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In the words of President David Hopkins, “Wright State University (today) is a growing, vibrant enterprise, value driven and distinctly outcome focused.” These inspiring words in his inaugural address do, indeed, define WSU today. President Hopkins goes on to explain how the university arrived at this position through the extraordinary efforts of the administration, faculty, staff, and students; WSU is, “a collaborative group of people with a can-do attitude, honoring tradition, and with a spirit of innovation to go boldly into the future, determined to create a new paradigm in higher education, a new institutional model of American Higher Education to serve Ohio in the 21st Century.”

President Hopkins uses two key words that define and drive the University: Inclusiveness and Innovation. Inclusiveness is “a commitment to provide opportunity and access to high-quality education programs and a full university experience to students with a wide range of academic abilities, educational backgrounds, ethnic and cultural heritage, family experiences and economic means, physical and learning differences, mobile and place bound circumstances, career and life expectations.” Innovation is the outcome of inclusiveness.

So, in crafting the campus master plan that will guide Wright State University over the next ten years and beyond; key attention is paid to the “drivers” that will help the university attain this new institutional model:

- Be inclusive
- Recognize WSU as a community that honors creative expression
• Celebrate WSU’s great strength in the arts and humanities in addition to STEMM (Science, Technology, Engineering, Mathematics, and Medicine) programs
• Embrace creativity as an essential part of the university community’s livelihood
• Be a force, not only a place
• Be globally engaged
• Develop vital business relationships through WSU’s international students and strategic partnerships
• Continue to grow WSU’s research enterprise
• Embrace WSU as a community of scholars

“Wright State University (today) is a growing, vibrant enterprise, value driven and distinctly outcome focused.”
President David Hopkins

Aerial View of Campus and Surrounds
2.0 Planning Context

Master Plan Intent

The 2010 WSU Campus Master Plan is intended to build on past master planning efforts with a focus on future land use and development. The previous campus master plan was completed in 1995 and has largely been successfully implemented though a series of annual phases. The WSU campus covers approximately 557 acres and includes a variety of athletic, housing, research, and academic programs. During the past 15 years, the university has completed a number of capital investments through major renovation and expansion of food service facilities, the Student Union, several major academic buildings and five science/research buildings. The most recently completed science/research building, Matthew O. Diggs III Laboratory for Life Science Research, has achieved LEED-NC Gold rating by the Green Building Council. The University has experienced increased enrollment over the past several years (2009 student enrollment 18,800) and has placed considerable emphasis on research partnerships to sustain this growth.

The master plan is intended to provide planning, growth, and capital investment opportunities for the next 10 years, while addressing key campus issues including the balance between paved and roof surface and green space, the role and use of the existing woodland that bisects the campus, future growth models, the interface between campus and the surrounding community, and how best to accommodate the large parking demand on the campus.

The plan also makes recommendations for future improvements and expansion of facilities to support growing and changing academic, research, and student life programs. It highlights...
planning principles and identifies the highest and best use of WSU’s land.

The master planning effort has involved analyzing the existing conditions of the campus, facilitating a series of meetings with faculty, staff, students and administrators to learn about the character and quality of the campus and the development of long- and short-term planning strategies for how the campus should evolve.

The University determined that the primary master plan outcomes should:
- define future quality and character of campus physical environment and
- identify future buildable sites, open space, and areas of potential growth

Additional recommendations should incorporate:
- the ability of the University to achieve its educational mission and aspirations
- a deepened sense of community on campus
- the look, feel and beauty of the existing campus
- a responsible carrying capacity of the University’s landholding
- the concept of “the campus” as a model for sustainable design and development
- adequate parking while sustaining other campus values
- clear and straightforward connections, introducing unity, harmony, campus vistas, gateways and art.

LEED-NC Gold Certified Matthew O. Diggs III Laboratory for Life Science Research
Master Plan Process

The master planning process started in March 2010 and was completed in October 2010. Approximately 35 one-on-one interviews were conducted with key board members, administrators, faculty, staff, students and community leaders to seek their input in the master plan.

Key points from one-on-one interviews included:

- General pride, optimism and expectation about the University and its future.
- WSU is mission focused, can think big picture about the enterprise, with a focus on “the next 50 years”.
- Know campus: “land rich, sites poor”.
- The core campus is compact, convenient, densely developed, and future capacity is a concern.
- Parking: everybody uses it, but few like it.
- Housing: not stitched into the fabric of the University.
- Woods: their asset value is unclear and no mandates have been established for preservation and protection or development within.
- Campus Image: better than ever, but there is still no clear sense of arrival and more work needs to be done.
- Campus Life: there are “voids” in the campus with limited places for people to “hang-out”.
- Consistent Themes: innovation, regional and access – a principle and metaphor.

In addition, regular meetings were held with the master plan Core Team, consisting of key University leaders and an Advisory/Working committee, consisting of faculty, staff, students and community leaders. Three open houses were held at specific points in the process - during the development of “big picture” planning strategies, at the draft master plan stage, and at the conclusion of the master plan.
The master planning process is deeply rooted in the framework of the Strategic Plan and is one of the tools that help achieve the campus goals set-forth in the Strategic Plan. The vision, mission, values, and goals identified in the Strategic Plan drove the master plan process, goals, and principles. In return, the master plan, through its planning recommendations, reinforces the Strategic Plan and the commitment of the University to: its people and the community, to scholarship, and to sustainability.
VISION
In the pioneering spirit of the Wright Brothers, Wright State will be Ohio’s most innovative university, known and admired for our diversity and for the transformative impact we have on the lives of our students and on the communities we serve.

MISSION
We transform the lives of our students and the communities we serve.
We are committed to:
• Achieving learning outcomes through innovative, high quality programs for all students: undergraduate, graduate and professional;
• Conducting scholarly research and creative endeavors; and to
• Engaging in significant community service.

VALUES
Wright State University is proud to be at the nexus of discovery and innovation. At our core is a set of values that drive our priorities and decision making.

People – we are committed to the success of students, faculty and staff. We provide an inclusive academic environment for people with a diverse range of abilities and educational backgrounds; ethnic and cultural heritages; family experiences and economic means; physical and learning differences; geographically mobile and place bound circumstances; and career and life aspirations.

Learning – we are responsible for sharing a wealth of knowledge, enabling discovery, fostering innovation and supporting scholarship in its many forms to better serve our regional, national and global communities. As a learning-centered university, we fulfill responsibilities most effectively when students are engaged throughout the process of discovery. Freedom of academic inquiry and expression are the foundations of knowledge and discovery.

Partnerships – we are catalysts for transforming lives and the communities we serve. Through collaborations and partnerships with businesses, educators, agencies and organizations we will achieve our goals of regional development, cross-cultural cooperation, entrepreneurial advancement and improved global relations.

Relationships – the success of each individual strengthens our community. We promise to maintain high ethical standards in all of our relationships and operations through open communication, trust, professionalism, and a collaborative spirit. We recognize the inherent value and promise of each individual and welcome all who seek transform their lives.

Sustainability – the necessity of preserving our planet compels us to weigh the impact of our decisions, both short-term and long-term. Additionally, prudent financial management supports the sustainability of our operations. Furthermore, the pursuit of knowledge is sustainable, and our programs will maintain their relevance, only if we continually invest in the infrastructure to support research and creative endeavors.

GOALS
Goal 1: ACADEMIC DISTINCTIVENESS AND QUALITY
Enhance our distinctive learning experience to produce talented graduates with the knowledge and skills essential for critical thinking, meaningful civic engagement, international competency, an appreciation for the arts, life-long learning and the ability to lead and adapt in a rapidly changing world.

Goal 2: EDUCATIONAL ATTAINMENT
Enhance student access to and successful participation in higher education through quality and innovative instruction and student life programs that increase graduation and career placement for a diverse student body.

Goal 3: RESEARCH AND INNOVATION
Expand our scholarship in innovative and targeted ways to address regional, national and global needs.

Goal 4: COMMUNITY TRANSFORMATION
Provide leadership to promote and support social, cultural and economic development within the region through collaborations with local, state, national and global partners.

Goal 5: VALUED RESOURCES
Develop and sustain the human, financial and physical resources required to accomplish the university’s strategic goals.

Adopted by Board of Trustees
June 13, 2008
The Campus

The Wright State University campus is located in Dayton, Ohio, approximately 70 miles west of Columbus, the state capital. The campus covers approximately 557 acres and includes a variety of athletic, housing, research, academics, and support facilities. Understanding the history of the University and its regional and local context was a crucial first step in the planning process. An in-depth understanding of the physical campus was developed by analyzing the existing campus systems including:

- zoning and land use patterns
- building conditions
- vehicular and pedestrian circulation system
- parking numbers and distribution
- landscape and open space
- site topography and hydrology, and
- infrastructure.

The site analysis revealed existing campus resources and opportunities as well as challenges to be addressed by the master plan. The analysis of the campus and environs are recorded through photographs and diagrams in this section. Additional analysis documentation can be found in the Appendix section of this report.

3.0 Analysis
Regional Setting

Relationship To Wright Patterson Air Force Base
Site Topography

Slope Analysis
Planning Goals and Principles

The master plan core team, campus members, and the NBBJ consultant team jointly developed the following planning goals and principles to serve as a guide to the master plan and future campus development.

**GENERAL**

- Ensure that all future campus planning and design supports the precept that the university and its campus as a whole is more important than any of its parts.
- Create a flexible, functional, attractive and sustainable general planning framework for the future physical evolution of the university and its campus.
- Develop, and periodically review and revise as needed, a series of planning principles and goals to help guide the physical evolution of the campus.

**LAND USE**

- Ensure that future expansion and improvements within the core campus maintain and further enhance its compactness, efficiency, and attractiveness as an academic and research environment.
- Utilize future development to reinforce logical and functional campus zoning, including the main academic quad, the existing research quad, and an arts quad.
- Ensure that existing and future student amenities and services are “on the path,” and serve to enhance and re-enforce campus community, including development
of key facilities strategically located between the academic core and the major concentrations of student housing and commuter student parking.

- Identify and integrate future student housing into sites that are adjacent to and reinforce student life on the core campus.
- Reorganize the current athletic and recreation zone into a more interconnected, coherent, and ordered series of uses, parking, and open spaces.
- Identify and develop future, interconnected research and special use zones, including the long-term relocation and redevelopment of the current services complex.

**BUILDING USE**

- Provide for an array of future building sites, distributed both within and outside of the campus core, to meet the future needs of a wide variety of academic, research, and support programs.
- Locate and design future buildings to maximize ground floor activity and transparency to further animate and enrich campus life.
- Utilize future building renovations and new buildings to develop a higher level of design consistency and sustainability.
- Identify any existing campus buildings that may, over time, become functionally or physically obsolete, and appropriately defer major future investment in these buildings to permit future demolition and a higher and better use of that building site.
PEDESTRIAN MOVEMENT

- Ensure that all future development within and adjacent to the core campus connects and extends outward into the campus tunnel system and the ground level series of campus quads and pedestrian spaces and pathways.
- In coordination with future building development, construct pedestrian bridges over the campus loop road that interconnect major commuter parking and student housing to the core campus.
- Create a pedestrian spine that helps organize, service, and interconnect uses within the athletics and recreation spine.
- Complete a pedestrian bikeway loop that interconnects all areas of the campus including: Kauffman Avenue frontage, the protected pathways through sections of the campus woodlands, and the new pedestrian spine.
- Ensure that the campus pedestrian/bikeway loop safely and conveniently interconnects with all adjacent public pedestrian systems.
TRAFFIC AND PARKING

• Over time, improve the campus roadway system and its capacity to include improvements to major intersections, turning lanes, signage, and signalization, as well as provide additional vehicular entry and exit points to the campus to further distribute traffic improvements along a variety of campus entries and exits.

• Identify and preserve well-located sites for future multilevel parking, including a major structure for commuter parking near the student center.

• Identify and preserve other distributed sites for smaller, integrated parking decks as well.
• Utilize all future campus development to raise the level of campus design quality and environmental sustainability.
• Preserve major areas of the campus woodlands, notably the woodlands surrounding the creek and ravine environment.
• Soften the current hard and built-up edges between the core campus and the adjacent woodlands, and showcase the woods as a major campus feature through integration of well-designed buildings on the woodland edge and reforestation of the built-up core campus.
• Avoid over-densifying the core campus, and ensure that all new buildings within the campus core further define and complete pedestrian quadrangles.
• Preserve contiguous open space along the campus frontage parallel to Colonel Glenn Highway.
• Utilize the campus frontage along peripheral roads to locate key campus buildings to enhance sense of arrival and create campus gateway opportunities.
Framework Options

At the onset, four long-term campus framework options were developed that began to address the needs of the campus and formulate a vision for future growth of the campus. The following criteria were used as broad tests for refinement of the long-term framework options:

- capacity (in phases, flexible)
- functionality (how it works, adjacencies)
- access (connected, understandable)
- image and identity (adds to campus beauty, and coherence)
- value (cost-benefit)

The four options (Expanded Core, Woods as Campus Core, Dual Core, Campus Spine) were presented to the campus community to compare the strengths and limitations of each and to elicit ‘best thinking’. The feedback from the campus community is presented here as key points.
Option A: Expanded Core
- Compact, walkable, functional
- Keeps core intact, small university feel
- Consolidated academics, library more centered
- Status quo, no real change
- Image? Integration?
- Woods impact
Option B: Woods as Campus Core
- Spread-out, dead-end roads
- Integration with woods
- Curb appeal with Colonel Glenn frontage development
- Most aesthetically interesting
- Woods impact
Option C: Dual Core
- Split campus, isolation, seriously disjointed
- Dysfunctional and will never be one university
- Adjacencies, duplication of services
- Save the woods
- Building parking garages (#8)
Option D: Campus Spine
• Good for cars less so for pedestrians-spread out
• Great access, a true “university boulevard”
• Increases capacity, more opportunities to expand
Based on the feedback from the campus community, options A, B, and D were identified as having most potential. Additional analyses resulted in two refined options:

1. Campus Parkway
2. University Drive

Campus Parkway Option
- Create a new campus parkway between Colonel Glenn Highway and Kauffman Avenue
- Create “new face” development sites along campus parkway
- Develop core expansion inside expanded loop road
- Create a new library green on the core campus
- Expansion of contiguous woods
- Expand the athletic/recreation zone from Colonel Glenn on the south and Kauffman Ave to the north
- Relocate University Boulevard and services zone for special uses.

Campus Parkway

1. new arts quad
2. new academic expansion
3. new student life center
4. new residential
5. new research expansion
6. structured parking
7. the woods
8. parking deck
9. service / support
10. recreation field house
11. natatorium
12. multi-use sports fields
13. relocated tennis courts + facilities
14. special-use sites
15. softball field

vehicular entrance
Functional Zoning

- Off Campus Housing
- Student Life
- Athletics and Recreation
- Student Life
- WSU boundary
- Housing
- Student Life
- Research Core
- Athletics and Recreation
- Academic
- Arts
- Athletics and Recreation
- Support
- Special Use
- Off Campus Housing
- Special Use
- Student Life
- Extension of the Forest Vector
- Growth Vectors
- Existing Tunnel System
- Extended Tunnel System
- Long-term extension of tunnel

New Building Sites

- Building sites (near - mid term)
- Future expansion buildings (long term)
- Parking deck
- Parking structures
- Existing Buildings
- Existing Tunnel System
- pedestrian tunnel system
- Student Life Core
- Forest vector extension
University Drive Option

- Develop University Boulevard as a primary campus road way and organizer
- Completion and expansion of core campus and frontage development along Colonel Glenn
- Integrate special, new building sites into woods, and re-establish woods on parts of the core campus
- Redevelop the northeast zone for as a “gateway” or for special use
- Establish additional sites along upgraded university boulevard
- Compact and reorganized recreation zone between Colonel Glenn Highway to the south and University Boulevard to the north

The Campus Parkway and University Drive options were presented to the campus community to formulate consensus around the best option. The final master plan framework is a composite of the strengths identified in both these options.
Master Plan Recommendations

- classroom building
- creative arts drop-off plaza
- creative arts expansion
- creative arts expansion
- creative arts expansion
- arts expansion opportunity/feature building
- creative arts expansion
- research: human centered innovation
- research building
- neuroscience building
- medical school addition
- research/high-bay engineering student project building (option 1)
- engineering building addition
- addition to Hamilton Hall dormitory
- auditorium & program space
- academic building
- riveter complex
- student housing
- student life/community center
- feature building
- visitor/alumni center
- archives
- conference accommodation/support
- conference facility
- facilities and operations
- arts quadrangle
- recreation field
- special use/storage
- micro/special use
- high-bay engineering student project building (option 2)
- special use
- sport medical institute
- relocated sports field
- relocated tennis courts
- field house
- aquatic center/natatorium
- recreational field
- parking deck
- parking garage
Overview

The 2010 Campus Master Plan for Wright State University provides a long-term, ten-year plus, outlook for the future of the campus with realistic and achievable short-term and mid-term strategies to guide anticipated growth and capital investments.

The plan focuses on maintaining a compact campus core, the solidification of an athletic and recreation precinct along Route 844 and defining a key opportunity zone along Kauffman Road. The existing wooded area that occupies the center of the campus remains largely intact, with limited new long-term uses located along its edges and opportunities to enhance campus and community access into and through it.

4.0 Master Plan

The University determined that the primary master plan outcomes should:

- Define future quality and character of campus physical environment and
- Identify future buildable sites, open space, and areas of potential growth
The core campus can be described as the Central Core, the West Core, and the East Core. The Central Core, the area inside the campus loop road, contains the bulk of the campus’ academic, research, and student life facilities. The West Core is currently mostly surface parking. The master plan recommends that new housing and student life facilities be constructed in this zone to strengthen the connections between on-campus student housing and the private housing developments along Zink Road that are predominately occupied by WSU students.

The East Core is currently undeveloped and predominately wooded. The plan recommends that building sites be strategically located along the edge of the wooded area to better integrate the campus built environment with the natural environment established by the woods.

The Woods zone, which occupies a large area in the center of the campus, is recommended to be maintained, with the exception of some long-term limited development along the western edge. While much of the campus growth can be accommodated in the core campus over the next ten years, consideration must be given to where academic and research growth occurs beyond that.

Based on the current configuration of academic and research uses on campus, the logical growth vector is towards the northeast. As such, the master plan has identified several key building sites, in the woods, along the northeast edge of the core campus.

The Athletic and Recreation zone has been defined as the area between Raider Road (extended to Kauffman Road) and Route

Proposed Campus Zoning

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Campus Zoning

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The Athletic and Recreation zone has been defined as the area between Raider Road (extended to Kauffman Road) and Route
```
844 from Colonel Glenn Highway to Kauffman Road. This zone currently incorporates most of WSU’s athletic facilities. The master plan recommends relocating the existing recreation fields along the Colonel Glenn frontage, in the Core Campus, to this zone. The only exception would be the recreation field at the intersection of Kauffman Road and Zink Road, which serves some of the needs of on campus housing. A site has also been reserved, long-term, for a future indoor practice facility and natatorium in the southwest quadrant of the intersection of University Boulevard and Raider Road.

The master plan recommends that a key opportunity zone be set aside along Kaufmann Road for future non-academic uses that are either WSU sponsored or involve business ventures with other organizations. Kauffman Road provides excellent visibility and convenient access to the zone.

A new Support / Services zone is proposed on WSU owned land on the east side of Route 844. This land was cut-off from the main campus with the construction of Route 844 and has been vacant ever since. This zone has convenient access to Colonel Glenn Highway which connects directly to University Boulevard and Raider Road for quick campus access.
The master plan recommends minimal changes to vehicular circulation through the campus. The existing roadway loop around the core campus has only been modified on the west side to create a traffic-free core campus. Raider Road has been extended north of University Boulevard, to connect to Kaufmann Road establishing a new entrance into the campus.

The master plan recommends that the core campus accommodate campus growth while maintaining core campus aesthetics. This additional growth will result in increased program in the core campus that will lead to an increased demand for parking. The preferred sustainable option is to not add additional parking in the core. This strategy, however, would require a change in parking behavior amongst campus community. It is recommended that the University encourage campus faculty, staff, and students park outside the core on parking lots available outside of the core.

If the campus community parking habits do not change then parking demand in the core campus will increase as projected. To meet this increased demand for parking, the master plan recommends a number of new parking structures, strategically located around the core campus to serve students, faculty and visitors. These parking facilities are provided as placeholder sites.
in the event that parking habits remain unchanged and demands keep increasing. The parking structures will be phased in over time, and will also help to create new building sites, reduce the amount of extensive surface parking and allow for the creation of new green areas.

Currently, the campus provides no sheltered parking spaces for people with electric wheelchairs, thus exposing them to the elements of the weather. Providing covered parking in the core will allow people with wheelchairs to safely and quickly get to underground tunnels.

In addition, with the impetus on expanding the creative arts, there is an impending need to provide public access to the creative arts and library. Detail study to determine the public access should be undertaken before finalizing the location of the proposed parking garage near the library and creative arts buildings.

The plan also recommends that a one-level parking deck be constructed off the northeast end of the Nutter Center. This proposal requires partial filling of the existing retention pond, which has already received approvals from regulatory agencies. The grade change in this area facilitates the creation of the one-level deck, which will provide considerably more close-in parking to serve the needs of larger events at the Center.
Pedestrian Circulation

Pedestrian circulation on the WSU campus occurs primary within and around the core campus and between the core campus and student housing. Currently there is limited pedestrian access at east side of the core campus; new sidewalks, as recommended in the 1995 Master Plan, should be incorporated to improve access in the east side of the core campus. Pedestrian connections to other areas of the campus and to nearby off-campus destinations occur mostly by car. The master plan outlines these core pedestrian circulation strategies:

Link Uses
As the campus core is infilled with new facilities it will be important to add new pathways to better interconnect one building to another.

On the path activities
As much as possible, buildings should edge pathways providing activity that can spill from indoors to outdoors.

Bikeways and footpaths
The master plan recommends expanding and enhancing the core campus pedestrian circulation network to incorporate a campus wide walkway/bikeway system that provides accessible routes throughout the campus for its use and enjoyment by students, faculty and the community. Because the campus is so expansive, and with the woodland separating the East Campus from the Core and residences, the network of walking paths and bikeways should be expanded.

Regional connections

Campus Trail Network
The expanded campus walkway/bikeway system will also connect into the existing regional trail system between Kauffman Road and Route 444 and the planned regional trail system that will connect south over I-675 to the Mall at Fairfield Commons and other locations.

Accessible routes
The university has a world renowned reputation for accessibility as a campus. As the campus expands accessible routes and paths should also expand to provide convenient and safe connections at grade and below grade (tunnels). In addition accessible paths, which interconnect the Core Campus and the East campus through and at the perimeter of the Woodland, should be developed.

As such, the placement and organization of new buildings and parking structures has been done to allow for the logically and orderly expansion of the existing tunnel system. Care has also been taken to minimize the number of "dead-end" tunnels and in the case of engineering and the medical school, the master plan recommends creating a new tunnel loop connecting the medical school to engineering.

Safety and security
In keeping with the goal of ensuring a safe learning environment, lighting on campus should be expanded and improved. As the campus expands, additional security/emergency kiosks should be introduced where required. The location and design of these elements should be in cohesion with the landscape and building aesthetics and be uniform across campus.
Open Space and Place Making

Existing Open Space Character

The campus has seen quite a transformation since the creation of the initial academic quad constructed by 1968. While the core campus building infrastructure, arranged in the familiar campus grid, has created a series of inter-connected open spaces of varied scale and proportion, the visual quality and activation of these spaces is inconsistent.

In the “1995 Master Plan”, developed by Van Yahres Associates, this realization was addressed and subsequent efforts to upgrade some campus open spaces have been successful. In particular the North Campus Quad has been redeveloped with the addition of structured gardens composed of tree allees and bosques, low evergreen hedges, seat walls, walks and plaza spaces with paver surfaces ornamental light poles, and sculpture. This area of campus is now an attractive and popular open space that has a clear sense of place.

With the infill strategies outlined within this master plan there will be excellent opportunities to further enhance the outdoor campus environment continuing the momentum that has begun.

The Woodland

Covering over 150 of the campus’s 600 acres, the existing woodland has a tremendous impact on the character of the campus. The woodland wraps the campus on the west, north and east with the most significant and mature stands of native trees located to the east. In addition to the visual quality that the

Nutter Center and Nutter Pond

The Woods at Colonel Glenn Highway

Sports fields and native planting fields at Colonel Glenn Highway
woodlands provide, they are also used by multiple colleges and departments for educational studies.

The woodland consists of numerous trees and understory species of plants. The topography is pronounced with the higher elevations associated with the core campus edge and lower elevations occurring away from the core campus. Drainage swales and ravines fall within the woodland and numerous species of animals reside and move through the woodland.

**The Expansion of Campus Open Spaces**

The Campus Woodlands

Strategic Development Along Woodland Edges
With the infill of academic and research buildings within the campus core and the core’s perimeter, there will be numerous opportunities for more and more activated outdoor spaces on the campus. A key goal will be to create attractive and meaningful “third place learning environments”. [First place environments being the places (residential places) where students and faculty live; second place being the places (classroom places) where students and faculty teach and learn.]

Third places can be spaces indoors or outdoors where people naturally meet and interact serendipitously or casually to talk, learn, share and generally interact. For these spaces to become reality, the designers of the new facilities must be aware of the “chemistry” that occurs when a space has the proper scale, lighting, transparency, amenities, program, and materiality that brings people together (e.g. a Starbucks or Panera Bread environment, for instance).

In addition to the human factor, these new open spaces are also opportunities to function as performative spaces. The spaces, from a landscape perspective can be more than visually stimulating. They can be spaces that perform environmentally by reducing heat island effect on roofs and parking lots while filtering and slowing storm water allowing it to recharge the below grade aquifer.

**Open Spaces as Connectors**

*Open Space Opportunities Created by Infill Buildings Within Core Campus*

*Expand Core Campus Spaces*
While campus open spaces clearly serve as places for people to gather and interact, they also serve as key connectors as students move between classes and other destinations.

A number of strategic connections have been identified as the campus evolves over the next 20 years.

**New On-Campus Student Housing Connection:**
The plan calls for the removal of the antiquated Forest Lane Apartments and the replacement of a new state-of-the-art on-campus housing community. This complex will consist of light retail along with student amenities and services on the first floor with residential units above. Buildings will edge a linear central plaza which will become the hub of activity for this community while serving as a connector for students walking from the Zinc Road residential areas as they make their way to the core campus.

**Off-Campus Housing Connection Reinforced:**
The bridge which traverses the Woodland Ravine was constructed to connect the Zink Road residential complex and the North Academic Quad. As the campus grows, the path that extends from the bridge presents a great opportunity for the addition of new program that lessen the gap between the two entities and provide “third place” opportunities. The area due south of the bridge will be redeveloped as a new student center. The area due north of the existing North Academic Quad will expand along the path to the edge of the campus ring road.

**Reinforced Linkages to Nutter Center and East Campus:**
While the Woodland is clearly an asset to the campus, it also can be understood as a barrier between the Core Campus and facilities located at the East Campus.

The plan locates a series of environmentally sensitive, low impact buildings to be located at the south fringe of the Woodland parallel to Colonel Glenn Road between the Main Campus Gateway and the Nutter Center Gateway. These buildings will visually connect the Core and East campus areas. The pathway that connects the Core Campus with the East Campus/Nutter Center will meander through this new complex providing a more pleasant and active experience.

**Redefine and Activate the Student Union/Engineering Quad:**
While this open space is the largest within the Core Campus it is also one of the least successful people spaces on campus. The edges to the space are buildings which have few entrances, mostly solid walls, no activating program and little hierarchy architecturally.

As the campus grows and evolves efforts should be made to:
- transform this space into a series of smaller spaces, to address the scale issue,
- activate edges of the space as new buildings are added to the Core Campus, and
- add program to the outdoor spaces that create activity.
Campus Edges

The perimeter of the 600-acre consists of a wide variety of conditions that include academic, sports, entertainment, and woodland. Three quarters of the site is edged by major roads or highways with Colonel Glenn Road to the south, Highway 644 to the east and Kaufmann Road to the north. The west edge of the campus is edged by the woodland ravine which separates off-site housing from the core campus.

Because the campus edges are so extensive and diverse, it is a significant challenge to create a single edge appearance that is associated with the university.

The approach that is recommended by this master plan suggests that since the woodland is such a dominant and beautiful part of the campus, that it be extended to other perimeter areas of the campus to create a more unified appearance.

The uniformity of the campus perimeter presents the opportunity to create contrast at the six campus gateways as they create an open space to the campus that becomes the setting for significant architectural gateway elements that announce Wright State University.

The Facility Services function resides in a high real estate area and should be moved. If these elements remain, significant screening is needed.
Image and identity:
While the existing gateway features off Colonel Glenn Road are at an appropriately large scale, they are at three different expressions, which weakens the visual brand of WSU. As the campus develops, steps should be taken to unify the gateway features.
Presently the landscape of the Core Campus front yard consists of recreation fields, a significant plot of prairie grasses as well as areas of open lawn with some tree plantings. The open nature of the landscape allows visibility to the southern-most buildings of the Core Campus. The master plan recommends that rectangular plots of reforested woodland be developed in open areas at the campus perimeter to create a consistent campus edge that also restores the woodland character. The woodland would consist of native species found in the existing woodland and could also be features of study by various departments within the university.

Screen negative views – Parking:
Within the campus large areas of surface parking will remain in the near and long term. It is recommended that this parking be visually screened from view from the campus perimeter drive. This can be accomplished through the use of landforms and informal hedge planting.

Frame good views – Quad Spaces:
Landscape at the perimeter and within the Core Campus can work with the shape and location of new buildings to frame desirable views within the campus as well as to the perimeter of the campus. Lines of trees and masses of shrub plantings can reinforce the movement of pedestrians and physically frame views to campus open spaces and features.
Sustainability

WSU’s emphasizes ‘sustainability’ as one of the core values that drives WSU’s “priorities and decision making”. The master plan responds to the strategic plan and commits to creating the physical campus as a model for sustainable design and development.

The master plan adopts a truly comprehensive approach to sustainability. The recommendations of the plan portray stewardship of our environmental resources while simultaneously being financially prudent and creating a physical environment that fosters community spirit and nurtures scholarly endeavors.

**Sustainable land use strategy:**
A key sustainable land use strategy is to locate new development in those zones of the campus that are already developed and strategically preserve natural lands and open space. By maintaining a compact campus core the plan ensures preserving invaluable greenfields, efficient growth patterns, diversity of uses in the core campus, and increased opportunities of collaboration and chance interactions.

Beyond the next ten years as growth needs exceed the capacity of the core campus some development will occur in the woods; however, these sites have been intentionally chosen along the edges to minimize disruption of the ecologically sensitive environment and maintain the invaluable character of the woods. Overall, the land use strategy of the plan creates opportunities of connecting the campus spatially and programmatically to the neighborhood community and city.
Environmental stewardship:
Planning for the campus necessitates being critical about the impact campus growth has on environmental resources of not only the campus, but also beyond the campus boundaries. Several strategies are adopted in the master plan to support environmental stewardship efforts. These resources present the obvious ecological and human health benefits, add aesthetic value to the campus, and if planned right can serve as live laboratories of learning.

As described in the land use strategy, preservation of the woodland is critical to the plan. In addition, via a network of trails, access is provided into and through the woods to increase community engagement with the environment. The master plan also recommends that rectangular plots of reforested woodland (using native species) be developed in open areas at the campus perimeter to restore the woodland character.

As the campus invests in its buildings and grounds, the plan recommends investigating and seizing every opportunity to allow open spaces and landscapes to perform environmentally by reducing heat island effect on roofs and parking lots while filtering and slowing storm water allowing it to recharge the below grade aquifer.

Preserving and enhancing campus open space as campus outdoor social spaces is a critical master plan strategy.
Sustainable parking strategy:
Traditional surface parking lots, as in the case of the WSU campus, are large impervious areas of land that increase the storm-water run-off, decrease ground water recharge, and contribute to 'heat-island' effect. The master plan proposes surface parking reduction by building multi-level garages and one-level decks. This will reduce the impervious surfaces on campus and allow for creation of new green areas that will decrease storm-water run-off, decrease heat-island effect, create opportunities for outdoor community space, and enhance campus aesthetics. In addition, these parking structures will not only meet the increased parking space demand, but also create new building sites on already developed land, thus allowing preservation of precious greenfield sites.

Examples of Bioswales Used As Landscape Elements to Filter and Slow Storm Water Run-off
Sustainable physical environment:

The master plan lays the framework for optimizing on the existing physical resources and making most efficient use of the limited physical resources at hand. The master plan proposes new building be built to high levels of environmental and energy efficient standards. The most recently completed Mathew O. Diggs III Laboratory for Science Research has set an excellent precedent for future campus buildings by achieving LEED-NC Gold certification.

Building maintenance and operation has a large role in creating a sustainable physical environment. The master plan applauds and recommends that the ongoing campus-wide recycling and energy efficiency programs continue and be enhanced as the campus expands. Roof gardens where practically feasible will be provided to increase energy efficiency and decrease local heat island effect.

Universal accessibility to all campus facilities is important to create a truly sustainable physical environment. The placement and organization of new buildings and parking structures allow for logical and efficient expansion of the existing underground tunnel system. This will ensure that the University continues to remain one of the most accessible campuses in the country.
5.0 Implementation Strategy

The implementation strategy recommends the master plan be implemented in four phases:
Phase 1- immediate-term (0-3 years)
Phase 2- short-term (3-5 years)
Phase 3 - mid-term (5-10 years)
Phase 4 - long-term (10+ years)

While the phasing allows for anticipated near-term priorities it is also flexible enough to support unanticipated long-term needs and future evolution of the campus.

The short-term plan for the campus incorporates a number of currently planned projects at different stages in the funding and development process.

The mid-term plan for the campus incorporates new building sites and parking structures, and meets the needs of campus athletic and recreation facilities.

The long-term plan for the campus proposes a number of new buildings, parking facilities, and campus open space enhancement opportunities.
**Immediate-term Plan: 0-3 years**

**CAMPUS CORE**
- Classroom Building (four 75-seat classrooms, two 125-seat auditoriums)
- Neuroscience – 60,000SF
- Complete Phase VI of 1995 Campus Master Plan site around CAC and the Library
- Creative Arts Expansion - music / theatre
- New Art Gallery
- Art Sculpture Garden
- Remove parking lot 15
- Parking garage (near Dunbar Library)
- Establish Creative Arts drop-off and entry plaza
- Implement new structural landscaping

**KAUFFMAN road/service area**
- Sports Medicine I
- Replace lot 20 spaces lost to Raider Road extension
- Raider road extension
- Relocate Grounds and Operations west of Zink Road

**WEST CORE**
- Complete Streetscape Along Loop Road

**EAST CORE**
- Extend and Complete Raider Road to Kauffman
- Add softball fields
- Fill in part of existing lake and replace with additional parking
- Relocate tennis courts
- Rinzler Complex
  - Rest rooms
  - Soccer field
- Streetscape
- Improvements to University Boulevard/Raider Road to establish a new gateway
- Begin implementation of pedestrian spine through precinct
- Tie into campus wide and regional trail system

**ATHLETICS and RECREATION**
- Streetscape
- Improvements to University Boulevard/Raider Road to establish a new gateway
- Begin implementation of pedestrian spine through precinct
- Tie into campus wide and regional trail system

**PHASE I 0-3 YEARS**
PHASE 1
0-3 YEARS
Short-term Plan: 3-5 years

PHASE II 3-5 YEARS

- Human Centered Innovation (Collaboration) - 60,000 SF
- Forest Lane Replacement (250-320 units)
- Dining/Student Life Center TBD
- “Community Center” / Student Life Center
- 2 Catholic Diocese
PHASE 2
3-5 YEARS

WRIGHT STATE UNIVERSITY MASTER PLAN

Colonel Glenn Highway
Route 844
Loop Road
University Blvd
Duncan Drive
Zink Road
Shields Ave
Kauffman Avenue
Route 444
University Blvd
Raider Rd
North Fair Field Road
PHASE 2 PARKING SUMMARY
3-5 YEARS by year 2014

- Core Campus Spaces: 5,805
- Overall Campus Spaces: 10,285
- Commuter Student Permit Demand: 11,644
- Permits/space: 2.5:1
- Development Cost: $28.3 Million
- Permit Fee Cost: $160/yr additional
- Net Gain of Core: 341*
- Net Gain of Overall: 581*

* cumulative
Mid-term Plan: 5-10 years

PHASE III 5-10 YEARS

- Campus Core
  - Research building
  - Auditorium: 200-250, Classrooms: 2-4, Quasi Conference Center
  - Engineering: Student Project Building (H-B Warehouse)-Option B, Residential Building to complement Hamilton Hall

- KAUFFMAN Road/service area
  - Mini-U (New childcare location)
  - Engineering Student project Building-Option A

- West Core
  - Parking Lot Replacement
  - Student Center parking garage
  - Eliminate part of existing Loop Road and move Loop Road to western edge of campus

- East Core
  - Library Archives along Colonel Glenn
  - Visitor/Alumni Center along Colone Glenn

- Athletics and Recreation
  - Assess need for special use buildings east of 844

Mid-term Plan: 5-10 years
PHASE 3
5-10 YEARS
PHASE 3 PARKING SUMMARY
5-10 YEARS

• Core Campus Spaces: 6,507
• Overall Campus Spaces: 11,305
• Commuter Student Permit Demand: 13,076
• Permits/space: 2.5:1
• Development Cost: $31.6 Million
• Permit Fee Cost: $360/yr additional
• Net Gain of Core: 1,419*
• Net Gain of Overall: 1,601*
  *cumulative
Long-term Plan: 10+ years

**Phase III** 10+ Years Long Term
PHASE 4
10+ YEARS

WRIGHT STATE UNIVERSITY MASTER PLAN
View of Proposed Academic Core Expansion Northwest

View of Proposed Arts Expansion Opportunity

Existing Academic Core Expansion Site
PHASE 4 PARKING SUMMARY
10+ YEARS

- Core Campus Spaces: 7,561
- Overall Campus Spaces: 12,781
- Commuter Student Permit Demand: 13,520
- Permits to space: 2.2:1
- Development Cost: $40.8 Million
- Permit Fee Cost: $384/yr additional
- Net Gain of Core: 2,473*
- Net Gain of Overall: 3,077**

*cumulative
6.0 Appendix

Campus Interviews: Synopsis
Enrollment Characteristics
Site Analysis Diagrams
Parking Study
Campus Interviews: Synopsis

**INTERVIEW SYNOPSIS**

**KEY POINTS**
- pride, optimism, expectation
- mission focused, big picture enterprise thinking, “the next 50 years”
- know campus: “land rich, sites poor”
- core campus: compact, convenient, concrete, capacity?
- parking: everybody uses it, but few like it
- housing: not stitched into fabric of university
- woods: asset value unclear, no mandates either which way
- campus image: better than ever, still no arrival, not “there” yet
- campus life: voids, people don’t hang out on campus
- consistent themes: innovation, regional, access - a principle and a metaphor

**STUDENT INTERVIEWS**

**“ON THE STREET”**
- 25 students interviewed
  - 14 males, 12 females; ages 18-42; freshman through graduate students
- where I live:
  - 12 live on campus in dormitories
  - 7 live just off campus (only a few minutes away)
  - 7 live away from campus (from 15 minutes to 1 hour away)
- how I get to class:
  - of those living on campus, all walk (not bike) to class.
  - of those living near campus and away from campus
  - all drive to class
  - a few (4) sometimes carpool
- areas of study: A wide range (12 different) areas of study
STUDENT INTERVIEWS

“ON THE STREET”

• when asking what made students the most proud about WSU (in order from most often noted to least often):
  - my education, my specific course of study
  - the variety of good programs, academic record
  - tunnel system
  - modern, up-to-date, clean, well taken care of, safe
  - small class sizes
  - just being here (first in the family to attend college)
  - easily accessible to people with disabilities

STUDENT INTERVIEWS

“ON THE STREET”

• when asking what made students the least proud about WSU (in order from most often noted to least often):
  - no campus life, nothing to do, not a college town, hard to meet new people, boring, commuter school, people don't get involved, no traditions
  - lack of parking
  - N/A (I am proud of everything here)
  - Administrative systems aren't smooth, takes a lot to get things done, not enough academic counseling support, takes too long to graduate
  - “design of campus is flawed: housing is isolated; have to leave campus to talk to friends; don't just bump into people here.”
STUDENT INTERVIEWS

“ON THE STREET”

• If you could change one thing about WSU’s campus (in order from most often noted to least often):
  - more social activities, fun things to do
  - do more to get students and people of different races to know each other
  - give students something to be proud of (traditions, public arts, sports teams)
  - need to do more to inspire the community
  - more things to make you want to come to/stay on campus
  - Parking/Parking Garage
**Enrollment Characteristics**

**STUDENT ENROLLMENT CHARACTERISTICS**

- university enrollment
- age distribution
- ethnicity
- county of origin
- campus housing
- campus occupancy

<table>
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<th>FTE's main campus</th>
<th>Head Count main campus</th>
<th>Total university</th>
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<tbody>
<tr>
<td>1.1%</td>
<td>4.2%</td>
<td>23%</td>
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</table>

<table>
<thead>
<tr>
<th>Category</th>
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<th>Total University</th>
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<td>(13,554)</td>
</tr>
<tr>
<td>grad / prof'l</td>
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<td></td>
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<tr>
<td>fulltime</td>
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</tr>
<tr>
<td>part-time</td>
<td>(4,351)</td>
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</table>

**STUDENT ENROLLMENT, 2009**
less than two hour drive total (63.1%)

<table>
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<th>County of Residence</th>
<th>Number of Students</th>
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<td>Hamilton</td>
<td>637</td>
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<tr>
<td>Franklin</td>
<td>723</td>
</tr>
<tr>
<td>Miami</td>
<td>768</td>
</tr>
<tr>
<td>Warren</td>
<td>781</td>
</tr>
<tr>
<td>Clark</td>
<td>948</td>
</tr>
<tr>
<td>Greene</td>
<td>2,766</td>
</tr>
<tr>
<td>Montgomery</td>
<td>5,221</td>
</tr>
<tr>
<td>Other</td>
<td>6,932</td>
</tr>
</tbody>
</table>

County of Origin

- **Montgomery**: 27.8%
- **Greene**: 14.8%
- **Clark**: 5.6%
- **Miami**: 2.6%
- **Warren**: 5.0%
- **Franklin**: 4.2%
- **Hamilton**: 3.4%
- **Other**: 36.9%
ENROLLMENT GROWTH

MASTER PLAN IMPACTS
- the university experience: creating a community
- student quality of life – success
  - expectations
  - fair comparisons to norm
  - measures of success

A potential typology:
- residential undergraduate students (19% +/−, 2700 students)
- commuter undergraduate students (81% +/−, 10,800 student head count)
- graduate, professional, doctoral students (4,054 student head count)

5-YEAR (2004 - 2010) ENROLLMENT

% change last 5 years
+ 1,573 students
9.8% 🔼

+ 1,160 students
8.8% 🔼
ENROLLMENT GROWTH

RESIDENTIAL UNDERGRADUATE STUDENTS

- housing largely concentrated
- options:
  - maximize opportunities "along the path", between housing and campus
  - new housing, add to same area of concentration or new area with strong connectivity
  - reinforce current housing area: "hillside village"

ENROLLMENT GROWTH

COMMUTER UNDERGRADUATE STUDENTS

- define "success"
- traditional answer: major commuter parking, student union as gateway, "one-stop shop" for convenience services
- what makes them feel like fully vested undergraduate students?
- maximize opportunities and time students spend on campus
ENROLLMENT GROWTH

GRADUATE, PROFESSIONAL, DOCTORAL STUDENTS

- collaboration vs social mixing
- association with an academic / departmental "home"
- what are common "watering holes", informal meeting spaces, whiteboards, flexible areas, furniture, "crossroads" locations?
Site Analysis Diagrams

WRIGHT STATE UNIVERSITY MASTER PLAN
EXISTING PEDESTRIAN WALKING DISTANCE PLAN

WRIGHT STATE UNIVERSITY MASTER PLAN
EXISTING TRAFFIC CIRCULATION PLAN
Parking Study

The evolutionary development of the WSU campus has led to the establishment of four distinct parking subareas: the Main Campus Area, the Park-n-Ride Area, the Nutter Center Area and the Residents Community Area. The Department of Parking and Transportation (DPT) at WSU has - subareas.

The Main Campus Parking Area is viewed as the primary parking supply for the campus. Access to parking in the Main Campus is coveted by parking user groups (i.e. faculty, staff, students and visitors) and the closer the various parking facilities are to the academic buildings, the higher the demand among users for the spaces. At present, the Main Campus Parking Area is comprised of 5,311 spaces dispersed among 19 surface parking lots and 27 on-street spaces which line University Boulevard. Aside from 154 spaces located in the vicinity of the intersection of University Boulevard and Wright State Road (Lots 18 and 19), all of the parking spaces that comprise the Main Campus Area parking supply are located in and around the central core of campus.

The Park-n-Ride Area is viewed as the secondary parking supply of the campus and functions as the discounted overflow area to the Main Campus Parking Area. The Park-n-Ride Area is the designation given to the 1,082 spaces in Lot 20 located to the east of the campus woodlands between Kaufman Avenue and Wright State Road. Users who park in the Park-n-Ride Area are shuttled to the central core via the free University-sponsored Raider Bus System. Some users of the Park-n-Ride Lot are required to park at this location (i.e. freshman residential students), others may be forced into the Park-n-Ride Lot due to a lack of available spaces in the Main Campus Area and others choose to park here because of the lower parking fee.

The Nutter Center Area is composed of the 2,933 spaces dispersed among nine surface parking lots that surround the 12,000 seat Nutter Center special event facility. The Nutter Center Area spaces were developed primarily for the special event facility and must be available whenever they are needed for event setup and tear down. The Nutter Center Area parking facilities are managed and controlled by the Ogden Company, the private sector management firm that manages the Nutter Center. Table 2 provides a summary of existing campus parking spaces allocated to these WSU parking system user groups.

The Resident Community Area parking is exclusively dedicated to the students residing in the six on-campus housing complexes situated to the northwest of the Main Campus Area. The majority of the 1,492 resident parking spaces can only be accessed by vehicle from Zink Road. The one exception is the 126-space parking lot at the Forest Lane Apartment complex which is accessed from Lot 4 in the Main Campus Area. Although the DPT manages the parking in these resident community areas, this supply of spaces, like the spaces at the Nutter Center, are not viewed by DPT as part of the general parking accommodations of the campus.

II. Existing Parking Conditions & Circumstances

Existing Parking Supply

The University’s DPT provided an inventory of the parking spaces by facility on campus. This inventory is shown in Table 1. According to the DPT records, there are 10,818 parking spaces across the campus. This total includes the spaces in the Main Campus Area, the Park-n-Ride Area, the Nutter Center Area and the Resident Community Area. The existing surface parking lots on the WSU campus consume approximately 98 acres (18%) of the University’s total land area. However, while the Main Campus and Park-n-Ride Areas are primarily used to accommodate the daily population of commuter students, faculty/staff and visitors that park on campus, these two areas combined only account for approximately 59% of the total campus parking supply. A complete listing of the existing parking lots (with space counts) has been included in Appendix A.

<table>
<thead>
<tr>
<th>WASU PARKING AREA</th>
<th>Spaces</th>
<th>Est. Acres</th>
<th>Avg SF/Sp</th>
<th>Supply %</th>
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</thead>
<tbody>
<tr>
<td>Main Campus</td>
<td>5,311</td>
<td>45</td>
<td>374</td>
<td>49%</td>
</tr>
<tr>
<td>Park-n-Ride</td>
<td>1,082</td>
<td>11</td>
<td>431</td>
<td>10%</td>
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<tr>
<td>Nutter Center</td>
<td>2,933</td>
<td>29</td>
<td>426</td>
<td>27%</td>
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<tr>
<td>Resident Community</td>
<td>1,492</td>
<td>14</td>
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<td>14%</td>
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<tr>
<td>Totals</td>
<td>10,818</td>
<td>98</td>
<td>408</td>
<td>100%</td>
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</table>

Space Allocation, Access Restrictions & Parking User Group Accommodations

DPT regulations require that all weekday parkers on campus must have a valid WSU parking permit. DPT enforcement personnel monitor compliance with this parking regulation and issue citations to identified violators. There are four primary categories of WSU parking system users namely Commuter Students, Resident Students, Faculty/Staff members, and Visitors. Smaller categories of other special users includes the President, Vice President, Deans, Board of Trustee members, ADA parkers, University service suppliers, contractors, vendors, ROTC staff and hybrid vehicles. While Nutter Center event patrons are also WSU parking system users, their presence on campus is regulated and generally confined to the Nutter Center parking lots which are managed and controlled by the Ogden Company, the private sector management firm that manages the Nutter Center. Table 2 provides a summary of existing campus parking spaces allocated to these WSU parking system user groups.

Parking access control gates are installed at only two parking lots (Lots 8 and 12) which are exclusively designated for Faculty/Staff use until 4:00pm on class days. Only Lot 2, which is devoted to Visitor Parking, is staffed by a parking attendant on a daily basis.
The DPT relies on staff to monitor and enforce compliance with the WSU parking program policies. Vehicles found parked on campus without a valid parking permit or parked in violation of posted parking rules and regulations are issued a parking citation. As shown in Table 4, fines for such parking infractions range between $25 and $250.

Table 2 PARKING SUPPLY ALLOCATION

<table>
<thead>
<tr>
<th>WSU SUPPLY ALLOCATION</th>
<th>Spaces</th>
<th>Supply %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Commuter</td>
<td>4,255</td>
<td>39%</td>
</tr>
<tr>
<td>Student Resident</td>
<td>1,492</td>
<td>14%</td>
</tr>
<tr>
<td>Faculty/Staff</td>
<td>1,590</td>
<td>15%</td>
</tr>
<tr>
<td>Visitor</td>
<td>185</td>
<td>2%</td>
</tr>
<tr>
<td>Nutter Ctr (Event)</td>
<td>2,933</td>
<td>27%</td>
</tr>
<tr>
<td>Other</td>
<td>363</td>
<td>3%</td>
</tr>
</tbody>
</table>

Totals: 10,818 100%

Source: DESMAN Associates

Resident students are provided parking at their respective housing complexes and are prohibited from parking elsewhere on campus until after 4:00 pm on class days. Commuter students have the option to park in either the Main Campus Area or the Park-n-Ride Area, but access to the gated Faculty/Staff-Only lots is only permissible after 4:00 pm. Faculty members and staff members are treated as a single user group and, aside from the two gated Faculty/Staff-only lots, this group of parkers share with commuter students for the available parking spaces in either the Main Campus Area or in the Park-n-Ride Area. Visitors to the Main Campus Area and the Park-n-Ride Area can either park in the Visitor-Only lot (Lot 2) or in one of five other lots (Lots 9, 10, 11, 15 and 20) containing designated visitor parking spaces after first obtaining a visitor parking permit from the parking attendant stationed at the Visitor-Only lot. Nutter Center event parkers are not required to display a permit but they are generally confined to the Nutter Center parking lots. None of these parking restrictions are upheld on weekends.

Parking Permits & Fines

All WSU parking system users other than those attending Nutter Center events are required to have a permit to park on campus. Several classes of parking permits can be obtained from the DPT depending on the standing of the intended permit users. In terms of parking permits, WSU recognizes four basic categories of parking system users, namely Faculty/Staff (as one group), and Service Providers/Contractors/Vendors (as one group), Students, and Visitors. Current Permit pricing is shown in Table 3.

Table 3 PARKING PERMIT PRICING

<table>
<thead>
<tr>
<th>WSU PERMIT TYPES</th>
<th>Annual</th>
<th>3 Quarters</th>
<th>2 Quarters</th>
<th>1 Quarter</th>
<th>Weekly</th>
<th>Daily</th>
<th>Temporary</th>
<th>Replacement</th>
</tr>
</thead>
<tbody>
<tr>
<td>A - Faculty/Staff (Reserved)</td>
<td>$411.00</td>
<td>$35</td>
<td>$27.00</td>
<td>$15.00</td>
<td>$4.00</td>
<td>$5.00</td>
<td>$4.00</td>
<td>$5.00</td>
</tr>
<tr>
<td>B - Faculty/Staff</td>
<td>$125</td>
<td>$35</td>
<td>$27.00</td>
<td>$15.00</td>
<td>$4.00</td>
<td>$5.00</td>
<td>$4.00</td>
<td>$5.00</td>
</tr>
<tr>
<td>C - Commuter Students</td>
<td>$95</td>
<td>$75.00</td>
<td>$50.00</td>
<td>$30.00</td>
<td>$3.00</td>
<td>$5.00</td>
<td>$3.00</td>
<td>$5.00</td>
</tr>
<tr>
<td>R - Park-n-Ride</td>
<td>$95</td>
<td>$75.00</td>
<td>$50.00</td>
<td>$30.00</td>
<td>$3.00</td>
<td>$5.00</td>
<td>$3.00</td>
<td>$5.00</td>
</tr>
<tr>
<td>Resident Students</td>
<td>$125</td>
<td>$95.00</td>
<td>$65.00</td>
<td>$35.00</td>
<td>$3.00</td>
<td>$5.00</td>
<td>$3.00</td>
<td>$5.00</td>
</tr>
<tr>
<td>Resident Students (1st Year)</td>
<td>$95</td>
<td>$75.00</td>
<td>$50.00</td>
<td>$30.00</td>
<td>$3.00</td>
<td>$5.00</td>
<td>$3.00</td>
<td>$5.00</td>
</tr>
<tr>
<td>Service/Contractors/Vendors</td>
<td>$125</td>
<td>$95.00</td>
<td>$65.00</td>
<td>$35.00</td>
<td>$3.00</td>
<td>$5.00</td>
<td>$3.00</td>
<td>$5.00</td>
</tr>
<tr>
<td>Visitors (with Permit)</td>
<td>$95</td>
<td>$75.00</td>
<td>$50.00</td>
<td>$30.00</td>
<td>$3.00</td>
<td>$5.00</td>
<td>$3.00</td>
<td>$5.00</td>
</tr>
<tr>
<td>Non-WSU/Non-Credit Students</td>
<td>$100.00</td>
<td>$75.00</td>
<td>$50.00</td>
<td>$30.00</td>
<td>$3.00</td>
<td>$5.00</td>
<td>$3.00</td>
<td>$5.00</td>
</tr>
</tbody>
</table>

Source: WSU Parking & Transportation Department

Peak Period Parking Demand & Permit Sales

In May 2010 (Spring Quarter), DESMAN surveyed the prevailing utilization of the campus parking supply (Which areas?) during the AM and PM timeframes. Parking activity peaked between the hours of 10:00 am and 11:00 am and again between 2:00 pm and 3:00 pm. The survey revealed that the total campus-wide parking supply was only 50% occupied during the AM timeframe and 57% occupied during the PM timeframe. However, the primary supply of Main Campus Area spaces were found to be 72% and 93% occupied during these respective AM and PM timeframes. The AM and PM occupancy levels of the Resident Community lots were 64% and 58%, respectively. This suggests that a significant share of resident housing students with permits drive and park in the non-resident parking facilities on campus during class periods. Students residing in the Village Apartment complex are permitted to park in student commuter spaces at anytime, however all other resident students are only allowed to park in the commuter student spaces throughout campus after 4:00 PM on weekdays.

It is a generally accepted principle in parking supply/demand analyses that the operational efficiency of a supply of parking diminishes at 85% to 95% occupancy. When this occurs it becomes difficult to find a parking space and vehicle circulation is slow. Often vehicles will stand idling in parking facility drive aisles waiting for a space to be vacated. This behavior was observed at several parking lots in the Main Campus area during the 2:00PM survey period when the overall occupancy of the area parking supply peaked at 93%. A detailed breakdown of the peak period space occupancy levels recorded at each of the individual parking facilities on campus is included as Appendix B.

It is important to note that at most higher education institutions, student enrollment and parking demand for the spring class session is usually 8% to 10% lower than that during the fall class session. The DPT indicated that the same is true at WSU. According to the DPT, in the Fall Quarter of 2009 and in years past, all the Main Campus Area and Park-n-Ride lots were filled to capacity during the
peak demand period and several of the Nutter Center lots had to be used to accommodate the surge of parkers attracted to the campus during this time period.

The Ervin J. Nutter Center, which has a maximum seating capacity of 12,000, can accommodate various types of sporting events, concerts, and other entertainment events, as well as large and small exhibitions and meetings. The 2,933 parking spaces controlled by the Nutter Center are usually sufficient to accommodate parking demand generated by the majority of events and programs held at the facility. However, on occasions when event attendance surpasses 11,000, some of the associated event parking demand has to be directed to the Park-n-Ride Lot 20 controlled by the DPT.

In fiscal year 2009, DPT reported that 44,331 visitor parking permits were requested by various University departments, program sponsors and individuals including potential students, classroom speakers, bookstore customers and on-campus event and meeting patrons during the daytime and evening. The DPT estimates that an average of 171 parking permits are issued on a daily basis to visitors to the campus.

Table 5 correlates Fall Quarter 2009 campus population figures and parking permit sales among the key parking system user groups to the existing supply of campus parking spaces allocated to the same respective groups. Since the display of a WSU parking permit is mandatory on campus, the sale of parking permits is a clear indication of the demand for parking among the various user groups.

<table>
<thead>
<tr>
<th>Parking User Groups</th>
<th>Campus Population &amp; Existing Spaces</th>
<th>Population to Spaces</th>
<th>Fall Qtr. 2009 Permits Sales</th>
<th>Permits to Spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resident Students</td>
<td>2,746</td>
<td>1,492</td>
<td>1.8 : 1</td>
<td>1,492</td>
</tr>
<tr>
<td>Commuter Students</td>
<td>14,812</td>
<td>3,232</td>
<td>4.5 : 1</td>
<td>10,783</td>
</tr>
<tr>
<td>All Students</td>
<td>17,558</td>
<td>4,724</td>
<td>3.7 : 1</td>
<td>12,275</td>
</tr>
<tr>
<td>Faculty/Staff</td>
<td>2,342</td>
<td>1,590</td>
<td>1.5 : 1</td>
<td>2,277</td>
</tr>
<tr>
<td>Visitors</td>
<td>171</td>
<td>158</td>
<td>1.1 : 1</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Source: DESMAN Associates
1. Student and Faculty/Staff population figures from the WSU Student Factbook 2009.
2. Existing allocations of spaces for various population groups provided by WSU Parking and Transportation Department and the total excludes the Nutter Center parking lot spaces.
3. Permit sales for 2009 as reported by of the WSU Parking and Transportation Department.
4. Estimate of Average Daily Visitors to Campus as reported by the WSU Parking and Transportation Department.

The population of 17,558 students is comprised of commuters to campus and individuals who reside in on-campus housing. The number of parking spaces and the number of resident parking permits allotted to resident students is presently fixed at 1,492 which equates to 1.8 resident students to every resident-only parking space. At present, all the available resident parking permits are sold. Unless the present number of student housing units on campus is increase and/or more existing spaces are exclusively dedicated to resident students, the demand for resident parking permits will remain unchanged in the future. Therefore, parking demand among resident students is treated as a non-issue in this campus master plan. Conversely, the parking demand among commuter students and faculty/staff is significant, as these two population groups are expected to grow in the future. As they grow, the demand for parking permits is expected to grow as well.

At present, the 14,818 commuter students are served by 3,232 commuter parking spaces (i.e. a ratio of 4.5 commuter students to each commuter space). The more significant fact is that close to 73% of the commuter students purchase a commuter parking permit and 3.3 commuter permits are sold for every existing commuter parking space throughout campus.

Similarly, the 2,342 members of the faculty/staff population are presently served by 1,590 faculty/staff-only parking spaces. Ninety-seven percent of the faculty/staff members (2,777) purchase a faculty/staff permit and 1.6 permits are sold for every existing faculty/staff space on campus.

The DPT did reported that during the Fall Quarter 2009 peak period parking demand consumed all the unrestricted spaces in the Main Campus and at the Park-n-Ride Lot and that Nutter Center Lots 7 and 8 also had to be used to accommodate spillover demand. Due to this reported high levels of parking utilization and the anticipated growth in the commuter student and faculty/staff population, the underlining objective of the parking component of the campus master plan is to increase the supply of commuter and faculty/staff parking spaces throughout campus, but most importantly within the core area of campus.

Since no detailed Fall Quarter 2009 peak period parking occupancy statistics were available to analyze and correlate with the reported number of Student and Faculty/Staff parking permits sold during the same permit period, it was only practical to conclude that the 3 to 1 ratio of student and faculty/staff parking permits in circulation to core area parking spaces produces a peak period parking occupancy level that far exceeded the core area parking space capacity. Therefore, the measure used to quantify the degree to which this core area parking supply/demand imbalance in addressed in the future had to be the lowering of the ratio of permits sold to spaces provided. It is estimated that maintaining a ratio of close to 2.5 permits sold per space provided will insure commuter and faculty/staff permit holders will be effectively accommodated. Since the demand for these permits will grow as the populations of commuters and faculty/staff grow, the supply of spaces serving these groups will have to also have to increase.

### III. Future Parking Issues and Challenges

The historical development and present layout of the WSU campus has been closely tied to the natural landscape of the site. The preservation of the woodlands and avoidance of the natural topographic divides on campus has contributed to the existence of three distinct and separated land use zones, namely the academic/research zone, the housing zone, and the athletics/sports zone. Naturally, the academic/research zone is the primary destination for most that arrive at the campus and consequently it has the most pressing need to be sufficiently supplied with parking. As the University moves forward with the continuing expansion of the academic/research zone with new buildings and facilities, some of the existing land area presently dedicated to surface parking in this zone will become building sites. As surface parking areas are converted to building sites, it will become increasingly important to find ways to maintain, if not grow, the supply of parking in the academic/research zone. Failure to doing so will likely lead to some degree of dissatisfaction among the University constituency and the lessening of the University’s competitive standing among peer institutions.

Several future building projects will displace existing parking spaces within the academic/research zone. The loss of inventory could either be replaced in the academic zone or in the more remote...
athletics/sports zone on campus. The prospects for replacing the lost spaces within the academic zone would mean that either more land area will have to be consumed by surface parking lots or that structured parking facilities will have to be developed. If the lost spaces are replaced outside the academic zone, there would be marked decline in the level of parking service University constituents presently enjoy and a greater reliance on the transit system to keep the system viable. The concepts relating to parking presented in this document primarily focus on approaches to maintain and grow the supply of parking within the academic/research zone and, secondarily, in the athletics/sports zone.

Several key issues and challenges exist related to the task of planning future parking system changes on campus, particularly in the academic/research zone. These issues and challenges include: 1) determining how much parking ought to be maintained within the academic zone, 2) determining where, when, and how much parking will likely be displaced by the new building projects, 3) deciding when and how best to replace lost spaces and provide extra capacity to optimally support the zone, and 4) generally defining the financial, operational and managerial implications that will accompany the proposed parking projects.

Quantifying the Future Need for Parking

Accurately forecasting parking demand on any college or university campus is difficult because of the many variables that can affect actual outcomes. These variables include, campus population changes, pricing policies, availability and access to supply, institutional programming and the application of demand management strategies. Some of these variables can be controlled and others are uncontrollable. For the purposes this master plan, DESMAN has assumed that current parking system user patterns and preferences will remain unchanged as the campus is further developed and its populations of students, faculty and staff grow.

In essence, the following circumstances have been assumed in order to forecast the future parking needs for the WSU campus:

1. The proportion of students, faculty and staff that presently commute to campus will remain consistent relative to the total campus populations for these groups;
2. The ratio of permit sales by faculty and staff and student commuters will remain consistent as the total campus populations for these groups change;
3. The prevailing peak period arrival and duration of stay patterns among the system users will remain unchanged.

Resident Student vs. Commuter Student Population Assumptions

According to the WSU Student Fact Book for Fall Quarter 2009, between 1999 and 2009 the headcount for student enrollment at the Main Campus grew by 18.79% (2,777 students). This increase translates into an average annual growth rate of 1.88%. Given this trend it is reasonable to assume that over the next ten years student enrollment will increase at a rate of 2% annually. The Fall Quarter 2009 student headcount total of 17,558 for the Main Campus includes 2,746 on-campus residents, meaning that the 14,812 non-resident students were commuters to campus.

The supply of parking for students residing in campus housing is segregated from the rest of the campus parking and correlated with the existing number of student housing units and beds on campus. Therefore, any future change in the demand for parking among the resident student population will only occur if and when there are changes to the number of housing units on campus or when student housing occupancy drops below the current 100% occupancy level.

The WSU master plan identifies two sites where on-campus new student housing developments are envisioned in the future. The first housing development, to be located in existing Lot 4, will replace the existing Forest Lane Apartment complex to the north of Lot 4. The second housing development is to be located on a presently vacant site in the vicinity of the intersection of Raider Road and University Boulevard. Each of these new student housing complexes will contain 120 double occupancy units and each will need 240 resident student parking spaces.

Since this first housing development, will replace an existing apartment complex, it is not expected to increase the resident student population on campus. However, when the second student housing development is completed it will raise the existing population resident student to 2,986 students.

Faculty/Staff Population Assumptions

As of Fall Quarter 2009 WSU employed a total of 2,342 faculty/staff members. This employee population equates to a ratio of one faculty/staff member to every 7.5 students. In the absence of any historic data or workforce projections provided by WSU, it was assumed that the proportion of WSU faculty/staff members to students will remain consistent over the next 10 years.

Parking Demand Generated by Anticipated Population Growth

Based on the assumptions discussed above, Table 6 shows the current and projected population growth for WSU students and for the faculty/staff workforce of the institution though 2021. The table also contains an estimated increase in demand for WSU parking permits that will accompany the projected population growth among resident and non-resident students and faculty/staff members. By extrapolating prevailing WSU population and parking permit sales circumstances into the future, it is reasonable to conclude that, by 2021, growth in the WSU Faculty/Staff and Student populations will generate demand for an estimated 4,077 parking permits. The annual growth in demand for campus parking permits among Students and Faculty/Staff members is projected to be split 84% to 16%, respectively.

Assuming that the University does not take any action such as capping the sales of permits or spreading daily classroom programming over a broader timeframe, both of which would reduce the peak period demand for parking, these projections reveal that between 300 and 370 more spaces per year will have to be available on campus. Furthermore, a majority of these spaces will need to be added to the core campus area in order to provide a comparable level of accommodations as is presently provided.

The need for additional parking in the core area of campus will expand even further if and where future building development projects on campus cause the displacement of existing core campus area parking.
DESMAN projects that are likely to be implemented at the WSU campus over the next 10 years and beyond. The following are the guiding objectives contained in this plan that relate to the topic of Traffic and Parking:

- Over time, improve the campus roadway system and its capacity to include improvements to major intersections, turning lanes, signage, and signalization, as well as provide additional vehicular entry and exit points into the campus to further distribute traffic improvements along a variety of campus entries and exits.
- Identify and preserve well-located sites for future multi-level parking, including a major structure for commuter parking near the student union center.
- Identify and preserve other distributed sites for smaller, integrated parking decks as well.
- Strive to maintain an optimal supply of parking within the core area of campus as the anticipated demand for conveniently-located and easily-accessible parking grows with the student and faculty/staff population growth.

The introduction of multi-level parking structures on campus will be a more efficient use of campus land area. Strategically located parking structures connected to core campus buildings and the underground tunnel system will improve the level of service and convenience for parkers. At the same time, parking structures will intensify traffic activity at certain locations and alter traffic circulation patterns during peak activity periods. Therefore, sites identified for the development of parking structures need to be at or near the most frequented destinations on campus. Existing surface parking lot sites near to Mill Hall, one of the largest classroom buildings on campus, the Library, the Creative Arts Center and the Student Union were identified as preferred locations for the development of parking structures. These sites are also sufficiently spaced around the core campus and are easily accessible from the ring roadways that encircle the core campus. Locating parking structures near these areas will also reinforce the importance of parking capacity.

Besides identifying well-located sites for future multi-level parking structures, the campus master plan also identifies sites for a number of other building and environmental improvement projects within the core area of campus that will displace existing parking spaces. Consequently, the campus master plan also identifies a series of other scattered parking projects intended to off-set the loss of parking caused by such projects and to grow the overall campus parking supply to satisfy future parking demand growth. The sites chosen for these other parking projects were determined as a matter of need and opportunity. These projects include the expansion of existing lots, the construction of new lots and the construction of single-level parking decks above several existing surface parking lots.

The only certain parking project included in the campus master plan is a new 378-space surface parking lot currently under construction and scheduled to be completed by the start of Fall Quarter 2010. This parking lot is located on green space to the south of Lot 4 along Colonel Glenn Highway. This lot is identified as Lot 4A.
The scope of all of the other individual parking projects has been grossly estimated in regard to the amount of parking spaces each will add or eliminate from campus. For example, after the footprint of a parking structure was positioned on a scaled drawing of the campus, the space capacity for the structure was estimated based on its approximated length, width and height.

Similarly, the number of spaces referenced as being gained by new or expanded surface parking lots was estimated based on the estimated square footage of land area to be occupied by the lot divided by 310 square feet – the standard parking industry unit measure used to approximate the parking space yield from a land parcel. This per space unit measure exceeds the area of an actual striped parking space because it includes parts of the area of a parking lot devoted to drive aisles and landscaped islands. Wherever proposed development projects were shown to encroach on an existing surface parking lot the number of parking spaces to be eliminated was estimated by overlaying the development project area on a scale drawing of the existing parking space striping plan for the lot.

Table 7 summarizes the estimated parking space gains and losses that will result from the various proposed WSU campus master plan projects envisioned to be implemented within 3 to 5 years, within 5 to 10 years or beyond 10 years (i.e. by years 2014, 2019 and 2021). The projected parking space gains and losses are noted as impacting the existing parking supply located inside and outside the core area of campus. This distinction is relevant because demand for parking within the core area is much more significant than it is for parking outside the core area. For the purposes of this summary, the core area of campus is recognized as encompassing the segment of campus to the west of the woodlands and the DPT parking lots 1 through 17, while all other existing parking lots (i.e. the existing remote lots, the park-n-ride lot and the Nutter Center lots), facilities and sites to the east of the woodlands are viewed as being outside the core area of campus.

Table 7 SUMMARY OF CAMPUS MASTER PLAN IMPACT ON THE EXISTING PARKING SUPPLY

<table>
<thead>
<tr>
<th>Proposed Parking Program Summary</th>
<th>Existing Year 5</th>
<th>Year 10</th>
<th>Year 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMPACT ON CORE AREA PARKING SUPPLY</td>
<td>2010</td>
<td>2014</td>
<td>2021</td>
</tr>
<tr>
<td>Added New Spaces</td>
<td>1,718</td>
<td>1,440</td>
<td>1,550</td>
</tr>
<tr>
<td>Eliminated Existing Spaces</td>
<td>(2,185)</td>
<td>(1,377)</td>
<td>(1,046)</td>
</tr>
<tr>
<td>Total Net Gain/(Loss) of Spaces for Period</td>
<td>341</td>
<td>1,078</td>
<td>1,054</td>
</tr>
<tr>
<td>Accumulative Net Gain in Core Campus Spaces for Period</td>
<td>341</td>
<td>1,419</td>
<td>2,473</td>
</tr>
<tr>
<td>IMPACT ON PARKING SUPPLY OUTSIDE CORE AREA</td>
<td>2010</td>
<td>2014</td>
<td>2021</td>
</tr>
<tr>
<td>Added New Spaces</td>
<td>1,506</td>
<td>650</td>
<td>350</td>
</tr>
<tr>
<td>Eliminated Existing Spaces</td>
<td>(962)</td>
<td>(403)</td>
<td>(208)</td>
</tr>
<tr>
<td>Total Net Gain/(Loss) of Spaces for Period</td>
<td>240</td>
<td>258</td>
<td>422</td>
</tr>
<tr>
<td>Accumulative Net Gain in spaces outside Core Campus Area for Period</td>
<td>240</td>
<td>182</td>
<td>604</td>
</tr>
<tr>
<td>CAMPUS-WIDE NET PARKING SUPPLY GAIN</td>
<td>2010</td>
<td>2014</td>
<td>2021</td>
</tr>
<tr>
<td>Added New Spaces</td>
<td>3,268</td>
<td>3,058</td>
<td>4,124</td>
</tr>
<tr>
<td>Eliminated Existing Spaces</td>
<td>(3,187)</td>
<td>(2,357)</td>
<td>(3,147)</td>
</tr>
<tr>
<td>Accumulative Net Gain in Core Campus Spaces for Period</td>
<td>581</td>
<td>1,601</td>
<td>3,077</td>
</tr>
<tr>
<td>Accumulative Net Gain in spaces outside Core Campus Area for Period</td>
<td>581</td>
<td>1,601</td>
<td>3,077</td>
</tr>
</tbody>
</table>

Source: DESMAN Associates

The campus master plan identifies a variety projects that have the capacity to add approximately 6,224 spaces after 2010, but that also could displace or eliminate approximately 3,147 existing spaces, thus potentially producing a campus-wide net gain of approximately 3,077 spaces. Two-thirds of this estimated net space gain would materialize within the core area of campus.

A complete detailed listing of the individual master plan projects that will impact the current supply of parking is included as Appendix C and is generally described and depicted in the following text and exhibits.

Projects Proposed in 3 to 5 years (by year 2014)

- New Housing Development on Lot #4 is proposed to have 120 double occupancy units. This new housing complex to be built on the northern end of Lot #4 will replace the existing Forest Lane Apartment complex to be schedule for demolition. It is estimated that this new housing development will cause the elimination of 616 existing surface parking spaces in Lot #4 in the core area of campus.

- Existing Lot #6 Capacity Reduction is proposed to allow for the creation of green open space.

- Development of New Lot #6A will be made possible after the proposed demolition of the Forest Lane Apartment Complex and Community Center. It is estimated that the new lot will accommodate approximately 580 surface parking spaces. However, it is assumed that 240 of these 580 new spaces will be eliminated. Thus, a net gain of 110 commuter parking spaces will be realized in the core area of campus from this new parking lot project.

- Neuroscience Building Project would necessitate the elimination of Lot 15. The project will eliminate 93 existing parking spaces in the core area of campus.

- Parking Garage #1 is envisioned to be developed on the northern portion of Lot 11 to the east of the Millet Hall classroom building. This would be a 1,138-space, 3 bay-wide, rectangular structure with seven parking levels. The parking structure and a new green open space along side it will displace approximately 238 existing surface parking lot spaces, resulting in a net gain of 810 spaces from the project in the core area of campus. This garage could be directly linked to the underground tunnel system.

- Raider Road Extension to Kaufmann Road is proposed to be aligned through the eastern portion of the Park-n-Ride Lot #20. It is estimated that this project will cause the elimination of approximately 180 existing spaces.

- Private Medical Office Building Project #1 near Lot #20 is a 60,000 square foot private MOB project envisioned to be developed on a vacant land parcel located northwest of the intersection of Raider Road and University Boulevard. No parking will be provided as part of the development therefore building tenants and visitors will have to compete with Commuter Students for the available supply of University parking at Lot #20. The MOB can be expected...
Projects Proposed in 5 to 10 years (by year 2019)

- Parking Garage #2 is envisioned to be developed on the southern portion of Lot #4 opposite the Student Union. This would be a 1,440-space, 4 bay-wide structure with six parking levels. The parking structure will displace approximately 200 existing surface spaces at Lot #4 so a net gain of 1,240 spaces will be realized from the project in the core area of campus.

- High Bay Engineering Building Construction Project at Lot #17 will necessitate elimination of 162 Faculty/Staff spaces in the core area of campus.

- Demolition and Relocation of the Geology Storage Building in the vicinity of the Park-n-Ride Lot #20. This clearance project will allow for the westward expansion of the Park-n-Ride Lot #20. It is estimated that this expansion will yield 150 additional Park-n-Ride spaces outside the core area of campus.

- Commercial Office Building Project #2 on northwest section of Lot #20 is a 20,000 square foot private office building development which will eliminate approximately 150 Park-n-Ride spaces outside the core area of campus. It is important to note that since no parking is included with this development, the building tenants and visitors will have to occupy some of the existing parking spaces in Lot #20. It is estimated that this private commercial office building will generate a peak period demand for approximately 58 spaces and these spaces would not be accessible to WSU Commuter Students. Therefore, the total estimated net loss of existing parking resulting from this project will be 208 spaces.

- Partial Infill of the Lake near the Nutter Center will allow for the reconfiguration and expansion of Nutter Center Lot #8. It is estimated that this project could yield 530 additional parking spaces to serve the Nutter Center outside the core area of campus. Unless the University adopts the practice of using these Nutter Center parking lots to serve the student commuter population, this gain in spaces will not directly benefit the DPT.

- Relocation of the Tennis Courts near Nutter Center Lot #8 will allow for the reconfiguration and expansion of Nutter Center Lot 8. This project is projected to yield approximately 120 additional parking spaces to serve the Nutter Center outside the core area of campus.

- Partial Infill of the Lake near the Nutter Center will allow for the reconfiguration and expansion of Nutter Center Lot #8. It is estimated that this project could yield 530 additional parking spaces to serve the Nutter Center outside the core area of campus. Unless the University adopts the practice of using these Nutter Center parking lots to serve the student commuter population, this gain in spaces will not directly benefit the DPT.
Projects Proposed after 10 years or more (by year 2021)

- Parking Garage #3 is envisioned to be developed where existing Lot #14 is located. This garage would be a 1,260-space, 3 bay-wide structure with seven parking levels. The parking structure will displace 180 existing surface spaces at Lot #14 so a net gain of approximately 1,080 spaces will be realized from this garage project in the core area of campus. This garage could be directly linked to the underground tunnel system.

- Parking Decks #4 and #5 are envisioned to be developed together in conjunction with a pair of academic buildings. The design concept for the project is for a one-level parking deck structure to be built over the existing surface parking Lots #7 and #8 that are situated between University/Rike Halls and University Drive. Part of the deck structure would serve as a pedestal for two new academic buildings that would bracket a westward extension of the open space quad area that exists between University/Rike Halls and University Drive. The remaining portion of the deck area to the north and south of the new academic buildings would accommodate parking spaces. Only pedestrian stairways and elevators would connect the elevated parking decks from the retained grade level parking area as the new deck areas and the grade level parking areas would each have direct and separate vehicular access points. It is estimated that these two parking decks together would accommodate approximately 240 parking spaces (i.e. 165 spaces for the deck area over Lot #7 and 75 spaces for the deck area over Lot #8). However, a total net gain of 220 parking spaces would result from the project because it is estimated that approximately 20 grade level parking spaces would be eliminated by the support columns, stairways, elevators and ventilation and utility shafts that will be necessary components of the vertically-integrated structure. Both the decks and the grade level parking areas could be connected to the underground tunnel system.

- Green Space to Replace Existing Lot #12 would eliminate this 236-space surface parking lot located northeast of the Library. The site will be converted to a passive green open space area.

- Green Outdoor Performance Plaza over Existing Lot #13 will be developed in order to support and compliment the Creative Art Center. It is estimated that support columns, stairways, elevators and ventilation shafts for the deck structure will displace approximately 10 grade level spaces at Lot #13.

- Westward Realignment of University Boulevard near its intersection with Wright State Boulevard will require the elimination of the existing 89-space Lot #18.

- New Housing Development on site adjacent to Nutter Center Lot #7 is proposed to have 120 double occupancy units. This new housing development will be developed on a vacant site at the intersection of Raider Road and University Boulevard. It is assumed that 240 spaces in nearby existing lots will have to be earmarked for the resident students that will inhabit new housing complex.

- 20,000 square foot private office building development which is expected to include an estimated 68-space surface parking lot that will be exclusively dedicated to the building tenants. The project will be located on a land parcel presently occupied by storage buildings used by the campus Facilities Department. The parking spaces envisioned to be developed along with this private commercial building will be off-limits to WSU Commuter Students and Faculty/Staff and thus are not included in the tally of parking space gains and losses.

- Nutter Center Parking Deck #6 is a one-level supported parking deck proposed to be developed over NC Lots #5, #6 and #9. The parking deck design would take advantage of the change in elevation between the grade level surface parking lots and the height of the entry plaza on the north side to the Nutter Center. It is estimated that approximately 766 parking spaces could be provided atop the deck structure. No internal ramps would be required to connect the deck parking with the grade level parking area as each parking area would have separate vehicular access points. It is estimated that support columns, stairways, elevators and ventilation shafts for the deck structure will displace approximately 15 grade level spaces in the three affected lots, so a net gain of 741 spaces would be realized from the project.
V. Campus Master Plan Parking Program Summary

The underlying objective of the proposed parking program presented in this master plan was to sustain an acceptable amount of parking spaces in the core area of campus over time as the demand for parking increases and while new building projects and environmental enhancement projects are implemented. As earlier stated, the on-going measure for assessing whether or not this objective is being met over time was to keep the WSU parking permit demand among students, faculty and staff to the core area of campus at or below 2.5 permits per available space. Table 8 reveals that the cumulative gain in core area parking spaces resulting from the proposed campus master plan projects will maintain the ratio of parking permit demand to available core area spaces at, or below, 2.5 to 1 through 2021.

Table 8 LEVEL OF SERVICE ASSESSMENT OF THE MASTER PLAN PARKING STRATEGY

<table>
<thead>
<tr>
<th>WRIGHT STATE UNIVERSITY</th>
<th>Year 5</th>
<th>Year 10</th>
<th>Year 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONSTITUENT POPULATION PROJECTION</td>
<td>2009</td>
<td>2010</td>
<td>2014</td>
</tr>
<tr>
<td>Total Student Headcount</td>
<td>17,558</td>
<td>17,909</td>
<td>19,385</td>
</tr>
<tr>
<td>Faculty/Staff Headcount</td>
<td>2,862</td>
<td>3,098</td>
<td>3,585</td>
</tr>
<tr>
<td>Non-Resident Student Population</td>
<td>14,812</td>
<td>15,163</td>
<td>16,639</td>
</tr>
</tbody>
</table>

Table 9 provides an order of magnitude comparison of the cost for the three types of parking projects proposed in this campus master plan -- a multi-level parking structure, a single level parking deck and a surface parking lot. In addition, it shows an estimate of the annual operating/maintenance costs and a long-term capital repair expense associated with each project type. The total project development cost, which includes an additional 20% for related project development and financing costs, is also expressed as an annual debt obligation. The annual operating and maintenance cost and a recommended capital repair and replacement reserve fund contribution for each project type were based on prevailing cost per space estimates.

Table 9 ESTIMATED COST COMPARISON BY PROPOSED PROJECT TYPE

<table>
<thead>
<tr>
<th>Multi-Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Garage</td>
</tr>
<tr>
<td>Per Space</td>
</tr>
<tr>
<td>Cost Per SF</td>
</tr>
<tr>
<td>Cost of Construction</td>
</tr>
<tr>
<td>Related Dev. &amp; Fin. Cost (20% of Constr.)</td>
</tr>
<tr>
<td>Total Project Development Cost</td>
</tr>
<tr>
<td>Per Space Project Cost</td>
</tr>
<tr>
<td>Annual Debt Obligation (20% of Constr.)</td>
</tr>
<tr>
<td>Annual Operating</td>
</tr>
<tr>
<td>Operating Cost Per Space</td>
</tr>
<tr>
<td>Recommended Annual Capital Expenditure Reserve</td>
</tr>
<tr>
<td>Capital Repair &amp; Replacement Reserve Per Space</td>
</tr>
<tr>
<td>TOTAL ANNUAL FACILITY COSTS</td>
</tr>
<tr>
<td>Notes: Based on 2013 costs</td>
</tr>
</tbody>
</table>

Source: DESMAN Associates

Table 10 summarizes the order of magnitude costs for the respective parking projects described in the campus master plan based on previously referenced unit costs for operation, maintenance, debt and a capital expenditure fund. A total investment of approximately $100.8 million will be required by the University in order to develop the projects and the new annual cost of operating (i.e. debt service, operation/maintenance and repair/replacement reserve fund contribution) all the projects could reach $9.6 million. This total does not include the parking projects associated with the private commercial building projects referenced in the plan. It is also significant to point out that these totals include three Nutter Center parking facility projects that are estimated to account $12.2 million in development costs and approximately $1.2 million in new annual operating costs.

Parking Project Cost

The investment required to implement the parking component of this master plan will be substantial.
Table 10 ESTIMATED MASTER PLAN PARKING PROGRAM COST

<table>
<thead>
<tr>
<th>Project Type</th>
<th>New Fac.</th>
<th>Project Dev. Cost Est.</th>
<th>Annual Debt Service</th>
<th>Annual Q/Oil in $ per Area</th>
<th>Capital R/ &amp; F Fund</th>
<th>NEW ANNUAL COST TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projects in 3-5 Years (2011 - 2014)</td>
<td>2,348</td>
<td>$28,350,528</td>
<td>$2,248,042</td>
<td>$914,400</td>
<td>$138,400</td>
<td>$2,745,442</td>
</tr>
<tr>
<td>New lot 6A (Student Parking Lots &amp; Core)</td>
<td>1,344</td>
<td>$14,490,000</td>
<td>$1,197,244</td>
<td>$841,804</td>
<td>$133,800</td>
<td>$2,685,042</td>
</tr>
<tr>
<td>Expansion of MC Lot 10 (South Hill)</td>
<td>1,344</td>
<td>$15,972,000</td>
<td>$1,268,183</td>
<td>$0</td>
<td>$100,000</td>
<td>$16,982</td>
</tr>
<tr>
<td>Expansion of MC Lot 4 (Parking Cost &amp; 4)</td>
<td>1,344</td>
<td>$375,200</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$375,200</td>
</tr>
<tr>
<td>Projects in 5-10 Years (2015 - 2019)</td>
<td>1,980</td>
<td>$31,688,640</td>
<td>$2,515,091</td>
<td>$432,000</td>
<td>$147,000</td>
<td>$3,136,091</td>
</tr>
<tr>
<td>Parking Garage 8 (North Circle lot 6)</td>
<td>1,440</td>
<td>$26,522,000</td>
<td>$2,095,579</td>
<td>$412,804</td>
<td>$141,000</td>
<td>$3,175,079</td>
</tr>
<tr>
<td>Parking Lot 16 (Lot Expansion &amp; City)</td>
<td>1,344</td>
<td>$365,000</td>
<td>$51,712</td>
<td>$0</td>
<td>$5,000</td>
<td>$51,712</td>
</tr>
<tr>
<td>Projects in 10-15 Years (2020 &amp; Beyond)</td>
<td>2,348</td>
<td>$42,857,000</td>
<td>$3,136,048</td>
<td>$529,200</td>
<td>$206,480</td>
<td>$3,854,388</td>
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<tr>
<td>Parking Garage 9 (South Circle lot 14)</td>
<td>1,344</td>
<td>$37,146,960</td>
<td>$2,918,567</td>
<td>$178,880</td>
<td>$134,000</td>
<td>$3,590,167</td>
</tr>
<tr>
<td>Parking Deck 14 (5 Level Deck atop 8)</td>
<td>1,344</td>
<td>$2,137,000</td>
<td>$177,480</td>
<td>$60,256</td>
<td>$33,200</td>
<td>$239,856</td>
</tr>
<tr>
<td>Parking Deck 14 (5 Level Deck atop 8)</td>
<td>1,344</td>
<td>$2,000,000</td>
<td>$188,000</td>
<td>$61,758</td>
<td>$6,000</td>
<td>$235,000</td>
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<tr>
<td>M-Space Lot with Private Cds. Office/Supply Blvd #3</td>
<td>1,344</td>
<td>$1,000,000</td>
<td>$84,700</td>
<td>$6,000</td>
<td>$0</td>
<td>$90,700</td>
</tr>
<tr>
<td>Parking Deck 14 (5 Level Deck atop 8)</td>
<td>1,344</td>
<td>$3,140,000</td>
<td>$255,800</td>
<td>$61,758</td>
<td>$6,000</td>
<td>$325,000</td>
</tr>
<tr>
<td>TOTAL SPACES/COSTS</td>
<td>6,224</td>
<td>$109,089,708</td>
<td>$8,071,741</td>
<td>$1,402,900</td>
<td>$493,880</td>
<td>$9,956,202</td>
</tr>
<tr>
<td>Less: Nutter Center Parking Facility and Costs</td>
<td>1,414</td>
<td>$12,689,048</td>
<td>$993,636</td>
<td>$91,800</td>
<td>$0</td>
<td>$1,291,783</td>
</tr>
<tr>
<td>ADJUSTED SPACES/COSTS (Less Nutter Cr. Fac.)</td>
<td>4,810</td>
<td>$96,400,660</td>
<td>$7,078,105</td>
<td>$1,311,100</td>
<td>$302,080</td>
<td>$8,664,419</td>
</tr>
</tbody>
</table>

Impact of Parking Program on Permit Fees

Table 11 illustrates the spread of estimated annual costs for the proposed parking program through the year 2021 when all of the identified projects would presumably be developed. No attempt has been made to forecast cost and price increases over the term and the debt service portion of the annual costs is assumed to remain level for the term. Given these gross cost estimates, it is estimated that the combined population of commuter students, resident students and faculty/staff permit holders would have to eventually be charged up to $385 more per year than they are currently charged for the DPT to continue to be self-supporting.

Other Considerations

The timetable for undertaking the specific parking projects contained in this campus master plan is flexible but related to the projected increases in the demand for parking permits and the timetable for implementing other proposed building and environmental projects. The University’s commitment to advancing campus improvements that will negatively impact the existing parking supply (particularly in the core area of campus) or that will require additional ancillary parking will dictate when, where and which parking projects will need to be undertaken.

It is important to note that the table above focuses only on the core area of campus, not the overall campus because, as is the case today, WSU has the option and opportunity to satisfy its future parking needs by shift increasing numbers of parking spaces to remote areas outside the core campus area. However, doing so will significantly diminish the parking experience of a growing number of University constituents as more and more students and faculty/staff members will have to rely on the University shuttle bus system to travel between their parking place and the core campus area. Also, the changes to the number of Nutter Center spaces may not be as impactful from a parking supply and demand standpoint because the DPT does not control, nor regularly rely on, the Nutter Center spaces to serve the daily parking constituents on campus.
## Appendix A

### Existing WSU Campus Parking Supply

#### Table 11 CAMPUS MASTER PLAN FINANCIAL SUMMARY

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Lot 1</td>
<td>162</td>
<td>123</td>
<td>61</td>
<td>11</td>
<td>12</td>
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<td>12</td>
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<td>6</td>
<td>7</td>
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<td>23</td>
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<td>7</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>3</td>
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<tr>
<td>Lot 4</td>
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<td>1,061</td>
<td>1,061</td>
<td>1,061</td>
<td>1,061</td>
<td>1,061</td>
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<td>7</td>
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<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Lot 6</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
</tr>
<tr>
<td>Lot 7</td>
<td>147</td>
<td>147</td>
<td>147</td>
<td>147</td>
<td>147</td>
<td>147</td>
<td>147</td>
<td>147</td>
</tr>
<tr>
<td>Lot 8</td>
<td>221</td>
<td>221</td>
<td>221</td>
<td>221</td>
<td>221</td>
<td>221</td>
<td>221</td>
<td>221</td>
</tr>
<tr>
<td>Lot 9</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Lot 10</td>
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<td>113</td>
<td>113</td>
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<tr>
<td>Lot 11</td>
<td>328</td>
<td>276</td>
<td>276</td>
<td>276</td>
<td>276</td>
<td>276</td>
<td>276</td>
<td>276</td>
</tr>
<tr>
<td>Lot 12</td>
<td>71</td>
<td>71</td>
<td>71</td>
<td>71</td>
<td>71</td>
<td>71</td>
<td>71</td>
<td>71</td>
</tr>
</tbody>
</table>

### 2010 Parking Supply Space Allocation

#### MAIN CAMPUS

| Lot 1A | 182 | 213 | 11 | 11 | 406 |
| Lot 2 | 89 | 89 | 6 | 8 | 97 |
| Lot 3 | 23 | 23 | 16 | 16 | 60 |
| Lot 4 | 1,061 | 1,061 | 1,061 | 1,061 | 1,067 |
| Lot 5 (Bid of Trustees) | 7 | 7 | 7 | 7 | 7 |
| Lot 6 | 250 | 250 | 250 | 250 | 250 |
| Lot 7 | 147 | 147 | 147 | 147 | 147 |
| Lot 8 (Restricted Access) | 221 | 221 | 221 | 221 | 221 |
| Lot 9 | 20 | 20 | 20 | 20 | 20 |
| Lot 10 | 113 | 113 | 113 | 113 | 113 |
| Lot 11 | 328 | 276 | 276 | 276 | 276 |
| Lot 12 (Unrestricted) | 71 | 71 | 71 | 71 | 71 |

### PARK N RIDE

#### Lot 20

| Lot 20 | 951 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 |

### NUTTER CENTER

| Nutter Lot 1 | 446 | 446 |
| Nutter Lot 2 | 470 | 470 |
| Nutter Lot 3 | 91 | 91 |
| Nutter Lot 4 | 70 | 70 |
| Nutter Lot 5 | 150 | 150 |
| Nutter Lot 6 | 120 | 120 |
| Nutter Lot 7 | 607 | 607 |
| Nutter Lot B | 817 | 817 |
| Nutter Lot 9 | 162 | 162 |

### Nutter Center Totals

2,933

### Residential Lots

| Residential Lots | 426 | 426 |
| College Park Lot | 426 |
| Forest Lane Lot | 126 | 126 |
| Monot Dorm Lot | 158 | 158 |
| University Place Lot | 280 | 280 |
| Village Apartment Lot | 156 | 156 |
| Wood Apartment Lot | 346 | 346 |

### Residential Community Totals

1,492

### CAMPUS-WIDE TOTAL

| CAMPUS-WIDE TOTAL | 4,255 | 4,402 | 4,190 | 4,185 | 4,183 | 4,185 | 4,183 | 4,183 | 4,183 |

| % of Total Supply | 30.3% | 34.4% | 34.4% | 34.4% | 34.4% | 34.4% | 34.4% | 34.4% | 34.4% | 34.4% | 34.4% | 34.4% | 34.4% | 34.4% |

DESMAN ASSOCIATES
### Appendix B

#### Peak Period Parking Space Occupancy – Spring Quarter 2010

<table>
<thead>
<tr>
<th>MAIN CAMPUS</th>
<th>Spring 2010 Spaces</th>
<th>Peak AM/PM Space Occupancy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10:00 AM</td>
<td>2:00 PM</td>
</tr>
<tr>
<td>Lots 1-14</td>
<td>406</td>
<td>382</td>
</tr>
<tr>
<td>Lot 2</td>
<td>97</td>
<td>44</td>
</tr>
<tr>
<td>Lot 3</td>
<td>60</td>
<td>44</td>
</tr>
<tr>
<td>Lot 4</td>
<td>1,161</td>
<td>643</td>
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<tr>
<td>Lot 5 (Bld of Trustees)</td>
<td>7</td>
<td>4</td>
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<tr>
<td>Lot 6</td>
<td>216</td>
<td>213</td>
</tr>
<tr>
<td>Lot 7</td>
<td>211</td>
<td>195</td>
</tr>
<tr>
<td>Lot 8 (Restricted Access)</td>
<td>262</td>
<td>214</td>
</tr>
<tr>
<td>Lot 9 (Faculty/Staff Only)</td>
<td>40</td>
<td>33</td>
</tr>
<tr>
<td>Lot 10</td>
<td>272</td>
<td>268</td>
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<tr>
<td>Lot 11</td>
<td>688</td>
<td>644</td>
</tr>
<tr>
<td>Lot 12 (Unrestricted)</td>
<td>71</td>
<td>71</td>
</tr>
<tr>
<td>Lot 13</td>
<td>283</td>
<td>279</td>
</tr>
<tr>
<td>Lot 14</td>
<td>178</td>
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<td>Lot 18</td>
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</tr>
<tr>
<td>Lot 19</td>
<td>65</td>
<td>65</td>
</tr>
<tr>
<td>University Blvd (On-Street)</td>
<td>27</td>
<td>27</td>
</tr>
<tr>
<td><strong>Main Campus Totals</strong></td>
<td>3,111</td>
<td>2,829</td>
</tr>
</tbody>
</table>

#### PARK N RIDE

| Lot 20 | 1,082 | 426 | 39.6% | 385 | 35.6% |
| Lot 21 | 1,082 | 426 | 39.6% | 385 | 35.6% |

#### NUTTER CENTER

| NC Lot 1 | 446 | 73 | 16.4% | 49 | 11.0% |
| NC Lot 2 | 470 | 0  | 0.0%  | 1  | 0.2%  |
| NC Lot 3 | 91  | 10 | 11.0% | 25 | 25.2% |
| NC Lot 4 | 70  | 1  | 1.4%  | 1  | 1.4%  |
| NC Lot 5 | 150 | 8  | 5.3%  | 9  | 6.0%  |
| NC Lot 6 | 120 | 9  | 7.5%  | 1  | 0.8%  |
| NC Lot 7 | 607 | 5  | 0.8%  | 5  | 0.8%  |
| NC Lot 8 | 817 | 21 | 2.6%  | 31 | 3.8%  |
| NC Lot 9 | 162 | 101| 62.3% | 40 | 24.7% |
| **Nutter Center Totals** | 2,093 | 238 | 7.8% | 160 | 5.3% |

#### Residential Lots

| College Park Lot | 426 | 283 | 66.6% | 255 | 59.9% |
| Forest Lane Lot | 126 | 78  | 61.9% | 79  | 62.7% |
| Hons-Dorm Lot | 158 | 110 | 69.6% | 96  | 60.8% |
| University Place Lot | 280 | 76  | 27.1% | 70  | 25.0% |
| Village Apartment Lot | 156 | 74 | 47.4% | 66 | 42.3% |
| Wood Apartment Lot | 346 | 336 | 97.1% | 298 | 86.1% |
| **Residential Community Totals** | 1,492 | 957 | 64.1% | 864 | 57.9% |

#### CAMPUS-WIDE TOTAL

| Total Space Occupancy | 10,818 | 5,442 | 50.3% | 6,235 | 57.6% |

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### Appendix C

#### Summary of Proposed WSU Master Plan Parking Projects

**WRIGHT STATE UNIVERSITY CAMPUS MASTER PLAN**

**PROJECTS WITH RELATED PARKING SUPPLY GAINS/(LOSSES)**

<table>
<thead>
<tr>
<th>Year 5</th>
<th>Year 10</th>
<th>Year 10</th>
<th>Year 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>2014</td>
<td>2019</td>
<td>2021</td>
</tr>
</tbody>
</table>

**Projects in Fall 2010**

- Core Campus site M: to make all core construction to be completed by fall 2020

**Projects in 3-5 Years**

- **Net Supply Change 2011 - 2014**
  - Core Campus: Lot 8 proposed new [120 double occupancy unit] housing development to eliminate approximate 465 existing space at lot II
  - Core Campus: Existing Lot 8 capacity reduced from 260 to 104 spaces to reduce any creation of green space area
  - Core Campus: New Lot 44: to provide 515 spaces at 315 of former Lake Apartments/Community Center
  - Core Campus: New Lot 44: to provide 515 spaces at 315 of former Lake Apartments/Community Center
  - Core Campus: New Lot 44: to provide 515 spaces at 315 of former Lake Apartments/Community Center
  - Core Campus: Lot 8 and Lot 9 to provide the required new housing complex developed in lot II

**Projects in 5-10 Years**

- **Net Supply Change 2015 - 2019**
  - Core Campus: Lot 6 and Lot 7 required for the development of the Recreation Bldg
  - Core Campus: Lot 9 required for the development of the Recreation Bldg

**Projects in 10-Plus Years**

- **Net Supply Change 2021 & Beyond**
  - Core Campus: Lot 8 and Lot 9 required for new development of part of residential area
  - Core Campus: Lot 8 and Lot 9 required for new development of part of residential area
  - Core Campus: Lot 8 and Lot 9 required for new development of part of residential area

**Proposed Parking Program Summary**

<table>
<thead>
<tr>
<th>Existing Year</th>
<th>5</th>
<th>10</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMPACT ON CORE AREA PARKING SPACES</td>
<td>2010</td>
<td>2014</td>
<td>2021</td>
</tr>
<tr>
<td>Total Added New Spaces</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total Elminated Existing Spaces</td>
<td>(1,218)</td>
<td>(932)</td>
<td>(868)</td>
</tr>
<tr>
<td>Total Net Gain%/Loss of Spaces for Period</td>
<td>301</td>
<td>1,476</td>
<td>1,454</td>
</tr>
<tr>
<td>Accumulative Net Gain in Core Campus Spaces for Period</td>
<td>341</td>
<td>1,419</td>
<td>2,473</td>
</tr>
</tbody>
</table>

**IMPACT ON PARKING SUPPLY OUTSIDE CORE AREA**

<table>
<thead>
<tr>
<th>Existing Year</th>
<th>5</th>
<th>10</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMPACT ON CORE AREA PARKING SPACES</td>
<td>2010</td>
<td>2014</td>
<td>2021</td>
</tr>
<tr>
<td>Total Added New Spaces</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total Elminated Existing Spaces</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total Net Gain%/Loss of Spaces for Period</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Accumulative Net Gain in Spaces outside Core Campus Area for Period</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**CAMPUS-WIDE NET PARKING SUPPLY GAIN**

<table>
<thead>
<tr>
<th>Existing Year</th>
<th>5</th>
<th>10</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMPACT ON CORE AREA PARKING SPACES</td>
<td>2010</td>
<td>2014</td>
<td>2021</td>
</tr>
<tr>
<td>Total Added New Spaces</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total Elminated Existing Spaces</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total Net Gain%/Loss of Spaces for Period</td>
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</tr>
<tr>
<td>Accumulative Net Gain in Spaces outside Core Campus Area for Period</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

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**OVERALL CAMPUS SPACES**

- 11,106
- 12,377
- 12,377