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LETTER FROM PRESIDENT JASINSKI

To Be Inserted from Separate Document previously reviewed

EXECUTIVE SUMMARY

To Be Inserted from Separate Document previously reviewed

- *Graphic notation in orange. Throughout, sprinkle stock landscape & student life photos*

OVERVIEW OF CAMPUS MASTER PLAN

The Campus Master Plan provides Northwest Missouri State University with a framework to guide building and open space development well into the future. Elements of this plan have been holistically integrated so the whole is greater than the sum of its parts. Many of the concepts are elegantly simple, powerfully transformative and financially achievable. As the University implements this plan, changes to the physical campus will be recognizable and will elevate the stature and identity of the University regionally and nationally.

- **Insert spread of existing campus & campus plan (Existing Campus Plan.jpg & Campus Plan.jpg)**

Process & Schedule

The master planning process for Northwest took just over a year to complete during the calendar years 2015 and 2016. The planning process began with a kickoff meeting in March of 2015 and concluded with this final report released in June of 2016. In between these bookends, the process was characterized by numerous on-campus workshops conducted by various members of the planning team in which existing conditions, aspirations and ideas were gathered and synthesized into an initial draft plan and subsequently revised into the final plan.

- **Insert table of master plan schedule (Master Plan Schedule.jpg – Illustrator File Available)**

In addition to these main workshops, various members of the campus master planning team conducted separate meetings and workshops to analyze and construct elements of open space, landscape, signage and wayfinding, athletic and recreation, infrastructure support, building capacities and utilization and technological projects to support the University in accomplishing its mission and vision.

Research & Analysis

The planning process began with research and analysis of the campus. The University's history was studied to fully appreciate the origins and development of the campus. Over the course of several visits, driving and walking tours were conducted to better understand and appreciate the physical qualities of the campus. Through focus groups and public forums, verbal input from various student, faculty and staff groups at the University as well as the Maryville community provided a nuanced understanding of the physical character of the campus that help augment the research and analysis conducted. Through this process, the ethos of Northwest revealed itself; what generally works well on campus and what needs improvement manifested through discussions and feedback. Taken together, this information informed the subsequent phases of the planning process.

Conceptual Plan

Using the information culled from the research and analysis phase, a conceptual plan was developed. The conceptual plan is illustrative but not detailed. It captures the most elemental aspects of the plan, but is fluid and certainly not set in stone. The conceptual plan for Northwest began to flesh out and 'test' some of the plan's elements through a series of public forums and working sessions conducted with a steering committee. Feedback received during the forums and working sessions was incorporated into the final plan.

Final Plan

This final plan supplements the strategic plan, *FOCUS*, in guiding future developments and initiatives on the campus. Through a collaborative and iterative process based on the research and analysis coupled with numerous sessions involving various members of the University and neighboring communities, the final plan was completed. It provides the framework for the campus's new, repurposed and reconfigured buildings to interact with a purposeful open space network that is supported through design and infrastructure and fosters an efficient and cohesive habitat that effectively nurtures Northwest's strategic goals today and decades into the future.

Engagement

The planners engaged with different groups involved with the University community in various roles. Groups of faculty, staff and students were engaged both within their larger groups as well as through individual opportunities for discussions and questions. In addition, the planners met with members of the greater Maryville community and hosted several public open forums during which any individual, who was not a member of a directly-solicited group, was provided the opportunity to react to the master planning process. The engagement sessions occurred during the initial observation and research processes in the spring of 2015 as well as again during the concept plan development processes in the fall of 2015 and even the final plan preparation processes in early 2016.

- Insert table of focus groups with whom we met (**Master Plan Meetings.jpg** *Illustrator File Available*)
- Insert photos of focus group meetings (**University Leadership Meeting.jpg**, **University Leadership Workshop.jpg**, **Public Forum.jpg**, and/or **Focus Group.jpg**)

OVERVIEW OF NORTHWEST MISSOURI STATE UNIVERSITY

Northwest Missouri State University is a nationally accredited, four-year comprehensive university offering 126 distinct undergraduate majors, 40 graduate programs, five graduate certificate programs, three certificate programs and three specialist programs¹. In the fall of 2015, undergraduate enrollment reached 5,188 with 37% of students coming from outside of Missouri². The University is governed by a nine-member Board of Regents, appointed by the governor of Missouri and approved by the Missouri Senate. As a comprehensive public university, Northwest is one of 13 public four-year universities in Missouri. The Maryville campus's 74³ buildings provide academic, residential, athletic, recreation, dining, social and support space for over 5,850 total students and housing for the 41% of students who live in University housing.

The University Setting

Encompassing 370 acres⁴ on its main campus in Maryville, the University and the city of Maryville are fundamentally intertwined. The University is situated just west of the city of Maryville's business district. Its location just north of Missouri State Route 46 running through Maryville's business district and to the west of U.S. Route 71 running on the eastern edge of Maryville -- is integral to the local and regional economy. In fact, with over 800 employees, the University is Maryville's single largest employer.

Maryville, Missouri has a population of about 12,000 people, which represents approximately twice as many people as the city's population in 1905 when Northwest was founded. Maryville, the county seat of Nodaway County, encompasses 5.8 square miles in rural northwest Missouri. The land within Maryville's boundaries comprises 99.5% land and 0.05% water. The University lies 50 miles north of St. Joseph, Missouri; 100 miles north of Kansas City, Missouri; 115 miles southeast of Omaha, Nebraska; and 150 miles southwest of Des Moines, IA. Although Northwest is within the town boundaries of a county seat and mere blocks from Maryville's business district, its setting is decidedly rural and is bordered to the north and west with open agricultural land.

- Insert Map Showing Maryville Boundaries with University (**Maryville Context.jpg** and **Maryville Context Legend.jpg**) (*Illustrator file available*)
- Insert photos of Maryville (**Maryville Town Square Mural.jpg** (*Photoshop file available*), **Nodaway County Courthouse.jpg**)

FOCUS: The Strategic Plan

In November of 2015, Northwest's Extended Leadership Team officially updated the University's strategic plan. Titled *FOCUS 2017*, the updated strategic plan contains elements acknowledging Northwest's proud past while appreciating the need for continued progress and key strategic changes.

The release of *FOCUS* transpired concurrently with the development of the Campus Master Plan and the mission, vision and values of *FOCUS* are reiterated throughout this campus framework plan.

The mission, vision and values of Northwest Missouri State University as documented in *FOCUS* are:

MISSION – Northwest Missouri State University focuses on student success – every student, every day.

VISION – Northwest Missouri State University will be THE university of choice for a comprehensive, exceptional student experience.

VALUES – Student success, scholarship and life-long learning, intercultural competence, collaboration, respect and integrity, strategic thinking and excellence.

In addition to the mission, vision and values, *FOCUS* outlines five strategic objectives and 14 corresponding strategic actions. The five strategic objectives are:

- Innovative Enrollment Approaches

¹ <http://www.nwmissouri.edu/academics/majors.htm>

² <http://www.nwmissouri.edu/facts/>

³ Per current building data from universities; not including structures

⁴ <http://www.nwmissouri.edu/facts/>

- Improving College Completion
 - Enhancing Diversity, Equity and Inclusion Practices
 - Heightening an Engaged and High Performing Workforce
 - Ensuring Organizational Viability
- **Include image of the FOCUS document (Focus One Pager.jpg)**

International Student Enrollment Growth

The portion of international students continues to grow. In the fall of 2015, international students from 30 different countries attended Northwest. International student enrollment has surged by 208% in the past five years from 259 students in the fall of 2010 to 799 students in the fall of 2015. In total in 2015, international enrollment comprised 11.8% of all students.

Analyzed by student year and program, the proportion of international students enrolled in graduate programs is particularly salient. In 2015, the 232 international undergraduate students enrolled represented 4% of all of Northwest's undergraduate students while the 469 international graduate students accounted for a staggering 50% of all of Northwest's graduate students. Of further significance, all but eight of the 469 international graduate students in 2015 came from India. At a minimum, these figures indicate the need for ongoing recognition and stewardship to the international communities attending Northwest.

During the preceding half decade, Northwest has been successful in recruiting international students in line with the strategic objective of *Innovative Enrollment Approaches* per *FOCUS*, the strategic plan. In order to maintain and expand upon this success, efforts to accommodate the diversity of and within the international student body must be continuously evaluated. Aspects of student life such as independent living space inclusive of kitchens, ethnic food availability on campus, transportation to Maryville for ethnic foods and goods not available on campus, integration within the overall Northwest student population and recreation areas were all concerns and opportunities raised during the campus planning process. The University has an active Office of International Programs charged with leadership and assistance on issues pertaining to cultural enrichment activities, curriculum development, international education and study abroad, recruitment, retention and policy making. The mere presence and multiple roles conducted by this office are indicative of the requisite importance that the University has assumed for successfully accommodating such a vital international community of students.

- **Include figure of International Enrollment (International Student Enrollment.jpg – Illustrator File Available)**

Satellite Facilities

Northwest owns and leases property outside of its main 370-acre campus. The University operates two satellite campuses, one in St. Joseph and one in Kansas City. These facilities are not set up to compete with the University's functions in Maryville, but rather to extend the reach of the University and provide an opportunity for students to have access to faculty and resources of Northwest outside of Maryville. The Kansas City campus offers distance learning to schools throughout northwest Missouri and even into eastern Kansas. In addition, the University operates two areas in the greater Maryville area, R.T. Wright Farm and the Mazingo Outdoor Education Recreation Area (MOERA).

- **Include partner site map (Partners Schools.jpg – Illustrator File available)**

Northwest Missouri State University – Kansas City

Northwest-Kansas City began in 2000 but is not technically a branch campus since it cannot offer all the services for students off-site. From 2000 through the beginning of 2006, Northwest-Kansas City offered graduate programs in partnership with the North Kansas City School District. A new Kansas City center opened in Liberty, northeast of downtown Kansas City in 2006. In January of 2014, the Kansas City center moved to a facility on the campus of Metropolitan Community College - Maple Woods. In the fall of 2016, Northwest-Kansas City is set to move to a

new building, as part of an Innovation Campus, in the city of Gladstone, just north of downtown Kansas City. The Northwest-Kansas City is focused on completion programs for students in the greater Kansas City area who, for employment or other commitments, have found it difficult to complete degrees. When the Northwest-Kansas City program moves to the Gladstone building in the fall of 2016, it will offer nine completion programs: Elementary Education, Business Management, Recreation and Parks Management, Business Marketing, Early Childhood, Special Education, Criminal Justice, Computer Science and Health Science. Northwest-Kansas City offers graduate degrees in education and business. Headcount enrollment at Northwest-Kansas City has decreased from 226 in 2006 (with a full-time equivalent (FTE) of 330) to 137 in 2014 (with a FTE of 213). However this enrollment is projected to increase rapidly to a headcount of 680 by 2017 after the facility in Gladstone opens.

- **Insert Photo of NW – KC (Provost Dr Mottet at KC Campus Groundbreaking...jpg)**

Northwest Missouri State University – St. Joseph

Northwest opened a St. Joseph Center in 2007 in downtown St. Joseph. Prior to that, the University had offered post-baccalaureate courses in St. Joseph for more than 40 years, but always in classrooms provided by other schools.

In 2012, programming moved to its current location in the Historic Green Acres building east of downtown. The coursework at St. Joseph includes degrees in education, business and science. Headcount enrollment at Northwest-St. Joseph began at 92 in 2007 (with a FTE of 98) and remained relatively steady at 92 in 2014 (with a FTE increase to 132). Projections for enrollment at Northwest-St. Joseph remain stable with a projected headcount of 100 into 2017.

- **Insert Photo of NW – St. Joe's (St Joseph Green Acres Building.jpg)**

Mozingo Outdoor Education Recreation Area

Located east of downtown Maryville on the eastern shore of Mozingo Lake lies the Mozingo Outdoor Education Recreation Area (MOERA). MOERA, which is operated by the School of Health Science and Wellness, sits on 315 acres of land that is leased by Northwest through a long-term lease. Northwest uses this land for outdoor research activities and teambuilding exercises.

MOERA and the Mozingo Lake area provide a great opportunity to connect the greater Maryville community with the University. In August of 2015, preliminary plans were announced to construct a 40-room lodge at Mozingo Lake Recreation Park. Although the lodge is being funded without direct University investment and is not on the 315-acre parcel leased by the University, there are initial discussions of constructing an adjoining conference center that would be publically funded by the city of Maryville. As Northwest continues to strengthen connections to the greater Maryville community, the opportunity to utilize conference space for events off campus will complement the Alumni Center as well as the proposed Exposition Center discussed within this Campus Master Plan.

- **Insert Map of region with North Farm and MOERA (Campus Property.jpg) (Illustrator File available)**
- **Insert picture of MOERA (MOERA.jpg)**

R.T. Wright University Laboratory Farm

Approximately two and a half miles north of the main campus in Maryville, the University owns 448 acres of farmland with a scattering of machinery warehouses, farmhouses and hoop sheds. The R.T. Wright University Laboratory Farm employs a farm manager, swine herdsman and University students. In addition to beef, dairy and swine production facilities, the farm also grows corn, soybeans, alfalfa and grass hay. The School of Agricultural Sciences uses the facilities at the farm in conjunction with the classrooms and laboratory facilities in the Valk Center and Thompson-Ringold Hall. The farm provides profession-based learning experiences with livestock and crops in addition to a community garden, campus agronomy plots and agriculture and aquaculture laboratories.

- Insert Pictures of farm (**Wright Farm.jpg**, **Wright Landscape.jpg**, **Student Agriculture.jpg**, **Students & Cow.jpg**, & **Cow.jpg**)
- Insert Map of Farm (**Farm Property.jpg**) (*Illustrator File available*)

HISTORY AND ORIGINS: THE INSTITUTIONAL TRANSITIONS AND CAMPUS DEVELOPMENT

Historical Context: The Northwest Missouri State University Campus

As the University moves ahead a century and a decade after its original inception, the need to evaluate the campus's origins and paths forward are paramount. To date, there has been a relative dearth of formal development plans that have served to guide the historical University's layout and design. The campus that has resulted is at times well-functioning and organic, but it can also distract from the intimacy that make so many students and visitors alike so enamored with Northwest. Both the history of the institution and the development of the campus provide a rich contextual foundation from which the master plan is able to garner informed inspiration and encourage continual progress.

The Missouri Fifth District Normal School (1905 – 1919)

Northwest was founded in 1905 as a state normal school created from a Missouri state legislative bill and an early vision from some residents in the small city of Maryville. From the beginning, the school's host city fought not only for the school's initial conception, but for its subsequent success. City leaders proudly proclaimed that two functioning railroad depots, county seat status, an electric light plant, a modest pot of cash, 86 acres of land and perhaps most importantly, a supportive base created an ideal setting for a state school. This school, in turn, would provide an environment in which Missouri's public school teachers could hone their craft and pedagogical breakthroughs could emerge. When Missouri Governor Joseph Folk's commission arrived to evaluate Maryville as a potential location, Maryville leaders obviated their need to look anywhere else by showcasing an arrival replete with a small town canvas and residents proclaiming their town was *the* ideal location for the school. Indeed these city leaders successfully leveraged their assets and marshalled the commission to declare Maryville as the winning location for Missouri's Fifth District Normal School.

The Fifth District Normal School held its first class on June 13, 1906, for its initial 212 students. Although the Normal School was officially functioning and its location secured in Maryville, its physical campus remained scattered throughout various buildings in Maryville: the high school, the basement of the new Carnegie Library, the Methodist church, a few business buildings and even an old nursery with a single-family residence on 21 acres of land. That single family residence, the Thomas Gaunt house and the nursery subsequently became the core of present-day Northwest's campus. From its inception, the school's appointed Board of Regents envisioned a campus core on the nursery property. They called for plans to erect an academic hall to serve as the primary building for the Normal School around the same time the first classes were in session. However, construction of this academic hall was protracted on account of shifting legislative building appropriations. Thus, for the initial four full years of the Normal School's functioning, there was no campus core. This new academic hall, today known as the Administration Building, held its first class on Oct. 3, 1910.

- **Insert Photo of Gaunt House around turn of century (Gaunt House.jpg)**
- **Insert Photo (Administration Building Training Garden 1912.jpg)**
- **Insert (Original Campus Panoramic.jpg)**

Northwest Missouri State Teachers College (1919 - 1949)

The Fifth District Normal School was, in fact, the fifth and final of the standard schools created by the Missouri Legislature to lay down the standards, or "norms," for a state teacher's college network. For the first 13 years of its existence, the Fifth District Normal School could only award certificates to its students and not baccalaureate degrees. In 1913, University President Ira Richardson requested the Board of Regents to authorize a course of study that would lead to a Bachelor of Science in education. The first degree class graduated on June 6, 1917 although the school was not yet designated a college. In 1919, the Normal School was renamed Northwest Missouri State Teachers College and began offering a full four-year curriculum that resulted in a college degree.

- **Insert (Field by Admin Building.jpg)**
- **Insert (Wells Interior.jpg)**
- **Insert (Early Homecoming.jpg)**

Northwest Missouri State College (1949 - 1972)

In 1940, an enabling act passed by the General Assembly prompted University President Uel Lamkin to begin pushing the college to develop and enlarge its offerings beyond training teachers. After nearly a decade of discussion, recommendations and legislation, Northwest Missouri State Teachers College removed the word “teachers” from its name and became Northwest Missouri State College in 1949. This change reflected its expanded regional and academic focus.

- **Insert (Old Campus Sketch.png)**

In its early years as Northwest Missouri State College, a building boom coincided with a dramatic increase in enrollment. Part of the spike in enrollment occurred in the 1950s simply due to men returning from the war. However, the surge quickly transcended any swing merely associated with the end of wartime. By 1955, there were almost three times the number of students on campus as in 1945. This population escalation continued unabated into the 1960s as enrollment doubled from 2,000 to 4,000 between 1961 and 1967. By 1970, the enrollment on Northwest Missouri State College reached 5,000.

- **Insert (Students in Roberta.jpg)**
- **Insert (Campus in the 1960s.jpg)**

Northwest Missouri State University (1972 - Present)

At the beginning of 1972, the North Central Association of Colleges and Schools accredited Northwest Missouri State College for its graduate programs. At that time, the College was offering a Master of Arts or Sciences in 22 areas. With the accreditation of graduate programs, the school’s status again changed to Northwest Missouri State University. In the 1970s and the 1980s, enrollment continued to grow but not at the breakneck pace that had characterized the 1950s and 1960s.

- **Insert (Electronic Campus 1987.jpg)**

Historical Development of the Campus

The pace of development on the campus indicates much about the University’s history. The Administration Building is the oldest structure built specifically for College use. It was originally referred to as The Normal School Building, or simply Academic Hall and its cornerstone was laid on Oct. 12, 1907, with a corresponding celebratory gathering. Indeed the cornerstone of Academic Hall was ceremoniously the cornerstone of the Normal School itself. Academic Hall was sited directly to the west of the Wabash train depot, indicating the historic arrival experience of visitors to campus. Classes began in Academic Hall on Oct. 3, 1910, almost three years to the date that the first cornerstone was laid.

- **Insert Picture of Administration Foundation (Administration Building Foundation.jpg)**
- **Insert Picture of Administration Building Turret Construction (Turret Construction.jpg)**
- **Insert Photo of Admin Building Construction (Administration Building Construction.jpg)**

When the Fifth District Normal School began in 1905, instruction occurred in several areas of Maryville but was located primarily on Thomas Gaunt’s former family nursery. The first buildings on campus flanked this original 21-acre nursery land and expanded around a perimeter of open space. During the time as the Missouri State Teachers College from 1919 through 1949, the campus expanded in measured increments. A women’s residence hall, now named Roberta Hall, opened in 1923. A gymnasium, now named Martindale Hall, was completed in 1925. Additionally, an industrial arts building, now named Thompson-Ringold, was constructed just to the east of Academic Hall in 1931. The College’s first library, now known as Wells Hall, was completed in 1936. These buildings began to frame what was to become known as “The Long Walk” leading from the entrance of Academic Hall to the fledgling campus’s southeastern corner. This core of campus, on a former nursery, had begun to take form by the end of the Great Depression.

- **Insert First Aerial (1942.Aerial.jpg)**
- **Insert (Martindale.jpg)**

Like many other American campuses, Northwest expanded rapidly in the post-World-War-II era, nearly tripling its enrollment between 1945 and 1955. Due to the necessity caused by a surging enrollment occurring during its time as Northwest Missouri State College from 1949 through 1972, the College rapidly added infrastructure and broadened the campus. In the 1950s and 1960s alone, the College added a student union, a classroom building (now known as Colden Hall), Martindale Gymnasium, the original Hudson and Perrin residence halls, the Mabel Cook Home Management house, the Olive DeLuce Fine Arts Building, Garrett-Strong Science Building and two high-rise residence halls. The construction began to push the boundaries of the campus beyond the original core and open space surrounding the Long Walk that had been shaped during the campus's previous period as the Missouri State Teachers College. This indelible pathway remained a well-defined open space, but the addition of buildings such as the new high-rise residence halls, Phillips and Franken, to the northwest and the Olive DeLuce Fine Arts Building to the south produced other nodes of student life activity away from this core. Parking and roadways were added to accommodate the additional buildings and altered the predominately pedestrian circulation patterns as automobiles became increasingly omnipresent among the students, faculty and staff.

- **Insert (Colden Hall.jpg)**
- **Insert (Garrett-Strong Science.jpg)**
- **Insert (Olive Fine Arts Construction.jpg)**
- **Insert (High-Rise Construction.jpg)**

As the 1970s began, almost as a reminder of the importance of the campus core, an iconic symbol arose approximately halfway down the Long Walk. The Memorial Bell Tower first tolled songs in 1971. The Bell Tower, a product of donations that would subsequently help form the basis of the Northwest Foundation, rang out and symbolically proclaimed the center of the campus core had not and would not be moving.

- **Insert (Bell Tower.jpg)**

When Northwest Missouri State College transitioned to Northwest Missouri State University in 1972, campus and building development continued to march away from the campus core lining the Long Walk. The two additional high-rise buildings, Dietrich and Millikan Halls, opened in the early 1970s as did Taylor Commons (now known as The Station). Taylor Commons provided a second dining space to accommodate the four high-rise student residence halls in the northwest quadrant of campus. At the beginning of the 1980s, construction began on a new library and its location bridged the distance between the campus core and the new constellation of student housing in the northwest section of campus. In the 21st century, the addition of the Tower Suites residence halls, Forest Village Apartments and the Dean L. Hubbard Center for Innovation and Entrepreneurship (CIE) continued the trend of expanding the landscape of the University to the north and west.

- **Insert (Owens Library Construction.jpg, Owens Library Construction 2.jpg & Owens Library Construction 3.jpg)**
- **Insert (Tower Suites.jpg, New Hudson-Perrin.jpg, CIE.jpg, & CIE 2.jpg)**

As enrollment is anticipated to continue an upward trajectory congruent with the University's strategic plan, connectivity within the campus will best be maintained through the renovation or replacement of existing buildings. Building upon investments previously made in the campus is using the University's resources wisely. New construction should be phased to prudently increase density within areas of campus already served by utilities and enhance the connectivity and mix of uses existing near the campus core. Additional new construction farther away from the campus core and existing housing locations will needlessly strain the University's infrastructure and available resources and result in building and open space inefficiencies.

- Insert progression of diagrams depicting campus development through the years (**19th Century Buildings.jpg**, **1905 – 1949 Buildings.jpg**, **1950s Buildings.jpg**, **1960s Buildings.jpg**, **1970s Buildings.jpg**, **1980s Buildings.jpg**, **1990s Buildings.jpg**, **21st Century Buildings.jpg**) (*Illustrator File available*)

GUIDING PRINCIPLES: MAJOR RECOMMENDATIONS OF THE PLAN

Four Guiding Principles

The Campus Master Plan, a physical representation of the University's principles and campus goals, includes projects that illustrate the full capacity of the campus. The plan provides the framework for Northwest to meet prioritized needs over the next five years, projected needs over a 10-year period and long-term needs beyond 10 years into the future. The plan organizes new physical development and allocation of open space to ensure that the cumulative impact of individual projects exceeds the sum of its parts. The plan addresses campus needs without any acquisition of new property. However, the University will continue to evaluate available, strategic property on a case-by-case basis. In short, the plan provides a flexible framework that is intended to be a living and often-revisited document that can adapt to changes in curriculum, enrollment and housing demand.

To inform the campus master-planning efforts, four guiding principles were developed to guide implementation of physical development of the campus. These guiding principles direct the plan and provide a way to evaluate whether individual proposals align with the overarching goals of the institution. They reflect findings from the planning process that were articulated by members of the campus community during focus groups, workshops and listening sessions. The guiding principles were derived from both existing strengths as well as identified needs.

The Four Guiding Principles of the Master Plan:

CREATE – Create a strong first impression.

MAINTAIN – Maintain the compact campus.

CONNECT – Connect the campus internally and to Maryville.

UTILIZE – Utilize resources wisely.

CREATE A STRONG FIRST IMPRESSION

A strong first impression will appropriately reflect the quality of Northwest to its guests and visitors. The respect for the physical campus among Northwest's faculty, staff and students is evident. This reverence should not be secretive but instead celebrated. This master plan will harness the best existing attributes of the campus and through strategic recommendations will provide a framework to bolster the first-time experience for visitors to Northwest. First impressions are important and they are made quickly.

The following elements of the Campus Master Plan speak directly to the guiding principle of creating a strong first impression.

Signage & Wayfinding

The need for a comprehensive campus signage and wayfinding plan is evident when visiting campus. First-time visitors to campus are often confused upon arrival. There is little sense of arrival when you reach campus and the existing signage is inconsistent in both placement and appearance and thus forms an unreliable system for navigation. Faculty, staff, students and visitors to Northwest enter the campus from any number of paths around the perimeter of campus and their resultant orientation is uneven and often unpredictable. This, in turn, robs visitors of a sense of place when arriving on campus.

Thus as part of the Campus Master Plan, a signage and wayfinding plan was developed to provide a consistent, logical and attractive means by which first-time visitors, initiated users and the broader community can navigate both *to* the campus as well as *through* the campus. The signage and wayfinding process engaged a varietal range of participants from the campus community including the president and a steering committee comprising representatives from several academic and administrative departments. This collaborative design approach allowed all aspects of the signage and wayfinding program to develop synergistically and mutually inform one another.

Through a sequential three-step process involving observations, concept design and design solution, a selected campus signage and wayfinding scheme sprung forth that lifts elements from both the prominent architectural detailing and history found on the campus as well as elements displayed throughout the recent upgrades to the Fourth Street entrance to campus.

Much of the Northwest campus edge is defined by public streets – College Avenue, North Country Club Road, W. 16th Street and North College Drive/ University Drive. The recent upgrades to Fourth Street have engendered the southeastern entrance to campus as the most recognizable point serving as a primary entrance to campus. However, while Northwest will continue to direct many visitors to this southeast entrance of campus, the University needs to be prepared to welcome visitors at all entrances. For this reason, the University is committed to developing a clear, high-quality entry and arrival experience at each gateway of the campus and this is highlighted within the signage and wayfinding plan. The consistency and familiar elements within the signage and wayfinding scheme provide a sense of arrival and a sense of place that are both recognizable and reassuring. Thusly the acclamation to the campus becomes both immediate and comfortable.

Specific design elements and details for the Signage & Wayfinding elements of the Campus Master Plan can be found within the Signage & Wayfinding Plan; an appendix of this document.

• Insert signage & wayfinding graphical elements (from Jack)

Visitor Center

The current arrival experience for first-time visitors to Northwest Missouri State University by car is not consistent and often underwhelming. During the planning process, the planning team heard repeatedly that the visitor experience to Northwest failed to reflect the high quality of the institution. While the existing southeastern entrance to campus along Fourth Street does indicate a clearly defined arrival to campus, this entrance route is not universally charted by all visitors. Although this route leaves visitors with a positive impression of Maryville, it loses impact just as it terminates at the campus gateway. This entrance route includes a first impression informed by an arrival at the existing campus recruitment and visitors center, Mabel Cook. Quite simply, Mabel Cook's appearance and space adequacy are inconsistent with the importance of this entrance to campus.

To address the inadequacy of Mabel Cook and the lack of a sense of arrival on campus, the Master Plan calls for the creation of a new campus visitor center to be located in the southeastern portion of the campus. With Fourth Street's recent upgrade with direct linkage to downtown Maryville, the southeastern entrance to campus has the potential to serve as the main grand entrance to Northwest. Continuing the streetscape enhancements onto University property will help expand that welcoming experience. Mabel Cook is in the right location, but it is woefully inadequate as a welcoming beacon to the University. An effective campus visitor center acts as the conduit through which first-time visitors, potential students and the general public enter a campus. Therefore, the importance of creating a positive memorable experience from the initial impression with a visitor center is paramount.

A new visitor center is a transformative project for Northwest that will change the face of campus. Its importance is difficult to overstate. Recent changes to Google Maps have been made to direct visitors to arrive at campus in the southeastern corner from most points south and east. Coupled with newly-unveiled signage from the city of Maryville as well as key destination signs outlined in the campus signage and wayfinding plan, first-time visitors will be arriving through the southeastern corner of campus in increasing numbers. As proposed, a new campus visitor center and accompanying landscape improvements and clear circulation will direct visitors to a circular roundabout from which passengers can immediately enter the new visitor center. Automobiles, in turn, will be directed to an adjacent parking lot to the east of the new visitor center, where an appropriate number of visitor spaces will be reserved. Visitors can then go through the new visitor center and through a back door immediately to the core of campus looking northwest to the Memorial Bell Tower and the Administration Building. Indeed, this arboreal vista along Thomas Gaunt's original nursery land augments the ease of arrival and new visitor center in greatly enhancing the first impression of visitors to Northwest.

- Insert Existing Mabel Cook Welcome Sign (**Mabel Cook Welcome Sign.jpg**)
- Insert Existing Conditions (**Mabel Cook.jpg, Mabel Cook Rear.jpg, & Mabel Cook Interior.jpg**)
- Insert rendering of new visitor center (**Visitor Center Rendering Fade.png**)

Tower Walk & East Drive

Throughout the planning process, the areas immediately in front of the Administration Building, J.W. Jones Student Union and the Memorial Bell Tower were routinely cited as the most scenic outdoor areas on Northwest's campus. Indeed this area, comprising the nexus of the Missouri Arboretum's designated trail systems, is the area often cited as being *the* quintessential part of the Northwest collegiate campus. Of course, this is the area referred to as The Long Walk; the center of which houses the Memorial Bell Tower audibly proclaiming its prominence of the heart of campus. This was the area around which the Fifth District Normal School was created in 1905. This is the area where pedestrians wander to and from classes and meals; the area where trees and shade dance in a defined envelope; and the area composed with a healthy mix of collegial academic, residential and student life facilities.

"The Long Walk." A main pedestrian thoroughfare running from the Administration Building to the campus's predominant entrance abutting the newly redesigned Fourth Street. Although measuring only a quarter of a mile, the Long Walk can indeed seem rather long when, as a pedestrian, you are forced to yield your seemingly dominant position as a pedestrian to a motoring car piercing the heart of campus along University Drive. The automobiles impede the otherwise uninterrupted right-of-way for the pedestrian. They force foot-travelers to be on heightened alert for conflicts. Unsurprisingly, this bucolic core of campus, the heart of the Northwest campus experience and soul of the Missouri Arboretum, is lined with motorists as much as throngs of students, faculty and visitors strolling through the arboreal open space on foot. Additionally, the dense tree canopy that originally seems an asset to the space is so overgrown that it impedes your ability to see across the space to key buildings and entries. The combination of the vehicular traffic and the almost opaque quality of the dense vegetation leaves visitors with the perception that the walk is much longer than it is in reality.

However, these challenges can be remediated. Automobiles need not continue to travel through the green core of campus. There is no destination along University Drive that cannot be accommodated by access from the perimeter of campus. There is no passage provided by University Drive that cannot be accommodated with an alternate route. To eliminate pedestrian-automobile conflicts and return the campus core to pedestrians, the Campus Master Plan calls for a removal of regular automobile traffic along University Drive. In so doing, University Drive will be transformed into a route designed for pedestrians and yet still can retain the ability for emergency vehicles if needed. Occasional vehicular access for limited events such as move-in and move-out days can also be accommodated. Through a system of adjustable bollards and tasteful repaving with brick, University Drive will be reinvigorated from an asphalt zone for automobiles to a landscaped passage welcoming pedestrians and expanding the main campus pedestrian zone. Complementary to the removal of vehicles is the proposal to assess, prune, relocate and remove trees and limbs that block key visual connections across the space. These recommendations will take careful consideration of signature arboretum plantings and be completed with the intent to visually open up the space while preserving the dappled canopy that exists today.

University Drive itself can be rebranded as University Way. As the transformation from University Drive to University Way is completed, automobiles formerly traversing through the heart of the campus core will be routed to the perimeter of campus and onto a newly constructed East Drive running along the campus's eastern edge. This new East Drive will extend eastward from the new parking lot provided for the new Visitor Center to the south portion of existing Parking Lot 10. The bi-directional, 20- to 24-foot East Drive then travels northward immediately adjacent and to the east of Parking Lot 10 continuing past the 90-degree intersection with West Seventh Street and eventually terminating in a T-intersection at West Ninth Street. In total, East Drive will extend a quarter of a mile. While approximately 80 parking spaces will be removed from the southeastern portion of Parking Lot 20 and western portion of Parking Lot 11, Parking Lots 10, 12 and 21 will remain entirely intact.

In addition to shifting the automobiles to the perimeter of campus, East Drive will be landscaped in a fashion that will soften the campus's eastern face displayed to Maryville. The right-of-way that East Drive will occupy is currently an unadorned plot of land that is subject to routine flooding as Peach Creek fills from stormwater runoff. With provisions for eight feet of sidewalk and 16-28 feet of landscaping and bioswales to the west, East Drive will create an attractive, usable, efficient and sustainable front to the city of Maryville along Northwest's eastern perimeter. The simple additions of sidewalk connections, stormwater management edge plantings, consistent street trees and appropriate screening to the east establish a beautiful streetscape for pedestrians and a memorable edge condition landscape for campus.

- Insert existing vs. rendering of proposed tower walk (**Tower Walk Before.png** and **Tower Walk Rendering.jpg**) *Landscape – Stephanie or Adam – may have higher res version*
- Insert existing, existing with measurements, & rendering of proposed East Side Drive (**East Ridge Drive Before 1.png**, **East Drive Before 2.jpg**, and **East Ridge Drive Rendering.jpg**) *Landscape – Stephanie or Adam – may have higher res version*
- Insert existing and proposed road networks (**Existing Road Network.jpg** and **Proposed Road Network.jpg**) *(Illustrator File available) Landscape – Stephanie or Adam – may have higher res version*

Alumni House Expansion

The University's Alumni House is located in the historic Townsend home along College Avenue in the southern part of campus on land currently owned by the Northwest Foundation Inc. The Alumni House serves as the focus for alumni activities and houses both the Office of University Advancement and the Northwest Foundation's main offices. Although the historic house has undergone restoration, University leadership has identified the need to improve and expand the Alumni House and the Northwest Foundation offices. A larger venue is needed to host alumni and advancement events at a dedicated location. For visitors attending events at the Alumni or Advancement facilities, an expanded, improved Alumni House will provide a strong first impression.

- Insert photo of existing alumni house (**Alumni House.jpg** OR **Alumni House Existing.jpg**)

Agricultural Learning Center

The number of students enrolled in one of the eight majors and minors offered through the School of Agricultural Sciences has been steadily increasing. More than 10% of the University's undergraduate students are enrolled in its programs. In order to expand the opportunities for hands-on experiences in living laboratories at the 448-acre R.T. Wright University Farm north of the main campus in Maryville, the University has planned to construct a multipurpose Agricultural Learning Center. The University Farm is currently home to beef, swine, dairy and sheep herds as well as row, silage and hay crops. The planned Agricultural Learning Center will provide dedicated research and instruction space allowing greater use of farm crop, soil and livestock resources at the University Farm. Preliminary site plans have been created and depict a proposed center totaling approximately 30,000 square feet and comprising offices, two classrooms, four laboratories, a teaching kitchen and a 12,000 square foot exposition event space. The new Agricultural Learning Center will contain two primary program elements:

1. **Agricultural Education** – The agricultural education element includes the laboratories, classrooms, commercial kitchen and administrative components.
2. **Agricultural Exposition** – The agricultural exposition element provides public and interactive spaces used for hosting conferences and events as well as helping showcase the work of a skilled workforce.

Taken together, the components of the Agricultural Learning Center will expand the hands-on learning opportunities at the University farm land.

- Insert rendering of proposed Ag Center (**Ag Literacy.jpg**)
- Insert site plan of proposed Ag Center (Insert Campus Plan with Farm Inset in top right (**Campus Plan.jpg** with Proposed **Wright Farm Inset.jpg** layered in top right) *(Illustrator File available)*

Administration Building: One Stop Shop

The Administration Building supports the majority of administrative functions at Northwest. Additionally it is the home for the nutrition and dietetics program and corresponding classrooms and labs. In its current state, the layout of the building and its occupants is not optimal and in some areas, poses a risk. The Campus Master Plan sets a realignment for the Administration Building to become the exclusive purview of administrative functions throughout campus. In this manner, students, faculty and staff will visit the Administration Building for all administrative matters. In essence, it will be an administrative one-stop-shop for student services on the first floor. On the academic program side, nutrition and dietetics programs could potentially be co-located with agricultural sciences and result in positive synergies for instruction and research.

- Insert table of space allocation/restacking in the Admin Building (**Administration Building Space Restacking.pdf**) (*Original File available*)
- Insert photo of interior Admin Building (**Administration Building Office. Jpg**)

MAINTAIN THE COMPACT CAMPUS

One of the strengths existing within the current campus setting is the intermingling and close-knit mix of uses among campus functions within its core geography. Building uses co-exist in repeating adjacent fashions wherein residential can abut academic and in turn germinate active student life. This master plan celebrates this mix of uses by further implementing a compact physical campus and only expands its footprint in measured, judicious means. The focus of maintaining the compact campus calls for infill construction as opposed to a sprawling expanding campus footprint.

The following elements of the Campus Master Plan speak directly to the guiding principle of maintaining a compact campus.

- Insert existing building uses + legend (**Existing Building Uses.jpg** and **Building Uses Legend.jpg**) (*Illustrator Files available*)
- Insert proposed building uses + legend (**Proposed Building Uses.jpg** and **Building Uses Legend.jpg**) (*Illustrator Files available*)

Campus Connectivity – Pedestrian Circulation

Pedestrian circulation is the lifeblood of campus movement. Due to the compact nature of the University campus, walking is the predominant means of navigating the campus. Connectivity within the campus core is generally strong as most of the academic buildings are proximally connected to adjacent residential and student life buildings. This relatively tight-knit mix of uses includes connections among the Administration Building, Hudson and Perrin Residence Halls and the J.W. Jones Student Union in the campus core. With the exception of the aforementioned conflicts caused with automobiles presently traveling on University Drive, the connectivity for pedestrians is strong and unimpeded within the campus core.

This sense of connectivity, however, severs rather abruptly the farther away one traverses from the campus core. Pedestrians are generally willing to walk about 10 minutes to reach a destination in the established campus core where the experience is pleasant and inviting. Contrary to that, in areas of campus that offer little landscape character and appeal, the physical distance is not considered a walkable distance. Indeed, if the quality of the walk experience is poor, then perceived distance will be much greater. Although the University campus is compact, not all the paths are high-quality. Despite the vast majority of the academic, residential, student life and public buildings all being located within a 10 (or even five) minute walk from the Memorial Bell Tower, the distance between buildings that sit outside of the campus core often seems disproportionately far. This perceived distance is caused by a lack of defined connections and an unwelcoming campus landscape. There is limited plant material; the walkways are narrow; resting spots are not readily available and desired footpaths are forced to cross parking lots and roads. Together, these elements result in an objectively short walk that seems interminably long.

- Insert walking circle diagram (**Walking Circles.jpg**) with caption (**Walking Circles Caption.jpg**) (*Illustrator Files available*)

Campus Connectivity – Vehicular Circulation

To get to campus, the primary means of transportation is motorized and conducted from single-occupancy vehicles. During the planning process, very few students, faculty, or staff reported walking or bicycling to reach campus. However, the city of Maryville's 2012 Comprehensive Plan denotes the importance of balanced and multi-modal transportation options and includes a *Bike and Pedestrian Plan* that encourages "elements of an active transportation system that is closely tied to the city's future development pattern." In essence, although the culture of walking and biking to and from the University from the greater Maryville community has not fully developed, there is a nascent movement to provide infrastructure that would foster greater use of such options. This is not unusual; biking and pedestrian activity benefits from numbers. As more residents walk and bike throughout the greater Maryville community, awareness of these modes as viable opportunities to motorized transport will increase. Through dedicated infrastructure, more residents will feel safer biking and walking. During the planning process, several participants reported that they would like to bike or walk to campus but did not feel

encouraged or even safe doing so in part because of the ubiquity of automobile traffic coupled with a corresponding lack of awareness from drivers.

Public mass transit options within the campus and within the greater Maryville community are limited and generally service transit-dependent or limited mobility customers such as seniors, people with disabilities and potentially children. However, the market for public transportation expands significantly when the student population is considered. Defining the appropriate type of service for the University and the Maryville market involves balancing demand, convenience and cost. University Police provide the Safe Ride Home program within the city limits of Maryville. This shuttle system is designed for students to travel to various retail stores in the Maryville area throughout the week. This program provides an important link between the University and the city of Maryville by offering students an efficient way to engage in off-campus activities such as shopping and dining. The shuttle service follows two defined routes continuously in a similar pattern as a city bus route. Although this service provides a key link for the University community to access greater Maryville, the system only operates two to four hours per weekday.

Additionally, there is a Safe Ride late night taxi service that runs from the University to the greater Maryville community but without retail stops. This service operates on Thursday, Friday and Saturday nights. For students needing to reach the Kansas City International Airport and several destinations east of Kansas City along Interstate 70, the Missouri Academy operates a once-per-month shuttle service for a fee.

- Insert safe ride home route maps ([Safe Ride Logo.jpg](#), [Safe Ride Route 1 Map.jpg](#), [Safe Ride Route 1 Stops.jpg](#), [Safe Ride Route 2 Map.jpg](#), [Safe Ride Route 2 Stops.jpg](#))
- Insert mapped diagrams of bike/ped paths with Maryville and shopping ([Bike and Ped Paths.jpg](#) and [Bike and Ped Paths Legend.jpg](#)) (*Illustrator File Available*)

Parking

The topic of parking often arose during the planning process and it quickly became apparent that more than just an objective number of parking spaces, the comprehensive management of parking policy at Northwest is essential. The campus has a high parking ratio per student at approximately 0.74 spaces per student. This has resulted in a surplus of parking as portions of parking lots are underutilized. Distribution of the surface parking lots and University policies creates a “hunting license” wherein people will drive around hunting for an available parking space. There are relatively few lot-based restrictions for parking permit holders and as a result, virtually anyone with a permit is able to park in nearly any lot. Although this system results in the highest possible utilization of the parking lots around the core of campus, it leads to congestion and frustration by users on the roads as it puts more cars into circulation and greatly increases the risk of auto-pedestrian conflicts. Additionally this system is very poor at generating high customer satisfaction because the perception that there is not enough parking manifests quickly once drivers inevitably cannot find a space “nearby” their destination. During the planning process, students voiced frustration at leaving their residences close to campus in an effort to find a parking space adjacent to their destination and subsequently returning to the perimeter of campus after spending time circling the interior roadways within the campus.

If we were to examine the amount of land currently paved by surface parking lots on Northwest’s campus (there are no parking garages on campus), it would be slightly larger than the land within the campus core along The Long Walk. Using a standard 350-square-foot parking space, the 4,345 spaces currently on the Northwest campus total just over 1.5 million square feet or a staggering 35 acres. To reduce the surplus of parking, the master plan calls for a parking quantity that is justified as a means of controlling investment in parking and meeting the sustainability goals of the University. The plan calls for the removal of some parking while providing new carefully-sited parking with a resulting quantity of parking that, while still considerably high at 3,774 spaces, results in a more justifiable 0.64 spaces per student. This would only return approximately 4.5 acres of parking for other uses, but would shift parking to areas closer to the campus perimeter.

In addition to the sheer volume of parking, changing parking policies to zoned permits for the campus core would greatly reduce frustration and increase customer satisfaction. Although admittedly changing parking policies can amount to essentially a culture shift and must include adequate time for both adjustment and acceptance, a system such as a zoned permit would lead to lower frustration among permit holders, decreased pedestrian and automobile conflicts and higher customer satisfaction. A zoned permit parking system, in which patrons are assigned to a particular lot or lots based on price paid or user-designation (e.g., resident, faculty, commuter, etc.) greatly reduces the time spent circling campus in search of an elusive spot “nearby” a desired location. With a zoned permit system, parking patrons know in advance where they can find parking within their permitted zone. A zoned permit distributes parking across the campus and minimizes hunting for parking. A planned zoned parking scheme can become most efficient after trial-and-error adjustments have been made based on permit sales and user patterns. Such a zoned parking scheme is one means of changing the policy but certainly not the only means. However, as the planning process revealed, the current policy has proven troublingly inefficient in generating customer satisfaction among patrons. Any prudent change to the campus parking policy, coupled with improvements to the quality of the campus pedestrian paths, can bring order, improve campus access and enhance campus safety.

Surface parking lots can be designed to both accommodate safe pedestrian routes while also helping manage the stormwater run-off associated with large impervious lots. The addition of large canopy trees within parking lot medians visually softens the large scale of many of these lots while offering cooling effects in the hot summer months. Designing surface lots to provide key pedestrian desire lines within the median strips makes this experience more humane and safe for the pedestrian. Parking lot stormwater run-off can be captured and treated immediately adjacent to the impervious surface area by integrating bioswales into the parking lot medians and adjacent plantings. These stormwater plantings are not only functional and help mitigate the surge into the stormwater infrastructure in rain events, but also offer visually appealing plantings that help minimize the expansive areas of pavement.

- **Insert existing, proposed, and aggregated parking diagrams (Existing Parking.jpg, Parking Aggregated.jpg, & Proposed Parking.jpg)**
- **Insert signage & wayfinding parking diagram here** (This is “ParkingRecommendations.pdf”)

Building Space Use Assessment

Today, the campus totals approximately 2.2 million gross square feet of building space. As part of the master planning process, a detailed building-space analysis was conducted to quantify both the amount of space the University has and needs. In addition, the assessment analyzes the building space necessary to accommodate a 10% enrollment growth. Resultantly, the building space use assessment divulged details of current campus needs as well as possibilities for future space use. This analysis contributed to decisions about building renovation and footprint expansion or contraction.

The Building Space Use Assessment relied on initial data provided by the University’s database using fall 2014 as a snapshot in time. Northwest supplied fall 2014 course data with enrollments, employee data and the target enrollment growth as well as all floor plans. This preliminary data was supplemented and verified by a space needs assessment conducted by the planning team. This assessment included a room-by-room facilities inventory of all non-residential spaces on the Maryville campus. The resulting database was coupled with on-campus individual work sessions with a wide range of Northwest stakeholders. The provost, vice presidents, deans and directors supplied empirical information that helped formulate the needs assessment. These sessions helped clarify the qualitative aspects of how space has been allocated and shared. Indeed, while space needs assessments are largely quantitative, the existing quality of space plays a major role in the perceived need for space and completes the picture about space at an institution.

Detailed Space Analysis elements of the Campus Master Plan can be found within the Space Analysis Report; an appendix of this document.

Several outcomes were observed for both classroom and lab utilization at the present level of enrollment as well as at the 10% enrollment growth scenario. Major observations from the building space use assessment for the overall existing conditions include:

- The majority of classroom footprints and configurations impede the ability to incorporate modern learning styles. Several academic departments noted the lack of appropriate-sized classrooms. These needs can be accommodated with the existing inventory by “rightsizing” rooms. To accomplish this, underutilized large-capacity classrooms should have seats removed.
- Classrooms need to be more flexible with moveable furniture and writeable surfaces. Each classroom will need to be evaluated individually as unique physical characteristics could pose some challenges such as sightlines or accessibility.
- Classrooms and class labs could be better utilized through improved scheduling practices. A centralized scheduling software would serve the entire campus well to ensure efficient use of institutional space, conference rooms and meeting spaces.
- The majority of buildings need more electrical capacity, outlets and wireless capacity in instructional spaces and lounge/study areas.
- Quality academic buildings have been overburdened in terms of office and instructional space allocations. For example, Colden Hall and the Garrett-Strong Science Building are busting at the seams. A plan to decant these buildings is needed.
- With recent department, school and college changes, several academic units lack a sense of physical identity and focal point. This disjointedness is an operational challenge.
- There is a need and desire to move to a more digitized filing system. Many units reported still being 100% paper-based. Filing cabinets create a need for space that could be utilized for other purposes or negate the need completely.
- There is a need for informal student study and collaboration space that is intentionally designed and obvious. These types of spaces should be included in the planning stage of future projects.
- The majority of academic and administrative offices are in desperate need of modernization in terms of interior finishes and furniture to increase functionality and aesthetics. The B.D. Owens Library is a good example of where updated furnishings are needed to improve the overall appearance of the building but to also improve the student experience.
- The science programs are relatively in good shape in terms of quantity and quality of space. Utilization data indicates there is the ability to absorb more lab courses.
- Several academic and administrative units would benefit from a reallocation plan to better utilize the existing space inventory, benefit from adjacencies and provide a better customer experience.

Regarding classroom utilization, the following outcomes were observed:

- On average, the University schedules its 74 classrooms for 27 hours per week at a 62% seat fill rate. This equates to 17.6 weekly seat hours. Currently, the utilization targets are 32 hours per week with a 70% seat fill rate which is 22.4 weekly seat hours. Northwest schedules its classrooms 21% less than the existing target.
- Peak times on campus are from 9:00 a.m. through 3:00 p.m., Monday through Friday. On all days, the 8:00 a.m. hour is used less than 50% with utilization dropping off dramatically after 4 p.m.
- Colden Hall houses the largest number of classrooms (21) and has the highest number of weekly room hours at 36. On the other end of the spectrum, the Administration Building houses three classrooms that are only scheduled for three weekly room hours.
- The classroom demand analysis shows that there is about a nine-classroom overage. There is a need for five more classrooms that seat 40 students, three additional rooms that seats 90 students and one 150-seat room.

Regarding class laboratory utilization, the following outcomes were notable:

- There are 57 class laboratories. Class laboratories are scheduled an average of 15 hours per week with a 74% seat fill rate for a 12.7 weekly seat hour average. Northwest's existing utilization rate is about 25% less than the expected utilization rate of 20 hours per week with an 80% seat fill rate.
- Computer sciences makes the most efficient use of its labs at 34 hours per week with an 88% seat fill rate for an average of 34.2 weekly seat hours.
- Art has the largest number of class labs (12) that have a good fill rate of 84% but only show 8.3 weekly seat hours. Art studios are typically made available to students after scheduled course times to work on projects.

For the current period, fall of 2014, the space needs assessment produced the following outcomes:

- The bottom line need for space is 105,000 net assignable square Feet (NASF). This accounts for the planned construction of the Bearcat Activity Center with Athletics as the primary occupant.
- The key drivers of current need are: assembly and exhibit Space (16,866 NASF); library and study space (14,145 NASF); athletics (132,818 NASF); and other academic space (16,288 NASF) in part to account for dedicated presentation/meeting room with pre-function space for admission's recruitment efforts.
- Quality of space at Northwest is a key driver of the perceived space shortage on campus. About 39% of all instructional space is located in below average or poor quality buildings.
- There is a surplus of instructional space, which is reflective of lower utilization rates of classrooms and class labs. This indicates capacity within existing sections and the capacity to add sections.
- There is a surplus of academic and administrative offices. The reasons for this are varied. First, the average office size at Northwest is 162 NASF per office, which is greater than the 140 NASF office space metric used in the analysis. Also, office suite circulation might be counted as office service space. Some offices are located in historic houses, so offices are larger by nature. For example, the Alumni House has offices that average more than 280 NASF.

Accounting for growth, outcomes at the 10% growth scenario include the following:

- The biggest driver for additional space in the future scenario is the need for additional instructional space to meet increased student enrollment. With the exception of open laboratories, all academic space categories are in a deficit when the 10% growth is realized.
- The deficit in library and study space increases due to more students on campus. The physical volume collection is expected to decrease somewhat due to a culling process underway. That space can be repurposed for maker spaces and additional study spaces within the library. The enrollment growth exacerbates the need for informal collaborative study spaces throughout the campus. As renovations and new construction occurs on the campus, this type of space should be included in the planning phase.
- The surplus in office space decreases as faculty and staff are added to support the enrollment growth both for academic and administrative offices. In planning new capital projects, a recommended standard of 120 NASF is recommended.
- Looking at the needs assessment by primary unit, the College of Arts and Sciences demonstrates the need for the most additional space. These needs are in the areas of classrooms, research labs and offices.

Detailed Space Analysis elements of the Campus Master Plan can be found within the Space Analysis Report; an appendix of this document.

Academic Space Migration

Based on the building-space assessment in tandem with the overall master plan herein, the following migration or shifts of academic space are proposed:

1. Move the functions of the School of Agricultural Sciences in Valk Center to the western portion of the Dean L. Hubbard Center for Innovation and Entrepreneurship (CIE).
2. Move any remaining functions from Facility Services East to the Facility Services West buildings for consolidation. Many of the previous functions within Facility Services East moved to the Support Services

Building in 2014. The remaining transportation services can move to the existing space near Facilities Services West and the Support Services Building.

3. Decant Colden Hall and move the humanities, behavioral sciences and social sciences programs to the Valk Center.
4. Move the majority of functions within Thompson-Ringold to Colden Hall with remaining functions from Thompson-Ringold dispersed throughout campus in appropriate building space as determined by University leadership during and immediately prior to migration.
5. Raze Thompson-Ringold and the Facility Services East building
6. Move nutrition and dietetics from the Administration Building to the CIE
7. Move the TRiO Program from the Administration Building to space in Owens Library. The program is currently under the auspices of Owens Library despite retaining offices in the Administration Building.
8. Move Horace Mann Laboratory School and the School of Education from Everett Brown Hall to a new building constructed in the area where Thompson-Ringold and the former Facility Services East Building were located.
9. Move the School of Communication and Mass Media from Wells Hall to a renovated Brown Hall to function as a Center for Innovation.

Insert Space Analytics Diagrams/Charts

New Campus Academic Buildings

As Northwest strives to increase enrollment following the tenets of its strategic plan, it will need to increase academic space. In the immediate term, the consolidation of the School of Agricultural Sciences to the currently underutilized portion within the western wing of the CIE is a priority as this frees up academic space in the Valk Center while making the School of Agricultural Sciences more efficient. This, in turn, will facilitate other shifts and migrations in academic space throughout campus as described above within the building-space assessment and academic space migration sections of the Campus Master Plan. However, to meet long-term needs for capacity of academic space, the University needs to plan for several new academic buildings. This plan provides for the placement of additional academic buildings around the historic campus core. Through the removal of Wells Hall and Thompson-Ringold, space opens on the northeast portion along the planned University Way to provide the area for a higher density of academic space adjacent to campus residence halls as well as student-life facilities lining the core. In so doing, the campus maintains its compact core with an efficient mix of uses.

Forest Village Expansion

As the building-space assessment analyzed non-residential space throughout Northwest's campus, increases in enrollment congruent with targets set in the University's strategic plan will also require additional on-campus housing. Existing housing capacity (fall of 2015) indicates 2,730 beds are divided among several unit types. The apartment-style unit type, which offers the most independence and is typically reserved for upperclassmen, is the least common unit type existing at Northwest. Comprising only 7% of the housing stock, all 194 beds in the apartment-style on campus are located in the three-building Forest Village Complex.

During the planning process engagement with Northwest's Residential Life staff, historical exit polling was reviewed that showed the three main reasons for students choosing to live off campus have been:

1. Cost
2. Meal Plans
3. Freedom

Student participants cited a desire for independent living styles as one of the three most important considerations when deciding to move off campus. The relative lack of the apartment-style unit type on campus has helped the burgeoning private rental housing market in Maryville court students who cannot find on-campus housing options that align with their desired lifestyle; that is greater independence provided in an apartment unit type setting.

The Campus Master Plan provides for additional apartment unit types flanking the existing Forest Village buildings

on campus in order to maintain the compact nature of this residential area to the north of campus. These additional residential units will necessitate an increase in parking capacity, which can best be provided simply by expanding the existing parking lot for Forest Village Complex north along College Park Drive (Parking Lot #32). In this matter, parking remains immediately west of the Willow Building at Forest Village and immediately to the east of Campus Park Drive while maintaining the connection to the rest of the parking for the Forest Village Apartments. This helps maintain the compact campus by keeping parking and automobile use at the campus perimeter. With the eventual expansion of two to three buildings within the Forest Village complex, the additional parking will serve as a replacement to existing Forest Village parking that will have been claimed through ongoing construction of additional Forest Village units.

As the University's international student population continues to grow, the possibility of creating a "Global Village" becomes more feasible. A place where additional support and services can be provided in order to ease the transition to life in northwest Missouri can be bolstered through an immediate sense of community. The Forest Village complex and its planned expansion could play that role in Northwest's future.

Insert picture of Forest Village

Additional Housing & Dining Venues

Today, the University has the required number of beds for the student body; however, diversity of unit types (e.g., traditional, suites and apartments) could be improved. Thus, the proposed addition of apartment unit types in Forest Village is most urgent in terms of housing.

The University will also need to provide additional housing and dining venues to provide adequate capacity for anticipated enrollment growth targeted within the University's strategic plan. Without including Phillips Hall, which was off-line for student housing in the fall of 2015, 88% of the available beds on campus were occupied in the fall of 2015. While this indicates adequate capacity for the student body, only 41% of students lived in University-provided housing. Thus, as the University strives to raise the proportion of students living on campus in tandem with anticipated enrollment growth, on-campus housing capacity will need to correspondingly increase.

As revealed during the planning process engagement meeting with the University's Residential Life staff, cost remains the single most significant factor for students choosing to live on or off campus. The relatively low cost of residential units provided off campus provides stiff competition to any potential on-campus housing solution. The eventual living cost charged for any new housing on campus must be a strong consideration during construction and must incur a lower cost or run the risk of maintaining lower occupancy rates even with an increase in demand.

Tied into the residential experience and need for additional housing is the need for increased or modified dining and meal plan arrangements. The current meal plan was cited as one of the three most important factors for students deciding to live on or off campus. During the planning process, students reported that that meal plan can be a limiting aspect to student life. As the meal plan is no longer accepted at The Station, the facility has become desolate and is no longer a social gathering spot in the northwest section of campus. At the Student Union, the meal plan forces students to separate socially since the basement area is "food dependent" and limited to students who have purchased a meal plan. With the anticipated enrollment growth and goals for increasing the proportion of students living on campus, additional dining venues accepting of the meal plan will need to be established. Efficient management and allocation of meal plans will continue to be paramount as the number of students partaking in the meal plan increases. The division between residents and non-residents in meal plan options needs continues management and possible adjustments.

Insert picture of dining facilities at the Union and Station

Insert picture of Student ID Card

Campus Meeting Space

The need for larger venues on the campus at Northwest to hold receptions, large meetings and special events was voiced by campus leaders, student groups and faculty alike throughout the master planning process. Larger venues

including the J.W. Jones Student Union Ballroom, the Ron Houston Center for the Performing Arts and some of the larger conference rooms sprinkled throughout campus are routinely reserved months in advance or are not large enough to accommodate more prodigious or prominent gatherings. In several ways, the need for a larger formal meeting space echoes similar desires voiced for an expansion of the Alumni House. The opportunity to merge both needs with one center could be feasible if space is programmed accordingly. With the addition of a designated larger meeting center, existing facilities such as large conference rooms and the Student Union Ballroom could be more efficiently utilized to handle student and faculty obligations.

Insert pictures of Student Union Ballroom

Athletic & Recreation Facilities – Indoor & Outdoor

Northwest athletic teams compete in the Mid-America Athletic Association (MIAA) in NCAA Division II. Northwest has a strong, active athletic program and routinely attains postseason play in many sports. Northwest offers the following sports:

SPORT	MEN	WOMEN
Football	X	
Track & Field / Cross Country	X	X
Soccer		X
Basketball	X	X
Volleyball		X
Golf		X
Tennis	X	X
Baseball	X	
Softball		X

In maintaining the guiding principle of maintaining the compact campus, the clustering of practice and competition fields in the southwest quadrant of campus has proven successful. With the singular exception of golf, all sports practice and compete directly on the Maryville campus in facilities located in the southwest quadrant of campus. While the location has been ideal, the wear and tear on several of the indoor and outdoor facilities used for practice and competition is beginning to hinder high levels of continuous use. In addition, many of the fields have not changed in years and thus are not keeping current with trends at the university level of competition. Upgrades and/or replacements for several of the fields are recommended.

Outdoor Facilities

Adjacent to the on-campus Bearcat Stadium housing football and track are four outdoor tennis courts, the Frank Grube courts. The remainder of the primary outdoor facilities are clustered farther west and across College Park Drive. This clustering includes track throws, softball, soccer and baseball. Due to the compact clustering of both indoor and outdoor facilities, all athletic and recreation facilities are within short walking distances of each other.

There is adequate land available in the southwestern quadrant of campus to accommodate further additions and improvements to these practice and competition venues. Such additions and improvements are needed for soccer, baseball and softball venues as these facilities are in need of renovations including synthetic turf, lighting, fencing, dugouts, press boxes and seating. In addition, these venues require a centralized spectator/athlete support building with toilets, storage and small training and meeting rooms. The proposed long-term approach is to create a large and lit two-field pad of synthetic turf just south of the campus’s existing residential clustering of the high rises and tower suites. With added recreational tennis and basketball courts, these turf fields will create excellent long-term flexibility for various recreational activities all located within the same section of campus and maintaining direct connectivity.

In order to buffer against prevailing winds and to provide clearly defined edges for the outdoor athletic facilities, landscaped planting within the southwestern quadrant of campus is highly desired.

Renovations are also needed at Bearcat Stadium. The track lane widths are sub-standard. One possibility in renovating the track that was raised during the planning process was to move the track to another location separate from Bearcat Stadium and therefore allow the football field to immediately abut the grandstands and provide fans a more intimate vantage for the football action. However, for the purview of the current master plan, upgrades to the existing track in its current location are warranted. The press box structure at Bearcat Stadium also requires a west-side stair and balcony enclosure. Water penetration has become problematic in areas at the field level, within the main grandstands and within press areas. The grandstand stairway risers and suites are in need of renovations to protect from additional water penetration.

Competition tennis at the University level is ideally clustered in six courts. The campus provides four competition courts immediately north of Martindale Hall and the Robert and Virginia Foster Fitness Center, the Frank Grube Courts. In order to expand the existing court configuration from four to six courts, the playground for the Horace Mann Laboratory School needs to be moved, a proposal addressed within this master plan wherein the Horace Mann is relocated to the northeast section of campus.

The sole exception to athletic and recreation improvements and expansion that is *not* to be located within the southwestern quadrant of campus is the provision of a natural grass cricket pitch. Demand for a formal cricket pitch was voiced during the planning process and arose from the fact that the area of grass immediately to the south of the CIE's eastern building has served as an informal area for cricket for several years. The location of this informal pitch has resulted, in part, from a clustering of international students living in apartments adjacent to this area on the eastern side of North College Drive. These students have often convened on this grassy area to play cricket informally. This area of open space is large enough to accommodate a formal cricket pitch and its creation would directly address a request for student-life improvements for the growing international student body.

Insert pictures of outdoor athletic facilities, tennis courts, stadium, etc.

Indoor Facilities

The clustered indoor athlete support facilities are directly adjacent to Bearcat Stadium. Indeed all indoor athletic and recreation facilities (competition arena, practice courts, weight training, team lockers, sports medicine, equipment issue and departmental offices) are located in one interconnected building complex, Lamkin Activity Center (the location of these facilities will also expand to the Bearcat Activity Center once it is completed). This centralized location is a positive attribute that helps to maintain the compact campus. A planned renovation to the lower level of the two buildings will address space and function shortfalls for the primary athlete support areas.

The existing Bearcat Arena has the potential of being a great venue for both practice and competition. Recommended improvements include improved graphics, better lighting, renovated ceiling material, improved concessions and an enhanced connection to the existing lobby. Additionally, although the quantity of seating within Bearcat Arena is at least adequate (and occasionally excessive), the quality of the seating is not commensurate with the high level of competition.

Volleyball currently practices in the older gymnasium in Martindale Hall. This space, if renovated properly, could remain an excellent practice venue and recreational space.

Overall, the Lamkin complex requires both renovation as well as some additions. There are space shortages, including coaching office areas, team meeting spaces, sports medicine expansion and other team needs. The results of the athletic and space analysis completed for the master plan indicate a need for an additional 12,000 square feet. Once the planned Bearcat Activity Center is completed, some functions from the Lamkin complex may transition to the new activity center and thus free some areas for much-needed space within Lamkin.

With the recent completion of the 19,490 square foot Robert and Virginia Foster Fitness Center in 2015, indoor student recreational space is sufficiently provided for the long term. The Foster Fitness Center, located in the location of the former Foster Aquatic Center, provides an eastern anchor to the athletics and recreation land and facilities use in the southwestern portion of the Northwest campus.

Insert pictures of Bearcat Arena (inside and out), Foster Fitness Center, etc.

CONNECT CAMPUS TO MARYVILLE

From its inception, Northwest has been both supported and supportive of its host town, Maryville. The strong sense of community that pervades the campus is also evident within Maryville wherein strong town-gown relations bolster a symbiotic co-dependence found only within the most successful college towns. Building upon this tenable relationship to create even deeper connections is a framework of this master plan. The landscaped elements found within the campus will be extended from the core to the edges of campus to provide a greater interaction with the surrounding community.

The following elements of the Campus Master Plan speak directly to the guiding principle of connecting the campus internally and to Maryville.

Bearcat Activity Center

The planned Bearcat Activity Center provides an additional 136,000 gross square feet of indoor athletic space on the Northwest campus. This facility brings the total indoor athletic net assignable square feet to 295,516 – a figure on par or exceeding most of Northwest’s peer institutions in terms of dedicated indoor activity centers. As the space in Bearcat Activity Center is planned to be flexible in use, it carries the potential to serve more than just indoor athletics and can be programmed for a variety of indoor events.

The planned center includes a 300-meter indoor track surrounding a full multi-use synthetic turf field. This gives the ability for the University’s outdoor sports teams to be able to practice during the winter months. In addition, the indoor track and turf will provide a viable solution to inclement weather issues that can preclude use on the outside track and turf for all types of users. Within the Bearcat Activity Center, support areas including meeting space, toilets, lobby, storage and a training room are included in the plans. The facility will be utilized by University athletic and recreational users and remain open to the greater Maryville community and summer camps. It will serve as a community asset that further connects the Northwest campus to the Maryville.

Insert renderings of Bearcat Activity Center

The Missouri Arboretum

In 1993, Northwest was designated the official state arboretum of Missouri by the Missouri State Legislature. This designation aligned with the campus land’s original existence as the Gaunt nursery in the 19th century. In following the historical pattern of mutual progress between the University and Maryville, the Arbor Day Foundation named the city of Maryville an official Tree City USA in 1998.

The original Gaunt nursery was 86.5 acres and consisted of vines, evergreens and several species of trees including Pecan, Black Oak and Austrian Pines planted by the Gaunt family. In addition it included several fruit-bearing trees. Today it is estimated that about a dozen trees, standing near the Gaunt House and Colden Hall, remain from the original Gaunt nursery property. The Missouri Arboretum land is situated on the highest point between Omaha and St. Louis (1,163 feet above sea level).

The arboretum helps to shape the physical campus and contributes to the sense of campus identity. Members of the campus community often cited the arboretum’s collection of trees as beautifully enhancing the grounds around the core of the campus and providing a sense of being amid a residential neighborhood rather than within an institutional setting. To supplement the sense of place within the arboretum, signage for designated trees comprising the arboretum adorn the campus. Three trails that wind through the arboretum grounds are demarcated: Gaunt, Tower and Chautauqua Trails.

Despite the campus community's widespread recognition of the campus's designation as the state arboretum and the existing tree signage, most participants involved in the planning process concurred that the University has not taken full advantage of the status conferred with having the state's official arboretum directly on their property. The landscape and signage portions of the proposed plan encourage better documentation and recognition for the campus's role as the official state arboretum.

Clusters of trees throughout the arboretum grounds often have varying origins. Over the years graduating classes, friends of the University and groundskeepers have gifted the University individual trees as well as clusters of certain species. For instance, the Flowering Crabapple trees planted behind Colden Hall were donated in memory of President Robert Foster's mother. Gingko trees planted near the southwest corner of the Administration building are largely the product of former University President Uel Lamkin bringing the trees to Northwest after his visits to China. Despite deliberate gifting and siting of certain trees and species' clusters, an overall vision entailing a cohesive placement pattern for the arboretum have largely been absent. Consequently although the Missouri Arboretum has produced a positive impact in shaping the core of campus along and near the Tower Walk, its presence is not as strong elsewhere on campus, particularly to the west and adjacent to the residence halls. Many of the community members described the athletic and facilities grounds to the west and the areas encompassing the high-rise residential halls to the northwest as a wholly separate place due to the lack of trees, paucity of plant material and prevalence of asphalt. Similarly, the areas north of the former Wabash rail bed in which the Dean L. Hubbard Center for Innovation and Entrepreneurship is located, are sparsely landscaped. Members of the campus community described these northern areas as isolated and removed from the campus core.

An important component of this Campus Master Plan therefore calls not only for the continuation of regular tree plantings but also for a specific and deliberate pattern of tree planting locations outside of the original defined arboretum into areas of campus lacking trees and other plant material. The addition of trees to these areas can strategically achieve a greater sense of identity for the Missouri State Arboretum while greatly contributing to a more pleasant campus-wide aesthetic. In addition, key site lines for many of the campus's core viewsheds in and around the campus core are currently obstructed by low-hanging, dense foliage within the designated arboretum. Although trees are central to constructing an inviting open space, they need ongoing management to provide an appropriate level of definition and enclosure within the campus landscape. Areas that could otherwise be important gathering spaces and active open spaces have become clogged with unmanaged or dense foliage. These visual blockages can be mitigated through increased targeted pruning of lower-branch growths, strategic tree relocation and removals. This pruning can be thought of as a "campus haircut" and could be completed within a summer. Careful consideration of key arboretum specimens, health of plant material and key desired visual connections across campus must be assessed when considering this "campus haircut."

Insert emblem/logo of the Missouri Arboretum
Insert images of Arboretum grounds and tree labels

Open Space

Open spaces define the overall structure of the campus and provide a framework for the built environment. The open space network of Northwest's campus largely reflects its special status as the Missouri Arboretum. However, away from the campus core, the open space network is not well-defined. Patches of open space that are undefined in structure or use such as the stretch of land immediately west of South Complex or areas surrounding Owens Library are merely zones without buildings through which pedestrians cross en route to a destination. They are pass-through areas. However, these same regions provide opportunities to connect seemingly isolated islands of activity with inviting and high-quality nodes for active student life. The proposed open space network respects the existing functional open space in the campus core and seeks to create more such active open spaces through the northwest quadrant of campus. As the University judiciously replaces some interior asphalt parking lots and service drives with pedestrian paths, tree-lined spaces can extend the breadth of the Missouri Arboretum and connect buildings and once-neglected open areas throughout campus. The network of defined open space can reach the edges of campus and weave seamlessly into connections with greater Maryville. The addition of these open space transformations, a comprehensive pathway system and an expanded tree planting program, which extends across campus, allow the open space system to knit the perceived disparate campus parts into one whole.

Insert Existing and Proposed Open Space Diagrams

Topography and Stormwater Management

Over the breadth of the campus, there is approximately 65 feet of grade change. The topography forms a gentle wishbone shaped ridge line through the center of campus that is generally not noticeable to pedestrians but creates some noticeable stormwater management issues.

Insert Topo Map/Diagram

Existing site drainage at Northwest reflects traditional runoff conveyance techniques involving curb inlets, basins and piping throughout the campus. The gentle sloping nature of the campus allows stormwater to have more chances to pool in various niches or alcove spaces created between buildings, walls, curbs and hardscape plazas. This is especially true during intense storm events.

The existing campus drains in varietal directions due to the wishbone shaped ridge that meets in the middle of campus. The southwestern part of the campus drains to the southwest corner of campus to an outlet that goes under Country Club Road (Drainage Area, DA-1). The south-central portion of campus drains to an area around the existing track, which is a low point on campus and then via underground storm system drains across College Avenue directly to the south, down North Munn Avenue and into the municipal system (Drainage Area, DA-2). Just to the east of DA-2 is the Colden Pond drainage area, which is a smaller watershed that comprises a high percentage of impervious surface area. This stormwater runoff is collected at Colden Pond, but has no known outlet. The eastern part of the campus drains to the east and outlets through Peach Creek and into the municipal system. The north and northwest parts of the campus drain to the northwest corner and outlets at a small waterway that leads to a large body of water west of the existing softball complex.

Insert Existing Conditions Drainage Area Map (CHA – Existing Conditions Drainage Area Map)

Insert Average Annual Runoff Volumes Map

Insert Existing Conditions Stormwater Issues Map

Campuses across the country are creatively attempting to incorporate stormwater management techniques into otherwise traditional campus environments. The Northwest staff have expressed interest in utilizing integrated landscape stormwater management solutions where possible, while realizing that all campus design guidelines must comply with Missouri Department of Natural Resources laws and regulations. This section will outline some potential steps that can be taken while implementing different phases of the Campus Master Plan.

Like any campus there has been growth through the years and some campus projects have done a good job in dealing with the stormwater conveyance while others have not. It is the goal of this narrative to create a plan that will facilitate achievement of the goals of the campus as well as local, state and federal stormwater regulations.

The quality of stormwater leaving a watershed is at its highest level when the land is in its pre-developed state. Treating stormwater to bring it back to or as close to its pre-development runoff levels as possible is an important action for the long-term health of regional streams and rivers. Northwest should strive to reduce future average annual runoff rates back to that of the pre-developed condition. In order to accomplish this goal, water quality facilities will need to be incorporated into existing and proposed parking lots, existing and proposed buildings and existing roads on campus. Stormwater management techniques shall be implemented in an attempt to control site runoff.

Retention and Detention Basins

Both dry “detention” and wet “retention” ponds can be used to mitigate both water quality and quantity concerns. A dry pond is typically designed to provide water quantity control but has only limited water quality benefits. A wet pond is typically designed to provide greater water quality control but is limited on its water quantity benefits. Unlike wet ponds, a dry pond does not have a permanent pool and the purpose is to reduce the peak flow rate of stormwater runoff, essentially providing flood control. A wet pond, on the other hand, typically has a permanent

pool and during storm events the water stored in the pond is later displaced by new runoff. Colden Pond is a potential candidate for conversion to a water re-use pool in order to irrigate nearby landscaped and lawn areas.

Infiltration Practices

Rain gardens, cisterns, infiltration planters, bio-swales, bio-retention systems, dry swales, constructed wetlands and infiltration basins are some examples of infiltration facilities that help to filter stormwater from small rainfall events. By encouraging and assisting infiltration, these facilities enhance water quality, reduce runoff rates, recharge the groundwater system and create habitat. Recent use of these practices for the construction of the Center for Innovation and Entrepreneurship on Northwest's campus has created a hardship for the maintenance staff when it comes to mowing and maintaining. The maintenance staff have mowed these areas in most cases due to their unsightly appearance and the relative ease of dispersed mowing versus discrete, targeted management. While implementing this Campus Master Plan in phases, it will be imperative to incorporate some of the infiltration best management practices regarding on-site stormwater management into the existing and proposed landscaping.

Pervious Pavements

Pervious pavements allow the infiltration of stormwater in areas that would normally be impervious with regular pavements. They also enhance groundwater recharge through increased percolation of rain water into the soil underneath paved areas. Pervious pavements can be applied to walks, parking lots, roads and driveways in the form of pervious asphalt, pervious concrete, or pervious pavers. As part of the campus master plan, there are a number of existing and proposed parking lots that could be renovated with pervious pavements.

Green Roofs

Green roofs have proven effective at managing stormwater during small rain events, while slowing stormwater runoff for large rain events. Providing natural surfaces on building roofs, where impervious surfaces are quite common, allows stormwater from small rain events to be absorbed at the point on contact and used by plants rather than running into the stormwater system. In contrast to traditional roofing materials, green roofs absorb, store and evapo-transpire rainfall. This scenario more accurately mimics the conditions that would have occurred prior to the development of the site.

Insert Images of Landscaped, bioretention swale areas, green roofs

Specific design elements and details for Stormwater Management and Landscape elements of the Campus Master Plan can be found within the Stormwater Management report; an appendix of this document.

The Wabash Rail Corridor

A unique aspect of the existing Northwest campus is a former rail corridor bisecting the campus from east to west running just north of Millikan Hall in the northwest portion of campus to the former Wabash Depot building toward the northeast portion of campus. As a former rail corridor, this linear stretch of land is at a flat grade and currently serves as an unofficial recreational trail for both students at Northwest as well as members of the Maryville community. The city of Maryville has incorporated the former rail bed into the city's 2012 Comprehensive Master Plan delineating the trail as an official proposed path from Icon Road in the west (on the Northwest Campus) to Jade Road on the east. Although the former rail bed bisects private property to the east of the University and thus encounters hurdles to an official trail demarcation, the desire to convert the former rail bed into a rail trail has been documented within the city's purview. Maryville's Master Plan touts the former railroad right-of-way as "a logical connection on the north side of the city [as] opportunities exist to use sections of the right-of-way."

Although the path's actual right-of-way is visible and recognizable on the ground, there is currently minimal signage highlighting this amenity. The lone sign posted just south of the pellet plant on the west side of Country Club road announces a portion of the "Wabash Trace Nature Trail," but there is no official declaration of the trail as a former rail corridor nor indication of the trail's length or recommended use.

The rail bed corridor represents a section of the former multi-state Wabash Railroad system. The portion that passes through Maryville is part of the former line running from Omaha to St. Louis that began operation in 1878. Currently, the portion of the trail from Omaha, Nebraska, to Blanchard, Iowa, has been converted to a designated rail trail spanning 63 miles with crushed limestone and concrete. Although the official trailhead on the southern portion terminates in Blanchard, Iowa, just north of the Iowa/Missouri state line, the national Rails-to-Trails Conservancy has demarcated the 25.6 miles from Blanchard to Maryville as an official Project Trail. This designation conveys that the national Rails-to-Trail Conservancy has identified the potential for extending the current Wabash Trace Rail Trail through to Maryville and thus make Maryville a trailhead for the Wabash Trail. Towns that serve as trailheads for national Rail Trails often serve as tourist points for hikers, bikers, horse riders and history enthusiasts looking for unique and dedicated recreation activities and as a means to explore former rail corridors.

- **Insert Old Maps of Wabash Rail Line (1886 Wabash.jpg and 1900s Wabash.jpg)**
- **Insert picture of Wabash Depot in 1908 along with Wabash Depot today (Wabash Depot 1908.jpg)**
- **Insert Map of Wabash Rail Line Extension (Wabash Rail Extension Map.jpg with Wabash Rail Extension Map Legend.jpg – *Illustrator File Available*)**
- **Insert Wabash Sign (Wabash Nature Trail Sign.jpg)**

Insert Before/After Rendering of Rail Trail

New Horace Mann and School of Education

In 1906, when the Missouri Fifth District Normal School began offering classes, Horace Mann opened as a laboratory school for which aspiring teachers trained in the Normal School could craft their trade. The Horace Mann Laboratory School has served for over a century as an amenity for both the community and its students as well as Northwest's education department by providing a real-time laboratory environment for aspiring teachers.

While the Horace Mann Laboratory School has continued to serve as a successful laboratory school, its location within Everett Brown Hall creates logistical problems. As a daily laboratory school for kindergarten through sixth grade students, morning drop-off and afternoon pick-ups within the core of Northwest's campus create daily pedestrian and vehicle conflicts immediately adjacent to the J.W. Jones Student Union. The playground for the Horace Mann students abuts the Frank Grube Tennis Courts as well as Bearcat Arena and creates conflicts with Northwest grounds and maintenance crews.

As students and family need to arrive and depart daily to and from Horace Mann, an efficient and hassle-free connection to Maryville is paramount. When Northwest Missouri State University began as a state normal school and teachers college, the laboratory school's location in the core of campus emphasized its central role in providing hands-on training for aspiring teachers. As Northwest's enrollment has exponentially grown from its roots as a state normal school to a University providing both undergraduate and graduate degrees, the central location of Horace Mann has outlived the benefits conveyed from being within the campus core and, in fact, now jeopardizes the safety of its students. Furthermore for the town of Maryville, the location proves logistically challenging as parents and caregivers of students have to penetrate into the core of the University to access the school. The connection between Maryville and the University can be strengthened by relocating Horace Mann to the perimeter of campus and, in so doing, create a safer and more efficient environment for a laboratory school.

The proposal within this Campus Master Plan calls for the movement of Horace Mann to the northeast perimeter of campus in the general location of the current Facility Services East building. Most of the original facilities functions that were formerly housed in Facilities Services East moved to the Support Services Building in 2014. What remains in Facilities Services East is primarily transportation services. The space needs assessment that occurred in conjunction with the Campus Master Plan indicated the remaining functions within Facilities Services East could be housed within and adjacent to the Support Services Building and Facilities Services West with the addition of a hoop shed and bay access for vehicles.

With Horace Mann vacated from Brown Hall, Brown Hall becomes available for functions that take advantage of proximity to J.W. Jones Student Union such as an innovation center with mass communications based within the hall. Such an innovation center would house communications studies and form the nucleus of a creative synergy near the core of campus.

Near the proposed Horace Mann and School of Education building, the outdated Thompson-Ringold building is in need of major renovations and deferred maintenance that puts it at a level at which repair costs exceed their return on investment and demolition becomes prudent. The classroom and office functions that dominate Thompson-Ringold can be more effectively woven into the profession-based learning approach at Northwest through incorporation into the innovation center at Brown Hall and some class transitions to Colden Hall.

Museums to Courthouse Square

The symbiotic history of collaboration and interdependence between the town of Maryville and Northwest has underscored a proximal sharing of benefits that has extended more than a century. The opportunity to provide a greater direct presence of the University into the town square of Maryville can help reinforce the prodigious impact that the University plays within the area.

The campus houses a clustering of small museums, or exhibit spaces, throughout campus. These small museums total 3,898 assignable square feet (ASF) and are dispersed among four buildings on campus:

- Agriculture: 332 ASF in the Valk Center
- Radio & TV: 732 ASF in Wells Hall
- Natural Sciences: 1,462 ASF in Garrett Strong
- Fine Arts: 1,372 ASF in Olive DeLuce Fine Arts Building

These four museums are individually staffed with distinct hours. They are not marketed heavily on campus. Thus, the benefit that these museums may provide to visitors has been understated. Rather than increase the staffing or hours for each individual museum, the University has an opportunity to efficiently showcase the materials of the museum to a wider audience and engage the greater Maryville community by clustering these four small museums in the Maryville town square. In so doing, the University will provide a showcase of the work done at the University to a public who may not have the opportunity to visit campus directly. A presence in downtown Maryville by the University aligns with the overall goals outlined in Maryville's 2012 Downtown Strategic Plan. In particular, highlighting the work of the University within the town square builds on the competitive advantage of proximity to the University that the downtown enjoys. While in the past few decades, areas in south Maryville have attracted some businesses and chains away from downtown Maryville due to better highway access to US-71 and proximity to larger employers, downtown Maryville has lost some opportunities to bring activity and visitors. The four museums combined within one setting can create a synergy between the exhibits and become an enticement for visitors traveling to the Maryville square. Rather than compete with other visitor attractions, the addition of such museums will provide another attractive destination that enhances the experience of visiting the town square. Maryville's strategic plan calls for enhancing downtown Maryville through new development, attractions and design that can encourage more investment and interest in the downtown district. By showcasing work being completed at the University, the clustered museums and exhibits can reinforce the healthy connections and close proximity between the University and the city of Maryville.

Insert picture of town square

Insert picture of existing small museum

UTILIZE RESOURCES WISELY

Northwest has limited resources and endowments. Its strength has perennially been maintained from within its core. The physical campus has prevailed over natural disasters, legislative uncertainties and civic disruptions. This Campus Master Plan recognizes that for Northwest's continued prosperity, existing resources must be summoned, valued and implemented. The focus of utilizing resources wisely calls for investing in renovation and infrastructure improvements to increase efficient reuse of space and energy.

The following elements of the Campus Master Plan speak directly to the guiding principle of utilizing resources wisely.

Tunnel / Infrastructure Repair

The current conditions of the tunnels and infrastructure cannot sustain the infrastructure that is needed to support the programmatic proposals outlined in the Campus Master Plan nor can these conditions support campus functioning with the anticipated enrollment growth. The three main branches of the utility tunnel infrastructure all require routine upkeep and, in some cases, significant renovation. To obviate the need for a total replacement, the University should use the existing resources of the utility system prudently and perform maintenance work promptly and judiciously. The work in the three tunnels can be done in varying phases and need not necessarily be completed all at once.

There are two chief concerns in the utility tunnels that need to be addressed:

1. Pipe supports
2. Water in the tunnels

PIPE SUPPORTS

Numerous pipe supports are failing within the utility tunnels causing the pipes to sag and experience pressure as weight formerly braced by the supports is now being applied in a linear fashion by the pipes' outer lining. As more of these supports fail, the risk of the pipes buckling and leaking either chilled water or dangerously hot steam increases. The pipes have been withstanding the increased pressure but as more supports fail, the existing pipes run the risk of puncturing. In order to maintain the optimal use of the existing resource of the pipes, the master plan calls for replacing the existing pipe supports.

Insert picture(s) of failing pipe supports

WATER IN THE TUNNELS

Water has infiltrated the underground utility tunnels from several sources.

One source of the water infiltration is from the ground itself. The utility tunnels have become what essentially amount to an underground drainage system for the campus grounds. This is occurring as stormwater penetrates into the ground before reaching the sewer grate collection points. Under ideal conditions, such an absorption of stormwater at the point of contact is beneficial in helping to avoid flooding and transporting pollutants from the ground. However most of the soil on the campus at Northwest consists of high clay content that acts more as a medium on which water flows instead of being absorbed. Consequently, the water travels to the point of least resistance through largely impervious soils and reaches the walls of the utility tunnels. Water has been slowly but steadily entering the utility tunnels through pipe entrance points as well as fissures running along the utility walls.

In addition to water entering the utility tunnels from the ground, water collects within the utility tunnels due to condensation forming on the pipes themselves. This has become especially problematic as the insulation around the chilled pipes has been deteriorating and causing the chilled water pipes to be exposed to warmer surrounding air. This, in turn, causes water to collect directly on the chilled water pipes through condensation and eventually drip onto the tunnel floor (or on adjacent pipe insulation therefore causing further deterioration).

On the tunnel floors, this collection of ground water and condensed water is finding its way to the trenches leading to tunnel drains, which are often filled with debris from the deteriorating insulation. The clogged trenches are therefore further exacerbating the backup of water within the utility tunnels.

To continue relying on the existing campus utility tunnel system, the chilled water pipes need to be fitted with water-resistant insulation. Improved stormwater management in the form of bioswales and retention areas consisting of ground mediums that are capable of greater absorption rates will also absorb more stormwater at the point of contact and therefore cause a lower volume of stormwater from reaching the utility tunnels' fissures and pipe entrance points.

Insert picture(s) of water in the tunnels

Electricity

The infrastructure that provides electrical generation for the Northwest campus is open and exposed around piped water in some areas. Although the electrical system is routinely shielded, it remains exposed in certain sections and therefore causes safety hazards within the tunnels. Please refer to the appendix of this report of the campus electrical system.

To provide electrical infrastructure for the entire campus with the anticipated enrollment increases documented in the University strategic plan, certain electrical systems on campus demand attention in both their current condition as well as to accommodate future growth.

Insert pictures of electrical systems

Potable Water

The potable water system is in varying states of repair from brand new to aged originals throughout campus. During the planning process, the maintenance staff revealed there is no comprehensive record of what the condition or age of the pipes are other than what can be orally reported from campus institutional staff.

It was noted that the maximum water pressure on campus varies but averages approximately 60 psi, which can be problematic for higher floors within taller buildings and can also limit fire suppression. Consequently, most of the taller buildings on campus require fire pumps.

Currently, any irrigated areas are serviced with potable water. Most of the systems in place are aging and can be problematic from a maintenance perspective. The following areas were identified as receiving irrigation:

- The area from the Administration Building to the Gaunt House
- The existing softball and baseball fields
- Recreation fields
- Bearcat Pitch soccer field

Areas that do not have irrigation associated with athletics or areas of athletic fields wherein irrigation has failed are serviced by a water cannon.

Based on the disparate states of aging and functioning of potable water throughout the campus, it is recommended that as new buildings are proposed, appropriate accommodations should be programmed to review water service connections. Of particular importance, there is a need to evaluate water pressure with regard to fire suppression capabilities.

Sanitary Sewer

Similar to the potable water system the sanitary sewer system is in various states of repair although no specific areas were identified as problematic. The capacity of the system appears to be adequate. A capital plan initiative recently resulted in replacement of the pump station, which has helped tremendously.

Due to the current adequacy of the sanitary sewer capacity on campus, it is recommended that, as new buildings are proposed, appropriate follow-up steps are instituted in order to ensure appropriate sanitary sewer service connections. Additionally, any increased volume would need to be reviewed with the local municipality to ensure capacity within the receiving system.

Natural Gas

Natural gas on campus is privately owned by Empire District Gas Company. Much of the campus is on campus steam, but there are some gas-fired units on campus as well. University facilities staff expressed the desire to place the entire campus on campus steam where feasible, but currently there is a deficiency in capacity and the aging system will not allow any further facilities to come online using steam or chilled water.

There are no known quantity or pressure deficiencies noted, but if new facilities are going to be using natural gas the quantities and the pressures required should be reviewed further with the servicing private gas company.

Detailed Utility elements of the Campus Master Plan including steam, chilled water, sanitary sewer and electricity can be found within the Utility Infrastructure Report; an appendix of this document.

Technology Systems

Northwest houses a variety of spaces for learning, collaboration and communication supporting many programs, research and practices. While some of these teaching spaces function adequately, when compared to peer institutions across the country, they often fall short. Northwest envisions providing technology-rich learning environments that offer students and faculty updated capabilities including bandwidth, model classrooms, updated infrastructure and enhanced visual presentation. Contemporary learning environments are required to stay competitive by attracting and retaining a representative level of the region's and state's available student population.

The existing conditions of Northwest's technology systems can be classified into four major categories:

1. Infrastructure
2. Systems
3. Spaces
4. Services

INFRASTRUCTURE

At a high level, the major findings with regard to the technology infrastructure include the following:

- Provisions are needed for additional power where needed in teaching and learning spaces to support portable devices and audiovisual upgrades. For older buildings such as Wells and Brown Halls, power and grounding are major concerns. For space renovations, plans should be in place to provide the infrastructure that can support emerging technologies even if not integrated on day one. In this matter, the University can "future-proof" their investment to best anticipate evolving technology needs.
- Back-end network upgrades are needed to support Gigabit speeds (1 Gigabit/second – 10 Gigabits/second) in order to meet growing network demands, continue reliance on the Learning Management System (Pearson), increase the use of blended and online learning and anticipate rich media content including lecture capture.
- There is minimal redundancy in the fiber backbone pathways. This raises concerns for Disaster Recovery (DR) in the event of an issue occurring deep within a utility tunnel or at the network core. A DR plan should be assembled or an existing DR plan should be reexamined and updated. The IT department can provide some redundancy in the form of a ring between buildings connecting each segment of the star. Regular IT backbone inspections of fiber and copper in the main distribution frames and utility tunnels for all networking and communications is recommended.
- An internal IT assessment is needed across all telecommunication rooms to confirm ANSI/NECA/BICSI industry standards are followed. At the rack, cables and pathways need to be re-routed, re-dressed and more efficiently organized. Physical security of IT rooms including the Intermediate Distribution Frames

(IDFs) and Main Distribution Frames (MDF) in each campus building should be reviewed. Division 27 Specifications and IT standards need to be clearly defined, written and documented for all IT and telecommunications systems.

- Regular monitoring of wireless network coverage is paramount to confirm it is optimized. Relocating or adding access points where there are gaps, including outdoors, are encouraged as the Campus Master Plan is followed.

SYSTEMS

At a high level, the major findings with regard to technology systems include the following:

- Educational outcomes cannot easily be tracked from the current Pearson Learning Management System (LMS). At present, students are tracked with a Customer Relationship Management (CRM) tool that is not ideal. Tools for assessing student learning and tracking student progress should be within the LMS. A LMS change is under consideration and must account for tracking outcomes, training and available support systems for content development and user questions, including a cloud-based helpdesk. The new LMS must integrate with the existing administrative student information system, Banner.
- Gathering metrics, mining data and reporting outcomes in customizable dashboards should be available across departments and needs to be a high priority of the IT department.
- Information security should be a priority and an internal risk assessment should be performed to understand “what needs to be locked down.”
- ADA accommodation will require assistive listening systems to be available for the hearing impaired in classrooms where program audio and speech amplification are provided via loudspeakers. Additional student accommodations and technologies may need to be considered.
- As classroom technologies continually evolve, the Technology Systems Plan recommends replacement of all handheld remotes in favor of a common network-based audiovisual control system that can be monitored via the Local Area Network (LAN) and standardized across classrooms. This control upgrade will promote use of technology by full and part-time faculty, improve technical support and operation and provide valuable metrics for decision-making.

SPACES

At a high level, the major findings with regard to the technology spaces include the following:

- Additional model classrooms should be funded with the development of a long-range roll-out plan across buildings and programs. While certainly not all classrooms require multi-screen projection, flexible furniture, or divisible spaces, such provisions support effective group-based learning, an approach that should be considered for all future classroom renovations. At a baseline, there should be flexibility in both furniture and technology for working in different sized groups. Classroom infrastructure and technology must allow the instructors to place themselves anywhere within the space. The Technology Systems Plan encourages space designs that focus on being open and visible.
- A digital upgrade path is needed across classrooms. Many classrooms have analogue-only connections or legacy equipment.
- The Technology Systems Plan recommends categorizing classrooms into distinct and easily-understood levels corresponding to technology provisions available. Such a classification system would improve scheduling, utilization and planning. An example of such a classroom classification system with three levels could be:
 - Basic | Level 1
 - Enhanced | Level 2
 - Advanced | Level 3
- Wireless presentation gateways should be tested, adopted and standardized into classrooms and Group Study Rooms (GSRs) to promote on-screen group collaboration.
- Informal learning spaces, including group study rooms and huddle spaces, should be integrated into academic buildings. These spaces along with key classrooms should be equipped to support online interaction through social media and live two-way video using web conferencing.

- As Northwest works to more fully engage its satellite facilities in St. Joseph and Kansas City as well as institutions and companies with ties or interests to the University, global interactions and connections should be promoted via online interactions and live two-way videos with web conferencing.
- The Technology Systems Plan recommends a review of acoustics and acoustical treatment options in learning spaces including within the Owens Library to improve utilization and effectiveness. The quality of the environment improves the quality of the learning experience. Qualitative features for the classroom environment include acoustics, lighting and finishes as well as the visual connectivity of the classroom.
- As the Owens Library moves to a learning commons model, new spaces that support knowledge creation, interdisciplinary work and innovation should be developed. Examples of such spaces include maker space, a faculty sandbox and capture studios with access to tools to create quick snip-it video captures.

SERVICES

At a high level, the major findings with regard to technology services include the following:

- The IT department is encouraged to follow Information Technology Infrastructure Library (ITIL) Service Management practices and to establish service level agreements for the helpdesk. More visibility is needed. The Technology Systems Plan recommends expanding the concierge desk for technology assistance in the Owens Library. This expansion would entail moving operations for the Electronic Campus Support Center (combining laptop services and the IT helpdesk) to the Owens Library where there is available space to create a more open and visible one-stop service desk.
- The system used for project management of IT projects, including classroom renovations should be accessible by project sponsors and leadership outside of the IT department. Stakeholders should understand and be updated on project timelines, milestones, budgets and resources. Communication on projects should be available through dashboards such as through SharePoint.
- The lifecycle maintenance cost of equipment should be funded through annual budgets to properly plan and allocate resources for new University-wide initiatives. The Technology Systems Plan recommends a careful review of the current IT budget and process with the Northwest Leadership Team to assure that an annual investment in technology can be anticipated and maintained.
- Technology Services should be easily accessible remotely by portable devices where and whenever possible.

The Technology Systems Plan, laid forth in detail herein as an appendix to this report, describes a series of goals, objectives and strategies designed to support Northwest's learning environments with appropriate technology while meeting changing habits and expectations of both students and faculty and evolving workforce requirements for investigation, collaboration and communication.

Whenever possible, the Technology Systems Plan encourages a use of existing technology resources on campus congruent with the Campus Master Plan's guiding principle of using resources wisely. As the Technology Systems Plan is implemented, both new construction and renovation projects will offer the opportunity to examine existing infrastructure and spaces, systems and services. The plan also offers the opportunity to explore the impact of technology on teaching, learning and student outcomes.

This carefully developed approach — balancing modernization and upgrade needs with sustainment and operational considerations — was used to create the recommendations contained in the Technology Systems Plan. The plan encourages the IT department leader and staff to review the plan together, to take ownership in it, to regularly meet with key campus stakeholders, including the Northwest Leadership Team and update the plan to keep it focused on student success while providing exceptional student experiences.

Planning is intended to be an ever-evolving cycle while aligning with the larger goals of the University. Modernization of instructional delivery requires that instructional spaces be configured relative to future disciplinary and programmatic goals whose objectives and functions dictate more efficient organization and utilization of space. The Technology Systems Plan serves as a framework to support the optimal deployment and use of resources, infrastructure and technology, including technology refresh and support needs.

And finally, consistent with any efforts to increase space utilization, office configurations should be in keeping with global considerations as well as provisions for accessibility and administrative functions.

The full Technology Systems Plan can be found as an appendix to this document.

High-Rise Renovation(s)

The first two of the four high-rise residential halls, Phillips and Franken Halls, began housing men and women, respectively, in 1966. The remaining two high-rise residential halls, Dieterich and Millikan for men and women, respectively, began housing students five years later in 1971. These halls provided much-needed housing for the surging enrollment that occurred during the decade that preceded each of their openings. A half century later, the high-rise residential halls still house more than a quarter of all Northwest students who live on campus. In the fall of 2015, even with Phillips Hall temporarily closed for student housing, the remaining three high-rise buildings still housed more than a third (39%) of all Northwest students who elected to live on campus. These high-rise residential halls have the capacity to house between 306 and 312 students each and in 2015, the three operating buildings averaged 90% occupancy.

In order to continue housing students at such high levels of occupancy, the half-century old high-rise buildings require a reinvestment of resources. The four high-rise residence halls surround The Station, a building formerly referred to as Taylor Commons, which began operation in 1970 to provide a second dining space for the students housed in the high-rise residential halls. Collectively The Station, the four high-rise residential halls and Tower Suites residential halls, which opened in 2004, form a high-density area of residential and student life northwest of the campus core.

In their current condition, the high-rise residential halls serve nearly exclusively as residences in which students sleep, but from which they depart to alternate locales for active student life. Reinvestment in the high-rise residential halls transcends the immediate need of mechanical and structural upkeep to an opportunity for a transformative project in which the halls are redeveloped in a matter that can provide a greater variety of housing types, common spaces, student activity events and natural light. Using the same building footprint for each high-rise but reconfiguring the floor plan, renovations to the high-rises can become a reinvigorating project. While keeping the structural and weight-bearing columns intact, the windows of the high-rises can be enlarged to allow more natural light to flood the common areas and hallways. The restrooms can be efficiently reconfigured to allow the opportunity for single gender on each or floor or half-men and half-women on each floor. Suite unit types can be added in the corner units allowing more independence for students who request or require such conditions. In short, reinvestment in the existing resource of the high-rises will create pride for an area of campus that only serves as a place to sleep; an area from which many students hope to move and to which few students desire to live. Such changes encourage more active academic collaboration and social activity within the halls instead of pushing students away from the areas where they reside.

The University carries a debt on the four high-rise housing buildings that will not be paid down until 2028 or 2029. Transforming these high-density residential complexes on campus into choice destinations for students can help assuage concerns that the high-rise facilities will not adequately function as viable residential options through their loan terms.

Roberta Hall Renovation

In addition to the high-rise residential halls, Roberta Hall is another residential hall, which is considerably older and historic and is a prime candidate for upgrading as well. Roberta Hall, constructed in 1922, has withstood a severe fire and nearly a century of Northwest students. It is reserved, nearly exclusively, for sororities. It is inhabited mostly by sophomores and prohibited to first-year students. The unit type of Roberta is semi-suite in which residents have their own bathroom (per suite), but living space is shared outside of the unit.

In the fall of 2015, only 149, or 85% of Roberta Hall's 175 beds, were occupied. This accounted for one of the lowest occupancy rate of any of the residential halls actively housing students. Students no longer pine to live in Roberta and its time as a beloved residential destination has largely passed. Indeed, Roberta Hall is in need of an

upgrade. The infrastructure, specifically the pipes and potable water systems, need renovations. Piping problems and difficulties with the antiquated shower designs have caused water damage and leaking in several of the rooms. In spite of this, many students expressed reverence for the rooms in Roberta and described the hall as “beautiful” and a hall in which “every room is unique.”

Overall, the rooms in Roberta Hall are good sized and the hall is historic and beloved. However, the poor conditions of the bathing facilities are largely overshadowing the positive attributes. The floor plans of Roberta Hall are amenable to reconfiguration. The existing large closet spaces could provide the space needed to enlarge the bathing facilities and make them more accessible. New closets could then be placed within the room to replace the separated closed space turned over for enlarged bathing facilities. To renovate Roberta Hall and bring it back up to prominence is an efficient use of the University’s resources. However, the renovations would be fairly extensive and a detailed analysis of renovation versus replacement is recommended.

- **Insert (Roberta Hall Fire.jpg)**
- **Insert (Roberta Hall Today.jpg)**

Insert pictures of Roberta Hall floor plans and potential modification

Renovate or Replace Missouri Academy

The Missouri Academy of Science, Mathematics and Computing (MASC), or simply the Missouri Academy, houses high school junior and senior students on the University campus at the North Complex. Missouri Academy brings high-performing and exceptional students to live and socialize within a University setting. While the program is impressive, the building in which the program is housed is not. Constructed in 1962, the North Complex is in poor condition and in need of significant deferred maintenance. To continue Missouri Academy as an amenity bringing promising high school students to the University, the plan calls for the construction of a new facility to house Missouri Academy students.

IMPLEMENTATION + PHASING

Implementation of the campus master plan will be realized through the completion of individual projects. Guided with the strategic plan, *FOCUS*, as well as the Campus Master Plan's guiding principles, the University has identified three phases of projects to advance realization of the campus master plan. The phases were selected during the campus planning project after all the projects were identified and discussed. The projects included in each phase that are described here are based on knowledge and discussions that arose out of the Campus Master Planning process. Although the projects are listed in three phases, several of the projects are independent and thus could occur at any time outside of the phasing framework. Projects that could be completed independently of phasing have been indicated below.

Immediate Needs (1-5 Years)

- A. *Bearcat Activity Center* (Potentially Independent)
- B. *Campus Signage System* (Potentially Independent)
- C. *Landscape Improvements* (Potentially Independent)
- D. *Visitor Center, East Drive & Tower Walk*
- E. *Tunnel / Infrastructure Repairs* (Potentially Independent)
- F. *Forest Village Buildings & Parking* (Potentially Independent)
- G. *Initial High Rise Renovation(s)*

Mid-Term Strategies (5-10 Years)

- A. *Alumni House Expansion* (Potentially Independent)
- B. *Campus Exposition / Meeting Center* (Potentially Independent)
- C. *Athletic & Recreation Field Construction and Expansion* (Potentially Independent)
- D. *New Horace Mann and School of Education*
- E. *Fine Arts Building Renovation* (Potentially Independent)
- F. *Additional Housing Renovations (Roberta, remaining high-rises)*
- G. *Lamkin/Martindale Renovation/Addition* (Potentially Independent)
- H. *Align Building Functions with Inventory*

Long-Term Projects (Beyond 10 Years)

- A. *Administration Building: One Stop Shop*
- B. *Additional Housing & Dining Venues*
- C. *Renovate or Replace Missouri Academy*
- D. *Museums to Courthouse Square* (Potentially Independent)

DESIGN GUIDELINES

The Campus Master Plan for Northwest Missouri State University includes landscape and signage design guidelines. The goal of these design guidelines is to establish a framework for future designers as the structure of the campus evolves. The design guidelines provide broad recommendations to direct the design of future projects at Northwest. The design guidelines, which are informed by the best landscape and design elements evident on campus, will sustain the Campus Master Plan's intentions by preserving special qualities and characteristics of the campus while addressing issues that relate to site planning, landscaping, signage, building location, massing and character.

Design Guidelines: Buildings and Grounds

INSERT DESIGN GUIDELINES FROM LANDSCAPE ARCHITECTURE TEAM

Design Guidelines: Signage and Wayfinding

INSERT DESIGN GUIDELINES FROM GRAPHICS TEAM

ACKNOWLEDGEMENTS

Focus Groups

The University steering Committee

Consultants

APPENDICES

SPACE NEEDS ANALYSIS REPORT

SIGNAGE & WAYFINDING PLAN

STORMWATER AND UTILITY CONDITIONS AND MANAGEMENT REPORT

TECHNOLOGY SYSTEMS PLAN

INFRASTRUCTURE REPORT