of high employment demand. Undergraduate degree programs include nursing, English, history, social science, liberal arts, psychology, education, general science, physical science, environmental science, business, horticulture, computer science, electrical and mechanical engineering. Graduate programs are offered in a variety of sciences,



as well as in engineering, education, nursing, and business.

WSU Tri-Cities delivers programs through a variety of teaching methods and technologies. Academic programs that have been proposed for the next decade and beyond include:

- Liberal Arts
- Teacher Education
- Entrepreneurship
- Viticulture and Enology
- Information Technology
- Bioproducts
- Bioengineering

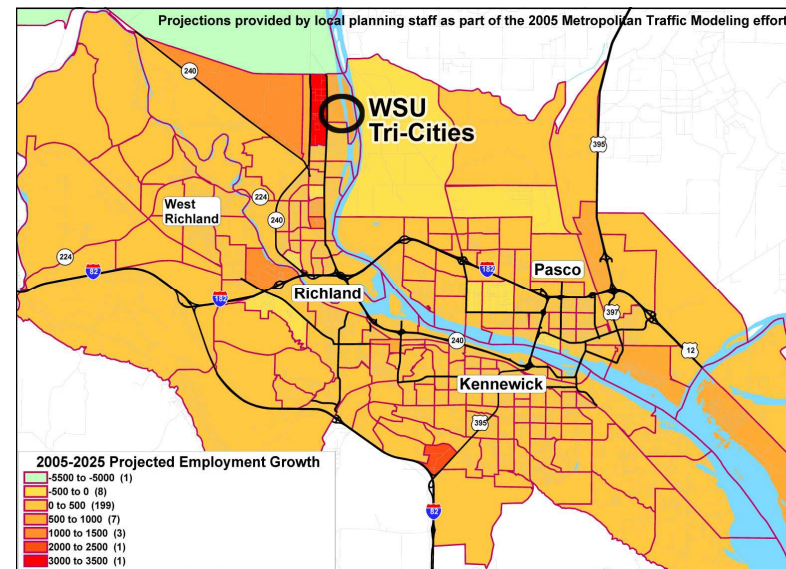
As WSUTC's programs have grown, available space for general classrooms, teaching labs and faculty offices have become scarce. The popularity of evening classes strains the existing classrooms. Some laboratory classes are accommodated at a local community college due to lack of space at WSUTC. Daytime classes currently have room for growth, but they will likely fill quickly as more full-time students enroll. Faculty numbers are also increasing. As available office space disappears, closets and conference rooms are being converted to accommodate new faculty and staff hires.

### **Partnerships**

WSUTC is located near the Pacific Northwest National Laboratory (PNNL), one of the US Department of Energy's (DOE's) ten national laboratories. Battelle, an international science and technology, has operated PNNL for DOE and its predecessors since 1965. To the north of the campus is the Hanford Site, home to the Manhattan Project's plutonium-production facility during World War II, now a major environmental technologies development and deployment area. The Hanford site and PNNL provide WSU students and faculty access to a large and diverse pool of world renowned scientists and engineers, many who serve as adjunct faculty. This unique core of working professionals contribute significantly to WSUTC programs,

providing "real-world" applications to the theoretical concepts taught in the classroom and opportunities to work together on joint research projects.

Collaboration between WSUTC and the community has been a key element in bringing new academic and economic development opportunities to the region. In addition to PNNL and Battelle, other community partners have been the US Department of Energy, ICF Kaiser Engineers Hanford, Westinghouse Hanford Company, Boeing Computer Services Richland and Siemens Power Corporation. These partners and others have funded research, equipped laboratories, improved science and engineering education, and provided internship opportunities. The area immediately adjacent to the campus is projected to have the highest employment growth in the Tri-Cities region, providing further opportunities for partnerships. WSUTC is committed to the stewardship of existing partnerships and the development of new ones.



*Strongest employment growth (in red) is projected near WSUTC*

## **CAMPUS PHYSICAL ASSESSMENT**

### **Neighborhood Edges**

The perimeter of the core of the campus is defined by George Washington Way, Sprout Street and First Street. A strategy to enhance campus edges, while allowing visual access to the site, could provide amenities such as view corridors and landscaped

edges and attractive gateways. Private residences front the southeastern end of Sprout Road, near the East and West Buildings. The campus appearance and traffic patterns should be particularly sensitive to the neighborhood in this location. Along the rest of Sprout Road, the campus owns both sides of the street. The land to the south is being leased by the Hanford High School for their recreation fields and sport facilities.



First Street creates the boundary to the north of the campus. The land across First Street is owned primarily by the Port of Benton as an industrial park. This land is only lightly developed at this point, though the Port of Benton is working with PNNL and Solaris, a local developer, on a master plan for their properties to the west and north. This master plan proposes a large mixed-use development to the north, including housing and retail. At the northeastern end of First Street, a privately-owned manufacturing plant is located. It currently processes potatoes, and can emit unpleasant smells and noises. Any development for the northeastern corner of campus will need to acknowledge this neighboring use.

The land to the west of George Washington Way is owned by the campus. However, this land is fairly narrow in places. The City of Richland owns the land



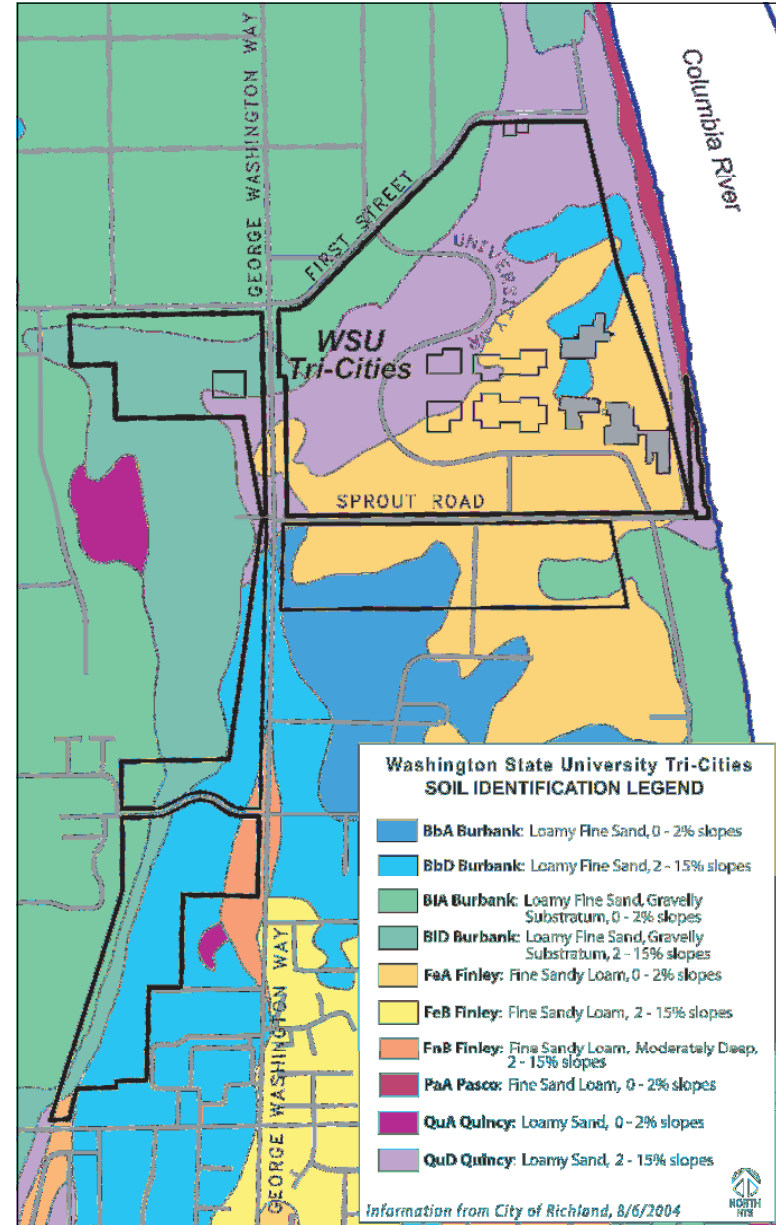
immediately to the west of this narrow section, where a retention pond is located that is surrounded by a chain link fence. This property is not particularly attractive in its current setting. The campus would benefit from landscaping along this narrow strip of land to improve the views beyond.

The University owns a fairly large piece of property on the southwestern corner of First Street and George Washington Way. Currently, the Washington State Police (WSP) plan to build a crime lab facility on a portion of this property. In the future, other similar types of shared uses relating to the University mission could also occur on this property. Battelle's industrial park located to the north and west provides opportunities for partnerships.

### **Soils and Topology**

The soils on the campus and the surrounding areas are primarily sandy and well-drained. This is very representative of the region, and contributes to the desert-like appearance of the undeveloped portions of the campus. Burbank soils were formed in basaltic gravelly and cobbly glacial outwash alluvial deposits in arid climates. Finley soils generally have a mixture of loess in the surface, with dominantly basalt-based, coarse fragments. Quincy soils often have a ridged, hummocky, or dune microrelief and contain significant amounts of dark colored basaltic sand. Pasco soils are found in basins and low flat areas adjacent to the Columbia River and its tributaries with little slope, accumulating under ponded drainage conditions. It is the only soil type present near the campus that does not drain quickly.

The campus property is mostly flat, except an abrupt ridge that parallels First Street and a short descent near the edge of the Columbia River. The ridge along First Street provides excellent overviews of the campus from the north portion of George Washington Way.





## Climate

Richland is located at an elevation of about 400 feet above sea level. The highest average temperatures are in the upper 90's and occur in July and August. The lowest average temperatures, which dip into the 20's, occur in January. Temperatures have been recorded above 100 degrees in every month between May and September, and have sunk below 0 in January and February.

The average annual precipitation in the Tri-Cities region is only about 7 inches, most of which falls in the winter months. The average number of rainy days is less than 21. Average snowfall is eight inches for the entire winter, with the highest average snowfall occurring in January at about three inches.

Month	Average Max Temp (F)	Average Min Temp (F)	Average Total Precipitation (in.)	Average Total Snowfall (in.)
Jan	40.5	26.2	1.01	3
Feb	48.5	30.4	0.72	1.6
Mar	57.9	35.1	0.6	0.3
Apr	66.6	40.9	0.5	0
May	75.3	48.2	0.54	0
Jun	82.6	54.8	0.49	0
Jul	90.3	59.5	0.21	0
Aug	89.3	58.7	0.25	0
Sep	80.7	50.7	0.27	0
Oct	66.9	40.9	0.51	0
Nov	50.9	33.8	0.95	0.7
Dec	41.9	28.6	1.04	2.5
<b>Annual</b>	65.9	42.3	7.1	8.1

Climate plays a role in all campus development. The summer heat and year-round wind encourages the creation of sheltered paths between buildings and minimized travel distances between facilities. However, currently the CIC building is some distance from the other buildings. The location of future buildings will need to

consider the wind direction and use its massing to provide shelter for pedestrian areas near the building. Additional tree plantings will also improve the microclimate between buildings. Tree species planted near the edges of the campus should be species able to survive the wind-borne dust that can scourge bark. Evergreen trees can be effective in reducing the impact of the wind year-round.

## Open Space

The physical and functional quality of the WSUTC campus has many good aspects upon which to build. The existing buildings are arranged in a pattern that begins to create a framework of identifiable open spaces. Mature trees define the current major entry, Sprout Road. By and large, however, open spaces do not yet provide a strong physical or visual connection. The existing structures are spaced some distance from each other, and there are not enough of them to give the campus much presence at the street. Pedestrian access and circulation is limited to connections between the existing parking lot and the East and West buildings. The distance between the CIC and the other campus buildings can be uncomfortable in the cold, windy winters on the campus. Little exists to break up the strong winds, and few trees along the interior campus paths are there to provide shade from the hot summer sun.

The campus presents a limited image to its surrounding community at the present time; there are a number of areas of aesthetic and operational design which should be addressed and considered as a part of the Master Plan.



*The distance between buildings can be imposing in weather extremes*

The campus is generally devoid of formal planting, except along the riverfront, around the existing structures and along Sprout Road. Future planting of the campus will need to take into account the arid, desert-like nature of the region, and be sensitive to indigenous plant materials.



*Outside of irrigated areas, only desert-tolerant native plants thrive*

### **Facilities**

To date, the facilities at WSUTC consist of four permanent buildings, two of them connected by hallways, and four modular office structures. These buildings, including the modulares, contain approximately 148,000 assignable square feet (ASF).

### **East Building**

The East Building, completed in 1969, contains classrooms and administrative and faculty offices. Three science laboratories provide facilities for chemistry, biological sciences, and environmental sciences. Two of these laboratories were built in 1969 as radiological laboratories and were retrofitted to accommodate general sciences. The East Building contains 44,600 gross square feet and 22,700 assignable square feet.



*East Building*

### **West Building**

The West Building, completed in 1992, contains classrooms, laboratories, the Max Benitz Library, the computer center, faculty offices, and all support services. It also contains a large two-story atrium that has become the center of campus life. The West Building contains 93,900 gross square feet, of which 48,000 is assignable.



*West Building*

### **Consolidated Information Center**

The CIC Building was completed in 1997. It includes a campus library, merged with the Hanford Technical Library, which provides access to print volumes and more than 700,000 technical reports in addition to online access to databases and scientific periodicals. The DOE's Public Reading Room is also located in the area. It also includes an area for seminar courses and conferences as well as professional development programs and space for community- or business-based training activities. The CIC contains over 81,300 GSF and nearly 52,200 ASF.



*Consolidated Information Center (CIC)*

### **BioProducts, Sciences and Engineering Laboratory (BSEL)**

BSEL, completed in 2008, contains classrooms, laboratories, offices and shared spaces focusing on processes for converting agricultural and industrial wastes into bio-based fuels, chemicals, and other valuable commodities. This building continues the long-standing research collaboration between WSU and PNNL, as the approximately 38% of the space is leased to PNNL. In addition, PNNL contributed funds toward the design and construction of BSEL, and also provided a significant amount of research

equipment for use by WSU researchers. The building has a total gross square footage of 55,722 and 34,531 assignable square feet, with WSU using 27,453 gross and 16,957 assignable square feet.



*BioProducts, Sciences and Engineering Laboratory (BSEL)*

### **Modular Buildings**

The four modular buildings on the site include a storage building that initially was the Bookstore, the Cooperative Extension Building, the Pharmacy Building, and the East Annex. These buildings are currently being emptied so that they can be removed from their current location. The Facilities Operations Building will be replaced



*Modular Buildings*



with a new structure and fenced yard for equipment on the north side of campus. The other departments with space in the modulares are either being absorbed into existing space on the campus, or are moving off campus.

Bldg Number	Building Name	Assignable SF	Gross SF (GSF)	Year Built
9501	East Building	22,697	44,582	1969
9510	West Building	47,982	93,893	1992
9512	Consolidated Information Center (CIC)	52,172	81,310	1997
9513	BioProducts, Sciences and Engineering Laboratory (BSEL)	34,531 total, 16,957 WSU	55,722 total, 27,453 WSU	2008
9502	Dry Storage Warehouse	1,798	2,040	1989
9519	Maintenance Equipment Storage (Facilities Opera-	2,190	2,268	2000
9516	104 W. Campus Annex – US Transuranium Research (USTUR)	2,478	2,730	1993
9517	103 W. Campus Annex – Pesticide Operations & Extension	1,570	1,936	1994

### Architectural Materials

Buildings with concrete exteriors dominate the architecture on the campus. While concrete provides a very modern, permanent appearance to the campus buildings, the appearance of the campus could benefit from additional details and materials that would provide a more pedestrian-oriented scale to the exterior architecture, including brick or a concrete block pattern. Attention should also be given to energy-efficient building details like day lighting, sun shading, and courtyards that would encourage outdoor activities sheltered from the wind with areas of sun and shade.

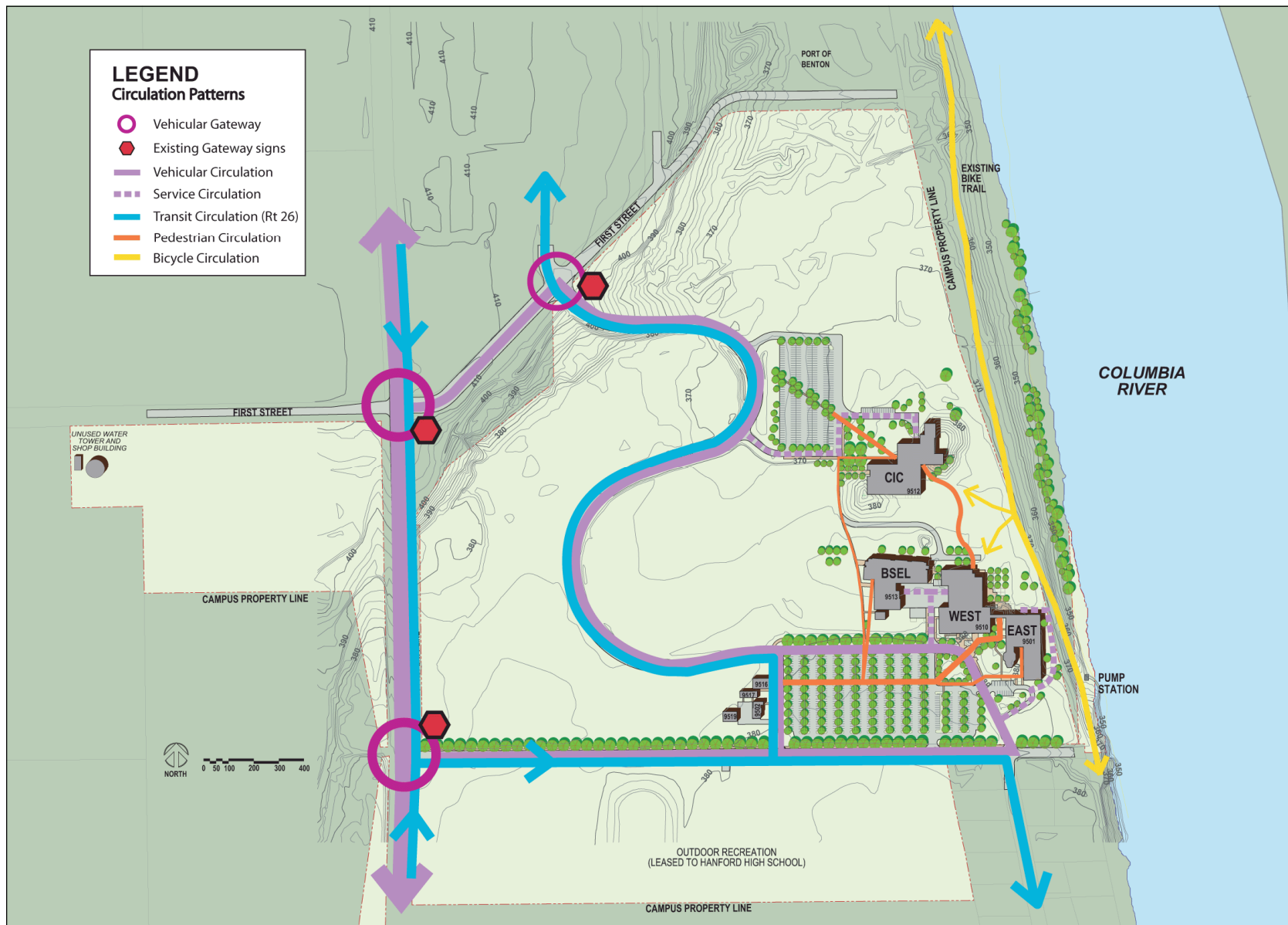
### Vehicular Circulation and Parking

George Washington Way is a major city thoroughfare which runs north to south along the western edge of the core campus. First Street and Sprout Road connect George Washington Way to the river on the north and south edges of the campus core, respectively.

The main circulation route within the campus is University Way, a circuitous road that weaves in a north-to-south manner through the center of the campus, connecting First Street to Sprout Road. The existing campus buildings are all to the east of University Way,



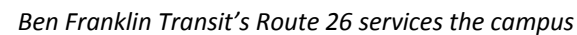
*The circuitous University Way is the primary road through campus*



*WSU Tri-Cities vehicular and pedestrian major circulation patterns*

Current parking space requirements are met with the existing on-campus surface parking, which numbers over 950 parking spaces. The existing parking will likely accommodate the campus parking needs for some time to come, even though the campus has a significant number of commuting students.

Parking increases can be avoided for some time in the future if the campus works with the City to improve alternative transportation





options like bus service and biking. Already, the City of Richland's Ben Franklin Transit (BFT) system provides bus service from downtown Richland along George Washington Way to Sprout Road about every 30 minutes between 6:30am and 7pm Monday-Friday, and also drives through the center of the campus during the weekday during the morning and evening rush hours. On Saturday the bus travels Sprout Road every hour between 8:30am and 6:30pm. Greater frequency, longer hours of service and a wider distribution of bus routes will encourage bus usage. The existing city bike path that runs along the Columbia River also provides an excellent alternative transportation corridor.



*The City of Richland maintains an extensive system of bicycle routes*

### **Campus Image and Wayfinding**

Most drivers reach the campus from Sprout Road, as it is the closest entry road from downtown and the adjacent parking lot is closest to the majority of academic buildings. However, exiting the campus is more difficult as the driver is required to cross the wide George Washington Way, which its relatively busy traffic and fast speeds. The intersection just to the south of Sprout Road already is signalized, so it is unlikely that Sprout Road will be signalized. However, the City has considered signaling First Street in the future. Once this occurs, its use as a major campus entrance will increase. In addition, the future construction of housing on First Street and additional academic buildings near the CIC building will encourage the use of First Street by drivers.

Both First Street and Sprout Road have large gateway signs. These signs could be enhanced by additional landscaping and possibly



*Campus gateway signs are located on George Washington Way*

some basic directional signage. More detailed directional signage should be included along Sprout Road, First Street and University Way. As the number of buildings increase on the campus, this secondary directional signage will be critical to a positive visitor experience. This signage should relate to the appearance of the entrance signage in color and style. Some directional signs have been recently installed along University Drive, but the text is difficult to read at driving speed. Building entrance signage can also be improved. University Drive could be enhanced by the addition of trees, plantings, and a landscaped setback area to provide a more favorable image. Pedestrian crossings will need to be clearly identified.



*Text on directional signs is small and too detailed for drivers to read*

### **Infrastructure**

An analysis of infrastructure needs to serve the campus as it grows was beyond the scope of this current master plan. However, there are existing utility systems in place serving the current campus that

can likely be expanded for future development. For record purposes, this map shows the existing utility infrastructure of the present campus. Included in the utility map shown on the following page are the approximate locations of irrigation, water, gas, storm drain, power, cable TV, telephone and fiber system.

## **CAMPUS ANALYSIS - OPPORTUNITIES AND CONSTRAINTS**

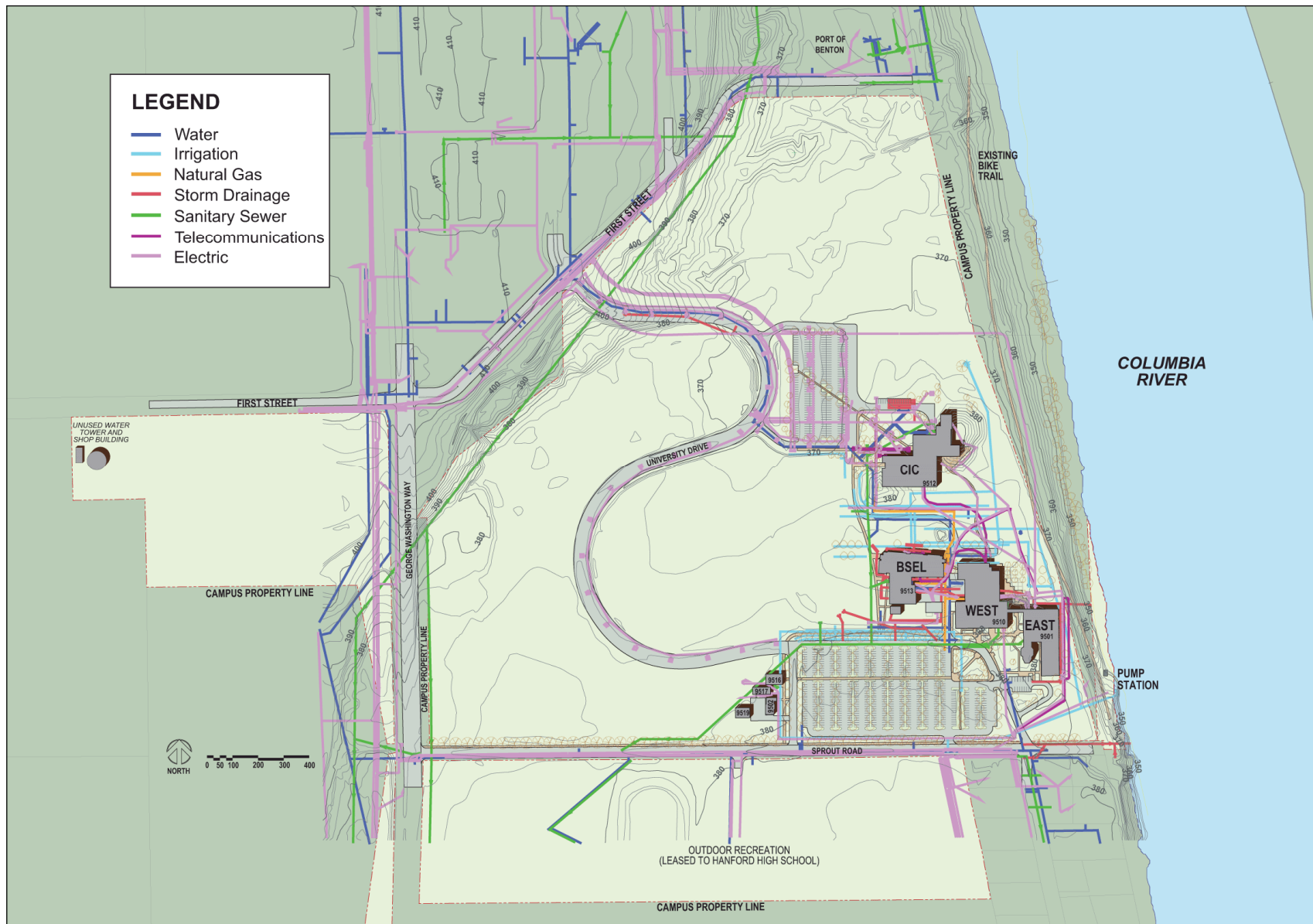
### **Building Sites**

There are many opportunities for new buildings within the boundaries of the existing campus. Careful designation of building sites, as well as permanent open space, is essential to the success of the Master Plan. Sites for larger buildings or special purposes, such as a recreation building or theater, need to be set aside for the future.

### **Columbia River**

The Columbia River, which forms the eastern boundary of the campus, is both a constraint and an opportunity. The views of the river from campus buildings and outdoor spaces are greatly valued. However, the land around the river is owned by the City of Richland and the waterfront managed by the Corps of Engineers. Large trees have grown up at the river's edge that block the views of the water. In addition, the far side of the river is being developed into housing, which diminishes the river's appearance. Some selective pruning of the lower tree branches could improve the views of the water while still concealing the majority of the housing across the water. This would have to be done with permission from the City and the Corps of Engineers.

The development of additional buildings will need to respect the edge of the river, frame the views of the water, and direct the pedestrian's attention toward this positive visual resource. At the same time, the buildings need to create a relationship between themselves that fosters a sense of place. This can be accomplished



WSU Tri-Cities — Existing utilities

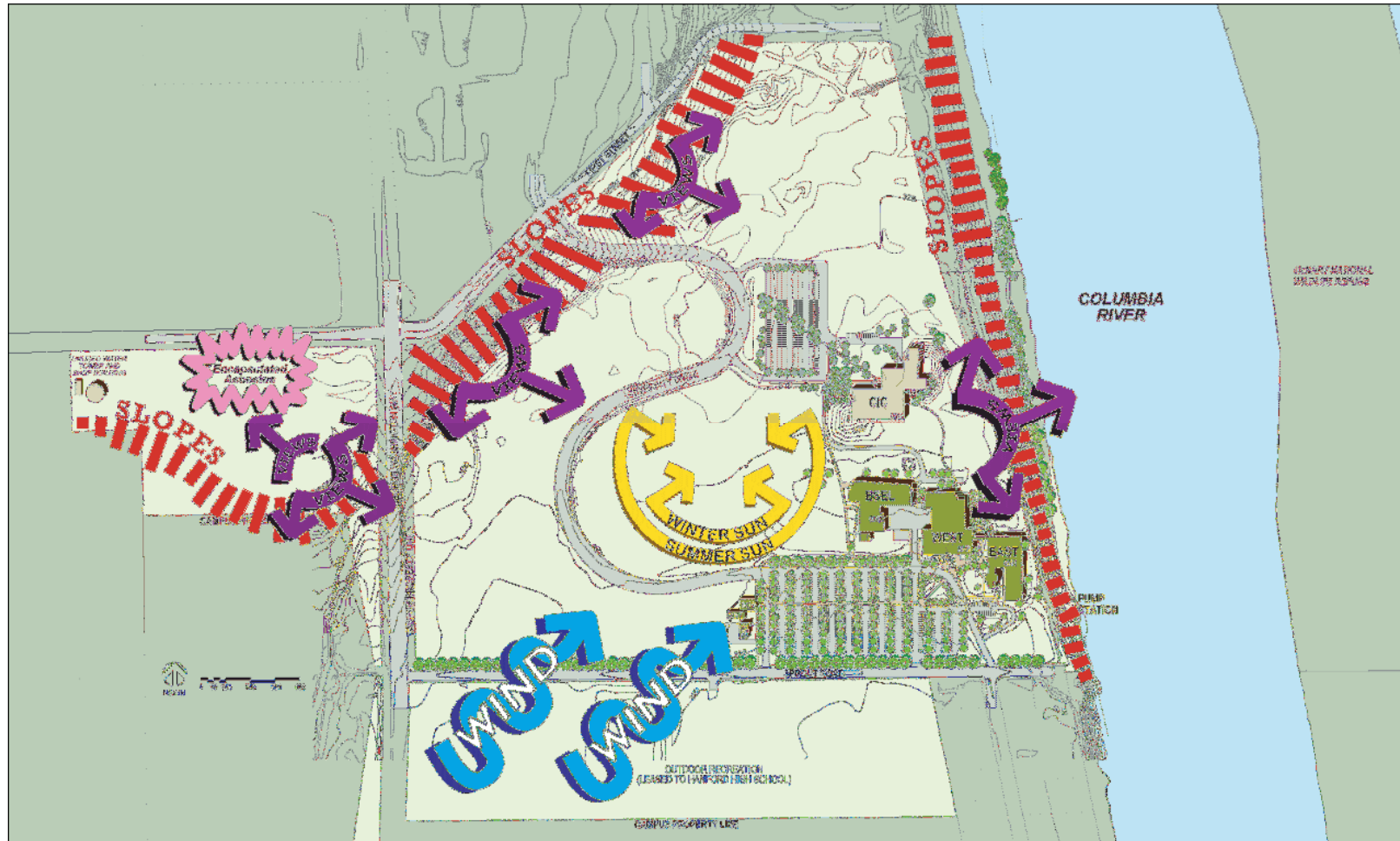


by a careful placement of the buildings that respond to each other first while still acknowledging the close presence of the river.

### **Environmental Hazards**

In 1994 the university encapsulated an asbestos contaminated area with gravel, soil and a vegetative cover located on property given to

WSUTC by the Siemens Power Corporation. When this property, located southwest of George Washington Way and First Street, is eventually developed, a parking lot could be built on the site without disturbing the asbestos. Other uses of the location would likely require the removal of the asbestos.



*WSU Tri-Cities — Opportunities and Constraints*

## **CAMPUS MASTER PLAN RECOMMENDATIONS**

As stated in the 1997 Campus Master Plan, the physical layout of the campus has many good aspects on which to build. Several aspects of the 1997 Master Plan have been implemented, including the new BSEL building. Numerous trees have been planted to enhance the appearance of the campus grounds. However, not enough facilities have been built to define important open spaces that will give a strong physical and visual image to the surrounding community.

This updated Campus Master Plan builds on the 1997 Master Plan's effort to redefine open space, develop campus connectors both across the campus and between buildings, reserve areas for future growth, reinforce the existing building framework, and strengthen the pedestrian routes across the campus.

The Master Plan seeks to consider both short term and longer term facility needs on the campus. The short term facilities are projected to be those that would be constructed in the next five to ten years, while the longer term facilities would be those projected to be constructed beyond ten years in the future.

The overall objectives of the Master Plan are to:

1. Enhance the sense of "arrival" on campus and improve visitor orientation.
2. Celebrate the excitement created by the openness of the campus, retaining open space as an important component of the campus' physical character.
3. Develop those qualities that will exemplify the outdoor image of the campus, creating park-like places for meeting, recreation, reflection, and communication.
4. Create the opportunity for serendipitous encounters to take place in the mall area of the academic core through the provision of seating, activity nodes, crosswalks, and places to pause and visit.

5. Cluster buildings and maintain comfortable spacing between buildings so that pedestrians are not negatively affected by extreme temperatures as they walk from one building to another.
6. Enhance University Drive as the main vehicular route through the campus by creating a "parkway" design for the road. This would include the development of a planted island divider down the center of the roadway and removing the speed bumps in the road.
7. Improve the campus environment around and along University Drive by screening parking, keeping a wide landscape space between University Drive and parking, planting trees, and providing a "front door" feeling to buildings located along University Drive.
8. Cluster peripheral parking along University Drive.
9. Minimize pedestrian-vehicular conflicts and create a pedestrian friendly environment.
10. Enhance the architectural character of the campus through the use of more human-scaled building materials that relate to the existing buildings, constructing low rise buildings (two to three stories), and including broadly pronounced building entrances.
11. Replace the modular buildings with permanent structures in more appropriate locations.
12. Improve the appearance of the outdoor campus through the consistent use of paving materials, lighting fixtures, waste receptacles, and outdoor furniture.
13. Maintain a visual connection to the Columbia River and the recreational trail along the river. Provide physical connections, such as paths, down to the river.
14. Provide an overlay of possible sites for public art.

This campus master plan calls for the redefinition of open space on the campus, the development of campus connectors both across campus and between buildings, the reservation of specific areas for future growth, the reinforcement of the existing building framework, and the strengthening of pedestrian routes across the campus.

Additional planning issues include the identity of the campus, vehicular circulation and parking, architectural and landscape development, and space needs. Utility needs were not considered as part of this project. Access to the Columbia River and connections to the river path are part of the attraction to the Tri-Cities Campus.

The statements that follow are intended to serve as a basis for facilities planning and as a framework for setting the tone, style, and substance of the University's built environment. It is a guide to the physical evolution of the campus and responds to academic planning as well as to the goals and ambitions of WSUTC faculty, students and staff.

### **Identity and Wayfinding**

Key concepts:

- Develop an attractive campus edge to provide distinctiveness and a sense of arrival.
- Establish a clear entry point to the campus where First Street meets University Drive.
- Improve onsite way-finding and identification that is easily comprehensible to the campus visitor.
- Consider future developments by adjacent property owners.

WSU has a way-finding and identity signage program. It is part of the marketing scheme for all WSU campuses and will be continued on the Tri-Cities Campus. The current identity images can be found

on the WSU web page. The information displayed on all directional signage needs to be concise and easily readable while driving a vehicle. Only the most critical information should be displayed on any single sign.

A landscaping scheme for the campus has begun with the planting of trees along Sprout Road and as part of establishing tree-lined walkways. An integrated landscaping concept will be created as part of the 2008 master plan. This will include identifying existing signage and additional signage opportunities, continuing landscaping along University Drive, initiating a planting program around the campus edge, and providing a welcoming information area.

The newly designated front entry from First Street will serve to move a portion of the traffic from Sprout Road. The point where University Drive and First Street intersects will require careful attention in terms of landscaping around the existing entry signage and the opportunity for public exit.

Additional attention given to University Drive will greatly enhance the overall image of the campus to visitors. Treatment of the road edges, pedestrian crosswalks, and way-finding markers will enforce the drive as a major circulation system of the campus and will help link the front entry to the campus.

### **Vehicular Circulation and Parking**

Key concepts:

- Monitor the impact of traffic changes along the George Washington Way as new development occurs on campus and on adjacent properties.
- Envision University Drive as a unifying element rather than one that dissects the campus. This will require careful planning of buildings on both sides of the roadway, access to parking, and pedestrian crossings.



- Employ traffic calming methods where appropriate for the safety of pedestrians.
- Encourage alternative transportation methods.
- Strategically place service access to buildings so that it does not conflict with other functions, including pedestrian access to buildings and parking.
- Locate parking strategically to minimize its impact on the campus image.
- Install adequate lighting and signage around parking areas for personal safety, particularly where dense foliage exists.
- Mitigate/avoid adverse street light impacts on neighboring properties, particularly residential properties.

The goal of these specific vehicle circulation recommendations is to reduce, if not eliminate, internal circulation conflicts within the campus and to provide access to service and parking spaces in the areas of specific need.

Safety for drivers entering and exiting the campus would be improved with traffic control at the intersection of First Street and George Washington Way. This improvement would be done by thru City of Richland, as both roads are city-owned. The city is encouraging growth in this area, and traffic control would improve the access to the numerous future businesses and retail activities.

On-campus parking consumes valuable open space. The two existing parking areas serve the campus adequately for the immediate future. As the campus grows, a third major parking area will be developed west of University Drive. Any future on-campus housing will require some parking for residents and visitors. When the campus reaches full build-out, additional parking may be needed north of University Way. Improvements to alternative transportation systems could reduce the need for parking lots, preserving more open space.

Currently, the campus has approximately 950 parking spaces. The proposed campus plan provides for an additional 800 spaces for complete campus development. The possible construction of on-campus housing will affect the number and location of parking. All parking lots should be landscaped and screened and be easily accessible from the primary road network.

Providing efficient service is critical to a well-functioning campus. Therefore, service vehicles should have direct and convenient building access from University Drive. At the same time, service traffic and pedestrians should remain as separated as possible and loading docks, trash containers, and the like must be screened from view. New buildings and pedestrian paths need to be carefully arranged to allow for efficient building service and also a pleasant pedestrian experience.

Provisions should be made for bike routes linking the campus and adjacent areas, as well as along University Drive. The existing river path provides a ready access from the south edge of campus to the north. Connections are needed from east to west campus as new development occurs.

### **Pedestrian Circulation**

#### **Key Concepts:**

- Avoid conflicts between pedestrian routes and other functions.
- Create enjoyable and convenient walkways that coincide with natural pedestrian paths and patterns.
- Place buildings close enough to make spaces between buildings a comfortable distance for walking during all times of day and in all kinds of weather.
- Evaluate and redesign as needed the walkways and curbs to minimize the potential for vehicle and pedestrian conflict.
- Ensure pedestrian safety along University Drive with traffic calming methods instead of speed bumps.

To respond appropriately to safety issues and, at the same time, deal specifically with the image and identity of the campus, several actions are proposed. Linking the east and west portions of the campus will require special markings at pedestrian crosswalks and, perhaps, at a pedestrian underpass or new route to the intersection of George Washington Way and First Street. These improvements will be important to the development of the character of the campus and, more importantly, to the physical safety of those who regularly cross the streets.

A pedestrian mall is gradually being defined by the placement of new buildings. This area can extend to University Drive and ultimately may provide an opportunity to connect the western edge of the campus across George Washington Way. The mall can be further defined by special paving, seating areas, landscaping and shade trees, graphic identity, and low walls.

A secondary walkway connecting student housing to the campus and to the river path is proposed. Student housing and buildings may eventually be developed on the northern portion of campus. During design of these building it is important to maintain pedestrian connections between buildings and include access to the river path.

As the campus builds to the north, a pedestrian walkway that runs north and south, parallel to the river path, will be created that provides more convenient circulation between buildings.

### **Open Space and Landscaping**

Key concepts:

- Develop a landscaping program that plants species appropriate to the Tri-Cities environment, and establishes a visual hallmark of the campus.
- Use appropriate landscaping and tree cover where new parking areas are developed.

- Continue to improve the external appearance of the campus by creating a landscape setback around buildings to make all areas attractive, including University Drive.
- Establish a palette of landscape plant materials for campus that are successful in the Tri-Cities region.
- Complete and implement a lighting scheme to accomplish adequate illumination levels throughout the campus for safety, security, and aesthetic enhancement.

Pedestrian walkways along all major roads should be separated from the vehicles by a minimum eight foot wide landscaped strip.

Several small gardens have been created, especially in the areas surrounding the entrances to the East and West Buildings. The Cougar Garden is the most notable example. Additional small gardens can be created in key areas around the entrances to new buildings, providing a personal touch to the campus. The number of these gardens should be limited, however, to guarantee that the grounds staff can keep them adequately maintained.



*Cougar Garden is an example of a successful small campus garden*

The campus also has a number of successful small plazas and seating areas. As the campus continues to grow, additional gathering areas in a range of scales need to be created. The placement of future buildings will be critical in determining the location and scale of future plazas.

The location of campus buildings near the Columbia River has allowed for wide open spaces along George Washington Way and First Street. This creates a pleasant foreground to the buildings and enhances wide views of the entire campus. Clustering new buildings near existing ones will maintain these views and allow for future passive and active recreational areas.

The undeveloped area to the north of the CIC building has been designated by the campus as the Arid Lands Campus Preserve. A walking path winds through this area, providing views of the campus and of the native plants on the site. This area should be preserved for the future.

### **Facilities**

Key concepts:

- Provide a facility to accommodate additional general classrooms, teaching laboratories, and faculty offices. This is a critical campus need.
- Provide a classroom or meeting facility for 250 to 500 people to hold large classes and “mini-conferences”. Presently, such functions are held at other facilities in the Tri-Cities area.
- Develop an indoor or outdoor venue for graduation ceremonies, which could also be a location for performances or lectures.
- Create adequate space for informal meetings such as lounges or quiet areas for talking will enhance the usefulness of future building designs.

- Explore means to provide protection from the wind and sun as part of new building construction, including connectors between buildings and overhead planes.
- Maintain a high quality of materials and finishes on the inside and outside of buildings both to reduce long term maintenance and to give a look and feel of enduring quality to the campus.
- Consider renaming some of the older buildings, if appropriate (e.g. East Building and West Building). Building identity provides a sense of place.

Although architectural style affects how one feels about being on a campus, building size and scale have a greater impact on how individuals perceive their relationship to the campus. Of equal importance is the proximity of one building to the other and the space between buildings. The architectural character of the existing buildings at WSUTC is a modernist style, with attempts to create inviting outdoor spaces and framed panoramic vistas. The great distance between the existing buildings, however, can be uncomfortable in the Tri-Cities climate. As additional buildings are constructed, the distances between them should be minimized. Methods to reduce the exposed area between the CIC Building and the other buildings should be explored.

Given the current building appearances, the future construction of “signature buildings,” or out-of-context architectural statements should be avoided. A careful design review should accompany each proposed new project. The appropriate architectural interpretation of scale and the alliance developed between one building and another, including scale, orientation, materials and roof treatment will become increasingly important.

At the same time, attention should be paid to improve the human scale of concrete structures. The use of textured concrete, grey brick, or concrete block can be used successfully to reduce the scale



on long walls. Concrete can be a hard, “bright” surface, and incorporating texture into the surface would help “soften” its appearance. New buildings are required to build to a LEED Silver Standard, which provides opportunities for standardizing a palette of building materials for facades that address a vernacular aesthetic.

Building site orientation and interiors can be used successfully to capture the surrounding views. New buildings should not block views or encroach on their neighbors. As appropriate, buildings should provide for circulation through the building or through covered or sheltered passage ways. This will help to create a sense of human scale and provide micro-climate control through the use of shade and shadow.

The height of buildings should remain consistent with existing campus buildings and with their immediate neighbors. This will be especially critical when large mass buildings, such as theaters, large classrooms, and auditoriums start to appear as part of the capital plan. The opportunity for single purpose vertical structures, such as a clock tower could be used to create a campus focal point and signature structure for the campus, which it currently lacks. The plan allows for building expansion by addition to buildings, as well as new stand-alone facilities.

The campus appears to have adequate land, but carefully planning and use of the land will create a campus that endures for the next 100 years. The size of buildings or the frequency of funding for new construction is uncertain and the university will use the 2008 Master Plan to provide locations for new facilities to support an eventual 5,000 student population. The plan itself, and its physical development phasing, is further described in the following section.

### **Physical Development**

As noted earlier in this report, the time space of the 2008 Master Plan is three-fold:

**Short-Term Development:** those portions of the campus which will require change within the next five years, or roughly to the time when the campus population could approach 1,800 students;

**Middle-Range Development:** facilities and projects that will be needed in the following five to ten years, at which time the campus plans to reach an enrollment of 2,400 students;

**Long-Range Development:** projects to be considered by the WSU Administration for development after ten years when the campus might grow to 5,000 students.

The plan drawings which follow show the campus at these various phases of development. To make the campus appear complete as it grows is a principle of this master plan. Those academic buildings which constitute the initial core of the campus will be built along a central mall, and not along the riverfront. As the mall development occurs, the campus will achieve outdoor gathering places, as well as minimizing the distances that one would travel between buildings and between classes.

### **The campus at 2,400 students**

The first increments of future buildings for the campus beyond those currently existing should be developed on either side of an east-west plaza or mall. Funding, timing, and project size will all play a role in determining which of the available building sites is developed first and which follows. In any event, the plan concept is a linear pattern of buildings defining open space, a mall, and the ability for the campus to use its land resources in an efficient manner. A new centrally-located general classroom building with teach labs should be a high priority.

It is also important that the next phase of buildings on the campus clearly show how each building can or will be expanded or connected, how entrances will be defined, and how necessary vehicular service to the building will be screened from public view and not interrupt pedestrian circulation.



WSU Tri-Cities Master Plan at 2,400 students

The campus at 2,400 students is shown diagrammatically in the schematic land use plan, which includes necessary parking areas supporting the academic core, future development areas north and west of academic core, and long term future development west of George Washington Way. The 30-acre area south of Sprout Road is shown as recreation.

In the map on the previous page, the academic core is defined by an extension of the built campus to the west. The linear arrangement of buildings along the pedestrian spine, the connection of buildings, the definition of service and entry points, the relationship of the building masses to each other and to the campus as a whole will begin to define the urban design for the Tri-Cities campus. As noted in these exhibits, the buildings are not scattered, but create large setback areas and provide opportunities for outdoor activities to take place. Building footprints shown on these drawings would allow buildings of 45,000 GSF to 130,000 GSF to be constructed without significant modification of the plan.

The pedestrian spine will be a critical outdoor focal point for pedestrians walking between the academic buildings. It will include a range of spaces, including small intimate niches for quiet, shaded studying areas and large open spaces for group gatherings. Key focal points provide a range of visual experiences. A vertical element like a clock tower or carillon will occupy the circle between the BSEL, CIC and two new academic buildings. This will provide a focal point for both major directions of pedestrian travel. A fountain or sculpture garden might be located within one of the other circles, while the other might include a shaded seating area near a central food and drink establishment in one of the buildings.

### **The Campus at 5,000 Students**

To ensure the WSUTC campus is a careful steward of its land resources, a series of plans were created to show the site capacity and the density of development that would permit the campus to

reach student population of 5,000. These are illustrated in the following map. The Plan indicates that to reach 5,000 student population, a second series of academic buildings would be needed beyond the core academic facilities along the central mall spine. These academic facilities are closer to First Street and would surround recreation and parking area.

It is also conceivable that as the campus exceeds 2,400 students, housing would become part of the campus. An initial housing increment will occur south of First Street and northeast of University Drive. The feasibility of housing on the campus should be studied prior to construction, taking into consideration nearby off-campus housing opportunities and the rental market. If it is determined that on-campus housing is viable, WSUTC should consider a public-private partnership where the campus would lease the land to a private developer to construct and manage the facilities.

### **CONCLUSION**

WSU Tri-Cities fills a unique niche in the growth of the Tri-Cities region. As a member of the Washington State University family of campuses, Tri-Cities expanded its mission to provide a four-year degree beginning in the fall of 2007. The first freshman class of 100 students created many changes for WSUTC such as scheduling and the demand for new amenities. The beginning level classes focused on liberal arts education; however, there is a need to provide foundation classes that support upper division courses in science and engineering. Meeting these needs will drive the development of the WSUTC. As the demographics of the student population changes, a demand for new facilities such as a student union building and housing will become more prevalent. The 2008 Master Plan Update provides a physical plan that has enough flexibility to accommodate all possible campus growth areas for the next 20 years or more.





WSU Tri-Cities Master Plan at 5,000 students