SASAKI

UNIVERSITY OF MISSOURI ST. LOUIS Master Plan Update | Executive Summary



APRIL 2006

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Executive Summary



The Blanche Touhill Performing Arts Center was completed in 2002.

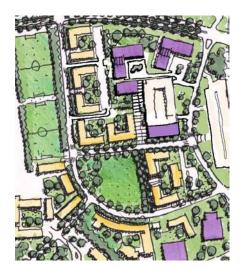
OVERVIEW

The University of Missouri – St. Louis campus master plan was presented to the University's Board of Curators in 2002. The master plan established an overall vision for the campus, and a framework to support the University's long-term plans for growth in enrollment and academic programs. The key elements addressed in the plan included:

- · Long-term land requirements, including recommended land acquisitions
- · Land use, including uses for newly acquired properties
- · Organization of academic program
- · Campus circulation and parking
- · The open space and landscape framework
- · Physical and programmatic linkages with adjacent communities and businesses

Since the presentation of the plan, several projects and recommendations have been implemented or approved, including completion of the Blanche Touhill Performing Arts Center, acquisition of additional land to consolidate the South Campus, development of a new South Campus Residence Hall, and a strategic partnership with the adjacent Normandy community. Most recently, the University has initiated the development of the new Business, Technology and Research Park on University-owned land fronting I-70. However, since the plan was completed in 2002, a number of new issues with a potential impact on the campus have come up that require consideration. These include issues relating to land use, program, circulation and parking, development and redevelopment, and infrastructure.

The purpose of this master plan update is to examine these issues and opportunities within the context of the overall vision and strategic direction established in the 2002 plan, and to define appropriate design solutions, planning strategies and recommendations to be incorporated into the plan. The master plan update will take the form of a plan addendum, which will consist of a land-use strategy for sites considered in the update, recommendations concerning the siting and development of new facilities currently being considered, revised systems plans for circulation, parking and campus infrastructure, recommendations for adjacent areas in Normandy and Bel-Nor with an impact on the campus, and other items. This executive summary report contains a summary of the update recommendations, in both graphic and narrative form.





Alternative options for the South Campus were explored during Phase 2 of the planning process.

PLANNING PROCESS

The process for preparing the master plan update involved three phases structured around four on-campus work sessions. The three phases included:

- · Phase 1: Issues Identification and Analysis
- · Phase 2: Preparation and Review of Planning Strategies and Design Studies
- · Phase 3: Documentation of Master Plan Update

The work sessions were held at the beginning of the project, and at the end of each phase of work. They involved brief presentations followed by roundtable discussions of issues, ideas, and concerns. Participants in these meetings included:

- · University of Missouri System staff
- University of Missouri St. Louis Master Plan Committee, including senior administrators and Deans of identified academic departments, where programmatic issues are being considered
- · Civic leaders and residents with an interest in the campus

In May, 2005, Sasaki presented the findings of Phase 2 of the update to the University's Master Plan Committee. The concepts presented at the Committee meeting were intended to serve as the basis for the final plan update.

Subsequent to the May Committee meeting, the University entered into negotiations with a potential tenant of the University's planned Business, Technology and Research Park, relating to the development of the Park. Given the potential impact of this development on other areas of the campus, Sasaki was asked to postpone completion of the master plan update until the plans for the Park were finalized. In January 2006, with development of the Park underway, Sasaki was asked to complete the master plan update, and a presentation of the draft plan was made to the Master Plan Committee in March 2006. This executive summary report contains the recommendations and concepts presented to and adopted by the Master Plan Committee at the March meeting.

ISSUES

The following were the principal issues that were considered in the master plan update and that are reflected in the plan recommendations:

Athletics

The principal issues concerning the University's athletics program are as follows:

- There is a need to replace the existing baseball field next to the Mark Twain
 Center as a result of the re-location of Geiger Road (now University Place Drive).
 Approximately two-thirds of the existing baseball field area is needed to accommodate the new road alignment. The new road will re-establish traffic flow between University Boulevard (new Florissant Road) and North Hanley.
- · There is a need for two to four intramural sports fields.
- In addition to the need to relocate the baseball field, the remaining site can not accommodate future athletic programs growth.
- Ideally, athletics facilities should be consolidated at a single location. Up to 20 usable acres are required. Growth of the University's athletic programs would require additional land.

Recreation (Wellness Center)

The University has developed plans for a new Wellness Center to replace the recreation facilities currently housed in the Mark Twain Center. The program for the proposed Wellness Center consists of +/- 90,000 gross square feet of space, including administration, wellness, gyms, indoor track, activity space and support space. A location for the facility needs to be established, and costs and phasing also need to be considered.

Student Housing

The University's Action Plan establishes a goal of 2,500 beds of student housing, or 14 percent of the University's planned 18,000 headcount enrollment. This amounts to 1,330 additional beds beyond the current supply. Over the long-term, an additional 148 beds will need to be replaced when the Mansion Hills apartment complex is redeveloped. The development requirements for student housing are as follows:

- · 350 gsf/bed
- · .65 parking spaces per bed
- Support amenities, including expanded campus dining and student recreation space



The existing soccer field.



University Meadows student housing.



Marillac Hall currently houses the Optometry Program on the South Campus.



Parking on the South Campus requires consolidation.

South Campus and Gateway Site

With the acquisition of the child care center site on the South Campus, the University has successfully consolidated its landholdings south of Natural Bridge Road. Planning for the South Campus needs to address:

- · Program accommodation and adjacencies.
- · Consolidation of vehicular circulation and parking systems.
- · Integration with the North Campus.
- · Overall aesthetics.

Science Renovation and Expansion

The principal issues considered in the master plan update were:

- There is a need to renovate the teaching and research labs in Benton and Stadler Halls.
- · Swing space is required to house science programs as renovations occur.
- Over the long-term, new space will be required to accommodate planned growth of the biology and chemistry programs.

Fine Arts Relocation

There is a long-term goal to consolidate fine arts programs near the Blanche Touhill Performing Arts Center. Issues to be addressed include:

- Confirmation of space needs for the music program as part of the General Services Building renovation.
- The need for rehearsal and work shop space for the theatre program.
- The long-term relocation of Fine Arts programs from the existing Fine Arts building on Florissant Road.

Circulation and Parking

There were several circulation and parking issues that required consideration in the update:

- It was determined that the original siting of the proposed West Drive Garage
 North in the master plan was not the most cost effective solution for replacing the old parking structure (Garage N) that was demolished and removed.
- The overall South Campus circulation system requires consolidation and clarification.
- Metro requires approximately 130 additional parking spaces at the South Campus MetroLink station.
- It was determined that proposed access to the Beffa property identified in the master plan was not the most cost effective solution.
- The safety of pedestrians crossing Natural Bridge Road continues to be of concern. Neither bridge or tunnel options would be feasible because of grade conditions on both sides of the Road, and the presence of underground utilities.
- Improved pedestrian connections are required to the Metro stations on both the North and South Campuses.
- Routes for both the Trailnet and Greenway Trails recreational pathway systems need to be accommodated.



Site Plan for the Express Scripts development.

Accommodation of Business, Technology and Research Park

The current development of the new Business, Technology and Research Park requires reconsideration of several elements of the plan for this area of the campus:

- The relocation of Geiger Road (now University Place Drive) requires the relocation of the baseball field at the Mark Twain Center.
- · Areas for potential expansion of the Park need to be identified.
- Appropriate land uses on University-owned land adjacent to the Park need to be defined.

Collaboration with Surrounding Communities

The University is exploring ongoing opportunities for collaboration with adjacent communities. Areas of exploration include:

- · Relationships of the campus within broader regional plans.
- $\boldsymbol{\cdot}$ The need for commercial development surrounding the campus.
- · Strategic relationships for economic development and shared economic benefits.
- Growth of the campus and the Business, Technology and Research Park.

CAMPUS MASTER PLAN

The master plan is structured around a framework of four principal elements:

- · Open Space Network
- · Campus Districts
- · Vehicular Circulation
- · Pedestrian Circulation

The master plan concepts, goals and related initiatives for each of these elements are described on the following pages. The illustrative master plan is shown in Figure ${\bf 1}.$





The Master Plan reinforces the valley as the central unifying element of the campus.

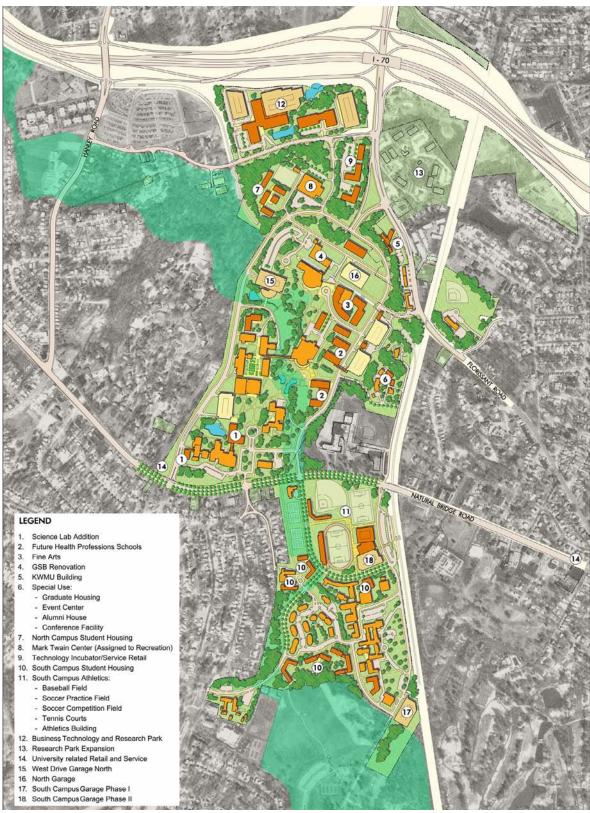


Figure 1 Illustrative Master Plan



The valley connects with open space areas adjacent to the campus.



A goal of the plan is to remove surface parking from the valley.

Open Space Network

The master plan organizes the campus around the central valley that extends through the North Campus and connects to the South Campus. The valley serves as both a defining feature of the campus, and the connecting fabric that links all areas of the campus. Other elements of the open space network include the South Campus Athletics District (see Districts below), quadrangles, streetscapes, and connections to adjacent open space areas. The open space network is illustrated in Figure 2.

Master Plan Goals

- · Reinforce open space connections between the North and South Campuses
- · Replace surface parking with structured parking, green space and plant trees
- · Frame the valley edges with buildings
- Extend the character of the valley into adjacent areas by creating an open space focus for each campus district
- · Strengthen open space connections beyond the campus

Master Plan Initiatives

- · Consolidation of the athletics fields within the South Campus
- · Accommodation of the Trailnet and Greenway Trails recreational pathway networks
- Introduction of streetscape improvements along Natural Bridge Road to link the North and South Campuses



Natural Bridge Road Streetscape Improvements



Figure 2 Open Space Network

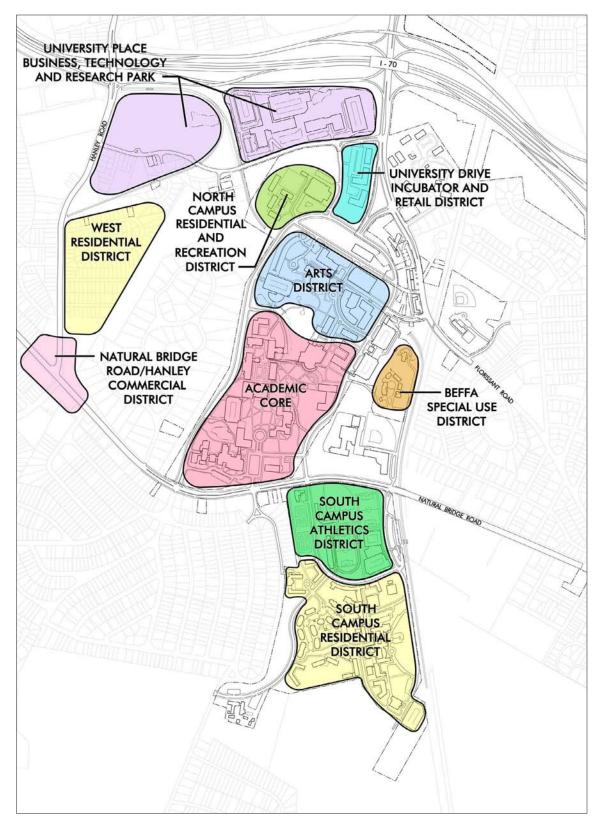


Figure 3 Campus Districts

Campus Districts

The North and South Campuses consist of several districts that are defined by existing and planned future land-uses. Additional University-related districts are located in areas adjacent to the campus. The campus districts (Figure 3) are:

North Campus

- · Academic Core
- · Fine Arts and Communication District
- · Beffa Special Use District
- · North Campus Residential and Recreation District
- · University Place Drive Incubator and Retail District

South Campus

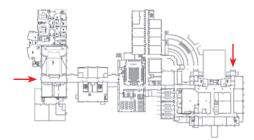
- · South Campus Residential District
- · South Campus Athletics District
- · Health Profession Schools

Adjacent Districts

- · Business, Technology and Research Park
- · Natural Bridge Road/Hanley Commercial District
- · West Residential District
- · Normandy Center

Master Plan Goals

- · Reinforce the function of each district with future land uses.
- Connect each district to other areas of the campus with open space and the pedestrian and vehicular circulation systems.



Potential locations for additions to the science complex.



Proposed KWMU Radio Station building in the Arts District.



View of future Incubator site.

Master Plan Initiatives

Specific master plan initiatives within each district are as follows:

- Academic Core: Accommodate the renovation of science labs and the future expansion of science programs through a 25,000 gsf addition to Benton or Stadler Hall.
- Fine Arts and Communication District: Accommodate the consolidation of arts programs in the area to the east of the Touhill Performing Arts. The long-term program needs for Fine Arts are summarized in Table 1.
- Beffa Special Use District: Provide for a number of use options, including graduate housing, an event center, an alumni house, or conference facilities. Improve access to the Beffa site with a new road to the south of Garage I. Maintain existing Lucas Lane for emergency access.

Table 1. Long-Term Fine Arts Program Needs

Program Element	Required ASF
GSB Renovation for Music Expansion	37,000
Relocate Music Building Program	16,000
Program Consolidation	28,000
Fine Arts Building	
Florissant Road Facility	
University Park Facility	
· Lucas Hall	
Visual Arts Expansion	20,000
Rehearsal Space/Work Shop	16,000
Storage	20,000
Total	137,000







Beffa Special Use District



North Campus Residential and Recreation District and University Place Drive Incubator and Retail District

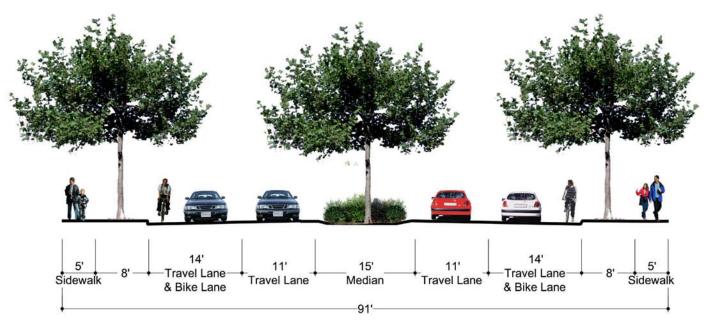
- North Campus Residential and Recreation District: Re-assign the Mark Twain Center for exclusive use for campus recreation in lieu of new Wellness Center. Build new student housing around Mark Twain.
- University Place Drive Incubator and Retail District: Provide a destination for technology incubator and service uses to support the adjacent Business, Technology and Research Park.
- South Campus Residential District: Continue to accommodate housing on infill sites within the South Campus. Provide parking for residential students.
- South Campus Athletics District: Relocate the University's athletics program to a
 consolidated site on the South Campus. Begin with the relocation of the baseball
 field to the Normandy Hospital site. Move soccer fields, tennis courts and build a
 new athletics building over the long term.
- University Place Business, Technology and Research Park: Accommodate the longterm expansion of the Park along I-70, east and west of University Boulevard.
- Natural Bridge Road/Hanley Commercial District: Support the development of University-related retail and service uses.
- Normandy Center: Support the development of a mixed-use district with University-related retail, service and housing uses.



Proposed site for the University's athletics fields and future athletics center.



South Campus Athletics District



Cross-section of Proposed Natural Bridge Road Streetscape Improvements



Natural Bridge Road Today

Vehicular Circulation and Parking

The master plan establishes a continuous vehicular circulation system (Figure 4) defined by a new entrance to the campus from University Boulevard, a continuous loop road that links the North and South Campuses, and reconfigured intersections with the regional road network. It also provides for the consolidation of surface parking lots into several parking structures that are strategically placed to serve the various Campus Districts.

Master Plan Goals

- Improve connections between the North and South Campuses and consolidate Natural Bridge Road crossings at a signalized intersection.
- · Rationalize the South Campus road network and consolidate parking.
- Identify sites for parking garages.

Master Plan Initiatives

- Re-alignment of East Campus Drive to connect to the South Campus through a signalized intersection.
- Accommodation of the re-located Geiger Road (University Place Drive)
- Natural Bridge Road streetscape improvements (see Pedestrian Circulation below).
- Rationalization of the South Campus road network and replacement of surface lots in a parking structure west of the Metro Station.
- · Accommodation of structured parking on existing Lot LL.
- · Replacement of Garage 'N' to the north of the existing garage site.
- Introduction of an access drive to the Beffa property to the south of MSC Garage I.

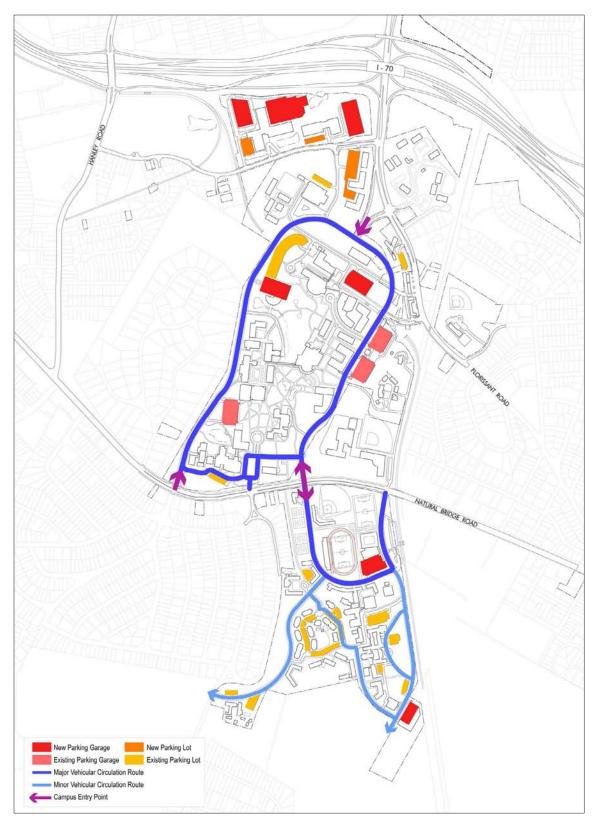


Figure 4 Vehicular Circulation and Parking



Construction of TrailNet pathway in 2005.

Pedestrian Circulation

The master plan establishes a hierarchy of pedestrian circulation routes that clearly define pedestrian routes between different areas of the campus (Figure 5). The routes include primary pedestrian corridors serving the North and South Campuses and regional recreational trails with connections through the campus.

Master Plan Goals

- Enhance pedestrian routes to support a walkable campus.
- Improve pedestrian connections between the North and South Campuses and the safety of Natural Bridge Road crossings.
- Accommodate planned regional trail routes through the campus.

Master Plan Initiatives

- Rationalization of the South Campus pedestrian circulation system as part of Athletics District development.
- Improvement of pedestrian connections across Natural Bridge Road through creation of a signalized intersection and implementation of streetscape improvements, including traffic calming, street tree planting and introduction of a central median.
- Accommodation of the Trailnet and Greenway Trails recreational pathway through the North and South Campuses with connections to the surrounding recreational trail network.

Program and Program Accommodation

The master plan accommodates the University's building and facility needs for academic, student life, student housing, support and parking functions. The master plan program is summarized by District in Table 2. Campus housing and parking programs are summarized in Tables 3 and 4.

North Campus

- · Academic Core
- · Fine Arts and Communication District
- · Beffa Special Use District
- · North Campus Residential and Recreation District
- · University Place Drive Incubator and Retail District

South Campus

- · South Campus Residential District
- · South Campus Athletics District

Adjacent Districts

- · Business, Technology and Research Park
- · Natural Bridge Road/Hanley Commercial District

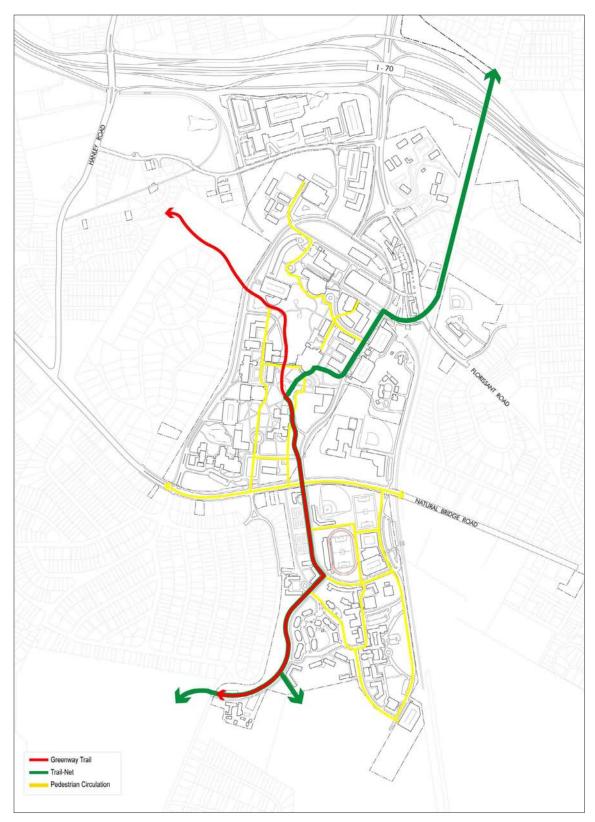


Figure 5 Pedestrian Circulation

Table 2. Master Plan Program

District	Program Element
Academic Core	Benton and Stadler Hall Lab Renovation Science Lab Addition Future Health Professions Schools
Fine Arts and Communication District	GSB Renovation Fine Arts Program Consolidation: - Fine Arts Building - Florissant Road Facility - University Park Facility - Lucas Hall Fine Arts Program Expansion: - Visual Arts - Theatre Rehearsal and Workshop - Shop and Storage KWMU Building
Beffa Special Use District	Building Re-use: - Graduate Housing (40 beds) - Event Center - Faculty Resource Center - Alumni House - Conference Facility
North Campus Residential and Recreation District	Student Housing (400 beds) Mark Twain Center Assigned to Recreation
University Place Drive Incubator and Retail District	Technology Incubators Service Retail
South Campus Residential District	Infill Student Housing (1,090 beds) Parking Lot LL Garage (300 spaces)
South Campus Athletics District	Athletics Facilities: - Replacement Baseball Field - Soccer Practice Field - Soccer Competition Field - Replacement Tennis Courts - Replacement Athletics Building - Garage (850 spaces)
Business, Technology and Research Park	Research Park Expansion
Natural Bridge Road/Hanley Road Commercial District	Future 'Campus Town': - University-related Retail and Service - Housing

Table 3. Summary of New Housing

District	Program Element	Beds
Beffa Special Use District	Graduate Housing	40
North Campus Residential and Recreation District	Soccer Field Site	400
South Campus Residential District	Infill Student Housing: - South of Meadows Apartments - East of South Campus Residence Hall - South of South Campus Residence Hall - East of Marillac Hall	650 200 100 100
Total New Housing, All Sites		1490

Table 4. Summary of Changes to Parking Supply

District	Parking Removed	Parking Provided
North Campus Garage N West Drive Parking Structure North North Garage North Campus Total	515 515	500 650 1,150
South Campus Lot LL Lot NN Lot S Lot SS Lot T Lot U Lot V Lot W Lot Y Lot SC2 South Campus Garage Phase I South Campus Total	33 40 74 336 57 135 189 52 56 68	300 850 1,150

Community Collaboration

The University is exploring opportunities to collaborate with the surrounding communities of Normandy, Bellerive Acres, Bel-Nor and Cool Valley in areas of shared interest. University staff have met with representatives of these communities to initiative discussions on issues such as planning, economic development, strategic relationships and campus and research park expansion. It is anticipated that these efforts will lead to future partnerships and an action plan for moving forward. Potential areas of opportunity include:

- Collaboration on planning and development of University-related retail, service and housing uses at Natural Bridge and Hanley Roads, Normandy Center, and University Boulevard
- Future expansion of the Business, Technology and Research Park
- · Ongoing community access to the Optometry Clinic
- · Community access to other University facilities