

2015-2025
USF System
Campus Master Plan Updates

Tampa



2015-2025
USF System
Campus Master Plan Update

Goals, Objectives, and Policies

Tampa



Goals, Objectives, and Policies

Table of Contents

Executive Summary 2015-2025 USF Campus Master Plan Update

Introduction to the University of South Florida

Element 1 University of South Florida Strategic Plan

Element 2 Introduction to the Campus Master Plan

Element 3 Academic Overview

Element 4 Future Land Use

Element 5 Transportation

Element 6 Housing and Student Support Services

Element 7 Infrastructure

7.1 Stormwater Management

7.2 Potable Water

7.3 Sanitary Sewer

7.4 Solid Waste

7.5 Hot Water

7.6 Chilled Water

7.7 Electrical Power and other Fuels

7.8 Data/Voice Communications

Element 8 Conservation

Element 9 Recreation and Open Space

Element 10 Intergovernmental Coordination

Element 11 Capital Improvements

Appendix A General Requirements and Definitions

Appendix B Data Collection and Analysis

Appendix C Evaluation and Appraisal Report

Appendix D Moffitt Oil Spill

Goals, Objectives and Policies Figures

Element 4 Future Land Use:

- Figure 4-1 10 Year Campus Master Plan Concept**
- Figure 4-2 10 Year Context Area Map**
- Figure 4-3 10 Year Building Development and Use**
- Figure 4-4 10 Year Campus Land Use Districts**
- Figure 4-5 10 Year Encumbrances Leases Subleases and Easements**
- Figure 4-6 10 Year Potential Demolition**
- Figure 4-7 10 Year Build to Framework**
- Figure 4-8 Existing Campus Aerial**
- Figure 4-9 Campus Development Density**
- Figure 4-10 Building Development**

Element 5 Transportation:

- Figure 5-1 10 Year Functional Roadway Classification**
- Figure 5-2 Conceptual Roadway Sections**
- Figure 5-3 10 Year Service Corridors**
- Figure 5-4 10 Year Bull Runner Route Map**
- Figure 5-4a 10 Year HART System Map**
- Figure 5-5.1 10 Year Tram Circulator**
- Figure 5-5.2 10 Year Tram Spine/Branching**
- Figure 5-6 10 Year Parking Supply Summary**
- Figure 5-7 10 Year Planned Parking Modifications**
- Figure 5-8 10 Year Bicycle Facilities**
- Figure 5-9 10 Year Pedestrian Circulation**
- Figure 5-10 10 Year Existing and Planned Pedestrian Facilities**

Element 6 Housing and Student Support Services:

- Figure 6-1 10 Year Plan Housing**

Element 7 Infrastructure:

- Figure 7-1 10 Year infrastructure and Utility Corridor Plan**
- Figure 7-1.1 10 Year Stormwater Management Plan**
- Figure 7-1.2 10 Year Permeable Area**
- Figure 7-2.1 10 Year Potable Water Plan**
- Figure 7-2.2 10 Year Irrigation Plan**
- Figure 7-3.1 10 Year Sanitary Sewer Plan**
- Figure 7-4 10 Year Waste Management Plan**
- Figure 7-5 10 Year Heating Hot Water Plan**
- Figure 7-6 10 Year Chilled Water Plan**
- Figure 7-7.1 10 Year Electrical**
- Figure 7-7.2 10 Year Electrical Site Distribution Plan**
- Figure 7-8.1 10 Year Communications Plan**
- Figure 7-8.2 10 Year Communications Site Distribution Plan**

Element 8 Conservation:

- Figure 8-1 10 Year Natural and Environmental Resources**
- Figure 8-2 10 Year Campus Greenway and USF Forest Preserve**
- Figure 8-3 Archaeology Map**

Element 9 Recreation and Open Space:

- Figure 9-1 10 Year Recreation and Athletics Facilities**
- Figure 9-2 10 Year Campus Open Space**
- Figure 9-3 10 Year Greenway Structure and Edges**
- Figure 9-4 10 Year Riverfront Park Recreation Area**

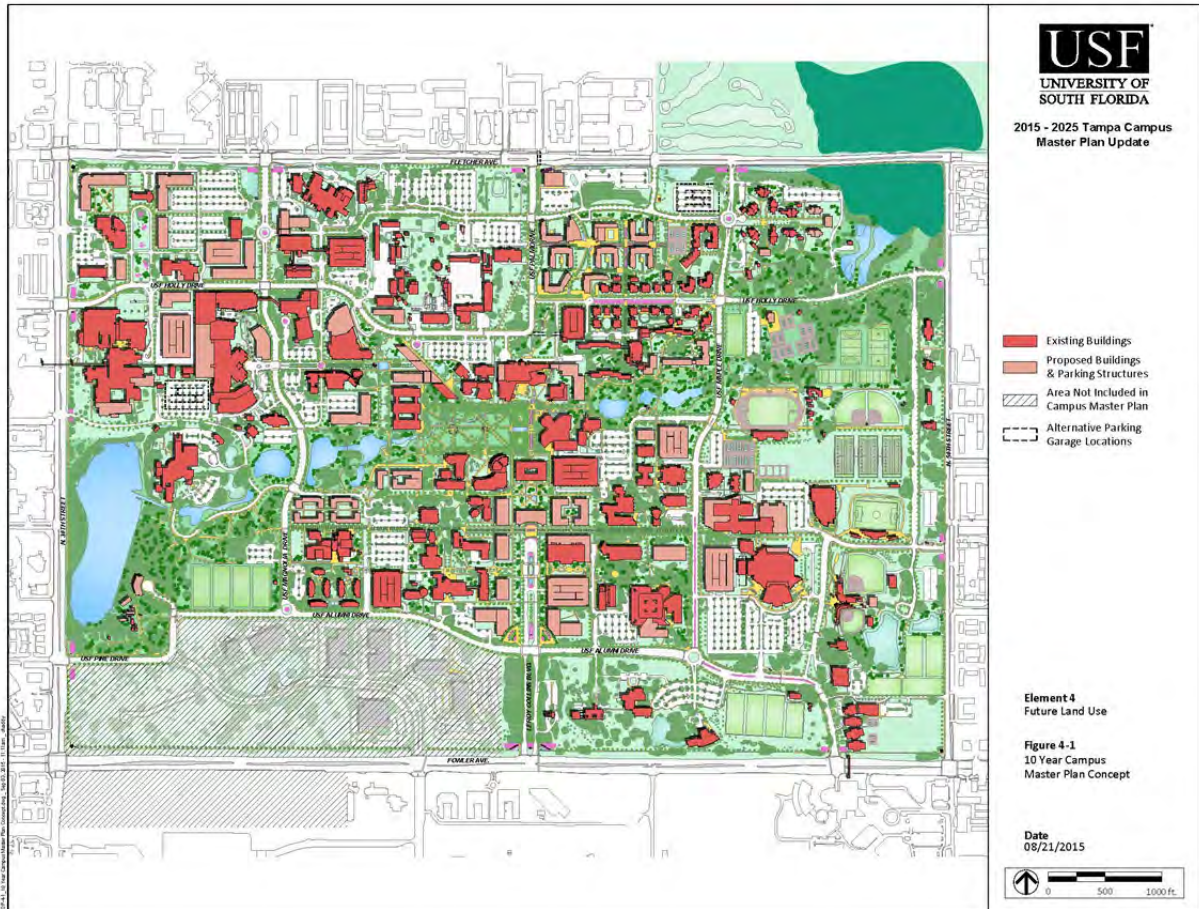
Element 11 Capital Improvements:

- Figure 11-1 10 Year New Construction**
- Figure 11-2 10 Year Landscape Improvement Areas**

This Page Intentionally Left Blank.

Executive Summary

2015-2025 Tampa Campus Master Plan Update



Introduction to the University of South Florida

The University of South Florida is a high-impact, global research university located in beautiful Tampa Bay on Florida's spectacular west coast. It is one of the largest public universities in the nation, and among the top 50 universities, public or private, for federal research expenditures. The University is one of only four Florida public universities classified by the Carnegie Foundation for the Advancement of Teaching in the top tier of research universities, a distinction attained by only 2.3 percent of all universities.

At the heart of USF is a vibrant, diverse and engaged student body. Serving nearly 48,000 students, the University has an annual budget of \$1.7 billion and an annual economic impact of \$4.4 billion. The University includes three separately accredited institutions by the Commission on Colleges of the Southern Association of Colleges and Schools: USF; USF St. Petersburg; and USF Sarasota-Manatee. The University's main Tampa location is also home to USF Health, including the Colleges of Medicine, Nursing, Public Health and Pharmacy.

With over 240 degree programs at the undergraduate, graduate, specialty and doctoral levels, including the doctor of medicine, there's something for everyone at USF. The University offers a dynamic learning

environment that inspires innovation, creativity and collaboration and is focused on student success. More than 2,000 distinguished scholars, researchers and expert teachers, nearly all holding PhDs or the highest degrees in their fields, make up the USF faculty – including the 2012 U.S. Professor of the Year.

USF is a member of the American Athletic Conference, with 17 men's and women's varsity teams competing at the NCAA Division I level. New facilities for practice and competition, along with a completely renovated USF Sun Dome, put the University's athletic facilities on par with virtually every top program in the country.

Additional information about the University is available at <http://www.usf.edu/about-usf/index.aspx>.

Element 1 University of South Florida Strategic Plan

The 2013-2018 Strategic Plan builds on the success of previous plans and advances the institution as a global research university. The vision is to extend USF's reach in the U.S. and around the world, provide further educational opportunities for students and improve their employability, increase faculty and staff prospects, and foster richer local, national, and international relationships. By these steps, we also look to advance the university's case for membership within the Association of American Universities (AAU).

The new plan adopts a laser-like focus on USF's academic investment and performance, refining institutional priorities and measuring outcomes as depicted in the updated planning and performance matrix and online dashboard. The plan underscores the pressing need to provide broad access to higher education while maintaining affordability and high quality within a changing economic reality brought on by significantly reduced state support.

While honoring the accomplishments produced from previous plans and recommitting the institution to the hallmarks of student success and top-tier research and innovation, the new plan also differs from its predecessors by way of its fresh emphasis on developing active public-private partnerships designed to increase economic and employment opportunities within a global context that recognizes the significance of international relations in an interconnected world.

USF's priorities have been set:

USF will, through a continued commitment to student success, produce well educated global citizens
USF will, through its high-impact research and innovation, change lives for the better, improve health, and foster sustainable development and positive societal change
USF will, as a highly effective major economic engine, create new partnerships to build a strong and sustainable future for Florida in the global economy
USF will pursue a more secure economic base, greater operational and resource efficiencies, and increased transparency in its business practices

Element 2 Introduction to the Campus Master Plan

University Campus Master Plans must be updated every five years. The minimum requirements of the Master Plans for Florida Universities are contained in two documents: The Florida Statute (FS) 1013.30 and Chapter 21. The first Campus Master Plans for the USF campuses prepared under these minimum requirements were completed with the 1995-2005 USF Campus Master Plans and have been updated every five years since. The updates have generally followed and improved upon each previous plan. The Update process includes an Evaluation and Appraisal Report, Data Collection and Analysis, and revisions to the Goals, Objectives, and Policies. Development capacity is governed by the current Campus Development Agreement with the host municipality, the City of Tampa.

Element 3 Academic Overview

The University of South Florida (USF) is a global research university dedicated to student success and positioning itself for membership in the Association of American Universities (AAU). The University's Tampa campus is the research institution among the three separately accredited institutions in the USF System. USF-Tampa has 14 Colleges and Schools with the Marine Science College located on the St. Petersburg campus. The faculty in the 14 Colleges are dedicated to research in many disciplines, including healthcare, water resources management, urban sustainability, practices to improve the quality of life for people with disabilities and being a leading university on Veterans research and integration. USF research and innovation are directed, therefore, toward creating local, national and global solutions to societies' difficult problems.

The University takes pride in being young but innovative and creative, dedicated to providing a globally competitive education to students from diverse cultures, nationalities and economic backgrounds. Thus, USF values cultural diversity and enhanced understanding and appreciation of the global experience.

The Academic Overview Element includes information on the 14 Colleges, Research and the other Academic Resources responsible for the dynamic research, teaching and learning going on at USF. This section provides, also, links to Sustainability Education and Research Information, as well as information regarding campus Public Art installations.

Element 4 Future Land Use

The Future Land Use goal of the Tampa Campus Master Plan is to clarify and strengthen the established campus land use pattern and improve the relationship between land uses on and off the campus. The 2015-2025 Campus Master Plan Update continues to implement and carry forward the basic planning goals, objectives, and policies of previous Campus Master Plans in the development of the campus. These include infill development and increased density by minimizing building footprints, maximizing height, and replacement of inefficient one and two story buildings in order to optimize land use and conserve open space. The existing surface parking lots in the Academic core will largely become future sites for Academic, Research, and Support facilities. The completion of the cross campus Greenway system also remains a priority.

Two major projects which have received partial funding, until recently planned for campus property, are now planned to be built on donated land in Downtown Tampa; these projects are the USF Health Heart Institute and the Morsani College of Medicine. This location will be much closer to the USF South Clinic at Tampa General Hospital and the USF Center for Advanced Medical learning and Simulation (CAMLs), further contributing to the revitalization of the area.

Element 5 Transportation

The Transit, Circulation, and Parking goal of the Tampa Campus Master Plan is to encourage options for sustainable transit and vehicular access to the campus that reduce reliance on single-occupant vehicles, reduce overall parking demand, and minimize emissions and fossil fuel consumption, while maintaining essential delivery and service access.

Transit: The USF campus and nearby off campus student apartment neighborhoods to the north and south are served by six routes of the USF Bull Runner Transit Service, free for student riders. A recent service improvement is the Bull Tracker, a real-time mobile device information system. USF students also ride free of charge regionally by HART, the Hillsborough Area Regional Transit service, the nearby transfer center on 131st Street, and a bus rapid transit route on Fletcher Avenue to Downtown Tampa.

Roads: Generally the existing traffic patterns remain the same in the campus roadway system with the exception of the relocation of daily traffic on a segment of USF Holly Dr. to a new road north of the new Residence Halls, Dining, and Recreation project. This will alleviate ongoing pedestrian crossing conflicts

and unite the Student Residence Halls north of USF Holly Dr better with the Halls to the south and the Academic core of the campus. USF Holly Dr. will remain open to transit, service, and emergency vehicles, as well as resident move-in and move-out. Two new campus access connections are proposed: 1) at the existing traffic signal at Fletcher/46th St and 2) at Bruce B Downs north of Lake Behnke where a new traffic signal will be installed.

Pedestrians, bicycles, and non-motorized circulation: Pedestrian and bicycle traffic has steadily increased over time due to many factors, including increased density in the campus core, use of transit with the growth of nearby off campus student housing, and student awareness of the health, ecological, and economical benefits. USF students funded a new bike-share program, bringing 100 new bikes to the campus for general use. USF continues to strive to improve safety and necessary facilities including sidewalks, bike lanes, bike racks, and roadway crossings.

Parking: Replacement of surface parking lots displaced due to facilities infill construction will continue to occur in parking structures near the main campus roads. Efforts continue to reduce use of single occupant vehicles, their environmental impacts, and their parking loads through promoting walking, biking, carpools, van share, car rental, Red Coach, Zimride, and other alternative modes of travel and services.

Element 6 Housing and Student Support Services

The Housing and Student Support Services goal of the Tampa Campus Master Plan is to encourage the availability of diverse, safe, affordable housing and support services opportunities for students in support of the educational success, personal development, and social experience of all University students.

Currently the University is planning for the demolition of the aging Andros area housing and replacing and increasing the bed count with state of the art residence halls, including dining, and recreation facilities, on the north side of campus. The plan also includes a small grocery store at the campus edge to support the growing student residential community both on-campus and the adjacent off-campus area of apartments to the north, thereby reducing the need to travel to more distant stores for everyday needed items.

Element 7 Infrastructure and Utilities

The overarching goal of the General Infrastructure and Utilities Element is to implement systems that adequately meet the present and future needs of the University, and providing for anticipated long-term growth. By increasing the efficiency of utility infrastructure and reducing consumption and any wasted resources, the campus can better ensure these systems are adequate to support campus growth.

The Infrastructure element addresses the existing and future proposed utilities and infrastructure needed to support the continued growth of campus facilities. These include: storm water, potable water, sanitary sewer, solid waste, hot water, chilled water, electrical power, and telecommunications systems

Element 8 Conservation

The Conservation goal of the 2015-2025 Campus Master Plan is to be an institutional model for conservation policies, to meet the American College and University Presidents Climate Commitment goals, to minimize negative environmental impacts, and better the environment through improved air, water, and open space quality in the vicinity of the campus. Completion of the cross-campus Greenway for the purposes of open space conservation, stormwater retention ponds, and student recreation remains a priority.

Element 9 Recreation and Open Space

The Recreation and Open Space goal of the Tampa Campus Master Plan is to provide enhanced recreational and athletic options for the campus community in a diverse open space environment that links the campus and the larger host community.

The Recreation and Open Space element includes USF Campus Recreation and USF Athletics facilities. USF is a member of the American Athletic Conference, with 17 men's and women's varsity teams competing at the NCAA Division I level. New facilities for practice and competition, along with a completely renovated USF Sun Dome, put the University's athletic facilities on par with virtually every top program in the country.

Element 10 Intergovernmental Coordination

The Intergovernmental Coordination goal of the Tampa Campus Master Plan is to achieve the goals, objectives and policies of the campus master plan through the use of joint processes for collaborative planning, decision making, and coordinating growth and development with local agencies and governmental entities.

Element 11 Capital Improvements

The goal of the Capital Improvements Element is to provide educational, research and support facilities to all enrolled students, faculty staff and community partnerships, in a manner that protects the investment and maximizes the use of existing facilities and promotes orderly, planned sustainable campus development. This element includes the USF Capital Improvement Plan.

This Page Intentionally Left Blank.



Introduction to the University of South Florida

The University of South Florida is a high-impact, global research university located in beautiful Tampa Bay on Florida's spectacular west coast. It is one of the largest public universities in the nation, and among the top 50 universities, public or private, for federal research expenditures. The University is one of only four Florida public universities classified by the Carnegie Foundation for the Advancement of Teaching in the top tier of research universities, a distinction attained by only 2.3 percent of all universities.

At the heart of USF is a vibrant, diverse and engaged student body. Serving nearly 48,000 students, the University has an annual budget of \$1.7 billion and an annual economic impact of \$4.4 billion. The University includes three separately accredited institutions by the Commission on Colleges of the Southern Association of Colleges and Schools: USF; USF St. Petersburg; and USF Sarasota-Manatee. The University's main Tampa location is also home to USF Health, including the Colleges of Medicine, Nursing, Public Health and Pharmacy.

With over 240 degree programs at the undergraduate, graduate, specialty and doctoral levels, including the doctor of medicine, there's something for everyone at USF. The University offers a dynamic learning environment that inspires innovation, creativity and collaboration and is focused on student success. More than 2,000 distinguished scholars, researchers and expert teachers, nearly all holding PhDs or the highest degrees in their fields, make up the USF faculty – including the 2012 U.S. Professor of the Year.

USF is a member of the American Athletic Conference, with 17 men's and women's varsity teams competing at the NCAA Division I level. New facilities for practice and competition, along with a completely renovated USF Sun Dome, put the University's athletic facilities on par with virtually every top program in the country.

Additional information about the University is available at <http://www.usf.edu/about-usf/index.aspx>.

USF Rankings

In the region, in the state, in the nation and across the globe, the University of South Florida is making an impact. Here are just a few of the distinctive attributes that make our young, vibrant and dynamic university a leading institution of higher education.

Research

- USF is one of the nation's top 73 very high public research universities, and is one of 40 public research universities nationwide that is designated as both very high research activity and as community engaged by the Carnegie Foundation for the Advancement of Teaching.
- USF is one of only four Florida public universities classified by the Carnegie Foundation for the Advancement of Teaching in the top tier of research universities (RU/VH), a distinction attained by only 2.3 percent of all universities.
- USF is ranked 43rd in the nation for research expenditures, among all U.S. universities, public or private, by the National Science Foundation for fiscal year 2012.
- USF is ranked 34rd in total research expenditures and 27th in federal research expenditures for public universities by the National Science Foundation for fiscal year 2012.
- The University of South Florida ranks 10th nationally and 13th among universities worldwide for U.S. patents granted in 2014, according to a new report released by the National Academy of Inventors (NAI) and the Intellectual Property Owners Association (IPO). The report, based on data obtained from the U.S. Patent and Trademark Office, recognizes the important role patents play in university research. USF, with 104 patents for 2014, has ranked among the top 15 universities worldwide for the past five years in generating new inventions.
- The *Chronicle of Higher Education* ranked USF as the fifth fastest growing research university in the U.S. from 2000-2010.
- USF was awarded \$411.1 million in research contracts and grants in fiscal year 2012.
- USF's College of Marine Science successfully competed for one of eight research centers worldwide, funded at \$11 million by BP.
- USF's College of Nursing ranks #1 in Florida and 24th among nursing schools nationwide to receive research funding from National Institutes of Health (NIH) in FY2012.
- USF was in the top 15 for the number of startup companies and in the top 25 for the number of licenses and options, when compared to other U.S. universities in the most recent survey by the Association of University Technology Managers (2012).
- USF's Tampa Bay Technology Incubator is currently home to 42 resident and affiliate companies and growing.

- USF is the founder and home of the National Academy of Inventors (NAI), a non-profit member organization with over 2,000 individual inventor members and Fellows spanning more than 100 U.S. universities, and governmental and non-profit research institutions. The USF Chapter of the NAI has 270 USF faculty, staff, students and alumni members, who collectively hold more than 1,400 U.S. patents.

Academic Value

- USF ranks 40th on *Forbes'* Top 100 Best Buy Colleges. (2012)
- USF is recognized by Princeton Review as one of the top 75 Best College Values (2014).
- Many of USF's Social Science programs rank as top programs in the country: Overall Social Science (#85), Anthropology (#78), Economics (#29), Political Science (#61), Psychology (#88), Sociology (#80) (Center for Public Anthropology, 2013).
- USF's part-time MBA is the top program among Florida's 12 state universities, and No. 16 among public schools in the nation (Bloomberg BusinessWeek, 2013).
- USF is named in *Princeton Review's* Best 378 Colleges: 2014 Edition.
- USF ranks among the top tier of colleges listed in the *USNWR Best Colleges 2014*, ranking in the top 100 of best public schools.
- According to the Times Higher Education (THE) World University Ranking (2013), USF ranks among the top 350 of the best colleges and universities in the world.
- According to the Quacquarelli Symonds (QS) World University Rankings, USF ranks as one of the top universities in the world (2013).
- Quacquarelli Symonds Stars (QS Stars) rated USF with 4 stars (2013), indicating that USF is "highly international, demonstrating excellence in both research and teaching."
- In the 2014 edition of the *U.S. News & World Report's* Best Colleges, USF is ranked 14th as an 'up and coming' university among the country's national universities.
- *The Princeton Review* and *Entrepreneur Magazine* once again rank USF's interdisciplinary graduate entrepreneurship program among the top 25 programs in the nation (#11), the only Florida program included. (November 2012)
- USF was named one of the Top 100 Best Values in Public Colleges by *Kiplinger's Personal Finance* for 2014.
- *USNWR* Names USF College of Education as one of America's best graduate schools for the 10th consecutive year.
- Many USF graduate level programs continue to be ranked among the best according to the 2014 *USNWR Graduate School Rankings*. Newly ranked USF graduate programs in the top 50 include Industrial and Organizational Psychology (#4), Public Health (#21), Library and Information Studies (#24), and Industrial/Manufacturing Engineering (#42). Previously ranked USF graduate programs that continue to

hold a ranking in the top 50 include Audiology (#12), Criminology (#22), Rehabilitation Counseling (#30), and Speech-Language Pathology (#45).

- USF is ranked among the best in *USNWR's Online Education Program* rankings (2014) for the engineering (#26) and education (#36) programs.
- USF ranks as a national leader in online education, according to the *Guide to Online Schools*, ranking 25th on its 'best overall' list of top nonprofit and for-profit schools (2013).
- USF School of Accountancy is ranked 1st in the nation in accounting information systems research, as well as top 30 in other areas of research (audit #21 and tax #29), according to the 2012 rankings released by Brigham Young University (BYU).
- USF ranks among the top 250 world-class colleges and universities according to the *Times Higher Education World University Rankings* (2012-2013) which measures universities across their core missions of teaching, research, knowledge transfer and international outlook.
- According to the Academic Ranking of World Universities (ARWU) (2013), USF ranks among the top 300 of the best colleges and universities in the world.
- BusinessWeek ranks many of USF's undergraduate business programs in their Best Undergraduate Business School rankings, including 25th for Information Systems (2013).

Awards and Recognition

- Popular Science magazine has named Mya Breitbart, USF Associate Professor of biological oceanography, as one of its "Brilliant Ten," on its annual list of some of the country's brightest young scientific minds (2013).
- USF is ranked 110th among all of the world's universities in a ranking of faculty publications, according to *High Impact Universities*. (2010)
- USF was recognized as one of the nation's top producers of Fulbright Scholars in 2012 by the Institute of International Education and by the U.S. Department of State's Bureau of Educational and Cultural Affairs.
- In November 2011, the first USF student in the institutions' history was awarded the prestigious postgraduate Marshall Scholarship.
- USF is home to 46 national scholarship and fellowship student awardees for 2012-13 academic year.
- In the 2012-13 academic year, USF faculty were awarded several prestigious awards, to include Carnegie Foundation/CASE U.S. Professor of the Year, a record 15 AAAS fellowships, the only 2 Sloan research fellowships awarded in Florida, 3 NSF CAREER awards, 5 NAI fellowships, and 4 Core Fulbright's.
- USF was acknowledged as an honor roll recipient of the 2013 President's Higher Education Community Service Honor Roll by the Corporation for National and Community Service. The Honor Roll recognizes

higher education institutions that reflect the values of community service and achieve meaningful outcomes in their communities.

- USF was one of only five institutions to receive NAFSA's 2013 Senator Paul Simon Award for Comprehensive Internationalization.
- USF's Ghana Scholars Program selected by the Institute of International Education (IIE) as the Honorable Mention for the 2013 Andrew Heiskell Award for International Partnerships, which recognizes strategic, comprehensive, and innovative international partnership efforts.

Diversity

- USF has been named one of the top 50 Colleges Advancing Women in Science, Technology, Engineering, and Math (STEM) (The College Database, 2013).
- The USF College of Engineering ranked in the top five nationally in conferring engineering doctorates to both African American and Hispanic/Latino students (Diverse Issues in Higher Education, 2013).
- With a student body representing over 130 different countries, USF is one of the 40 most diverse public universities in the country and the second most diverse public university in the state of Florida, according to *U.S. News & World Report's* recent Diversity Index ratings.
- USF ranks among the *Hispanic Outlook in Higher Education* Top 25 Graduate Schools enrolling Hispanics. (2011)
- USF consistently ranks in the top 25 or 50 in Top 100 Colleges Awarding Degrees to Hispanic according to *Diverse Issues in Higher Education Top Degree Producers*.

Veteran Friendly

- USF was ranked 5th among the country's most veteran-friendly schools by *Military Times' Best for Vets: Colleges 2014* rankings (November 2013).
- USF's College of Business was ranked 9th by *Military Times' Best for Vets: Business Schools 2014* rankings (March 2014).
- USF ranks in the top 15 percent of all colleges, universities and trade schools nation-wide as a Military Friendly School®, as named by *G.I. Jobs* magazine.
- USF is one of only 16 universities in the nation selected as a Tillman Partnership University of the Pat Tillman Foundation, a selection based on innovative veteran-specific support services and proven culture of community for military families.
- U.S. News and World Report ranked USF as a Best College for Veterans (2013).

Social Responsibility

- The University of South Florida has earned the 2015 Community Engagement Classification by the Carnegie Foundation for the Advancement of Teaching.
- USF is ranked 78th nationally, out of more than 1,500 institutions of higher education, for social mobility, research and civic engagement, according to Washington Monthly.
- USF is one of only 22 institutions on the 2014 Green Rating Honor Roll list by *Princeton Review*.
- USF is featured in *Princeton Review's Guide to 322 Green Colleges: 2013 Edition* as one of 322 institutions of higher education that demonstrate a strong commitment to sustainability in their academic offerings, campus infrastructure, activities and career preparation.
- USF vaulted up *Sierra* magazine's annual "America's Coolest Schools" list in 2014 in the top 10 among American universities and colleges for advances in sustainability in research and education.
- USF is one of a small number of universities nationwide to receive a GOLD RATING for building an environmentally-conscious campus. (Association for the Advancement of Sustainability in Higher Education, 2014)

A GLOBAL RESEARCH UNIVERSITY DEDICATED TO STUDENT SUCCESS

• 2013-2018 •

STRATEGIC PLAN





EXECUTIVE SUMMARY

The 2013-2018 Strategic Plan builds on the success of previous plans and advances the institution as a global research university. The vision is to extend USF's reach in the U.S. and around the world, provide further educational opportunities for students and improve their employability, increase faculty and staff prospects, and foster richer local, national, and international relationships. By these steps, we also look to advance the university's case for membership within the Association of American Universities (AAU).

The new plan adopts a laserlike focus on USF's academic investment and performance, refining institutional priorities and measuring outcomes as depicted in the updated planning and performance matrix and online dashboard. The plan underscores the pressing need to provide broad access to higher education while maintaining affordability and high quality within a changing economic reality brought on by significantly reduced state support.

While honoring the accomplishments produced from previous plans and recommitting the institution to the hallmarks of student success and top-tier research and innovation, the new plan also differs from its predecessors by way of its fresh emphasis on developing active public-private partnerships designed to increase economic and employment opportunities within a global context that recognizes the significance of international relations in an interconnected world.

USF's priorities have been set:

- USF will, through a continued commitment to student success, produce well educated global citizens
- USF will, through its high-impact research and innovation, change lives for the better, improve health, and foster sustainable development and positive societal change
- USF will, as a highly effective major economic engine, create new partnerships to build a strong and sustainable future for Florida in the global economy
- USF will pursue a more secure economic base, greater operational and resource efficiencies, and increased transparency in its business practices



CONTENTS

03	Welcome	11	Linked Goals
04	A Message from the President	13	Goal One
05	Strategic Planning Challenges	14	Goal Two
06	2007-2012 Plan & Results	17	Goal Three
08	The Future: Mission, Vision, Values	18	Goal Four
10	Objectives	20	Measuring Success





WELCOME

The University of South Florida System includes three institutions: USF, USF St. Petersburg, and USF Sarasota-Manatee, each separately accredited by the Southern Association of Colleges and Schools (SACS) Commission on Colleges. All institutions have distinct missions and their own detailed strategic plans. Serving more than 47,000 students, the USF System has an annual budget of \$1.5 billion and an annual economic impact of \$11.5 billion.

USF is comprised of the main campus in Tampa, its College of Marine Science in St. Petersburg, and USF Health. As a global research university dedicated to student success, USF is classified by the Carnegie Foundation for the Advancement of Teaching as a research university with very high research activity (RU/VU), and as a community engaged campus.

USF is accredited by SACS to award baccalaureate, master's, doctoral, and professional degrees, including the Doctor of Medicine. The university offers more than 230 degree programs at these levels.

USF values cultural and ethnic diversity and access along with an enhanced understanding and appreciation of the global experience. From developing sources of clean energy to improving the quality of life for people with disabilities and leading the way on veterans research and reintegration, USF research and innovation is directed toward creating local, national, and global solutions to society's most difficult problems.

In addition to being an important part of the Tampa Bay economy, USF undertakes ambitious community-engaged research and participates in mutually beneficial partnerships that enhance student access to academic programs, research, and employment opportunities.

And at the heart of the university is a fundamental commitment to student success.

A GLOBAL RESEARCH UNIVERSITY DEDICATED TO STUDENT SUCCESS

A MESSAGE FROM THE PRESIDENT

The University of South Florida's 2013-2018 Strategic Plan builds on a tremendous era of achievement for our young institution, during which USF greatly expanded its national and international reputation as a creative, innovative, and successful center of higher learning and research. While the previous strategic plan guided the university through unprecedented financial challenges, this plan is designed to build on our defining strengths and core mission: providing a globally-competitive education to our students; creating partnerships that leverage our assets with other public institutions and the private sector; and advancing research, innovation, and sustainability.

This plan comes at a time when our nation and our world have come to accept a "new normal" for higher education, even as colleges and universities play an ever-increasing role in the world's economic future. More people will need advanced education to be successful, but America's higher education sector holds no illusion that the public resources lost during the Great Recession will recover to previous levels. The onus is now on institutions – especially those such as the University of South Florida, a public research university which serves a diverse population – to create new opportunities wherever the potential exists. The nation looks to its public research universities to reignite the economy and provide a workforce that is adaptable, entrepreneurial, and resilient.

In this document, you will see clearly that the University of South Florida envisions itself as a premier public research university with state, national, and global impact. We continue to measure our progress against the best institutions and position the university for membership in the Association of American Universities. We will distinguish USF as an inclusive environment that expands access for students from all walks of life, creating a learner-centered environment where every aspect of the university is committed to student success. Our dedicated faculty and staff have put USF on the leading edge of research in many disciplines that are critical to the future



prosperity of our region, state, and nation, including health care, marine science, water resource management, veterans reintegration, and urban sustainability.

USF stands shoulder to shoulder with the best public and private institutions as a Top 50 research university, as a global leader in new U.S. patents, and as a leading producer of Fulbright Scholars.

As you review this document, bear in mind this is not a plan that exists on paper only. It is infused into our university's budgeting, hiring, and work production processes. As a university, we have come to respect the value of careful and deliberate planning as essential to moving forward in an era when setbacks and roadblocks are numerous and unpredictable. With a clear sense of our priorities, we look forward to meeting the challenges ahead and continuing to build a great university of the future.

A handwritten signature in black ink that reads "Judy L. Genshaft".

Judy Genshaft
PRESIDENT

STRATEGIC PLANNING CHALLENGES

Preparation of the 2013-2018 Strategic Plan began in spring 2011 and continued into fall 2012. Directed by Vice Provost Graham A. Tobin, the 39-member Strategic Planning Committee included representatives from major constituent groups: students, faculty, staff, and alumni. Stakeholders from the broader campus and Tampa Bay communities also contributed to the process.

USF's plan aligns with the State University System of Florida Strategic Plan for 2012-2025, the Florida Board of Governors' annual work plan, and legislative/gubernatorial priorities. Careful attention was paid to (i) maintaining USF's position as a top-tier (RU/VH) research university and a community engaged university as designated by the Carnegie Foundation for the Advancement of Teaching; (ii) improving performance relative to the Association of American Universities' indices; (iii) increasing USF's national ranking based upon the National Science Foundation's assessment of total and federal research expenditures; (iv) improving the number and quality of graduate programs ranked by the National Research Council; and (v) enhancing USF's position in the Top American Research Universities annual report.

USF's bold vision requires strategic investment and predictable funding. However, the dramatic shift in public higher education funding in Florida makes specific budget projections difficult. Consequently, the planning process assumed that: (i) state appropriations would either decline or remain stable; (ii) USF would have authority to increase tuition rates to meet requirements; (iii) state legislation would allow pledging of tuition to support capital needs; (iv) the USF Foundation would meet its goals for increased giving; (v) USF's Direct Service Organizations and auxiliary operations would generate incremental margins for reinvestment; and (vi) USF would achieve savings through budget re-engineering.

In addition, the landscape of higher education in Florida is changing as state colleges and private institutions now compete with for-profit providers for students. Thus, risks remain high. There persists considerable economic uncertainty regarding support for higher education at both federal and statewide levels. This plan helps position the university to manage effectively these challenges.



John B. Ramil
CHAIR, BOARD OF TRUSTEES



Judy Genshaft
PRESIDENT



Brian D. Lamb
BOARD OF TRUSTEES
Strategic Planning Committee Member

RESEARCH

\$11 Million Grant

awarded to USF to fund a three-year project in the Gulf of Mexico

252% Increase

in federal research investment to USF between 2000 and 2009

50th in Nation

among all universities, public and private, for federal and total external research expenditures as determined by the National Science Foundation

One of the Top 5

fastest-growing research universities in the country

\$400 Million +

total research support awarded by National Institutes of Health for programs in diabetes

\$9.3 Million

2010-11 funding for preclinical and translational studies of Alzheimer's disease

ENVIRONMENT & SUSTAINABILITY

#12 "Coolest School"

as ranked by *Sierra* magazine in 2012

Gold Certification

Patel Center for Global Solutions and Interdisciplinary Sciences Building receive Gold Certification for Leadership in Engineering and Environmental Design (LEED)

Climate Leadership Award

USF receives the 2012 Second Nature Climate Leadership Award for "unparalleled campus innovation and climate leadership"

Sustainability Research

38 of 54 academic departments at USF have faculty members actively engaged in some manner of sustainability research

Patel College of Global Sustainability

In 2012, USF announced the creation of the nation's first College of Global Sustainability, giving the next generation the tools it needs to build a healthier and more sustainable future for our planet and its people, while developing a global network of leaders to put the most effective new sustainability practices to work

STRATEGIC PLAN 2007-2012 SUCCESSSES

The vision, values, and goals expressed in the 2007-2012 Strategic Plan set USF on a sound course for realization of its bold objectives; it was a plan that challenged us to our best thinking and actions. **It succeeded.**

STUDENT SUCCESS

Ranked #8

in *U.S. News & World Report's* 2011 national Top 20 "Up-and-Coming Universities"

80-Point Gain

in median SAT scores for incoming, full-time freshmen from 2006-07 to 2011-12

Top Producer

of Fulbright U.S. Scholarship recipients for the 2011-12 academic year

First Goldwater Scholars

In April, 2010, Juan Baso and Amber Schmidt became the university's first Goldwater Scholars

A Record 48

national scholarship and fellowship winners in 2011-12 (including Marshall, Goldwater, Udall, Fulbright, Boren, Hollings, Gilman and other prestigious scholarships)

NATIONAL RANKINGS

Very High Research

USF was classified by the Carnegie Foundation for the Advancement of Teaching as a Research University with Very High Research Activity in 2006; it has remained in this elite category of 73 public universities ever since

2012 Honor Roll

U.S. News & World Report names USF's graduate programs in education and engineering to its 2012 Honor Roll of the nation's best online programs

9 Programs in the Top 50

U.S. News & World Report's 2012 rankings of America's Best Graduate Schools

Nation's Top 100

USF was named one of the Nation's Top 100 public universities by *U.S. News & World Report* in 2012

#9 Nationally

2012 Princeton Review and *Entrepreneur* magazine ranking of USF's Graduate Entrepreneurship Program

Top 10 Nationally

The Chronicle of Higher Education reports three USF doctoral programs, in criminology, communication sciences, and aging studies, in the Top 10 nationally

Six Years in a Row

USF earns a place among The Princeton Review's Best 376 Colleges six years in a row, 2007-2012

GLOBAL

Education Abroad

35 programs in 28 countries

More than 140

international agreements in effect in locations around the world

A Record 18

USF students awarded competitive Gilman Scholarships for education abroad in 2012

1,600+

degree seeking international students and 200 international research scholars representing 157 countries on campus in 2011-12

1,600 Patients in 4 Days

were treated in the small Haitian village of Dilaire by a team of USF and Tampa Bay medical professionals following a major earthquake in 2011

ENGAGEMENT & PARTNERSHIPS

Record 2,600

Stampede of Service volunteers in 2012

Community Engagement

USF's Office of Community Engagement and Partnerships established in 2009

A First-Of-Its-Kind Study

aimed at creating "America's Healthiest Hometown" initiated by USF Health in 2011 at The Villages, the world's largest retirement community, located in Sumter County

Tampa Bay Educational Partnership

USF joins with Hillsborough County Public Schools to develop the Tampa Bay Educational Partnership (TBEP) promoting exemplary programming for area K-12 schools

CAMLS

Opened in 2012 and packed with learning tools found nowhere else in the world, USF's Center for Advanced Medical Learning and Simulation (CAMLS) in downtown Tampa is leading the way toward better and safer patient care across the U.S. and beyond

New MBA Program

In fall 2012, USF teamed up with the Tampa Bay Lightning to launch a new two-year MBA in Sport and Entertainment Management within the College of Business

ATHLETICS

775

student-athletes named to BIG EAST All-Academic teams

Scholar-Athletes of the Year

2 Male BIG EAST Scholar-Athletes of the Year

BIG EAST Championships

4 BIG EAST Championships

All-America

13 All-America selections



THE FUTURE

Mission

The University of South Florida's mission is to deliver competitive undergraduate, graduate, and professional programs, to generate knowledge, foster intellectual development, and ensure student success in a global environment.

Vision

The University of South Florida is a global research university dedicated to student success and positioned for membership in the Association of American Universities (AAU).

As Florida's leading metropolitan research university, USF is dedicated to:

- Student access, learning, and success through a vibrant, interdisciplinary, and learner-centered research environment incorporating a global curriculum
- Research and scientific discovery to strengthen the economy, promote civic culture and the arts, and design and build sustainable communities through the generation, dissemination, and translation of new knowledge across all academic and health-related disciplines
- Partnerships to build significant locally- and globally-integrated university-community collaborations through sound scholarly and artistic activities and technological innovation
- A sustainable economic base to support USF's continued academic advancement

Values

The University of South Florida values:

- High-quality education and excellence in teaching and learning
- High-impact scholarship, research, and creative activities
- Diversity of students, faculty, and staff
- Affordable and accessible education
- Global research, community engagement, and public service
- Social, economic, and environmental sustainability
- Focus and discipline in aligning the budget with institutional priorities
- A campus life with broad academic, cultural, and athletic opportunities
- Success and achievement of its students, faculty, staff, and alumni
- Shared governance within all components of the institution
- Collegiality, academic freedom, and professional responsibility
- Entrepreneurial spirit, partnerships, and innovation
- Efficiency and transparent accountability
- First-class physical infrastructure and a safe campus environment



OBJECTIVES

During the next five years, the University of South Florida aspires to become (i) one of the top 25 public universities in the nation for high quality undergraduate, graduate, and professional education; (ii) one of the top 100 global research universities in developing community and world-changing discoveries, technological inventions, and medical advances; (iii) a leader in improving the quality of community enrichment and increasing employment opportunities in Florida, the United States, and the global economy to ensure student success; and (iv) an organization with an even stronger sustainable economic base, built through continued sound financial management.

LINKED GOALS

Goal One

Well-educated and highly skilled **global** citizens through our continuing commitment to **student success**



Goal Four

Sound financial management to establish a strong and sustainable **economic base** in support of USF's continued academic advancement

Goal Two

High-impact **research** and **innovation** to change lives, improve health, and foster sustainable development and positive societal change



Goal Three

A highly effective, major economic engine, creating new **partnerships** to build a strong and sustainable future for Florida in the global economy



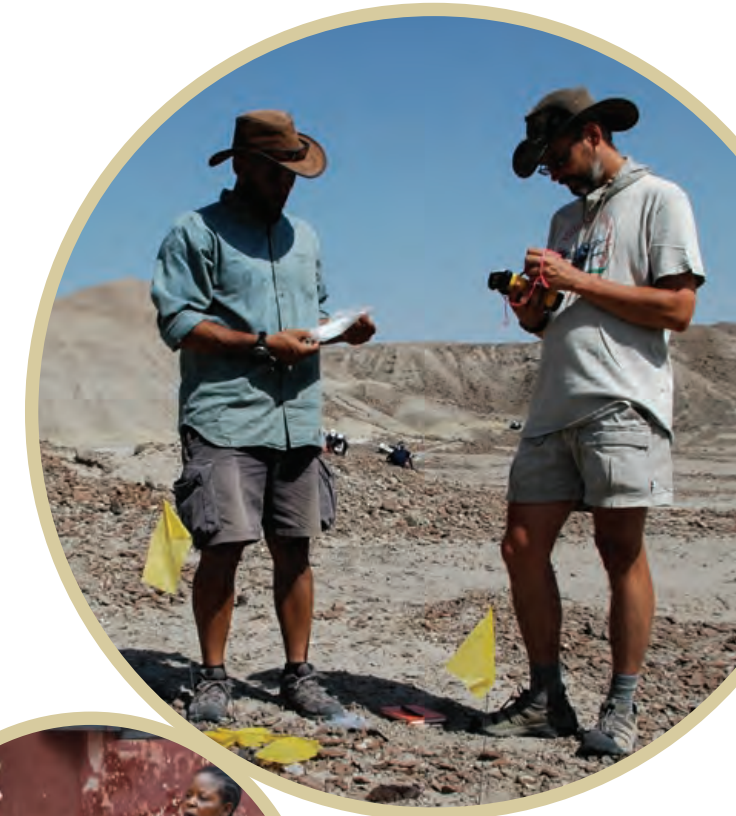


The university is committed to delivering high-quality **globally informed** academic programs that prepare our graduates for **leadership** roles both at home and abroad.

GOAL 01

Well-educated and highly skilled global citizens through our continuing commitment to student success:

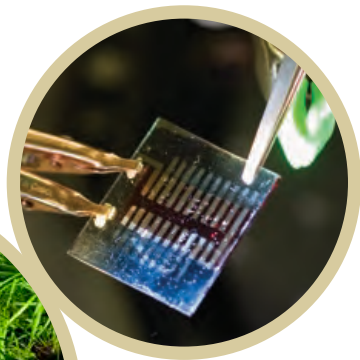
- Provide the highest quality, comprehensive, interdisciplinary educational programs and student research opportunities to foster critical thinking and intellectual inquiry through a variety of pedagogical and delivery methods
- Develop diverse, dynamic global citizens and leaders to strengthen communities and improve quality of life
- Enhance opportunities for all students by providing transformational learning — including an increased commitment to science, technology, engineering, and mathematics (STEM) and health fields — that is intellectually, scientifically, and technologically sound and produces relevant applied skills and engaged outcomes
- Educate competitive, highly skilled students prepared to excel in the global job market and to make meaningful and lasting contributions to society
- Deliver a globalized curriculum utilizing emerging technologies to increase accessibility and cultural understanding



GOAL 02

High-impact research and innovation to change lives, improve health, and foster sustainable development and positive societal change:

- Engage in high-impact research, scholarship, and creative activities that generate new knowledge
- Increase global research opportunities and partnerships at all levels within the university
- Develop strategic interdisciplinary research initiatives that solve critical problems
- Promote community-engaged scholarship and creative activities to benefit all members of society



The university prizes the responsibility of placing the academic experience of our students, the productivity of our faculty, and the creativity of our staff in the **global** context. The university will remain **relevant and engaged**, and will fulfill a leadership role in addressing critical global issues with technologies that have yet to be imagined.

The university seeks to build robust, innovative **partnerships** bridging our local and international communities to strengthen the Tampa Bay region as part of the global landscape.



GOAL 03

A highly effective, major economic engine, creating new partnerships to build a strong and sustainable future for Florida in the global economy:

- Pursue entrepreneurial endeavors and partnerships that augment revenue and maximize institutional effectiveness
- Establish mutually beneficial partnerships (internal and external) that enhance student access to academic programs, research, and employment opportunities
- Provide university stewardship that represents the cornerstone of economic and cultural significance for Florida, the nation, and beyond
- Promote a stimulating campus life through diverse academic, economic, cultural, and athletic opportunities



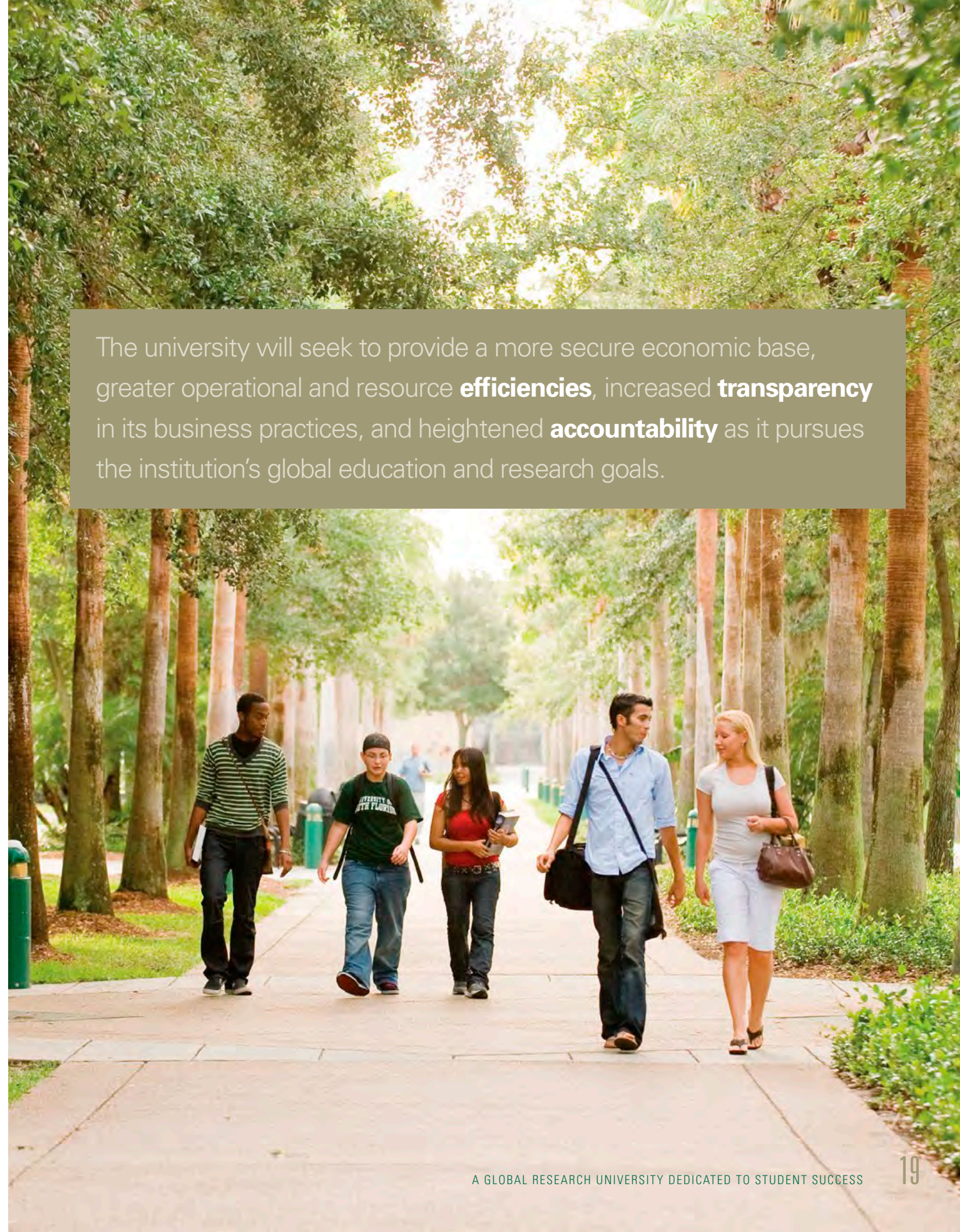
GOAL 04

Sound financial management to establish a strong and sustainable economic base in support of USF's continued academic advancement:

- Align budget and fiscal resources with academic priorities that support the recruitment and retention of intellectual talent at USF
- Refine business practices to ensure a strong and sustainable economic foundation for the university
- Promote and sustain a positive working environment, high service quality, and strong staff support through competitive salary structures and professional development opportunities
- Build USF's fundraising enterprise and endowment by completing a comprehensive campaign to support capital projects, endowed professorships and scholarships, and ongoing operating needs
- Expand USF's international identity through design and implementation of a comprehensive, powerful branding campaign
- Expand the commercialization of emerging technologies to enhance regional and state economic development
- Enhance the physical infrastructure of campus through fiscally responsible investments



The university will seek to provide a more secure economic base, greater operational and resource **efficiencies**, increased **transparency** in its business practices, and heightened **accountability** as it pursues the institution's global education and research goals.



MEASURING SUCCESS

USF's strategic priorities are fully aligned with those of the Florida State University System Board of Governors and those of the federal government. USF measures its progress by setting clear annual targets for a series of metrics and compares itself to its peer and aspirational peer institutions. These data are available at several Web sites (see links) and show trends and comparisons for many of these metrics during the last ten years.

- **Annual AAU Performance Assessment Report**
<http://www.ods.usf.edu/Plans/Strategic/docs/Performance-Update-AAU.pdf>
- **Planning, Performance, and Accountability Matrix**
<http://www.ods.usf.edu/Plans/PPA/matrix.htm>
- **Performance Dashboard**
<http://www.ods.usf.edu/Plans/PPA/dashboard.htm>

The University of South Florida tracks prioritized institutional placements in:

- Integrated Postsecondary Education Data System's broad measures of academic institutions
- Carnegie Foundation for the Advancement of Teaching position in the top tier of American research universities, along with its designation as a community engaged university
- Association of American Universities' performance indices
- National Science Foundation's ranking of research universities
- National Research Council's ranking of the scope and quality of graduate programs
- Top American Research Universities' annual report ranking
- *US News and World Report's* annual ranking of national universities
- Association of University Technology Managers' ranking for technology transfers, start-ups and patents
- National Association of Colleges and University Business Officers' endowment standings
- Institute of International Education's Open Doors statistics on international education and study abroad
- Moody's credit rating
- Voluntary Support of Education's data on annual giving



USF's National Peer Institutions

- North Carolina State University
- Rutgers, The State University of New Jersey*
- The State University of New York, Buffalo*
- The State University of New York, Stony Brook*
- University of Alabama, Birmingham
- University of California, Irvine*
- University of Cincinnati
- University of Illinois, Chicago

USF's Aspirational Peer Institutions

- Georgia Institute of Technology*
- University of Pittsburgh*
- University of California, San Diego*

* AAU Institutions



4202 East Fowler Avenue, Tampa, Florida 33620 | usf.edu

Committee Members

Name	Representative Unit
Graham A. Tobin (Co-Chair)	Academic Affairs, Office of the Provost
Michael Hoad (Co-Chair)	University Communications & Marketing
Christopher Akin	Staff
Sandra Cooper	University College
Roger Brindley	USF World
Robert Sullins	Undergraduate Studies
Paula Coble Rhodes	College of Marine Science
Theresa Drye	Human Resources
Eric Eisenberg	College of Arts and Sciences
Tom Frontera	College of Medicine
Patsy Feliciano	Office of Diversity and Equal Opportunity
Mark Greenberg	USF Library
Khalid Hassouneh	Undergraduate students
Richard Heruska	Alumni
Cathy Hicks	USF Foundation
Peter Howard	University Communications & Marketing
Gregory Knollman	Graduate students
Brian Lamb	Board of Trustees
Robert MacLeod	College of The Arts
Tom Massey	College of Behavioral and Community Science
Robert McDermott	College of Public Health
Valerie McDevitt	Research and Innovation
Pritish Mukherjee	College of Arts and Sciences
Jenny Paulsen	Information Technology
Amy Perkins	Athletics
Richard Pollenz	Graduate School
Jianping Qi	College of Business
Barbara Redding	College of Nursing
Laura Runge	College of Arts and Sciences
Paul Sanberg	Distinguished University Professor
John Schueler	University Advancement
Amy H. Schwartz	College of Pharmacy
Nicholas Setteducato	Academic Affairs
Jim Shimberg	Community Representative
Denita Siscoe	Student Affairs
Greg Teague	Faculty Senate
Sylvia Thomas	College of Engineering
Nick Trivunovich	Business and Finance
Carlos Zalaquett	College of Education

Board of Trustees

John B. Ramil, Chair
Hal W. Mullis, Esq., Vice Chair
Christopher J. Davis
Gene Engle
Brian D. Goff
Stephanie E. Goforth
Brian D. Lamb
Rhea F. Law, Esq.
Stephen J. Mitchell, Esq.
Debbie N. Sembler
Byron E. Shinn
Jordan B. Zimmerman

USF Leadership

Judy Genshaft
President

Ralph Wilcox
Provost and Executive Vice President

Karen Holbrook
Senior Vice President, Global Affairs
and International Research

Stephen Klasko
Senior Vice President, USF Health, and
Dean, Morsani College of Medicine

John Long
Senior Vice President and
Chief Operating Officer

Joel Momborg
Senior Vice President,
University Advancement

Sandy Lovins
Vice President, Administrative Services

Michael Pearce
CEO of Innovative Education and Vice
President, Information Technology, CIO

Steven Prevaux, Esq.
General Counsel

Paul Sanberg
Vice President, Research and Innovation

Denita Siscoe
Interim Vice President, Student Affairs

Nick Trivunovich
Vice President, Business & Finance

Doug Woolard
Director, Intercollegiate Athletics

This Page Intentionally Left Blank.

Element 2 Introduction to the Campus Master Plan

The 2015-2025 Campus Master Plan development supports the University objective in the USF 2013-2018 Strategic Plan:

During the next five years, the University of South Florida aspires to become (i) one of the top 25 public universities in the nation for high quality undergraduate, graduate, and professional education; (ii) one of the top 100 global research universities in developing community and world-changing discoveries, technological inventions, and medical advances; (iii) a leader in improving the quality of community enrichment and increasing employment opportunities in Florida, the United States, and the global economy to ensure student success; and (iv) an organization with an even stronger sustainable economic base, built through continued sound financial management.

- Goal One: Well-educated and highly skilled global citizens through our continuing commitment to student success
- Goal Two: High-impact research and innovation to change lives, improve health, and foster sustainable development and positive societal change
- Goal Three: A highly effective, major economic engine, creating new partnerships to build a strong and sustainable future for Florida in the global economy
- Goal Four: Sound financial management to establish a strong and sustainable economic base in support of USF's continued academic advancement

University Campus Master Plans must be updated every five years. The minimum requirements of the Master Plans for Florida universities are contained in two documents: The Florida Statute (FS) 1013.30 and Chapter 21. In addition to these requirements, each university may add additional information and sections.

Both documents are available on the web at the following addresses:

FS 1013.30:

http://www.flsenate.gov/statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=Ch1013/SEC30.HTM&Title=->2009->Ch1013->Section%2030#1013.30

Florida Board of Governors Regulations Chapter 21:

<http://www.flbog.edu/about/regulations/regulations.php>

University Campus Master Plans are composed of three parts containing, at a minimum:

1. The Evaluation and Appraisal Report (EAR) is a self-assessment by the University of the previously adopted Goals, Objectives, and Policies and how well it succeeded in implementing them.
2. The Data Collection and Analysis Report is an update to the required and discretionary information upon which the Campus Master Plan Update is based. The minimum requirements are specified to be based on best existing available information and do not require the University to conduct original data collection.
3. The Campus Master Plan Update Goals, Objectives and Policies. This document describes, in narrative, table, and graphic form, the intended development criteria and parameters for the next 10 years and beyond.

The 2015-2025 Campus Master Plan Update Data Collection and Analysis Report and Evaluation and Appraisal Report are included in the Appendixes, as well as additional pertinent information.

These documents are presented to the Campus Development Committee (CDC) and Academic Campus and Environment Advisory Committee (ACEAC) for review and recommendation to the Academic and Campus Environment (ACE) Workgroup. The ACE reviews and recommends adoption to the University Board of Trustees.

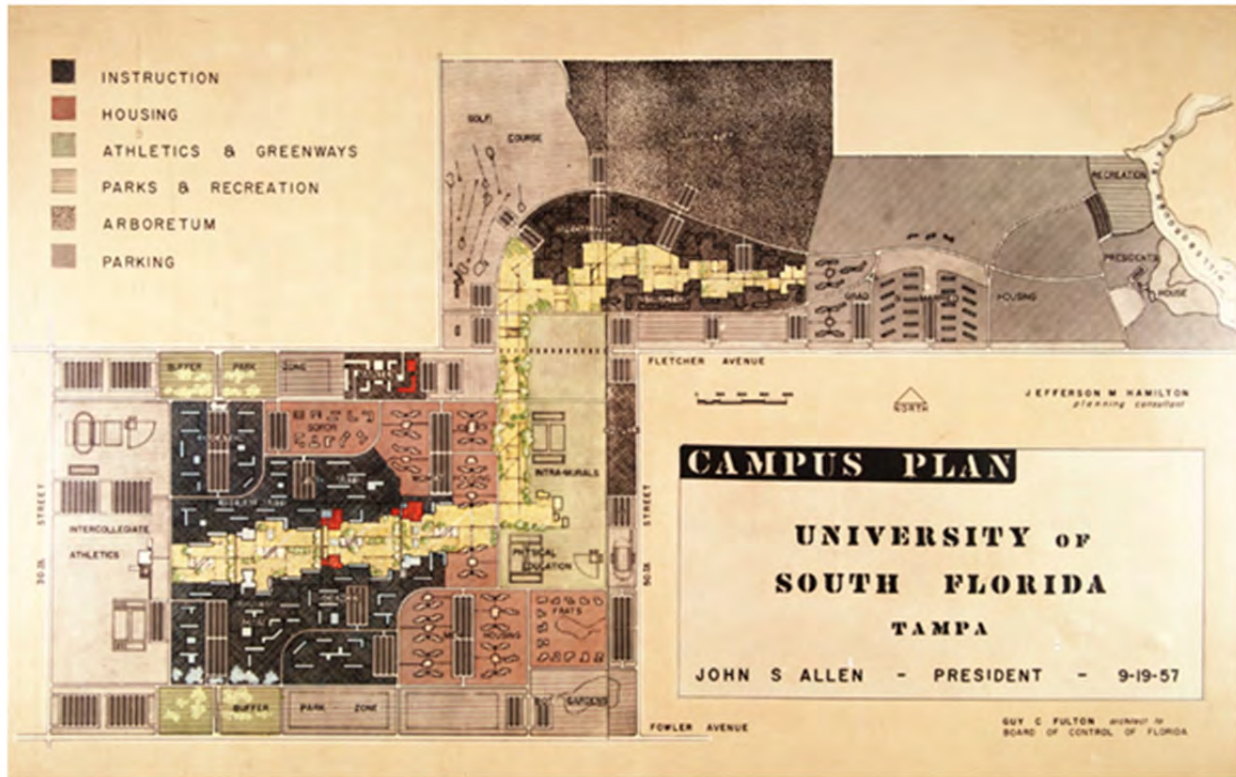
This is the five-year update to the 2010-2020 USF Campus Master Plan. The Campus Development Agreement with the City of Tampa, dated April 2, 2007, remains in effect until December 31, 2015. It is in the process of an amendment extension to 2025.

The current Campus Development Agreement is available on this website:

<http://www.usf.edu/administrative-services/facilities-planning/documents/master-dev-agreement.pdf>

Evolution of the Campus Master Plan

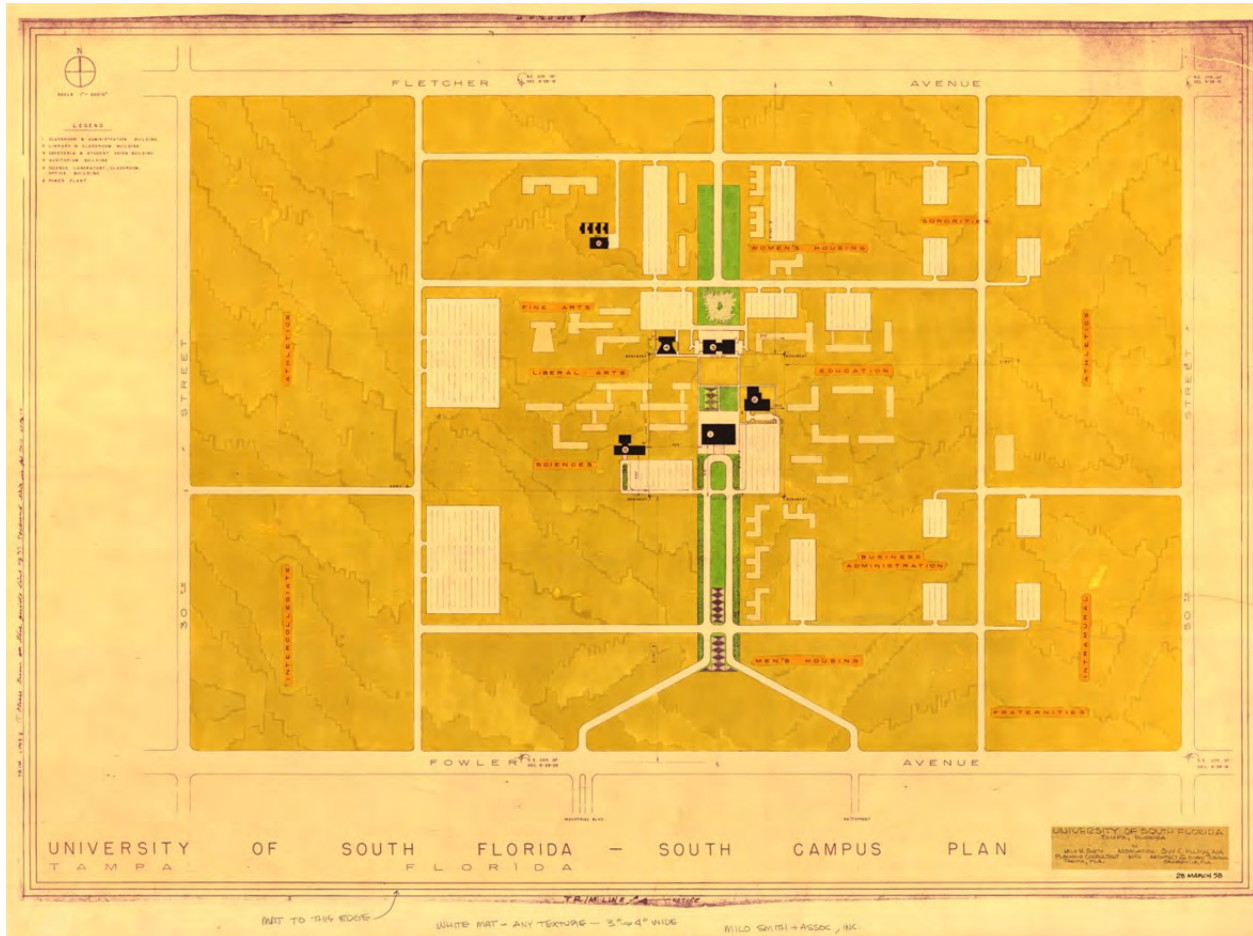
1957 Campus Master Plan



The first USF Campus Master Plan was dated 1957. It was a vision for the future of an entirely new campus on pasture land on the outskirts of Tampa, at the time a rural area accessed by sandy dirt roads. The first plan included a continuous series of plazas and courtyards that connected across the very large campus acreage. The property area to the north of Fletcher Avenue was to have been connected to the southern property area under an overpass for the safe access of pedestrians and bicyclists. The plan is attributed to John S. Allen, first USF President, Guy C. Fulton, Architect Board of Control, and Jefferson M. Hamilton, Planning Consultant.

For more information regarding the early evolution of the new University please refer to *The Vision of a Contemporary University* by Russell M. Cooper and Margaret B. Fisher and *The University of South Florida The First Fifty Years* by Mark I. Greenberg.

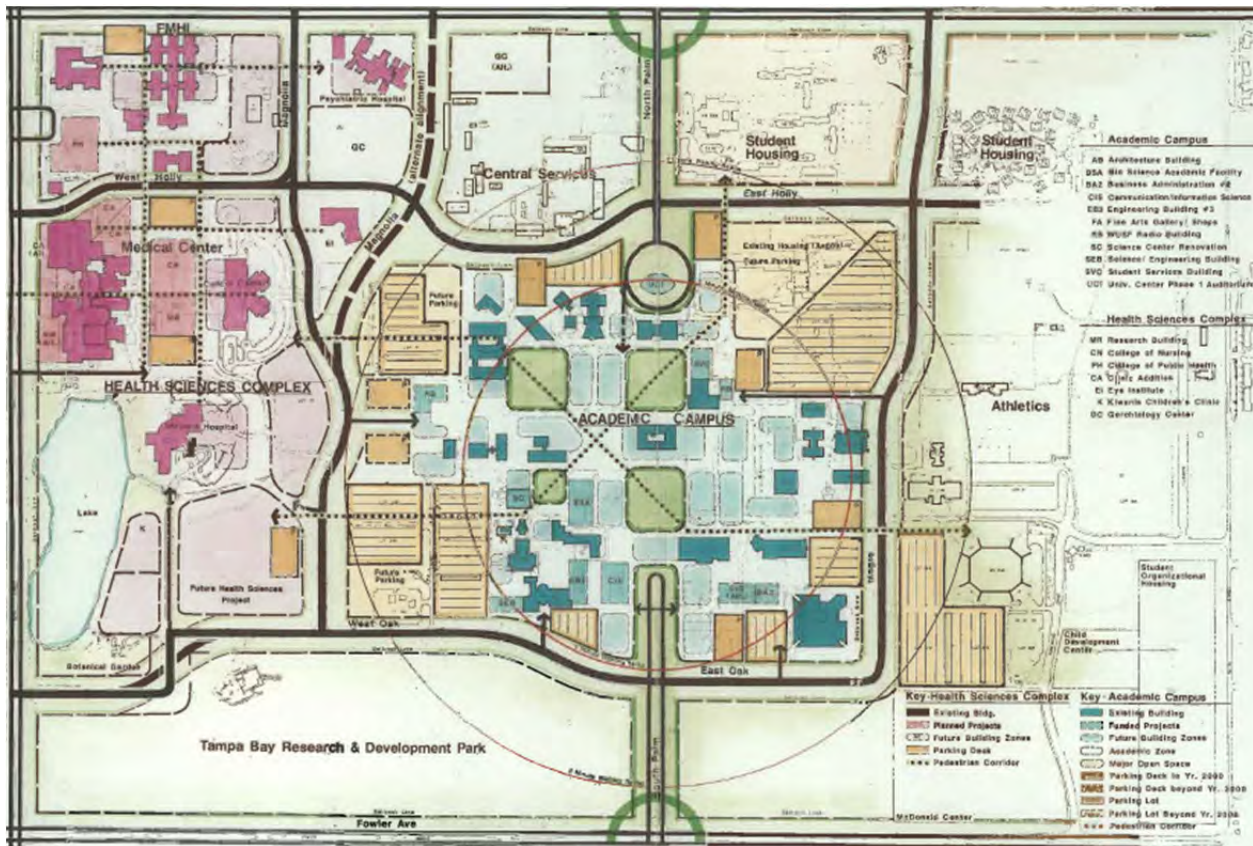
1958 Plan



The plan above is dated 1958 for the first campus buildings, completed in 1960 and 1961. The Leroy Collins Boulevard main entrance drive was envisioned and constructed with a wide landscaped median separating the two directions of traffic, although when built it met Fowler Avenue at 90 degrees. The roadway system was laid out in more of a grid than the 1957 plan, however as the roads were built there were modifications made to the alignments. Large parking lots were planned for the internal edges of the loop road to preserve land for infill by later buildings. The first six buildings are shown in black above. These first buildings were Administration (later named the John and Grace Allen Building), Chemistry, Library, Theater, Student Center (later named the Phyllis P Marshall Center), and the Physical Plant. For the first few years until dormitories were built, women students were housed on the top floor of the Student Center.

1987 Campus Master Plan

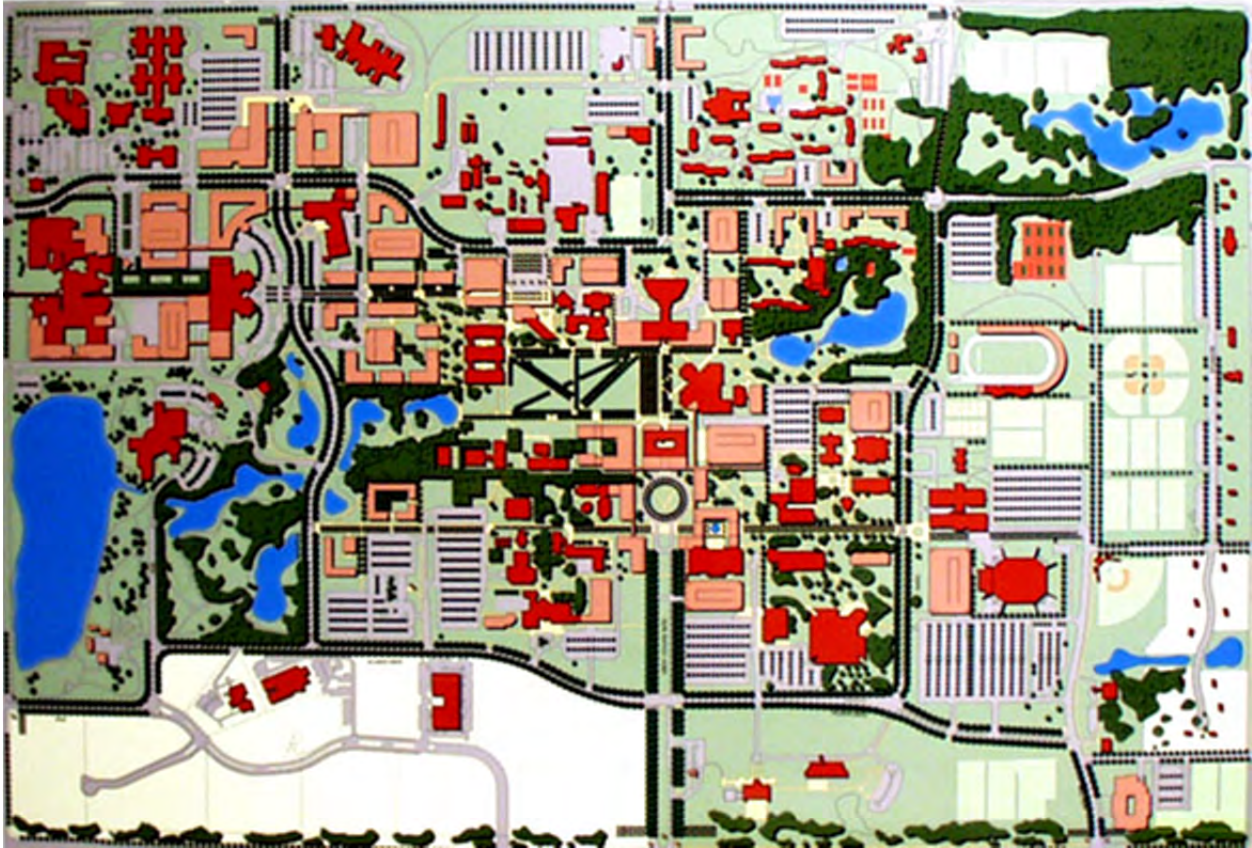
Existing buildings are in dark blue and pink, proposed future buildings in light blue and pink.



There are no known Campus Master Plans between 1958 and 1987, although much changed in that timeframe. The Medical Center facilities grew on the west side of the campus and Athletic facilities were developed on the east side. The Academic facilities remained in the central campus area and student housing was built to the northeast. Campus access roads were built to connect to an inner loop road. By 1987 the concept of the cross campus connected courtyard system had ceased to exist and the Fletcher overpass was not built. As the University primarily served commuter students, vast parking lots were constructed adjacent to the loop road. Other than the Golf Course, and the small Riverfront Park, no further development occurred north of Fletcher as the importance of wetlands become recognized. This unique undeveloped Sandhill and Wetland area, originally known as the Ecological Research Area and recently renamed the USF Forest Preserve, has continued to be a valuable environmental resource for research and teaching. (See the Conservation Element for more information)

1995-2005 Campus Master Plan

Existing buildings in red color, proposed building locations in peach color.



In the early 1990's the State of Florida legislature passed statutes with the requirements for comprehensive Campus Master Plans for all the state universities and for the plans to be updated every 5 years. There were extensive implementation requirements prepared by the Board of Regents for the Data Collection and Analysis as well as the Goals, Objectives, and Policies. Based on the projected off campus impacts, each university was required to enter into a Development Agreement with the municipality in which they were located. The USF Agreement included compensation to the municipality for traffic impacts and was paid with funds from the State Concurrency Trust Fund.

The 1995-2005 Campus Master Plan was the first to be prepared in response to the new Statutes. One of the first conceptual ideas for the 1995 plan was for a permanent protected greenway that would connect the campus from the lake at the southwest corner through the center of campus to the wetlands in the northeast corner. The center of the Greenway, an area of high pedestrian and special event activity, would become an urban shaded plaza, named in honor of Dr. Martin Luther King Jr. The first phase of the plaza was prioritized for funding by the students with their CITF funds. The project included a vine covered trellis, seating, shaded walks to the student center, a sunken court for small events, and a pool with fountains with the I Have A Dream speech wall at the west end and the re-cast bust of Dr. King at the east end. The greenway was to become less formal and more park-like to the east and west, including aggregated storm water ponds as amenities and for passive recreation.

Other major concepts were to:

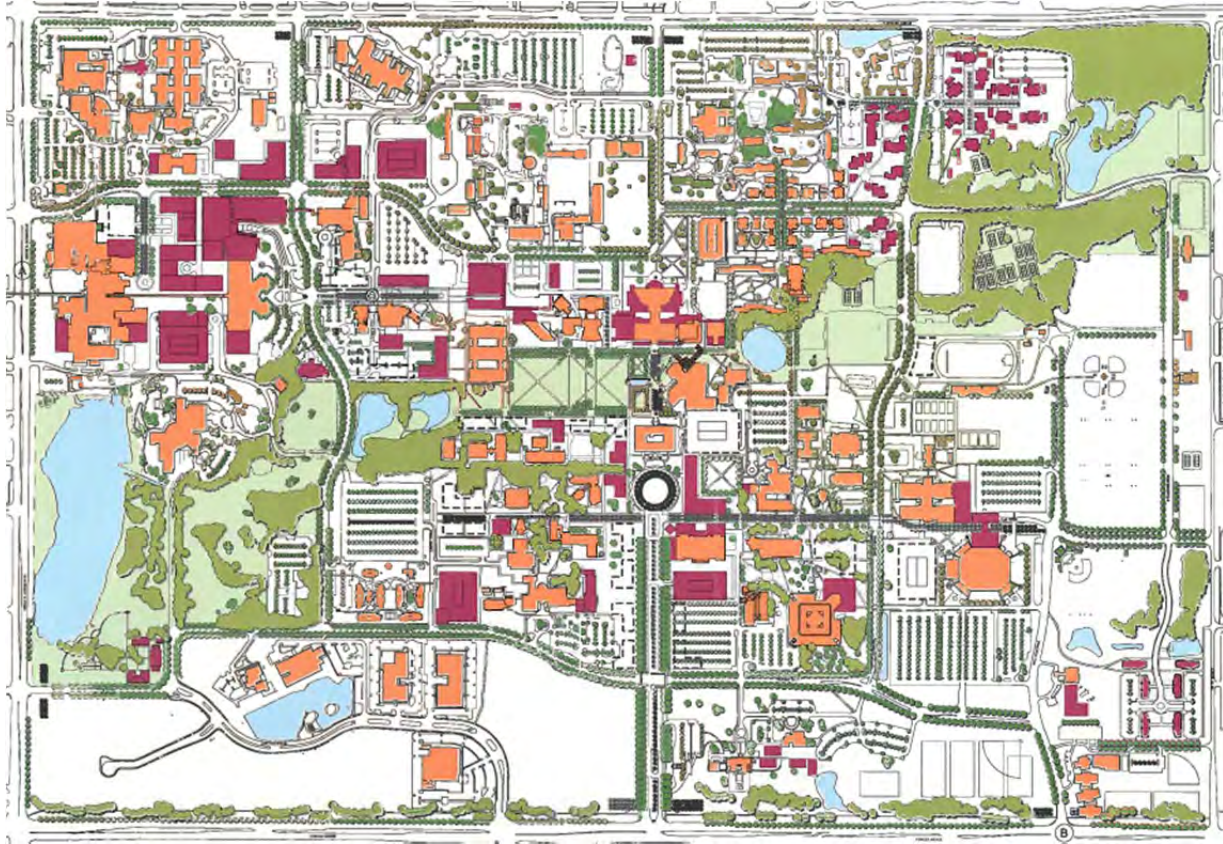
- Densify the academic core area in order to reduce walking distances
- Improve shaded north-south and east-west pedestrian movements
- Build parking structures for displacement and growth located inboard of the loop road where possible to reduce vehicular-pedestrian conflicts
- Establish a shuttle bus circulator on-campus and to the dense off-campus student apartments to the north
- Infill housing on USF Holly Drive to be built on the large parking lots that separated the two existing housing areas
- Line the streets with trees for pedestrian and bicyclist shade and to reduce the vehicular speed
- Build a new housing area on the west side of campus to
 - enliven the west side of campus
 - increase pedestrian/bicycle traffic across the campus,
 - serve the engineering, science, and art students

From 1995 to 2000, many improvements were accomplished:

- Psychology/CSD
- Center for Urban Transportation Research (CUTR)
- major expansion to the College of Education
- WUSF Television Building
- Magnolia Apartments, Phase I of the new west housing district
- Holly Residence Halls, the infill housing project on both sides of USF Holly Dr.
- a new centrally located Campus Bookstore
- Crescent Hill Parking Garage, the first parking structure
- Sam and Martha Gibbons Alumni Center
- Dr. Martin Luther King Jr. (MLK) Plaza
- Pizzo Elementary School
- Campus Information Center at the Collins main entrance
- East and west storm water ponds replaced parking lots, beginning to establish the greenway system.
- Implemented the USF Bullrunner transit system, both on and off-campus.

2000-2010 Campus Master Plan:

Existing buildings are in peach color, proposed building locations in red color



The 2000-2010 Campus Master Plan continued the proposed development concepts initiated in the 1995 Plan described above. The location of the Natural and Environmental Sciences building began the intended definition of the MLK Plaza edge. The Stable Research Building further contributed to the urbanization of the northwest Health district.

The major changes for student life were the proposed further expansions to residential life on campus on the northeast side of campus, in the form of suites, apartments, and a new Greek Village. In lieu of the previously planned Greek Row, the Greek Village was a new concept based on fostering a sense of community. It was also more feasible for the University to build duplex type houses (with individuality) and all at once, then rent to the organizations.

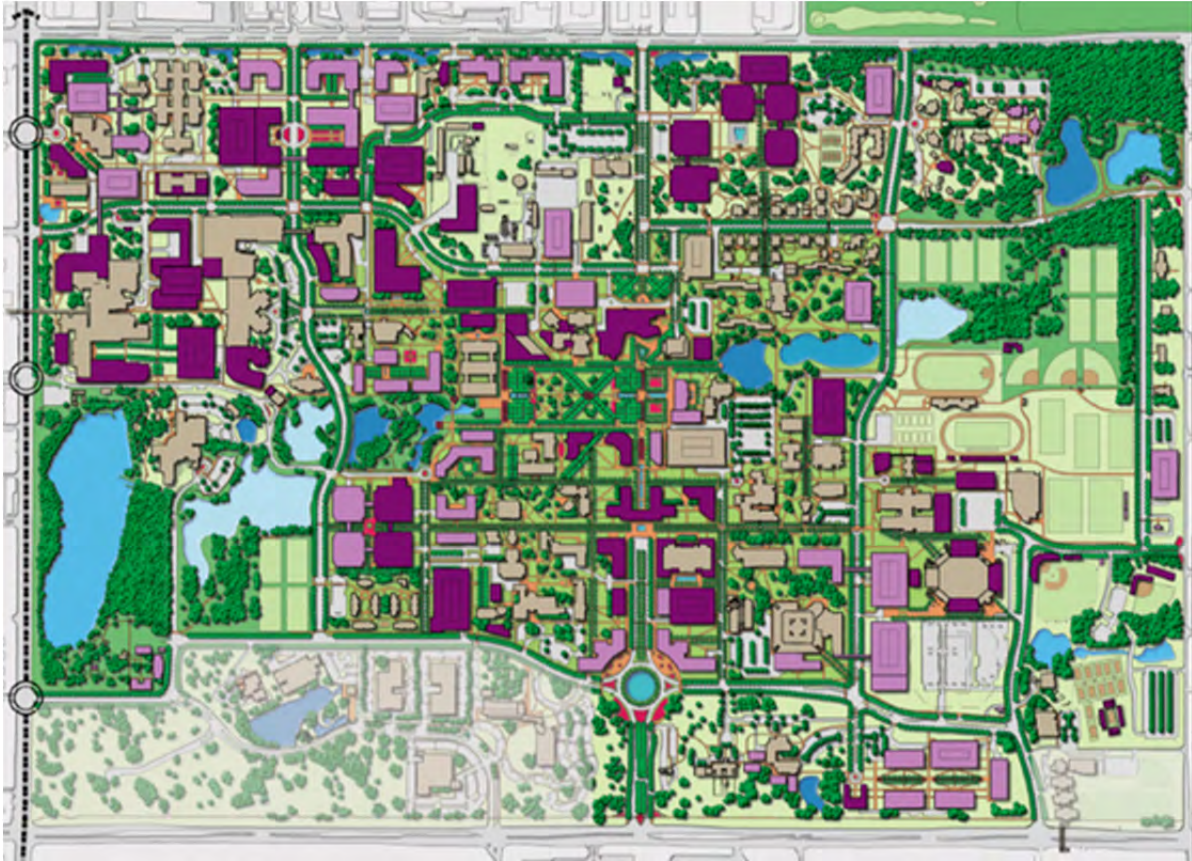
From 2000-2005 the completed projects included:

- Engineering Building III
- Chiles Center for Healthy Mothers and Babies
- Natural and Environmental Sciences building
- WUSF Television Building
- Expansion of the College of Business building
- Nanotechnology Building

- Maple and Cypress Student Residence Halls
- Greek Village
- Stabile Research Center and the American Cancer Society Hope Lodge were built on the Moffitt Cancer Center subleased property.
- Le Roy Selmon Athletic Center
- Dr. Kiran Patel Charter School
- Athletics and Campus Recreation field facilities reconfigured
- Collins Blvd Parking Garage, the second parking structure for enrollment growth and displacement.

2005-2015 and Long Range Campus Master Plan

Existing buildings in tan color, 2005-2015 proposed building locations in dark purple color, proposed long range building locations in light purple color



The 2005 Plan combined the 10 year and long range plan illustrative diagrams. Campus Master Plan Goals, Objectives, and Policies continued to support sustainable concepts and practices. The Plan proposed increased infill density of the Academic, Health, and housing areas on the west side, as well as rebuilding the older housing with greater density on the north side of USF Holly Drive. Additional storm water ponds were shown to be needed for the long range development.

A new Academic building was proposed at the north end of Leroy Collins Blvd to 1) shorten its length, 2) provide a focal terminus of a more appropriate scale than the existing two story building and 3) eliminate pedestrian/vehicle conflicts in the campus east-west pedestrian spine.

After a study of options, and due to the cost and limitations of renovation, the existing Special Events Center and the Phyllis P. Marshall Student Center were demolished to build a larger new multi-purpose, state of the art student center. The project was soon in need of expansion after it opened. The facility presents an improved inviting image to those arriving from the north on USF Palm Avenue. The south side the facility is connected to the MLK Plaza by three running mascot USF Bulls statues in a recirculating fountain river. The make-up fountain water is provided by the condensate from the building. The facility quickly became the hub of student activities and a model for other universities.

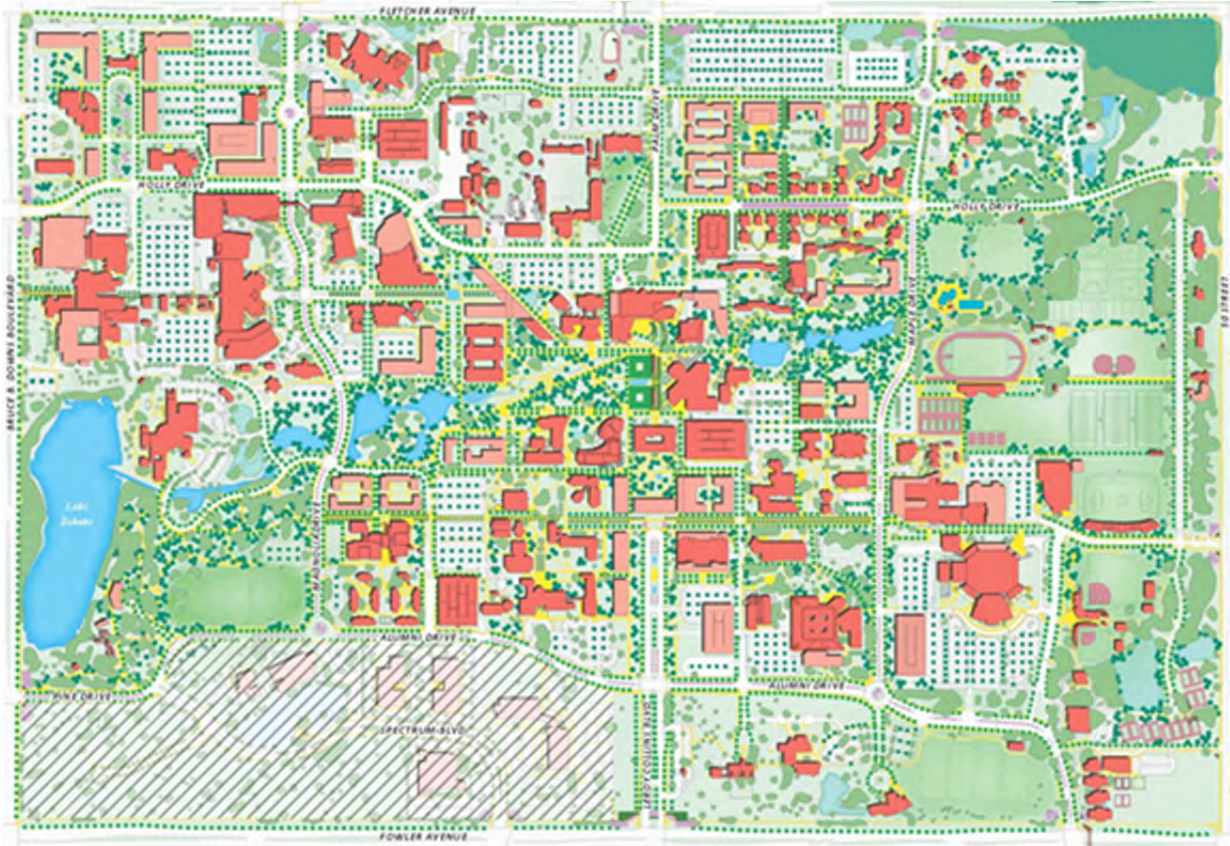
As the original Development Agreement with the City of Tampa was going to expire, in 2007 a new agreement was negotiated and paid from the State Concurrency Trust Fund (this Fund no longer exists). The agreement will expire in December 2015.

Between 2005 and 2010 the following had been accomplished:

- Morsani Center for Advanced Health Care clinic building
- USF Health Medical Offices
- Kiran Patel Center for Global Solutions
- Children’s Medical Services
- Phyllis P Marshall Student Center
- Testbed for Rehabilitative Robotics
- Johnnie Byrd Alzheimer’s Center
- School of Music Building
- C W Bill Young Hall
- Juniper-Poplar Hall, another 1,000 beds on the west side
- Laurel Dr. and Beard Dr. Parking Garages
- Southeast Chiller Plant
- Expanded the USF Bullrunner transit service to the south of campus.
- President Genshaft signed the American College and University Presidents Climate Commitment (ACUPCC)

2010-2020 Campus Master Plan

Existing buildings in red color, proposed building locations in peach color



The 10 year Plan continued to promote infill density, the replacement of aging housing with greater density, and protection and completion of the Greenway. The Master Plan further increased the previous emphasis on reducing the USF carbon footprint in response to:

- >increasing student sustainability awareness and expectations
- >the American College and University Presidents Climate Commitment
- >USF Student Green Energy Fee to fund campus sustainability projects
- >the creation of the Office of Sustainability
- >the founding of the College of Global Sustainability
- >increasing USF recognitions in national research and sustainability rankings

These efforts include Leadership through Energy and Environmental Design (LEED) Certifications, reducing utility consumption, increasing conservation and recycling, planting shade trees, improving facilities for pedestrian, bicycle, and transit, among many other efforts. The 2010 plan proposed that USF Holly, between USF Palm and USF Maple be closed to daily vehicular traffic and that traffic should be moved north of the housing district in order to eliminate daily pedestrian and vehicle conflicts and to encourage walking and biking for the students living on the north side of USF Holly.

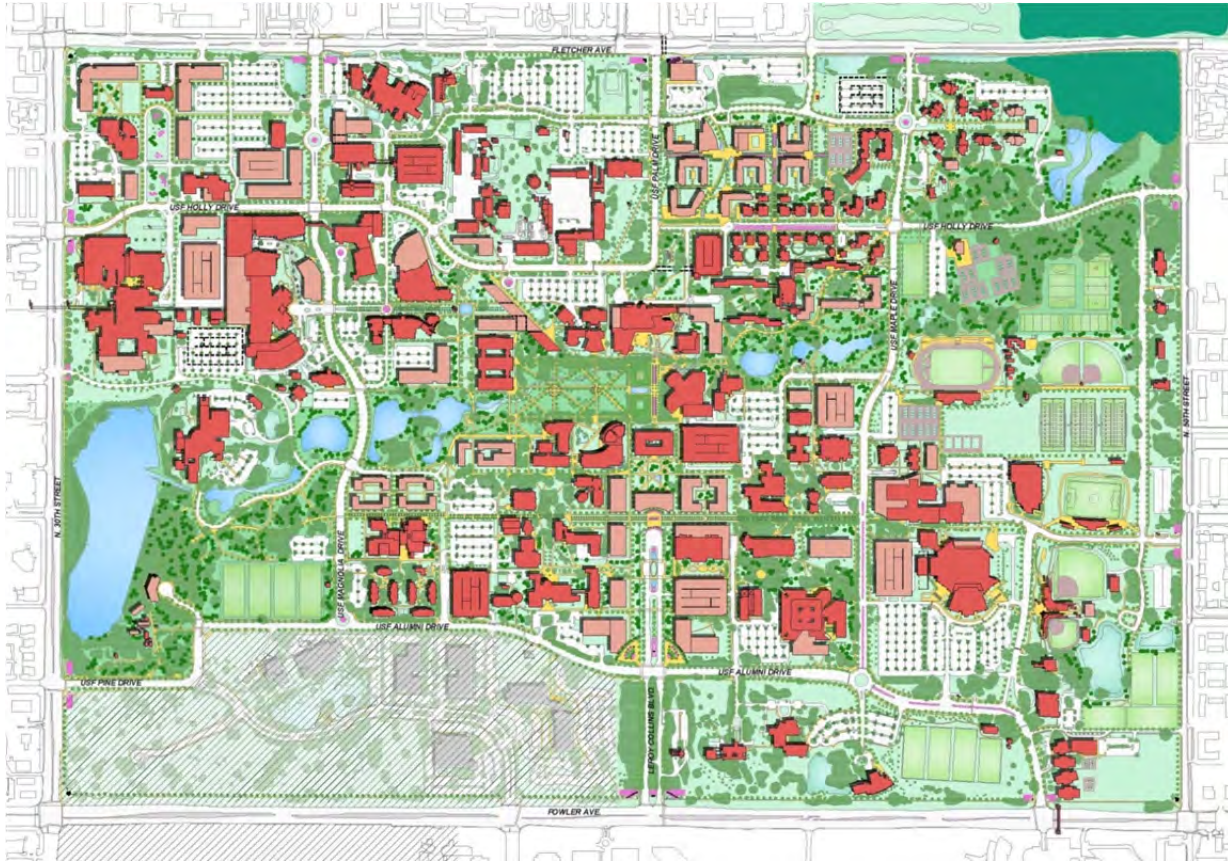
Projects completed between 2010 and 2015 include:

- Interdisciplinary Science Building
- Pam & Les Muma Basketball Center expansion to the SunDome and
- Campus Recreation Center Expansion
- New baseball and softball fields and stands with shared facilities and Gonzmart Plaza
- Corbett Soccer Park Stadium
- Champions Choice Dining
- New parks on the south side of the Library and at the West Pond
- Collins Blvd. landscape and fountains
- Chowdhari Golf Training Facility.
- Extensive shade tree plantings along existing and future pedestrian walkways and bike lanes

<http://www.usf.edu/administrative-services/facilities-planning/divisions/master-plan.aspx>

2015-2025 Campus Master Plan

Existing buildings in red color, proposed building locations in peach color



2015-2025 Campus Master Plan continues to implement and carry forward the basic planning principles of previous Campus Master Plans in the development of the campus. These include infill development and increased density by minimizing building footprints, maximizing height, and replacement of inefficient one and 2 story buildings. The existing vast acreage of surface parking lots in the Academic core will continue to become sites for future Academic, Research, Health, and Support facilities. Replacement will occur in parking structures near the main campus roads. The completion of the cross campus Greenway system also remains a priority.

Currently the University is planning for the demolition of the aging Andros area housing and replacing and increasing the bed count with state of the art residence halls, including dining, and recreation facilities, on the north side of campus. The plan also includes a small grocery store at the campus edge to support the growing student residential community both on-campus and the adjacent off-campus area of apartments to the north, thereby reducing the need to travel to more distant stores for everyday needed items. The relocation of daily traffic to a new road north of this housing area will provide a new connection to Fletcher Avenue and alleviate ongoing pedestrian crossing conflicts and unite the Student Residence Halls north of USF Holly Dr. with the Halls to the south and the Academic core of the campus. USF Holly Dr. will remain open to transit, service, and emergency vehicles, as well as resident move-in and move-out. A new connection to Bruce B Downs north of Lake Behnke is also proposed.

Two major projects which have received partial funding, until recently planned for campus property, are now planned to be built on donated land in Downtown Tampa; these projects are the USF Health Heart Institute and the Morsani College of Medicine. This location will be much closer to the USF South Clinic at Tampa General Hospital and the USF Center for Advanced Medical learning and Simulation (CAMLs), further contributing to the revitalization of the downtown area.

This Page Intentionally Left Blank.

Element 3 Academic Overview & Program

USF is committed to promoting globally-competitive undergraduate, graduate and professional programs that support interdisciplinary inquiry, intellectual development and skill acquisition. Every department and administrative unit at the University – from the cashier's office and physical plant, to academic departments and residence life – is committed to student success. Through a series of programs and initiatives, the University strives to create a positive teaching and learning environment designed to engage students and enrich all aspects of the student experience.

USF's academic programs are designed to meet the needs of all learners, including traditional learners, special needs learners, adults interested in advancing their careers, veterans and distance learners. The University offers more than 80 undergraduate majors and over 130 degree programs at the graduate, specialist and doctoral levels, including the doctor of medicine. Undergraduates are strongly encouraged to take advantage of a wide range of undergraduate research opportunities and study abroad programs.

The University has 14 colleges falling under the Office of the Provost and Executive Vice President for Academic Affairs. From Medicine and The Arts to Marine Science and Business, each of the colleges offers an extensive range of degree and specialty programs, many allowing students to focus on a particular discipline while exploring other areas of interest across the University.

Honors College at USF offers high-achieving, academically motivated students extraordinary opportunities to develop their thinking, reasoning, and analytic skills, regardless of major. The program encourages interaction among students and top faculty through small classes and unique on-campus opportunities.

Innovative Education extends the reach of USF's academic programs through continuing education programs, graduate certificates, distance and online learning, workforce development, noncredit education, pre-college programs and the Osher Lifelong Learning Institute.

USF Colleges

Arts and Sciences: The College of Arts and Sciences is the largest college at USF and is home to the School of Humanities, the School of Social Sciences and the School of Natural Sciences and Mathematics. [College of Arts and Sciences](#)

Behavioral and Community Sciences: The College of Behavioral and Community Sciences prepares students to improve the quality of life, health and safety of diverse populations. It is home to one of the country's largest behavioral health research and training institutes. [College of Behavioral and Community Sciences](#)

Business: The Muma College of Business prepares students to take leadership positions in business and society. Since 2008, the college's graduate entrepreneurship program has been ranked among the top 25 in the nation by the Princeton Review. [College of Business](#)

Education: The College of Education is a leader in regional, national and international education. Over the past 10 years, the college has graduated the largest or second-largest number of educators in the state of Florida. [College of Education](#)

Engineering: The College of Engineering provides a high-quality educational experience for students and practicing professionals and is a leader in innovative research in the areas of sustainability, renewable energy and biomedical engineering. [College of Engineering](#)

Global Sustainability: The Patel College of Global Sustainability prepares students to address complex regional, national and global challenges in sustainability and the ability to innovate in diverse cultural, geographic and demographic contexts. [College of Global Sustainability](#)

Graduate Studies: The College of Graduate Studies is housed in the Graduate School and provides a home for interdisciplinary programs so graduate students may experience a truly multidisciplinary experience. [College of Graduate Studies](#)

Honors College: The Honors College provides motivated students an exciting experience and productive learning environment that combines the advantages of a small, highly personalized college with the resources of a major research institution. [Honors College](#)

Marine Science: The College of Marine Science is a global leader in applying science to society's needs through research, service and training of future scientists. The college is recognized among the nation's top oceanographic institutions. The facilities for the College of Marine Science are located on the USF ST. Petersburg campus and are included in the Master Plan for that campus. [College of Marine Science](#)

Medicine: The Morsani College of Medicine is a major academic medical center known nationally for its innovative curriculum with an emphasis on improving health through interprofessional education, high-impact research and clinical activities. [Morsani College of Medicine](#)

Nursing: The College of Nursing is transforming healthcare, transforming lives: creating the nursing leaders of tomorrow and the research that improves health. [College of Nursing](#)

Pharmacy: The College of Pharmacy is a pacesetter in pharmacy curriculum and experience. Through interprofessional and simulation resources, students are prepared to deliver technologically-advanced pharmaceutical care based on genetic profile and individualized responses to medications. [College of Pharmacy](#)

Public Health: The College of Public Health offers masters and doctoral degrees as well as Florida's first bachelor's degree in public health. The curriculum features cooperative learning, research, problem-solving and field experience to advance and improve public health. [College of Public Health](#)

The Arts: The College of The Arts provides an immersive scholarly, artistic and technical environment for tomorrow's leaders in architecture, community design, art, art history, music, theatre and dance. It is also home to the Institute for Research in Art, comprised of the Contemporary Art Museum and Graphicstudio. <http://www.arts.usf.edu/>

Academic Resources

USF Tampa Library: USF's largest and most comprehensive library provides access to over two million academic journals, databases, and books, and research assistance for students and faculty. The Library's Learning Commons offers high-tech study space, the SMART Lab, the Office For Undergraduate Research, tutoring, and the Writing Center. [USF Tampa Library](#)

FMHI Research Library: The FMHI Research Library provides services and resources directly supporting the Louis de la Parte Florida Mental Health Institute and related academic and research programs at the University of South Florida. [FMHI Research Library](#)

Shimberg Health Sciences Library: Shimberg Health Sciences Library is located on the USF Tampa campus and serves USF Health students and faculty. [Shimberg Health Sciences Library](#)

Academic Advising: Contact an academic advisor in your college, learn how to declare or change your major, find out about counseling services available to students, view a registration tutorial and more. [Academic Advising](#)

Tutoring and Learning Services: Take advantage of academic support services including tutoring, workshops, test prep, a Writing Center and more to enhance learning. Find out about services and opportunities available through the tutoring center located in the USF Library Learning Commons. [Tutoring and Learning Services](#), [Writing Center](#), [SMART Lab](#)

Innovative Education: Innovative Education meets the needs of learners any time and any place through innovative distance learning, continuing education, degree completion, certificate, workforce development, lifelong learning and pre-college programs. [Innovative Education](#)

Testing Services: Testing Services administers comprehensive testing including the ACT, SAT, CLEP, GRE, LSAT, Six Sigma, Florida Teacher Certification and more. Find out about test schedules and programs. [Testing Services](#)

USF Scholar Commons: The University of South Florida Scholar Commons, a service of the USF Tampa Library, is a showcase for the University's research and creative output. Members of the USF academic community contribute completed scholarship for long-term preservation and worldwide electronic accessibility. [USF Scholar Commons](#)

USF Research Overview

Over the past 10 years, USF has transitioned into a major research institution. Today, USF is one of only 40 public research universities nationwide with very high research activity that is designated as community engaged by the Carnegie Foundation for the Advancement of Teaching.

Researchers at the university are advancing the frontiers of medicine, science, engineering and the arts. The university is a leader in the treatment of brain disease, veterans reintegration, sustainability, infectious disease and photovoltaic technologies – using cells to transfer energy from sunlight. The USF Pediatric Epidemiology Center, the data and technology coordinating hub for nearly every major Type 1 diabetes clinical trial worldwide, has become the epicenter for global juvenile diabetes research.

In the 2011-2012 fiscal year, USF broke the \$400 million mark for research awards, earning more than \$411 million in total awards and contracts. The university ranks tenth worldwide among universities granted U.S. utility patents and is ranked among the top 50 universities in the nation, public or private, for research expenditures.

Undergraduates at the university are encouraged to take advantage of a wide range of research opportunities. The Office for Undergraduate Research provides support to students engaged in undergraduate research and teaches students about the expectations and privileges associated with undergraduate research.

Graduate students have the opportunity to work alongside internationally renowned faculty and researchers in a variety of settings. Together they work to create solutions to society's most pressing problems.

The USF Research Park, located on the Tampa campus, links researchers to businesses in need of research partnerships. The park is home to a network of innovation-based companies, research, government resources and business development tools.

At USF, research is a creative and ongoing collaboration between faculty and student researchers, administrative staff, business and academic partners, and the community. The result is an ever-stronger national research university that opens minds, creates knowledge, brings innovation into the marketplace and changes lives.

<http://www.usf.edu/research/index.aspx>

USF Research & Innovation

USF Research & Innovation promotes and supports the research and scholarship activities of faculty, staff and students, and strives to make USF a leading national research university. Learn about discovery at USF.

- [Research & Innovation](#)
- [Research Administration Education](#)

Sponsored Research

For USF researchers, the Division of Sponsored Research provides resources and information for grant and contract proposal development and project management, proposal submission, training, and assistance with identifying research collaborators.

- [Sponsored Research](#)

Technology Transfer / Patents & Licensing

The Technology Transfer Office (TTO) works with companies interested in licensing or starting a new business around USF patents and intellectual property, and with USF researchers and students to ready new inventions for the patenting process and potential licensing opportunities.

- [TTO / Patents & Licensing](#)

Research Integrity & Compliance

Research Integrity & Compliance partners with researchers to promote safe and ethical research practices at USF, and ensure the university is compliant with federal regulations, state statutes, and university policies.

- [Research Integrity & Compliance](#)

USF CONNECT

USF CONNECT focuses on the needs of Tampa Bay's technology and bio/life sciences entrepreneurs, providing the facilities, partners and resources for successful business development, including access to technologies, workforce programs, technology commercialization, critical research equipment, incubator facilities, faculty researchers, student interns, and a matching grants program.

- [USF CONNECT](#)

USF Research Park

The USF Research Park of Tampa Bay, located on the USF Tampa campus, offers space and equipment, and links USF researchers to businesses in need of research partners, primarily in the areas of biotechnology and life sciences research and entrepreneurship.

- [USF Research Park](#)

Student Research

Undergraduate Research

As early as their freshman year, students are encouraged to engage with faculty and get involved in research. Learn about the resources available to students in the Office of Undergraduate Research to promote and support real-world discovery.

- [Undergraduate Research](#)

Graduate Research

As one of the nation's top 50 public research universities, USF provides graduate students outstanding opportunities to work alongside internationally renowned faculty and researchers in a variety of settings. Explore research at USF.

- [Graduate Research](#)

[For Enrollment and enrollment projections please see Element 4 Future Land Use.](#)

[Degrees Awarded 2013/14:](#)

[Bachelors 8,253](#)

[Masters 2,622](#)

[Ed Specialists \(EdS\) 2](#)

[Research Doctoral 330](#)

[Professional Doctoral 216](#)

[TOTAL 11,423 Degrees](#)

Education and Research in Sustainability

Links to Sustainability Tracking, Assessment & Rating System (STARS) full report:
<https://stars.aashe.org/institutions/university-of-south-florida-fl/report/2014-01-14/>

For the Academic sections of the report, See:
[Education & Research](#)

Co-Curricular Education

- [ER-1: Student Sustainability Educators Program](#)
- [ER-2: Student Sustainability Outreach Campaign](#)
- [ER-3: Sustainability in New Student Orientation](#)
- [ER-4: Sustainability Outreach and Publications](#)
- [Tier 2 Credits](#)
 - [ER-T2-1: Student Group](#)
 - [ER-T2-2: Organic Garden](#)
 - [ER-T2-3: Model Room in a Residence Hall](#)
 - [ER-T2-4: Themed Housing](#)
 - [ER-T2-5: Sustainable Enterprise](#)
 - [ER-T2-6: Sustainability Events](#)
 - [ER-T2-7: Outdoors Program](#)
 - [ER-T2-8: Themed Semester or Year](#)

Curriculum

- [ER-5: Sustainability Course Identification](#)
- [ER-6: Sustainability-Focused Courses](#)
- [ER-7: Sustainability-Related Courses](#)
- [ER-8: Sustainability Courses by Department](#)
- [ER-9: Sustainability Learning Outcomes](#)
- [ER-10: Undergraduate Program in Sustainability](#)
- [ER-11: Graduate Program in Sustainability](#)
- [ER-12: Sustainability Immersive Experience](#)
- [ER-13: Sustainability Literacy Assessment](#)
- [ER-14: Incentives for Developing Sustainability Courses](#)

Research

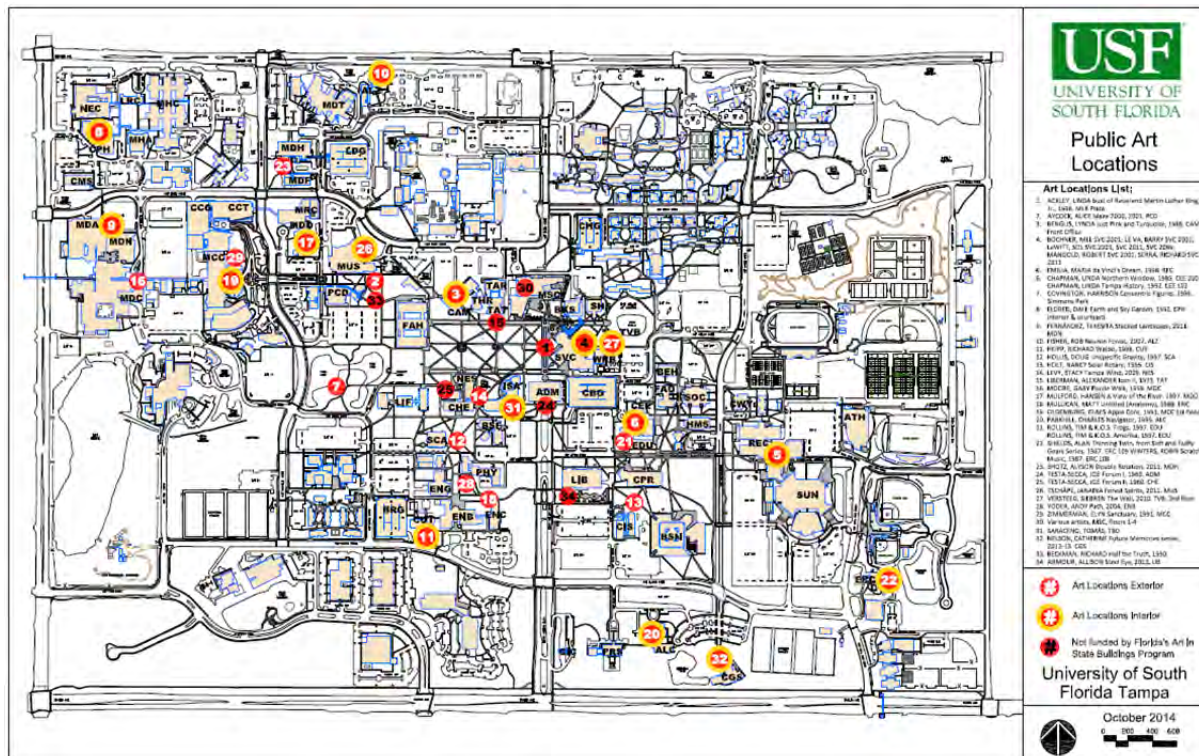
- [ER-15: Sustainability Research Identification](#)
- [ER-16: Faculty Engaged in Sustainability Research](#)
- [ER-17: Departments Engaged in Sustainability Research](#)
- [ER-18: Sustainability Research Incentives](#)
- [ER-19: Interdisciplinary Research in Tenure and Promotion](#)

Public Art

The Public Art program at USF focuses on site responsive works, typically resulting in the creation of places, as opposed to objects. Most projects have been developed for the spaces between buildings, with footprints that result in plazas, gardens and courtyards. These projects serve as informal gathering spaces for the various academic neighborhoods of the campus.

The USF Institute for Research in Art is recognized by the State of Florida as a major cultural institution and receives funding through the Florida Department of State, the Florida Arts Council and the Division of Cultural Affairs. Florida's Art in State Buildings Program was created legislatively in 1979; setting aside one half of one percent of any new state construction funds for the acquisition of artwork to be placed in and around our new facilities. At the University of South Florida, this program has allowed us to work with many of the nation's most prominent public artists to develop projects which enhance the aesthetics of our campus, and enrich the cultural life of our students, faculty and staff. Major projects have been completed by such premier artists as Alice Aycock, Dale Eldred, Richard Fleischner, Doug Hollis, Nancy Holt, Tim Rollins and K.O.S., James Rosenquist, Ned Smyth, Elyn Zimmerman, Richard Beckman, Maria Castagliola, Robert Calvo, Jack Casey, Harrison Covington, Gary Moore and Andy Yoder.

Complementing the major projects, the USF Public Art program has offered opportunities to emerging artists from the State of Florida and beyond; oftentimes providing these artists with their first opportunity to work in the public realm. Significant projects amplify the collection and provide the viewer the opportunity to experience a broad spectrum of contemporary public art.



For more information, please visit: http://www.usfcam.usf.edu/PA/pa_projects.html

This Page Intentionally Left Blank.

Element 4 Future Land Use

The established land use pattern of the campus is generally maintained in this Campus Master Plan Update, with the exception of limited strategic boundary adjustments that better reflect new programmatic and functional directions set for the ten-year plan horizon. The land use element continues to reinforce the functional integrity of the academic, housing, and health core areas, and the importance of memorable, legible, and functional public setting, open space and circulation corridors that establish the connection between land use areas that strengthen academic vitality and the richness of campus life. Allowances for secondary uses in the academic and health districts provide flexibility for the research, clinical and community-oriented functions that may arise through unforeseen program expansion and/or funding opportunities.

The 2015 Plan continues to emphasize the basic urban design framework set forth in the 1995 plan and continued through the 2002, 2005, and 2010 plan updates. The plan is structured around an interconnected system of public spaces, quadrangles, courtyards and pedestrian ways that are reinforced by coherent building edges. Progressive increases in campus density are encouraged to enhance campus vitality, conserve limited land resources for facilities growth, and animate the functional connections between areas of the campus. The texture of the developed areas of campus is complemented and reinforced by the “Greenway,” a continuous system of formal and natural open spaces that traverses the campus and connects naturalized areas on the southwest - Lake Behnke, and northeast - the USF Forest Preserve into a larger contiguous regional open space system including the Hillsborough River and Lake Lettuce Park. This urban design framework celebrates Tampa’s semi-tropical heritage by advocating the use of arcades, breezeways, places of intimate courtyards and natural shading to make the outdoor setting a welcome, integral part of the campus experience.

The 2015 Plan, building on this basic urban design framework and land use pattern, promotes the increased emphasis on land use and phased building development decisions made in support of establishing a vibrant pedestrian dominated core campus through:

- Reorganization of the campus loop road,
- Concentration of parking at the campus perimeter,
- Prioritizing phased building placement in support of defining pedestrian open space before street edges.

Please note that Fig 4.1 and the other 10 Year Plan Figures include a number of building footprints beyond the anticipated projects in order to provide USF with siting flexibility. For the Moffitt Cancer Center, a Master Plan was not available; illustrative building footprints are shown to indicate potential future growth conceptually within the MCC Sublease area.

The 2015 Plan continues to advocate the Greenway:

- Activating the Greenway with “highest and best use” building program placed at its edges— in particular, housing and student activities, arts, and classroom facilities with high social/interdisciplinary connection;

- Encouraging campus community engagement with a living dynamic Greenway through incorporation of education, research, and pilot project sites, passive and active informal recreation opportunities, and outdoor gathering and performance sites.
- Expansion of the Botanical Garden to a campus wide program, centered at the Lake Behnke site, and focused along the Greenway.

Land Use Districts

The following Districts have been identified and are shown on Figure 4-4, 10 Year Campus Land Use Districts:

1. Academic – South
2. Academic – North
3. Health Sciences
4. Student Housing – East
5. Student Housing – West
6. Facilities Services
7. Athletics and Recreation
8. Greenway

Density and Build-out Capacity

The proposed future development capacity for all land use zones, based on the 10 Year Plan and comparison of density (FAR) proposed in previous plans is summarized in the four tables included in this element:

Table 4.1, Potential Building Development Capacity – 10 Year Plan summarizes the existing and proposed new building by land use district, including proposed demolition and related replacement. Table 4.2, Potential Structured Parking Capacity – 10 Year Plan indicates the potential 10 year parking capacity projected within each land use zone, based on the building footprints shown in the 10 Year Master Plan. Additional structured parking sites are indicated on the plan as alternative options. These have not been included in the table calculations as it is assumed selection of one of these locations would be instead of, rather than in addition to, the included structures. The 10-year total building and parking gsf capacities are 12.2 million gsf and 4.9 million gsf, respectively.

Table 4.1: Potential Building Development Capacity – 10 Year Plan

Land Use District	Land Area (Acres)	Existing Building Area (GSF)	Replacement Building (GSF) Due to Potential Demolition	New Proposed Building (GSF) ³	10-Year Plan Potential Total Building (GSF)	Percent Increase (GSF)
1 Academic – South	170	2,737,498	0	1,600,000	4,337,498	0.58
2 Academic – North	55	912,621	13,766	687,785	1,600,406	0.75
3 Health	145	3,066,481	325,826	1,502,000	4,568,481	0.49
4 Student Housing – East	92	1,352,752	327,376	675,850	2,028,602	0.50
5 Student Housing – West	20	527,916	0	350,000	877,916	0.66
6 Facilities Services	50	238,297	0	82,000	320,297	0.34
7 Athletics and Recreation	158	939,970	0	305,000	1,244,970	0.32
8 Greenway	125	3,516	0	19,200 ⁴	22,716	5.46
Total	815	9,779,051	666,968	5,221,835	15,000,886	0.53

- 1 Land use totals include adjacent roadways to centerline, and include roadways. USF Research and Development land is not included in the Campus Master Plan.
- 2 For 2015 Campus Master Plan Update Transportation, General Infrastructure and Utilities Modeling the following assumptions were used and form the basis for projected GSF.
 - For buildings currently programmed and under design, actual design GSF has been used.
 - Average height assumed for proposed structured parking is eight levels.
3. Includes replacement building GSF when accommodated in the same district.
4. Potential Botanical Garden Education, Research and Community Facility.

Table 4.2: Potential Structured Parking Facility Capacity – 10 Year Plan

Land Use District	Existing Structured Parking (GSF)	Potential Structured Parking Footprint GSF	Potential Structured Parking at 8 Levels GSF	10 Year Plan Total GSF
1 Academic – South	1,110,955	155,000	1,240,000	2,350,955
2 Academic – North	297,303	0	0	289,037
3 Health	1,012,951*	77,500	620,000	1,632,951
4 Student Housing – East	0	0	0	0
5 Student Housing – West	0	0	0	0
6 Facilities Services	0	0	0	0

7 Athletics and Recreation	0	77,500	620,000	620,000
8 Greenway	0		0	0
Subtotal GSF	2,421,209	310,000	2,480,000	4,892,943
Spaces in Structured Parking	6,840		8,000	14,840

*Includes Moffitt Structured Parking CCG and MGS.

Table 4.3, Potential Land Use Development Density – Existing, 10 Year, and Long-Range (see end of this element), summarizes the projected changes in density as measured by the ratio of floor area relative to land use area (FAR) and also by the average building height indicated by number of floors.

Table 4.4, Existing vs. Future Development Capacity (see end of this element), compares the existing and future development capacity proposed in this Master Plan Update with those of the four previous plans..

Following completion of the 1995 plan, the USF Research Foundation acquired the leasehold of the 87.79-acre Tampa Bay Research and Development Park—now known as the USF Research and Development Park of Tampa Bay (R&D Park). The development of this land is governed under the University Center Research and Development Park, City of Tampa Development of Regional Impact (DRI No. 161) and is approved for 1,205,000 GSF of development and 350 hotel rooms. An additional 28-acre undeveloped property located south of Fowler Avenue was purchased by USF Research Foundation November 18, 2005. At this time, the property does not have a DRI in place. Planning for these R and D properties is not included in the scope of this Master Plan. However, the Plan recognizes land use and development of the R&D Park has the potential to influence future development strategy and patterns of land use, programmatic requirements and opportunities for mutual support structures, such as research laboratories, and services such as transportation, and the synergy of activity between the R and D Park and USF.

Additional information regarding existing and future land use is provided in the 2010 Data Collection and Analysis Report, Element 4, *Future Land Use*.

Goal

The Future Land Use goal of the Tampa Campus Master Plan is to clarify and strengthen the established campus land use pattern and improve the relationship between land uses on and off the campus.

See Figure 4-1, 10 Year Campus Master Plan Concept)

Summary of Objectives and Policies

Objective 4.1: Ensure more effective use of land and containment of walking distances in the academic/residential core through higher density development and infill. Concentrate program expansion in existing land use districts. Abide by the recommended minimum, and where indicated maximum, build out and FAR limits for each land use district as described and illustrated in this plan element and the USF Design and Construction Guidelines.

(See Figure 4-4, 10 Year Campus Land Use Districts.)

Policy 4.1.1: The University shall abide by the land use districts as described and illustrated in this plan element in locating facilities, to maintain compatibility of uses, to maintain efficient use of the land resource, and to reduce distance and improve quality of connections between functions so as to reduce vehicle use on campus by encouraging non-vehicular circulation – walking and bicycling – and shared shuttle and potential tram access. Further, the adoption of land use/density districts as described herein will guide the concentration of academic and residential expansion within existing use districts. The maximum allowable intensity of development for each respective district shall be the "recommended maximum build out" for the eight land use districts as indicated in this element. The "mix" of allowable land uses for each respective district shall be as specified for the districts in this element. It is expressly clear and understood that district densities are recommendations. Any calculations for determining threshold changes per s. 1013.30(9), F.S., will be based on total campus density or impact.

Policy 4.1.2: The University shall abide by land management procedures to ensure careful use of the University's existing land resources. Those procedures shall consist of the application of policy actions as described in Element 4, *Future Land Use* policies, and will be administered by the Office of Facilities Planning and Construction.

Policy 4.1.3: Minimum new campus building heights are 3 stories or more unless granted exception from the University President. New buildings shall be designed to a maximum practical height in order to meet program requirements in order to preserve campus land for potential future expansion and to reduce pedestrian walking distances.

Policy 4.1.4: Edge of buildings should be setback from roadway center line no less than seventy-five feet. The policy extends to all new construction on sub-leased lands.

Policy 4.1.5: Building setbacks from USF property lines and sublease lines shall be no less than 30 feet unless granted exception from the University President.

Policy 4.1.6: One-story temporary structures are inefficient in terms of land use, energy consumption, and maintenance funds, and create potential risks in the event of a hurricane or other natural disaster. The University shall remove one-story occupied and unoccupied temporary buildings as soon as practical. Installation of additional units shall be prohibited, except on an emergency basis with removal dates and costs prescribed and monitored.

Policy 4.1.7: The University shall assess the appropriate location for unforeseen functions or land uses that may arise from grant awards or other unanticipated circumstances by comparing those unforeseen uses with the uses and 10-year density guidelines set forth for land use districts in this plan element. Upon the determination of appropriate location and consistency with adjacent programs, open space and circulation functions, and density guidelines, the University will undertake pre-planning and site planning studies. In the event that the appropriateness is in question, the subject use will be submitted for review under the procedures of Policy 4.9.2 below.

Policy 4.1.8: The University shall concentrate academic and residential program expansion in their respective Land Use districts as shown in Figure 4-4, 10 Year Campus Land Use Districts.

Policy 4.1.9: The University shall, through its monitoring and management of future development, ensure that the amount of future development within each land use district will meet or exceed the capacities identified in Table 4.1 in this element.

Objective 4.2: **Preserve and protect existing natural resource areas including Lake Behnke, located along Bruce B. Downs Boulevard, the wetland area at the corner of Fletcher Avenue and 50th Street and the 735-acre USF Forest Preserve north of Fletcher Avenue.**

Policy 4.2.1: The University shall protect natural resources in three ways:

- The USF Forest Preserve shall not be developed.
- Open spaces within land use districts shall be preserved in accordance with provisions in Element 9, *Recreation and Open Space*.
- The University shall adhere to Element 8, *Conservation* policies regarding environmental management, and shall require adherence to these standards by all parties performing design and construction of facilities on University property.

Objective 4.3: **Identify, evaluate, and protect historically significant cultural, architectural, and archaeological resources that are known or may be discovered on the Tampa campus.**

Policy 4.3.1: The University shall maintain an inventory and evaluation of all archaeological and historic properties under University ownership that have been determined by professional architectural historian or preservation planner to qualify for the National Register of Historic Places. Buildings that have not yet been reviewed, but appear to the University Office of Facilities Planning and Construction to qualify for the National Register of Historic Places shall be identified for potential evaluation.

Policy 4.3.2: The University shall identify campus buildings which will reach the 50-year threshold for “historical resource” during the 10 year planning timeframe of the Campus Master Plan. In respect of the possibility that such a building may come under consideration for demolition, renovation, or addition, the University will endeavor to assess such building for its historical and architectural significance prior to a building’s reaching 50 years of age for consideration in the decision of the University to demolish.

Policy 4.3.3: The University shall consult and coordinate with the Department of State's Division of Historical Resources prior to any land clearing, ground disturbing, or rehabilitation activities which may disturb or otherwise affect any property which is included, or eligible for inclusion, in the National Register of Historic Places.

Policy 4.3.4: The University shall consider the effects of such an undertaking identified in Policy 4.3.2 above on any historic property that is included on the National Register for Historic Places. The University shall afford the State Division of Historical Resources a reasonable opportunity to comment on such an undertaking.

Policy 4.3.5: Prior to a historic property or site that is on the Historic Registry being demolished or substantially altered in a way that adversely affects its character, form integrity or archaeological or historical value, the University shall consult with the Department of State's Division of Historical

Resources to avoid or mitigate any adverse impacts, or to undertake any appropriate archaeological salvage excavation or recovery action.

Policy 4.3.6: In cases where avoidance or mitigation strategies are not feasible, the University shall submit for permit through the State Division of Historical Resources to undertake Phase III recovery prior to disturbing any site identified as significant in the State File.

Objective 4.4: Objective 4.4: Continue to implement, enhance and maintain the Greenway as a natural and cultural resource on the campus.

Policy 4.4.1: The University shall protect existing natural resources by designating the Greenway area (which contains most of the significant natural resources of the main campus) as a separate and distinct land use district, within which:

- No new buildings will be constructed except those which support recreational activities, i.e., restrooms, natural and cultural resource interpretive activities, such as the Botanical Garden and Arboretum facilities, or those which serve sound stormwater management practices.
- Existing paved parking and vehicular circulation functions, except those that traverse the Greenway as part of the campus loop road system, will be removed as replacement facilities are developed. Emergency and maintenance vehicular access will be provided through pedestrian facilities designed to accommodate vehicular weight and movement.
- Planting and reclamation of native plant communities will be undertaken, and
- The creation of wet and dry retention/detention facilities will be undertaken to provide for the stormwater management needs as generated by the projected land use development.

Policy 4.4.2: The University shall abide by the delineation of the Greenway Corridor as identified in Figure 4-6, Encumbrances, Leases, Subleases, and Easements to:

- Establish a primarily permeable landscape corridor;
- Reduce heat island effect;
- Maintain a strong complement to the developed sectors of the campus; and
- Ensure the capacity to provide for and make visible stormwater management treatment. A definitive stormwater management plan will continue to be maintained to accommodate campus stormwater needs within the Greenway area and throughout campus lands.

Policy 4.4.3: The University shall undertake phased implementation of a campus wide Botanical Garden/Arboretum, administered through expanded facilities located near the current site at Lake Behnke. Initial expansion shall focus on Greenway implementation, but shall also include localized quadrangles and courtyards as opportunities arise.

Policy 4.4.4: The University shall encourage student and community engagement with the Greenway through implementation of educational, research, and informal recreational opportunities within the Greenway and activation of the edges through priority siting of building facilities such as housing, arts, recreation, student life, and dining at its edges.

Policy 4.4.5: The University shall seek to maximize the benefits of “identity” and “wayfinding” gained through implementation of the Greenway as a visually strong and distinct element in the campus framework.

Objective 4.5: Preserve and amend existing street and major utility corridors to ensure adequate utility access compatible with implementation of planned development, open space framework, and non-vehicular circulation.

Policy 4.5.1: The face of all future buildings shall be set back at least seventy-five (75) feet from the adjacent roadway center line. This policy shall extend to new construction on sub-leased lands shown in Figure 4-5.

Policy 4.5.2: The University shall preserve existing street corridors for circulation and open space use. In support of sustainable planning principles a more pedestrian dominated core, improved campus wayfinding, and increased pedestrian, bicycle and vehicular safety, roadway modifications are recommended, as follows:

- The campus loop road system shall be modified to establish stronger visual and physical connections, with greater pedestrian safety, between housing areas north of Holly and campus areas south of USF East Holly by closing the section of USF East Holly extending east of the Crescent Garage to west of Maple Hall B to regular vehicular traffic and limiting this section of the corridor to pedestrian, bicycle, Bull Runner, emergency, and service access (special allowances lifting restrictions during move-in, move-out periods shall be permitted).
- The modified primary internal campus loop road shall divert vehicular traffic from USF East Holly to a proposed extended USF Dogwood Drive to USF Maple. This new road is expected to be developed as part of the Andros redevelopment project and include a connection to Fletcher Ave. and 46th St..
- Leroy Collins shall be modified to reduce vehicular-pedestrian conflict and become primarily ceremonial drive north of Alumni Drive. Primary modifications include: termination of roadway just south of Sessums Mall to allow free pedestrian flow east to west on Sessums; and reduction in traffic accessing parking areas including surface lots and rerouting Collins Garage traffic to USF Willow.
- USF Apple Drive on the north side of the Library will be discontinued for vehicular access to complete the east-west Sessums pedestrian mall but will continue to be used for service and emergency access. .
- Various access driveways to parking and other destinations on the campus may be altered or realigned in conjunction with development projects.

(See Element 5, *Transportation*, for additional policy regarding roadways, vehicular and non-vehicular circulation.)

Objective 4.6: Ensure that future land uses are compatible with and appropriate to topographic and soil conditions on campus.

Policy 4.6.1: The University shall, through the Office of Facilities Planning and Construction, maintain its regular procedure of assessing the suitability of development sites relative to topography, soil condition (including the presence of sink holes), drainage, utility and infrastructure connections, and vehicular and service access and program affinities as part of the initial pre-planning and siting studies for individual projects as those projects are brought into implementation. USF shall require the integration of natural topographic and other features in project designs in order to develop the campus in harmony with its natural environment.

Policy 4.6.2: The University, through the Office of Facilities Planning and Construction, shall maintain existing soil data and topographic conditions, which shall be updated as additional data developed for future construction projects becomes available.

Policy 4.6.3: As part of the design process for any programmed improvement (major project) and prior to approval and acceptance of the design by the University, USF shall require that geotechnical testing be conducted to determine relevant soil characteristics of the site and to ensure that the design reflects consideration of these conditions.

Policy 4.6.4: The University shall ensure that appropriate methods of controlling soil erosion and sedimentation intended to minimize the destruction of soil resources and reduce impact on adjacent watersheds and storm management facilities shall be used throughout site development and shall ensure protection in final state following implementation. Such methods shall include, but not be limited to:

- Phasing and limiting the removal of vegetation;
 - Minimizing the amount of land area that is cleared;
 - Limiting the amount of time bare soil is exposed to rainfall;
 - Use of temporary ground cover on cleared areas if construction is not imminent;
 - Protection of drains, watersheds, and stormwater facilities during construction; and
 - Special consideration given to maintaining vegetative cover on areas of high soil erosion potential (i.e., steep or long slopes, banks of streams, stormwater conveyances, etc.).
- For any land disturbance considered for Lot 32 or the land immediately north of Lot 32 including certain areas of the Moffitt Sub-lease, see **Appendix D, Moffitt Oil Spill** for Petroleum Discharge Resolution of Petroleum Discharge at the H. Lee Moffitt Cancer Center restrictions.

Objective 4.7: Ensure that the development of future land uses takes place in a way that is coordinated with the availability of adequate facilities and services to support the uses. This includes establishing appropriate location and adequate area set asides to accommodate utility requirements necessary for serving the estimated 10-year development, and implementing utility extensions in cost-effective increments.

Policy 4.7.1: Each development project representing a change in the amount of impervious surface will be measured to assess the effect it will have on stormwater detention capacity on an east and west basin approach.

Policy 4.7.2: The University shall, preserve the existing physical plant/maintenance area north of Holly Drive for future physical plant operation expansion adequate to serve utility needs of future land use development.

Policy 4.7.3: The University shall, through the Office of Facilities Planning and Construction, coordinate future land uses with the availability of facilities and services to ensure that utilities and infrastructure needed to support future development are available at adopted levels of service, consistent with the concurrency provisions contained in s. 1013.30, F.S. The Office of Facilities Planning and Construction shall review and evaluate all future construction projects to ensure that adequate provisions for infrastructure and utilities have been incorporated into the design by documenting:

- The provision and maintenance of necessary utility easements, corridors, and points of connection.
- The provision of adequate supply lines to accommodate future development and facility expansion.
- The provision of open space, safe convenient pedestrian and bicycle circulation, vehicular traffic flow, and parking at established levels of service consistent with the 10 year Master Plan.

Objective 4.8: Ensure that measures can be undertaken to minimize or avoid off-campus constraints to campus development and to minimize or avoid conflicts of campus development within the context area. Accordingly, the density and scale of development on the campus properties should be compatible with the adjacent off-campus uses.

Policy 4.8.1: Through inter-local agreements and memoranda of understanding, the University shall work with the host community to minimize both campus conflicts with the host community land uses within the context area and off-campus constraints that may limit future development on the campus.

Policy 4.8.2: The University shall maintain and refine the existing procedural model for review and monitoring of growth and change in land use, and continue to use such model as a monitoring and coordinating measure with the host communities (see also Element 10, *Intergovernmental Coordination*).

Policy 4.8.3: The University shall, through the Office of Facilities Planning and Construction, include in its project and site suitability assessments an evaluation of the relationship of the project to on-campus and off-campus development constraints, conflicts, or limits vis-à-vis multimodal circulation, infrastructure, open space, and stormwater management.

Policy 4.8.4: Where the acquisition of additional land is necessary for continued growth and expansion, the University shall coordinate with the appropriate local government on any required amendment to the local government's Comprehensive Plan.

Policy 4.8.5: Proposed amendments to the adopted campus master plan which do not exceed the thresholds established in s.1013.30, F.S., and which have the effect of changing land use designations or classifications, or impacting off-campus facilities, services or resources, shall be submitted to the host local government for a courtesy review.

Policy 4.8.6: The University shall participate with the City of Tampa in the reciprocal review of plans and development proposals, consistent with provisions established in Element 10, *Intergovernmental Coordination*.

Policy 4.8.7: The University shall ensure that uses at the edges of the campus are compatible with off-campus uses by:

- Maintaining the use and density levels for the land use districts described and illustrated in this element to the degree that they define use patterns that are compatible with the off-campus medical, residential and commercial uses on the west side of Bruce B. Downs Boulevard and the north side of Fletcher Avenue.
 - Accommodating uses of compatible density and compatible building heights adjacent to the 50th Street residential units.
 - Providing park-like open space with views of the campus from Fowler Avenue, and landscaped street edge enhancements on all sides of the campus.
- Building setbacks from campus property lines will be a minimum of 30 feet.

Policy 4.8.8: The University shall coordinate through the Office of Facilities Planning and Construction with the City of Tampa, City of Temple Terrace, Hillsborough County and FDOT to construct pedestrian/bicycle linkages between USF and adjacent neighborhoods and edge conditions.

Policy 4.8.9: Storage and non-vehicle trip generating support space shall be allowed at the Golf Course and Riverfront Park.

Objective 4.9: Ensure that incompatible use relationships are eliminated or mitigated in the event that such incompatibilities exist or arise.

Policy 4.9.1: The University shall, through the Office of Facilities Planning and Construction, undertake an annual review of the schedule of capital improvements to ensure that the capital improvements are consistent with the land use and development factors as described in this plan element and that such improvements are acknowledged in the periodic review set forth in Policy 4.9.2.

Policy 4.9.2: The University's Campus Development Committee (CDC), Academic and Campus Environment Advisory Committee (ACEAC), and Academics and Campus Environment (ACE) Work Group shall periodically review the status of land use and facilities program development on the campus, including projects and grant award opportunities that are currently unforeseen. The Work Group shall identify trends or needs for change in use patterns, density, program affinities and relationships to open space, circulation and utility patterns that might affect the land use plan, and

determine whether such circumstances should be corrected to maintain the integrity of the land use plan and constraining factors, or cause the plan to be altered or amended to reflect valid needs. The group will report its periodic findings to the president and recommend circumstances when and by which amendment of the adopted Campus Master Plan may be merited, or where projects should be limited or amended.

Policy 4.9.3: In the pursuit of Policy 4.9.2 above, the University shall identify any circumstance whereby future land acquisition may be necessary or appropriate to accommodate currently unforeseen development projects or strategies (such as remote parking, grant opportunities, utility corridors, etc.), and shall determine the appropriate timetable, funding, and development coordination measures associated with the prospective acquisition. Similar measures will be applied in the event of any circumstance calling for the sublease of University land to others.

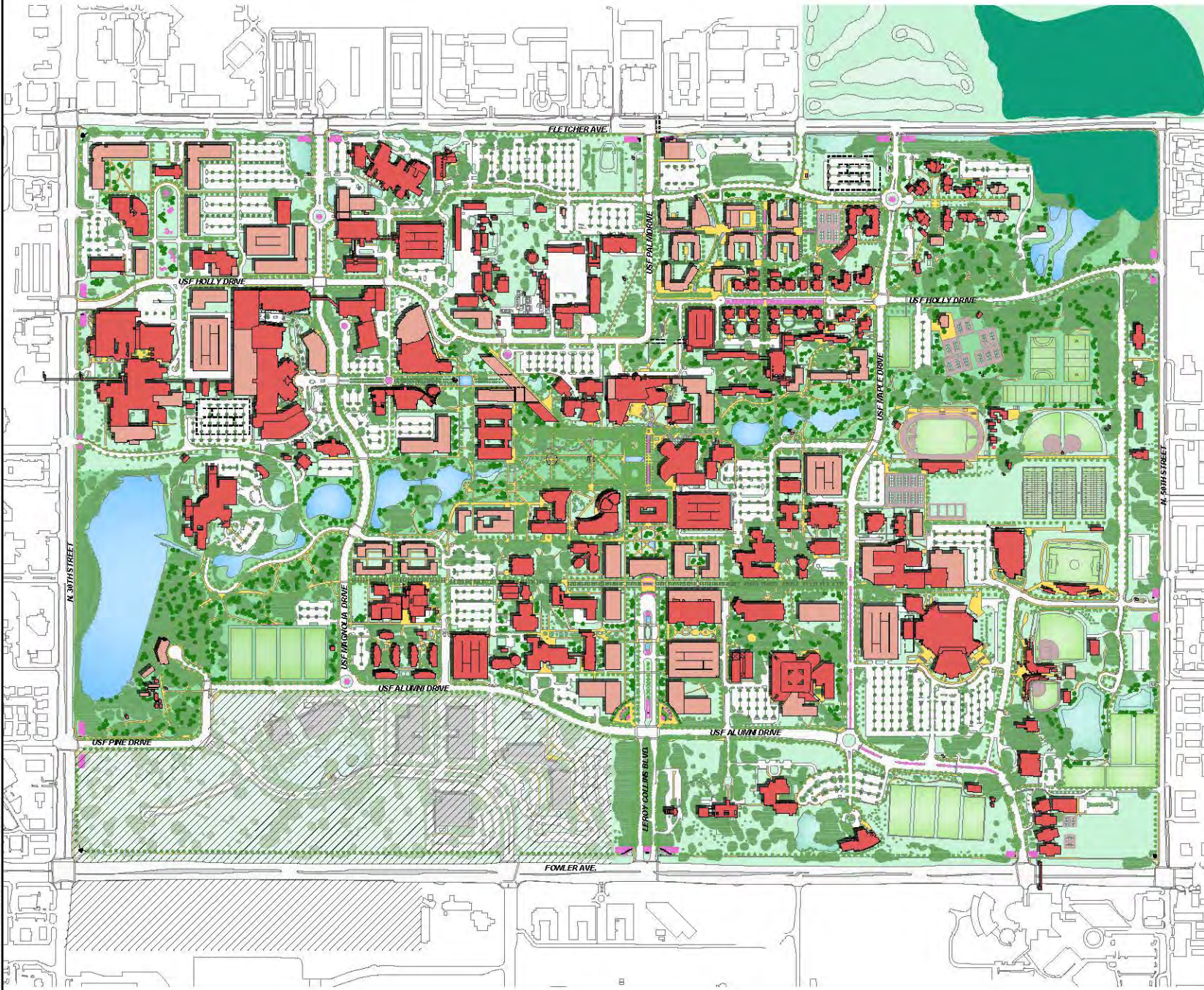
Policy 4.9.4: Campus Master Plan amendments that, alone or in conjunction with other amendments, exceed thresholds established in s. 1013.30(9), F.S., shall be reviewed and adopted under the provisions of s. 1013.30(6), F.S.

Table 4.3: Potential Land Use Development Density – Existing & 10-Year

Land Use District	Land Area (Acres)	Existing Building Area (Total GSF) (including Structured Parking)	Existing FAR (including Structured Parking)	Existing Average Building Height By Number of Floors	10-Year Plan Potential Building (Total GSF) (including Structured Parking)	10 Year Plan FAR (including Structured Parking)
1 Academic – South	170	3,848,453	0.52	4	6,688,453	0.90
2 Academic – North	55	1,209,924	0.51	3.2	1,897,709	0.79
3 Health	145	4,079,432	0.65	2.38	6,201,432	0.98
4 Student Housing – East	92	1,352,752	0.34	2.71	2,028,602	0.51
5 Student Housing – West	20	527,916	0.61	5.67	877,916	1.01
6 Facilities Services	50	238,297	0.11	1.36	320,297	0.15
7 Athletics and Recreation	158	939,970	0.14	1.91	1,864,970	0.27
8 Greenway	125	3,516	0.00	1	22,716	0.00
Total	815	12,200,260	0.34	3	19,902,095	0.56

Table 4.4: Existing vs. Future Long-range Development Capacity

	1995 Plan (Amended 1999)	2002 Master Plan Update	2005 Master Plan Update	2010 Master Plan Update	2015 Master Plan Update
Existing Space at the Time of Plan	5.0 million GSF	6.7 million GSF	7.0 million GSF	10.0 million GSF	12.2 million GSF
Documentation (Tampa Campus)	(no parking structures existing in 1995)	(includes 527,000 GSF in parking structures)	(includes ±825,000 GSF in parking structures)	(includes ±1,879,240 GSF in parking structures)	(includes ±2,421,209 GSF in parking structures)
Future Development Program/Potential	6.5 million GSF (includes 2.7 million GSF in parking structures)	5.3 million GSF (includes 1.7 million GSF in parking structures)	12.8 million GSF (includes 3.9 million GSF in parking structures)*	10.2 million GSF (includes 2.8 million GSF in parking structures)*	20 million GSF (includes 4.8 million GSF in parking structures)*

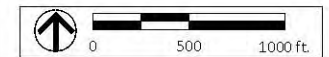


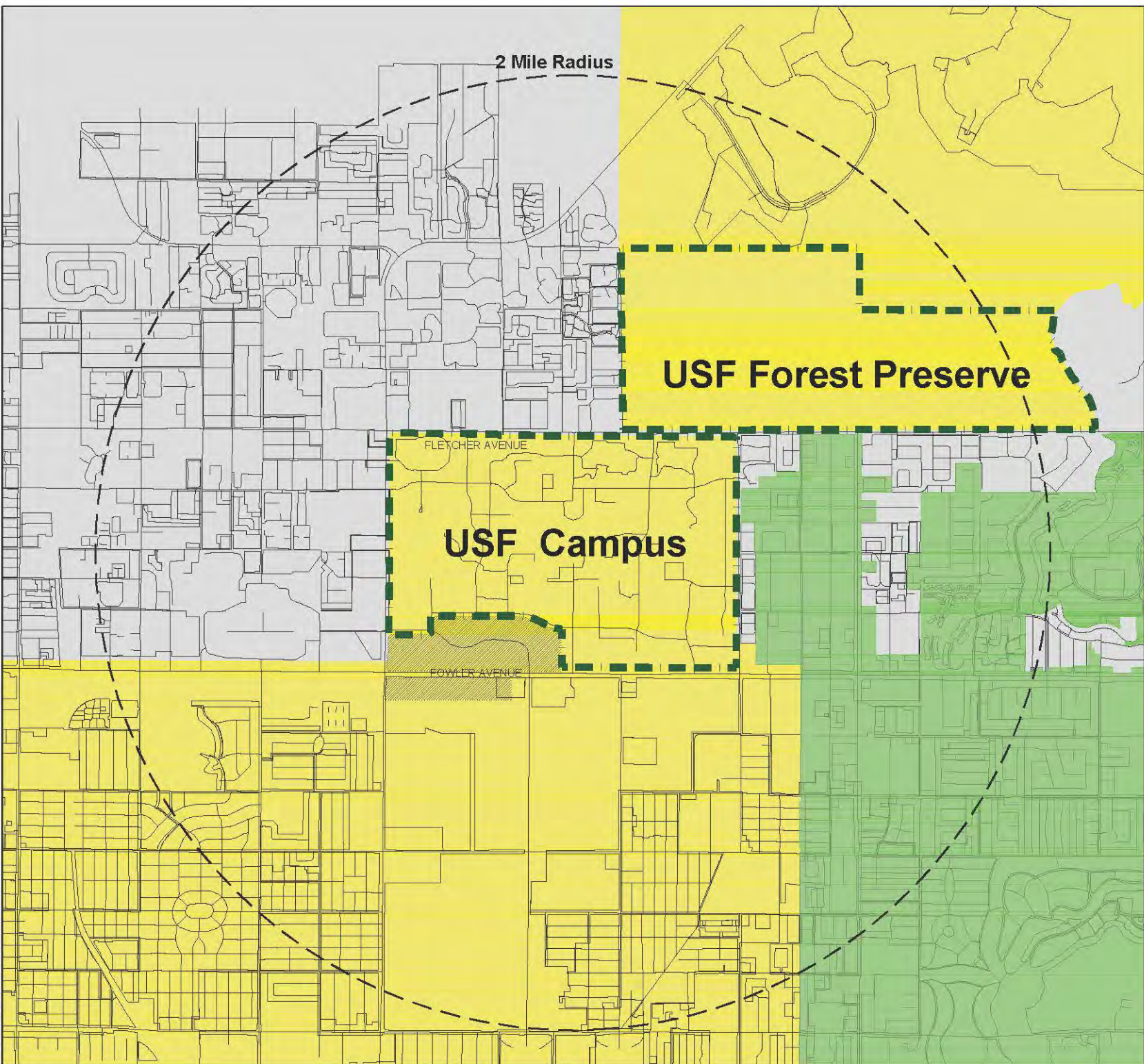
- Existing Buildings
- Proposed Buildings & Parking Structures
- Alternative Parking Garage Locations
- Area Not Included in Campus Master Plan

Element 4
Future Land Use

Figure 4-1
10 Year Campus
Master Plan Concept

Date
08/21/2015





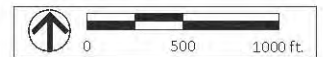
- 2 Mile Radius
- USF Property
- City of Tampa
- City of Temple Terrace
- Hillsborough County

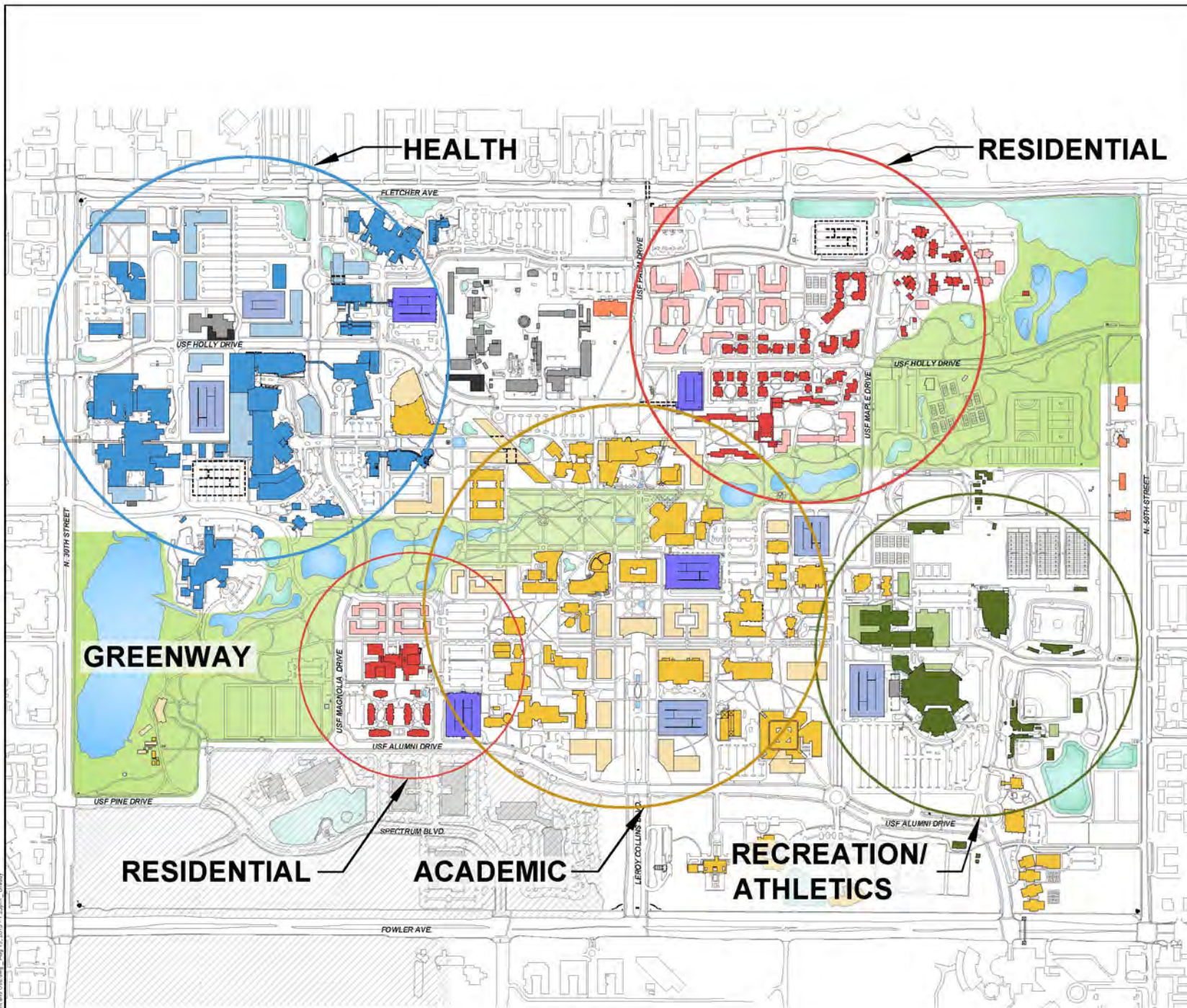
Area Not Included in
Campus Master Plan

Element 4
Future Land Use

Figure 4-2
Context Area

Date
08/21/2015





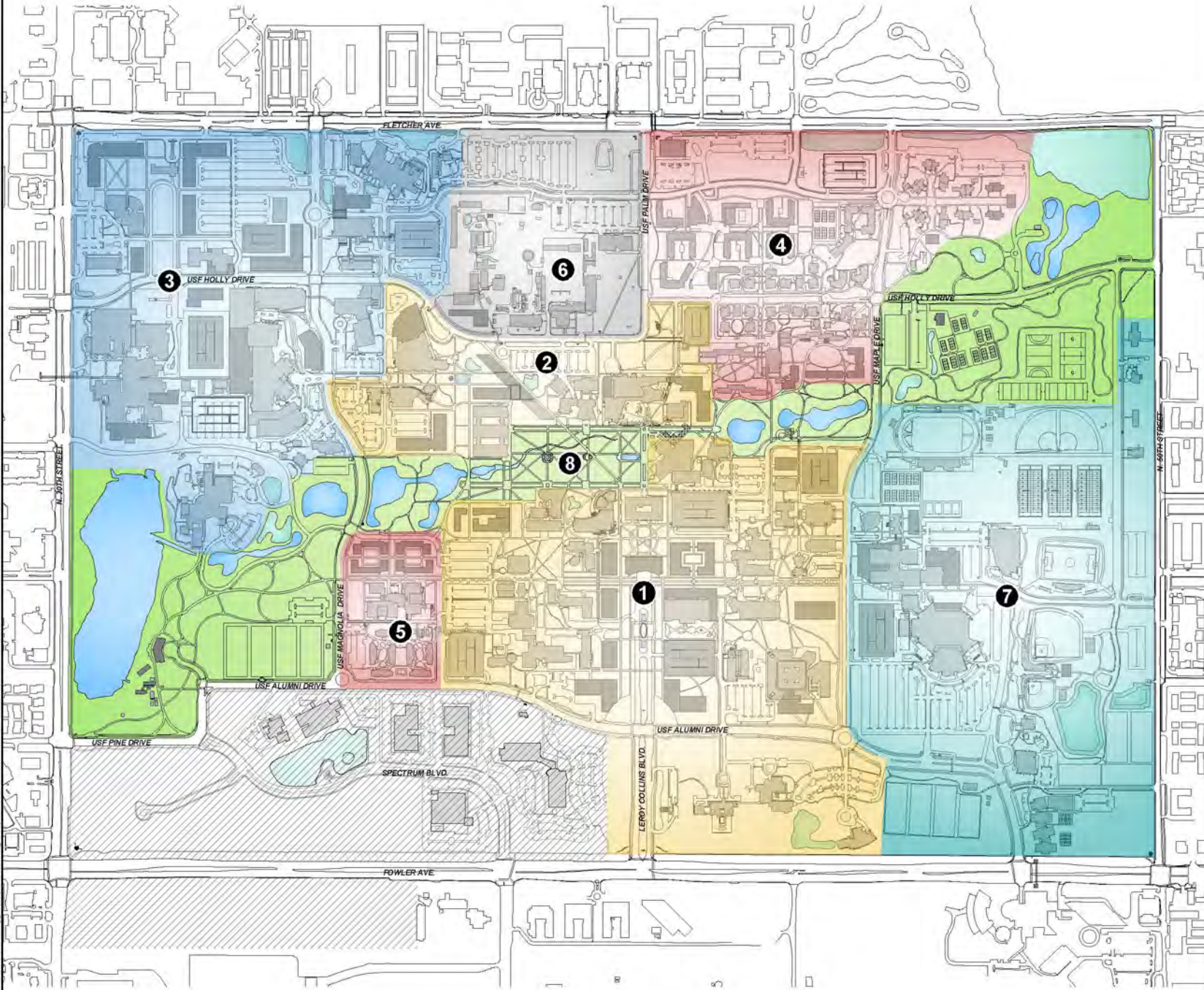
- Academic Support - Existing
- Academic Support - Proposed
- Recreation/Athletics - Existing
- Recreation/Athletics - Proposed
- Facilities - Existing
- Facilities - Proposed
- Health - Existing
- Health - Proposed
- Parking - Existing
- Parking - Proposed
- Residential - Existing
- Residential - Proposed
- Support (Non USF) - Existing
- Area Not Included in Campus Master Plan

Element 4
Future Land Use

Figure 4-3
10 Year Building
Development and Use

Date
08/21/2015



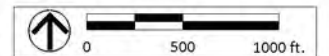


- 1** Academic - South
158 acres
- 2** Academic - North
48 acres
- 3** Health Sciences
142 acres
- 4** Residential - East
85 acres
- 5** Residential - West
18 acres
- 6** Facilities Services
47 acres
- 7** Athletics & Recreation
160 acres
- 8** Greenway
125 acres
- Area Not Included in
Campus Master Plan

Element 4
Future Land Use

Figure 4-4
10 Year Campus
Land Use Districts

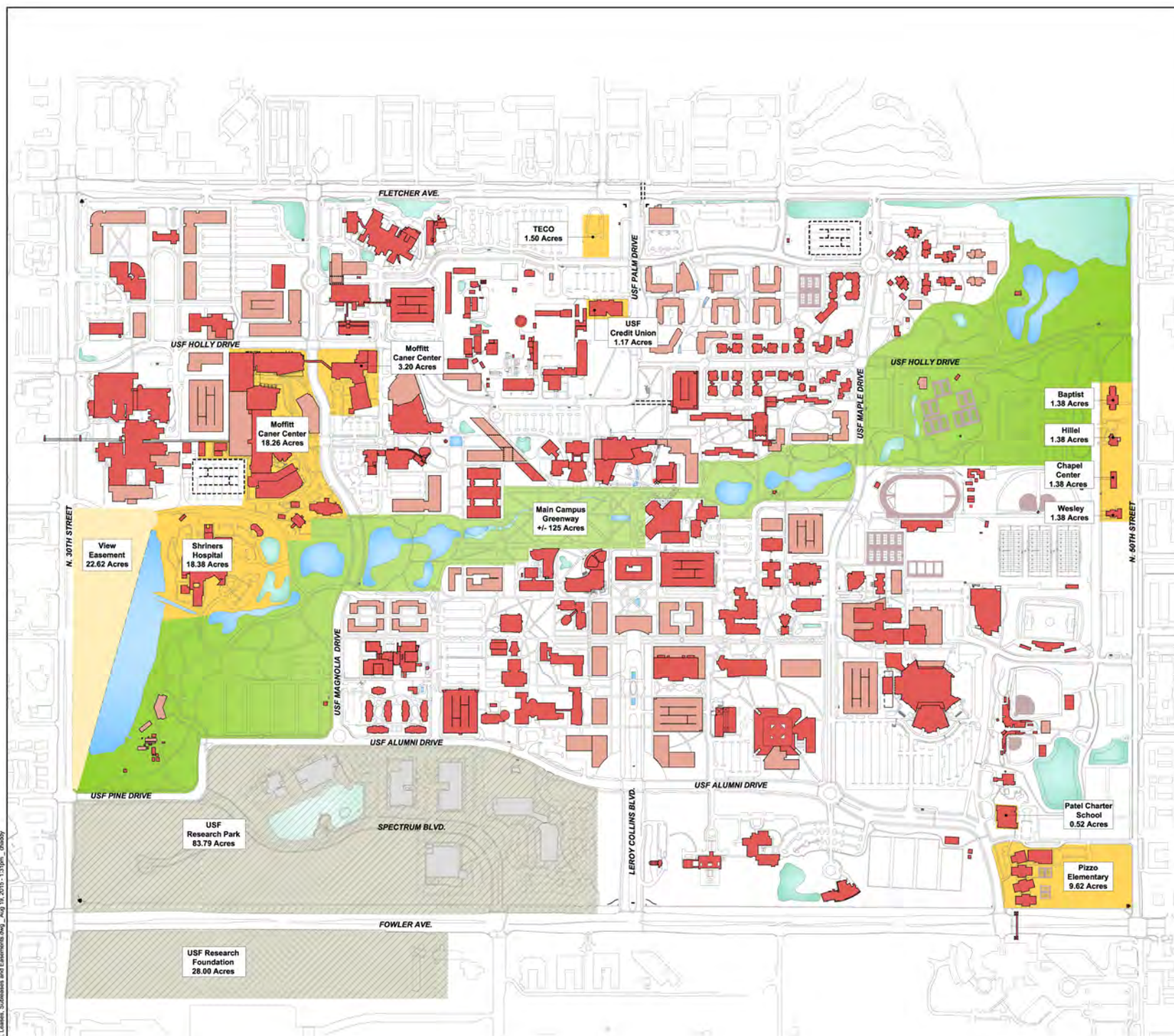
Date
08/21/2015



**2015 - 2025 Tampa Campus
Master Plan Update**

- Sub-lease
(Total = 58.17 Acres)
- Research Park
- Protected View
- Greenway

Area Not Included in Campus Master Plan





Element 4
Future Land Use

Figure 4-5
10 Year Encumbrances,
Leases, Subleases, and
Easements

Date
08/21/2015



-  Potential Demolition
-  Area Not Included in Campus Master Plan

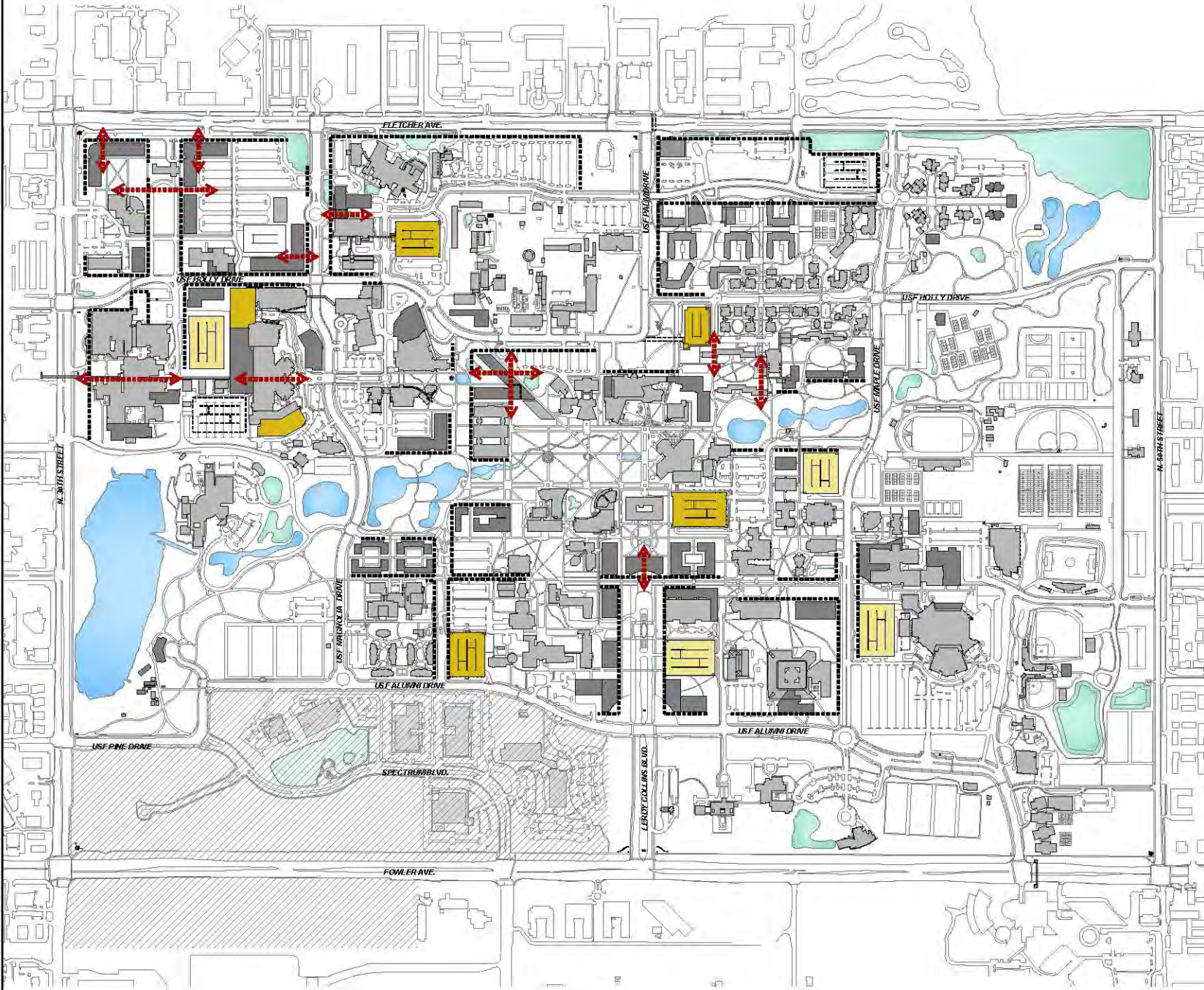


Element 4
Future Land Use

Figure 4-6
10 Year
Potential Demolition

Date
08/21/2015





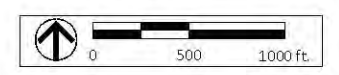
- Build-to-line
- ↔ Pedestrian Passage
- Parking - Existing
- Parking - Proposed

▨ Area Not included in
Campus Master Plan

Element 4
Future Land Use

Figure 4-7
10 Year Build-to Framework

Date
08/21/2015






Element 4
Future Land Use

Figure 4-8
Existing Campus Aerial

Date
08/21/2015



-  1-2 Story Building
-  > 2 Story Building
-  Parking Structure
-  Surface Parking

 Area Not Included in
Campus Master Plan

Element 4
Future Land Use

Figure 4-9
Campus Development
Density

Date
08/21/2015



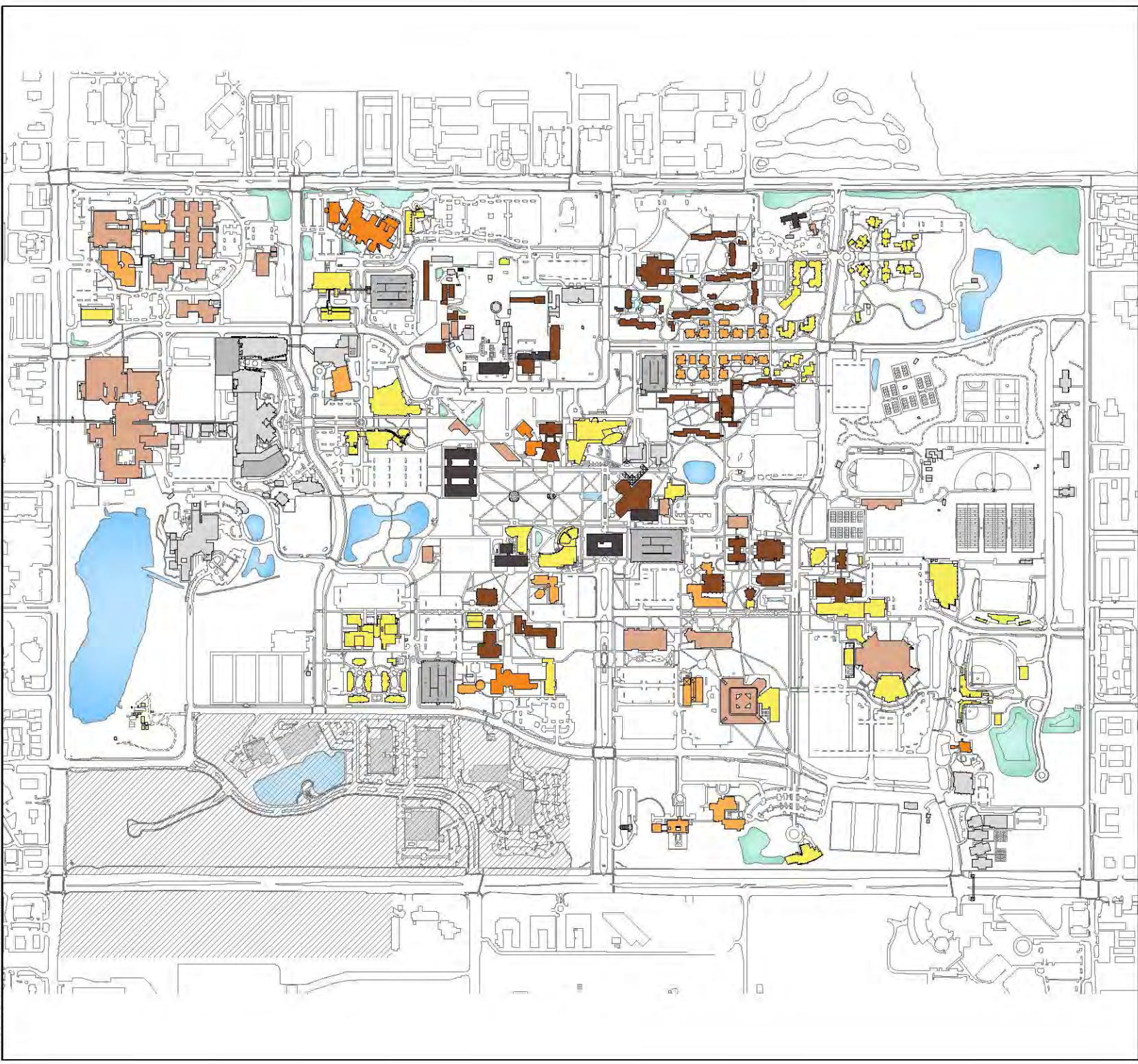
- 1956 - 1960
- 1961 - 1970
- 1971 - 1980
- 1981 - 1990
- 1991 - 2000
- 2001 - 2015

Area Not Included in
Campus Master Plan

Element 4
Future Land Use

Figure 4-10
Building Development

Date
08/21/2015



Element 5 Transportation

Transit System Improvements

Provision of the Bull Runner transit service has helped alleviate parking demand and traffic congestion on and off campus as increasing ridership takes cars off the road and out of parking lots. The University has constructed a logical and comprehensive system of bus stops on the campus road network. Historical data shows that ridership demand for the Bull Runner shuttle service has remained steady with approximately an average of 14 million riders annually.

Based on the strength of ridership on Bull Runner Route C, which serves an off-campus residential neighborhood to the north of campus, the University expanded the Bull Runner shuttle service to off-campus destinations to the south. Starting in fall 2011, the Bull Runner linked on-campus destinations including the Marshall Student Center and academic buildings along Leroy Collins Boulevard with off-campus service to the southern neighborhoods, via 40th Street and 50th Street. The expanded Bull Runner shuttle system is depicted in Figure 5-4.

The University continues to coordinate with Hillsborough Area Regional Transit (HART), Tampa Bay Area Regional Transportation Authority (TBARTA), Metropolitan Planning Organization (MPO) and the other host communities to explore opportunities for improved transit to the University area. The University may consider proposals for an on-campus tram system to serve as a new inner circulator for the core campus, connect the core campus with any future light rail stations, and/or connect peripheral parking structures with central campus destinations. A new tram system, in combination with the strong ridership of the existing Bull Runner shuttle services will result in a continual reduction of vehicle trips to the campus as well as reduced traffic and conflicts with other modes within the campus.

Vehicular Circulation

The majority of the campus street and road network remains the basis for the master plan update, including several recommendations for roadway and circulation improvements to regulate safe and consistent vehicle speeds, minimize vehicle conflicts with pedestrians and bicyclists, and support the migration of parking toward the campus edges. These roadway and circulation improvements include the following (see Fig 5-1):

- Extend USF Dogwood Drive easterly, generally along an east-west alignment, to connect to USF Magnolia Drive via USF Laurel Drive to the west and USF Maple Drive to the east and serve as the primary access route for residences and parking in the proposed new Andros housing area. This road should also connect to 46th St and Fletcher Avenue at the existing traffic signal.
- Close USF East Holly Drive to vehicle traffic for the majority of its alignment between USF Palm Drive and USF Maple Drive, to reduce vehicle-pedestrian conflicts in one of the most active pedestrian zones on the campus while maintaining access for emergency vehicles, transit, and move-in/move-out.

- Construct four new roundabouts at the following intersections, which will replace traffic signals, serve as traffic-calming devices on the major gateways entering the USF-Tampa campus, and reinforce campus wayfinding cues:
 - USF Magnolia Drive at USF Laurel Drive
 - USF Maple Drive at USF Dogwood Drive
 - USF Magnolia Drive at USF Alumni Drive
 - USF Maple Drive at Alumni Drive
- Provide primary access to the Collins Boulevard Garage and surrounding surface lots via USF Willow Dr., to reduce pedestrian conflict issues at Collins. Eliminate the unsignalized T-intersection at Alumni Drive/Pine Drive through roadway realignment of Shriners access road to the north.
- Consider conversion of many four-lane campus roadways to two-lane roadways with bicycle lanes and/or on-street parking, which will support alternative mode choice, reduce vehicle speeds, bolster the parking supply, and enhance user experience and safety.

The concept reduces pedestrian/vehicular conflicts by shifting some vehicle circulation out of the campus core to roadways along the campus periphery and implementing roadway improvements that reduce vehicle speeds and enhance alternative mode travel. Intersection and roadway improvements have been made in conjunction with project construction. However, several on and off campus intersections continue to experience undesirable delays and will require further study and funding for intersection-focused capacity improvements.

To provide adequate service, emergency and disabled access to facilities that are remote from the loop road around the core, the current plan identifies critical service corridors in Figure 5.3. Corridors are comprised of a combination of dedicated vehicular routes and pedestrian/bicycle ways designed and constructed to accommodate service and emergency vehicles.

Non-Motorized Circulation

The basic framework for major and secondary pedestrian walks continue to apply. The primary pedestrian-related update areas are the strengthened pathway connections along the northeast-southwest axis of the campus Greenway and diagonal pathways in the campus core. Hillsborough County has recently completed roadway redesign and reconstruction involving sidewalk, crossing, and other pedestrian and bicycle safety upgrades on Fletcher Avenue, between Nebraska Avenue and 50th Street, including the entire north campus edge. Other safety projects in planning include 42nd Street, 46th Street and 56th Street.

The proposed strategy for designated bicycle circulation remains one that a) provides bicycle lanes along the loop road and the radial campus roads that connect with the bicycle lanes on surrounding arterial highways, and b) designates selected major pathway corridors on the campus for joint pedestrian/bicycle use. The University has installed bicycle lanes on many improved roadways within the campus, however, many bike lane segments are incomplete and remain a source of inconsistency or confusion for bicyclists on the campus. USF will work to complete these segments and continue to

install bicycle lanes to complete the entire bicycle lane network, as shown in Figure 5.8, over the 10-year horizon of the plan as funding allows.

Parking

The Plan projected the need to provide for new campus parking in the amount of 5,000 spaces in structures in subsequent years for a total of approximately 22,000 campus parking spaces including structured and surface, for three reasons:

- To conserve land for projected growth of academic, medical, residential and support facilities;
- To reduce the area of surface parking as an environmental and stormwater management measure;
- To serve the anticipated population with a restored pedestrian/open space environment.

The Plan Update recognizes the need for additional growth in the overall parking supply for the University; however, significant recent parking expansion on the campus has highlighted the disadvantages of maintaining significant parking supply within the campus core, which contributes to access and circulation challenges, vehicle-pedestrian conflicts, and occupies space better allocated to programmatic or open space uses. Additionally, the cost to construct additional structured parking represents a significant incentive to pursue less expensive parking and transportation demand management strategies that may slow or stabilize the rate of growth in parking demand.

Among the major priorities of the Plan is the conversion of most surface parking within the campus core to academic buildings or open space within the campus Greenway. These changes will transform the campus core into a more inviting, community-oriented, and pedestrian-friendly place. To support this transformation, the Plan recommends a migration of the major parking facilities toward the campus edges. New and improved parking facilities on the campus periphery will reduce the need for vehicle circulation within the campus core, which will reduce the potential for vehicle-pedestrian conflicts on campus roadways like Holly Drive and Maple Drive where major pedestrian corridors intersect the campus loop roads.

The campus currently provides 20,840 parking spaces for use by faculty, staff, students, and visitors, with utilization ranging from a low daily average of 57% on Fridays to the high on Tuesdays of approximately 81%. Taking into account USF population growth and transportation demand management (TDM) program effectiveness, demands for parking from students (including parking for on-campus housing), faculty, staff, and visitors (including medical center patients) is anticipated to grow. The 10-Year plan for campus facilities and infrastructure development will displace approximately 3,350 surface parking spaces on the main campus. In light of projected demand growth and significant parking supply reductions for future development, additional parking spaces are needed to serve the parking needs generated by development and displacement contemplated in the future.

To sustainably and affordably accommodate displacement and future growth in parking demand on the campus, the University will both accept a higher parking utilization ratio and construct new parking facilities. The parking facilities plan, shown on Figures 5-6 and 5-7, eliminates a significant amount of surface parking within the academic core and locates new parking facilities along the loop roadways or campus edges. To offset the planned parking supply reductions, the Plan can accommodate construction of up to 8,000 net new parking spaces in parking structures, as

remains in the Campus Development Agreement, as well as potentially installing 483 on-street parking spaces within existing roadways at relatively low cost. As a result of the projected growth, the USF parking supply is planned to increase and parking utilization will be elevated to 88 percent.

Modifications to parking management strategies will be required to appropriately allocate existing and planned parking spaces to USF drivers in a logical and equitable fashion. All major parking facilities will continue to be served by the Bull Runner shuttle system, providing robust connections to the entire campus. For the visitors, clinical patients, commuting staff and students whose access to core area venues will be time-sensitive, the potential on-street parking could fill an important niche. Among the recommended strategies to manage overall transportation and parking demand within the campus are the following TDM program options:

- Alternative transportation options:
 - Increase the range of services and marketing for commuter options (i.e., vanpool, carpool, car-sharing, telework, cycling, walking, compressed work week, emergency ride home, and transit),
 - Expand Bull Runner shuttle service to additional off-campus residential areas,
 - Improve pedestrian and bicycle facilities;
- Construct additional student housing on or near the USF-Tampa campus;
- Parking permit price tiers and/or increases; and
- Parking permit buyback program.
- Pre-tax deduction for employee alternative commute expenses.

Goal

The Transit, Circulation, and Parking goal of the Tampa Campus Master Plan is to encourage options for sustainable transit and vehicular access to the campus that reduce reliance on single-occupant vehicles, reduce overall parking demand, and minimize emissions and fossil fuel consumption, while maintaining essential delivery and service access.

5.1 Vehicular Traffic and Transit Sub-Element

Summary of Objectives and Policies

Objective 5.1.1 Reduce the impacts on-campus of future vehicular traffic generated by the 10-year master plan, especially at peak hours.

Policy 5.1.1.1: (on-campus): The University shall continue to construct additional on-campus housing as marketing and financial opportunities are available. This housing will reduce both internal and external traffic generation, especially at peak hours.

Policy 5.1.1.2: (off-campus): The University should continue to pursue off-campus park/ride programs and an off-campus shared use parking lots to meet future parking needs without constructing new parking facilities.

Policy 5.1.1.3: (off-campus): The University shall continue to provide, promote, and evaluate the use of distance learning, telecommuting, and compressed work week to reduce the need to travel to the University.

Policy 5.1.1.4: (on-campus): The University shall evaluate and implement, as appropriate, opportunities of incorporating secure, covered bicycle parking within the proposed parking structures to encourage the use of transit, carpooling, and bicycling.

Policy 5.1.1.5: The University shall construct new parking facilities at the periphery of the campus core and manage the parking permit system to encourage the use of remote lots in conjunction with Bull Runner shuttle service to peripheral parking facilities, to decrease the volume of traffic on the interior and loop roads of the campus.

Policy 5.1.1.6: The University shall analyze and implement as appropriate, techniques such as computerized technology to govern parking spaces and better utilize existing and future resources. Such techniques may include revenue access control systems and transportable variable message signs to facilitate traffic flow.

Policy 5.1.1.7: The University shall continue to review and revise class scheduling policies to achieve greater balance in daily and weekly class schedules and reduce peak demands on the campus transportation systems associated with student arrival and dismissal.

Objective 5.1.2 Reduce the impacts off-campus of future traffic generated by the 10-year master plan.

Policy 5.1.2.1: (off-campus): The University shall continue to jointly plan with the host communities, City of Temple Terrace, Metropolitan Planning Organization (MPO), Hillsborough Area Regional Transit (HART), the Hillsborough County City/County Planning Commission (HCCCPC), Pasco County, Pinellas County, New North Transportation Alliance (NNTA), and the Center for Urban Transportation Research (CUTR) to develop programs and incentives to enhance transit service in the campus context area. A few of the examples are:

- Continuation of the U-pass system, giving privileges to University users of the local transit system.
- Additional on-campus housing and proximate off-campus housing to help further reduce the on-campus demands of traffic and parking.
- The University will coordinate with the MPO and HART to establish a Plan for a rail stop to support the USF area if the Rail Project goes forward in the future.

Policy 5.1.2.2: (on-campus): The University shall coordinate on-campus traffic signalization and its connectivity to the surrounding transportation network with the City of Tampa.

Policy 5.1.2.3: The University shall continue to participate in the New North Transportation Alliance (NNTA), a public/private transportation demand management advocacy organization for the North Tampa area, as well as USF's CUTR.

Policy 5.1.2.4: The University shall continue to work with the CUTR to identify and implement specific best practices for transportation planning.

Objective 5.1.3 Provide a safe, efficient transportation system considering vehicle circulation, transit facilities, and the needs of motorized and non-motorized vehicle parking.

Policy 5.1.3.1: (on-campus): The University shall implement traffic circulation and transit improvements as described in this element and shown in the Master Plan Update figures as funding allows.

Policy 5.1.3.2: (on-campus): The University shall continue to evaluate and upgrade, as appropriate, the Bull Runner shuttle service along the internal loop of the campus to supplement the regional and neighborhood circulators.

Policy 5.1.3.3: (on-campus): The University shall explore various routing and technology alternatives associated with implementing an internal tram, or other circulator conveyance system(s) to improve personal mobility in the campus core, connect the campus core with any future planned light rail station on Bruce B. Downs Boulevard, and/or connect major parking facilities with the academic core.

Policy 5.1.3.4: (on-campus): The University shall continue to evaluate designs/improvements for intersections as idle times and accident reports warrant. If changes prove to be feasible, practical, and promote transportation safety, the University shall amend the adopted campus master plan to incorporate these strategies into the overall transportation plan.

Policy 5.1.3.5: Following the Bull Runner system's use of biofuels as an example, the University shall consider providing additional alternative fuel vehicles for its campus fleet with biofuels and electric vehicles as potential options to reduce the University's carbon footprint and reduce reliance on non-renewable energy including fossil fuels.

Objective 5.1.4 Provide for convenient pedestrian and bicycle ways within the transportation program.

Policy 5.1.4.1: (on-campus): The University shall enhance the pedestrian corridors with provision of shade and weather protection, including shade trees, trellises, shade structures and/or arcades, seating, and implementation of design standards as established in USF Design and Construction Guidelines..

Policy 5.1.4.2: (on-campus);The University shall incorporate pedestrian safety features , including high-visibility crosswalks, warning signage, countdown pedestrian signals, and generous pedestrian landings, at new or improved mid-block, intersection, and roundabout crossings, as well as countdown pedestrian signals at all new or improved signalized intersections.

Policy 5.1.4.3: (on-campus) The University shall provide convenient bike racks, or covered bicycle storage if possible, at all new and renovated facilities and endeavor to complete the installation of continuous bike lanes.

Policy 5.1.4.4: (on-campus)The University shall consider installing bike lanes on all new or improved roadways, assuming that the planned bike lanes will fully extend between intersections, rather than ending abruptly at unanticipated locations.

Objective 5.1.5 Enhance and encourage the utilization of alternative modes of transportation (including mass transit, bicycle and pedestrian modes) that reduce dependence on single-occupant vehicles as the primary mode of travel.

Policy 5.1.5.1: (off-campus): The University shall continue to evaluate opportunities to incorporate bus locations at high activity commuter nodes, and provide facilities to assist in attracting riders to the mass transit system.

Policy 5.1.5.2: (on-campus): The University shall continue to provide convenient routes for the Bull Runner shuttle service and explore opportunities for expanding on-campus transit with the addition of a tram, or similar people-mover system, supplement other alternative modes in the campus core, connect major parking facilities with the campus core, and which could eventually link the campus to future light rail in the University area.

Policy 5.1.5.3: (off-campus): The University shall adhere to guidelines established for the Bull Runner shuttle stops. The University shall continue to explore opportunities for mass transit rail to the University area in cooperation with HART, TBARTA, MPO, CUTR, and the host communities. Opportunities for creating stations near the campus shall be encouraged with the implementation of mass transit rail.

Policy 5.1.5.4: (on-campus): The University shall endeavor to provide covered and/or partially enclosed shelters and seating at on-campus transit stops, whenever possible.

Policy 5.1.5.5: At Orientation, the University shall provide to all enrolling students information regarding the availability and scheduling of the HART bus system and Bull Runner transit systems well as other options such as the car-sharing, van-pooling, ride-matching, bike-loan, and Bicycle Club options.

Policy 5.1.5.6: The University shall continue to work with HART to provide the U-pass or other reduced public transit pass prices and van-pooling (offered by TBARTA) for students, faculty, and staff to promote the use of mass transit.

Policy 5.1.5.7: (off-campus): The University shall continue to implement transportation demand management (TDM) strategies designed to encourage the use of alternative modes of transportation and reduce the dependence on the single-occupant automobile as the primary mode of travel. The University shall consider:

- Expanding Bull Runner shuttle service to additional off-campus residential areas
- Improvement of pedestrian and non-vehicular facilities;
- Increasing the number of students living on campus;
- Tracking the development of diverse new off-campus student and faculty oriented housing within walking, bicycling, and transit distance to the campus;
- Academic scheduling modifications, including scheduling more classes during non-peak hours;
- Parking pricing strategies designed to make other modes of travel more economical and to provide revenue for improved TDM services and facilities;
- Parking permit buyback program ;
- Provide qualified transportation fringe benefits, including pre-tax or employer-provided transit, vanpool, and/or bicycle benefits;
- Traffic System Management approaches;
- Further promotion of ridematching services (i.e., HART, TBARTA Commuter Services, Zimride, etc.) and designating preferential parking locations for carpoolers; and
- Distance learning programs for students and telework or staggered work hours for faculty and staff.

Policy 5.1.5.8: (off-campus): The University shall coordinate with the Cities of Tampa and Temple Terrace and Hillsborough County to evaluate other options and strategies for reducing the dependence on the personal automobile.

Policy 5.1.5.9: (on-campus): The University shall continue to evaluate and implement enhanced mass transit opportunities with Hillsborough Area Regional Transit Authority (HART), the Metropolitan Planning Organization (MPO) and the host communities in accordance with procedures described in Element 10, *Intergovernmental Coordination*.

Policy 5.1.5.10: (on-campus): The University shall continue to provide, enhance and coordinate the Bull Runner shuttle routes with HART service. In particular, the University shall maintain and consider new providing transit connections to major regional transit facilities, such as the University Area Transit Center and planned light rail stations, and major destinations to reduce the demand for external vehicle trips. With an increasing number of bus stops, and reduced head times, regional access and circulation will become more convenient.

Policy 5.1.5.11: (on-campus): The University shall encourage increased pedestrian and bicycle mobility through the provision of shaded sidewalk/pathway connections and continuous on-road

bike lanes to reduce vehicle trips and inter-modal conflicts. The University shall also provide secure bicycle storage and consider providing changing and shower facilities for bicycle commuters.

Objective 5.1.6 Ensure that transportation system improvements shall be coordinated and phased with the University's future land uses.

Policy 5.1.6.1: The face of all future buildings shall be set back at least seventy-five (75) feet from the adjacent roadway center line and 30 feet from property lines, see Element 4, *Future Land Use*. This policy shall extend to new construction on sub-leased lands.

Policy 5.1.6.2: The University shall adopt a transportation funding strategy to ensure adequate revenue to finance parking improvements and other transportation alternatives consistent with the Master Plan. This may include increased parking rates, new parking revenue (i.e. daily or metered parking), and/or the transportation access fee.

Policy 5.1.6.3: The University shall plan on performing identified transportation improvements in conjunction with future projects. The timing and phasing requirements and priorities for these improvements are established in Element 11, *Capital Improvements*, and as opportunities arise through future development projects that are currently unforeseen.

Objective 5.1.7 Coordinate required transportation improvements within the context area with the host communities.

Policy 5.1.7.1: (off-campus): The University shall continue regular coordination with the host and affected local governments and the FDOT to ensure that transportation facility improvements are available when needed to support the growth of the University. The University shall pursue memoranda of understanding or interlocal agreements necessary to ensure that transportation facilities are available to meet the future needs of the University.

Objective 5.1.8 Coordinate resolution of issues associated with projected impacts in level of service with the host community.

Policy 5.1.8.1: (on-campus): The University shall monitor all on-campus intersections along the loop roads and campus access points onto Fletcher Avenue, Bruce B. Downs Boulevard, Fowler Avenue and 50th Street. On-campus intersections and campus access points shall be evaluated concurrent with future projects and be consistent with the recommendations presented in this Element 5, *Transportation*.

Policy 5.1.8.2: Level-of-Service (LOS) E conditions will be tolerated on the main campus loop roadways to minimize impacts on pedestrian safety associated with capacity improvements intended to reduce vehicle delays.

Policy 5.1.8.3: (off-campus): The University shall continue to coordinate with the City, County, MPO and FDOT to assure planned public roadway projects along the periphery of the campus are scheduled and funded and include lighting, transit, pedestrian, and bicycle improvements.

Objective 5.1.9 Provide emergency travel routes and a building identification system to all new and renovated campus buildings.

Policy 5.1.9.1: All new and renovated buildings shall be designed in accordance with NFPA1. The University shall remediate access and building justification as soon as practical. Following the street addressing system in place, future lanes and streets shall be named after native trees. The designation “USF” shall be added to all street names. Numbering shall match the City of Tampa’s grid.

5.2 Parking Sub-Element

Summary of Objectives and Policies

Objective 5.2.1 Provide adequate parking capacity for the University’s needs while reclaiming existing surface parking sites in the campus core for programmatic uses or open space.

Policy 5.2.1.1: The University shall program new multi-level parking facilities as needed, taking into consideration multi-modal use, for during the planning 10 year planning time frame as shown in Figures 5-6 and 5-7. The recommended locations for new parking structures are south of the Library (Zone 1), adjacent to the Sun Dome (Zone 3), and in Health (Zone 6). Alternative locations are identified for consideration if specific conditions restrict development of recommended sites or parking demand conditions indicate these as earlier priority development. The schedule for parking facility completion will be based on continued review of campus parking demands, development, and funding.

Policy 5.2.1.2: The University shall strongly encourage the use of periphery parking areas for students and staff through permit pricing incentives. On campus shuttle service shall continue to be routed to support this parking strategy.

Policy 5.2.1.3: The University shall evaluate on-street parking and completion of bicycle lanes on some campus roadways, as recommended in Figure 5-8, to affordably maintain or expand parking capacity on the campus as needed.

Policy 5.2.1.4: The University shall review existing parking facilities for opportunities to expand capacity through lower-cost measures such as re-stripping or surface lot expansion.

Policy 5.2.1.5: The University shall coordinate with host communities regarding opportunities to provide off-campus Park and Ride parking for University use, if such parking facilities are deemed beneficial to overall campus parking operations.

Objective 5.2.2 Provide methods to reduce the impacts and demands of future on-campus parking.

Policy 5.2.2.1: The University shall continue to monitor parking needs as development progresses and evaluate and implement, as appropriate, mitigation techniques. These programs may include the following:

- Explore the possibility of establishing remote Park and Ride parking lots off campus and shuttle systems to these lots;
- Encourage the utilization of peripheral parking facilities and mass transit with the establishment of commuter centers, shuttle service, and utilization of bicycles;
- Consider parking lot and/or permit designation modifications to discourage visitors, faculty, and students from moving vehicles between different parking locations on campus;
- Continue to evaluate academic classroom schedules encouraging more classes to be scheduled in off-peak hours, thus reducing parking demands by increasing utilization throughout the day – "reusing" the same parking space;
- Provide preferential parking locations for those who carpool and vanpool regularly;
- Evaluate preferred parking for alternative fuel vehicles and consider electric vehicle charging facilities during design of new or improved parking facilities, and;
- Consider restrictions in the use and parking of personal vehicles on campus by freshmen.

Policy 5.2.2.2: The University shall continue to evaluate and refine the parking permit fee structures to adequately incentivize parking in more remote parking lots, while maximizing revenue.

Objective 5.2.3 Locate program and design on-campus parking facilities to be accessible to the various land uses and circulation systems while minimizing pedestrian vehicle conflicts.

Policy 5.2.3.1: The University shall adhere to its design guidelines that ensure proper signage and traffic circulation to the parking structures and lots to avoid potential confusion and conflicts with pedestrians. The University shall, during the design of parking lots and garages, address concerns regarding landscaping, lighting, signage, security and pedestrian circulation issues.

Policy 5.2.3.2: The University shall implement parking improvements as described in this element and on Figures 5-6 and 5-7. The timing and phasing requirements and priorities for these improvements are established in Element 11, *Capital Improvements*.

5.3 Pedestrian and Non-Motorized Circulation Sub-Element

Goal

The Pedestrian and Non-Motorized Circulation goal of the Tampa Campus Master Plan is to shift the primary transportation focus within the campus from vehicles to pedestrians, bicycles, and transit modes through improvement and implementation of functional and inviting pedestrian, bicycle, and transit facilities in order to reduce personal vehicular traffic, improve safety, and support sustainable University operations.

Summary of Objectives and Policies

Objective 5.3.1 Provide convenient, safe and direct on-campus pedestrian and bicycle way connections, as shown in Figures 5-8 and 5-9, to off-campus pedestrian and bicycle ways where the campus interfaces with the public roadway network and neighboring communities.

Policy 5.3.1.1: The University shall coordinate with the City of Tampa, City of Temple Terrace and Hillsborough County in the systematic implementation of on-campus pedestrian and bicycle facilities to ensure continuity of such facilities within the larger regional system of pedestrian/bicycle facilities in accordance with procedures described in Element 10, *Intergovernmental Coordination*.

Policy 5.3.1.2: The University shall continue to work with the host community through coordinated efforts of University Police and local police departments, community action groups, and planning entities to improve the safety of off-campus routes connecting to the campus in accordance with procedures established in Element 10, *Intergovernmental Coordination*.

Policy 5.3.1.3: Coordinate with Hillsborough County to provide and maintain appropriate street lighting on roadways, surrounding the campus and along major pedestrian routes to/from campus.

Policy 5.3.1.4: Coordinate with Center for Urban Transportation Research (CUTR), New North Transportation Alliance, Hillsborough County, FDOT and other transportation planners and providers to implement educational programs for students, employees, and surrounding community members regarding transportation and public safety in proximity to USF.

Objective 5.3.2 Coordinate locations for future pedestrian and non-vehicular circulation facilities to be developed on and off the campus with recommendations made by the University Police Department, Facilities Planning and Construction, and Parking and Transportation Services.

Policy 5.3.2.1: Record may be made of actual observed pedestrian flow. Such campus wide observations should be scheduled as needed to assess any changes in pedestrian and non-vehicular movement patterns which may merit changes in prioritizing implementation of new pedestrian and non-vehicular facilities. Additional observations should be scheduled during periods of new campus development which may affect patterns of pedestrian and non-vehicular movement.

Objective 5.3.3 Coordinate locations for additional lighting and improvements in lighting delivery with recommendations made by the University Police Department and Student Night-Walks.

Policy 5.3.3.1: The University shall consult the University Police Department in determining locations for additional lighting along pedestrian and non-vehicular circulation routes, recognizing that the most effective lighting safety response may be to light the edges of the open space rather than the actual walk. University Police acting as Crime Prevention Through Environmental Design (CPTED) consultant to Facilities Planning and Construction shall provide input to identify areas in which they feel a risk factor exists. Their input will be based on on-site observation and crime data.

Policy 5.3.3.2: The University shall continue the campus-wide blue light emergency telephone plan to complement existing University Police escort and "Safe Team" services.

Objective 5.3.4 Provide pedestrian and non-motorized circulation facilities to meet both the aesthetic and functional needs of the users and to encourage increased pedestrian and bicycle movement on campus.

Policy 5.3.4.1: The University shall give priority to mitigation of existing pedestrian/vehicle conflicts on campus through the following actions:

- Prohibit vehicular access to USF East Holly Drive, for most of the section between USF Palm Drive and USF Maple Drive, to eliminate vehicle-pedestrian conflicts with residents of the housing areas and strengthen the connection between housing areas north and south of USF East Holly.
- Review pedestrian safety treatment options for intersections experiencing pedestrian collisions, including crosswalk treatment upgrades (i.e., high-visibility materials, raised crosswalks, etc.), relocating crosswalks to align with pedestrian desire lines, median refuges, curb extensions, pedestrian signal improvements, signal cycle length reductions, warning signage, and speed/safety enforcement.
- Largely relocate central campus parking toward the edges of the campus and construct new pedestrian and multi-use pathways providing logical and continuous connections between uses along the campus Greenway.
- Converge pathway alignments within the Greenway at intersections with campus collector roadways and install high-visibility crossings and traffic-calming treatments at mid-block crossing locations.
- Consider using Sharrow markings on roadway sections that do not yet have dedicated bikelanes. Sharrows assist bicyclists with lateral positioning in lanes that are too narrow for a motor vehicle and a bicycle to travel side by side within the same traffic lane; alert road users of the lateral location bicyclists are likely to occupy within the traveled way; encourage safe passing of bicyclists by motorists; and reduce the incidence of wrong-way bicycling. Sharrows are typically (but not exclusively) utilized on roads that are popular with bicyclists but lack right of way for conventional bike lanes. <http://bike.emory.edu/2010/08/18/sharrows-coming-soon-to-clifton-road>
- Continue to support the development and funding of the "Open Trip Planner" developed by CUTR. This is a web-based tool for creating point to point campus pedestrian route planner

which will help students, especially physically challenged, plan the best route to navigate the campus.

Policy 5.3.4.2: The University shall continue to work with partners to review personal and shared bicycle parking quality and availability at all on-campus facilities and install bicycle parking equipment in beneficial locations.

Policy 5.3.4.3: The University shall encourage utilization of pedestrian and non-motorized facilities and improve the safety of persons using the facilities through implementation of pathway and roadway improvements, including increasing shade along walks and pathways and converting some four-lane roadways to two-lane roadways with bike lanes and on-street parking, as identified in this element. The timing and phasing requirements and priorities for these improvements are included in Element 11, *Capital Improvements* under Infrastructure.

Objective 5.3.5 Establish a series of strong pedestrian corridors to link campus precincts, as shown in Figure 5-9.


Policy 5.3.5.1: The University shall continue the maintenance and development of primary east-west and north-south pedestrian corridors as follows:

- Sessums Pedestrian Mall between athletics/recreation and business/education/social science precincts on the east and the engineering/natural sciences, housing precincts on the west;
- Interdisciplinary Pedestrian Mall extending from the north edge of the Central Lawn northwest to the interdisciplinary /proposed arts precinct and west to Moffitt/Health extending to Bruce B. Downs Boulevard;
- Proposed USF East Holly Pedestrian Mall extending between USF Maple Drive on the east and USF Palm Drive on the west; and
- Proposed North-South Pedestrian corridor extending from redeveloped Andros housing area south, crossing the Greenway to the business/education/social science precinct.

Policy 5.3.5.2: The University shall establish strong diagonal northwest to southeast and northeast to southwest pedestrian and multi use (pedestrian/bicycle) corridors as follows:

- Cross-campus Greenway Corridor extending from the northeast Greek Village and Fletcher Avenue southwest to the Botanical Garden continuing to Pine Drive and Bruce B. Downs, and including a proposed diagonal crossing of the Central Quadrangle.
- Cross-campus southeast to northwest corridor extending from Alumni/Bull Run Drive and Fowler Avenue, through the academic precinct, to proposed connection to Administration crossing Central Quad, extending northwest and continuing to the redeveloped Health area via USF West Holly Drive walks and bicycle lanes.

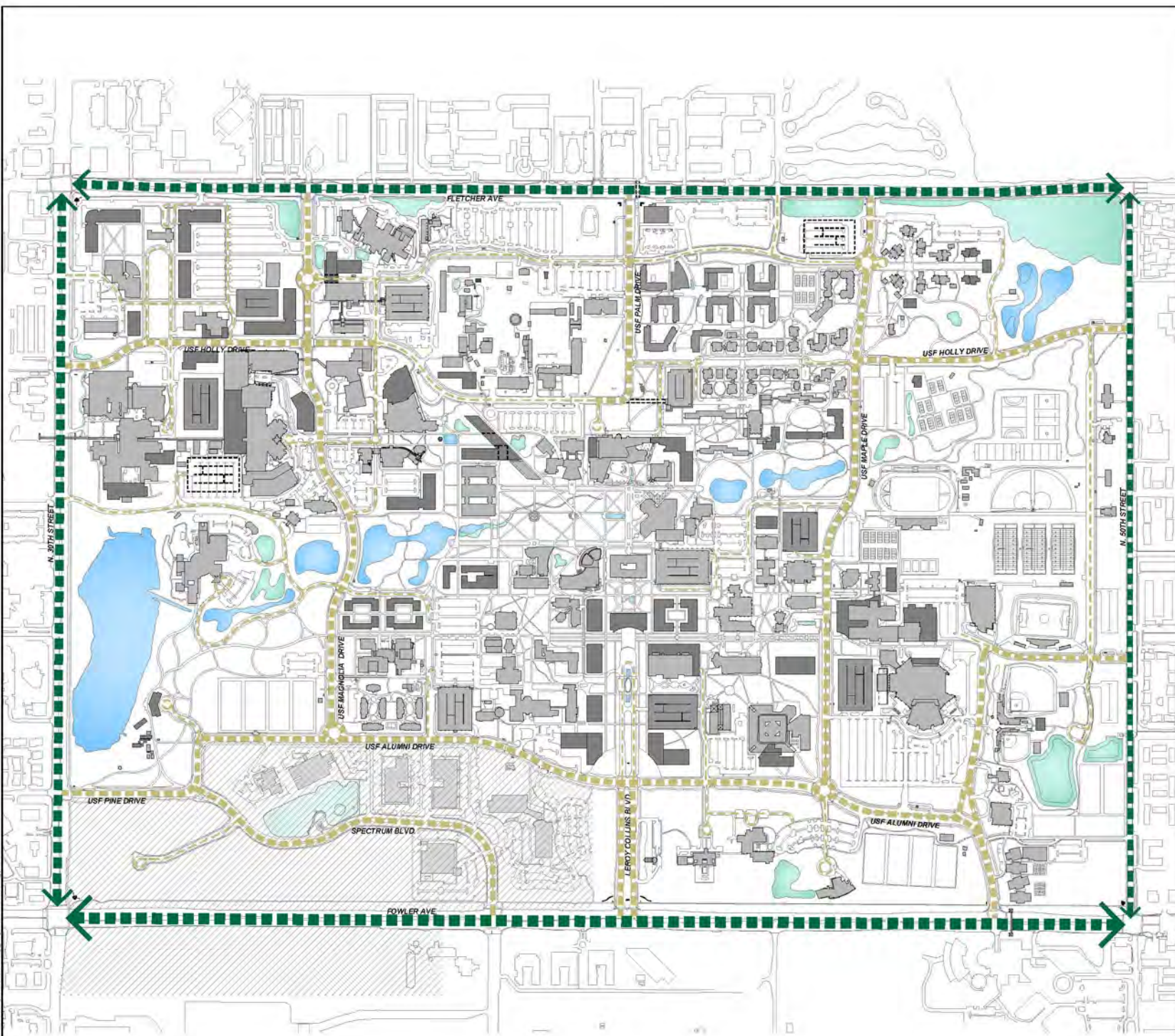
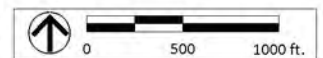
-  Principal Arterial
-  Minor Arterial
-  Collector Roadway
-  Collector Roadway (USF)
-  Drive (USF)

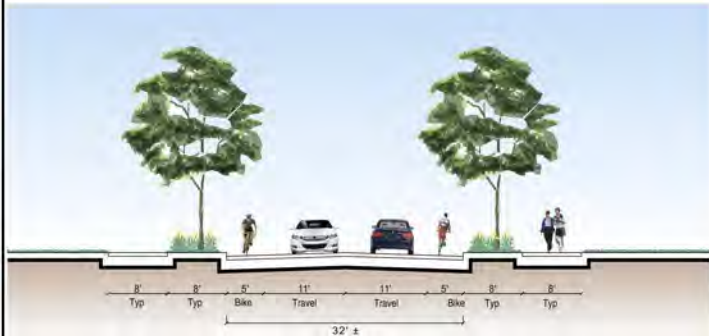
 Area Not Included in Campus Master Plan

Element 5
Transportation

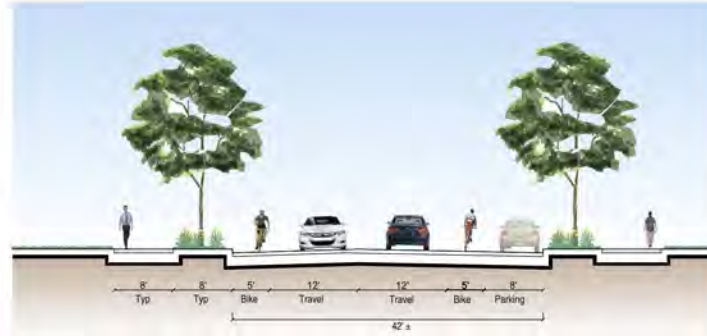
Figure 5-1
10 Year Functional
Roadway Classification

Date
08/21/2015

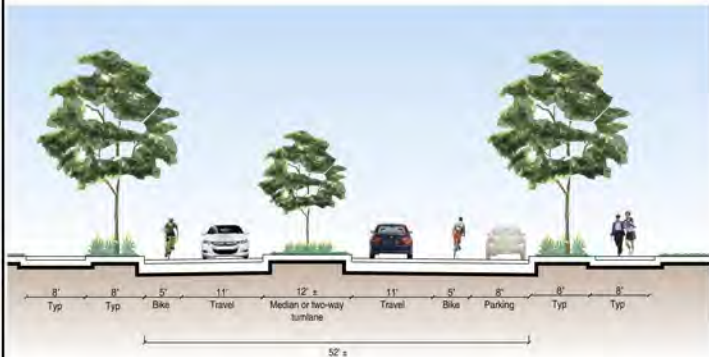




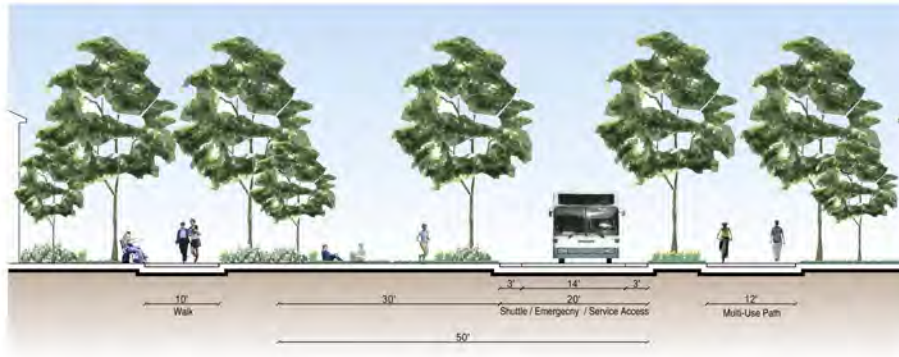
32' Roadway with Bike Lanes



42' Roadway with Bike Lanes and On Street Parking



52' Roadway with Planted Median, Bike Lanes and On Street Parking

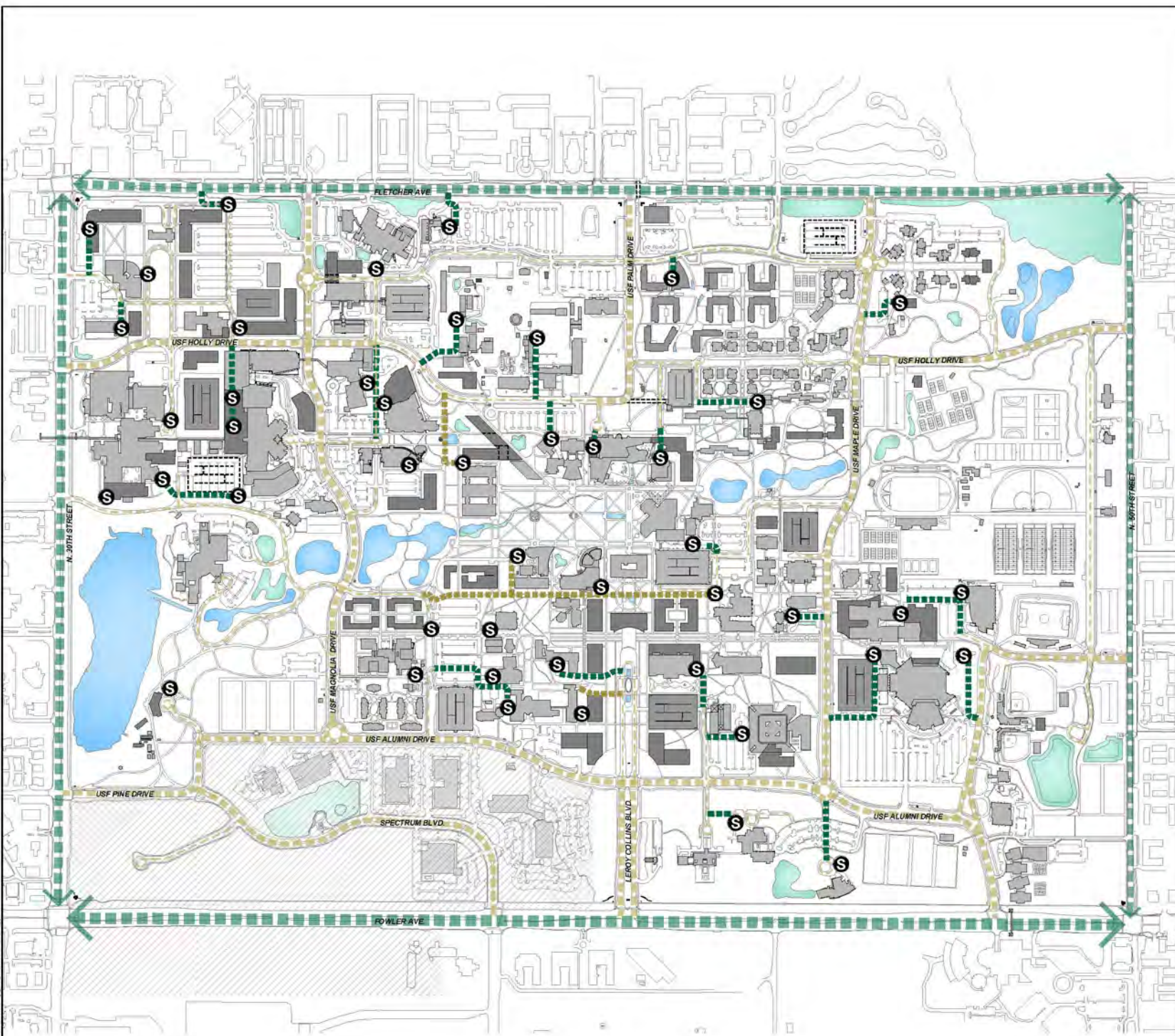


Holly Green Pedestrian Corridor

Element 5
Transportation

Figure 5-2
10 Year Conceptual
Roadway Sections

Date
08/21/2015



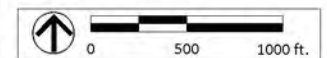
- Principal Arterial
- Minor Arterial
- Collector Roadway
- Collector Roadway (USF)
- Drive (USF)
- Service Shared Vehicle
- Service Shared Pedestrian
- Service

Area Not Included in Campus Master Plan

Element 5
Transportation

Figure 5-3
10 Year Service Access

Date
08/21/2015



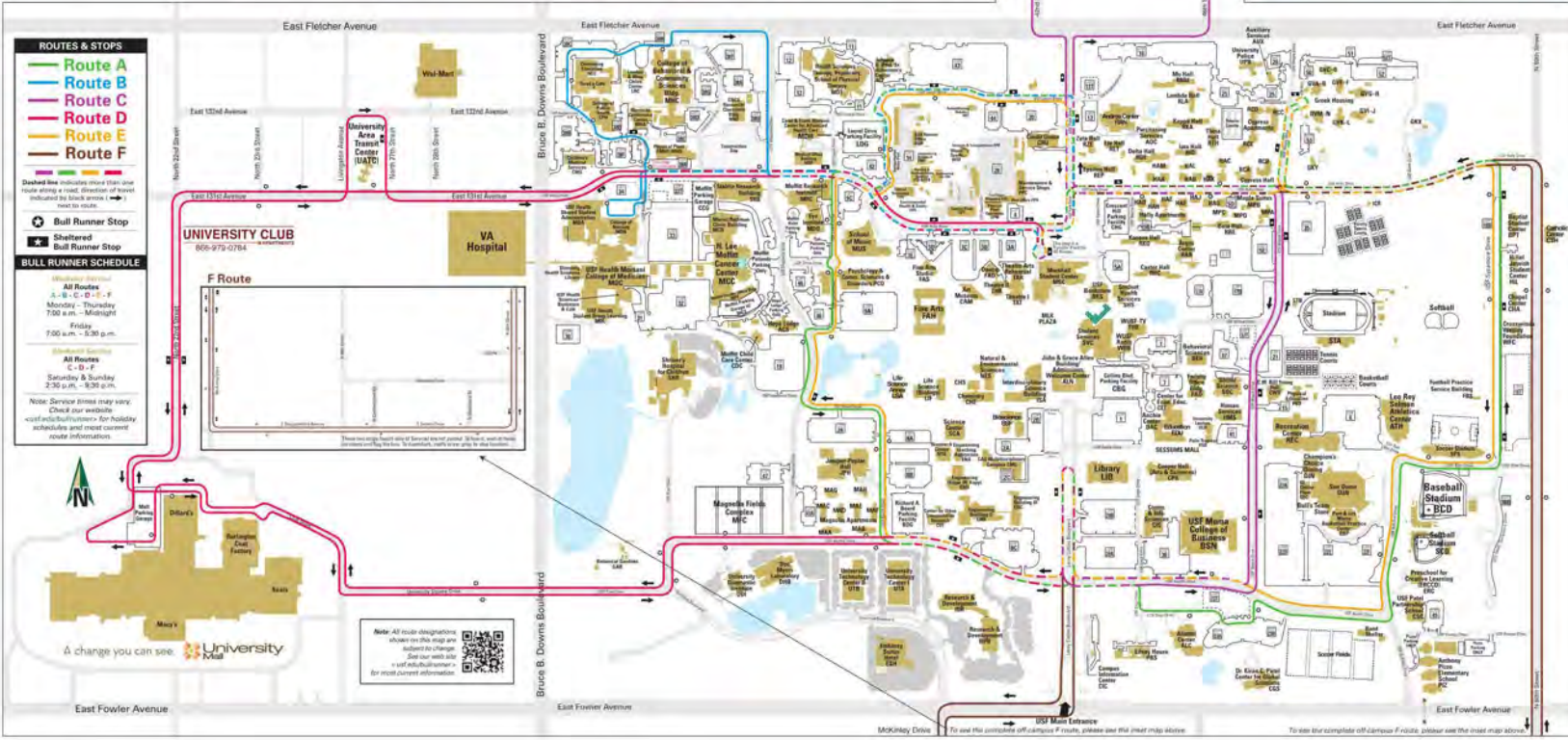


Use the **BULL TRACKER** to locate the fare-free Bull Runner Transit!

Get these features online or from your mobile device:

- Find bus locations in real time
- Get bus arrival predictions
- Set up alerts for bus arrival at your stop
- View a specific route or the entire system
- Find out if space is available on the bus

usfbullrunner.com

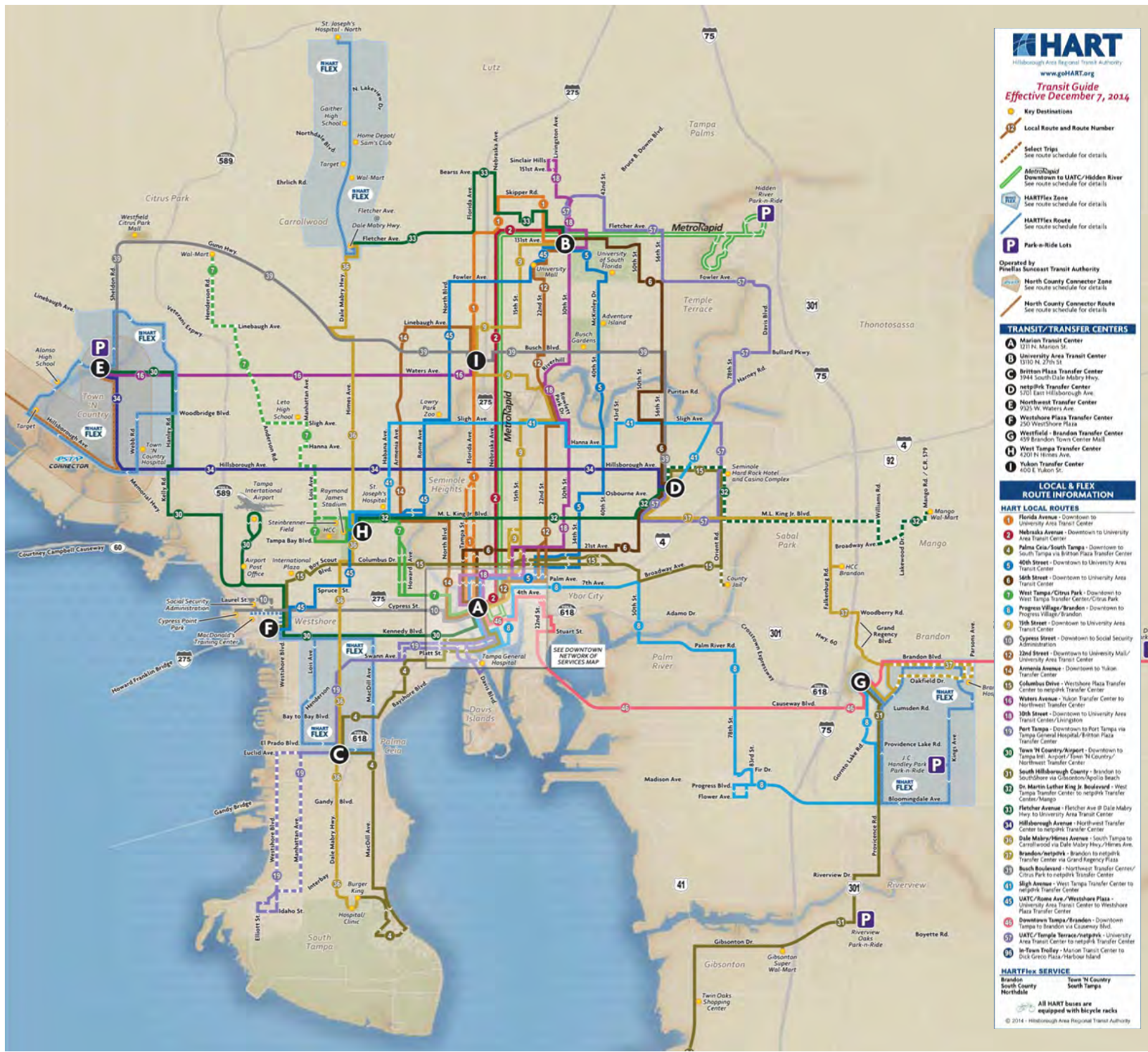


Element 5
Transportation

Figure 5-4
10 Year Bull
Runner Route Map

Date
08/21/2015





HART
Hillsborough Area Regional Transit Authority
www.goHART.org

Transit Guide
Effective December 7, 2014

Key Destinations

- Local Route and Route Number**
- Select Trips** - See route schedule for details
- Advisories** - Downtown to UATC/Hidden River - See route schedule for details
- HARTflex Zone** - See route schedule for details
- HARTflex Route** - See route schedule for details
- P** - Park-n-Ride Lots

Operated by Pinellas Success Transit Authority

- North County Connector Zone** - See route schedule for details
- North County Connector Route** - See route schedule for details

TRANSIT/TRANSFER CENTERS

- A** Marion Transit Center
- B** University Area Transit Center
- C** Britton Plaza Transfer Center
- D** netpark Transfer Center
- E** Northwest Transfer Center
- F** Westshore Plaza Transfer Center
- G** Westfield - Brandon Transfer Center
- H** West Tampa Transfer Center
- I** Yukon Transfer Center

LOCAL & FLEX ROUTE INFORMATION

HART LOCAL ROUTES

- 1** Florida Avenue - Downtown to University Area Transit Center
- 2** Nebraska Avenue - Downtown to University Area Transit Center
- 3** Palma Ceia/South Tampa - Downtown to South Tampa via Britton Plaza Transfer Center
- 4** 40th Street - Downtown to University Area Transit Center
- 5** 16th Street - Downtown to University Area Transit Center
- 6** West Tampa/Citrus Park - Downtown to West Tampa Transfer Center/Citrus Park
- 7** Progress Village/Brandon - Downtown to Progress Village/Brandon
- 8** 15th Street - Downtown to University Area Transit Center
- 9** Cypress Street - Downtown to Social Security Administration
- 10** 12nd Street - Downtown to University Mall/University Area Transit Center
- 11** Armenia Avenue - Downtown to Yukon Transfer Center
- 12** Columbus Drive - Westshore Plaza Transfer Center to netpark Transfer Center
- 13** Waters Avenue - Yukon Transfer Center to Northwest Transfer Center
- 14** 10th Street - Downtown to University Area Transit Center/Livingston
- 15** Port Tampa - Downtown to Port Tampa via Tampa General Hospital/Britton Plaza Transfer Center
- 16** Town 'N Country/Airport - Downtown to Tampa Int'l. Airport/Town 'N Country/Northeast Transfer Center
- 17** South Hillsborough County - Brandon to Southshore via Gibsonton/Apolla Beach Dr. Martin Luther King Jr. Boulevard - West Tampa Transfer Center to netpark Transfer Center/Mango
- 18** Fletcher Avenue - Fletcher Ave @ Dale Mabry Hwy to University Area Transit Center
- 19** Hillsborough Avenue - Northwest Transfer Center to netpark Transfer Center
- 20** Dale Mabry/Himes Avenue - South Tampa to Carrollwood via Dale Mabry Hwy/Himes Ave.
- 21** Brandon/netpark - Brandon to netpark Transfer Center via Grand Regency Plaza
- 22** Busch Boulevard - Northwest Transfer Center/Citrus Park to netpark Transfer Center
- 23** Sligh Avenue - West Tampa Transfer Center to netpark Transfer Center
- 24** UATC/Himes Ave./Westshore Plaza - University Area Transit Center to Westshore Plaza Transfer Center
- 25** Downtown Tampa/Brandon - Downtown Tampa to Brandon via Causeway Blvd.
- 26** UATC/Tampa Terrace/netpark - University Area Transit Center to netpark Transfer Center
- 27** In-Town Trolley - Marion Transit Center to Dick Greco Plaza/Harbour Island

HARTflex SERVICE

- Brandon South County
- Town 'N Country South County
- Northdale

All HART buses are equipped with bicycle racks

© 2014 - Hillsborough Area Regional Transit Authority

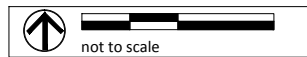








2015 - 2025 Tampa Campus Master Plan Update


Element 5
Transportation

Figure 5-4a
HART System Map

Date
08/21/2015



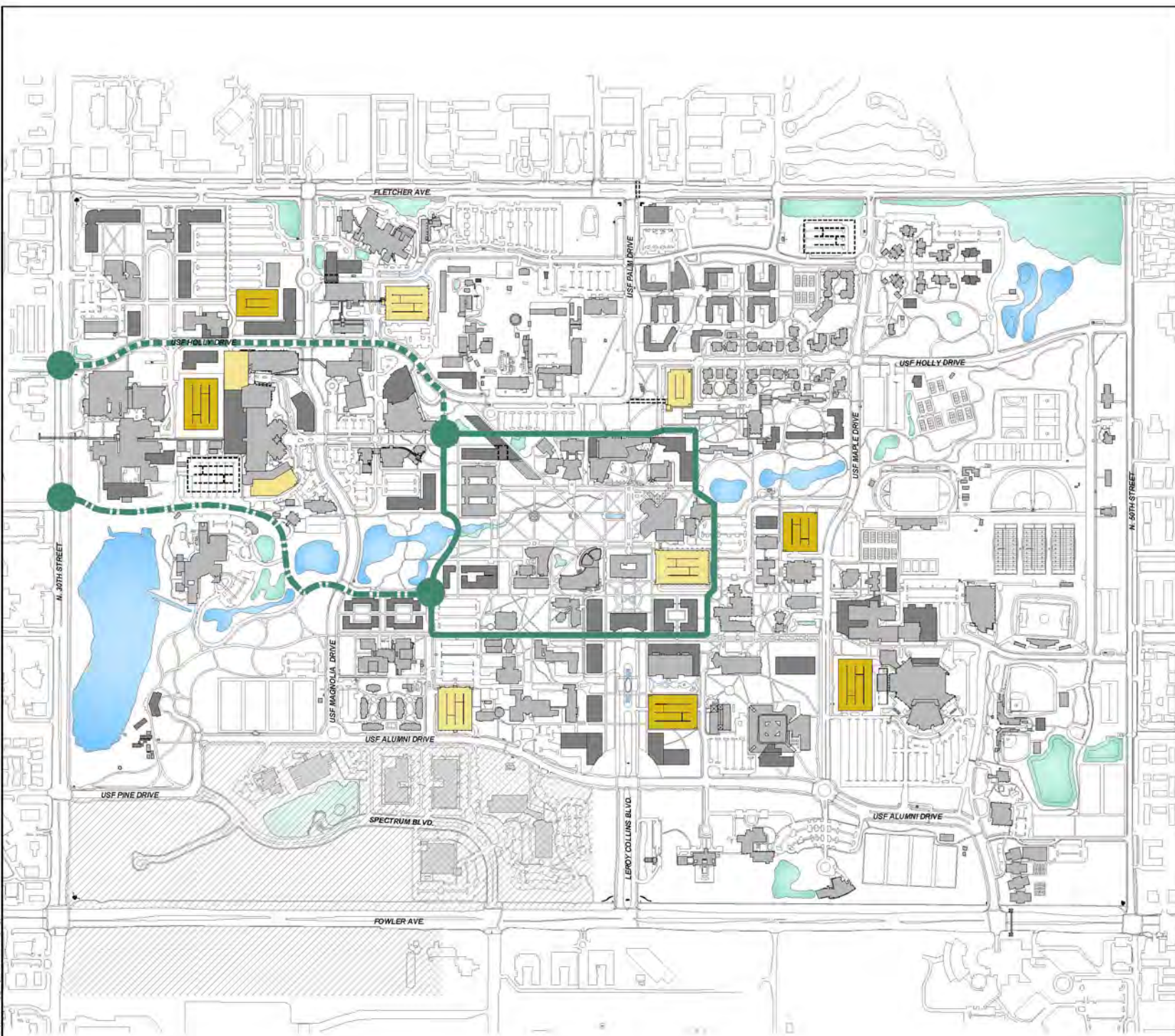
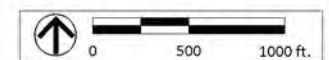
-  Phase 1
-  Phase 2
-  Phase 3
-  Structured Parking - Existing
-  Structured Parking - Proposed
-  Structured Parking - Alternate Locations

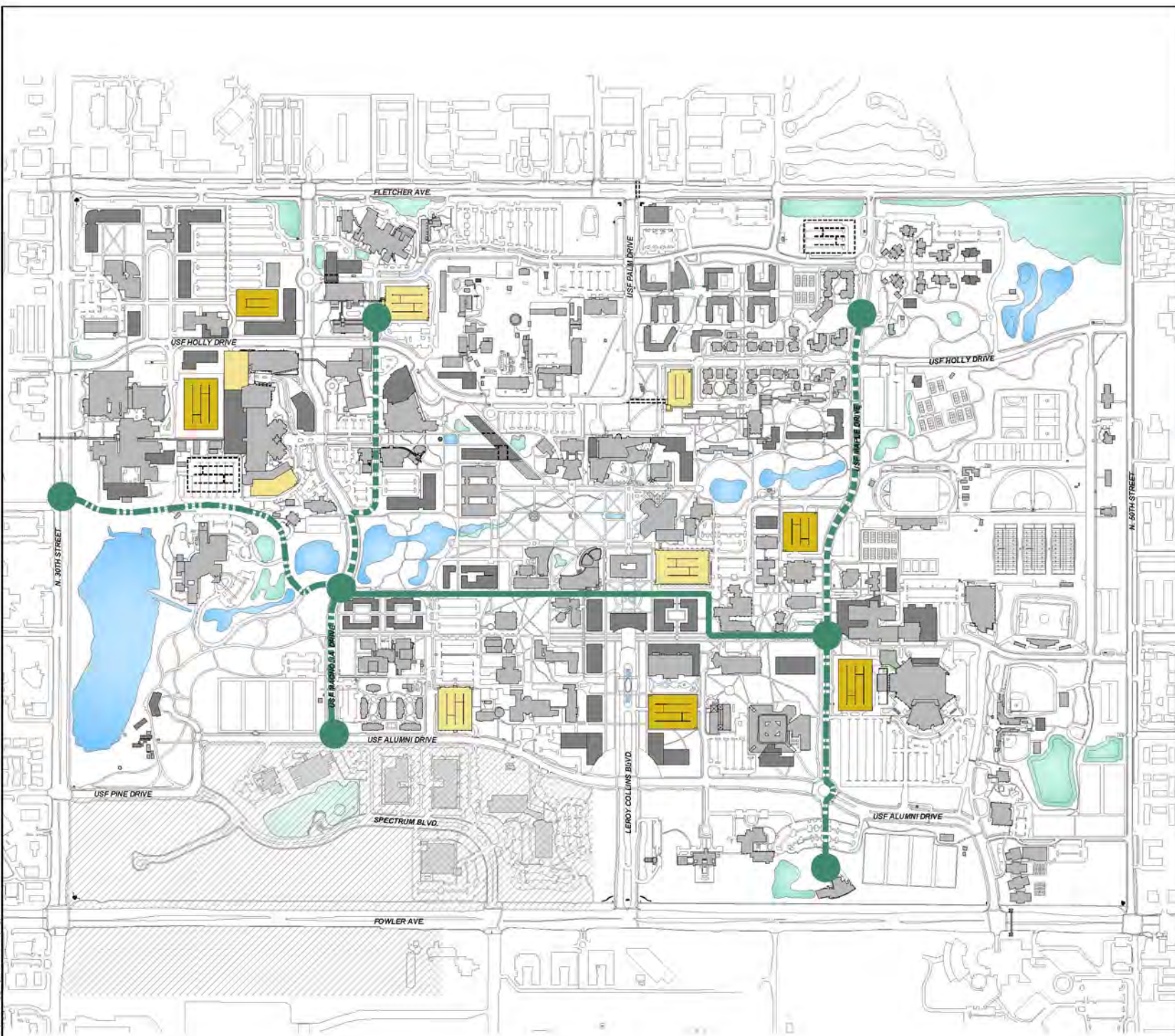
 Area Not Included in Campus Master Plan

Element 5
Transportation

Figure 5-5.1
10Year Tram: "Circulator"

Date
08/21/2015





- Phase 1
- Phase 2
- Phase 3
- Phase 4
- Structured Parking - Existing
- Structured Parking - Proposed
- Structured Parking - Alternate Locations

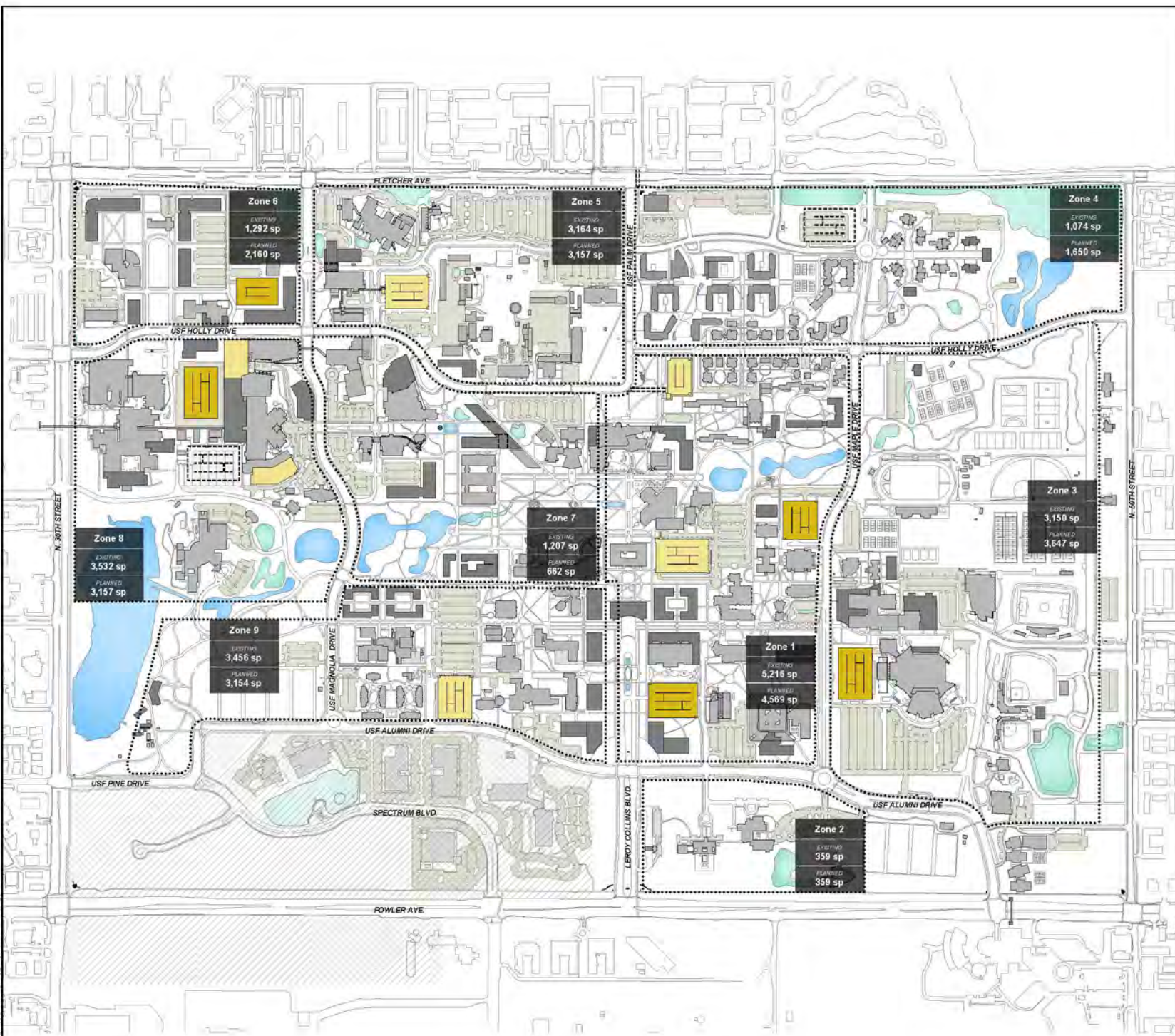
Area Not Included in Campus Master Plan

Element 5
Transportation

Figure 5-5.2
10 Year Tram:
"Spine/Branching"

Date
08/21/2015





- Surface Parking
- Structured Parking - Existing
- Structured Parking - Proposed
- Structured Parking - Alternate Locations

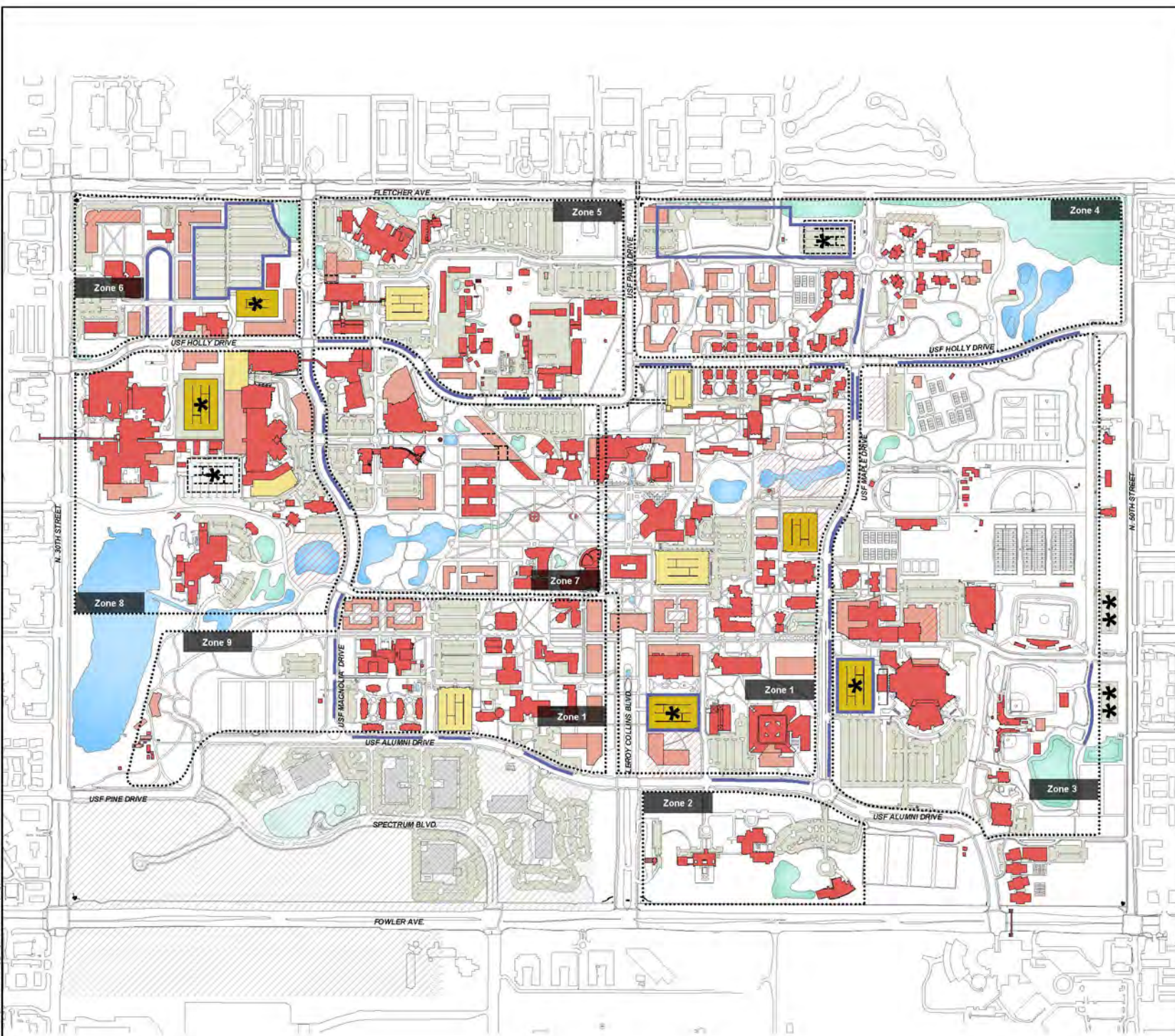
Area Not Included in Campus Master Plan

Element 5
Transportation

Figure 5-6
10 Year Parking
Supply Summary

Date
08/21/2015



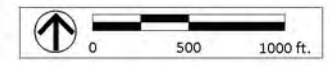


- Surface Parking
- Structured Parking - Existing
- Structured Parking - Proposed
- Structured Parking - Alternate Locations
- Existing Parking Lots Eliminated in Campus Master Plan
- Planned New or Expanded Parking (Including On-Street)
- Structured Parking - Proposed
- Temporary Event Parking - Proposed
- Area Not Included in Campus Master Plan

Element 5
Transportation

Figure 5-7
10 Year Planned
Parking Modifications

Date
08/21/2015



**2015 - 2025 Tampa Campus
Master Plan Update**

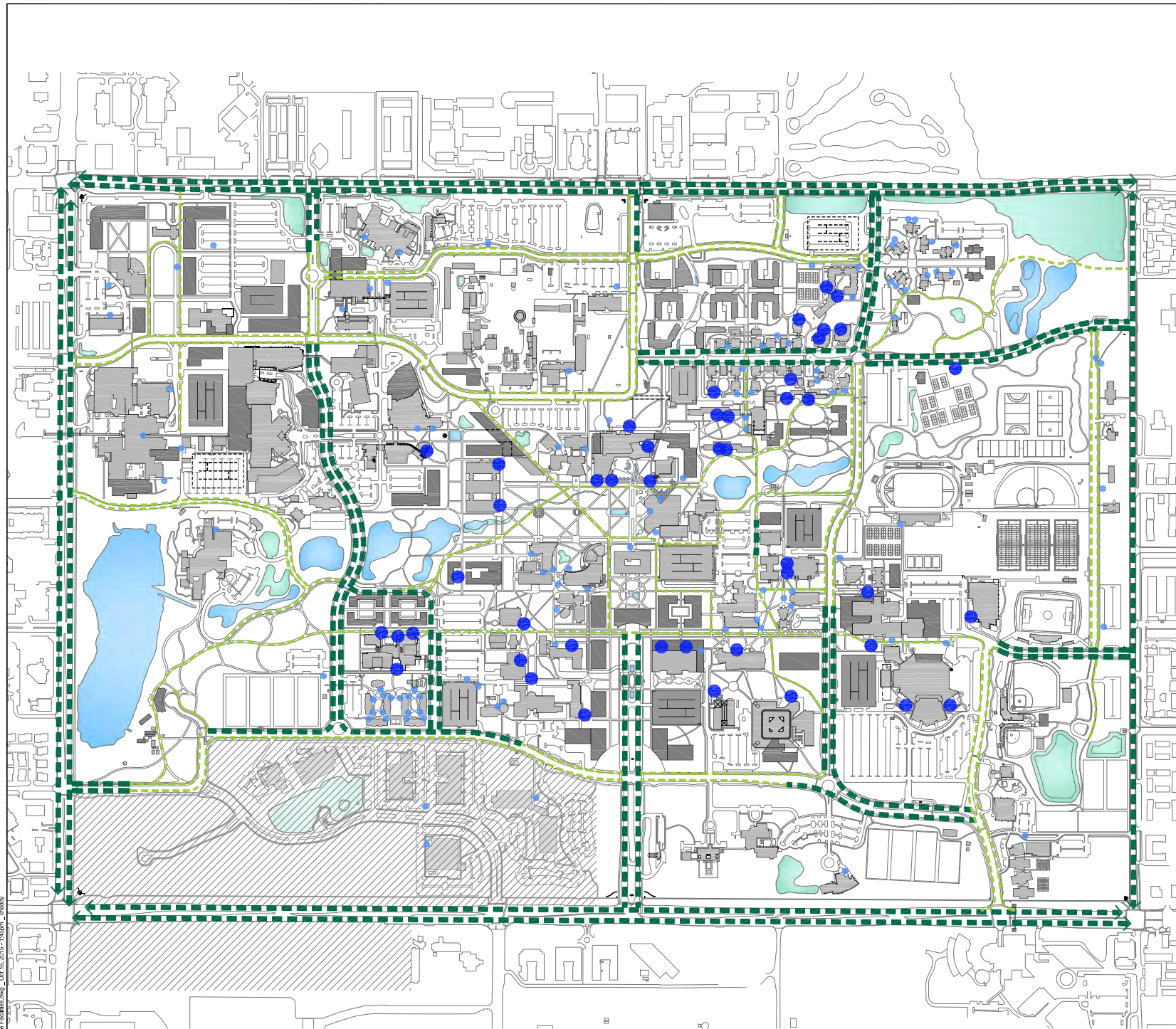
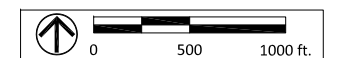
- Existing Bicycle Lanes
- Proposed Bicycle Lanes
- Bicycle Racks
- >20 Bicycle Racks

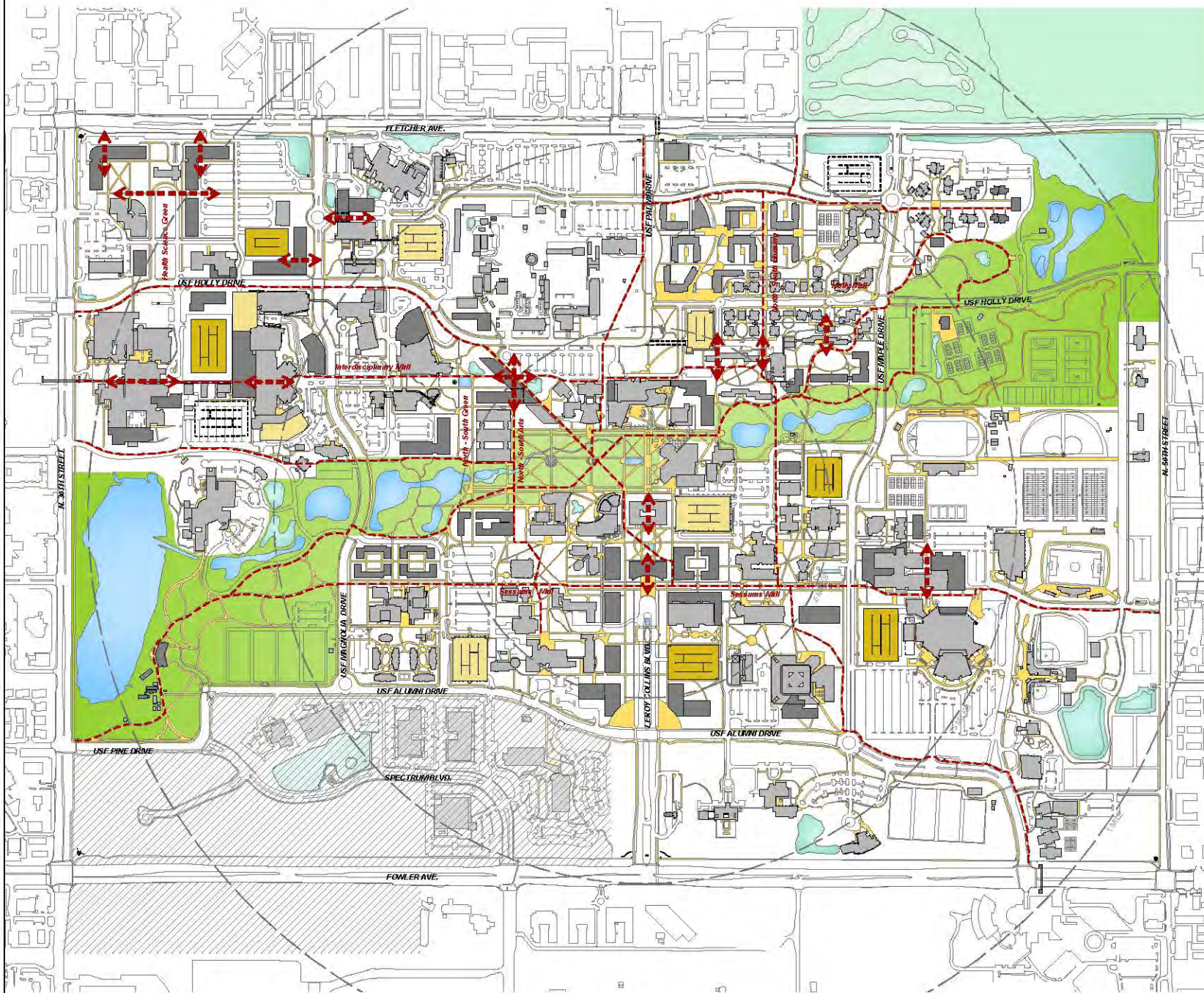
Area Not Included in
Campus Master Plan








Element 5
Transportation


Figure 5-8
10 Year Bicycle Facilities

Date
08/21/2015





-  Pedestrian Walkway
-  Major Pedestrian Corridors
-  Pedestrian Connection
-  Greenway
-  Structured Parking - Existing
-  Structured Parking - Proposed
-  Structured Parking - Alternate Location

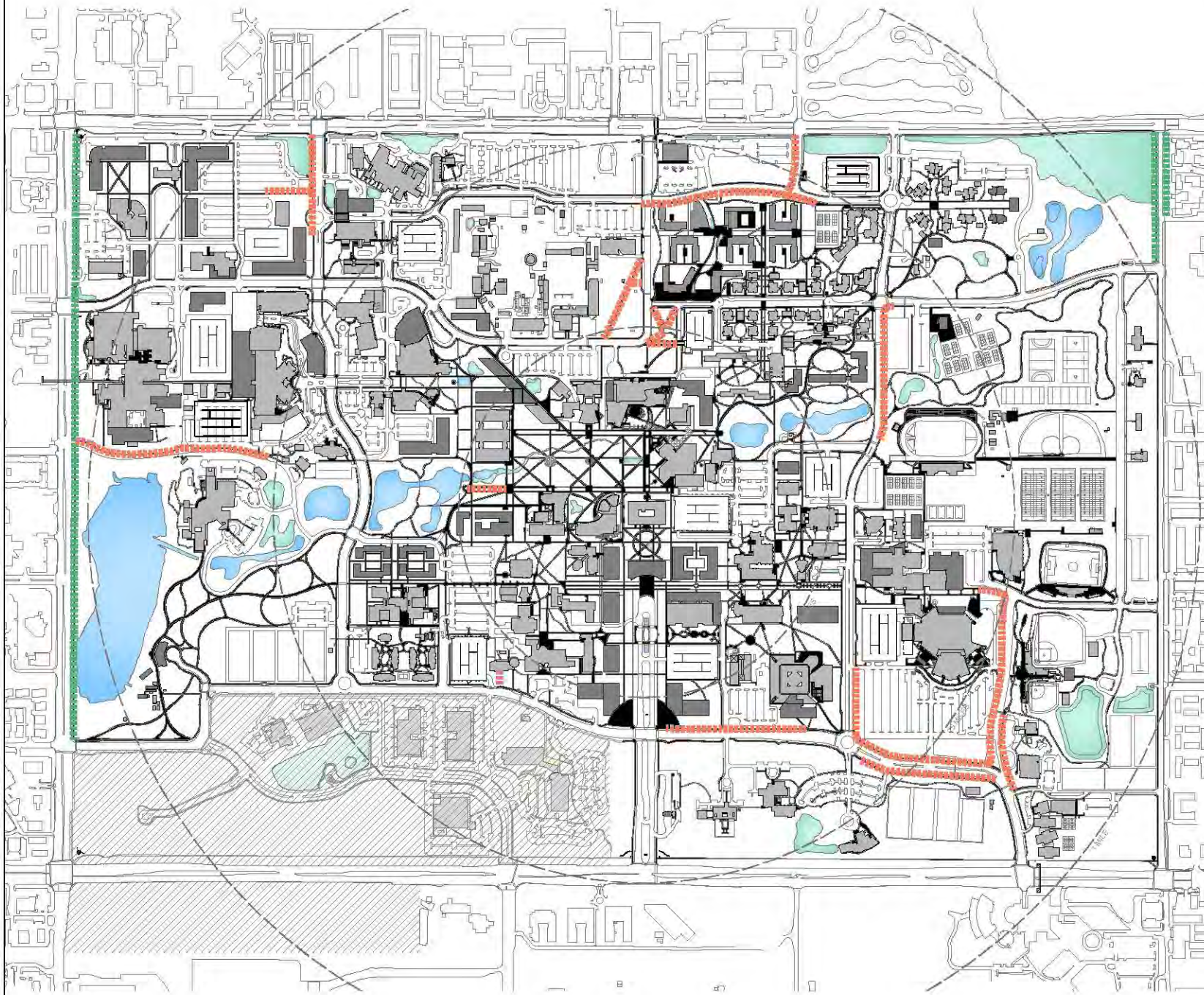
-  Area Not included in Campus Master Plan

Element 5
Transportation

Figure 5-9
10 Year Pedestrian Circulation

Date
08/21/2015





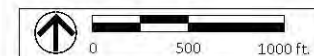
- Existing Walks
- Planned Campus Walk Development
- Proposed Public Walk Development

Area Not included in
Campus Master Plan

Element 5
Transportation

Figure 5-10
10 Year Existing & Planned
Pedestrian Facilities

Date
08/21/2015



This Page Intentionally Left Blank.

Element 6 Housing and Student Support Services

The 2009 initiative requiring First Time in College students (FTIC) to live on campus and the related increase in on-campus student housing – more than doubling since 1995 – has made a significant impact on the University and increased vitality of campus life. Housing, both on-campus and near off-campus, plays a critical role in establishing a more sustainable campus; supporting the learning experience by more fully engaging students and providing support, influencing transportation demands and strengthening pedestrian and bicycle circulation as desirable options, and providing the critical mass necessary to support a more diverse 24 hour campus community with increased demand for a greater range and supply of services and opportunities including food service options, retail, recreation, and entertainment.

The Plan reinforces the role of housing as a component of the sustainable campus community by expanding presence in both the east and west housing areas, and strengthening visual and physical (pedestrian/bicycle) connections within housing areas, to the campus core, and, significantly, to the Greenway. Proposed new housing frames and invigorates varied open space –larger quadrangles, semi-private “house” courtyards, and dining plazas, as well as the Greenway. The Plan envisions housing as distinct in character and scale from the larger academic facilities – narrower width and average height of four stories with strong response to indoor/outdoor connections and incorporation of community space.

The 10-year housing program provides for the construction of 3,526 new student beds. This includes replacement of 1,000 beds demolished in the Andros Housing Complex, refer to Fig 4-7 for demolition. (Architectural assessment, January 2010, determined removal and replacement of Andros to be both more cost effective and sustainable long term than renovation of existing structures.) The planned 10 year construction will result in a **net gain** of approximately **2,526 additional** student beds, thereby potentially making some 7,800 student beds plus supporting staff apartments available on the Tampa campus at the end of the ten-year period.

During the ten-year program period, there will be phased reductions in the number of existing student beds due to anticipated removal of facilities in the Andros residential complex. In the meantime, Housing and Residential Education will continue to secure affiliation partnerships with local property owners to meet Carnegie classification goals of 25% of undergraduate FTE and build a strong educational experience.

As part of the effort to provide safe and engaging connections between all campus housing and academic and social centers of the campus, the Plan recommends conversion of Holly Drive between the Crescent Garage and USF Maple Dr. to a primarily pedestrian/bicycle corridor. This strategic, multi-faceted move – contributing to improved qualities and function in transportation, housing, and open space – is also described in Element 5, *Transportation*, and Element 9, *Recreation and Open Space*.

Figure 6-1 indicates currently proposed locations for housing facilities based on program, land use relationships and site suitability factors. The University has undertaken a Housing Master Plan which included a study of off-campus, as well as on campus student housing options and the residential market. Specific locations and site layouts for some projects may change during the 10 year plan period due to changing conditions, modifications in building programs and contingencies

in site availability driven by sequencing of projects. The locations are important in underscoring that each future building must be sited so as to:

- Reinforce the civic structure of the campus;
- Frame meaningful, vibrant open spaces, and activate these spaces with social and recreational activity; and
- Recognize housing as a “highest and best use” of land adjacent to an implemented Greenway.

Goals

The Housing and Student Support Services goal of the Tampa Campus Master Plan is to encourage the availability of diverse, safe, affordable housing and support services for students on and in the vicinity of the campus in support of the educational success, personal development, and social experience of all University students.

Summary of Objectives and Policies

Objective 6.1: Provide up to approximately 2,526 net new undergraduate and graduate student beds in on-campus residence facilities over the next 10 years. In addition, replace 1,036 beds lost to proposed demolition and redevelopment of Andros Complex site. Endeavor to achieve and maintain The Carnegie Foundation for Advancement of Teaching classification as a “L4/R/Large Four Year, Primarily Residential” school.

Policy 6.1.1: The University shall locate such new housing as is determined to be financially feasible in Land Use Districts 4 and 5 (Student Housing East and West) as delineated in Figure 4-4, 10-Year Campus Land Use Districts, Element 4, *Future Land Use*.

Policy 6.1.2: Building locations indicated in Figure 4-1. Any location changes shall be effected by approval of the USF Board of Trustees without a Campus Master Plan amendment, provided that the project supports the primary land use function and is consistent with Figure 4-4, 10 Year Campus Land Use Districts, and Tables 4.1 and 4-3 included in Element 4, *Future Land Use*, as well as with the Campus Development Agreement with the City of Tampa.

Policy 6.1.3: The University shall, through this 2015 Master Plan Update and USF Design and Construction Guidelines (<http://www.usf.edu/administrative-services/facilities-planning/guidelines-standards/index.aspx>), specify that new construction or renovation of housing and support facilities be designed to reinforce and enhance the spatial order and coherence of the campus, thus lending to a sense of continuity and unity in the development of the campus. Additionally, housing and support facilities shall be located – and entries, views, public spaces oriented – in a way that engages and activates adjacent spaces such as the Greenway, framed residential quadrangles and courtyards, and circulation routes such as Sessums Mall to encourage more vibrant community engagement in these spaces.

Objective 6.2 Provide the land area and infrastructure to accommodate development of a student organization community facility in support of student organization housing over the next 10 years.

Policy 6.2.1: During the next 10 years, the University shall seek to enable development of a student organization residential community facility available to student organizations in the area of the Greek Village. Such construction will be subject to USF Design and Construction Guidelines.

Objective 6.3 Continue to improve the environment and coherence of the existing Andros and Magnolia residential areas by continued infill of new residence facilities forming residential courtyards; by taking advantage of existing and planned open space amenities such as the Greenway edge, by minimizing vehicular circulation and surface parking obstructions in the housing environment, and by improvements to existing housing facilities.

Policy 6.3.1: The University shall study the feasibility and proforma for providing additional new student beds with the first two phases proposed for construction in the five year planning time frame in the former Andros area, the area north of Holly and between USF North Palm and USF Maple Dr. Support areas for Dining, Campus Recreation, and a small grocery facility may be included with the project.

Policy 6.3.2: The University shall vacate the section of USF East Holly Drive located between Myrtle Drive (east of Crescent Garage) and the existing small parking area just west of Maple Hall 'B' and reconfigure this roadway cross section as a pedestrian/bicycle corridor to strengthen connection between housing area north of Holly Drive and housing to the south as well as the campus at large, improve safety, and establish greater open space amenity value for existing housing along Holly Drive. (See also Element 5, *Transportation*.)

Objective 6.4 Monitor and track improved and expanded off-campus housing opportunities in close proximity to the University in order to create an integrated community.

Policy 6.4.1.The University shall:

- Monitor the supply, costs, and amenities of off-campus housing;
- Monitor factors pertaining to safety, transit utilization, pedestrian and bicycle access;
- Track the development of diverse new off-campus student and faculty oriented housing within walking, bicycling, and transit distance to the campus; and
- Promote the location of convenient service, transit, and shopping opportunities for students near campus.

Objective 6.5 Provide residential and support services commensurate with any increase in the on-campus housing stock.

Policy 6.5.1: The University shall provide enhanced support facilities for campus Housing and Student Support Service, including expansion of programs to accommodate student activities, food service, cultural events, recreation facilities, adequate residential parking, improved bicycle and pedestrian connections, large group interior and exterior gathering space, and dining in existing and/or new complexes as determined to best serve the expanded residential program.

Policy 6.5.2: The University shall endeavor to create socially active residential environments that are compatible with the campus context. Housing and Student Support Service shall be sited to maximize opportunities for visual connection and physical access to attractive campus amenities. This includes the creation of usable, pleasant outdoor spaces that are regionally appropriate in design, including frontage and views to an implemented and/or planned Greenway and campus open space system, as well as quality pedestrian and bicycle connections to campus areas.




Objective 6.6 Eliminate substandard student housing and provide necessary structural, mechanical, aesthetic and safety improvements.


Policy 6.6.1: The University shall continue to monitor the existing housing stock on-campus and continue the capital upgrading plan to eliminate or upgrade substandard units. Improvements shall be made to overcome structural, mechanical, accessibility, aesthetic and safety deficiencies. Plumbing and HVAC systems shall be inspected on a periodic basis and kept in good repair. Routine maintenance shall be conducted on campus housing facilities exterior walls, roofs, windows and doors, and interiors.

Policy 6.6.2: The University's Offices of Facilities Planning and Construction, Physical Plant, and Purchasing shall work with the Department of Housing and Residential Education and Student Support Service to develop operations and maintenance metrics for use in establishing a baseline means of determining life-cycle costing, and to provide greater efficiency in energy use, expanded recycling, and up to date green product purchasing data base.

Policy 6.6.3: The University's Office of Facilities Planning and Construction shall review all programmed Housing and Student Support Service improvements to ensure that adequate stormwater management, potable water, sanitary sewer, and solid waste facilities are in place and operational at established levels of service prior to occupancy.

**2015 - 2025 Tampa Campus
Master Plan Update**

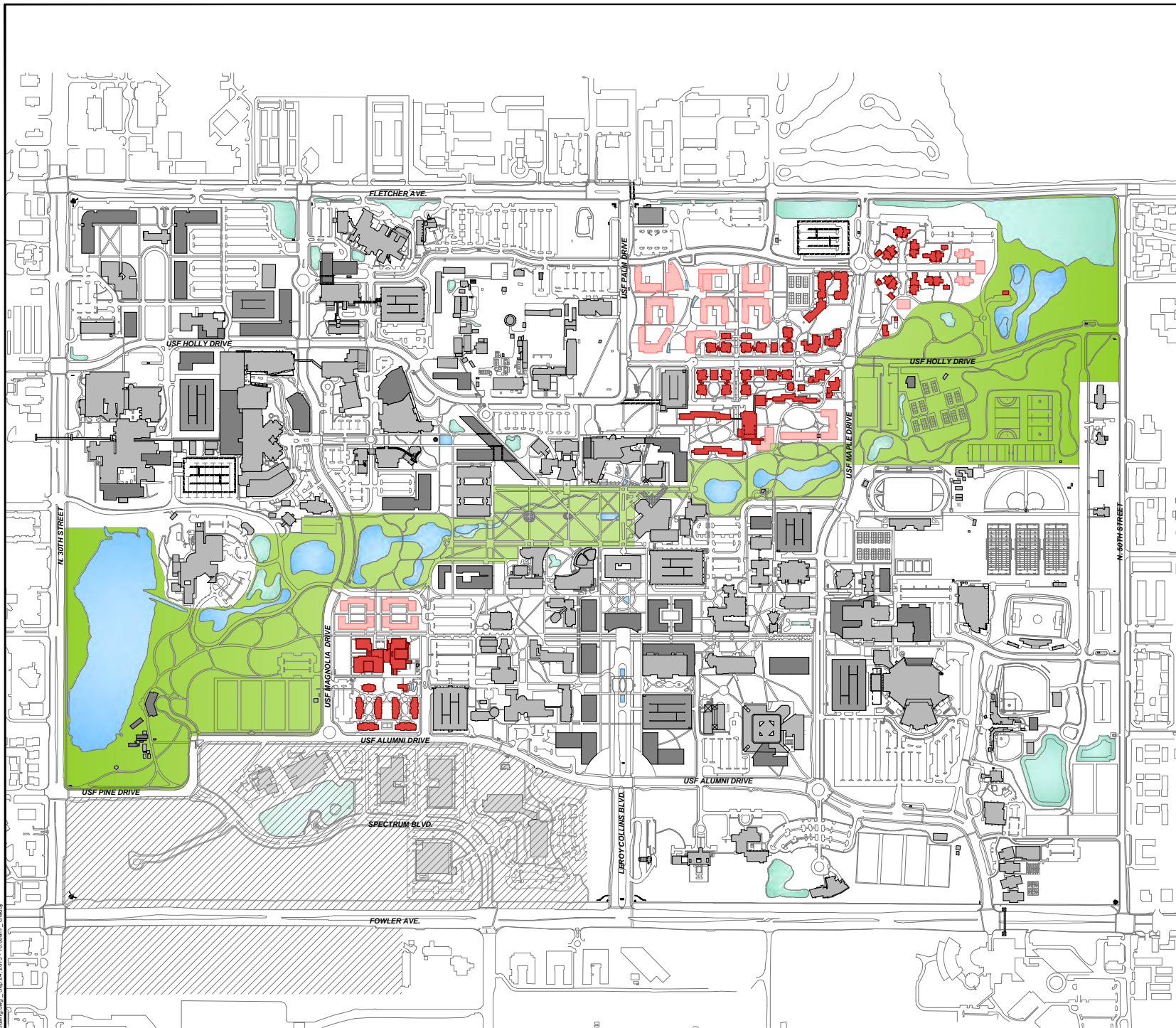
-  Housing - Existing
-  Housing - Proposed
-  Greenway

 Area Not included in
Campus Master Plan

Element 6
Housing

Figure 6-1
10 Year Plan
Housing

Date
08/21/2015



This Page Intentionally Left Blank.

Element 7 General Infrastructure and Utilities

The overarching goal of the General Infrastructure and Utilities Element is to implement systems that adequately meet the present and future needs of the University, without limiting long-term University growth. By increasing the efficiency of utility infrastructure and reducing the consumption and wasting of resources, the campus can better ensure these systems are adequate to support campus growth.

Proper management of campus resources yields specific benefits to the University. The University can create usable open space and protect natural areas by requiring new utilities to be placed within designated utility corridors, shown in Figure 7-1, Infrastructure and Utility Corridor. Stormwater systems can be modified to not only improve water quality, but also enhance the campus landscape. Reductions to energy consumption, wastewater, and solid waste generation directly reinforce the University's commitment to greenhouse gas reduction, support sustainability for the University and reduce costs. The sub-elements define specific goals, objectives, and policies that will be utilized by the University in fulfilling the 2015 Master Plan.

7.1 Stormwater Management Sub-Element

The 10-year plan for stormwater management focuses on increasing pervious area throughout the campus. In addition, the 10-year plan implements stormwater management Best Management Practices (BMPs) to improve water quality on campus and beyond in downstream waters off-campus.

Within the campus' West Basin, construction of pond 204B serves to provide additional water quality treatment prior to runoff entering Lake Behnke and serves to lower the peak stage elevation in Lake Behnke, the ditch south/east of Shriners (204C) and its future expansion. This will help reduce localized roadway flooding, currently occurring during certain storm events for areas draining to pond 204C.

In addition, a riparian way is proposed to the Central Quadrangle from MLK Plaza and the Marshall Center to a new pond southwest of Fine Arts Building, which will receive roof runoff and condensate from adjacent buildings. This feature will serve to divert runoff from entering pipe networks, lower the peak stage of Lake Behnke, improve water quality, and provide a resource for subsequent reuse while contributing aesthetic value to the Central Quad in a way that gives visibility to stormwater management and the hydrologic cycle.

Within the campus' East Basin, additional stormwater system components are to be added to address the changes in the land use. To complete the Greenway system, impervious pavement is proposed to be removed from within the Greenway and replaced with stormwater ponds and open space. Wet pond 104A-1 and future pond 104A will serve to provide the needed stormwater treatment, attenuation and flood prevention.

Goal

The Stormwater Management goal for the Tampa Campus Master Plan is to provide an adequate stormwater management system that accommodates current and future University stormwater needs.

Summary of Objectives and Policies

Objective 7.1.1: Provide a sufficient stormwater management system in a design that is consistent and enhances the overall Master Plan scheme, and strives to reduce stormwater outfall volumes.

Policy 7.1.1.1: The University shall identify the stormwater detention and greenway systems as a "no build" zone, except for recreation support facilities.

Policy 7.1.1.2: Stormwater facility improvements shall be constructed as identified on Figure 7.1-1.

Policy 7.1.1.3: The University shall coordinate through its capital improvement projects and building program to ensure that stormwater storage and conveyance pipes are located and constructed to avoid conflicts with future building programs.

Policy 7.1.1.4: The University, prior to the design and construction of any ponds within the stormwater system, shall thoroughly investigate issues including geotechnical information, regulations, and existing utilities.

Policy 7.1.1.5: The University shall continue to maintain a capacity tracking system to ensure capacity is available for the impacts of new construction.

Objective 7.1.2: Recognizing that natural drainage flows east and west from the central ridge line, appropriate considerations will be given for maintaining and protecting the natural drainage patterns and hydrological conditions.

Policy 7.1.2.1: The University shall enhance the stormwater facilities and greenway system with the following appropriate design features:

- Gradual and varied side slopes,
- Natural aquatic plant material as appropriate for the stormwater system utilized,
- Walkways/boardwalks,
- Seasonal hardwoods and native-understory plant materials, and
- Properly designed "feature" ponds that include retention liners and sufficient water volumes and aeration to maintain a healthy environment and habitat for wildlife.

Policy 7.1.2.2: Recognizing that increasing the tree canopy reduces the amount of runoff entering stormwater ponds, the University shall continue to implement an active tree planting program,

making it a priority to plant areas adjacent to roadways, surface parking lots, and other paved surface areas. To preserve the health of the University tree inventory, a Certified Arborist should be on staff for continued oversight monitoring and directives.

Objective 7.1.3: Prevent any further degradation and improve the quality of receiving waters.

Policy 7.1.3.1: The University shall implement an ongoing, regularly scheduled stormwater facility maintenance program to ensure adequate water quality and design capacity of the facilities.

Policy 7.1.3.2: The University shall continue to comply with the State’s implementation of the EPA’s National Pollutant Discharge Elimination System (NPDES) programs.

Policy 7.1.3.3: USF shall continue to construct on-site stormwater treatment systems that remove suspended solids and nutrients per Southwest Florida Water Management District standards.

Policy 7.1.3.4: The University shall mitigate University-generated stormwater impacts by minimizing or eliminating stormwater-borne pollutants through the implementation of a system of Best Management Practices (BMPs), which includes, but is not limited to:

- Incorporate stormwater management retention and detention features into the design of parks, trails, commons, and open spaces, where such features do not detract from the recreational or aesthetic value of a site.
- Use of slow release fertilizers and/or carefully managed fertilizer applications timed to ensure maximum root uptake and minimal surface water runoff or leaching to groundwater.
- Educate maintenance personnel about the need to maintain motor vehicles to prevent the accumulation of grease, oil and other fluids on impervious surfaces, where they might be conveyed to surface and ground waters by runoff.
- Regularly collect and dispose of yard debris to prevent the clogging of stormwater inlets and pipes.
- Avoid the widespread application of broad spectrum pesticides by involving only purposeful and minimal application of pesticides, aimed at identified target species.
- Coordinate pesticide application with irrigation practices to reduce runoff and leaching into groundwater.
- Use turf blocks and other pervious surface treatments to minimize impervious surface area and reduce the flow of runoff pollutants.
- Incorporate features into the design of fertilizer and pesticide storage, mixing and loading areas that are designed to prevent or minimize spillage.
- Pursue licensing for grounds superintendents and staff (or use of outside licensed contractors) to ensure proper handling and administering of restricted pesticides and to ensure that fertilizers will be selected and applied to minimize surface water runoff and leaching to ground water.

Policy 7.1.3.5: It shall be the policy of the University that increases in stormwater runoff shall not cause or contribute to a violation of water quality standards in waters of the State.

Objective 7.1.4: Coordinate and phase the increased stormwater facility capacity to meet the future needs of the University.

Policy 7.1.4.1: The University shall ensure that the detailed Stormwater Management Sub-Element will comply with the SWFWMD regulations for quantity and quality requirements established in Chapters 40D-4, 40D-40 and 40D-400 FAC.


Policy 7.1.4.2: Stormwater management facilities shall comply with the design criteria established in the USF Design and Construction Guidelines and shall be in place and operational, at established levels of service, prior to the construction of any new University improvement.

Policy 7.1.4.3: The University shall continue to evaluate and assess the existing and future system needs, as a result of proposed land redevelopment, transportation system improvements, reconfiguration of existing drainage conveyances, and improvements within the drainage basins. These engineering study efforts shall address the data and analysis requirements contained in Rules 6C-21.207(1) and (2) F.A.C., and shall also:

- Maintain that post-development rates of discharge shall not exceed pre-development rates.
- Establish priorities for replacement, correcting stormwater management facility deficiencies, and providing for future facility needs.
- Establish the timing and phasing requirements and identify the projected funding sources for stormwater management facility improvements to meet future USF needs.
- Classify existing utility corridors as no build zones. In the event the utility cannot be avoided, the Director of Facilities shall be notified.
- The University shall prioritize and correct identified stormwater system deficiencies. The University Stormwater Master Plan will be amended as needed.

Policy 7.1.4.4: The University shall annually review future construction programs and priorities for deficiency remediation as part of the capital improvements requirements and procedures to ensure capacity and capital improvements required to meet future University needs are provided when required, based on needs identified in other master plan elements.

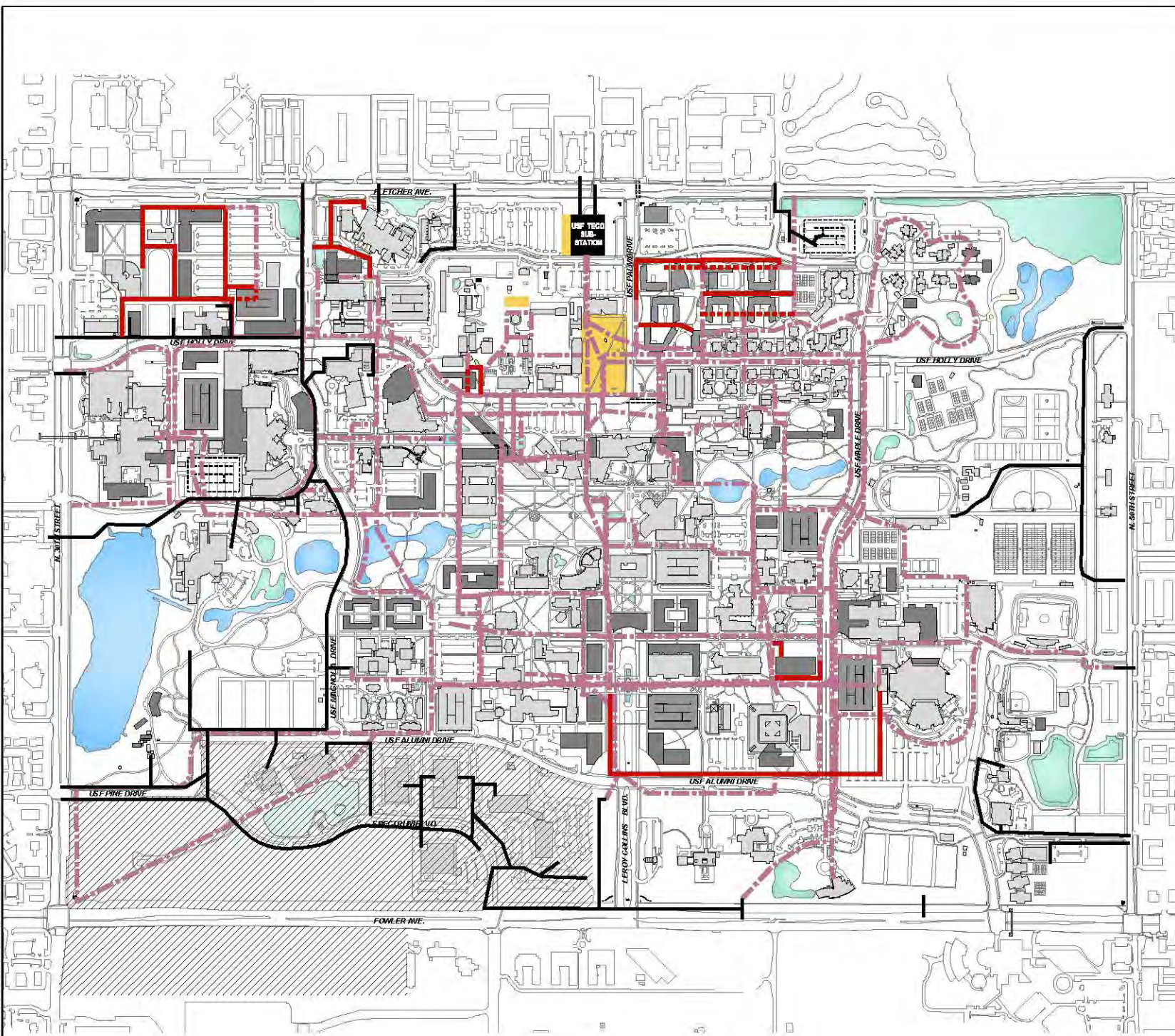
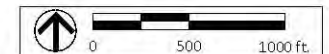
-  Utility Corridor
-  Proposed/Relocated Utility Corridor
-  Existing Utility Corridor To Be Removed
-  Existing Portable Wellfield
-  TECO Easement

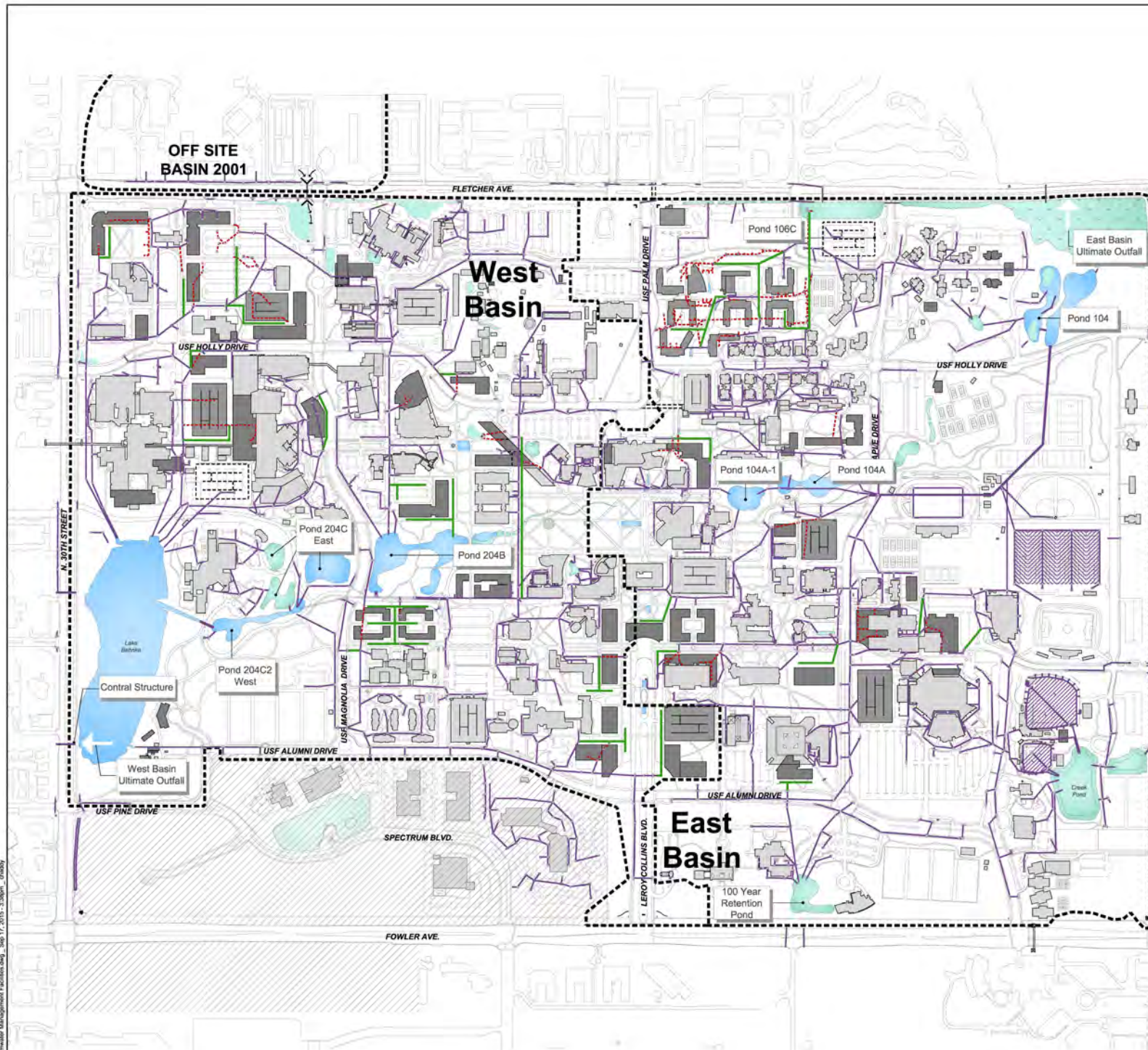
 Area Not Included in Campus Master Plan

Element 7
General Infrastructure
and Utilities

Figure 7-1
10 Year Infrastructure
and Utility Corridor Plan

Date
08/21/2015





-  Stormwater Pipes
-  Stormwater Pipes to be Removed
-  New Stormwater Pipes
-  Stormwater Collection Areas
-  Wetland Area
-  Stormbasin
-  Existing Buildings
-  10 Yr Proposed Buildings



-  Area Not Included in Campus Master Plan

Element 7
General Infrastructure

Figure 7.1-1
10 Year Stormwater
Management Plan


Date
08/21/2015



-  Permeable Area
-  Greenway

Notes

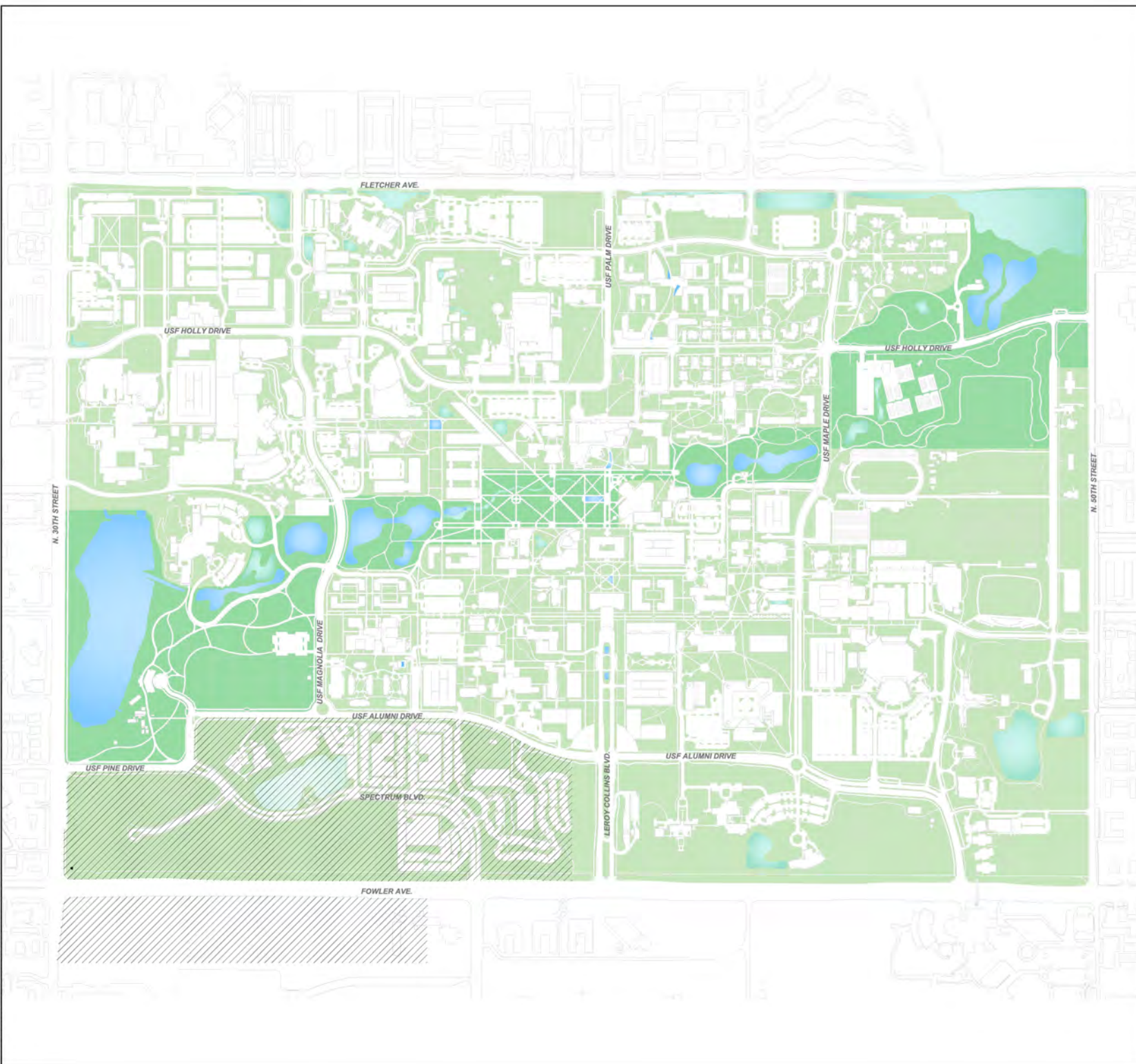
The USF Campus contains approximately 60% pervious surface, to 40% impervious surface.

-  Area Not Included in Campus Master Plan

**Element 7
General Infrastructure**

**Figure 7.1-2
10 Year Permeable Areas**

Date
08/21/2015



This Page Intentionally Left Blank.

7.2 Potable Water Sub-Element

The City of Tampa and the University agree that the University will plan to expand its service area to include the northwest corner of campus that is currently served by the City of Tampa to improve water pressure to the upper floors of existing and future buildings and improve fire flow.

Goal

The Potable Water goal for the Tampa campus plan is to provide adequate potable water and firefighting capacities and pressure that accommodates current operations and future University growth.

Summary of Objectives and Policies

Objective 7.2.1: Provide at a minimum a level of service as defined in Policy 7.2.1.1 and provide distribution and building plumbing systems to maintain these operational provisions.

Policy 7.2.1.1: The University shall establish and adopt the following level of service standards for potable water and fire flow:

- Provide a minimum a level of domestic service to the buildings of 0.16 GPM per 1,000 gross square feet of building area for general office / classroom space and 0.34 GPM per 1,000 gross square feet of building area for Housing.
- Provide adequate fire protection with a goal of 3,000 GPM for four hours.
- Maintain an operating pressure of a minimum of 40 psi throughout the building systems.
- System identified in Figure 7.2-.1 is designed to achieve and maintain these standards.

Policy 7.2.1.2: Proposed increases in consumptive uses, whether residential or non-residential, shall be approved only upon a finding that existing potable water treatment and distribution facility capacity is already on-line to accommodate the increased need, or that additional capacity will be funded and on-line when needed.

Objective 7.2.2: Provide adequate fire protection with a goal of 3,000 GPM for four hours.

Policy 7.2.2.1: The University shall provide sufficient fire protection with strategically placed fire hydrants during the construction of new facilities.

Policy 7.2.2.2: The University, in order to provide sufficient fire protection, shall install fire hydrants only on six-inch or larger water lines.

Policy 7.2.2.3: The University shall provide sufficient fire protection by maintaining sufficient water levels in the water tower for 4 hour fire flow during maximum day demand.

Policy 7.2.2.4: The University shall conduct on-site fire flow tests at least annually to verify adequacy of fire protection or identify deficiencies. The tests shall be conducted in accordance with the methodology described in the American Water Works Association Manual Number 31, entitled "Distribution System Requirements for Fire Protection" and NFPA 25. The results of such tests shall be provided to the City of Tampa Fire Department.

Objective 7.2.3: The University shall continue to implement and expand its water conservation program.

Policy 7.2.3.1: The University shall implement and promote its water conservation program as follows:

- The use of xeric landscaping materials, technology, and maintenance practices, including the maintenance or installation of selected native and environmentally fitting vegetative species, low irrigation and compact hydrazone concepts, shall be required for all new and renovated building, ancillary, and site facility construction.
- Continue to install, maintain and monitor sub-metering on existing and new facilities to document the quantity of water being consumed in the various irrigation and building facilities.
- The University shall continue to create awareness programs of water usage utilizing the information above to reduce water waste.
- Establish computerized, rain-sensitive system controls for all irrigation systems.
- Explore opportunities to coordinate with the host communities in providing a reclaimed water irrigation system, if system is extended to the University area.
- Continue to explore use of collected stormwater or other gray water sources for landscape irrigation purposes.
- Consider building greywater usage for building sanitary waste fixtures and the dual piping systems required.
- Consider air conditioning condensate and stormwater collection for new building sanitary waste fixtures. Prioritization shall be established for retrofitting existing facilities to collect condensate, on the basis of availability and proximity to a source requiring reuse water.
- Continue to require use of efficient low water volume plumbing fixtures in new and renovated University buildings.
- Strive to conduct annual water audits for monitoring consumption, leak detection, and determining necessary repairs.

Objective 7.2.4: Cooperate with the City of Tampa Water Department and other appropriate State and Federal agencies to ensure safe and sufficient water supply at a cost effective rate.

Policy 7.2.4.1: The University shall, through its capital improvements program, ensure that potable water service capacity is available to meet future potable water facility service needs as prescribed in Element 11, *Capital Improvements*.

Policy 7.2.4.2: The University shall continue to maintain the USF FPC Design and Construction Guidelines to ensure compatibility of future potable lines for ease of on-going maintenance.

Policy 7.2.4.3: The University water consumption is largely provided by on-campus wells. USF shall coordinate the provisions of any off-campus potable water facilities required to meet future University needs with the host community as described in Element 10, *Intergovernmental Coordination*. The University shall coordinate with appropriate City of Tampa officials relative to University water needs. USF shall pursue any interlocal agreements or memoranda of understanding necessary to ensure that potable water will be supplied to the campus to meet the future needs of the University, for those portions of the campus to be served by the host community.

Objective 7.2.5: Correct any existing potable water facility deficiencies and maximize its level of service where feasible.

Policy 7.2.5.1: The University shall maintain "loops" within the water system and avoid dead-end distribution lines. New water mains shall be designed to be in close proximity to existing utilities, following established utility corridors where possible, thereby minimizing impact to areas of open space.

Policy 7.2.5.2: The University shall maintain its on-going Capital Renewal program to replace deteriorated or undersized distribution mains considering eight inch diameter pipes, at a minimum, at building service interface if appropriate velocities are maintained.

Policy 7.2.5.3: The University shall, through its capital improvements program, ensure that when a project requires the relocation of potable water utilities, that those utilities be appropriately upgraded and replaced as necessary to provide service to the capital improvements programmed in Element 11, *Capital Improvements*.

Policy 7.2.5.4: The University shall investigate and ascertain presence of hazardous material such as asbestos, also known as "transite" when any existing lines (installed prior to 1980) are to be relocated, replaced or removed.

Policy 7.2.5.5: Maintain a hydraulic model of the potable water system on campus. The model should identify areas of low flow pressure. Alternatives should be developed to increase pressure to the affected areas. Areas for potential water service expansion should also be considered. The model should be updated to include the northwest service area when it is taken off City service.

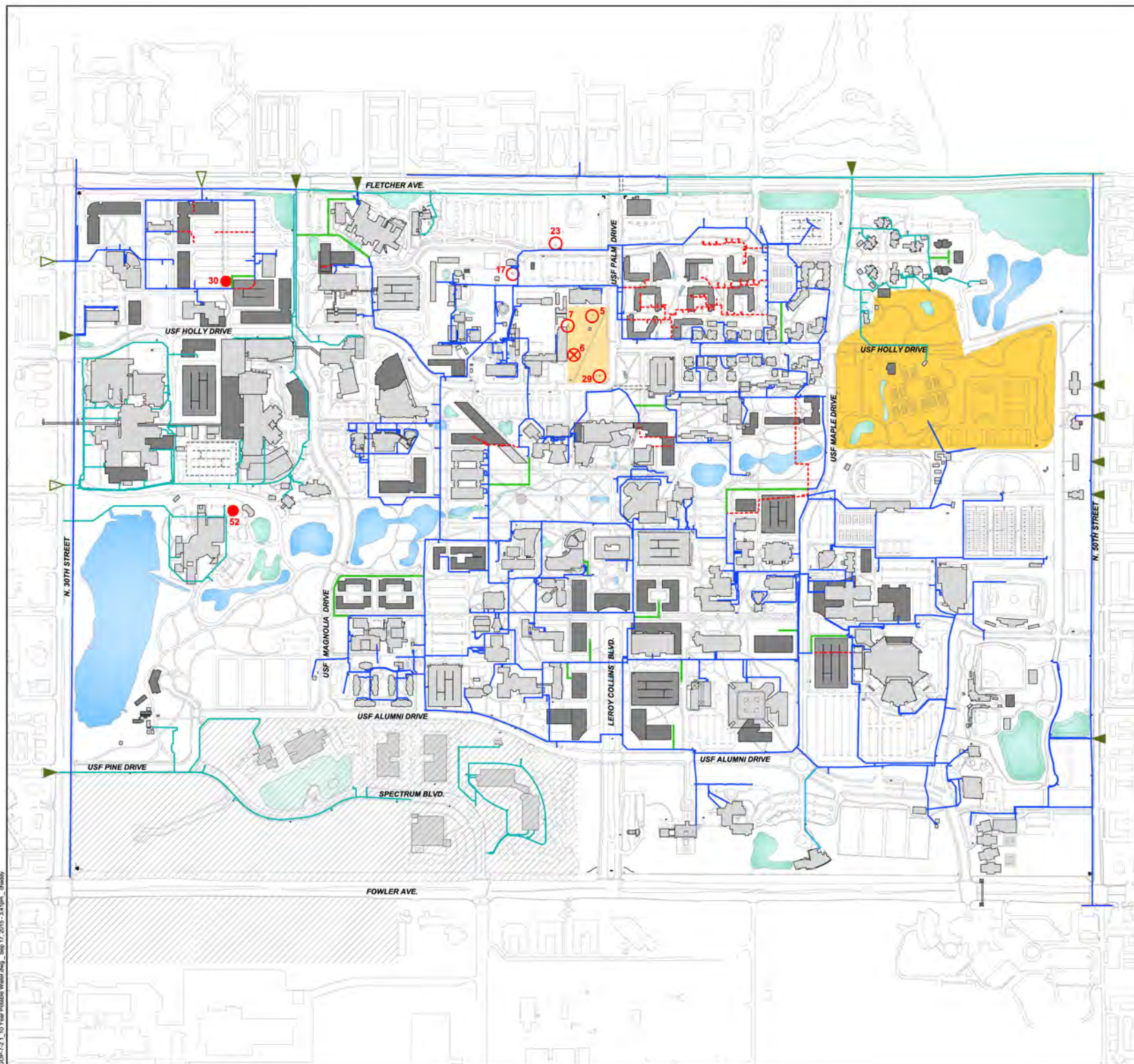
Objective 7.2.6: Protect and conserve potable water sources and facilities.

Policy 7.2.6.1: The University shall identify the new potable water corridors as "no build" zones.

Policy 7.2.6.2: The University shall identify the potable water well fields as "no-build" zones, except for certain recreation facilities.

Policy 7.2.6.3: The University shall seek additional well sources to ensure adequate un-interruptible supply. Additional wells must be permitted through Florida Department of Environmental Protection.

**2015 - 2025 Tampa Campus
Master Plan Update**



- City Supplied Water Mains
- Potable/Fire Water Mains
- Proposed Potable/Fire Water Mains
- - - Potable/Fire Water Mains to be Removed
- # Water Well (Potable/Industrial)
- ⊗ # Abandoned Water Well
- Existing Wellfield
- Future Wellfield Site
- ▲ City of Tampa Water Connection
- △ City Backup Service
- Existing Buildings
- 10 Yr Proposed Buildings
- Area Not Included in Campus Master Plan

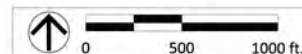
Notes

Well numbers
05, 07, 17, 23, 29, 52
also supply water to the
mechanical water system.

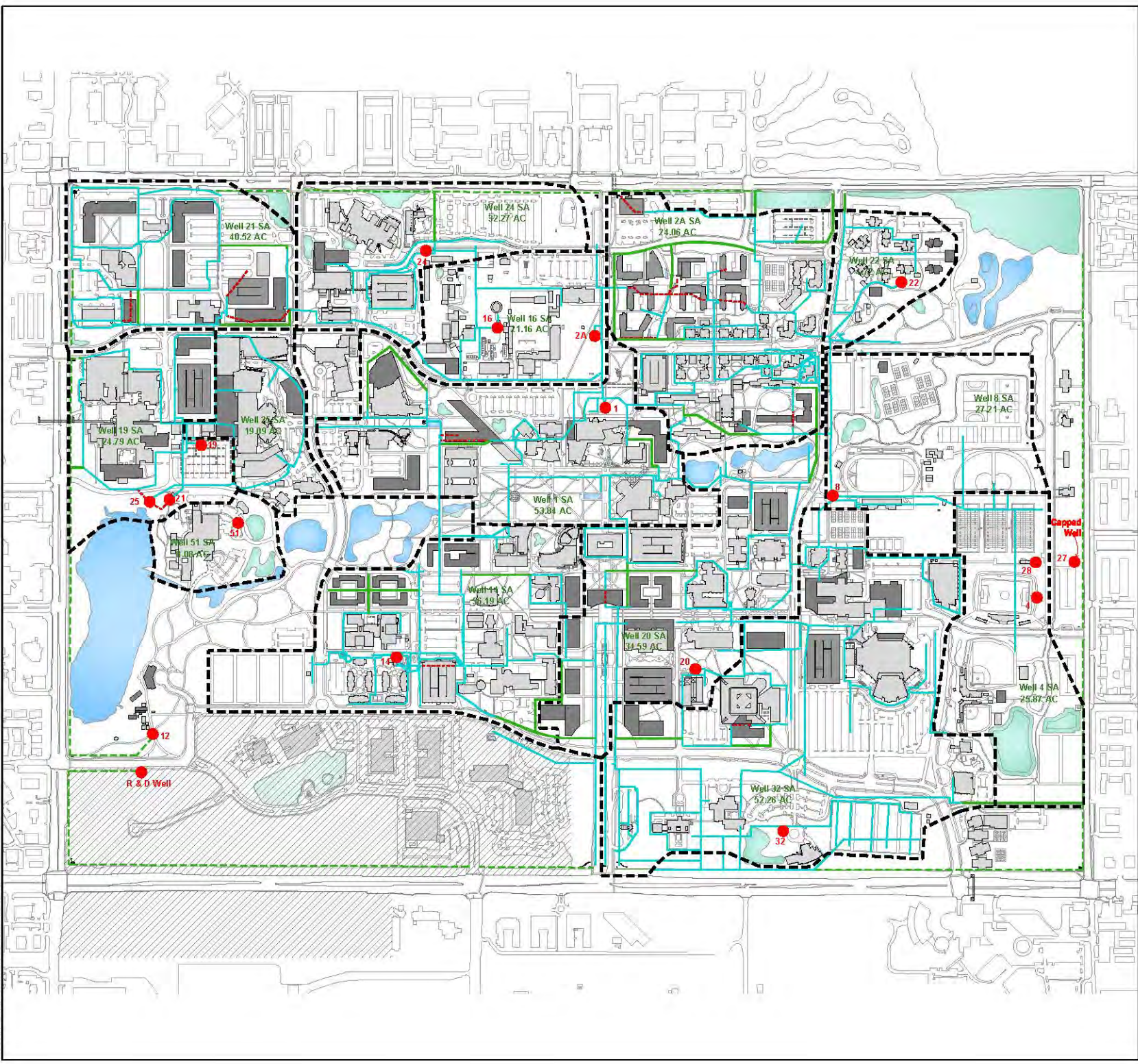
**Element 7
General Infrastructure**

**Figure 7.2-1
10 Year Potable Water Plan**

Date
08/21/2015



- # ● Irrigation Well
- Irrigation Mains
- - - Irrigation Mains to be Removed
- Proposed Irrigation Mains
- - - Proposed Campus Edge Landscape
- - - Well Service Area Boundaries
- Well # SA Well's Service Area
- Existing Buildings
- 10 Yr Proposed Buildings
- Area Not Included in Campus Master Plan



Element 7
General Infrastructure

Figure 7-2.2
10 Year Irrigation Plan

Date
08/21/2015



7.3 Sanitary Sewer Sub-Element

The University has continued to refine the operation of its campus-wide sanitary sewer system, striving to improve sewage collection capacity and delivery performance. Rerouting the force mains in the original cascading lift-station configuration into independent pump-stations service areas has improved the capacity of the existing sewage collection system. Previous capacity limitations are no longer impediments to the planned growth. Focus can now be more directed on maintaining needed capacity and operational reliability of the pump stations.

Goal

The Sanitary Sewer goal for the Tampa campus plan is to provide an adequate sanitary sewer system that accommodates the future University sanitary sewer needs.

Summary of Objectives and Policies

Objective 7.3.1: Provide for reliable and efficient collection and transmission of all wastewater generated by the University in an environmentally safe manner.

Policy 7.3.1.1: The University shall continue a preventative maintenance program to ensure existing lines and pump stations operate effectively.

Policy 7.3.1.2: The University shall periodically evaluate its pump stations to ensure redundant capacity is available.

Policy 7.3.1.3: The University shall coordinate with the host communities to ensure that off-campus sanitary sewer facilities that may be affected by additional demands are improved as appropriate in accordance with procedures identified in Element 10, *Intergovernmental Coordination*. The University shall continue to follow established procedures to coordinate with appropriate City officials relative to University sewage requirements. USF shall pursue any interlocal agreements or memoranda of understanding necessary to ensure that sanitary sewer will be supplied to the campus to meet the future needs of the University.

Policy 7.3.1.4: Proposed increases in consumptive uses, whether residential or non-residential, shall be approved only upon a finding that existing sanitary sewer treatment and collection/transmission system capacity is already on-line to accommodate the increased load, or that additional capacity will be funded and on-line at time of need.

The system identified in Figure 7.3 is designed to achieve and maintain these standards.

Objective 7.3.2: Maintain at a minimum the wastewater collection/transmission system at its present successful level of service with the implementation of the 10-year Master Plan.

Policy 7.3.2.1: The University shall ensure that the sanitary sewer master plan maintains an average daily level of service of 0.16 gallons per minute (GPM) minimum per 1,000 square feet of

building area for office/classroom space. Additionally an average daily service of 0.34 GPM minimum per 1,000 square feet of building area shall be provided for Housing.

Objective 7.3.3: Coordinate any required sanitary sewer relocation and improvement program with the implementation of the capital improvement program and Master Plan.

Policy 7.3.3.1: The University shall identify the main sanitary sewer trunk lines as "no build" zones. In the event the utility cannot be avoided, the Director of Facilities Planning and Construction should be notified for resolution.

Policy 7.3.3.2: The University shall, through its capital improvements program funding, ensure that the sanitary sewer system will be appropriately upgraded and expanded on-campus, as necessary to meet the future University needs described in Element 11, *Capital Improvements*.

Objective 7.3.4: Correct any existing and future sanitary sewer deficiencies needed to maintain a reliable level of service.

Policy 7.3.4.1: The University, through Facilities Planning and Construction and Physical Plant, shall annually review future construction programs and priorities for deficiency remediation as part of the capital improvements requirements and procedures to ensure that sanitary sewer facility improvements required to meet future University needs are in place and operational, at the adopted levels of service, prior to occupancy of any new University building.

Policy 7.3.4.2: The University shall devise and implement ongoing monitoring and evaluation activities to survey, document and assess the existing and future sanitary sewer system needs. This study shall address the data and analysis requirements contained in Rules of the Board of Governors DOG 21.207(5), and shall also:

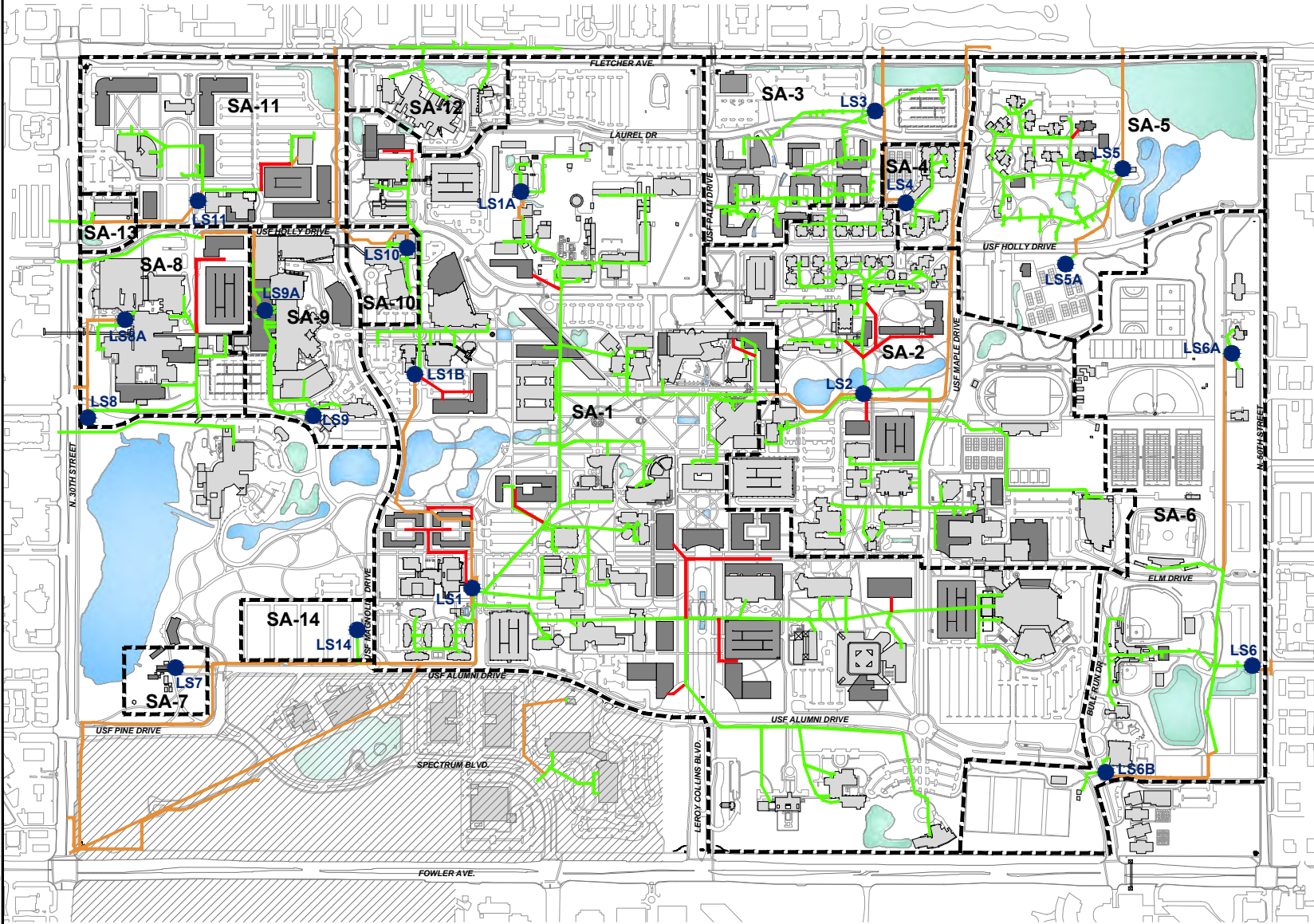
- Establish priorities for replacement, correcting sanitary sewer facility deficiencies found, providing for future facility needs, and
- Establish the timing and phasing requirements and identify the projected funding sources for sanitary sewer facility improvements determined to be needed to meet future USF needs.

Objective 7.3.5: Reduce the impacts of sewage generation.

Policy 7.3.5.1: The University shall implement, where practical, the following techniques for reducing the impacts of sewage generated on the campus:

- Utilizing low volume plumbing fixtures.
- Implementing a leak detection and repair program.
- Eliminating stormwater inflow and other nonconforming connections.

- Re-routing air-conditioning condensate drain lines from the sewer system to alternate locations (such as rain barrels, cisterns, fountains, infiltration areas, etc.).

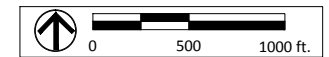


- Lift Station
- Service Area Boundary
- Sanitary Sewer Line Proposed
- Sanitary Sewer-Force Main
- Sanitary Sewer-Gravity Main
- Sewer Manhole
- Existing Buildings
- 10 Yr Proposed Buildings
- Area Not Included in Campus Master Plan

Element 7
General Infrastructure

Figure 7-3
10 Year Sanitary Sewer Plan

Date
08/21/2015



7.4 Solid Waste Sub-Element

Goal

The Solid Waste goal for the Tampa campus plan is to provide for future University solid waste collection and disposal requirements in a safe, cost-effective, environmentally sound and an aesthetically satisfactory manner.

Summary of Objectives and Policies

Objective 7.4.1: Coordinate with the City of Tampa, Hillsborough County, and other solid waste service providers in establishing an appropriate level of service for solid waste collection.

Policy 7.4.1.1: The University shall continue to assist in providing solid waste collection services for the residential and non-residential uses on campus.

Policy 7.4.1.2: The University shall establish a level of service standard for solid waste collection consistent with the Hillsborough County provision of two years of permitted landfill space at the current fill rate, plus 10 years of land under county control for purposes of solid waste.

Policy 7.4.1.3: The University shall coordinate the provision of off-campus solid waste collection and disposal facilities required to meet future University needs with the host community or appropriate service provider as outlined in Element 10, *Intergovernmental Coordination*. USF shall pursue any interlocal agreements or memoranda of understanding necessary to ensure that solid waste collection and disposal services will be supplied to the campus to meet the future needs of the University.

Policy 7.4.1.4: Specific training shall be developed and administered to all employees who handle solid waste.

Objective 7.4.2: Define procedures to reduce University-generated solid waste and increase scope of recycling and reuse programs.

Policy 7.4.2.1: The University shall continue to take steps to reduce the quantity of solid waste generated by expanding its recycling program to include additional interior and exterior, easily accessible drop-off locations. These drop-off facilities shall be installed in the individual buildings, residential areas or in other convenient locations. The University will strive to provide, at a minimum, for the recycling of paper, corrugated cardboard, glass, plastics, and metals. Awareness programs directed toward students, faculty and staff shall be included in this recycling program.

Policy 7.4.2.2: The University shall recycle and / or salvage construction, demolition and land clearing waste as practical and possible.

Objective 7.4.3: Select solid waste collection locations for convenient service while avoiding potential pedestrian conflicts and visual impacts.

Policy 7.4.3.1: The University shall establish solid waste collection locations with of aesthetic coordination considerations as well as standardized solid waste containers.

Policy 7.4.3.2: The University shall, during the design of specific building programs, evaluate the relationship of the proposed buildings with the existing buildings, and identify opportunities to reconfigure, enhance or screen solid waste collection facilities from pedestrian corridors.

Objective 7.4.4: Encourage and support proper management in the disposal of hazardous and other special wastes.

Policy 7.4.4.1: The University shall meet all State and Federal regulations in the collection and transportation of its hazardous wastes and materials.

Policy 7.4.4.2: The University shall monitor the volume and type of hazardous waste collection and temporary storage on site to determine feasibility of constructing and operating the next higher level of storage facility on campus. If such a determination is made to proceed, the University shall amend the adopted campus master plan to reflect the timing, location, and scope of such a facility.

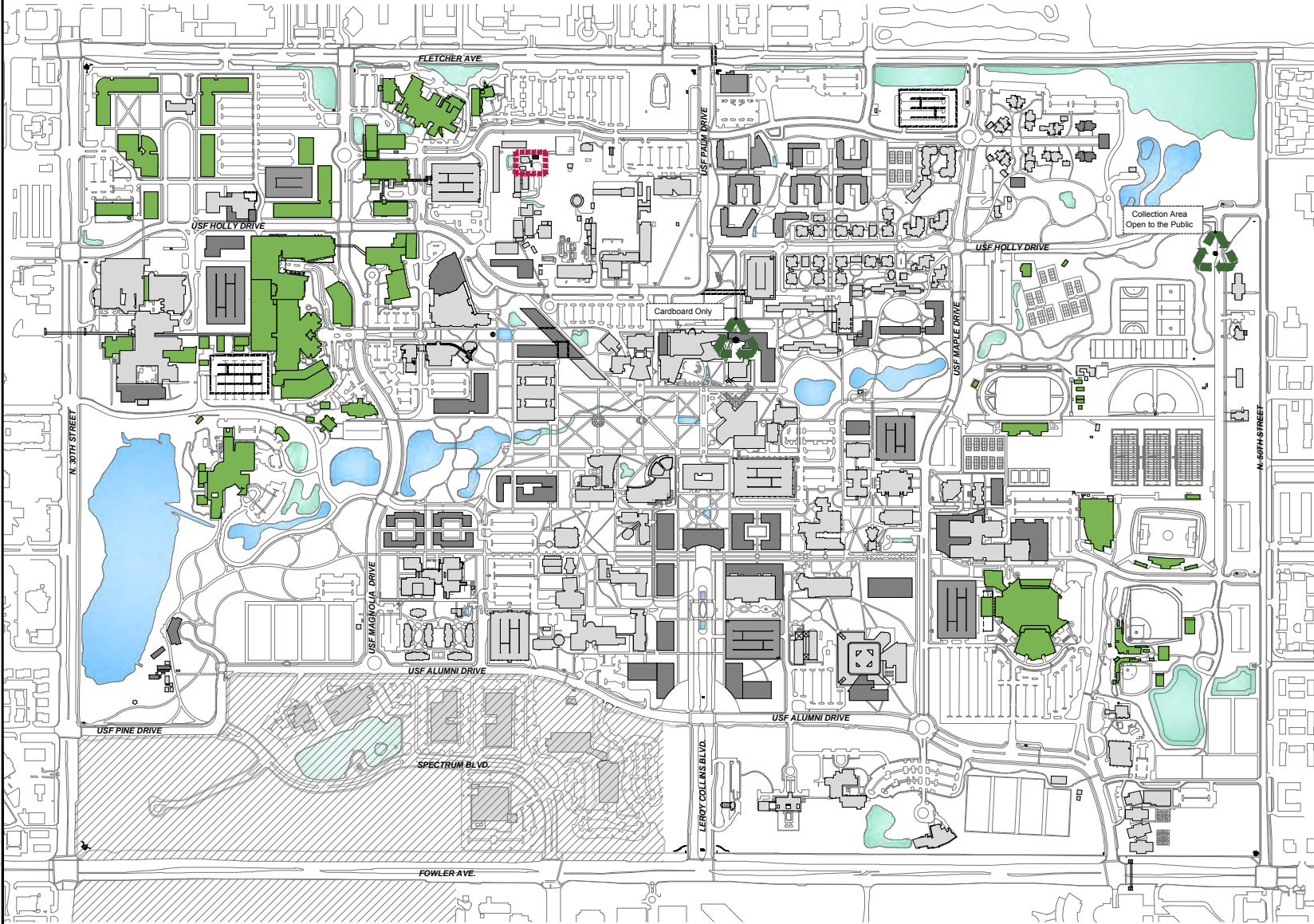
Objective 7.4.5: Establish procedures to correct any existing solid waste facility deficiencies.






Policy 7.4.5.1: The University shall ensure that solid waste collection and disposal facilities are appropriately provided and phased accordingly to meet the future University needs while correcting any disposal facility deficiencies. USF does not anticipate the need for any solid waste facility improvements at this time. If this condition changes, the University shall amend the adopted campus master plan to identify said improvements, and to establish the timing and phasing requirements and priorities for the improvements.


Policy 7.4.5.2: The University shall establish that the timing and phasing of disposal facility improvements shall be coordinated with Element 11, *Capital Improvements*.

Policy 7.4.5.3: The University shall annually review future construction programs and priorities for deficiency remediation as part of the capital improvements requirements and procedures of the Florida Board of Trustees to ensure capacity and capital improvements required to meet future University needs are provided when required, based on needs identified in other master plan elements.

**2015 - 2025 Tampa Campus
Master Plan Update**



-  Facilities Under Separate Waste Contract
-  Recycling Storage
Cardboard, Newspaper,
Glass, Plastic, Cans
-  Hazardous Waste
Storage Area
-  Existing Buildings
-  10 Yr Proposed Buildings

-  Area Not Included in
Campus Master Plan

Element 7
General Infrastructure

Figure 7-4
10 Year Waste
Management Plan

Date
08/21/2015



This Page Intentionally Left Blank.

7.5 Hot Water Sub-Element

Existing facilities will not provide sufficient boiler capacity to serve the ten year growth demand for hot water. Currently the majority of the hot water originates from the Central Plant. Additional hot water generation capacity will be required to support future growth; however, it is not viable to add boiler capacity in the Central Plant. Therefore, hot water generation capacity necessary to support future growth will need to be furnished by either the excess Central Plant capacity, future heating plants or heating equipment integral to the new buildings. The solution will need to be evaluated case by case based on the location of the new load and the existing utility excess capacity within its vicinity. A future heating plant consisting of parallel condensing boilers may be a viable consideration in the later part of the ten year plan, as necessary to offset portions of the Central Plant load. Refer to Figure 7-5 10 Year Heating Hot Water Plan showing the Heating Plants and main underground distribution Hot Water piping utilities.

As a signatory of the American College and University Presidents' Climate Commitment, the University has established goals for becoming carbon neutral by 2070. Improvements in the efficiency of the steam and hot water systems will have a direct impact on the greenhouse gas performance of the campus. While improvements in system efficiencies and greater utilization of existing systems and resources will allow the campus to meet near term benchmarks, long term goals will require demand side management strategies to reduce the demand as the greatest opportunity for greenhouse gas reduction is to eliminate or reduce the demand for the resource.

Goal

The Hot Water Sub-Element goal of the Tampa campus is to provide adequate heating in the most cost effective manner while providing for flexibility in the growth of the campus and limiting the generation of greenhouse gas emissions.

Summary of Objectives and Policies

Objective 7.5.1: Based on Life Cycle Cost Analysis, and if cost effective, phase out the existing Central Plant heating equipment and underground hot water pipe distribution system as existing facilities are renovated.

Policy 7.5.1.1: The University shall install hot water generation facilities to support future expansion in the southeast portions of campus. The anticipated five year Capital Improvement Plan (CIP) designated for growth in the Southeast quadrant of Campus should include high efficiency hot water generation systems integral to the respective new buildings. It is anticipated that the Central Plant capacity will be near its full design capacity toward the later part of the next ten years. At that point, the proposed Southeast Hot Water generation plant may need to be constructed to serve the southeast portions of campus in order to offset the Central plant load. Significant additional distribution main piping will be required to convey heating hot water commensurate with the facility growth in the Northwest portions of Campus.

Policy 7.5.1.2: The University shall evaluate methods to use waste heat recovery to reduce consumption of hot water. If any of these methods are demonstrated to be cost effective or

otherwise feasible, the adopted campus master plan shall be amended as needed to reflect their implementation.

Policy 7.5.1.3: The University shall prepare a study that evaluates the possible benefits of decentralizing the hot water system.

Policy 7.5.1.4: The University shall implement energy conservation measures to reduce the hot water load demand and use of high efficiency heating gas-fired equipment.

Policy 7.5.1.5: The University shall continue to pursue the possibility of heat waste recovery program from placing an electric utilities co-generation plant in the campus to supplement heating plant load demand. A study to assess the feasibility of this has been completed and submitted to the University. University will revisit and update the Cogeneration Study in respect to campus growth and utility rates.

Policy 7.5.1.6: The University shall evaluate use of heat pump chiller technology as a cogeneration option. Heat pump chiller technology is in fact a type of cogeneration as chilled water and hot water are produced simultaneously and eliminates water consumption associated with cooling towers used as part of traditional chilled water generation.

Objective 7.5.2: Provide hot water, steam or electric resistance heating plants and/or components for each new or renovated facility.

Policy 7.5.2.1: The University's Facilities Management Office will be responsible for reviewing all proposed development projects to ensure that adequate hot water capacity exists.

Policy 7.5.2.2: Proposed increases in hot water use, whether residential or non-residential, shall be approved only after finding that existing hot water distribution capacity is already on-line to accommodate the increased need, or that additional capacity will be funded and on-line at the forecasted time of need.

Objective 7.5.3: Provide sufficient hot water to correct existing deficiencies and to meet the future needs of the University.

Policy 7.5.3.1: The University shall implement hot water improvements as identified on Figure 7-5-10 Year Heating Hot Water Plan. The timing and phasing requirements for these improvements are established in Element 11, *Capital Improvements*.

Policy 7.5.3.2: The University shall establish and adopt a level of service standard for hot water which provides and maintains a range of 140-180 degrees °F hot water supply temperature to meet building heating demands. The guideline has been set to establish a 30°F temperature differential. Plant leaving heating hot water temperatures may be reduced down to 160°F during the off season and reduce temperature differential down to 20°F. Currently the hot water supply is controlled and maintained within a range of 140 - 160 degrees F. Adjustments are made between the stated range to optimize efficiency and operational requirements.

Policy 7.5.3.3: Hot water facility improvements shall be implemented based on the following priorities:

- Elimination of existing system deficiencies;
- Maintaining the existing system;
- Expanding the system to accommodate new hot water needs; and
- Develop and plan a program to replace aging Rickwell hot water piping with non-corrosive material in the northwest quadrant and the center core of the campus.

Policy 7.5.3.4: The University shall refurbish and add isolation shut off valves and service valves in the heating hot water distribution loop to allow a continuous supply of hot water in other areas of the campus when piping leakages occur.

Policy 7.5.3.5: The University shall evaluate possible ways to preserve the life service of existing heating hot water piping by providing corrosion protection to all underground heating hot water piping distribution systems.

Policy 7.5.3.6: The University shall develop heating hot water hydraulic piping modeling to simulate the actual hot water flow rate condition of the existing distribution system and identify the present and future pumping deficiencies.

Policy 7.5.3.7: The University shall update and maintain complete verified hydraulic models for the modifications and expansions of the piping system throughout the campus.

Policy 7.5.3.8: The University shall develop and implement non-destructive testing procedures and practices to evaluate the status of existing underground piping systems. The University standard practice includes adding and maintaining corrosion inhibitors to the water circulating through the hot water distribution system in order to preserve the interior surface of the piping system life service.

Policy 7.5.3.9: The University's Facilities Management Office shall meter hot water loads to implement load management and load history for planning and conservation measures.

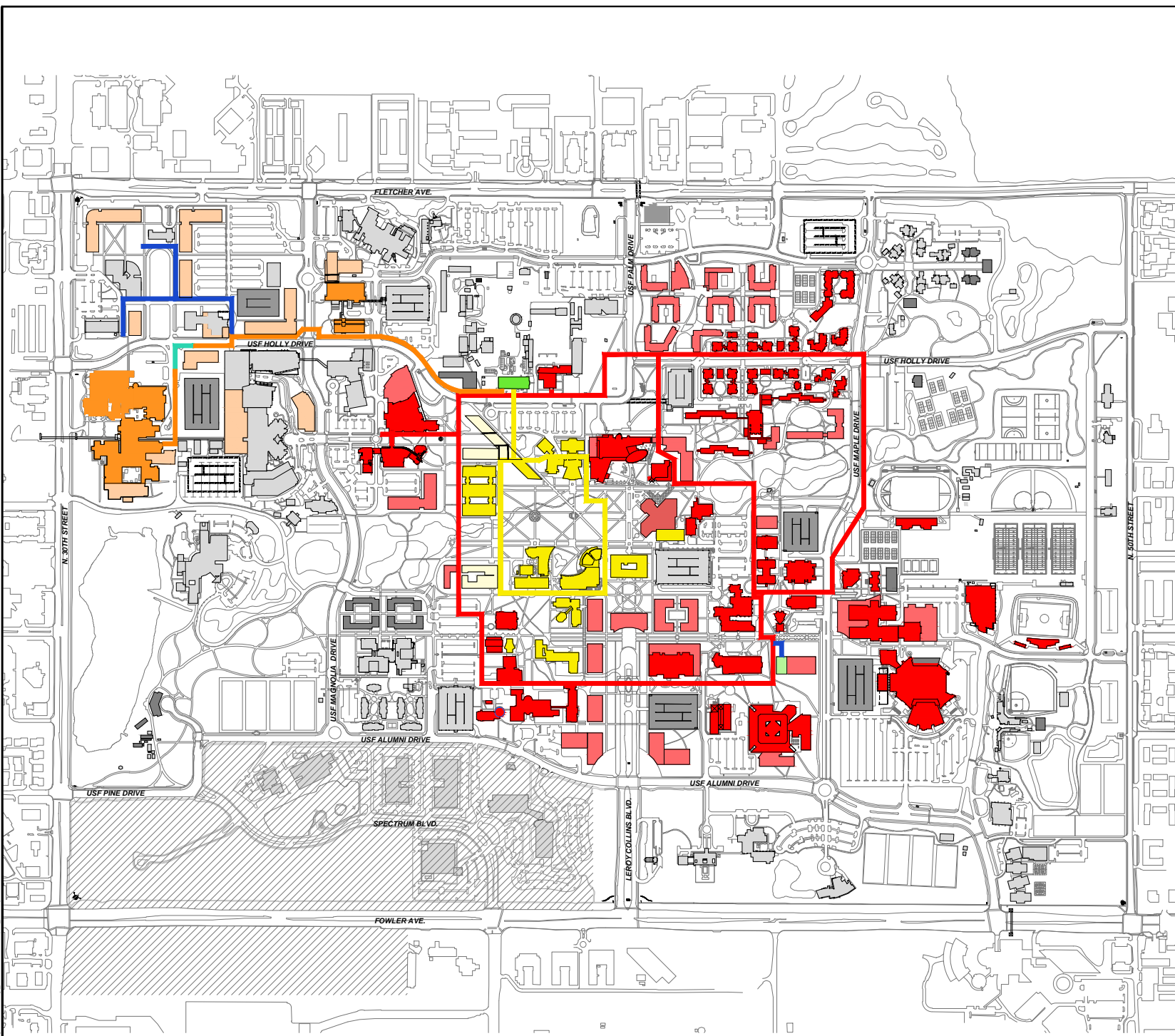
Policy 7.5.3.10: The University shall implement energy conservation measures to reduce the hot water load demand and use of high efficiency gas fired heating equipment.

Policy 7.5.3.11: The University shall continue to evaluate the possibility of implementing a waste heat recovery program by placing an electric utilities co-generation plant in the campus to supplement heating plant load demand.

Policy 7.5.3.12: The University shall develop a plan to implement LEED based projects to promote less energy use and thereby reduce the electric and fossil fuel demand.

Policy 7.5.3.13: The University shall pursue opportunities in clean fuel options (natural gas, synthetic gas, propane, etc.) and eliminate use of electric heat in existing facilities and new construction.

**2015 - 2025 Tampa Campus
Master Plan Update**



- District Plants
- Central Hot Water Loop
- East/West Hot Water Loop
- Medical Hot Water Loop
- Proposed 10" Hot Water Line
- Proposed 16" Hot Water Line
- Existing Buildings
- 10 Yr Proposed Buildings
- Area Not Included in Campus Master Plan

Element 7
General Infrastructure

Figure 7-5
10 Year Heating Hot
Water Plan

Date
08/21/2015



This Page Intentionally Left Blank.

7.6 Chilled Water Sub-Element

Additional chilled water plant capacity will be required to serve the future growth projected in the 2015 Master Plan Update. The Plan recommends expansion of the Southeast Plant to 6,900 tons in the next five years Capital Improvement Plan (CIP) and potentially up to the full design capacity of 11,500 tons within the next ten years. Significant additional distribution main piping is required to convey chilled water commensurate with the facility growth in the South Central and Southeast portions of Campus. The Northwest Plant will need to be expanded to 8,750 tons in the next five year CIP and potentially up to 10,500 tons capacity. The Central Plant should be expanded to 13,800 tons capacity tons within the next ten years. Significant additional distribution main piping is required to convey chilled water commensurate with the facility growth in the Northwest portions of Campus. Refer to Figure 7-6 10 Year Chilled Water Plan showing the Chilled Water Plants and main underground distribution Chilled Water piping utilities.

The significant growth projections and requirement for increased chilled water capacity will result in newer, more efficient chilled water plants and provides the University with an opportunity to preferentially load the plants with the most efficient equipment. While the growth will result in greater energy and water consumption and impact on the environment, these factors can be mitigated through selection, installation, and thoughtful operation of the systems.

As signatory of the American College and University Presidents' Climate Commitment, the University has established goals for becoming carbon neutral by 2070. Improvements in the efficiency of the chilled water systems will have direct impact on the greenhouse gas emissions performance of the campus. While capitalizing on greenhouse gas emissions reduction opportunities at the chilled water plants will allow the campus to meet near term benchmarks, long term goals will require demand side management strategies to reduce the demand, as the greatest opportunity for greenhouse gas emissions reduction is to eliminate or reduce the demand for the resource.

Goal

The Chilled Water Sub-Element goal of the Tampa Campus Master Plan is to provide an adequate chilled water service to the campus facilities in the most cost efficient manner that will support future expansion while limiting the generation of greenhouse gas emissions (GHG).

Summary of Objectives

Objective 7.6.1: Expand the Southeast chilled water plant to a thermal capacity level of 11,500 tons.

Policy 7.6.1.1: The Energy Models and Load Calculations shall be used to determine the amount of chilled water. Equipment selection and energy conservation measures will be evaluated based on life cycle cost analysis.

Policy 7.6.1.2: Chilled water facility improvements shall be implemented based on the following priorities:

- Expand the system to accommodate new chilled water needs.
- Consideration given to heat pump chiller technology for simultaneous chilled and hot water generation.

Objective 7.6.2: Campus Utility Plant facilities shall expand to accommodate the future new and renovation of facilities in USF Health and the NW quadrant of campus

Policy 7.6.2.1: The University shall require that the current Chilled/Hot Water Master Utility Plan be modified based upon the amount of chilled water required for each new and/or renovated facility. The adopted campus master plan shall be amended as needed to incorporate any new chilled water requirements.

Policy 7.6.2.2: The University shall implement chilled water improvements as identified on Figure 7-6 10 Year Chilled Water Plan. The timing and phasing requirements for these improvements are established in Element 11, *Capital Improvements*.

Policy 7.6.2.3: No outside sources from either private or public facilities will be required for chilled water production because all chilled water originates from within the campus.

Policy 7.6.2.4: The University shall establish and adopt a level of service standard for chilled water which provides and maintains a maximum of 45 degrees chilled water supply temperature at a minimum pressure of 60 psig to meet building cooling demands.

Policy 7.6.2.5: The University's Facilities Planning and Construction and Physical Plant Department will be responsible for reviewing all proposed development projects to ensure that adequate chilled water capacity exists.

Policy 7.6.2.6: Proposed increases in chilled water use, whether residential or non-residential, shall be approved only after finding that existing chilled water distribution capacity is already on-line to accommodate the increased need, or that additional capacity will be funded and on-line at the forecasted time of need.

Policy 7.6.2.7: The University shall continue to adhere to its policy for replacing ozone-depleting refrigerants with environmentally safe refrigerants.

Policy 7.6.2.8: The University shall continue to grow the Northwest satellite plant to meet the ongoing demands of the entire Northwest quadrant. Projected 10 year planning period future loads will require capacity expansion to 10,500 tons.

Policy 7.6.2.9: The University shall develop and implement a campus utility load profile for chilled water peak demand to determine the campus diversified peak load factor and establish firm capacity of the existing chiller plants that will be essential in accommodating future campus growth.

Policy 7.6.2.10: The University shall set and implement an N+1 redundancy strategy to maintain the plants firm capacity criterion such that the failure of the single largest chiller will maintain 100% of the chilled water demand.

Policy 7.6.2.11: The University shall evaluate possible ways to preserve the life service of existing chilled water piping by providing corrosion protection to the underground chilled water distribution system. The University standard practice includes adding and maintaining corrosion inhibitors to the water circulating through the chilled water distribution system in order to preserve the interior surface of the piping system life service.

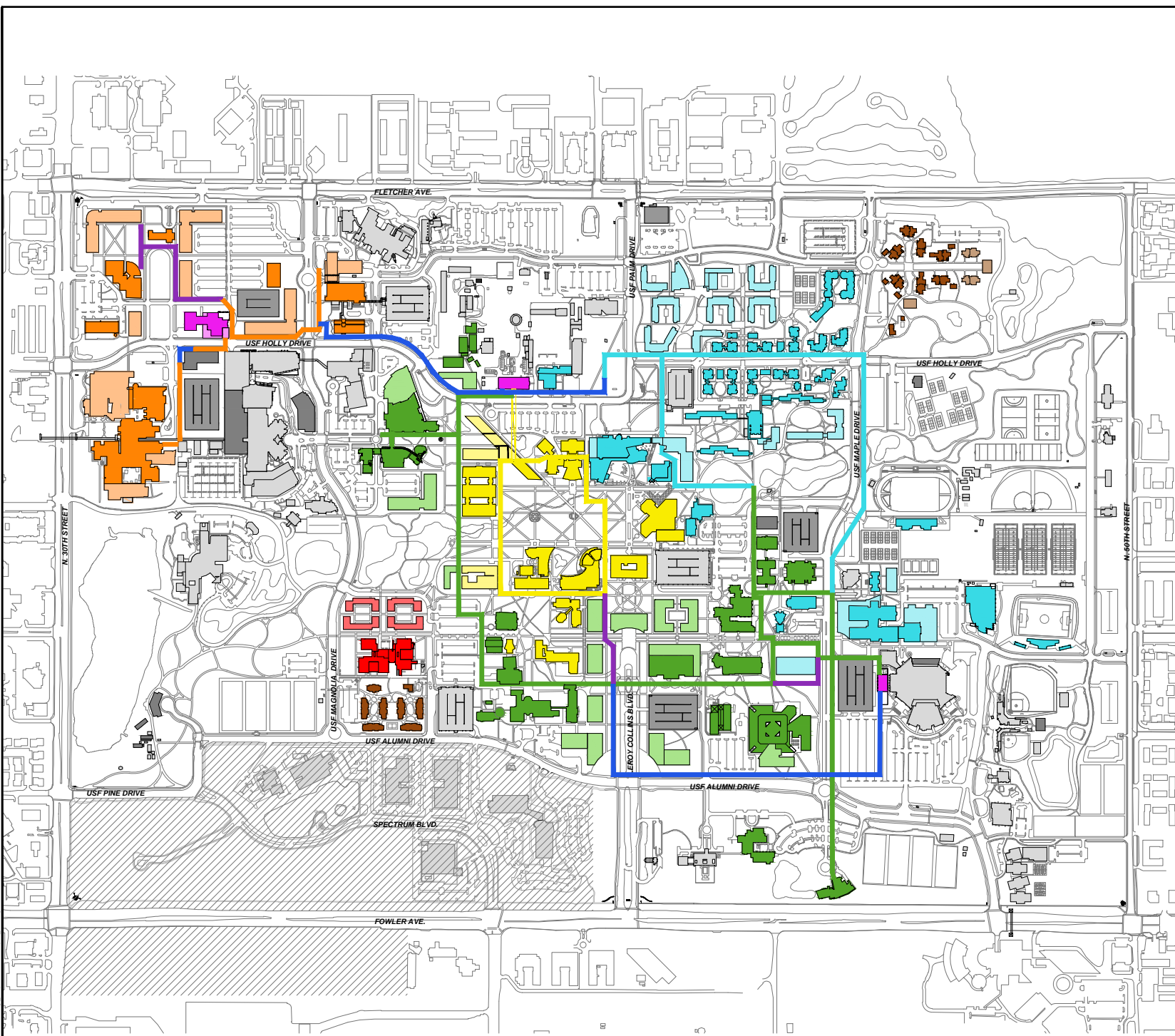
Policy 7.6.2.12: The University, through Facilities Planning and Construction, shall develop and maintain a NW satellite plant chilled water hydraulic piping model to simulate the actual chilled water flow rate condition of the existing distribution system and identify the present and future pumping deficiencies.











Policy 7.6.2.13: The University, through the Offices of Facilities Planning and Construction and Physical Plant, shall maintain complete verified hydraulic models for the modification and expansion of the piping system throughout the campus.

Policy 7.6.2.14: The University shall develop and implement non-destructive testing procedures and practices to evaluate the status of existing underground piping systems.

Policy 7.6.2.15: The University, through the Office of Physical Plant, shall meter chilled water loads to implement load management and load history for planning and conservation measures.

**2015 - 2025 Tampa Campus
Master Plan Update**



-  District Plants
-  14" Chilled Water Loop
-  18" Chilled Water Loop
-  24" Chilled Water Loop
-  Northwest Loop
-  Dedicated Air Cooled Chiller
-  DX System
-  Proposed 24" Chilled Water Line
-  Proposed 16" Chilled Water Line
-  Area Not Included in Campus Master Plan

Element 7
General Infrastructure

Figure 7-6
10 Year Chilled Water Plan

Date
08/21/2015



7.7 Electrical Power and Other Fuels Sub-Element

The principal 10-year goal for the Electrical Power and Other Fuels Sub-Element is to improve the existing electric utilities and add electric utilities to adequately meet present and future needs of the University.

As signatory of the American College and University Presidents' Climate Commitment, the University has established goals for becoming carbon neutral by 2070. The University shall continue to implement energy conserving standards and policies, and continue researching opportunities to diversify its energy sources between purchased utility company electricity and renewable energy production.

Goal

The Electrical Power and Other Fuels Sub-Element goal for the Tampa Campus Master Plan is to provide adequate, reliable, and cost effective electrical service to support campus operations and expansions through the next 10 year planning period.

Summary of Objectives

Objective 7.7.1: Update and implement design and construction standards to establish the levels of service and installation required to ensure that adequate, reliable, and cost effective electrical service is provided to future and rehabilitated facilities.

Policy 7.7.1.1: The University shall implement electrical energy system improvements as described in this sub-element or as identified on Figures 7.7.1 and 7.7.2. The timing and phasing requirements for these improvements are established in Element 11, *Capital Improvements*.

Policy 7.7.1.2: The University shall develop a phasing schedule for upgrading the existing electric power supply capacity and distribution system to meet University needs when required. The Campus Master Plan shall be amended as needed to reflect any changes to the timing and phasing requirements.

Policy 7.7.1.3: The University shall hold meetings with TECO representatives to negotiate the terms and conditions under which TECO provides service to the University.

Policy 7.7.1.4: The University shall include TECO participation in all modifications to the master plan and in planned expansion programs to ensure adequate electrical service will be available when needed.

Policy 7.7.1.5: The University shall require life cycle cost analysis for new and major renovated facilities to determine whether natural gas and/or electricity will be the source for appliances and heating.

Objective 7.7.2: Continue to reduce energy losses in the USF owned distribution system and in USF-owned and operated facilities.

Policy 7.7.2.1: The University shall continue to study the use of alternative energy sources (e.g., solar power, co-generation, on-site generation for peak demand shaving, etc.).

Policy 7.7.2.2: The University shall continue the use of energy efficient lighting fixtures, electronic ballasts, high lumen efficiency lamps, and LED fixtures in all new and renovated buildings and shall continue to implement upgrades as technology evolves and funding is available.

Policy 7.7.2.3: The University shall continue the use of infrared survey equipment for preventive maintenance of primary electrical distribution equipment to improve service reliability.

Policy 7.7.2.4: The electrical design of all future building construction shall be designed to achieve at minimum a Silver LEED rating.

Policy 7.7.2.5: The University shall continue to improve the reliability of the 13.2 kV underground system by selectively replacing aged power transformers, switchgear, power cables, and refurbishing manholes.

Policy 7.7.2.6: The University shall continue to identify energy conservation opportunities to reduce greenhouse gas emissions and reduce the load on existing feeders to allow additional capacity for future buildings.

Policy 7.7.2.7: The University shall consider a demand control strategy using existing metering instrumentation available throughout campus to reduce the overall campus electrical demand.

Objective 7.7.3: Continue to update a computerized data based load tabulation of electric power requirements, for existing facilities and for new buildings proposed in the master plan, which can be upgraded for changes on as needed or programmed basis.

Policy 7.7.3.1: The University shall continue to require that a report be submitted for each new and/or renovated facility indicating the anticipated electrical consumption and service size.

Policy 7.7.3.2: The University shall continue to require that the campus electrical power distribution system be modified to meet the electricity demands created by the renovated and/or new facilities.

Policy 7.7.3.3: The University's Facilities Management Office shall continue to be responsible for reviewing all proposed development projects to ensure that adequate electrical energy capacity exists.

Policy 7.7.3.4: Proposed increases in electrical energy use shall continue to be approved only after confirming the existing electrical distribution system has adequate capacity, or that additional capacity will be funded and on-line at the forecasted future time of need.

Objective 7.7.4: Limit the expansion of the University-owned electrical distribution system to within the boundaries established by USF. (See Figures 7-7.1 and 7-7.2.)

Policy 7.7.4.1: Electrical system improvements shall be implemented based on the following priorities:

- Maintaining the existing system; and
- Expanding the system to accommodate new electrical energy needs.

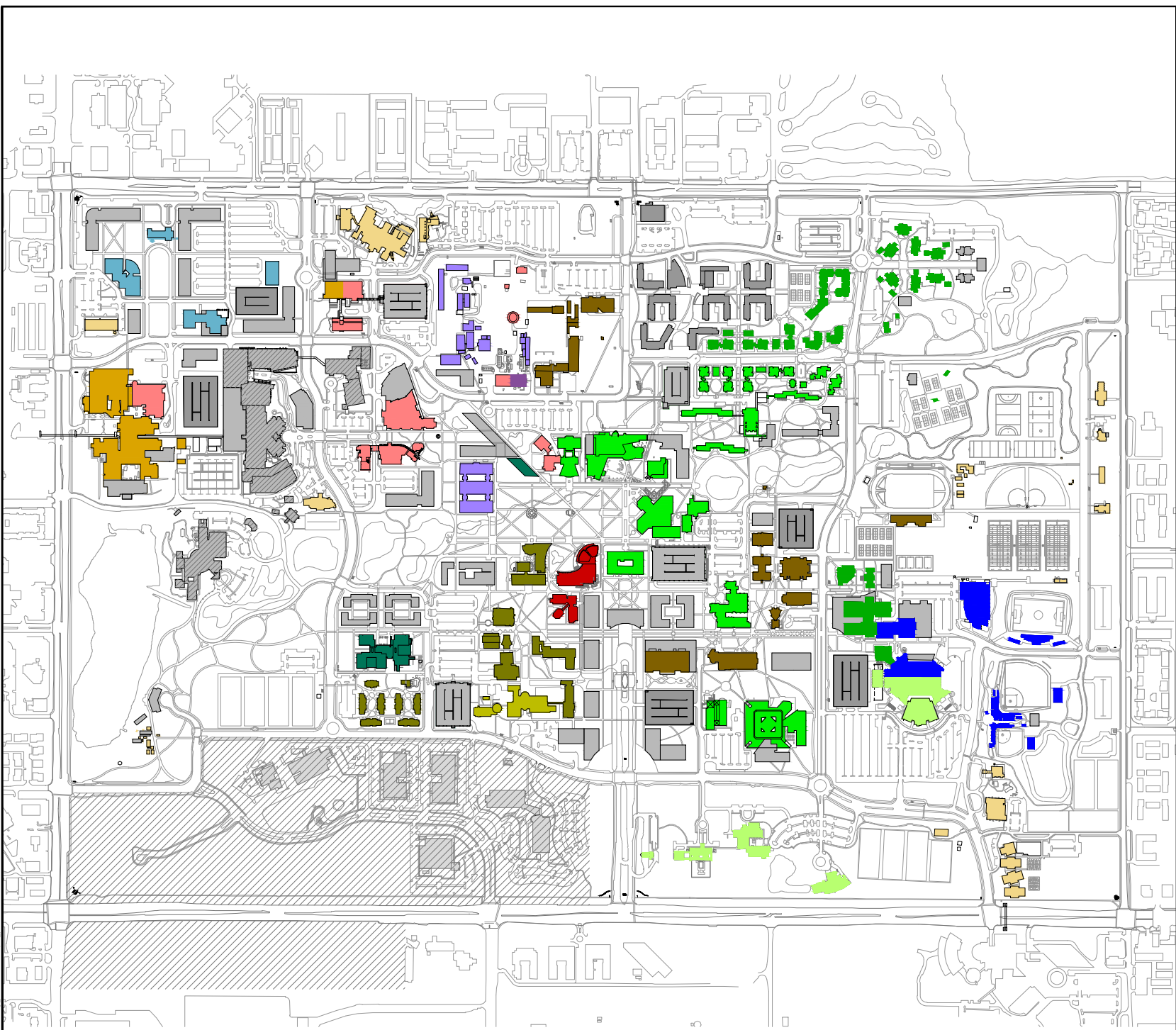
Objective 7.7.5: Inventory of emergency generators on the campus.

Policy 7.7.5.1: The University shall keep an updated inventory of emergency generators on campus.

Objective 7.7.6: Develop a means or standard for the assessment of disaster preparedness in existing and future buildings.

Policy 7.7.6.1: The University shall determine the potential risk, liability and economic impact of long term power outages for existing and new buildings.

Policy 7.7.6.2: The University shall assess the environmental exposure of electrical service equipment for worst case weather scenarios.



USF/TECO Substation Feeders

- F-131A
- F-131B
- F-132A
- F-132B
- F-133A
- F-133B
- F-134A
- F-134B
- Unknown
- Not in Scope

TECO Primary Services

- Moffit
- West Holly
- Magnolia
- 50th Street
- Fowler

TECO Secondary Services

- Standard Secondary Service
- Areas Not Included in Campus Master Plan

**Element 7
General Infrastructure**

Figure 7-7.1
10 Year Electrical

Date
08/21/2015



**USF / TECO
Substation Feeders**

- F131 / 13833
- F132 / 13834
- F133 / 13369
- F134 / 13368
- Not in Scope

**USF / TECO Perimeter
Feeders (Substation)**

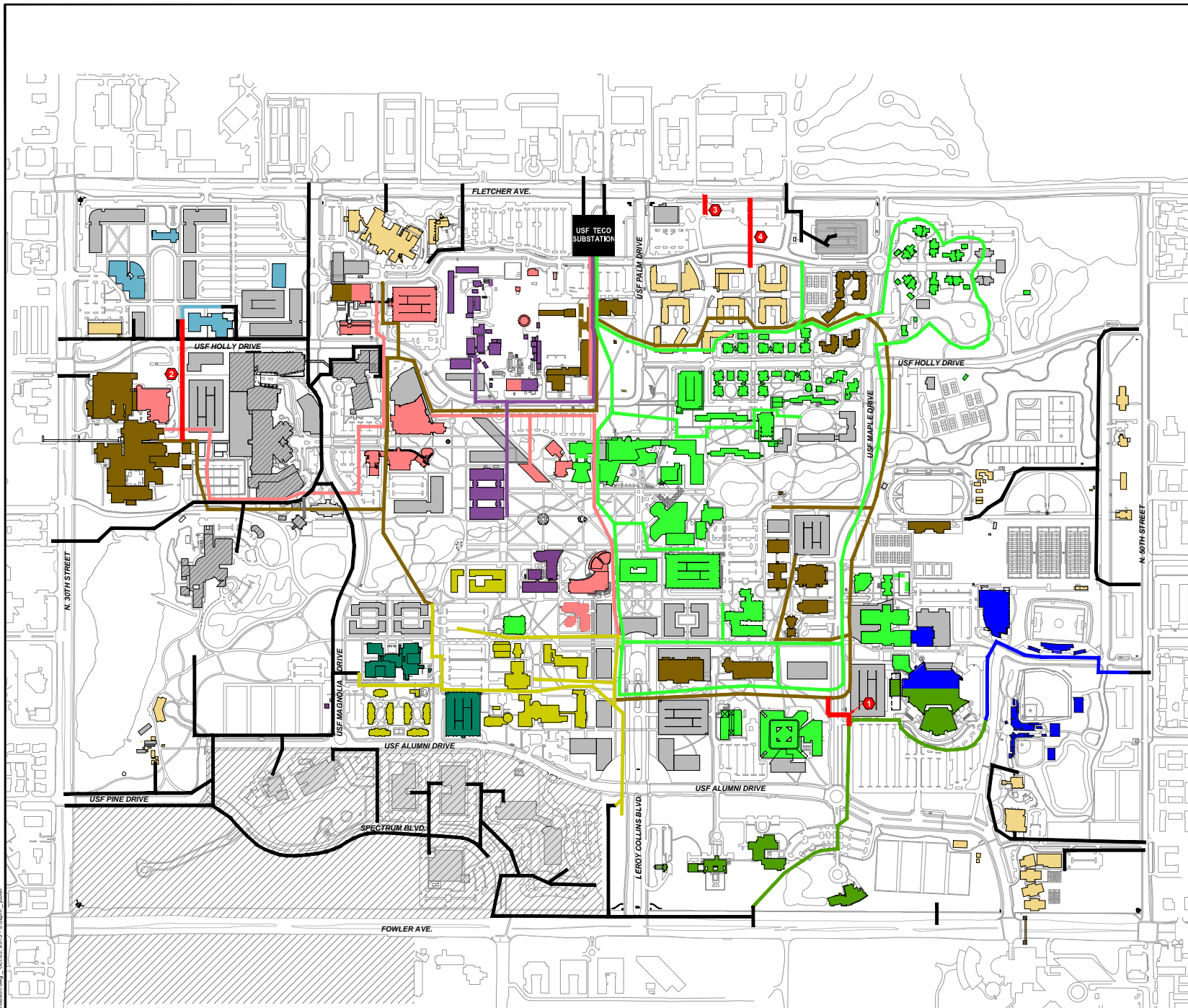
- 50th Street / 13051
(46th Street)
- JPH / 13497
(46th Street)
- Fowler / 13498
(46th Street)
- BBD / 13355
(27th Street)
- Leroy Collins / 13498
(46th Street)
Perimeter Feeder

- Buildings Served by
TECO
- TECO Easement
- Area Not Included in
Campus Master Plan

**Element 7
General Infrastructure**

Figure 7-7.2
10 Year Electrical
Distribution Plan

Date
08/21/2015



**Future Contingency
Loops and Service
Feeders**



1 Southeast / Northeast
Substation Feeders F132
& F134 and Fowler Feeder

2 Northwest
Substation Feeders F131
& F134 and BBD Feeder

3 Future TECO Service
to P3 Grocery Store

4 Possible Future TECO
Service to P3 Developed
Student Housing

This Page Intentionally Left Blank.

7.8 Data/Voice Communications Sub-Element

The campus communications infrastructure will need to be upgraded on a campus wide and localized basis to serve facilities growth and accelerating demands on information, research, instructional, and business technology systems. Existing and projected major communications corridors are positioned principally along primary circulation patterns and seams between development sites so as to minimize disruption by new construction.

The principal findings in the update point to the need to identify sources of emerging data demand in order to proactively plan for and implement additional capacity as needed. Potential sources need to be identified (i.e. increased research activity, migration of CATV to IP based streaming, increased IP based security camera demand, etc..) and appropriate case studies performed to determine capacity impact. Also, as more Tampa Campus based Colleges/departments relocate to remote locations (i.e. College of Medicine) new high bandwidth resources need to be identified in order to provide a seamless experience comparable to being on campus. Telephone switch capacity needs to be diligently monitored for adequate capacity as the estimated capacity is now at 85%. New policies for data communications in the update concentrate on inventory and coordination of data communications resources.

In general, the University shall continue on a path of identifying opportunities to manage growth with sustainability. Principles shall be incorporated that follow the path of Florida's new Energy Plan adopted by the Florida Department of Environmental Protection and recommended policies of the U.S. Green Building Council's Leadership in Environmental Design Standards.

Goal

The Data Communications Sub-Element goal for the Tampa Campus Master Plan is to provide each existing building and planned new buildings on the Tampa campus with communications connectivity for telephone, data, and video services.

Summary of Objectives

Objective 7.8.1: To plan, design and implement communications infrastructure at the Tampa campus, as shown in Figures 7-8.1 and 7-8.2, in order to correct existing deficiencies and meet the data, voice, and video communications needs of the 10 year planning period.

Policy 7.8.1.1: The University shall provide program funding for design and construction to the infrastructure to encompass the residential housing expansion in the (NE quadrant of the Tampa Campus).

Policy 7.8.1.2: The University shall program funding for design and construction to extend fiber optic cable to classrooms, offices, and dormitories to provide connectivity for faculty, staff, students, and residents.

Policy 7.8.1.3: The University shall provide program funding for design and construction to interconnect the medical office buildings at the regional Davis Island campus (USF Health South

Clinic) and the College of Medicine Infrastructure to be located in downtown Tampa . A dark fiber ring would be best suited to provide the high bandwidth capacity that will be required.

Policy 7.8.1.4: Participation by Local Exchange Carriers (LEC), the incumbent CATV provider, and other service providers shall be required in all modifications to the Master Plan and in planned expansion programs to ensure adequate communications services will be available when needed.

Policy 7.8.1.5: The University shall provide program funding for design and construction to upgrade and create additional licensed and unlicensed wireless systems to meet the needs of the University's educational mission.

Policy 7.8.1.6: The University shall implement Data communications system improvements as identified on Figures 7.8-1 and 7.8-2. The timing and phasing requirements for these improvements are established in Element 11, *Capital Improvements*.

Policy 7.8.1.7: Data communications system improvements shall be implemented based on the following priorities:

- Elimination of existing system deficiencies;
- Maintaining the existing system; and
- Expanding the system to accommodate new Data communications system needs.

Policy 7.8.1.8: The University's Information Technology Department shall be responsible for reviewing all proposed development projects to ensure that adequate data communications system capacity exists.

Policy 7.8.1.9: Proposed increases in Data communications system use, whether residential or non-residential, shall be approved only after a finding that existing Data communications system capacity is already on-line to accommodate the increased need, or that additional capacity will be funded and on-line at the forecasted future time of need.

Policy 7.8.1.10: The University shall provide program funding to maintain, upgrade, and expand coverage of USF's WIFI system to access to USF systems for students, faculty, staff, and guest.

Policy 7.8.1.11: The University shall provide program funding to expand coverage of USF's Distributed Antennae System (DAS) to boost cellular signal strength in buildings where signal penetration is low and occupants are unable to maintain service. This is required as a matter of public safety for both rescue personnel and building occupants. Appropriate signal surveys need to be performed in existing building and system inclusion for any new buildings.

Objective 7.8.2: Standardize on a data local wide area network, for campus-wide use, that will serve USF's network needs through the 10 year planning period and beyond.

Policy 7.8.2.1: The University shall program funding for design and construction to provide adequate copper capacity for voice, and single mode fiber for data/video to all buildings on the Tampa campus.

Policy 7.8.2.2: The University shall identify, inventory, and study any electromagnetic field generators on the campus.

Policy 7.8.2.3: The University shall program funds to perform an inventory and study of electromagnetic fields on campus.

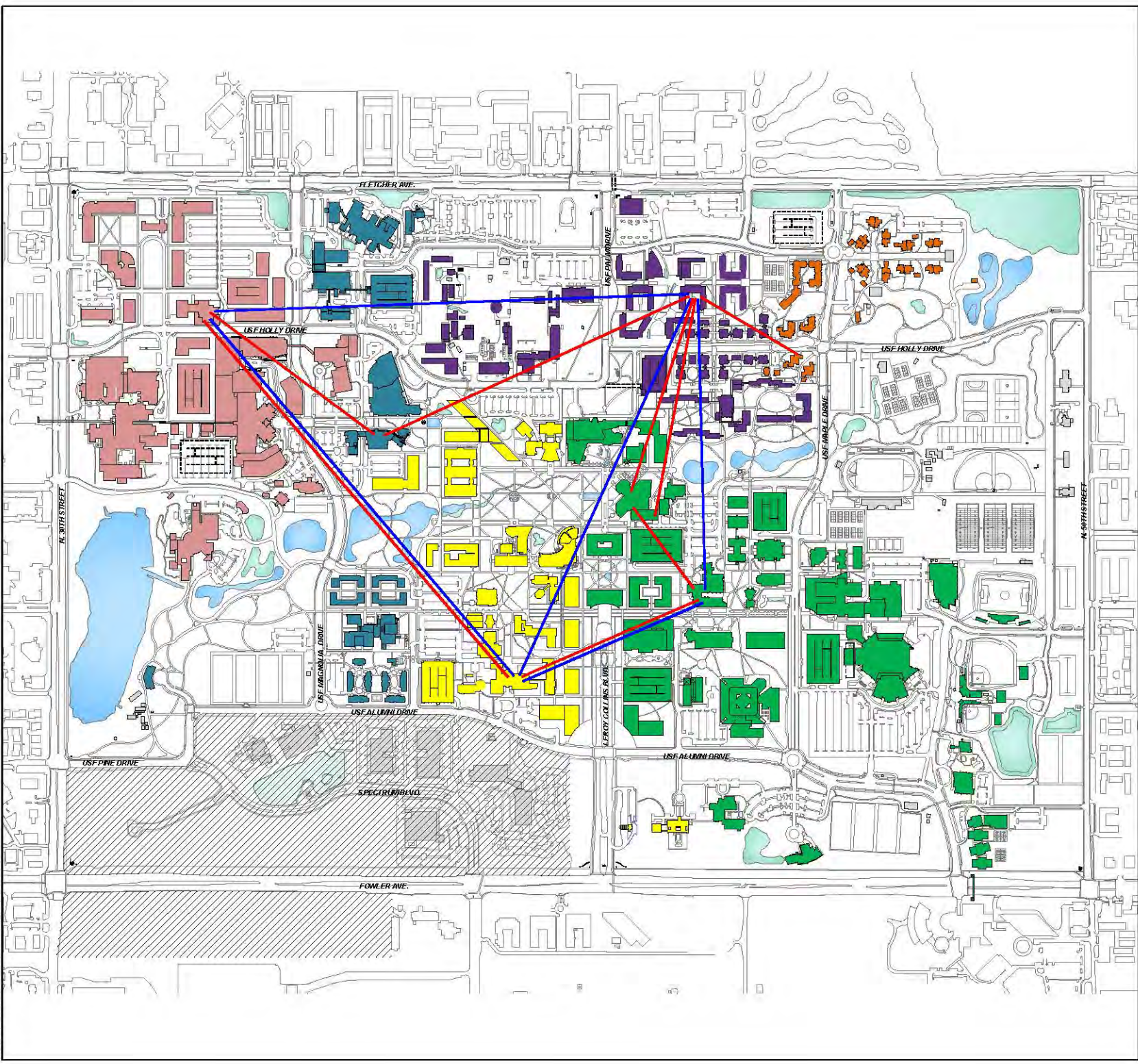
Objective 7.8.3: Identify, inventory, and assess any media or high bandwidth application on the campus.

Policy 7.8.3.1: The University shall program funds to perform an inventory and study of high bandwidth multimedia and research based systems on campus.

Objective 7.8.4: Maintain a periodically revised USF voice/data/video Construction Standard for use in all new construction and renovation projects requiring these services.

Policy 7.8.4.1: Information Technology and other designated entity, shall produce, distribute, and update as necessary a set of construction standards for campus-wide voice/data/video systems, based on technology to support the University through the 10 year planning period.

Policy 7.8.4.2: Information Technology shall provide oversight and coordinate with the Facilities Planning and Physical Plant Departments to coordinate the joint use of underground infrastructure trenches to minimize redundant construction costs.



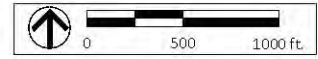
- MHB
- PCD
- AOC
- MPB
- ENB
- EDU
- Single Mode Fiber
- Multi Mode Fiber






Area Not Included in Campus Master Plan

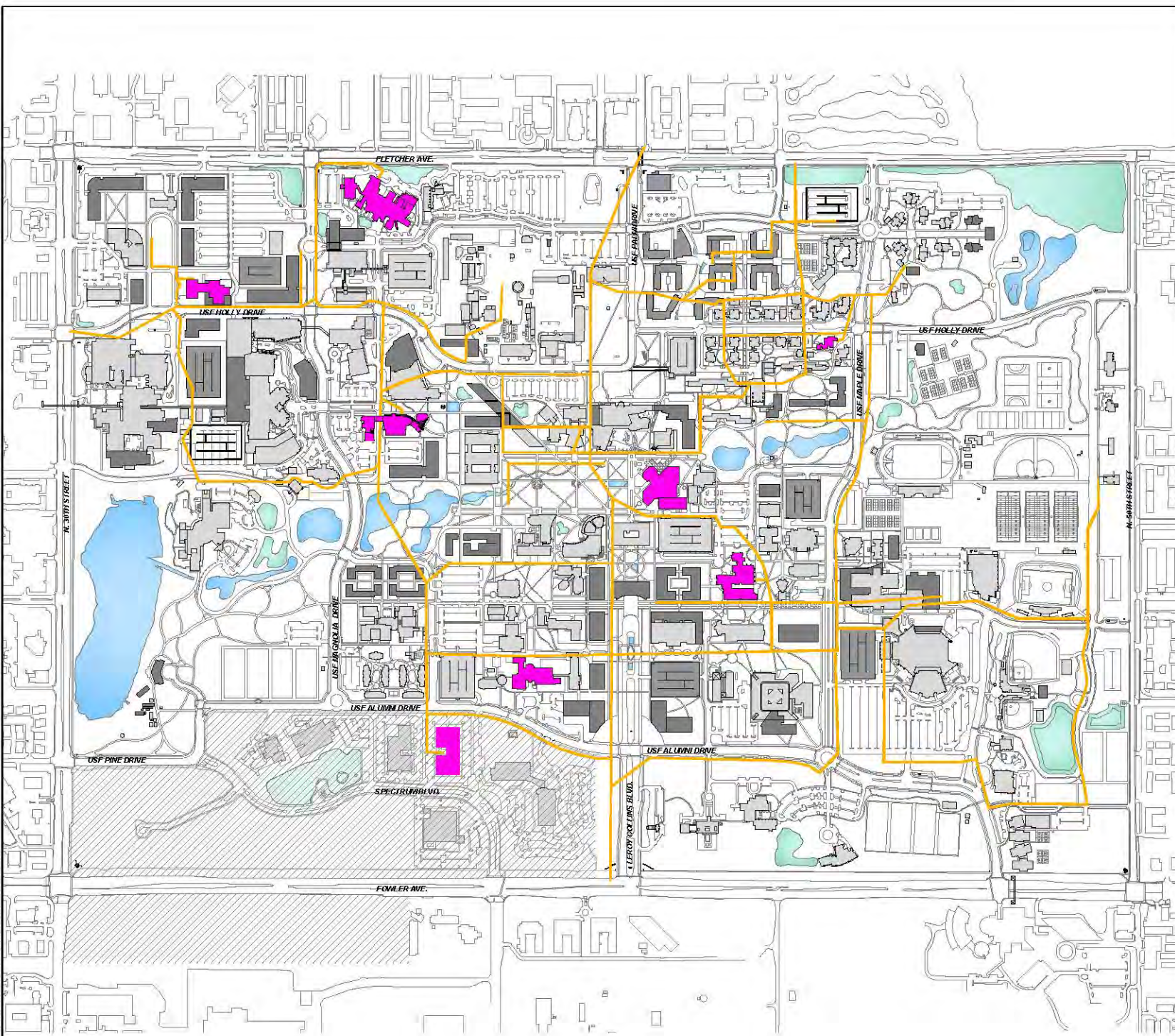
Element 7
General Infrastructure

Figure 7-8.1
10 Year Communications Plan

Date
08/21/2015



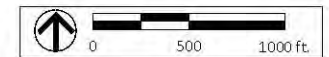
-  Network Operation Center
-  Communication Conduit
-  Existing Buildings
-  10 Yr Proposed Buildings
-  Area Not Included in Campus Master Plan



Element 7
General Infrastructure

Figure 7-8.2
10 Year Communications
Site Distribution Plan

Date
08/21/2015



This Page Intentionally Left Blank.

Element 8 Conservation

Conservation policies address:

- protection and improvement of air quality
- conservation and protection of the quantity and quality of water sources
- conservation and protection of native vegetation and wildlife habitats
- energy efficiency
- waste monitoring, disposition, and recycling

The Campus Master Plan includes focus on the reduction of greenhouse gas emissions in support of the University's commitment to the American College and University President's Climate Commitment (ACUPCC). The Plan recommends continued increased demonstration and visibility of conservation measures and pilot project efforts. Broadened awareness of initiatives demonstrates institutional commitment, enriches the educational experience, generates excitement for participation, and contributes to greater success in meeting the ACUPCC goals.

The 2015 Plan Update continues policies preserving the existing USF Forest Preserve north of Fletcher Avenue (formerly known as the Ecological Research Area), and the proposed extents of the Greenway including the wetland and natural areas at the southwest corner of Fletcher Avenue and 50th Street, the Lake Behnke and existing Botanical Garden area, and the "Geo Park" located in the area between Bruce B. Downs Boulevard and Magnolia Drive. The Plan recommends expanded implementation of the designated Greenway, including removing those elements currently within the limits of the Greenway that conflict with approved land uses; predominantly parking areas.

The mix of integrated, viable ecosystems in the USF Forest Preserve and Lake Behnke/ Botanical Garden Areas provides USF with exceptional research and educational resources and opportunities. The Plan recommends a phased campus wide expansion of the Botanical Garden/Arboretum. Implementation of the "Campus as Arboretum" initiative places priority on expansion and documentation of plant materials and vegetative communities throughout the Greenway and would be phased to include existing campus open spaces – quadrangles and courtyards – as opportunities arise. The Plan proposes the Botanical Garden/Arboretum operate administratively out of an expanded educational/research/community center at the current location on the southeast side of Lake Behnke.

In addition to areas of ecological resource, there are several locations of archeological value as documented in the Data Collection and Analysis report. Additionally, for the existing campus buildings that will reach an age threshold of 50 years during the timeframe of this Campus Master Plan, an assessment of their historical and architectural significance is needed to comply with state historic cultural resources regulations. The Plan recommends establishing a resource assessment data base to track facility evaluations conducted prior to a facility reaching the 50-year mark.

Goal

The Conservation goal of the 2015-2025 Campus Master Plan is to be an institutional model for conservation policies, to meet the ACUPCC goals, to minimize negative environmental impacts, and better the environment through improved air, water and open space quality in the vicinity of the campus.

Summary of Objectives

Objective 8.1: Identify mitigation techniques in order to reduce greenhouse gas emissions and improve the air quality.

Policy 8.1.1: The University shall continue to participate in and consider expanding those programs that contribute to improving existing air quality and reducing greenhouse through the reduction of campus traffic and parking demands. Such programs include participation in local transportation management associations such as New North Transportation Alliance (NNTA), transit routing and terminal servicing activities and the promotion of bicycle and pedestrian circulation improvements, see Element 5 *Transportation*.

Policy 8.1.2: The University shall reduce mobile sources of air pollution through implementation of Element 5, *Transportation* policies designed to discourage dependence on single occupancy vehicles (SOV) as the primary transportation mode for commuting to and from and/or moving on campus, reduce emissions caused by idling times at signals, and to encourage alternative modes of transportation.

Policy 8.1.3: The University shall explore and implement, as appropriate, alternative fuel vehicles including automobile and golf cart fleets and campus shuttle systems for on-campus utilization.

Policy 8.1.4: The University shall determine the potential impacts on air quality before construction of parking structures. Parking structures shall be sized and designed to facilitate rapid ingress and egress of vehicles to minimize idling time, and to maximize air flow through them to eliminate pockets of stagnation where pollutant levels can build up.

Policy 8.1.5: The University shall minimize emissions of air pollutants from and within buildings on campus, minimizing the storage and use of volatile and hazardous materials, and by reducing use of refrigerants and coolants in campus buildings.

Policy 8.1.6: The University shall continue monitoring both indoor and outdoor air quality.

Policy 8.1.7: The University shall maximize tree planting programs over the planning period (See Figure 8-3, 10 Year Tree Cover and <http://www.usf.edu/administrative-services/facilities-planning/documents/designguide-appendix-g.pdf>) as a means to provide the following benefits onto campus:

- Increase carbon absorption for improved air quality;
- Reduce the heat-island effect on campus;
- Reduce stormwater runoff; and

- Enhance outdoor space, providing shade for campus population and encouragement for increased alternative non-vehicular circulation.

Objective 8.2: Conserve and protect the quantity and quality of water sources including groundwater and surface water.

Policy 8.2.1: The University shall identify all existing and proposed potable well locations as "no build" zones, except for recreation facilities.

Policy 8.2.2: The University shall not undertake activities on-campus which would contaminate groundwater sources or designated recharge areas unless provisions have been made to prevent such contamination or otherwise provide mitigation for such activities so as to maintain established water quantity and quality standards. (See Sub-Elements 7.1, *Stormwater Management* and 7.2, *Potable Water*.)

Policy 8.2.3: The University shall continue to monitor and test treated potable water on a monthly basis. (See Sub-Element 7.2, *Potable Water*.)

Policy 8.2.4: The University shall continue to implement its comprehensive Water Conservation Plan, to include the following measures:

- Exploration of the potential interdependencies between chilled water make-up/discharge, stormwater, and treated wastewater and irrigation (See Element 7, *Infrastructure*),
- The use of automated timers, irrigation flow monitoring mechanisms, rain and ground moisture sensors,
- Application of low maintenance xeriscape, native plant landscape treatments for new and renovated building construction and new and renovated campus open space site and facilities, and
- The use of low-flow and low-flush fixtures in new building construction, and water audits and other leak detection programs.
- Continue to maximize the use of condensate and storm water to offset the consumption of water in irrigation, water features, waterclosets, and urinals.

Policy 8.2.5: The University shall ensure the status and integrity of all identified underground storage tanks on a periodic basis through its ongoing monitoring program.

Policy 8.2.6: The University shall construct a series of stormwater management facilities located within the Greenway providing reduction of stormwater pollutants prior to their eventual outfall. As part of new construction, additional, visible pilot and permanent low-impact design and stormwater management projects shall be considered for implementation within the public campus realm in support of demonstrating institutional commitment to protecting and conserving

water, including reduction of pollutants, on campus and within the water shed. (See Sub-Element 7.1, *Stormwater Management*.)

Objective 8.3: Protect identified jurisdictional native vegetative communities whether upland or wetland, as shown in Figure 8-1, 10 Year Natural and Environmental Resources and campus plantings.

Policy 8.3.1: The University shall maintain its campus wide landscape inventories including location and identification of existing plant materials, and assessment of health and condition, horticultural, environmental, and spatial significance, for the purpose of establishing a University tree and plant inventory data base.

Policy 8.3.2: The University, in order to maintain the aesthetic quality, health, and investment in the main campus landscape and the vegetative resources of the USF Forest Preserve, shall provide for the development of a Campus Landscape Management Plan by a qualified professional. This plan shall focus on long term sustainability of the landscape and include identification and description of tasks, schedule and frequency, operational requirements including equipment, materials, and identification of personnel by skill appropriate to tasks and budgeted hours.

Policy 8.3.3: Based on the landscape assessment, the University shall identify and protect jurisdictional and other environmentally sensitive plant communities from development by designating these areas as "no build" zones:

- The USF Forest Preserve north of Fletcher Avenue, shown in Figure 8-2 (10 Year Greenway and USF Forest Preserve) except for research activities as required, and recreation activity within Riverfront Park described in Element 9, *Recreation and Open Space*, Figure 9-4 (Riverfront Park Recreation Area)
- The hardwood hammock and wetland area at the southwest corner of Fletcher Avenue and 50th Street.
- The retention lake, Lake Behnke, at Bruce B. Downs Boulevard and area of the existing Botanical Gardens.
- Other areas of the Greenway specifically identified in Element 9, *Recreation and Open Space*, as conservation areas.
- Other opportunities to protect environmentally sensitive lands based upon State and local criteria shall be evaluated.

Should development be necessary to occur within these areas, mitigation techniques as provided by the regulatory agencies shall be coordinated with the host community and permitting agencies by the University.

Policy 8.3.4: The University shall endeavor to use plant species that are indigenous to the natural plant communities of the Tampa Bay area. In cases where non-invasive exotic plants are used to enhance the landscape, plantings shall be limited to those non-invasive species that are able to resist periods of drought and which require little fertilization or the use of pesticides.

Policy 8.3.5: As part of ongoing planting efforts, the University shall introduce a greater variety of tree and other plant species and greater numerical balance between various species in order to reduce likelihood of collective loss of a single species or group of species that may occur due to an existing or potential yet unknown blight condition. Additionally, the University shall continue to develop age diversity in the tree stock through a phased introduction of trees within given areas overtime to improve the long-term sustainability of the aesthetic landscape and vegetative communities. <http://www.usf.edu/administrative-services/facilities-planning/documents/designguide-appendix-g.pdf>

Policy 8.3.6: The University shall maintain and improve existing vegetative communities through the removal of ecologically undesirable vegetation. It is the intent of the University to remove all non-native invasive plants (whether grasses, shrubs or trees) which are identified on the most current Exotic Pest Plant Council's "Florida's Most Invasive Species List" from the campus grounds. As these species are identified on the campus. The University shall coordinate with the Florida Department of Environmental Protection and other appropriate governmental entities to ensure the proper removal and disposal of these exotic species.

Policy 8.3.7: The University shall endeavor to reduce the extent of turf grass on campus in favor of alternative native and xeriscape groundcovers (shade tolerant where required) and designation of areas of naturalized groundplane, to thereby reduce water consumption, fertilizer application, and overall mowing maintenance requirements.

Objective 8.4: Designate environmentally sensitive lands for protection based on state and locally determined criteria.

Policy 8.4.1: The University shall maintain the jurisdictional areas based upon the most recent Florida Department of Environmental Protection criteria, standards and guidelines.

Policy 8.4.2: The University shall maintain, in a managed natural state, all of those sites identified for preservation on the 10 Year Natural and Environmental Resources (8-1). No construction is anticipated in these areas except for minimal structures and improvements necessary to ensure safe access and essential recreational support functions.

Policy 8.4.3: During the initial planning phase of any physical changes to the campus, the University shall perform a census of plants and wildlife in the area to be affected. Existing plants or animals identified in the most current "Official Lists of Endangered and Potentially Endangered Fauna and Flora in Florida", Florida Fish and Wildlife Conservation Commission, or otherwise afforded protection by the host communities and state and federal agencies, shall be noted. Protection plans for those identified species shall be formulated consistent with those of the host communities and appropriate state and federal agencies.

Objective 8.5: Restrict University activities known to threaten the habitat and survival of threatened and endangered species and species of special concern.

Policy 8.5.1: The University shall continue to require the use of best management construction practices, including the use of soil stabilizers, silt screens, surface moisture applications and other techniques to reduce the impact of development activities as identified in the USF Design and Construction Guidelines <http://www.usf.edu/administrative-services/facilities-planning/guidelines-standards/design-construction-guidelines.aspx>

Policy 8.5.2: The University shall minimize site disturbance on previously undeveloped sites, and shall utilize native or adapted non-invasive xeriscape vegetation when restoring disturbed areas.

Policy 8.5.3: Future development, including buildings, parking facilities, utilities, walkways, paths, stormwater facilities, and recreation fields, shall be carefully sited to minimize impacts to existing trees. Prior to initiating construction, trees shall be protected from damage through the use of perimeter barricades placed at the tree drip lines or critical root zones (whichever is greater), and shall remain in place throughout the period of construction. Existing trees that are removed due to construction shall be replaced with new trees; total caliper of all new trees combined shall equal total caliper of trees removed or lost through construction. Replacement trees may be planted at the site of construction or elsewhere on campus depending on the site and overall campus needs as determined by USF Facilities Planning and Construction.

Policy 8.5.4: Any proposed development adjacent to an environmentally sensitive area shall be carefully sited and integrated into the existing landscape to have minimal visual impact on the area. Landscape treatment shall preserve significant existing vegetation to allow a gracious transition from developed areas to undeveloped areas to preserved areas. The existing vegetation shall serve to essentially buffer proposed development in order to maintain the natural and undeveloped character of the area. <http://www.usf.edu/administrative-services/facilities-planning/guidelines-standards/design-construction-guidelines.aspx>

Policy 8.5.5: The University shall protect and conserve the natural functions of soils, rivers, flood plans and wetlands. The University shall continue to support the designation of Hillsborough River as an Outstanding Florida Water by protecting and enhancing this important resource.

Policy 8.5.6: The University shall construct new facilities in respect of appropriate flood zone requirements. The University shall, to the maximum practical extent, locate buildings outside of the Federal Emergency Management Agency's (FEMA) recognized 100 year flood zone. In those locations where encroachment into the floodplain is deemed unavoidable, the University shall provide Base Flood protection and abide by all regulatory requirements to provide compensatory flood storage areas.

Policy 8.5.7: The University shall continue to protect and conserve threatened and endangered species of plants and animals, and species of special concern, as required by the Endangered Species Act of 1973, as amended, Chapter 39, F.A.C., and federal and state management policies relating to the protection of threatened and endangered species, and species of special concern. The campus has been largely disturbed, however known gopher tortoise habitats occur to the north of the existing Botanical Garden and in the USF Forest Preserve. Both areas are designated as no-build zones.

Policy 8.5.8: University personnel shall, when encountering listed species, follow procedures and seek consultation with the appropriate agencies as identified in the Florida Fish and Wildlife Conservation Commission's most current "Wildlife Methodology Guidelines."

Policy 8.5.9: The University shall endeavor to reduce and prevent "light pollution" and its impact on nocturnal environment by meeting relevant LEED credit guidelines in new development and through phased replacement of non-compliant lighting campus wide.

Objective 8.6: Reduce the quantity of waste generated on campus and expand the percentage of waste recycled or reused.

Policy 8.6.1: The University shall continue its ongoing evaluation of monitoring, reducing, and disposing of hazardous chemical and medical wastes. New technologies to assist in transporting and disposing of such wastes shall be evaluated by the University. (See Sub-Element 7.4, *Solid Waste Management*.)

Policy 8.6.2: The University shall continue to provide on-campus facilities for the collection and storage of hazardous materials used in University operations as required by federal, state and local regulations. (See Sub-Element 7.4, *Solid Waste Management*.)

Policy 8.6.3: The University shall continue to encourage reduction of generated waste materials and expanded use of its recycling and reuse programs by establishing mechanisms for coordinating efforts of USF Physical Plant and Auxiliary services, creating awareness through varied communication methods, and installing additional convenient recycling centers. (See Sub-Element 7.4, *Solid Waste Management*.)

Policy 8.6.4: The University shall coordinate on-campus recycling programs with those of local government in regard to materials collected, and disposal/collection procedures. (See Sub-Element 7.4, *Solid Waste Management*.)

Policy 8.6.5: The University shall, through USF Purchasing and Auxiliary Services, endeavor to establish mechanisms to encourage use of those environmentally preferable products with lower environmental impact.

Objective 8.7: Identify measures to conserve and appropriately reduce energy use.

Policy 8.7.1: The University shall evaluate and implement, as appropriate, solar energy and other clean energy sources as alternative sources of power for irrigation systems and lighting, shuttles, phones, etc. (See Sub-Element 7.7, *Electrical Power and Other Fuels*.)

Policy 8.7.2: The University shall establish administrative, operational and other procedures to monitor energy use on a building specific basis and provide enhanced feedback to end users on their energy use, and incentives for reduction.

Objective 8.8: Expand the use of conservation and energy saving techniques with the planning, design, and construction of new facilities.

Policy 8.8.1: The design of new buildings shall be consistent with the climatic response and sustainability guidelines contained in the USGBC LEED requirements and the USF Design and Construction Guidelines <http://www.usf.edu/administrative-services/facilities-planning/guidelines-standards/design-construction-guidelines.aspx>

Policy 8.8.2: Energy conservation fixtures, air conditioning and lighting systems and other building specific energy use and management techniques shall continue to be a required element of all new and renovated buildings constructed on the campus.

Policy 8.8.3: The University shall consider, during development of building programs and design, the building orientation, increased daylighting measures, utilization of courtyards, arcades and other shade and ventilation techniques to further reduce energy demands.

Policy 8.8.4: The University shall consider, during development of building programs and design, use of low-maintenance, local (within 500 miles per USGBC LEED), durable, and sustainable materials, with priority placed on durable materials with long term life cycle benefit.

Policy 8.8.5: The University shall require all major new construction and renovation projects to seek USGBC LEED certification with goal of achieving Silver rating or above. Commissioning is required on all projects. The University has a target of energy saving of 15-20% above the ASHRAE 90.1-2004 Baseline.

Policy 8.8.6: Copies of land development criteria and design standards which reflect the policies contained in the adopted Campus Master Plan, USF Design and Construction Guidelines, <http://www.usf.edu/administrative-services/facilities-planning/guidelines-standards/index.aspx> and Final Climate Action Plan shall be provided to design consultants and appropriate University staff. The University shall standardize the construction review process to assure adherence to appropriate Master Plan and Design and Construction Guideline policies.

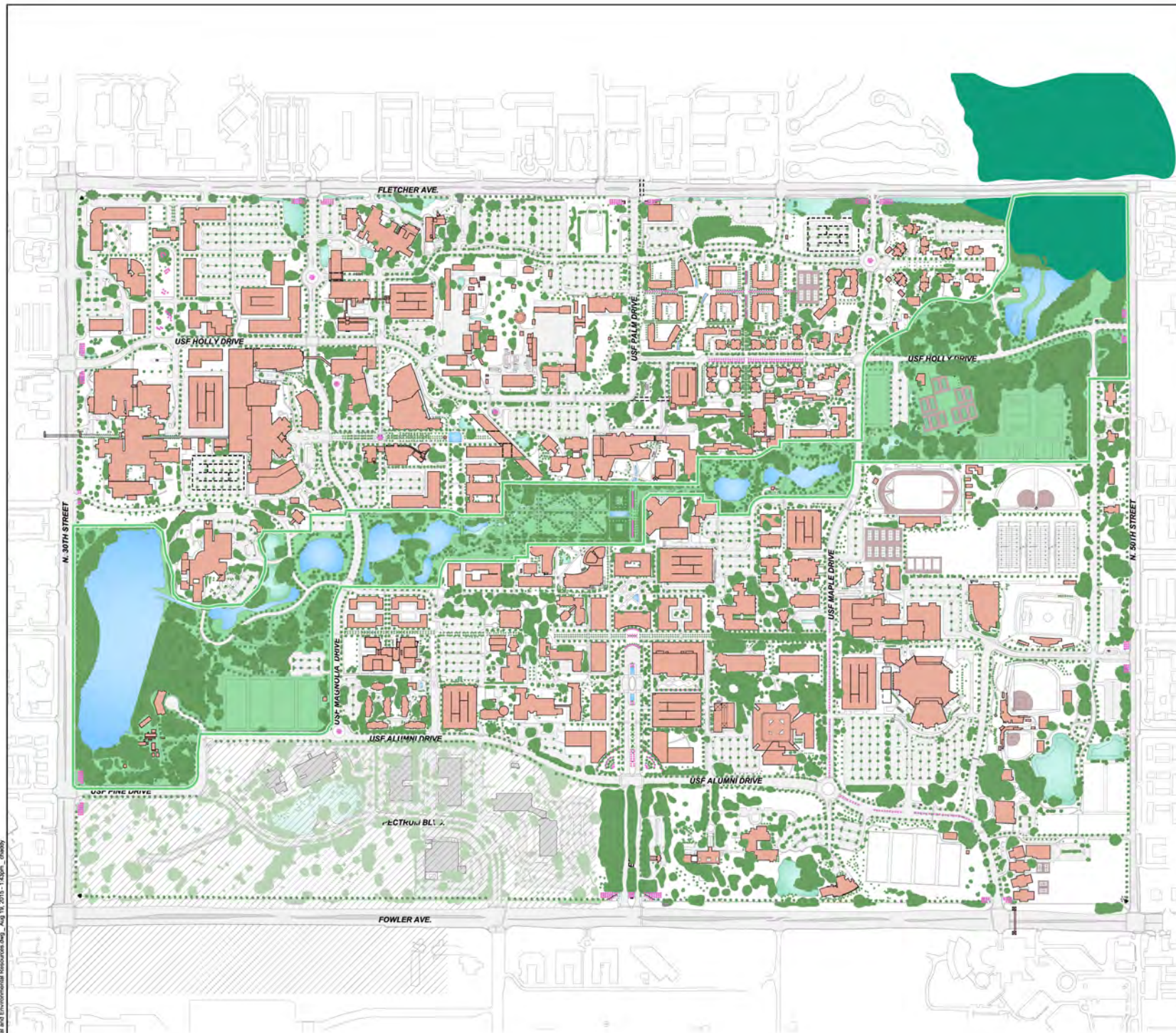
Greenway
Tree Cover

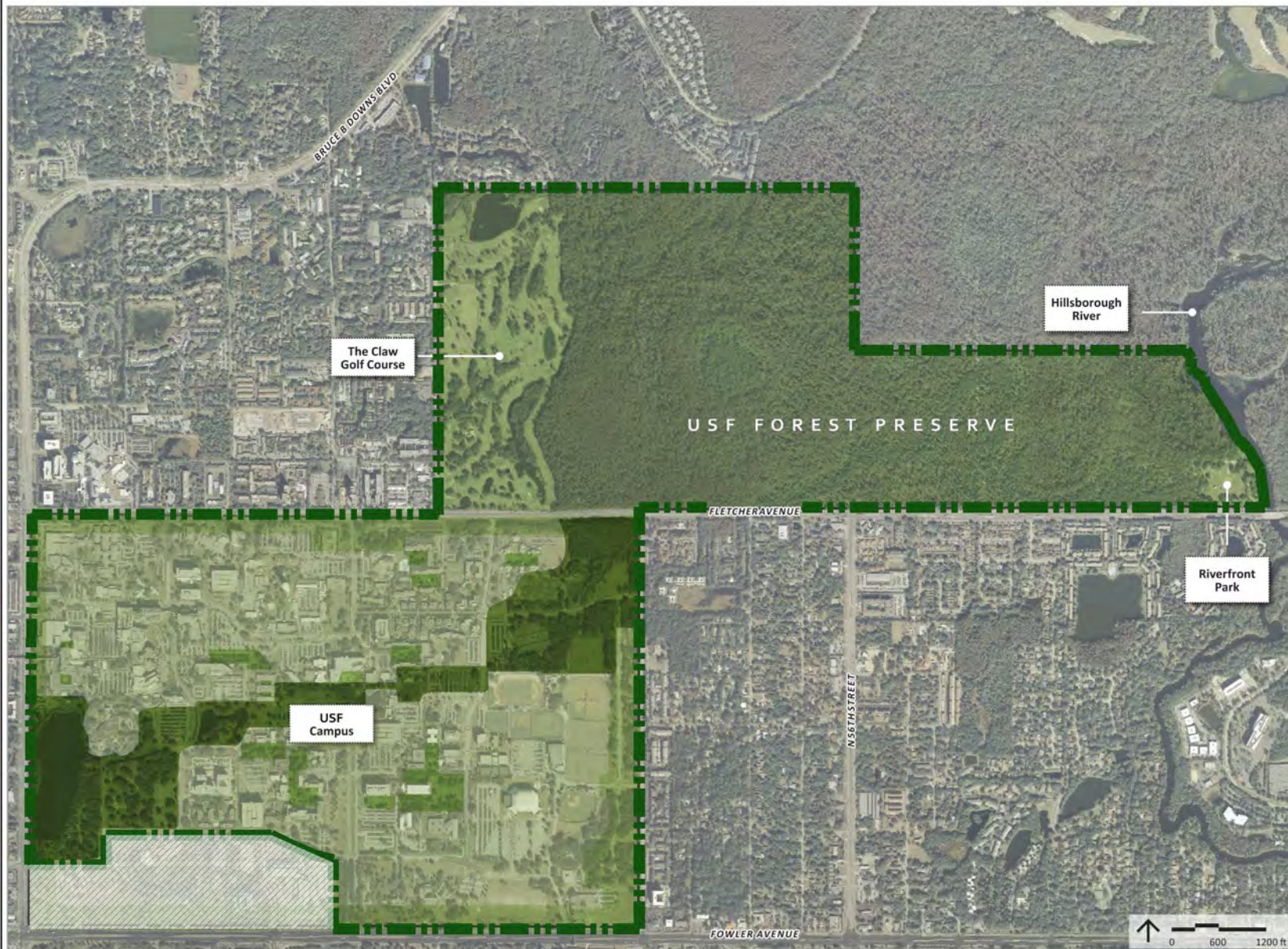
Area Not Included in
Campus Master Plan

Element 8
Conservation

Figure 8-1
10 Year Natural and
Environmental Resources

Date
08/21/2015





- USF Property Line
- Greenway
- Area Not Included in Campus Master Plan

Element 8
Conservation

Figure 8-2
Campus Greenway and
USF Forest Preserve

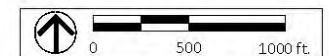
Date
08/21/2015



Element 8
Conservation

Figure 8-3
Archaeology Map

Date
08/21/2015



This Page Intentionally Left Blank.

Element 9 Recreation and Open Space

In response to the significant increase proposed in on-campus student housing, and the continuing success of the intercollegiate athletic programs in the American Athletic Conference (AAC) the development of enhanced, expanded and updated athletic and recreation facilities continues as an important component of the 2015 Master Plan Update. The emphasis in this 2015 Master Plan on sustainability further underlines the essential role quality campus open space plays in establishing a healthy, inviting campus setting of memorable places that engages the University community on a daily basis.

Athletic Facilities

Athletic Facilities developed since 2010.

- Renovation of Multi-use Track and Stadium,
- Renovation of the Sun Dome,
- MUMA Basketball Practice Facility,
- Morsani Football Practice Facility,
- Soccer Intercollegiate Stadium,
- Chowdhari Intercollegiate Golf Center
- Women’s Intercollegiate Softball Stadium
- Men’s Intercollegiate Baseball Stadium

The 2015 Plan depicts projected relocation and new construction of:

- Reconfiguration of Men’s and women’s intercollegiate tennis facility (12 courts),
- Sun Dome hospitality expansion (20,000 gsf), and
- Athletics Building expansion (5,000 gsf).
- Tennis & Baseball/Softball Clubhouses (7,000GSF each)

The implementation of these collective Athletics improvements consolidates the athletic facilities and has allowed the intramural fields to be reconfigured and consolidated in three campus locations – north of athletic facilities between Fowler and Alumni just west of Bullrun Drive, and adjacent to west residential housing area at the corner of Alumni and Magnolia Drives. Existing and proposed locations of athletic and recreation facilities are shown in Figure 9-1, 10 Year Recreation and Athletics Facilities.

Recreation Facilities

- Magnolia Field Complex (4 multi-purpose recreation fields)
- Sycamore Field Complex (5 multi-purpose recreation fields)

The 2015 Plan proposes expansion of recreation facilities over the 10 year planning period to include:

- Additional informal field/open space at the site of existing parking area 35, sized to accommodate one play field in the north residential area,
- Jogging path and walk network throughout the Greenway,
- Recreational expansion in the new Andros Housing project area to include pool complex,
- Satellite fitness center at USF Health (The Well)
- Botanical/Arboretum integration with the campus, centered on the Greenway,
- Construction of Riverfront Park storage facility (1,000 gsf), and
- Expansion of the Recreation Wellness Center to 246,907 gsf.

The projected program for the 2015 Plan utilizes the National Intramural Recreational Sports Association (NIRSA) standards as recommended by the USF Campus Recreation Department.

The Greenway

The Greenway remains the open space “centerpiece” in the 2015 Plan. The overall boundaries generally remain as shown in the original 1995 Master Plan.

The 2015 Plan places combined emphasis on the environmental advantages and programmatic opportunities for engaging the campus community in an implemented and enhanced Greenway. Envisioned as not only the campus landscape centerpiece, but as an institutional identity element, since the 1995 Plan, it continues to remain difficult to discern the continuity of the space due to existing parking areas within the proposed green space and lack of consistent built activity defining and invigorating the edges. In response, the 2015 Plan proposes an increased emphasis on removing parking from the Greenway through phased implementation of a larger parking management approach that moves parking to the campus edges to establish a strong pedestrian campus core and prioritizing development of active building program at the Greenway edges. In particular, housing, arts, student and public gathering functions, and academic facilities serving diverse populations are the highest priority Greenway neighbors. Functions such as parking structures or facilities that neither add indoor/outdoor activity nor benefit from adjacent open space amenity should not usurp sites that better contribute and/or benefit from proximity to the Greenway. In addition, the Plan envisions an expanded perception of the Greenway from the more narrowly defined “protected preserve” to encourage an image of an active dynamic space populated with activities ranging from research and pilot demonstration projects, gardens, trails and walks through a varied landscape, to reflective solitude and active recreation, to intimate and large public outdoor gathering/performance space, and urban plazas with café opportunities.

The 2015 Plan proposes conversion of Lot 35 to informal recreational open play space, Lot 17 A and B to informal recreation and stormwater management ponds, and the majority of Lot 19 to expanded experimental test landscapes and gardens associated with the USF Botanical Garden and University research (refer to Fig 5-4 for lot locations). This is consistent with the recommendations of Element 4, *Future Land Use*, and Element 5, *Transportation*, which call for the removal of surface parking lots from the Greenway. As in the 2015 Plan, properly designed subsurface drainage is recommended for

the proposed informal open play area to allow rainwater to percolate much as it would in non-playfield grass areas. In all instances, removal of the parking lots significantly reduces the impervious surface within the Greenway and replaces parking with permeable surface that in turn reduces requirements for stormwater management facilities.

Campus as Botanical Garden/Arboretum

A feature of the 2015 Plan is the “Campus as Botanical Garden and Arboretum.” This initiative recognizes a desire to expand the educational and research impact of the Botanical Garden throughout the campus. In addition, it recognizes the potential of the campus landscape to contribute to establishing an environmentally healthy setting that supports the educational and social experience, and physical health of students, staff and visitors. Finally, it is an acknowledgement of the University’s commitment and vision as a campus presence for generations to come (refer to Fig 9-2 and 11-2).

USF Forest Preserve

The update does not project any programmatic development in the 735-acre USF Forest Preserve (formerly known as Ecological Research Area) north of Fletcher Avenue. There are no modifications to its essential function as a natural research area that is tied to the regional ecosystem with habitats ranging from pine-oak xeric communities to wetland coniferous cypress forest and to research on the effects of fire, population dynamics, species diversity, seed dispersal, and ecotone dynamics of adjacent land uses. This area has been used for ecological research for many years.

Goal

The Recreation and Open Space goal of the Tampa Campus Master Plan is to provide enhanced recreational and athletic options for the campus community in a diverse open space environment that links the campus and the larger host community.

Summary of Objectives and Policies

Objective 9.1: Provide recreational facilities and open space to meet campus community demand through the coordinated use of public and private resources.

Policy 9.1.1: The University shall continue to seek private donors for the purpose of contributing to the development and maintenance of on-campus athletics, recreation and open space facilities and shall coordinate the distribution of these funds with other public University funding sources.

Policy 9.1.2: The University shall work with the Campus Recreation and Athletics Departments, campus organizations, Sun Dome management, and public/private off campus organizations to investigate and seek expanded opportunities for generating income through campus facility rentals and programs at the main campus, The Claw, USF Forest Preserve, and Riverfront Park.

Policy 9.1.3: The University shall work with host communities and agencies to explore shared or swapped recreation/open space development, maintenance, and/ or use of facilities to better serve the University and local populations.

Objective 9.2: Provide increased facilities to serve on-campus recreation, physical education, and intercollegiate athletic demands.

Policy 9.2.1: The University shall increase recreation and athletic facilities to meet on-campus recreation, physical education, and intercollegiate activities within the 10 year planning time frame. The proposed improvements to athletics, recreation and open space facilities are identified in Figures 9-1, 10 Year Recreation and Athletics Facilities and Figure 9-2, 10 Year Campus Open Space.

Policy 9.2.2: The University shall establish a basis for level of service (LOS) standard for the provision of recreational space, such as the National Intramural Recreational Sports Association (NIRSA) standards, as a means to ensure that the future recreational needs of the campus community are adequately met.

Objective 9.3: Provide increased opportunities for on-campus access to varied, high quality open spaces.

Policy 9.3.1: As shown in Figures 9-2, 10 Year Campus Open Space and 9-3, 10 Year Greenway Structure and Edges, the University shall establish a hierarchy of campus open spaces including: the Greenway and Edges, pedestrian corridors, quadrangles, plazas and courtyards within the 10-year planning time frame in partnership with the capital building and infrastructure improvements program as identified in Element 4, *Future Land Use* and Element 11, *Capital Improvements*.

Greenway—The University shall commit to the protection of the delineated Greenway comprising 158.7 acres including 22.62 acres of Unobstructed View Easement at Lake Behnke as indicated in Figure 9-3, 10 Year Greenway Structure and Edges, extending from Lake Behnke to the wetlands at Fletcher Avenue and 50th Street (including the Central Quadrangle), as a restricted no-build zone in order to establish an open space Greenway. Continued implementation of the Greenway and its enhancement is a high priority because of its:

- Functional importance in addressing stormwater management requirements and providing greater visibility to natural hydrological systems and University sustainability initiatives;
- Unique form-giving characteristic establishing a sense of clarity and orientation to the campus;
- Enhancement of recreation and social opportunities; and
- Role in carbon sequestration and reducing the heat island effect.

The Greenway should continue to be implemented in a strategic, incremental way in advance of individual campus projects so as to maintain the stormwater management capacity necessary to support future building projects and provide the open space amenity that makes engagement with adjacent development and campus constituents more likely.

The Greenway is comprised of the following landscape character sub-districts and programmatic zones (See Figure 9-3, 10 Year Greenway Structure and Edges.):

- **Urban parkland.** Within the Greenway, the Central Quadrangle is designated as “urban” parkland at the heart of the campus. It includes a combination of formalistic, “designed” signature plaza and tree lined walkway edges and strong informal designed spaces connecting to the more naturalistic areas to the northeast and southwest.
- **Naturalistic parkland.** These are areas within the Greenway that are pastoral in character and may be used for informal recreation facilities and open play space. Areas designated as naturalistic parkland may not be converted to another use without a formal Master Plan Amendment.
- **Recreation.** In contrast to the naturalistic parkland areas, recreation areas within the Greenway may be used for organized striped play fields. In order to be used for this function. The play fields within the Greenway must be designed with subsurface drainage systems that maintain, at a minimum, the water percolation rate that would be associated with campus lawn areas. It is also required that such fields not be enclosed with fences, so as to maintain the visual continuity of the Greenway and a park-like pastoral character when the fields are not in use. Areas designated as recreation areas may not be converted to another use without a formal Master Plan Amendment.
- **Conservation and Research.** This designation includes areas that provide conservation of land, habitat, water and vegetative resources, soil, and/or endangered species and site for ecological research. These areas include the Lake Behnke/Botanical Garden area (adjacent to Bruce B. Downs Boulevard) and proposed reclaimed site currently occupied by Lot 19, the wetlands located in the northeast corner of the main campus at Fletcher Avenue and 50th Street, and—while not part of the Greenway per se—the Ecological Research Area north of Fletcher Avenue.

In addition, the Greenway is intended to accommodate an array of stormwater management facilities and existing groundwater well fields including:

- **Stormwater management lakes and ponds.** This designation includes existing and proposed lakes and ponds that will remain filled with water throughout the year. While some relocation of future water areas may be possible, subject to USF engineering review, the overall surface area designated in the Campus Master Plan for this function cannot be reduced without a formal Campus Master Plan Amendment.
- **Stormwater management swales and retention areas.** This designation includes existing and proposed areas that are designed to be detention areas. Normally these areas will be dry, but will detain stormwater runoff for a period of time during a storm event. The amount of land designated for this function cannot be reduced without a formal Campus Master Plan Amendment.
- **Below grade storage.** Subsurface storm water retention/infiltration devices can be utilized on campus to accommodate the additional storm water needs of a growing university campus. Below grade storage chamber systems allow storm water to infiltration into the ground, thereby recharging the immediate groundwater table. This helps to provide the needed water for native wetland environments on campus. Storage chambers allow for storm water collection which can then be diverted for such uses as irrigation or water features. Most

importantly, when acreage on campus is limited, below grade storage devices can be installed beneath facilities, preserving the land surface above for other uses such as recreational activity.

- **Protection of future well fields.** In order to ensure a sustainable campus, the University must provide safe drinking water for the campus community. To do so, the campus has protected its current drinking well field from future development. Likewise, the region of campus designated for a future well field must have similar safeguards. The restrictions within the Greenway may also serve to protect the future well field. Because the actual wells require little space, it can easily share use with space designated as greenway recreational area.
- **Wetlands.** The northeast corner of the campus, south of Fletcher Avenue and west of 50th Street, contains a significant area of wetlands which links the Greenway to the existing Ecological Research Area (north of Fletcher Avenue), providing for stormwater management and contributing to the preservation of native habitat linkages. These wetlands are located within a designated “conservation” sub-district and are not suitable for informal recreation use.

(See Sub-Element 7.1, *Stormwater Management* and Figure 7.1,-1 10 Year Stormwater Management Facilities and Sub-Element 7.2, *Potable Water*, Figure 7.2-1, 10 Year Potable Water.)

Central Quadrangle—Continue to design and implement Central Quadrangle improvements in order to provide a physical setting that provides a quality collegiate atmosphere and identifiable place-making campus center. Although not identified with a specific building project, improvements to the Quadrangle are considered important as they contribute memorable spaces, thereby improving the sense of campus community, while enhancing the visual impact of this “signature” landscaped space. The spatial character of this central space should reflect and respond to the strong primary diagonal circulation desire lines identified in to the Plan with an asymmetry that complements the existing Martin Luther King plaza and trellis at the east end of the quad. Greater landscape variation and plant material diversity should be employed to establish a cohesive central quadrangle that is both spatially unified and interesting. While tree planting to shade walks is a priority, overall planting design shall include informal massing of diverse plant material to increase the usable area with the shade of tree masses, establish stronger and more interesting spatial definition and provide greater aesthetic interest. The overall resulting character will be of a naturalized, informal landscape within a framework of urban spaces and strong diagonal reflecting the proposed major circulation routes crossing the open quad.

Corridors—Extend the development of the Sessums Mall through phased implementation of the full length of the cross-campus east-west mall as a high priority. Additional corridors are indicated on Figure 9-2 and in Element 5, *Transportation* Figure 5-9. Existing corridors shall be enhanced with shade through tree planting, or other means such as trellises, shade structure, or building arcades. Implementation of new corridors shall be phased in coordination with adjacent building development or redevelopment or as independent projects ahead of development.

Quadrangles—Continue to implement a hierarchy of “local” quadrangles distributed throughout the campus as shown in Figure 9-2, 10 Year Campus Open Space, by means of judicious building placement which provides inviting, humane outdoor living spaces appropriate to the climate of west central Florida. Quadrangles should include programmatic opportunities for food, seating, wireless access, and shade.

Courtyards—Encourage inclusion of interior courtyard spaces in all new buildings or closely clustered groups of buildings when and where appropriate.

See USF Design and Construction Guidelines,
<http://www.usf.edu/administrative-services/facilities-planning/guidelines-standards/index.aspx>

Policy 9.3.2: The University shall affirm a belief that naturalistic parklands are necessary to the quality of urban life and that the institution seeks continuity with the natural communities and processes that support human life. The University will ensure that the Greenway reflects design for the future by connecting to the Ecological Research Area north of Fletcher Avenue and that adjacent spaces are developed appropriately.

Policy 9.3.3: The stormwater areas reserved in the Greenway as shown will be retained for future ultimate growth needs. Until that time, the areas may be used for geologic and hydrologic academic studies and recreational use, as well as for their visual amenity value, which enhances the overall quality of the campus setting.

Policy 9.3.4: The University shall maintain densities and intensities for the development of its campus (as established in Element 4, *Future Land Use*), including sites for infrastructure, academic, housing, and support space, which maximize permeable campus land and the retention and creation of meaningful open space.

Objective 9.4: The University endorses a campus open space planning approach that envisions the entire campus as an ecologically appropriate “Campus as Arboretum/Botanical Garden.”

Policy 9.4.1: The University shall expand the domain of the USF Botanical Garden to include all campus open space, with administrative functions centered at an expanded facility in the current location and priority expansion emphasis on documentation and enhancement of the Greenway as Campus Arboretum.

Policy 9.4.2: In recognition of the value of trees to the campus the University shall continue to protect, manage, and increase the number of trees and quality of the campus tree stock. (See Element 8, *Conservation*.)

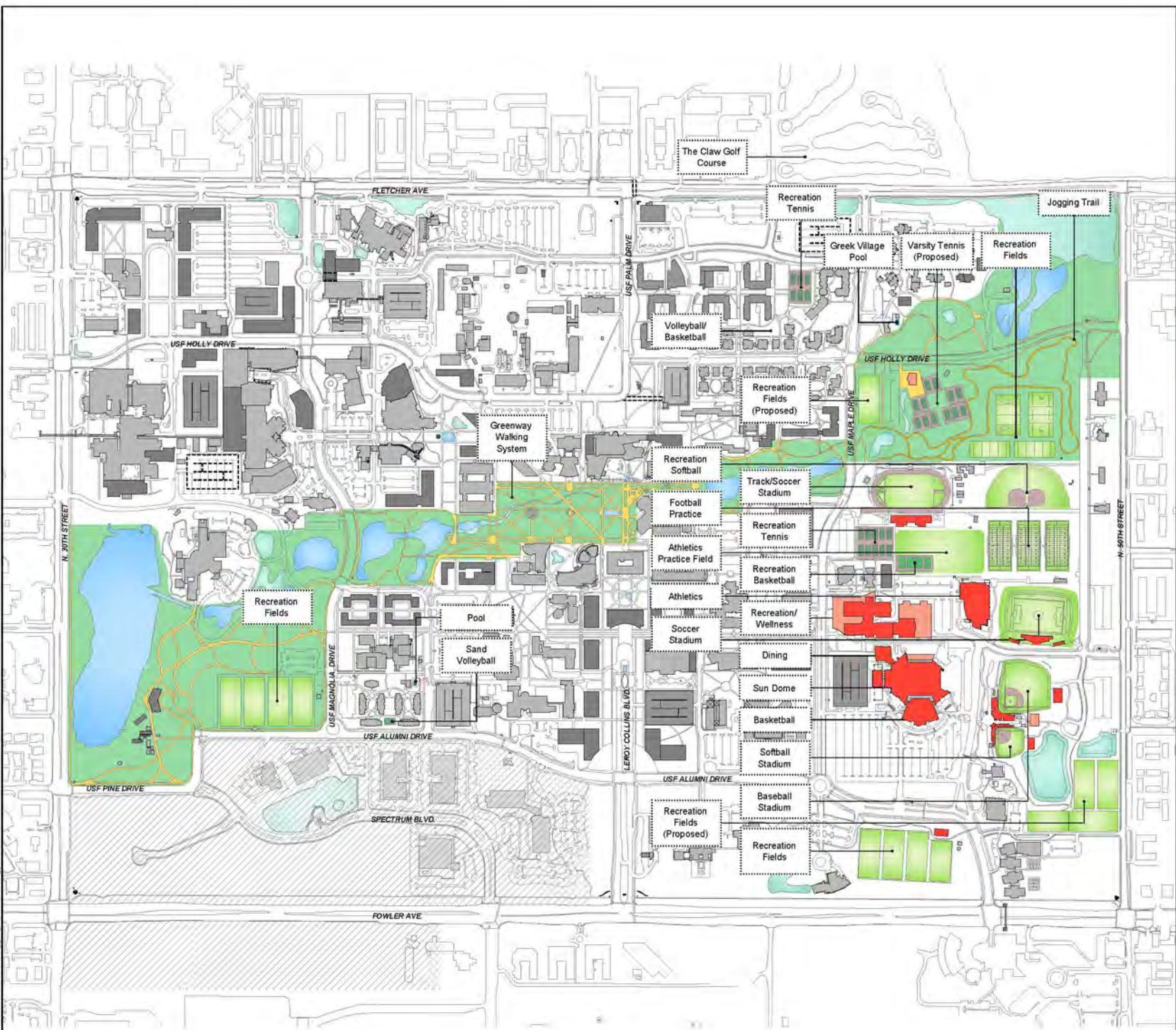
Objective 9.5: Preserve and protect the USF Forest Preserve as a unique and irreplaceable reserve of undeveloped native woodland contiguous with the Hillsborough River wetland corridor.

Policy 9.5.1: The University shall preserve and protect the USF Forest Preserve as a unique and irreplaceable natural resource for teaching and research. (See Figure 9-4, 10 Year Campus Greenway and Forest Preserve)

Policy 9.5.2: Storage and non-vehicle trip generating support space related to the USF Forest Preserve shall be allowed at The Claw golf course and Riverfront Park only.

Objective 9.6: Coordinate with the host communities to promote provision of adequate recreation and open space off-campus to serve the community living in the context area and to ensure continuity of campus open space resources within the larger regional open space system.

Policy 9.6.1: The University shall establish a procedure and assign responsibility for regularly scheduled coordination meetings with the City of Tampa, City of Temple Terrace, and Hillsborough County Parks and Recreation Departments relative to the provision of recreational facilities. The University shall pursue inter-local agreements or memoranda of understanding that may be necessary to ensure that parks and recreational facilities will be available to meet the future needs of the University.



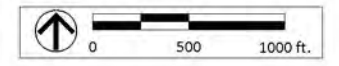
- Greenway
- Fields/Courts
- Jogging Trail
- Track/Fields
- Pool
- Greenway Walking System
- Athletic/Recreation Building Existing
- Athletic/Recreation Building Proposed

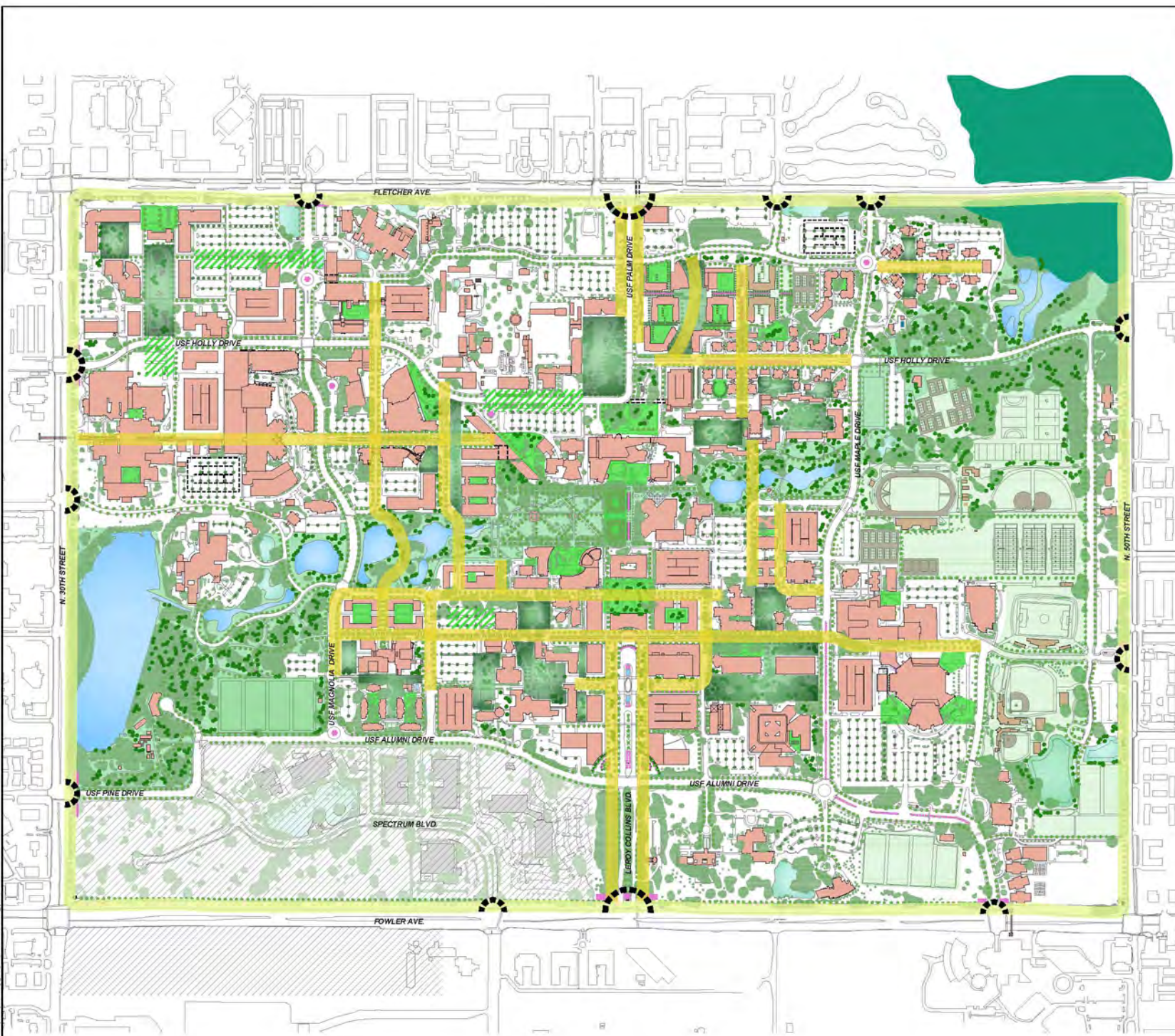
Area Not Included in Campus Master Plan









Element 9
Recreation and Open Space


Figure 9-1
10 Year Recreation
and Athletics Facilities

Date
08/21/2015





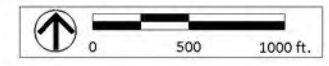
-  Campus Entry
-  Campus Edge
-  Greenway
-  Recreation and Athletics
-  Corridor Landscape
-  Quadrangle
-  Plaza and Courtyard
-  Future Open Space

 Area Not Included in Campus Master Plan

Element 9
Recreation and Open Space


Figure 9-2
10 Year Campus
Open Space

Date
08/21/2015



CAMPUS ARBORETUM



 Area Not Included in Campus Master Plan

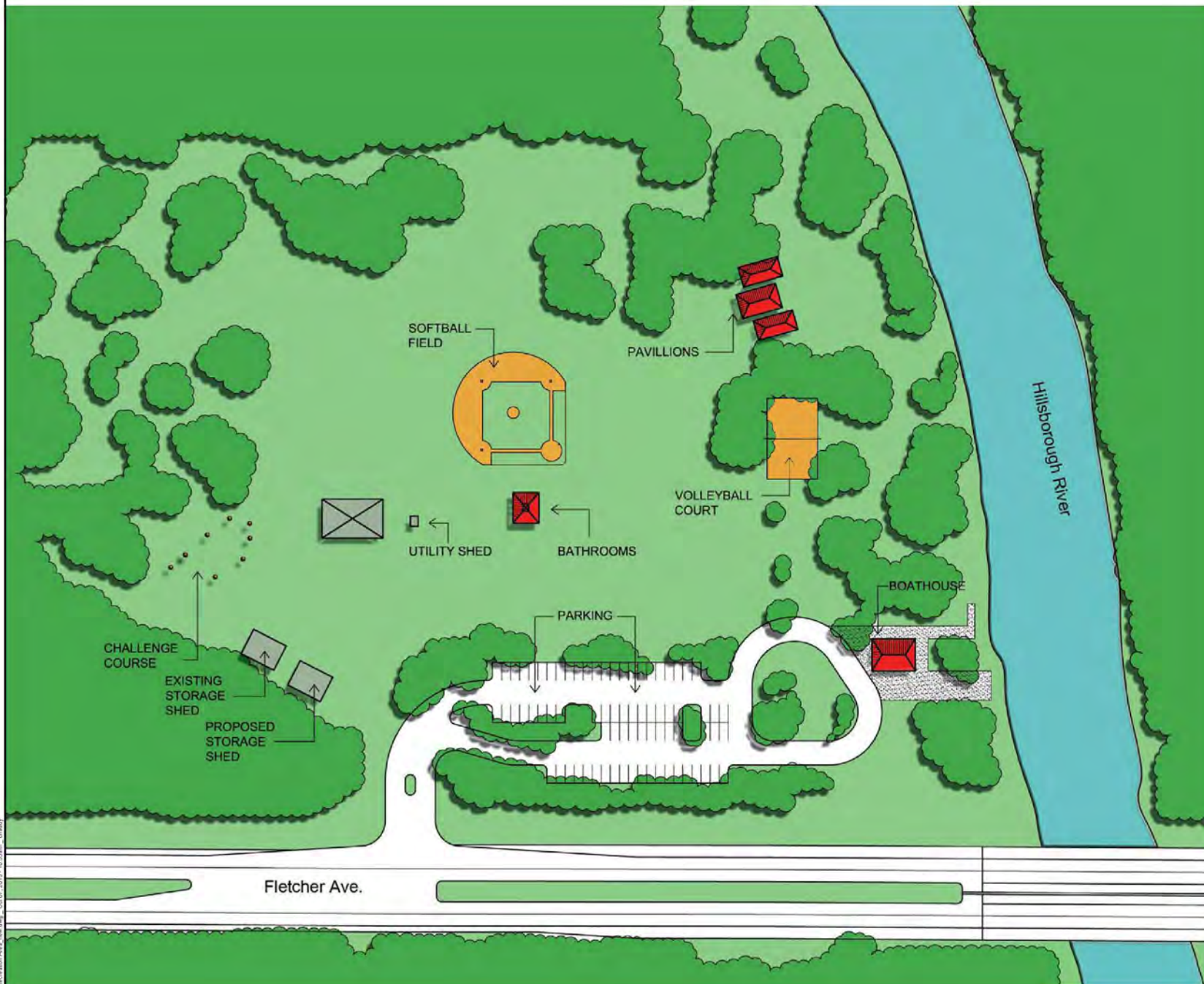
Element 9
Recreation and Open Space

Figure 9-3
10 Year Greenway
Structure and Edges

Date
08/21/2015



Locus



Element 9
Recreation and Open Space

Figure 9-4
Riverfront Park
Recreation Area

Date
08/21/2015



Element 10 Intergovernmental Coordination

Since the adoption of the 1995 plan, the University has consistently put into action coordination and communication measures necessary to facilitate the implementation of the Campus Master Plan and to address the public impacts of development herein identified. The importance of effective coordination and communication between the University, the host community, adjacent jurisdictions, and the numerous agencies and companies that provide services to the campus will increase as the needs and actions of the University and host communities are interdependent and impact each other. As both University and host communities address issues of sustainability—including transportation, land use and natural resource impact, energy use, economic and social fabric—the role of Intergovernmental coordination is both complex and essential to the University and its contextual communities—local to state levels. USF-Tampa currently interacts with some 37 governmental and service entities at the local, regional, and State level. To ensure that coordination continues in the most effective manner, and to the benefit of all the parties involved, the 2015 Plan updates and builds on existing relationships and accomplishments with the expectation of continued and expanding University engagement.

Goal

The Intergovernmental Coordination goal of the Tampa Campus Master Plan is to achieve the goals, objectives and policies of the campus master plan through the use of joint processes for collaborative planning, decision making, and coordinating growth and development with local agencies and governmental entities.

Summary of Objectives and Policy Statements

Objective 10.1: Maintain a process for the reciprocal review by University and local government officials of growth management plans, campus master plans, and plan amendments.

Policy 10.1.1: The University shall continue to work with the Cities of Tampa and Temple Terrace, and Hillsborough County to implement procedures allowing the University, through the Office of Facilities Planning and Construction, to review and comment on proposed amendments to local government comprehensive plans which:

- Have the effect of changing land uses or policies that guide the development of land within the designated context area surrounding the University;
- Affect the provision of local service; or
- Otherwise impact University facilities and resources.

Policy 10.1.2: Proposed amendments to the adopted campus master plan which exceed the thresholds established in s. 1013.30(9), F.S., shall be transmitted to the appropriate local, regional and state agencies for review in accordance with the procedures established in Chapter 21.108-21.110, Florida Administrative Code.

Policy 10.1.3: Proposed amendments to the adopted campus master plan which do not exceed the thresholds established in s. 1013.30(9), F.S., and which have the effect of changing land use designations or classifications, or impacting public facilities, services or natural resources, shall be transmitted to the host and affected local governments for a courtesy review.

Policy 10.1.4: University planning officials shall meet with officials from the City of Tampa, City of Temple Terrace, and Hillsborough County on a regular basis, or as required for the purpose of coordinating planning activities. Other local, regional, state and federal agencies shall be invited to participate in these meetings as appropriate.

Policy 10.1.5: Disputes between the University and a local government shall be resolved by the process established in s. 1013.30(8), F.S.

Objective 10.2: Continue reciprocal development review processes that assess the impacts of proposed campus development on significant local, regional and state resources and facilities, and assess the impacts of off-campus development of University resources and facilities.

Policy 10.2.1: Continue to work with the Cities of Tampa and Temple Terrace, Hillsborough County, and other pertinent agencies, to ensure that Comprehensive Plan amendments and rezoning requests within the designated context area, which have the potential to impact or affect University facilities and resources, shall be transmitted to the University's Director of Facilities Planning and Construction for review and input to the City Council.

Policy 10.2.2: The University's Director of Facilities Planning and Construction shall periodically meet with City and County officials to review and refine the criteria and thresholds for development proposals which would be subject to review by the University. The University shall adhere to development thresholds, developed in cooperation with City and County officials, which allow for both to review significant development proposals within the context area. Established thresholds for review will allow for exceptions to the review process for development proposals which are mutually agreed to be not significant.

Policy 10.2.3: Upon receipt of an application for a development order proposed for the context area, the University's Director of Facilities Planning and Construction shall assess the potential impacts of the proposed development on University facilities and resources. Findings shall be remitted in writing to the appropriate local government.

Policy 10.2.4: When it has been determined that proposed development on campus would have an adverse impact on local services, facilities or natural resources, University officials will participate and cooperate with respective City and County officials in the identification of appropriate strategies to mitigate the impacts.

Policy 10.2.5: When it has been determined that proposed development within the designated context area would have an adverse impact on University facilities and resources, University officials will participate and cooperate with respective City or County officials in the identification of appropriate strategies to mitigate the impacts on University facilities and resources.

Policy 10.2.6: Any dispute between the University and any host or affected local government regarding the assessment or mitigation of impacts shall be resolved in accordance with the process established in s. 1013.30(8), F.S.

Policy 10.2.7: All campus development may proceed without further review by the host local government if it is consistent with the Campus Development Agreement and the adopted campus master plan.

Policy 10.2.8: Once the University pays its "fair share" and annually reports construction of capital improvements, as identified in the Campus Development Agreement, all concurrency management responsibilities of the University are deemed to be fulfilled.

Objective 10.3: Maintain ongoing coordination between the University and public agencies to support a better community and environment. The University will coordinate with the municipalities and agencies to support safe housing, transportation, infrastructure, recreation and open space.

Policy 10.3.1: The University shall work with host community agencies and organizations as described in Element 6, *Housing*, Policy 6.4.1, to coordinate, improve, and increase the availability of safe, diverse, affordable housing in the USF area to serve the needs of its students, faculty, and employees.

Policy 10.3.2: USF is within the City of Tampa service area and has experienced effective and efficient provision of fire, rescue, and emergency medical services. Existing services shall continue to be coordinated with the appropriate entities.

Policy 10.3.3: The University shall continue to cooperate with the appropriate entities in the evaluation of traffic impact on adjacent roadways and endeavor to mitigate impact through increased on-campus housing, improved transit service, and other mitigation techniques described in Element 5, *Transportation*. The University shall participate in the planning of improvements to Fletcher Boulevard, Bruce B. Downs Boulevard and 50th Street, to ensure that adequate pedestrian and bicycle facilities are incorporated.

Policy 10.3.4: The University shall continue to work with the Hillsborough Area Regional Transit (HART) to promote bus transit and possible future alternative transit mode ridership by disseminating information at the time of registration, through target mailings, and at appropriate locations and events on and off-campus. Strategically placed bus stop shelters will continue to be installed to increase convenience of service.

Policy 10.3.5: The University shall continue to work with the Tampa Bay Area Regional Transportation Authority (TBARTA) to establish a Preliminary Plan for a light rail stop(s) serving the University campus, medical facilities, and the Research and Development Park.

Policy 10.3.6: The University shall continue to develop and implement the Master Stormwater Management System and associated permits, and produce a technical design standards manual for new systems to ensure adequate level of service and ease of maintenance.

Policy 10.3.7: The University shall continue operating its own water system for the Academic core while working closely with the City of Tampa to ensure that adequate supply is available to the University's perimeter users. Close involvement with regulatory agencies must also continue to ensure that health, safety and quantity issues are addressed.

Policy 10.3.8: The University shall continue with the regulatory process of Hillsborough County Environmental Protection Commission (HCEPC) to ensure that State sanitary codes are met. Also, the University shall meter its utility upgrade so accurate flow data can be generated and used for service needs and future projections.

Policy 10.3.9: As long as it remains economically feasible, the University shall continue to self transport its dry wastes to the Hillsborough County incinerator and use franchise services for all other organic and recyclable wastes.

Policy 10.3.10: The University shall maintain and periodically update its Emergency Operations Plan in coordination with Hillsborough County Emergency Management Operations (EMO), the American Red Cross, and the host communities. The plan shall identify the extent to which University buildings can, and will, be used to provide shelter for students, faculty, staff, and the general public, and will designate suitable campus open spaces for use as staging areas for emergency supplies, equipment, and resources. The information prepared shall be made available each year to the Local First Responder Agencies (Police, Fire, and EMS) and County and State Offices of Emergency Management.

Policy 10.3.11: The University shall continue to coordinate with the City of Tampa, Hillsborough County, and the City of Temple Terrace, to achieve an appropriate integration of the campus recreation and open space resources into the larger regional open space system, and to ensure that an adequate provision of recreation of open space is available through the 10-year planning horizon to serve the campus and off-campus communities.

Policy 10.3.12: The University shall coordinate with the Department of State, Division of Historical Resources, prior to any land clearing or ground-disturbing activities that may impact sites identified as significant in the University archaeological survey, and prior to any alteration or demolition affecting historic structures on campus. While it has been determined that no significant archaeological resource remain within the boundaries of the main Tampa campus, there is a significant prehistoric mound site located north of Fletcher Avenue, in the Ecological Research Area. In addition, many standing structures on the campus will reach 50 years of age during the timeframe of the Campus Master Plan. In respect of the possibility that such a building may come under consideration for demolition, renovation, or addition, the University will endeavor to assess such building for its historical and architectural significance prior to a building's reaching 50 years of age. The assessment will be conducted by a qualified architectural historian (Secretary of the Interior's Professional Qualification Standards (36 CFR 61)).

Element 11 Capital Improvements

The Capital Improvements element goals, objectives and policies remain largely the same until such time as any procedural changes are made. The primary component of this element is the list of projects and associated costs, sorted by fund source and year.

The Capital Improvements Element is intended to evaluate the need for facilities and site improvements identified in preceding elements of this 2015 Campus Master Plan Update Goals, Objectives and Policies Report, as well as the Data Collection and Analysis Report. This Element is also intended to estimate the cost of the improvements for which the University has fiscal responsibility; to analyze the fiscal capability of the University to finance and construct improvements; to adopt financial policies to guide the funding of improvements; and to schedule the funding and construction of improvements in a manner necessary to ensure that capital improvements are provided when required based on needs identified in the preceding Campus Master Plan elements. All development is contingent upon the availability of funding.

Figure 11-1, 10-Year Proposed New Construction, reflects the accommodation of proposed new building and structured parking program as identified by the University and summarized in Table 4-3 Projected 10 Year Building Program, shown in the Data Collection and Analysis Report, Element 4, *Future Land Use*. The 2015 Campus Master Plan does not identify specific building program assignments, but rather provides the framework for organizing and accommodating phased development of discreet buildings and site improvements within the overall planning framework in a way that allows strategic efficiencies and synergies between projects in order to create a whole that is stronger than the individual components.

In general, building sites shown on Figure 11-1, 10 Year New Construction have been recommended for priority phased construction because their implementation:

- Strengthens the campus urban framework,
- Supports campus circulation,
- Provides programmatic synergies, and/or
- Leverages economies of implementation.

However, unforeseen or changed conditions related to program, cost, or other justifiable reason(s) may recommend consideration of a site proposed for development in the long range planning period. For this purpose and for near term implementation of the 10 Year Plan, Figure 4-2, Long Range Campus Master Plan Concept is included in this report in Element 4, *Future Land Use*, to provide strategic guidance for near term capital improvement decisions.

As the University moves forward in developing greater long term sustainability in capital outlays and development investment, the 2015 Campus Master Plan recommends an increased weighing of life cycle costs as projects are programmed, budgeted, designed and implemented. Continued existing monitoring and expanded use of metrics to assess operation and maintenance costs of existing facilities in order to build dynamic data bases for setting long term project budgets is recommended. Dynamic data bases can be used to support strategic investment and development

decisions and guide project design and implementation. The long-term management of existing resources – building and site – through planned funding and maintenance operations programs is key to establishing a well-maintained, more economically and environmentally sustainable campus.

Additional information regarding capital improvements and funding sources is provided in the 2015 Data Collection and Analysis Report, Element 11, *Capital Improvements*. Also included is the 2016-17 Five-Year Capital Improvement Program (CIP2), as approved by the USF Board of Trustees. The projects included on this list are those which the University indicates will be needed to serve the expected programmatic needs of the next five years. As the yearly update to the Capital Improvement Program (CIP2) is approved by the USF Board of Trustees, it becomes part of the Campus Master Plan.

Goals

Provide educational, research and support facilities to all enrolled students, faculty staff and community partnerships, in a manner that protects the investment and maximizes the use of existing facilities and promotes orderly, planned sustainable campus development.

Summary of Objectives and Policies

Objective 11.1: The University shall, through the coordination of land use decisions and available projected fiscal resources, provide a schedule of capital improvements to maintain the levels of service established in the master plan and to address the existing and projected facilities needs.

Policy 11.1.1: The University, in coordination with the Florida Board of Governors shall schedule and fund capital improvements identified in Table 11-1 2016-2017 Five Year Capital Improvement Program (CIP2).

Policy 11.1.2: The University shall evaluate, rank and revise the order of priority as required for facilities and projects identified in Table 11-1, 2016-2017 Five Year Capital Improvement Plan (CIP2) and Legislative Budget Request, approved by USF Board of Trustees.

Policy 11.1.3: The University shall adopt the following criteria to evaluate and prioritize capital improvement projects related to the individual elements of the master plan:

- University Mission and Strategic Plan;
- University budget impact and financial feasibility;
- The elimination of existing capacity deficits;
- Locational and programmatic needs based on projected student enrollment;
- The accommodation of expansion and improvement needs;
- Related benefits/detriments to adjacent campus development of site areas;
- Life cycle costs of the project; and
- Plans and priorities based on funding availability.

Objective 11.2: To provide the needed improvements identified in the other elements and manage the expansion or improvement process so that facility needs do not exceed the ability of the University to fund

and provide the needed capital improvements, including initial construction costs, ongoing operation and maintenance costs and impact costs.

Policy 11.2.1: The University shall base the coordination of land use decisions associated with the implementation of capital improvements upon the development requirements of this Master Plan, the Campus Development Agreement and the availability of resources necessary for implementing required infrastructure.

Policy 11.2.2: The University shall make provisions for programming the budget for future facility development to consider the cost of the site improvements, utility extensions and associated easements, parking, traffic, pedestrian and bicycle circulation improvements, and operation and maintenance, necessary for the proper function of the individual facility and, to the extent funding levels allow, to include the cost of facilities necessary to support future capacity requirements.

Policy 11.2.3: The University shall make provisions for the adoption of the capital budget as part of the annual budgeting process and will include provisions which are consistent with the campus development agreement resulting from the adopted Master Plan.

Policy 11.2.4: The University shall apply the level of service standards adopted as part of the Design and Construction Guidelines, <http://www.usf.edu/administrative-services/facilities-planning/guidelines-standards/index.aspx>, in implementing the capital improvements identified in this Campus Master Plan.

Policy 11.2.5: The University shall ensure that future facility costs and programming efforts include consideration of the following:

- Site improvements;
- Utility extension and easements;
- Parking needs and traffic, pedestrian, and bicycle circulation improvements;
- Life cycle cost/benefits related to these site elements; and
- Compliance with applicable policies and standards.

Policy 11.2.6: The University shall adhere to sound fiscal policies, including life cycle cost/benefit assessment, in providing the capital improvements of this campus master plan and shall proceed with new capital improvements, expansions or replacements based upon the identification and commitment of adequate funding and resources for design, implementation, operation, and maintenance.

Policy 11.2.7: The University shall endeavor to increase sustainable construction practices by incorporating the USGBC LEED Silver certification process in the USF Design and Construction Guideline requirements.

Objective 11.3: To use the Capital Improvements Element as a means to meet the needs of the University for the construction of capital facilities to correct existing deficiencies, accommodate desired future growth, and replace obsolete facilities.

Policy 11.3.1: The University shall make provisions for conditions assessments and the replacement and renewal of capital facilities when it is determined that the building facility, site

element or infrastructure, including transportation facility (road, walk, bikeway) or utility line, is nearing the end of its useful life.

Policy 11.3.2: The University shall prohibit construction of academic and research buildings less than the minimum heights established in Element 4, *Future Land Use*, and in separate documentation found in USF Design and Construction Guidelines, except by special approval from the President. (For more detailed architectural requirements and guidelines see the USF Design and Construction Guidelines, <http://www.usf.edu/administrative-services/facilities-planning/guidelines-standards/index.aspx>)

Policy 11.3.3: The University shall discourage and limit the renovation of existing buildings that are less than three stories in height, except for reasons of preservation of buildings designated as historic resources or by special approval from the President for health and safety reasons. Buildings less than three stories in height are less efficient and not in keeping with the Master Plan objective of increasing F.A.R. campus density in order to reduce impermeable surface, concentrate activity, and gain efficiencies in land and energy use. For these reasons, with the exception of buildings of historic significance, the 2015 Campus Master Plan recommends buildings that are less than three stories be phased out.

Policy 11.3.4: The University shall continue to adhere to existing capital improvement programming procedures. This master plan is updated automatically with the annual BOT approval of any CIP revisions.

Table 11-1: 2016-2017 Five Year Capital Improvement Plan (CIP2)

Note, The Capital Improvement Plan (CIP) is updated annually and approved by the USF Board of Trustees prior to submission to the Board of Governors. Until the next Campus Master Plan Update in 2020, the most recently approved CIP replaces the one included below at the time of approval, usually in the June-July timeframe.

Potential Projects (cost, scope, and schedule to be determined) not included on the CIP from other funding sources may include:

- International facility for the INTO Program
- Academic Facilities
- Marshall Student Center (MSC) Addition
- MSC Expansion/Student Success Building
- Student Housing and Support
- Campus Recreation Housing Annex
- USF Wellness Center
- East Wing Expansion to the Center for Aging and Brain Repair
- Athletic facilities
- Parking Structures
- Moffitt Cancer Center Expansion
- Clubhouses for Tennis, Baseball, Softball
- Sidewalks, bikelanes

Campus Edge Enhancements
Roads and Intersection Improvements
Utility and Infrastructure Improvements

STATE UNIVERSITY SYSTEM
Five-Year Capital Improvement Plan (CIP-2) and Legislative Budget Request
Fiscal Years 2016-17 through 2020-21

University of South Florida System

7/14/2015

PECO-ELIGIBLE PROJECT REQUESTS

Priority No	Project Title	2016-17	2017-18	2018-19	2019-20	2020-21	Academic or Other Programs to Benefit from Projects	Net Assignable Square Feet (NASF)	Gross Square Feet (GSF)	Project Cost	Project Cost Per GSF (Proj. Cost/ GSF)	Educational Plant Survey Recommended Date/Rec No.	Approved by Law - Include GAA reference
		Year 1	Year 2	Year 3	Year 4	Year 5							
1	TPA-Utilities/Infrastructure/Capital Renewal/Roofs	\$ 10,000,000	\$ 11,000,000	\$ 11,000,000	\$ 11,500,000	\$ 11,500,000	All	Not Applicable	Not Applicable	55,000,000	Not Applicable	2.12 / #SR5	
2	STP-Utilities/Infrastructure/Capital Renewal/Roofs	\$ 2,500,000	\$ 3,000,000	\$ 3,500,000	\$ 3,500,000	\$ 3,500,000	All	Not Applicable	Not Applicable	16,000,000	Not Applicable	2.12 / #SR5	
3	SM-Utilities/Infrastructure/Capital Renewal/Roofs	\$ 1,000,000	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000	All	Not Applicable	Not Applicable	7,000,000	Not Applicable	2.12 / #SR5	
4	TPA-USF Health Heart Institute	\$ 15,755,000					Health	80,000	100,000	50,148,118	\$ 501	2.12 / 38 # 4.1	
5	TPA-USF Health Morsani College of Medicine Facility	\$ 20,000,000	\$ 20,000,000				Health	94,450	141,675	62,000,000	\$ 438	2.12/38# 384.6	
6	TPA-Interdisciplinary Science Teaching & Research Facility	\$ 9,031,204					Sciences	115,738	193,282	83,763,787	\$ 433	8.05/#1.3.3	
7	TPA-Cybersecurity/Data Center	\$ 7,178,985	\$ 15,755,578	\$ 14,000,000			Multiple	25,905	38,500	36,934,563	\$ 959	SUS	
8	SM-Academic STEM Facility	\$ 2,223,984	\$ 22,744,971	\$ 4,160,000			Multiple	51,724	75,000	29,128,955	\$ 388	TBD	
9	TPA Health College of Pharmacy	\$ 5,071,375	\$ 35,763,040	\$ 2,520,000			Health	65,333	102,000	43,354,415	\$ 425	TBD	
10	TPA-STEM (Engineering Expansion)	\$ 8,425,888	\$ 35,674,213	\$ 37,932,693			Multiple	104,979	173,215	82,032,794	\$ 230	2.12 / 1 # 3.3	
11	TPA-STEM Learning Center	\$ 5,580,201	\$ 31,700,585	\$ 18,630,787			Multiple	88,960	133,440	55,911,573	\$ 419	2.12 / 1 # 3.1	
12	TPA-Public Safety Building Phase I		\$ 4,454,555	\$ 19,171,220	\$ 8,063,740		All	40,000	60,000	31,689,515	\$ 528	2.12 / 1 # 3.9	
13	STP-STEM Teaching/Research Facility		\$ 2,652,512	\$ 22,569,830	\$ 2,500,000		Multiple	45,200	67,800	27,722,342	\$ 409	TBD	
14	TPA-CMC Remodeling (PHY)		\$ 2,115,026	\$ 13,491,860	\$ 1,289,186		Multiple	49,734	81,765	16,896,072	\$ 207	2.12 / 1 # 2.1	
15	TPA-USF Health Renovate/Reconfigure Medical Research Lab Facility		\$ 4,677,950	\$ 20,313,600	\$ 30,313,600		Health	126,960	126,960	55,305,150	\$ 436	2.12 / 38 # 2.4	
16	TPA-USF Health Major Renovation/Remodeling/Addition Research Space		\$ 3,776,297	\$ 8,283,389	\$ 32,852,362		Health	44,200	75,998	44,912,048	\$ 591	2.12 / 38 # 4.2	
17	TPA-USF Health Center of Excellence for Diabetes & Autoimmune Disorders		\$ 5,309,400	\$ 32,715,000	\$ 1,820,000		Health	64,200	96,300	39,844,400	\$ 414	TBD	
TOTAL		\$ 86,766,637	\$ 177,138,387	\$ 116,229,218	\$ 133,044,899	\$ 93,338,888							

CITF PROJECT REQUESTS

Priority No	Project Title	Year 1	Year 2	Year 3	Year 4	Year 5	Academic or Other Programs to Benefit from Projects	Net Assignable Square Feet (NASF)	Gross Square Feet (GSF)	Project Cost	Project Cost Per GSF (Proj. Cost/ GSF)	Committee Approval Date
1	USF Tampa Phyllis P. Marshall Student Center (MSC) Expansions Phase I (Planning	\$ 3,922,369					Student succes:	28,564	38,085	\$14,768,388	\$ 388	2/21/2013
2	USF Health Student Union Annex Facility Phase IV	\$ 641,646					Student succes:	15,000	20,000	\$5,892,509	\$ 295	2/21/2013
3	USF St. Petersburg Safety, Environmental and Co-Curricular/Wellness Upgrades Ph	\$ 544,141					Student succes:	0	0	\$2,253,827		2/1/2013
4	USF Sarasota-Manatee Student Outdoor Recreation Facilities Phase IV	\$ 202,552					Student succes:	0	0	\$887,048		5/14/2012
TOTAL		\$ 5,310,708	0	0	0	0						

- Off Campus
- Remodeling
- Complete

**2015 - 2025 Tampa Campus
Master Plan Update**

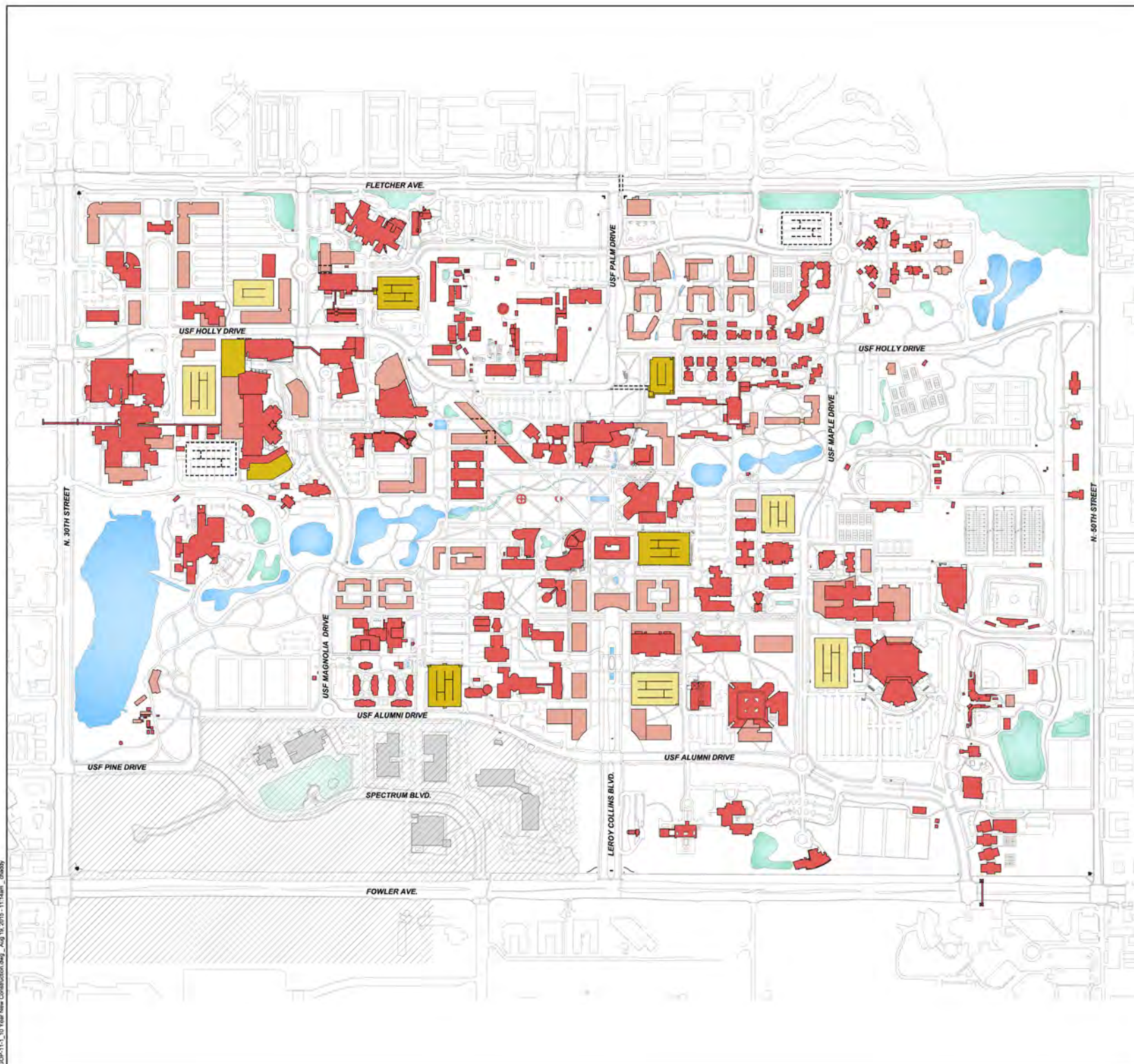
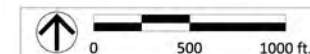
- Building -Existing
- Building-Proposed
- Parking Structure-Existing
- Parking Structure-Proposed
- Structured Parking-Alternate Locations



Area Not Included in Campus Master Plan


**Element 11
Capital Improvements**

**Figure 11-1
10 Year New Construction**

Date
08/21/2015



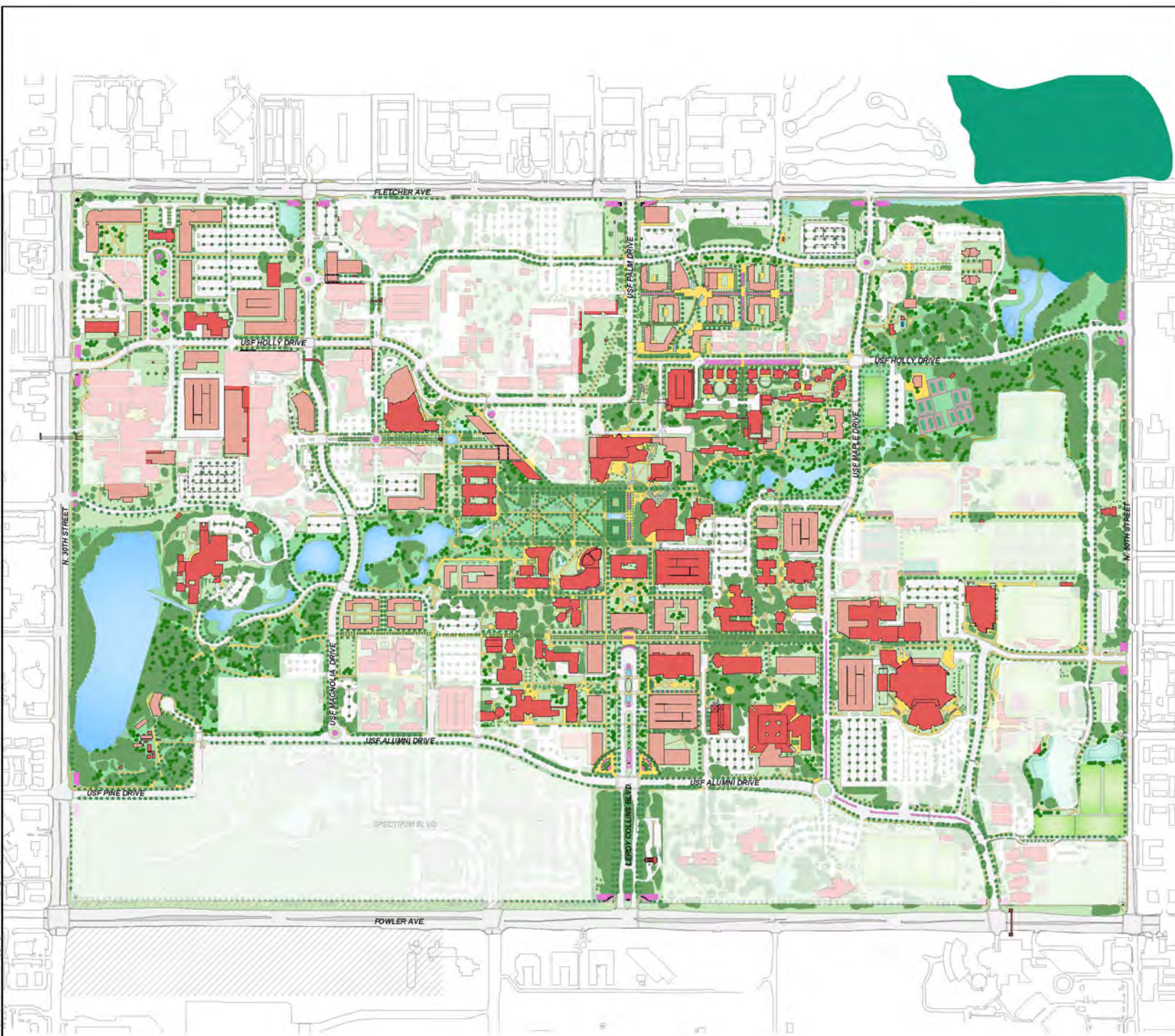
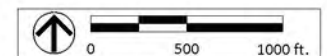
-  Building - Existing
-  Building - Proposed

 Area Not Included in
Campus Master Plan

Element 11
Capital Improvements

Figure 11-2
10 Year Landscape and
Site Development

Date
08/21/2015



2015-2025
USF System
Campus Master Plan Update

Appendix A
General Requirements & Definitions

Tampa



Appendix A General Requirements and Definitions

University Campus Master Plans must be updated every five years. The minimum requirements of the Master Plans for Florida universities are contained in two documents: The Florida Statute (FS) 1013.30 and Chapter 21. In addition to these requirements, each university may add additional information and sections.

Both documents are available on the web at the following addresses:

FS 1013.30:

http://www.flsenate.gov/statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=Ch1013/SEC30.HTM&Title=->2009->Ch1013->Section%2030#1013.30

Florida Board of Governors Regulations Chapter 21:

<http://www.flbog.edu/about/regulations/regulations.php>

University Campus Master Plans are composed of three parts containing, at a minimum:

1. The Evaluation and Appraisal Report (EAR) is a self-assessment by the University of the previously adopted Goals, Objectives, and Policies and how well it succeeded in implementing them.
2. The Data Collection and Analysis Report is an update to the required and discretionary information upon which the Campus Master Plan Update is based. The minimum requirements are specified to be based on best existing available information and do not require the university to conduct original data collection.
3. The Campus Master Plan Update Goals, Objectives and Policies. This document describes, in narrative, table, and graphic form, the intended development criteria and parameters for the next 10 years and beyond.

In addition, the 2015 Campus Master Plan Update includes an Appendix volume containing additional information.

These documents are presented to the Campus Development Committee (CDC) and Academic Campus and Environment Advisory Committee (ACEAC) for review and recommendation to the Academic and Campus Environment (ACE) Workgroup. The ACE reviews and recommends adoption to the University Board of Trustees.

This is the five-year update to the 2010-2020 USF Campus Master Plan. The Campus Development Agreement with the City of Tampa, dated April 2, 2007, remains in effect until December 31, 2015. The existing agreement is in the process of being extended until 2025.

The current Campus Development Agreement is available on this website:

<http://www.usf.edu/administrative-services/facilities-planning/documents/master-dev-agreement.pdf>

Florida Statute FS 1013.30:

The 2015 Florida Statutes
Title XLVIII
K-20 EDUCATION CODE
Chapter 1013
EDUCATIONAL FACILITIES

1013.30 University campus master plans and campus development agreements.—

(1) This section contains provisions for campus planning and concurrency management that supersede the requirements of part II of chapter 163, except when stated otherwise in this section. These special growth management provisions are adopted in recognition of the unique relationship between university campuses and the local governments in which they are located. While the campuses provide research and educational benefits of statewide and national importance, and further provide substantial educational, economic, and cultural benefits to their host local governments, they may also have an adverse impact on the public facilities and services and natural resources of host governments. On balance, however, universities should be considered as vital public facilities of the state and local governments. The intent of this section is to address this unique relationship by providing for the preparation of campus master plans and associated campus development agreements.

(2) As used in this section:

(a) “Affected local government” means a unit of local government that provides public services to or is responsible for maintaining facilities within a campus of an institution or is directly affected by development that is proposed for a campus.

(b) “Affected person” means a host local government; an affected local government; any state, regional, or federal agency; or a person who resides, owns property, or owns or operates a business within the boundaries of a host local government or affected local government. In order to qualify under this definition, each person, other than a host or affected local government, must have submitted oral or written comments, recommendations, or objections to the university during the period of time beginning with the advertisement of the first public hearing under subsection (6) and ending with the adoption of the campus master plan or plan amendment. If the plan or plan amendment is amended at the adoption hearing, the time period shall be extended by 7 calendar days. However, any comments, recommendations, or objections filed during the extension must be limited to those amendments adopted at the adoption hearing.

(c) “Host local government” means a local government within the jurisdiction of which all or part of a campus of an institution is located, but does not include a county if no part of an institution is located within its unincorporated area.

(d) “Institution” means a university.

(e) “Division” means the Division of Administrative Hearings.

(3) Each university board of trustees shall prepare and adopt a campus master plan for the university and maintain a copy of the plan on the university’s website. The master plan must identify general land uses and address the need for and plans for provision of roads, parking, public transportation, solid waste, drainage, sewer, potable water, and recreation and open space during the coming 10 to 20 years. The plans must contain elements relating to future land use, intergovernmental coordination, capital improvements, recreation and open space, general infrastructure, housing, and conservation. Each element must address compatibility with the surrounding community. The master plan must identify specific land uses, general location of structures, densities and intensities of use, and contain standards for onsite development, site design, environmental management, and the preservation of historic and archaeological resources. The transportation element must address reasonable transportation demand management techniques to minimize offsite impacts where possible. Data and analyses on which the elements are based must include, at a minimum: the characteristics of vacant lands; projected impacts of development on onsite and offsite infrastructure, public services, and natural resources; student enrollment projections; student housing needs; and the need for academic and support facilities. Master plans must be updated at least every 5 years.

(4) Campus master plans may contain additional elements at the discretion of the Board of Governors; however, such elements are not subject to review under this section. These additional elements may include the academic

mission of the institution, academic program, utilities, public safety, architectural design, landscape architectural design, and facilities maintenance.

(5) Subject to the right of the university board of trustees to initiate the dispute resolution provisions of subsection (8), a campus master plan must not be in conflict with the comprehensive plan of the host local government and the comprehensive plan of any affected local governments. A campus master plan must be consistent with the state comprehensive plan.

(6) Before a campus master plan is adopted, a copy of the draft master plan must be sent for review or made available electronically to the host and any affected local governments, the state land planning agency, the Department of Environmental Protection, the Department of Transportation, the Department of State, the Fish and Wildlife Conservation Commission, and the applicable water management district and regional planning council. At the request of a governmental entity, a hard copy of the draft master plan shall be submitted within 7 business days of an electronic copy being made available. These agencies must be given 90 days after receipt of the campus master plans in which to conduct their review and provide comments to the university board of trustees. The commencement of this review period must be advertised in newspapers of general circulation within the host local government and any affected local government to allow for public comment. Following receipt and consideration of all comments and the holding of an informal information session and at least two public hearings within the host jurisdiction, the university board of trustees shall adopt the campus master plan. It is the intent of the Legislature that the university board of trustees comply with the notice requirements set forth in s. 163.3184(11) to ensure full public participation in this planning process. The informal public information session must be held before the first public hearing. The first public hearing shall be held before the draft master plan is sent to the agencies specified in this subsection. The second public hearing shall be held in conjunction with the adoption of the draft master plan by the university board of trustees. Campus master plans developed under this section are not rules and are not subject to chapter 120 except as otherwise provided in this section.

(7) Notice that the campus master plan has been adopted must be forwarded within 45 days after its adoption to any affected person that submitted comments on the draft campus master plan. The notice must state how and where a copy of the master plan may be obtained or inspected. Within 30 days after receipt of the notice of adoption of the campus master plan, or 30 days after the date the adopted plan is available for review, whichever is later, an affected person who submitted comments on the draft master plan may petition the university board of trustees, challenging the campus master plan as not being in compliance with this section or any rule adopted under this section. The petition must state each objection, identify its source, and provide a recommended action. A petition filed by an affected local government may raise only those issues directly pertaining to the public facilities or services that the affected local government provides to or maintains within the campus or to the direct impact that campus development would have on the affected local government. A petition filed by an affected person must include those items required by the uniform rules adopted under s. 120.54(5). Any affected person who files a petition under this subsection may challenge only those provisions in the plan that were raised by that person's oral or written comments, recommendations, or objections presented to the university board of trustees, as required by paragraph (2)(b). The university may, during the pendency of a challenge, negotiate a campus development agreement as provided in subsection (11).

(8) Following receipt of a petition challenging a campus master plan or plan amendment, the university board of trustees must submit the petition to the Division of Administrative Hearings of the Department of Management Services for assignment to an administrative law judge under ss. 120.569 and 120.57.

(a) If a party to the proceeding requests mediation, the parties have no more than 30 days to resolve any issue in dispute. The costs of the mediation must be borne equally by all of the parties to the proceeding.

(b) If the matter is not resolved within 30 days, the administrative law judge shall proceed with a hearing under ss. 120.569 and 120.57. The hearing shall be held in the county where the campus of the university subject to the amendment is located. Within 60 days after receiving the petition, the administrative law judge must, consistent

with the applicable requirements and procedures of the Administrative Procedure Act, hold a hearing, identify the issues remaining in dispute, prepare a record of the proceedings, and submit a recommended order to the state land planning agency for final action. Parties to the proceeding may submit written exceptions to the recommended order within 10 days after the recommended order is issued. The state land planning agency must issue its final order no later than 60 days after receiving the recommended order.

(c) The final order of the state land planning agency is subject to judicial review as provided in s. 120.68.

(d) The signature of an attorney or party constitutes a certificate that he or she has read the pleading, motion, or other paper and that, to the best of his or her knowledge, information, and belief formed after reasonable inquiry, it is not interposed for any improper purpose, such as to harass or to cause unnecessary delay, or for economic advantage, competitive reasons, frivolous purposes, or needless increase in the cost of litigation. If a pleading, motion, or other paper is signed in violation of these requirements, the division, upon motion or its own initiative, shall impose upon either the person who signed it or a represented party, or both, an appropriate sanction, which may include an order to pay to the other party or parties the amount of reasonable expenses incurred because of the filing of the pleading, motion, or other paper, including reasonable attorney's fees.

(9) An amendment to a campus master plan must be reviewed and adopted under subsections (6)-(8) if such amendment, alone or in conjunction with other amendments, would:

(a) Increase density or intensity of use of land on the campus by more than 10 percent;

(b) Decrease the amount of natural areas, open space, or buffers on the campus by more than 10 percent; or

(c) Rearrange land uses in a manner that will increase the impact of any proposed campus development by more than 10 percent on a road or on another public facility or service provided or maintained by the state, the county, the host local government, or any affected local government.

(10) Upon adoption of a campus master plan, the university board of trustees shall draft a proposed campus development agreement for each local government and send it to the local government within 270 days after the adoption of the relevant campus master plan.

(11) At a minimum, each campus development agreement:

(a) Must identify the geographic area of the campus and local government covered by the campus development agreement.

(b) Must establish its duration, which must be at least 5 years and not more than 10 years.

(c) Must address public facilities and services including roads, sanitary sewer, solid waste, drainage, potable water, parks and recreation, and public transportation.

(d) Must, for each of the facilities and services listed in paragraph (c), identify the level-of-service standard established by the applicable local government, identify the entity that will provide the service to the campus, and describe any financial arrangements between the Board of Governors and other entities relating to the provision of the facility or service.

(e) Must, for each of the facilities and services listed in paragraph (c), determine the impact of existing and proposed campus development reasonably expected over the term of the campus development agreement on each service or facility and any deficiencies in such service or facility which the proposed campus development will create or to which it will contribute.

(f) May, if proposed by the university board of trustees, address the issues prescribed in paragraphs (d) and (e) with regard to additional facilities and services, including, but not limited to, electricity, nonpotable water, law enforcement, fire and emergency rescue, gas, and telephone.

(g) Must, to the extent it addresses issues addressed in the campus master plan and host local government comprehensive plan, be consistent with the adopted campus master plan and host local government comprehensive plan.

(12)(a) Each proposed campus development agreement must clearly identify the lands to which the university board of trustees intends the campus development agreement to apply.

(b) Such land may include:

1. Land to be purchased by the university board of trustees and if purchased with state appropriated funds titled in the name of the board of trustees of the Internal Improvement Trust Fund for use by an institution over the life of the campus development agreement.

2. Land not owned by the board of trustees of the Internal Improvement Trust Fund if the university board of trustees intends to undertake development activities on the land during the term of the campus development agreement.

(c) Land owned by the Board of Trustees of the Internal Improvement Trust Fund for lease to the Board of Governors acting on behalf of the institution may be excluded, but any development activity undertaken on excluded land is subject to part II of chapter 163.

(13) With regard to the impact of campus development on the facilities and services listed in paragraph (11)(c), the following applies:

(a) All improvements to facilities or services which are necessary to eliminate the deficiencies identified in paragraph (11)(e) must be specifically listed in the campus development agreement.

(b) The university board of trustees' fair share of the cost of the measures identified in paragraph (a) must be stated in the campus development agreement. In determining the fair share, the effect of any demand management techniques, which may include such techniques as flexible work hours and carpooling, that are used by the Board of Governors to minimize the offsite impacts shall be considered.

(c) The university board of trustees is responsible for paying the fair share identified in paragraph (b), and it may do so by:

1. Paying a fair share of each of the improvements identified in paragraph (a); or

2. Taking on full responsibility for the improvements, selected from the list of improvements identified in paragraph (a), and agreed to between the host local government and the Board of Governors, the total cost of which equals the contribution identified in paragraph (b).

(d) All concurrency management responsibilities of the university board of trustees are fulfilled if the university board of trustees expends the total amount of funds identified in paragraph (b) notwithstanding that the university board of trustees may not have undertaken or made contributions to some of the measures identified in paragraph (a).

(e) Capital projects included in the campus development agreement may be used by the local government for the concurrency management purposes.

(f) Funds provided by universities in accordance with campus development agreements are subject to appropriation by the Legislature. A development authorized by a campus development agreement may not be built until the funds to be provided pursuant to paragraph (b) are appropriated by the Legislature.

(14) A campus development agreement may not address or include any standards or requirements for onsite development, including environmental management requirements or requirements for site preparation.

(15) Once the university board of trustees and host local government agree on the provisions of the campus development agreement, the campus development agreement shall be executed by the university board of trustees and the host local government in a manner consistent with the requirements of s. 163.3225. Once the campus development agreement is executed, it is binding upon the university board of trustees and host local government. A copy of the executed campus development agreement must be sent to the state land planning agency within 14 days after the date of execution.

(16) If, within 180 days following the host local government's receipt of the proposed campus development agreement, the university board of trustees and host local government cannot reach agreement on the provisions of the campus development agreement, the following procedures for resolving the matter must be followed:

(a) The matter must be submitted to the state land planning agency, which has 60 days to hold informal hearings, if necessary.

(b) In deciding upon a proper resolution, the state land planning agency shall consider the nature of the issues in dispute, the compliance of the parties with this section, the extent of the conflict between the parties, the comparative hardships, and the public interest involved. In resolving the matter, the state land planning agency may prescribe, by order, the contents of the campus development agreement.

(17) Disputes that arise in the implementation of an executed campus development agreement must be resolved as follows:

(a) Each party shall select one mediator and notify the other in writing of the selection. Thereafter, within 15 days after their selection, the two mediators selected by the parties shall select a neutral, third mediator to complete the mediation panel.

(b) Each party is responsible for all costs and fees payable to the mediator selected by it and shall equally bear responsibility for the costs and fees payable to the third mediator for services rendered and costs expended in connection with resolving disputes pursuant to the campus development agreement.

(c) Within 10 days after the selection of the mediation panel, proceedings must be convened by the panel to resolve the issues in dispute.

(d) Within 60 days after the convening of the panel, the panel shall issue a report containing a recommended resolution of the issues in dispute.

(e) If either the university board of trustees or local government rejects the recommended resolution of the issues in dispute, the disputed issues must be resolved pursuant to the procedures provided by subsection (16).

(18) Once the campus development agreement is executed, all campus development may proceed without further review by the host local government if it is consistent with the adopted campus master plan and associated campus development agreement.

(19) A campus development agreement may be amended under subsections (10)-(16):

(a) In conjunction with any amendment to the campus master plan subject to the requirements in subsection (9).

(b) If either party delays by more than 12 months the construction of a capital improvement identified in the agreement.

(20) Any party to a campus development agreement or aggrieved or adversely affected person, as defined in s. 163.3215(2), may file an action for injunctive relief in the circuit court where the host local government is located to enforce the terms of a campus development agreement or to challenge compliance of the agreement with this section. This action shall be the sole and exclusive remedy of an adversely affected person other than a party to the agreement to enforce any rights or obligations arising from a development agreement.

(21) State and regional environmental program requirements remain applicable, except that this section supersedes all other sections of part II of chapter 163 and s. 380.06 except as provided in this section.

(22) In consultation with the state land planning agency, the Board of Governors shall adopt a single, uniform set of regulations to administer subsections (3)-(6). The regulations must set specific schedules and procedures for the development and adoption of campus master plans. Before adopting the regulations, the Board of Governors must obtain written verification from the state land planning agency that the regulations satisfy the minimum statutory criteria required by subsections (3)-(6). The state land planning agency shall provide the verification within 45 days after receiving a copy of the regulations.

(23) Until the campus master plan and campus development agreement for an institution have been finalized, any dispute between the university board of trustees and a local government relating to campus development for that institution shall be resolved by the process established in subsection (8).

History.—s. 825, ch. 2002-387; s. 1, ch. 2005-284; s. 120, ch. 2006-1; s. 31, ch. 2010-78; s. 69, ch. 2011-139.
Copyright © 1995-2015 The Florida Legislature • Privacy Statement • Contact Us

Florida Board of Governors Regulations Chapter 21:

<http://www.flbog.edu/about/regulations/regulations.php>

21.201 Definitions.

As used in this chapter, the terms defined in Section 1013.30, Florida Statutes, shall have the meanings provided in that Section. In addition, the following definitions are provided to clarify terms used in this chapter and not to establish or limit regulatory authority of other agencies or programs; however, institutions may choose alternative definitions which the Board of Governors shall review to determine whether such definitions accomplish the intent of both this chapter and of Section 1013.30, Florida Statutes.

(1) “Campus Development Agreement” means the fair share mitigation agreement referenced in Section 1013.30(10) F.S. The geographic area covered by the Campus Development Agreement may be the context area(s) or other land areas as identified in the Campus Master Plan.

(2) “Capital improvement” means physical assets constructed or purchased to provide, improve or replace a public facility and which are large scale and high in cost. The cost of a capital improvement is generally non-recurring and may require multi-year financing. For the purposes of this rule, physical assets which have been identified as existing or projected needs in the individual campus master plan elements shall be considered capital improvements.

(3) “Circulation facilities” means roadways, sidewalks or other surfaces designated for pedestrian, non-vehicular, or vehicular movement.

(4) “Context area for Campus Development Agreements” means an area surrounding the university, within which on-campus development may impact local public facilities and services and natural resources, and within which off-campus development may impact university resources and facilities. The size of the context area may be defined by natural or man-made functional or visual boundaries, such as areas of concentration of off-campus student-oriented housing and commercial establishments, stormwater basins, habitat range, or other natural

features. To facilitate planning analysis and intergovernmental coordination the context area may differ in configuration in the various elements of the campus master plan.

(5) “Development” means the carrying out of any building activity or mining operation, the making of any material change in the use or appearance of any structure or land, or the dividing of land into three or more parcels.

(6) “Goal” means the long-term end toward which programs or activities are ultimately directed.

(7) “Infrastructure” means those man-made structures which serve the common needs of the population, such as roadways, stormwater management facilities, potable water facilities, sanitary sewer facilities, and solid waste facilities.

(8) “Intelligent transportation system management” means efforts to add information and communications technology to transport infrastructure and vehicles in an effort to manage factors that typically are at odds with each other, such as vehicles, loads, and routes to improve safety and reduce vehicle wear, transportation times, and fuel consumption.

(9) “Intermodal” means the connection between any two or more modes of transportation.

(10) “Levels of Service” means an indicator of the extent or degree of service provided by, or proposed to be provided by a facility based on and related to the operational characteristics of the facility. Level of service shall indicate the capacity per unit of demand for each public facility.

(11) “Mediation” means a process in which a neutral third person called a mediator acts to encourage and facilitate the resolution of a dispute between two or more parties. It is an informal and non-adversarial process with the objective of helping the disputing parties reach a mutually acceptable and voluntary agreement. In mediation, decision making authority rests with the parties. The role of the mediator includes, but is not limited to, assisting the parties in identifying issues, fostering joint problem solving, and exploring settlement alternatives.

(12) “Mixed Use Development” means the practice of allowing more than one type of use in a building or set of buildings. In planning-zone terms, this can mean some combination of residential, commercial, industrial, office, institutional, or other land uses.

(13) “Objective” means a specific, measurable, intermediate end that is achievable and marks progress toward a goal.

(14) “Planning Study Area” means an area surrounding the university within which on-campus and off-campus development should be coordinated for specific development activities such as housing, recreation, transportation, capital improvements, urban design and designation of future land uses. The Planning Study Area defines an area of influence that may differ for each type of development activity. To facilitate planning analysis and intergovernmental coordination, the planning study area may differ in configuration in the various elements of the campus master plan.

(15) “Policy” means the way in which programs and activities are conducted to achieve an identified goal.

(16) “Potable water facility” means a system of structures designed to collect, treat or distribute potable water, and includes water wells, treatment plants, reservoirs, and distribution mains.

(17) “Public facility” means transportation systems or facilities, sewer systems or facilities, solid waste systems or facilities, stormwater management systems or facilities, potable water systems or facilities, educational systems or facilities, parks and recreation systems and facilities, and public health systems and facilities.

(18) “Public transit” means passenger services provided by public, private or non-profit entities, such as commuter rail, express bus, and local fixed route bus.

(19) “Recreation facility” means a component of a recreation site, such as a trail, court, athletic field or swimming pool.

(20) “Sanitary sewer facilities” means structures or systems designed for the collection, transmission, treatment, or disposal of sewage, and includes trunk mains, interceptors, treatment plants and disposal systems.

(21) “Solid waste facilities” means structures or systems designed for the collection, processing or disposal of solid wastes, including hazardous wastes, and includes transfer stations, processing plants, recycling plants, and disposal systems.

(22) “Stormwater management facility” means a system of man-made structures designed to collect, convey, hold, divert or discharge stormwater, and includes stormwater sewers, canals, detention structures, and retention structures.

- (23) “Sustainable Development” means development that uses methods, systems, and materials that do not deplete resources or interfere with natural cycles, and considers natural land, water, and energy resources as integral aspects of development.
- (24) “Sustainability” means a dynamic state in which global ecological and social systems are not systematically undermined, so as to ensure that the ability of future generations to meet their needs is not compromised.
- (25) “Trip Generation” means a transportation tool for forecasting travel demands by predicting the number of trips originating in or destined for a particular traffic analysis zone.
- (26) “Traffic Analysis Zone” means the unit of geography used in conventional transportation planning models.
- (27) “Transportation corridors” means any land area designated by the state, a county or a municipality which is between two geographic points and which area is used or is suitable for the movement of people and goods by one or more modes of transportation, including areas necessary for management of access and securing applicable approvals and permits.
- (28) “Transportation demand management” means strategies and techniques that can be used to increase the efficiency of the transportation system. Demand management focuses on ways of influencing the amount and demand for transportation by encouraging alternatives to the automobile and altering local peak hour travel demand. These strategies may include, but not be limited to, ridesharing programs, flexible work hours, telecommuting, shuttle services and parking management.
- (29) “Transportation system” means a multi-modal system of transportation facilities designed for the movement of people and goods.
- (30) “Transportation system management” means improving roads, intersections, and other related facilities to make the existing transportation system operate more efficiently. Transportation system management techniques include demand management strategies, incident management strategies, and other actions that increase the efficiency of the transportation system.
- (31) “Urban Design” means the pattern of urban forms comprising a campus, neighborhood, city, town, or other municipality or the process of patterning such forms into a design.
- (32) “Vision” means an ideal description of the future appearance and qualities of the university and its role in the host community and region to guide its planning.
- Authority: Section 7(d), Art. IX, Fla. Const. History — Formerly 6C-21.202, 2-15-94, Amended and Renumbered 6-18-09.

21.202 General Requirements.

(1) CONTENT REQUIREMENTS.

- (a) Each master plan shall include the content for all elements as required by law and this regulation; however, related elements may be combined.
- (b) If the university chooses to combine elements, it shall clearly indicate where in the master plan or support documents all statutory requirements of Section 1013.30, Florida Statutes, and the requirements of this chapter are met. The campus master plan shall contain an explanation of such combinations.
- (c) The campus master plan shall consist of those items listed below in this paragraph. All other documentation may be considered as support documents. Support documents do not have to be adopted unless the Board of Trustees desires to adopt all or part of the support documents as part of the campus master plan. All background data, studies, surveys, analyses and inventory maps not adopted as part of the campus master plan shall be available for public inspection while the campus master plan is being considered for adoption and while it is in effect. The campus master plan shall consist of:
1. Goals, objectives, and policies;
 2. Implementation of capital improvements;
 3. Implementation of sustainability initiatives in campus planning.
 4. Procedures for monitoring and evaluation of the campus master plan; and
 5. Required maps showing future conditions.

(2) DATA AND ANALYSIS REQUIREMENTS.

(a) All goals, objectives, policies, standards, findings and conclusions within the campus master plan shall be based upon relevant and appropriate data. Data or summaries thereof which are not part of the adopted campus master plan shall not be subject to the compliance review process. All tables, charts, graphs, maps, figures and data sources, and their limitations shall be clearly described.

(b) Unless noted otherwise, this chapter shall not be construed to require original data collection by the university; however, universities are encouraged to use any original data necessary to refine or update the campus master plan, as long as methodologies are professionally acceptable.

(c) Data are to be taken from professionally accepted existing sources. Data shall be the best available existing data, unless the university desires original data or special studies. Where data augmentation, updates, or special studies or surveys are deemed necessary by the university, appropriate methodologies shall be clearly described or referenced and shall meet professionally accepted standards for such methodologies.

(3) APPLICATION OF REQUIREMENTS.

(a) In those situations where data necessary to comply with the requirements of this regulation do not exist, and the university, for whatever reason, desires not to collect original data or conduct special studies, the appropriate data and analysis requirements shall not apply. The university shall include one or more statements in the data and analysis section of each element of the campus master plan identifying those requirements that are not applicable because the data do not exist.

(b) In those situations where data required to comply with the requirements of this regulation do not exist, any corresponding requirement to include goals, objectives or policies based on that data shall not apply. The university shall include one or more statements in the goals, objectives and policies section of each element of the campus master plan identifying those requirements that are not applicable because the data do not exist.

(4) PLANNING TIME FRAME. Each campus master plan shall cover a period of at least 10 years and not more than 20 years. Additionally, the capital improvements element shall contain a yearly itemized breakout for three years, and a general framework for the next seven years, for planned and anticipated capital projects, with an update to be submitted to the university Board of Trustees each year in accordance with the time frame established by the Board of Governors.

(5) INTERNAL CONSISTENCY.

(a) The required elements and any optional elements shall be consistent with each other. All elements shall follow the same general format. Where data are relevant to several elements, the same data shall be used.

(b) Each map depicting plan elements must reflect goals, objectives, and policies within all elements and each such map must be contained within the campus master plan.

(6) PLAN IMPLEMENTATION REQUIREMENTS. The sections of the master plan containing goals, objectives, and policies shall describe how the university's programs and activities will be initiated, modified or continued to implement the master plan in a consistent manner. It is not the intent of this chapter to require the inclusion of implementing regulations in the campus master plan, but rather to require the identification of those programs, activities and regulations that will be part of the strategy to implement the goals, objectives and policies of the campus master plan.

(7) MONITORING AND EVALUATION REQUIREMENTS. For the purpose of evaluating and appraising the implementation of the campus master plan, each master plan shall contain a section identifying monitoring and evaluation procedures to be followed in updating the adopted campus master plan every five years which address the following:

(a) Each university shall submit to the Board of Trustees, within four years from the date of plan adoption and every five years thereafter, an evaluation and appraisal report which:

1. Lists which goals, objectives and policies have been successfully reached; Valerie on extended medical leave. I am entering this leave on her behalf. Linda Harper
2. Identifies the need for new or modified goals, objectives, or policies needed to correct unanticipated and unforeseen problems and opportunities that have occurred since adoption of the campus master plan; and
3. Identifies proposed and anticipated plan amendments necessary to address identified problems and opportunities.

(b) Each university shall submit to the university Board of Trustees, within five years from the date of plan adoption and every five years thereafter, a proposed plan amendment which incorporates the findings and

recommendations contained in the evaluation and appraisal report, and which contains updated baseline data (as appropriate) and goals, objectives and policies to be accomplished during the remainder of the overall planning period.

Authority: Section 7(d), Art. IX, Fla. Const., History — Formerly 6C-21.203, 2-15-94, Amended and Renumbered 6-18-09.

21. 203 Optional Campus Master Plan Vision Statement

Some campus master plans have developed university campus vision statements which describe the ideal future appearance and qualities of the university and its role in the host community and region. If a University's plan includes a vision statement, the required and optional elements should be consistent with that vision. As an option, elements may include guiding principles that reinforce the campus vision statement and describe the outcome or desired end-state for the campus. If applicable, the campus vision statement should be compatible with the vision plan of the host local government.

Authority: Section 7(d), Art. IX, Fla. Const., History — New 6-18-09.

21.204 Future Land Use Element.

This element designates existing and future development as reflected in the goals, objectives and policies of the campus master plan, and describes how future development will be coordinated with land uses planned by the host and/or affected local governments in the planning study area.

(1) FUTURE LAND USE DATA AND ANALYSIS REQUIREMENTS. This element shall be based on the following data and analysis requirements, pursuant to Subparagraph 21. 202(2).

(a) Inventory and assess existing and projected space and building needs, both within the planning study area and throughout the state, for academic, support, housing and parking facilities. Such assessment shall be based on student FTE and headcount enrollment projections for the planning time frame, and shall include a graphical and narrative section. Existing land uses and development on university controlled property shall be shown on the land use map or map series, using either the land uses established in the host local government's comprehensive plan or using its own land use categories which shall be clearly labeled in the legend. The narrative section shall include the approximate acreage and general range of uses of structures.

(b) Inventory and assess existing and projected vacant, open or underdeveloped university-controlled lands to determine the potential opportunities for meeting the needs shown above in subsection (1)(a). This assessment shall include plans for the redevelopment of university- controlled land that is underutilized or inconsistent with the university's character, density and future land uses, as well as plans for the release of surplus lands to the state for use or disposal.

(c) Inventory and assess properties within the planning study area where title interest is held by the Board of Trustees of the Internal Improvement Trust Fund (including reservations and encumbrances such as leases, subleases, or easements, and any other land held by the university within the planning study area or included in the Master Plan). A map of all existing encumbrances to university-controlled property, other than utility easements, shall also be included.

(d) Inventory and assess properties within the planning study area which may serve to meet existing or future needs shown above in subsection (1)(a). This assessment shall include opportunities for expansion that do not include additional land acquisition.

(e) Inventory and assess existing natural, archeological or historic resources within the planning study area to determine their impact on meeting the needs shown above in subsection (1)(a). As utilized above, the phrase "natural resources" shall be read to include aquatic preserves and areas designated (or under study for designation) as an Area of Critical State Concern.

(f) Inventory and assess all facilities on university-controlled lands that are not under the jurisdiction or operation of the State University System to determine their impact on meeting the needs shown above in subsection (1)(a).

(g) Inventory and assess existing and projected land uses, goals, objectives, policies and zoning within the planning study area as defined in the local government's comprehensive plan to determine their impact on meeting the needs shown above in subsection (1)(a).

(2) REQUIREMENTS FOR FUTURE LAND USE GOALS, OBJECTIVES AND POLICIES.

(a) The element shall contain one or more goals which address the long-range development on the campus and the coordination of future land use development on the campus with future land use development in the host and/or affected local governments.

(b) The element shall contain one or more objectives for each goal which address, at a minimum:

1. Protection of natural resources (including existing surface waters and wetlands) and historic and archaeological resources;
2. Eliminating or minimizing land use compatibility problems between the university and host and/or affected local governments;
3. Correcting land use underutilization and compatibility problems on the university campus;
4. Coordinating future development with the appropriate topography and soil conditions;
5. Coordinating future development with the availability of facilities and services;
6. Ensuring the availability of suitable land on campus for utility facilities required to support proposed on-campus development; and
7. Minimizing off campus constraints to limit future development on campus (i.e., traffic, utilities) and minimizing on campus conflicts with land uses within the planning study area.
8. Promote compact, efficient, and environmentally sensitive land use planning.

(c) The element shall contain one or more policy statements for each objective which address at a minimum:

1. Establishment of standards of use for each land use category;
 2. Provisions for stormwater management, open space, safe and convenient on-campus traffic flow and parking facilities;
 3. Provisions for the identification, designation, and protection of historically and archaeologically significant properties;
 4. Provisions for the compatibility with adjacent land uses;
 5. Coordination of land use and development decisions with a schedule of capital improvements in the Capital Improvements Element;
 6. Establishment or description of land use management procedures within the university's administrative structure which will encourage careful use of the university's existing land resources and minimize deviations from the land use plan; and
 7. Establishment of a process, timetable and funding sources for future land acquisition (if applicable).
 8. Provisions for encouraging sustainable development practices such as compact mixed use development.
- (d) The Future Land Use Element shall be described, at a minimum, in the Future Land Use Map and explanatory text. A map of all existing and projected encumbrances shall be included.

Authority: Section 7(d), Art. IX, Fla. Const., History — Formerly 6C-21.204, 2-15-94, Amended and Renumbered 6-18-09.

21.205 Transportation Element.

This element assesses and makes transportation recommendations for integrating all modes of travel (bicycle, pedestrian, bus/transit, and motor vehicle) both on campus and in the off-campus planning study area. These recommendations shall coordinate policies, programs and projects with the host and/or affected local governments, as well as with other state and regional agencies.

(1) TRANSPORTATION DATA AND ANALYSIS REQUIREMENTS. This element shall be based on the following data and analysis requirements, pursuant to Subparagraph 21.202(2).

(a) Inventory and assess parking located on campus and off-campus if owned or controlled by the University. The assessment shall include campus parking demand for the base year and projected year that incorporates allowance for transportation demand management policies that may reduce parking demand. The assessment shall also consider parking demand for special events, as applicable.

(b) Inventory and assess transit facilities and services on campus and in the planning study area including:

1. service providers;
2. routes;
3. stop locations;
4. frequency of service;

5. ridership;
 6. vehicle capacity; and
 7. planned service modifications identified in the local government comprehensive plan's capital improvement element, transit agency's service plan or other comparable planning document.
- (c) Inventory and assess facilities and services for bicycling and walking including existing and planned facilities on campus and in the planning study area with identification of the facility location and type.
- (d) Inventory and assess opportunities to implement transportation demand management strategies, including strategies that link transportation and future land use such as transit-oriented design, walkable activity centers and multimodal districts.
- (e) Inventory and assess safety of the on-campus transportation system users including:
1. traffic crash data for bicycles; pedestrians and motor vehicles;
 2. lighting assessment for bicycle and pedestrian facilities; and
 3. identification of high traffic crash locations and other safety concerns on campus.
- (f) Inventory planned new roads, road modifications, and other planned transportation system modifications (including transit, bicycle and pedestrian) with cost estimates identified in the local government comprehensive plan's capital improvement element, the regional long-range transportation plan, the university's capital improvement program, and other transportation plan documents as applicable.
- (g) Inventory and assess roadways on campus and in the planning study area including:
1. adopted level of service (LOS);
 2. traffic counts;
 3. maximum service volumes;
 4. pavement condition;
 5. road designations (i.e. FDOT Strategic Intermodal System and local government Constrained Facilities); and
 6. evaluation of opportunities to implement transportation system management strategies that address intersection, operations and safety components of the roadway system.
- (h) Assess roadway capacity on campus and in the planning study area for the campus master plan base year and projected year including assessment of:
1. future conditions for enrollment, building program and parking facilities;
 2. mode split;
 3. transportation demand management strategies; and
 4. trip generation.
5. This roadway capacity assessment shall utilize traffic analysis zones (TAZs) and methodologies acceptable to the host and/or affected local governments, and shall be based upon professional standards of transportation for assessment of university traffic impacts significantly affecting off-campus roads in the planning study area. This assessment shall include:
- i. Map(s) and/or data tables to identify transportation facilities and services on campus and in the planning study area that will be operating below the adopted level of service standard in the projected plan year.
 - ii. Map(s) and/or data tables to identify deficient transportation facilities and services for all modes on campus and in the planning study area that are significantly and adversely impacted by university-generated travel demand in the projected plan year.
- (2) REQUIREMENTS FOR TRANSPORTATION GOALS, OBJECTIVES AND POLICIES.
- (a) The element shall include one or more goals for the provision of future transit, auto circulation, parking, pedestrian and non- motorized vehicle facilities, including sustainable transportation approaches that address:
1. Travel options to reduce dependence on single-occupant vehicles;
 2. Reduction of greenhouse gas emissions; and
 3. Reduction of dependence on foreign oil.
- (b) The element shall contain one or more objectives for each goal that address:
1. The provision of parking facilities on or off the campus to meet future university needs;
 2. The provision of future traffic circulation improvements both on the campus and in the planning study area to meet future university needs;

3. Improvements to public or university-provided transit service and facilities required to meet future university needs;
 4. Coordination of transportation system improvements with the future land uses shown on the future land use map or map series, and with those improvements identified in the host and/or affected local government's comprehensive plan(s) including approaches such as transit oriented development, walkable activity centers and multimodal districts;
 5. The coordination of pedestrian and non-motorized circulation facilities to be developed on campus, with those to be developed off- campus by the host and/or affected local governments in their local comprehensive plans, bicycle plans or transportation plans; and
 6. The provision of pedestrian and non-motorized circulation facilities required to meet future university needs.
- (c) The element shall contain one or more policy statements for each objective that address:
1. The provision and management of parking facilities, including transportation demand strategies that may reduce parking demand;
 2. Establish timing or priorities for development of future campus parking facilities;
 3. Establish programs and administrative procedures for coordinating parking facilities and services with the host and/or affected local governments;
 4. The provision and management of transit facilities and services including cooperation with outside agencies that provide transit service to the university campus if applicable. These policies shall seek to maximize utilization of public or university- provided transit;
 5. Establish timing or priorities for development of future transit facilities and services
 6. Provide coordination with the host and/or affected local governments for transit facilities and services;
 7. The provision and management of bicycle and pedestrian facilities and services including programs that encourage the use of non-motorized transportation. These policies shall seek to maximize utilization of pedestrian and non-motorized forms of travel;
 8. Establish timing or priorities for development of future campus bicycle and pedestrian facilities;
 9. Provide coordination with the host and/or affected local governments for bicycle and pedestrian facilities and services;
 10. Coordinate transportation facilities and services with future land uses, both on campus and in the planning study area;
 11. Reduce the number and severity of traffic crashes including physical modifications and provision of educational programs or partnerships;
 12. Establish timing or priorities for development of future campus transportation safety mitigation projects;
 13. Establish programs and administrative procedures that facilitate coordination of the transportation system on campus with the transportation system and future land uses of the host and/or affected local governments. Such administrative procedures shall include consideration of University representation as ex-officio member of the Metropolitan Planning Organization with jurisdiction in the host community;
 14. The provision and management of campus roadways including levels of service standards to be used for analyzing campus roadway capacities;
 15. Establish timing or priorities for development of future campus roadway and traffic circulation modifications;
 16. Reduce the impact of university-related traffic on roadways in the planning study area;
 17. Provide coordination with the host and/or affected local governments for traffic circulation facilities, services and intermodal connectivity.

(3) TRANSPORTATION ELEMENT MAP SERIES

(a) The Transportation Element shall be described, at a minimum, in the Transportation Element Map Series and explanatory text. This map along with companion narrative shall identify the location and description of proposed transit, circulation and parking facilities on the university campus. The map and text shall be accompanied by explanatory tabular information as applicable. This map series shall include, at a minimum, the following requirements:

1. Map(s) of existing and proposed university parking facilities with a schedule of development for new or modified parking facilities supported with narrative and tables as applicable;

2. Map(s) of existing and proposed transit facilities and services on campus and in the planning study area with supporting narrative and tables as applicable;
3. Map(s) of existing and proposed bicycle and pedestrian facilities on campus and in the planning study area with supporting narrative and tables as applicable;
4. Map(s) of walking distances on campus and adjacent non-university land;
5. Map(s) of proposed transportation safety mitigation projects with a development schedule, supporting narrative and tables, if applicable;
6. Map(s) and schedule of development for planned and programmed transportation system modifications on campus and in the planning study area; and
7. Map(s) of proposed campus roadway modifications including transportation system management and resurfacing projects with supporting narrative and tables as applicable.

Authority: Section 7(d), Art. IX, Fla. Const., History — Formerly 6C-21.205, 2-15-94, Amended and Renumbered 6-18-09.

21.206 Housing Element.

This element ensures the provision of public and private housing facilities on the university campus and within the host and/or affected communities that is adequate to meet the needs of the projected university enrollment.

(1) HOUSING DATA AND ANALYSIS REQUIREMENTS. This element shall be based on the following data and analysis requirements, pursuant to Subparagraph 21.202(2).

(a) Inventory and assess the number of undergraduate, graduate and married/family students to be housed in university controlled facilities on-campus. This inventory and assessment shall include housing facilities by type (apartments, dormitories, suites, etc...) and of facilities where handicapped students are to be housed.

(b) Inventory and assess the number of undergraduate, graduate and married/family students to be housed in university controlled facilities off-campus. This inventory and assessment shall include housing facilities by type (apartments, dormitories, suites, etc...) and of facilities where handicapped students are to be housed.

(c) Assess the number of students to be housed in non-university controlled facilities on-campus (fraternities, sororities, etc...). This assessment shall include housing facilities by type (apartments, dormitories, suites, etc...) and of facilities where handicapped students are to be housed.

(d) Assess the number of students to be housed in non-university controlled facilities off-campus including a description of concentrations within the planning study area. This inventory and assessment shall include housing facilities by type (rental rooms, rental houses, rental apartments, etc...) and of facilities where handicapped students are to be housed.

(e) Inventory and assess the supply of historically significant housing on-campus in regards to expected impacts on the needs described in subparagraph (2)(a).

(f) Inventory and assess potential on-campus sites where additional housing facilities may be created either through new construction or through conversion of non-housing facilities.

(2) REQUIREMENTS FOR HOUSING GOALS, OBJECTIVES AND POLICIES.

(a) The element shall contain one or more goals for the provision of student housing on and off-campus during the planning period.

(b) The element shall contain one or more objectives for each goal which address:

1. Ensuring the availability of an adequate supply (both on-campus and off-campus) of affordable housing units and support facilities in close proximity to the campus to meet the projected need for student housing; and
2. The elimination of substandard student housing and the structural (electrical, mechanical, plumbing, etc.) and aesthetic improvement of existing student housing.

(c) The element shall contain one or more policies for each objective which:

1. Define the number and type (graduate, undergraduate, married, etc.) of students to be housed on-campus and in off-campus university controlled facilities;
2. Identify the appropriate locations for the various types of on-campus housing to be provided in the future;
3. Describe the timing or phasing requirements for renovation, repair and/or demolition of existing university controlled housing facilities;

4. Establish procedures for coordination with the host and/or affected local governments regarding issues related to off-campus student housing (may include security, traffic, transit, etc.);
 5. Establish procedures for the provision of support facilities required in conjunction with future housing (may include parking, student activities and recreation, etc.);
 6. Preserve and protect historically significant housing; and
 7. Encourage the development of university and off-campus housing as part of mixed use development(s), so as to better provide for pedestrian and bicycle oriented communities.
- (d) The Housing Element shall be described, at a minimum, in the Housing Element Map and explanatory text. This map along with companion text shall define the location, size/capacity and character of proposed future university controlled housing facilities on the campus and in the planning study area. The map and text shall be accompanied by explanatory tabular information as required.

Authority: Section 7(d), Art. IX, Fla. Const., History — Formerly 6C-21.206, 2-15- 94, Amended and Renumbered 6-18-09.

21.207 General Infrastructure Element.

This element ensures the provision of adequate capacity for stormwater management, potable water, sanitary sewer and treatment, and solid waste facilities required to meet the future needs of the university. The General Infrastructure Element shall consist of a Stormwater Management Sub-Element, a Sanitary Sewer Sub-Element, a Potable Water Sub-Element, and a Solid Waste Sub-Element.

(1) **STORMWATER MANAGEMENT DATA AND ANALYSIS REQUIREMENTS.** This sub-element shall be based on the following data and analysis requirements, pursuant to Subparagraph 21.202(2).

(a) Inventory and assess all public and private facilities and natural features which provide stormwater management for the campus, including detention and retention structures, storm drainage pipe systems, natural stream channels, rivers, lakes, wetlands, etc., (map, narrative). Assessment should include:

1. A facility capacity analysis by geographic service area, indicating capacity surpluses and deficiencies for:
 - i. Existing conditions, based on the facility design capacity and the current demand on facility capacity; and
 - ii. The end of the planning time frame, based on the projected demand at current level of service standards for the facility, projected student populations and land use distributions, and any available existing surplus facility capacity.
2. Analyzing the general performance of existing stormwater management facilities, evaluating the adequacy of the current level of service provided by the facility, the general condition and expected life of the facility, and the impact of the facility upon adjacent natural resources.
3. Preparing a description of the proportional capacity of any facilities shared between the university and the host and/or affected local governments that are required to meet existing university needs, including a description of any capacity that may have been previously allocated to the university by the host and/or affected communities.
4. Analyzing the general performance of natural stormwater management and hydrological features, and preparing a map of where these features are located.

(b) Inventory and assess the problems and opportunities for stormwater management facility expansion or replacement to meet projected needs of the university.

(c) Inventory and assess existing regulations and programs which govern land use and development of natural drainage features, including an analysis of the strengths and deficiencies of those programs and regulations in maintaining the functions of natural stormwater management features.

(2) **REQUIREMENTS FOR STORMWATER MANAGEMENT GOALS, OBJECTIVES AND POLICIES.**

(a) The sub-element shall contain one or more goal statements for accommodating future university stormwater management requirements.

(b) The sub-element shall contain one or more objectives for each goal which address:

1. Correcting existing stormwater management facility deficiencies;
2. Coordinating the provision of increased facility capacity to meet future needs of the university; and
3. Protecting the functions of natural stormwater management and hydrological areas.

(c) The element shall contain one or more policy statements for each objective which:

1. Establish the levels of service to be used by the university in establishing stormwater management standards for stormwater quantity and quality;
 2. Establish priorities for replacement, correcting existing stormwater management facility deficiencies, and providing for future facility needs;
 3. Coordinate the provision of on and off-campus stormwater management facilities required to meet future university needs with the local government or appropriate service provider;
 4. Ensure that future stormwater management facility service capacity and capital improvements required to meet future university needs are provided when required, based on needs identified in other master plan elements;
 5. Establish administrative, operational and other procedures to mitigate impacts of university-generated stormwater; and
 6. Establish the timing or phasing requirements for stormwater management facility improvements to meet future university needs.
 7. Encouraging the use of stormwater best management principles such as low-impact design and development, green roofs, rain harvesting, erosion controls and pesticide management.
- (d) The Stormwater Management Sub-Element shall be described, at a minimum, in the General Infrastructure Element Map(s) and explanatory text. This map, along with companion narrative shall identify the location and size of the proposed general infrastructure distribution and collection system lines, treatment facilities and general facilities. The map and text shall be accompanied by explanatory tabular information as required.
- (3) POTABLE WATER DATA AND ANALYSIS REQUIREMENTS. This sub-element shall be based on the following data and analysis requirements, pursuant to Subparagraph 21.202(2).
- (a) Inventory and assess all public and private facilities (including main distribution lines) which provide potable water to the campus. Assessment should include:
1. A facility capacity analysis by geographic service area, indicating capacity surpluses and deficiencies for:
 - i. Existing conditions, based on the facility design capacity and the current demand on facility capacity; and
 - ii. The end of the planning time frame, based on the projected demand at current level of service standards for the facility, projected student populations and land use distributions, and any available existing surplus facility capacity.
 2. Analyzing the general performance of existing potable water facilities (including main distribution lines), evaluating the adequacy of the current level of service provided by the facility, the general condition and expected life of the facility, and the impact of the facility upon adjacent natural resources.
 3. Preparing a description of the proportional capacity of any facilities shared between the university and the host and/or affected local governments that are required to meet existing university needs, including a description of any capacity that may have been previously allocated to the university by the host and/or affected communities.
 4. Analyzing the underground hydrology of the campus, including its potential as a potable water source.
- (b) Inventory and assess the problems and opportunities for potable water facility expansion or replacement to meet projected needs of the university.
- (c) Inventory and assess existing regulations and programs which govern land use and development of potable water facilities, including an analysis of the strengths and deficiencies of those programs and regulations in maintaining the functions of potable water delivery.
- (d) Inventory and assess existing and future uses and opportunities for the use of reclaimed water on the campus and identify the source and entity having operational responsibility for the provision of reclaimed water on or near campus
- (4) REQUIREMENTS FOR POTABLE WATER GOALS, OBJECTIVES AND POLICIES.
- (a) The sub-element shall contain one or more goal statements for accommodating future university potable water requirements.
- (b) The sub-element shall contain one or more objectives for each goal which address:
1. Correcting existing potable water facility deficiencies;
 2. Coordinating the provision of increased facility capacity to meet future needs of the university; and
 3. Protecting and conserving potable water sources.
- (c) The element shall contain one or more policy statements for each objective which:
1. Establish the levels of service to be used by the university in establishing potable water supply requirements;

2. Establish priorities for replacement, correcting existing potable water facility deficiencies, and providing for future facility needs;
3. Coordinate the provision of on and off-campus potable water facilities required to meet future university needs with the local government or appropriate service provider;
4. Ensure that future potable water facility service capacity and capital improvements required to meet future university needs are provided when required, based on needs identified in other master plan elements;
5. Establish administrative, operational and other procedures to conserve water, including utilization of reclaimed water as appropriate, and thereby minimize future potable water requirements of the university; and
6. Establish the timing or phasing requirements for potable water facility improvements to meet future university needs.

(d) The Potable Water Sub-Element shall be described, at a minimum, in the General Infrastructure Element Map(s) and explanatory text. This map, along with companion narrative shall identify the location and size of the proposed general infrastructure distribution and collection system lines, treatment facilities and generation facilities. The map and text shall be accompanied by explanatory tabular information as required.

(5) SANITARY SEWER DATA AND ANALYSIS REQUIREMENTS. This sub-element shall be based on the following data and analysis requirements, pursuant to Subparagraph 21.202(2).

(a) Inventory and assess all public and private facilities (including main collection lines) which provide sanitary sewer services to the campus. Assessment should include:

1. A facility capacity analysis by geographic service area, indicating capacity surpluses and deficiencies for:
 - i. Existing conditions, based on the facility design capacity and the current demand on facility capacity; and
 - ii. The end of the planning time frame, based on the projected demand at current level of service standards for the facility, projected student populations and land use distributions, and any available existing surplus facility capacity.
2. Analyzing the general performance of existing sanitary sewer facilities (including main collection lines), evaluating the adequacy of the current level of service provided by the facility, the general condition and expected life of the facility, and the impact of the facility upon adjacent natural resources.
3. Preparing a description of the proportional capacity of any facilities shared between the university and the host and/or affected local governments that are required to meet existing university needs, including a description of any capacity that may have been previously allocated to the university by the host and/or affected communities.

(b) Inventory and assess the problems and opportunities for sanitary sewer facility expansion or replacement to meet projected needs of the university.

(c) Inventory and assess existing regulations and programs which govern land use and development of sanitary sewer facilities, including an analysis of the strengths and deficiencies of those programs and regulations in maintaining the functions of sanitary sewer collections.

(6) REQUIREMENTS FOR SANITARY SEWER GOALS, OBJECTIVES AND POLICIES.

(a) The sub-element shall contain one or more goal statements for accommodating future university sanitary sewer requirements.

(b) The sub-element shall contain one or more objectives for each goal which address:

1. Correcting existing sanitary sewer facility deficiencies; and
2. Coordinating the provision of increased facility capacity to meet future needs of the university.

(c) The sub-element shall contain one or more policy statements for each objective which:

1. Establish the levels of service to be used by the university in establishing sanitary sewage collection and treatment facility requirements;
2. Establish priorities for replacement, correcting existing sanitary sewer facility deficiencies, and providing for future facility needs;
3. Coordinate the provision of on and off-campus sanitary sewer facilities required to meet future university needs with the local government or appropriate service provider;
4. Ensure that future sanitary sewer facility service capacity and capital improvements required to meet future university needs are provided when required, based on needs identified in other master plan elements; and

5. Establish the timing or phasing requirements for sanitary sewer facility improvements to meet future university needs.

(d) The Sanitary Sewer Sub-Element shall be described, at a minimum, in the General Infrastructure Element Map(s) and explanatory text. This map, along with companion narrative, shall identify the location and size of the proposed general infrastructure distribution and collection system lines, treatment facilities and generation facilities. The map and text shall be accompanied by explanatory tabular information as required.

(7) SOLID WASTE DATA AND ANALYSIS REQUIREMENTS. This sub-element shall be based on the following data and analysis requirements, pursuant to Subparagraph 21.202(2).

(a) Inventory and assess all public and private facilities which provide solid waste collection, storage and disposal services to the campus. Assessment should include:

1. A facility capacity analysis by geographic service area, indicating capacity surpluses and deficiencies for:

i. Existing conditions, based on the facility design capacity and the current demand on facility capacity; and
ii. The end of the planning time frame, based on the projected demand at current level of service standards for the facility, projected student populations and land use distributions, and any available existing surplus facility capacity.

2. Analyzing the general performance of existing solid waste facilities, evaluating the adequacy of the current level of service provided by the facility, the general condition and expected life of the facility, and the impact of the facility upon adjacent natural resources.

3. Preparing a description of the proportional capacity of any facilities shared between the university and the host and/or affected local governments that are required to meet existing university needs, including a description of any capacity that may have been previously allocated to the university by the host and/or affected communities.

(b) Inventory and assess the problems and opportunities for solid waste facility expansion or replacement to meet projected needs of the university.

(c) Inventory and assess existing regulations and programs which govern land use and development of solid waste facilities, including an analysis of the strengths and deficiencies of those programs and regulations in maintaining the functions of solid waste collection, storage and disposal.

(d) Inventory and assess opportunities or available and practical technologies for the reduction, recycling and re-use of solid waste generated by the university.

(e) Inventory and assess any existing agreements for the collection, storage and disposal of university-generated solid waste, including allocated capacity and duration of service. Identify any future limitations on university development resulting from these factors.

(8) REQUIREMENTS FOR SOLID WASTE GOALS, OBJECTIVES AND POLICIES.

(a) The sub-element shall contain one or more goal statements for accommodating future university solid waste collection and disposal requirements.

(b) The sub-element shall contain one or more objectives for each goal which address:

1. Correcting existing solid waste collection and disposal facility deficiencies; and
2. Coordinating the provision of increased facility capacity to meet future needs of the university.
3. Increasing solid waste recycling.

(c) The element shall contain one or more policy statements for each objective which:

1. Establish the levels of service to be used by the university in establishing solid waste collection and disposal facility requirements;

2. Establish priorities for replacement, correcting existing solid waste collection and disposal facility deficiencies, and providing for future facility needs;

3. Coordinate the provision of on and off-campus solid waste collection and disposal facilities required to meet future university needs with the local government or appropriate service provider;

4. Ensure that future solid waste collection and disposal facility service capacity and capital improvements required to meet future university needs are provided when required, based on needs identified in other master plan elements; and

5. Establish the timing or phasing requirements for solid waste collection and disposal facility improvements to meet future university needs.

6. Increase recycling through increased collection points and awareness campaigns

(d) The Solid Waste Sub-Element shall be described, at a minimum, in the General Infrastructure Element Map(s) and explanatory text. This map, along with the companion narrative shall identify the location and size of the proposed general infrastructure distribution and collection system lines, treatment facilities and generation facilities. The map and text shall be accompanied by explanatory tabular information as required.

Authority: Section 7(d), Art. IX, Fla. Const., History— Formerly 6C-21.207, 2-15-94, Amended and Renumbered 6-18-09.

21.208 Conservation Element.

This element ensures the conservation, protection and wise use of all natural ecosystems and natural resources on the university campus and in the planning study area.

(1) CONSERVATION DATA AND ANALYSIS REQUIREMENTS. This element shall be based on the following data and analysis requirements, pursuant to Subparagraph 21.202(2).

(a) Inventory and assess existing natural and environmental resources where present both on the university campus and within the planning study area.

(b) The assessment indicated in (1)(a) of this element shall include for each natural and environmental resource the:

1. Identification of existing or potential commercial, recreational, or conservation uses.
2. Identification of available and practical opportunities and methods for protection or restoration of those resources.
3. Identification of known sources and rates of discharge or generation of pollution or its impacts generated by university activities.
4. Identification of opportunities or available and practical technologies to minimize pollution or its impacts generated by university activities.
5. Identification of current and projected water needs and sources, based on the demand for industrial, agricultural and potable water use and the quantity and quality available to meet those demands.
6. Identification of opportunities or available and practical technologies to reduce university energy consumption unless addressed in the utilities or capital improvement element. Investigation of emerging technologies (i.e., solar) to address this issue is encouraged.

(2) REQUIREMENTS FOR CONSERVATION GOALS, OBJECTIVES AND POLICIES.

(a) The element shall contain one or more goals establishing the long-term end toward which conservation programs are directed.

(b) The element shall contain one or more objectives for each goal which:

1. Protect or improve air quality;
2. Conserve, appropriately use, and protect the quantity and quality of current and projected water sources (including groundwater and surface water);
3. Conserve, appropriately use, and protect native vegetative communities and wildlife habitat and manage non-native invasive plant removal; and
4. Conserve and appropriately use energy.

(c) The element shall contain one or more policies for each objective which address implementation activities that:

1. Protect water quality and quantity by restricting university activities which contaminate groundwater sources such as wellfields, cones of influence or recharge areas;
2. Protect native vegetative communities from destruction by university development activities and also encourage use of native vegetation whenever possible;
3. Restrict university activities known to threaten the habitat and survival of endangered and threatened plant and wildlife species and species of special concern;
4. Improve control of, or restrict or minimize university activities which generate air and light pollution;
5. Minimize stormwater-borne pollutants generated as a result of university operations and maintenance practices;
6. Protect and conserve the natural functions of soils, rivers, floodplains and wetlands;
7. Encourage recycling;
8. Designate environmentally sensitive lands for protection based on state and locally determined criteria;

9. Manage hazardous wastes to protect natural resources; and
10. Establish administrative, operational, and other procedures to conserve energy and minimize future demand.
11. Encourage the attritional replacement of existing university-controlled vehicle fleets with reduced emission vehicles.

(d) The Conservation Element shall be described, at a minimum, in the Conservation Element Map and explanatory text. This map along with companion text shall describe the natural resource conservation and protection areas planned on the university campus. The map and text shall be accompanied by explanatory tabular information as required.

Authority: Section 7(d), Art. IX, Fla. Const., History — Formerly 6C-21.208, 2-15- 94, Amended and Renumbered 6-18-09.

21.209 Recreation and Open Space Element.

This element ensures the provision of adequate and accessible recreation facilities and open space to meet the future needs of the university.

(1) RECREATION AND OPEN SPACE DATA AND ANALYSIS REQUIREMENTS. This element shall be based on the following data and analysis requirements, pursuant to Subparagraph 21.202(2).

(a) Inventory and assess existing university-owned or managed recreational sites (including open spaces, incidental recreation facilities, parks, lakes, forests, reservations, freshwater and saltwater beaches) against the projected needs for recreation and open space facilities required to meet the needs of the projected university population (students, faculty and staff) based on university standards and calculations or established level of service standards.

(b) Inventory and assess existing privately-owned, state owned, or local government-owned recreational facilities and open spaces within the planning study area against the projected needs for recreation and open space facilities required to meet the needs of the projected university population (students, faculty and staff) based on university standards and calculations or established level of service standards.

(c) Inventory and assess planned future recreation and open space facilities, both on-campus and off-campus within the planning study area, against projected needs of both the university and the host and/or affected local governments. This analysis should consider levels of service standards established by both the university and the host and/or affected local governments for each type of recreation facility. The university assessment must consider opportunities for alternative future facility siting in order to conserve the supply and character of campus open space.

(2) REQUIREMENTS FOR RECREATION AND OPEN SPACE GOALS, OBJECTIVES AND POLICIES.

(a) The element shall contain one or more goals for recreation and open space facilities.

(b) The element shall contain one or more objectives for each goal which:

1. Coordinate public and private resources to meet the projected university generated demand for recreational facilities and open space; and

2. Ensure that parks, recreational facilities and open space are adequately and efficiently provided.

(c) The element shall contain one or more policy statements which:

1. Establish priorities for development of future recreation and open space facilities;

2. Establish the timing or phasing requirements for development of future athletic, recreation and open space facilities;

3. Select sites for infrastructure and buildings designed to maximize the retention of campus open space;

4. Coordinate provision of recreation and open space facilities on-campus with those provided off-campus by the host and/or affected local governments;

5. Correct or improve existing deficiencies due to university generated demand on parks and recreation facilities; and

6. Designate or acquire open space and natural reservations.

7. Promotes bike, pedestrian and mass transit connectivity between the university community and recreational facilities.

(d) The Recreation and Open Space Element shall be described at a minimum in the Recreation and Open Space Element Map and explanatory text. This map and companion text and tabular data shall define the location, size

and function of proposed future recreation and open space facilities on the campus. The map and text shall be accompanied by explanatory tabular information as required.

Authority: Section 7(d), Art. IX, Fla. Const., History — Formerly 6C-21.209, 2-15- 94, Amended and Renumbered 6-18-09.

21.210 Intergovernmental Coordination Element

This element identifies and resolves goals, objectives, policies and development proposed in campus master plans that may be incompatible with adjacent local governments, and regional and state agency plans.

Intergovernmental coordination shall be utilized to the extent required to carry out the provisions of this Chapter.

(1) INTERGOVERNMENTAL COORDINATION DATA AND ANALYSIS REQUIREMENTS. This element shall be based on the following data and analysis requirements, pursuant to Subparagraph 21.202(2).

(a) Inventory and assess the list of all host and affected local governments, and other units of local government providing services but not having regulatory authority over the use of land, independent special districts, water management districts, regional planning councils, and state agencies with which the university coordinates, or which provide services to the university. This inventory shall also include regional or state agencies with land use or environmental regulatory authority, and authorities, independent special districts, and utility companies which provide services to the university.

(b) The assessment indicated in (1) (a) of this subsection shall include the following:

1. An assessment of the existing coordination mechanisms in place for each governmental entity. This assessment shall include the nature of the coordinating relationship, the mechanism used for coordination (such as intergovernmental agreements, joint planning and service agreements, special legislation, joint meetings/workgroups, mutual aid agreements, etc...) the office with primary responsibility for coordination, as well as the effectiveness of any existing coordination mechanisms.

2. An assessment of specific problems and needs within each of the campus master plan elements which would benefit from improved or additional intergovernmental coordination and means for resolving those problems and needs.

(c) Inventory and assess all previous fair share payments made by the University to its host or affected local government as a result of existing Campus Development Agreement(s). This assessment shall include a summary of how those funds have been spent by the local government, and the relative effectiveness of this spending in mitigating university generated impacts.

(2) REQUIREMENTS FOR INTERGOVERNMENTAL COORDINATION GOALS, OBJECTIVES, AND POLICIES.

(a) The element shall contain one or more goal statements which establish the long-term end toward which intergovernmental coordination activities are ultimately directed.

(b) The element shall contain one or more specific objectives and policies for each goal which:

1. Coordinate the campus master plan with the plans of other units of local government providing services but not having regulatory authority over the use of land, and the comprehensive plans of host and affected local governments;

2. Ensure that the university addresses through coordination and accountability mechanisms, the impacts of development proposed in the campus master plan upon development in the planning study area; and

3. Ensure coordination in establishing level of service standards for public facilities with any state, regional or local entity having operational and maintenance responsibility for such facilities.

(3) INTERGOVERNMENTAL COORDINATION PROCESS.

The Intergovernmental Coordination Element shall establish a development review process, to be implemented in conjunction with host and affected local governments. This development review process shall assess the impacts of proposed development on significant local, regional and state resources and facilities, and shall be a reciprocal process whereby local officials are given an opportunity to review proposed campus development in order to assess its potential impacts on local, regional and state resources and facilities. The process should afford university officials an opportunity to review proposed development within the planning study area in order to assess its potential impacts on university resources and facilities. Prior to the approval and adoption of the Campus Development Agreement by the University Board of Trustees, the university will engage in a coordination process

with the Board of Governors. As part of this process of reviewing campus development agreements, the Board of Governors may require submission of more complete or more detailed data or analysis from the university. Authority: Section 7(d), Art. IX, Fla. Const., History — Formerly 6C-21.210, 2-15-94, Amended and Renumbered 6-18-09.

21.211 Capital Improvement Element

This element evaluates the need for public facilities as identified in other campus master plan elements; to estimate the cost of improvements for which the university has fiscal responsibility; to analyze the fiscal capability of the university to finance and construct improvements; to adopt financial policies to guide the funding of improvements; and to schedule the funding and construction of improvements in a manner necessary to ensure that capital improvements are provided when required based on needs identified in the other campus master plan elements. All development is contingent upon the availability of funding.

(1) CAPITAL IMPROVEMENTS DATA AND ANALYSIS REQUIREMENTS. This element shall be based on the following data and analysis requirements, pursuant to subsection 21.202(2).

(a) The element shall be based on the facility needs as identified in the other elements and shall support the future needs as identified in the future land use element; however, all capital improvements identified in this section shall be considered contingent on funding becoming available.

(b) Inventory and assess existing and anticipated revenue sources and funding mechanisms available for capital improvement financing, such as ad valorem funds, state funds, federal funds, bonds, impact fees, gas tax, etc.

(c) Inventory and assess the cost of future capital improvements identified in the other plan elements. This analysis must consider inflation factors, the relative priority of need ranking, and university practices that guide the timing and location of construction, extensions or increases in the capacity of university facilities. This analysis should include the cost of capital improvements both on-campus and off-campus within the planning study area. The analysis for off-campus capital improvements within the planning study area must also compare the host and/or affected local governments and university cost estimates for future improvements generated by university infrastructure impacts.

(d) Inventory and assess operations and maintenance costs for existing facilities.

(2) REQUIREMENTS FOR CAPITAL IMPROVEMENTS GOALS, OBJECTIVES AND POLICIES.

(a) The element shall contain one or more goal statements which establish the long-term end for the timely and efficient provision of capital facilities through the use of sound fiscal policies.

(b) The element shall contain one or more objectives for each goal and shall address:

1. The coordination of land use decisions and available or projected fiscal resources with a schedule of capital improvements which maintains level of service standards as adopted in the campus master plan and meets existing and projected facility needs;
2. The demonstration of the university's ability to provide or require provision of the needed improvements identified in the other elements and to manage the expansion or improvement process so that facility needs do not exceed the ability of the university to fund and provide provision of the needed capital improvements; and
3. The use of the capital improvements element as a means to meet the needs of the university for the construction of capital facilities to correct existing deficiencies, to accommodate desired future growth, and to replace worn-out or obsolete facilities.

(c) The element shall contain one or more policies for each objective which address programs and activities for:

1. The establishment of criteria used to evaluate and prioritize capital improvement projects;
2. Provisions for the replacement and renewal of capital facilities;
3. Provisions for the availability of facilities and services needed to support facility construction, expansion or improvement concurrent with the impacts of such construction, expansion or improvement subsequent to the adoption of the master plan;
4. Provisions for the adoption of the capital budget as part of the annual budgeting process to include provisions which are consistent with the campus development agreement; and
5. Provisions for programming the future facility costs to include the cost of the site improvements, utility extensions and associated easements, parking, traffic circulation improvements, etc., necessary for the proper

function of the individual facility and to include the cost of facilities necessary to support future capacity requirements.

(3) CAPITAL IMPROVEMENTS IMPLEMENTATION.

(a) The campus master plan capital improvement element shall contain:

1. The schedule of capital improvements for which the university has fiscal responsibility, by year (for the 3-year committed, for the provisions consistent with the campus development agreement, and 10-year projected improvements) which shall reflect the need to reduce existing deficiencies, remain abreast of replacements, and meet future demand; and

2. A list of projected costs and revenues by type of facility for the planning period, by year.

Authority: Section 7(d), Art. IX, Fla. Const., History — Formerly 6C-21.211, 2-15-94, Amended and Renumbered 6-18-09.

2015-2025
USF System
Campus Master Plan Update

Appendix B
Data Collection and Analysis

Tampa



Data Collection and Analysis

Table of Contents

Element 4 Future Land Use

Element 5 Transportation

Element 6 Housing and Student Support Services

Element 7 Infrastructure

7.1 Stormwater Management

7.2 Potable Water

7.3 Sanitary Sewer

7.4 Solid Waste

7.5 Hot Water

7.6 Chilled Water

7.7 Electrical Power and other Fuels

7.8 Data/Voice Communications

Element 8 Conservation

Element 9 Recreation and Open Space

Element 10 Intergovernmental Coordination

Element 11 Capital Improvements

Data Collection and Analysis Figures

Element 4 Future Land Use:

- Figure 4.1 Existing Building Uses**
- Figure 4.2 Campus Development Density**
- Figure 4.3 Building Development**
- Figure 4.4 Encumbrances, Leases, Subleases, and Easements**
- Figure 4.5 Developable and Underdeveloped Areas**
- Figure 4.6 Existing Campus Aerial**

Element 5 Transportation:

- Figure 5.1 Existing Parking and Vehicular Circulation System**
- Figure 5.2 Parking Utilization**
- Figure 5.3 Bull Runner Route Map**
- Figure 5.4 Bus Route Map**
- Figure 5.5 Existing and Planned Pedestrian Facilities**
- Figure 5.6 Existing and Planned Bicycle Facilities**
- Figure 5.7 Functional Roadway Classifications**
- Figure 5.8 Existing Average Daily Traffic Volumes**

Element 6 Housing and Student Support Services:

- Figure 6.1 Student and Staff Off-Campus Residences**
- Figure 6.2 Campus Housing**

Element 7 Infrastructure:

- Figure 7.1-1 Stormwater Management Plan**
- Figure 7.1-2 Stormwater Problem Areas**
- Figure 7.1-3 Permeable Surface**
- Figure 7.2-1 Potable Water Plan**
- Figure 7.2-2 Irrigation Plan**
- Figure 7.3 Sanitary Sewer Plan**
- Figure 7.4 Waste Management Plan**

Figure 7.5 Heating Hot Water Illustrative Map

Figure 7.6 Chilled Water Illustrative Map

Figure 7.7 Electrical Illustrative Map

Figure 7.8-1 Communications Illustrative Map

Figure 7.8-2 Communications Site Distribution

Element 8 Conservation:

Figure 8.1 USF Campus Open Space

Figure 8.2 Natural and Environmental Resources

Figure 8.3 USF Forest Preserve

Figure 8.4 Sinkhole Plan

Figure 8.5 Tree Cover

Figure 8.6 Floodplains

Element 9 Recreation and Open Space:

Figure 9.1 Athletic and Recreation Facilities

Figure 9.2 Open Space

Figure 9.3 Riverfront Park Plan

Element 11 Capital Improvements:

Figure 11.1 2005-2015 Projects Completed

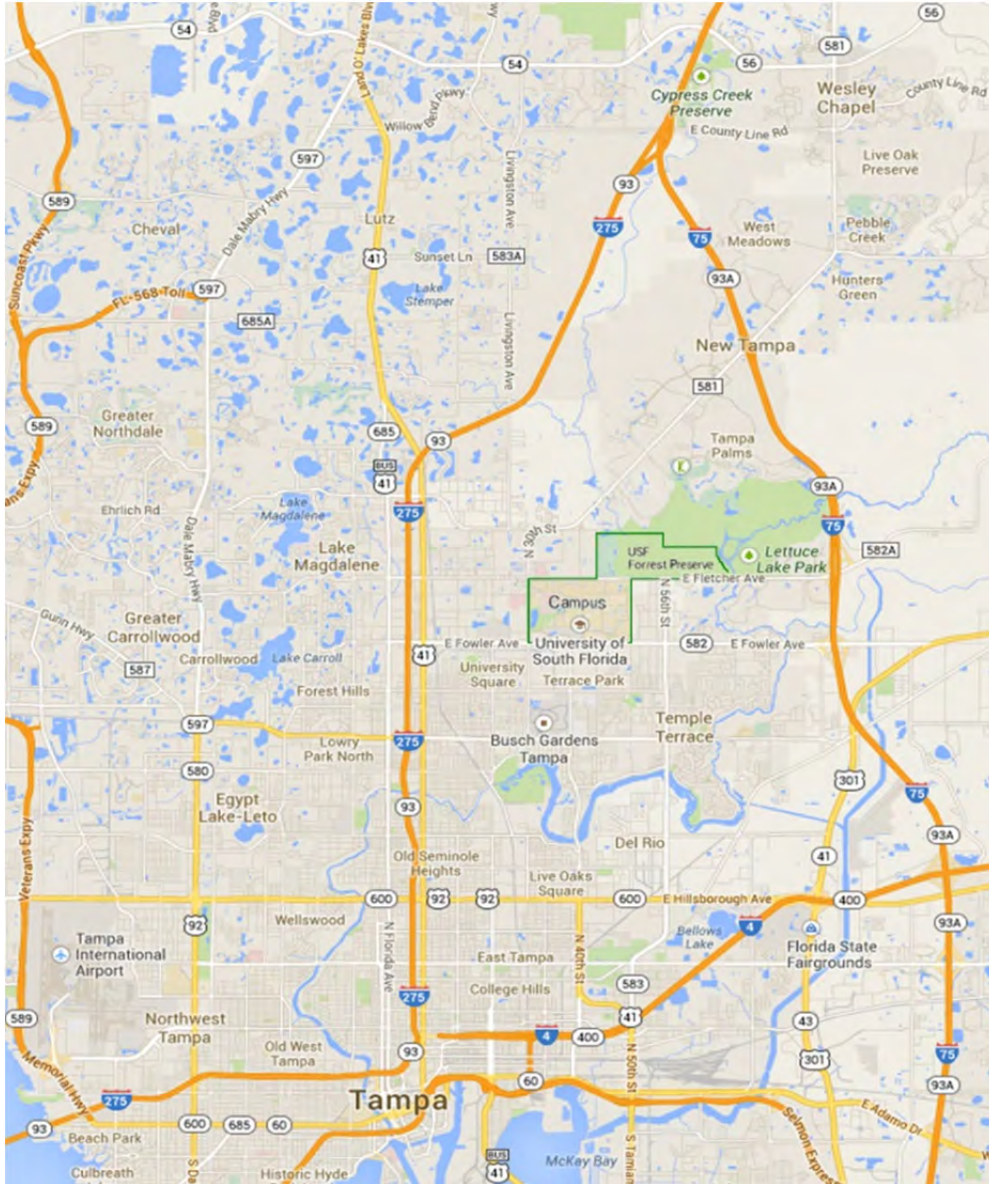
Figure 11.2 Building Maintenance Responsibilities

This Page Intentionally Left Blank.

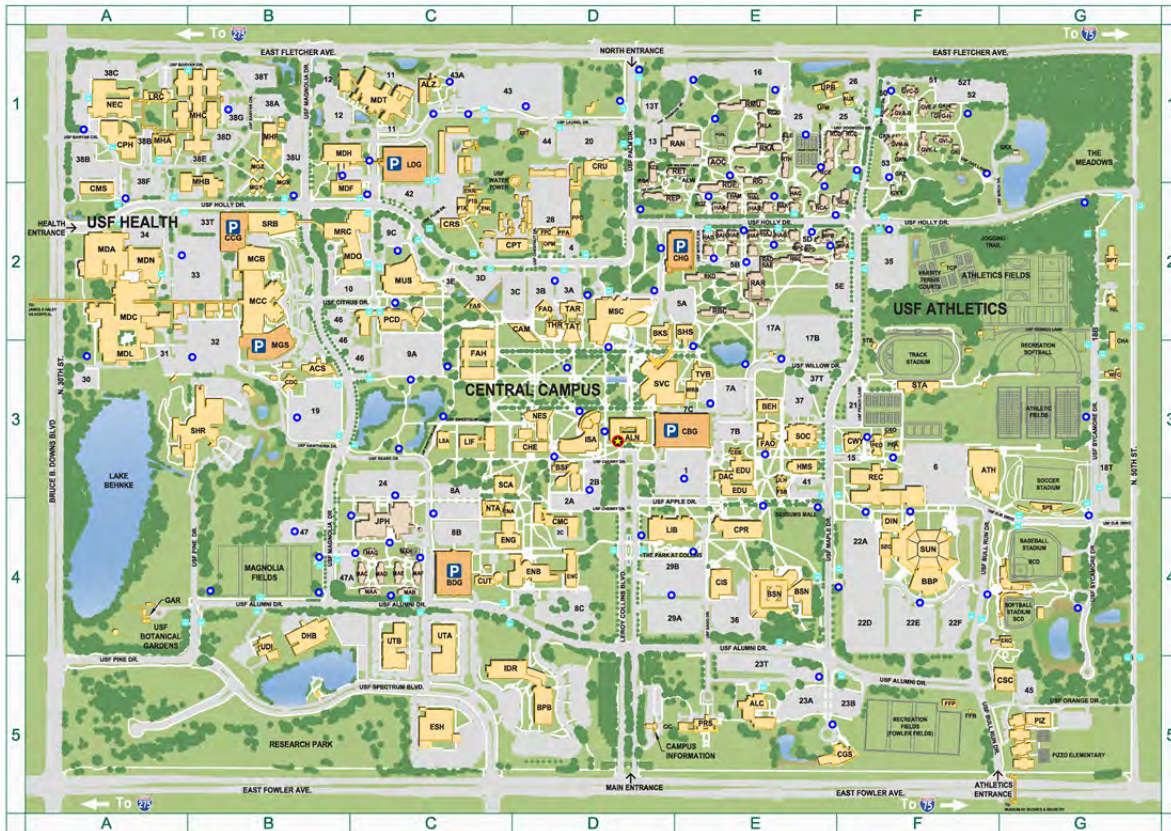
Element 4 Future Land Use

This element designates existing and future development as reflected in the goals, objectives and policies of the campus master plan, and describes how future development will be coordinated with land uses planned by the host and/or affected local governments in the planning study area, see also Element 10

USF Tampa Campus Location Map:



This Page Intentionally Left Blank.



(1) FUTURE LAND USE DATA AND ANALYSIS

The USF campus property consists of a total of approximately 1550 Acres and is divided by Fletcher Avenue. The property is leased from the state Trustees of the Internal Improvement Trust Fund (TIITF). The developed Academic Campus is approximately one mile north-south by one and a half miles east-west, containing approximately 815 Acres including subleased parcels, and does not include the USF Research Park. The campus is bounded by Bruce B Downs Boulevard, Fletcher Avenue, 50th Street, and partially by Fowler Avenue. USF campus development is guided by the Campus Development Agreement with the City of Tampa. The USF Research Park is a separate property leased directly to the USF Research Foundation by the TIITF. Its development is governed by a separate Development of Regional Impact (DRI) with the City of Tampa.

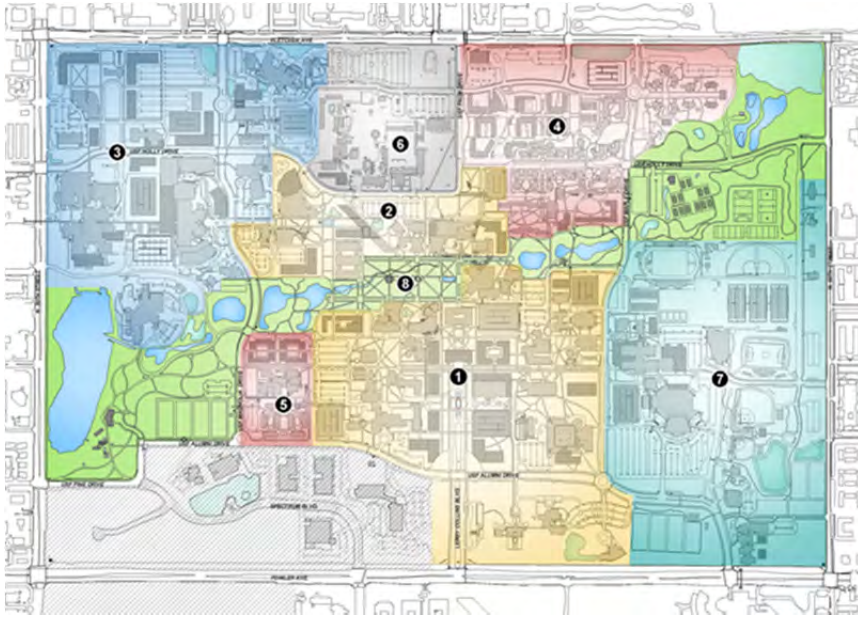
The USF property north of Fletcher Avenue is bounded by 46th Street, Fletcher Avenue, and the Hillsborough River. This property is approximately 735 Acres and contains the USF Golf Course, the USF Forest Preserve, and the USF Riverfront Park.

(a) Existing and projected space and building needs

Summary of Campus buildings GSF by area:

The campus currently contains 263 buildings. Individual building NASF and GSF are available through Facilities Planning and Construction. The facilities for the College of Marine Science and the USF Health Pediatric Research Building are located on the USF St. Petersburg campus and are included in the Campus Master Plan for that campus.

<u>USF BUILDINGS ONLY GSF TOTAL</u>				
			GSF	Parking Struct GSF
1 - Academic South			2,737,498	1,110,955
2 - Academic North			912,621	297,303
3 - Health Sciences			1,734,224	472,085
4 - Residential East			1,352,752	
5 - Residential West			527,916	
6 - Facilities Services			238,297	
7 - Athletics and Recreation			803,804	
8 - Greenway			3,516	
		GSF Total	8,310,628	1,880,343
		GSF Total with Parking Structures	10,190,971	
<u>USF TAMPA CAMPUS - ALL BUILDINGS GSF TOTAL</u>				
			GSF	Parking Struct GSF
1 - Academic South			2,737,498	1,110,955
2 - Academic North			912,621	297,303
3 - Health Sciences			1,734,224	472,085
3 - Moffitt, Shriners'			1,332,257	540,866
		Total Area 3	3,066,481	
4 - Residential East			1,352,752	
5 - Residential West			527,916	
6 - Facilities Services			238,297	
7 - Athletics and Recreation			803,804	
7 - Pizzo Elem, Patel Elem, Chapels			136,166	
		Total Area 7	939,970	
8 - Greenway			3,516	
		GSF Total	9,779,051	2,421,209
		GSF Total with Parking Structures	12,200,260	



USF Tampa Campus Enrollment Projections

Unique Headcounts on Campus*

2012	2013	2014	2020 projection	2025 projection
37101	37579	36842	37210	37583

Unique Headcounts of Distance Learning Students**

2012	2013	2014	2020 projection	2025 projection
3659	3907	4008	4048	4089

Unique Headcount per Day*^

	2012	2013	2014	2020 projection	2025 projection
Sunday	16	55	9	9	9

Monday	23614	24117	25321	25574	25830
Tuesday	26215	27248	27030	27300	27573
Wednesday	24108	24483	25696	25953	26212
Thursday	25797	26514	26320	26583	26849
Friday	13788	14379	6319	6382	6446
Saturday	877	939	1103	1114	1125

Headcounts by Home Campus*++

2012	2013	2014	2020 projection	2025 projection
41047	41703	41888	42307	42730

FTE by Home Campus*++

2012	2013	2014	2020 projection	2025 projection
15704.66	15784.33	15688.61	15845	16004

Tampa Campus Total Annual FTE Actual and Projected:

Tampa	Actual						Projected									
AY	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
FTE	25,705	26,270	26,058	26,417	26,765	27,048	27,249	27,429	27,612	27,798	27,988	28,180	28,370	28,562	28,754	28,948

All projects for student enrollment are based on 1% increase from Fall 2014 to Fall 2020 and a 1% increase from Fall 2020 to 2025.

*These represent the count of unique ids where course delivery campus location was USF Tampa.

**These represent the count of unique ids of students where 100% of their courses were labeled as distance learning where course funding campus was USF Tampa.

*^ These represent the count of unique ids where course delivery campus location was USF Tampa for a given day of the week.

*++ These represent the “federal” counts based on information available in InfoCenter. Note these counts do include USF Lakeland and USF Health students. FTE is the gross FTE fall contribution to the annual FTE total.

Non-Student Faculty-Staff*^#

Fall 2011	Fall 2012	Fall 2013	Fall 2020 projection	Fall 2025 projection
10101	10627	10870	11087	11309

*^# Non-Student Faculty-Staff projections are based on a 2% increase from Fall 2013 to Fall 2020 and a 2% increase from Fall 2020 to Fall 2025. Fall 2013 was used as the “base” for Non-Student Faculty-Staff projections because at the time of the study Fall 2014 Faculty Staff headcounts were considered “unstable”.

Enrollment and employee information above provided by USF Planning & Analysis Office of Decision Support

USF Tampa Campus Academic Space Need Generation

USF Tampa Campus Space Generation August 2015 (unofficial)										
		CLASS ROOM	TEACH LAB	STUDY	RSCH LAB	OFFICE	AUDITRM EXHIB	INSTR MEDIA	GYM	SUPPORT SVC
2020 f/t headcount		28,010								
2020 distance learn unique head		4,048								
2015 NASF totals		206,432	339,537	247,291	370,597	1,193,946	33,491	3,145	95,804	116,505
2015 space factor		12	15	18	32	40	3	2	4	6
2020 generated space										
2020 f/t headcount		336,120	420,150	503,340	896,040	1,110,120	84,030	56,020	119,323	176,257
distance learn unique head		48,576								
2020 Space Needs		81,112	80,613	256,049	525,443	(83,826)	50,539	52,875	23,519	59,752

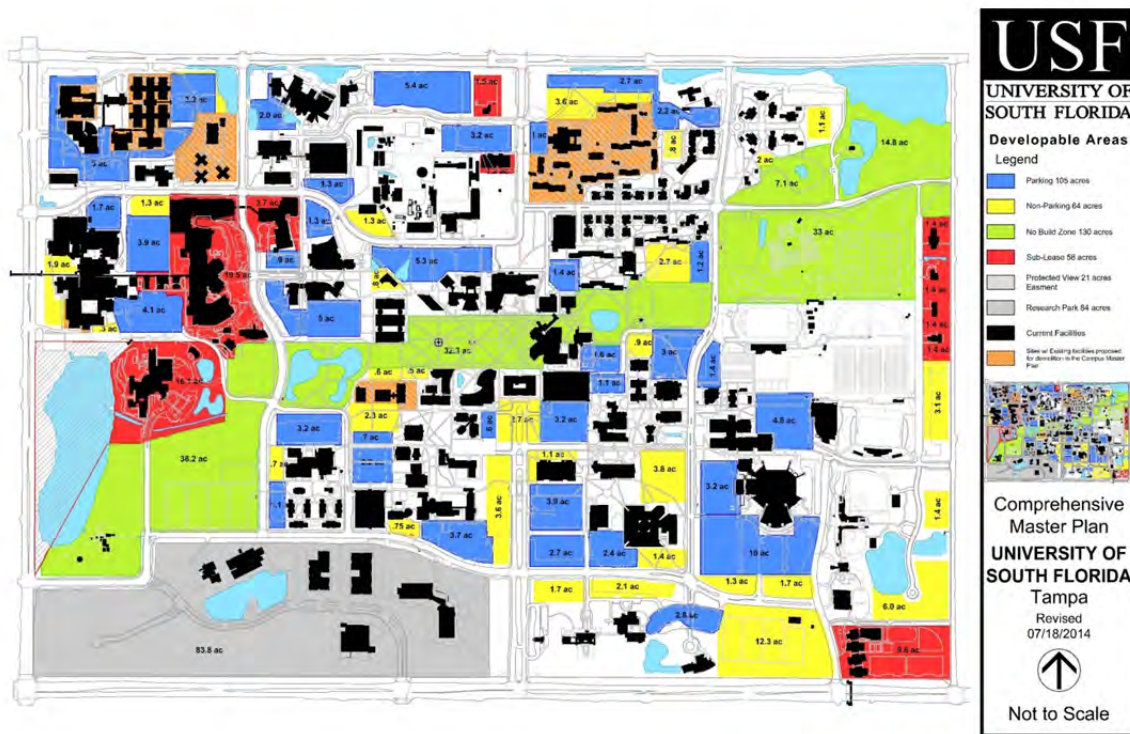
Notes:

1. Table above is an unofficial projection using BOG space formulas. The next official form will be generated in the fall of 2016 with the next USF Educational Plant Survey.
2. 2020 Space needs are in NASF and need to be converted to GSF with a conversion multiplier dependent on space type of approximately 1,774,000 total GSF.
3. See Element 11 Capital Improvements for projects seeking PECO funding and other sources.
4. The Space need generated above is only for Academic space funded by Public Education Capital Outlay (PECO) funds. Housing, Athletics, Student Services, and other Auxilliary facilities are not included in this Assessment as they are not funded by the state.
5. The f/t headcount above is Full Time Equivalent (FTE), which includes a conversion of part time students

(b) Projected vacant, open or underdeveloped University-controlled lands

The USF Tampa Campus proper contains a large number of 1-2 story buildings (Fig 4.2). This density is considered a poor use of land resources and in the future could be considered sites for facilities of greater density. Currently there are 105 acres of surface parking lots and 64 acres of non-parking land areas outside of the Greenway system. There is approximately 79 acres that is sub-leased to other entities, including a 22 acre view easement primarily over Lake Behnke. The Greenway, USF Golf Course, USF Forest Preserve, and the USF Riverfront Park are all considered unavailable for development. See map below

The former USF Chinsegut Hill Conference Center in Brooksville FL was considered surplus land. It is now leased by the State to Hernando County.



(c) Properties within the planning study area where title interest is held by the Board of Trustees of the Internal Improvement Trust Fund (TIIF).

The USF Research Park, the property at the northeast corner of Bruce B Downs and Fowler Avenue, is leased to the USF Research Foundation by the TIIF. Development is controlled by a Development of Regional Impact agreement with the city, not the USF Master Plan. The property is approximately 87 acres (including reservations and encumbrances such as leases, subleases, or easements, and any other land held by the University within the planning study area or included in the Master Plan). The property located at the southeast corner of Bruce B Downs and Fowler Avenue (South Park) was acquired by the USF Research Foundation in November 2005. The undeveloped property is 25 acres. This property currently does not have

a development agreement. Existing subleases to non-USF entities on University-controlled property, other than utility easements are shown on Fig 4.4.

Tampa Campus Property in Subleases and Encumbrances

LESSEE or SUBLESSEE	NAME of FACILITY/ STRUCTURE	FACILITY USE	LEASED ACREAGE	SUBLEASED ACREAGE	LEASE TERMINATION
USF/ Board of Trustees	USF/ Main Campus	USF/ Main Campus	1,550.00		1/22/2073
BOT Synod of Florida Presbyterian Church U.S.	Chapel Center	Student Religious Center		1.38	1/25/2059
Florida Baptist Convention	Baptist Student Center	Student Religious Center		1.38	1/25/2059
Florida Board of Education of the Florida Annual Conference of the Methodist Church	University Chapel Fellowship	Student Religious Center		1.38	1/25/2059
Credit Union	USF Federal Credit Union	Credit Union		1.17	1/17/2021
Shriners Hospital	Shriners Hospital	Shriners Hospital	includes view easement	40.96	12/13/2072
H. Lee Mofitt Cancer Ctr	H. Lee Mofitt Cancer Ctr	H. Lee Mofitt Cancer Ctr		21.64	10/10/2040
American Cancer Society	ACS: Hope Lodge	Short Term Residential Facility	incl in Moffitt sublease	4.00	4/30/2025
Hillsborough County School Board	Anthony J. Pizzo Elementary School	Elementary School		9.62	8/21/2017
Hillel Jewish Student Center	Hillel Jewish Student Center	Hillel Jewish Student Center		1.38	10/15/2017
Hillsborough County School Board	Patel Charter School	Elementary School		0.52	

ENCUMBRANCES/EASEMENTS:

TECO (substation only, no utility easements)	1.52
Shriners' Hospital Unobstructed View Area (included above)	22.62

Note: The USF Property Corporation maintains property subleases for certain campus areas as a result of some projects.

Note there are special requirements required by the EPC and DEP for any development on Lot 32 (located between the USF Health facilities and the Moffitt and Shriners Subleases). See Appendix D for more information.

Off- Campus property:

- South Tampa Clinic for Advanced Health Care:
Sublease from Tampa General Hospital To the USF Board of Trustees:
.746 Acres
Address: 2 Tampa General Circle, Tampa FL 33606
40 years, effective March 2006, expires September 30, 2046, may be extended
- Center for Advanced Medical Learning and Simulation (CAMLs):
Owner: USF Board of Trustees
1.39 Acres
Address: 124 S Franklin Street, Tampa FL 33602
- WUSF TV Riverview Transmission Tower Property
Sublease from DOE.
18.446 Acres
USF Research and Educational purposes compliant with the site and property characteristics including the replacement of the existing Transmission Tower and implementation of an Amphibian Water Tank project and future projects consistent with USF mission objectives and provisions of the Sublease.
Address: 14205 Boyette Road, Riverview, Fl. 33569

(d) Properties within the planning study area which may serve to meet existing or future needs

Property changes currently in progress:

- Downtown Tampa property transfer to the USF Board of Trustees for the purpose of building the USF Health Morsani Medical School and the USF Health Heart Institute. (not within the planning study area)
- Sublease of USF Campus property to a TBD Public/Private Partner for the purpose of building new Residence Halls, Dining and Recreation facilities.
- Sublease of USF Campus property to a TBD Public/Private Partner for the purpose of building a grocery store.

(e) Existing natural, archeological or historic resources

Natural Resources

The Greenway provides 125 acres of contiguous open space, stormwater management, and recreation for students. This is the largest natural resource currently on the USF-Tampa campus. Additionally, the east end of the USF Forest Preserve borders on the banks of the Hillsborough River, which is listed as an Outstanding Florida Water and is under the jurisdiction of the State of Florida. Alteration of the wetlands within the ERA is controlled by state agencies such as the Florida Department of Environmental Protection (FDEP) and the South West Florida Water Management District (“SWFWMD”). The ERA is currently managed as a natural area with prescribed burning employed as a research and management tool by the USF Biology Department. A portion of the USF Forest Preserve, as well as the connected hardwood area on the campus property at the southwest corner of Fletcher Avenue and 50th Street, and Lake Behnke, have all been designated as wetlands. The wetland portion of the USF Forest Preserve has been surveyed separately. See also Element 8, *Conservation*, for additional information on natural resource areas on the USF-Tampa campus.

Internal to the USF-Tampa Campus, there exists a single known location where existing regulations

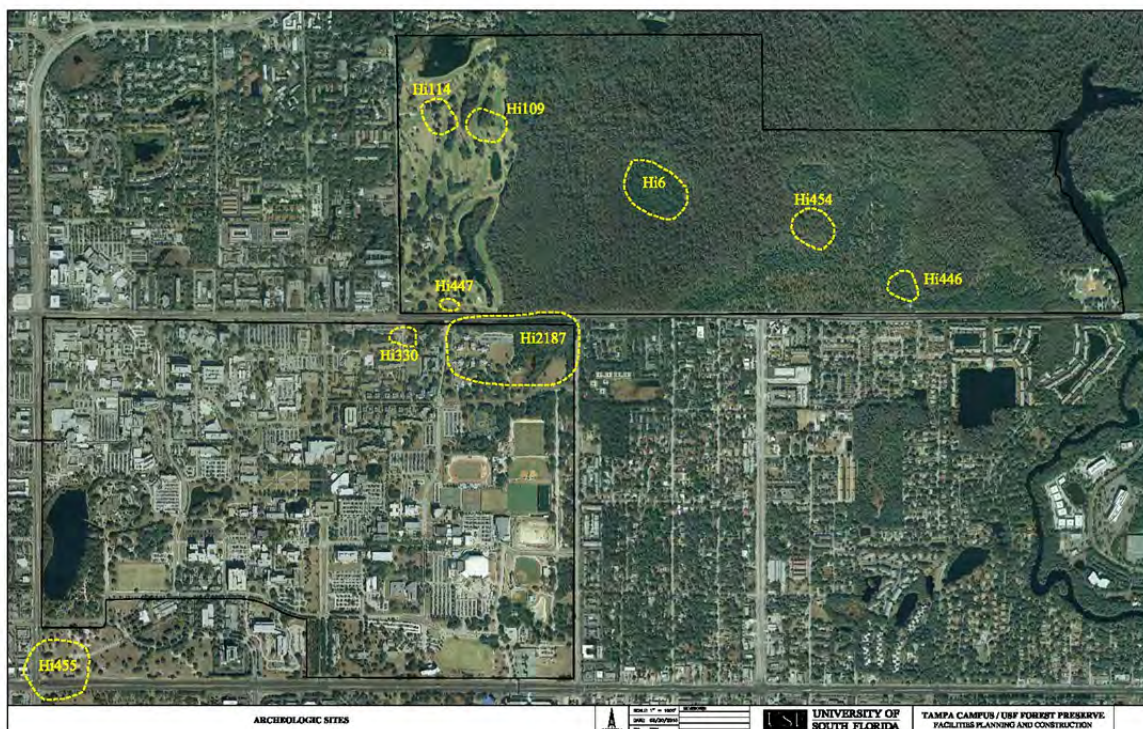
govern/prevent, the development of drainage features. Within the region of the H. Lee Moffitt Cancer Center, northeast of the above-ground storage tank, there was an identified petroleum spill. Proper protocols were followed for identifying and remediating the spill. In November 2008, Hillsborough County Environmental Protection Commission issued a report stating that no further action was required, with controls, for this petroleum spill. The report and corresponding legal description of the spill location are included in the Appendix D, *Resolution of Petroleum Discharge at the H. Lee Moffitt Cancer Center*. Prohibited uses in this “restricted area” include groundwater extraction and groundwater use, as well as the prohibition of developing any form of stormwater treatment system with the affected area. See also Element 7.1 C, *Stormwater Management* for additional information regarding regulations and programs which govern land use and development of natural drainage features.

Historic Resources

The Administration (ADM), Fine Arts (FAH), Theatre 1 (TAT), and Chemistry (CHE) buildings may be considered by the University for historic resource status as period examples of the Florida architectural approach to conservation. Techniques used in original design include minimizing the number of windows that face east or west, passive solar, sunscreens, courtyards and other measures.

Archaeological Resources

Several archeological sites on the campus property are listed with the State of Florida. In 2002 a small prehistoric site located at the north end of campus, near the Hillsborough River and Cypress Creek basins, golf driving range and adjacent wooded area, was documented by USF professor and students. The site, originally discovered and recorded in the 1980s, has been identified as the remnants of a camp site or habitation site, with stone and fossilized or agatized coral used as tools, and broken pieces of pottery made by ancient Floridians thought to have lived there up to two thousand or more years ago. Site investigation was also done recently on the USF Golf Course property by the USF Archeology Department for the impact of the construction of the Chowdari Golf Practice facility replacement.



(f) Facilities on University-controlled lands that are not under the jurisdiction or operation of the State University System.

South Tampa Clinic for Advanced Health Care:

Sublease from Tampa General Hospital to the USF Board of Trustees:

.746 Acres

Address: 2 Tampa General Circle, Tampa FL 33606

40 years, effective March 2006

Center for Advanced Medical Learning and Simulation (CAMLs):

Owner: USF Board of Trustees

1.39 Acres

Address: 124 S Franklin Street, Tampa FL 33602

USF Research Park of Tampa Bay

Currently leased from the TIITF to the USF Research Foundation

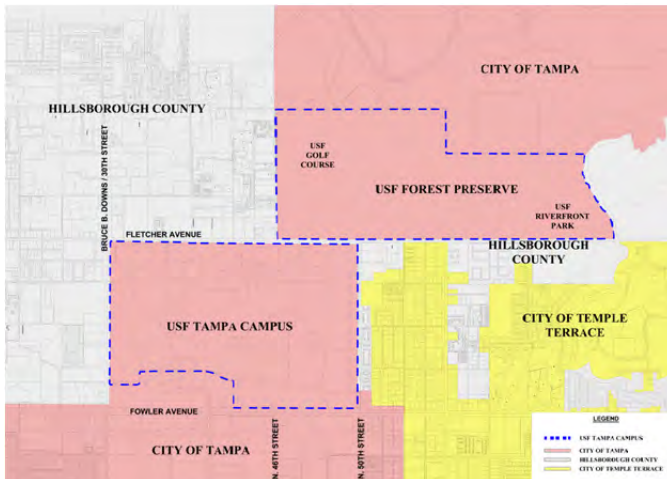
83.79 Acres north of Fowler Avenue, Development of Regional Impact (DRI)

28 Acres south of Fowler

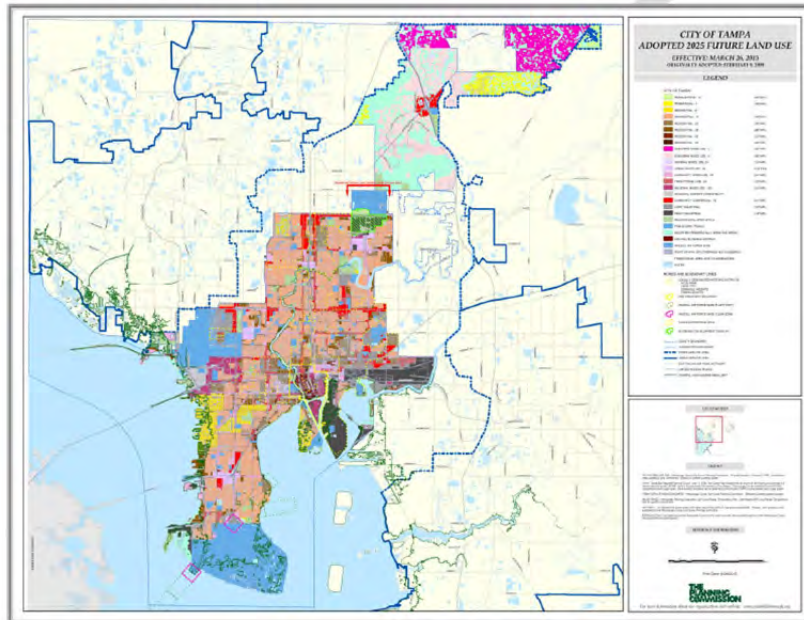
(g) Existing and projected land uses, goals, objectives, policies and zoning within the planning study area as defined in the local government's comprehensive plans.

The use of the USF campus property is consistent with the local governments Comprehensive Plans.

Adjacent Municipalities:

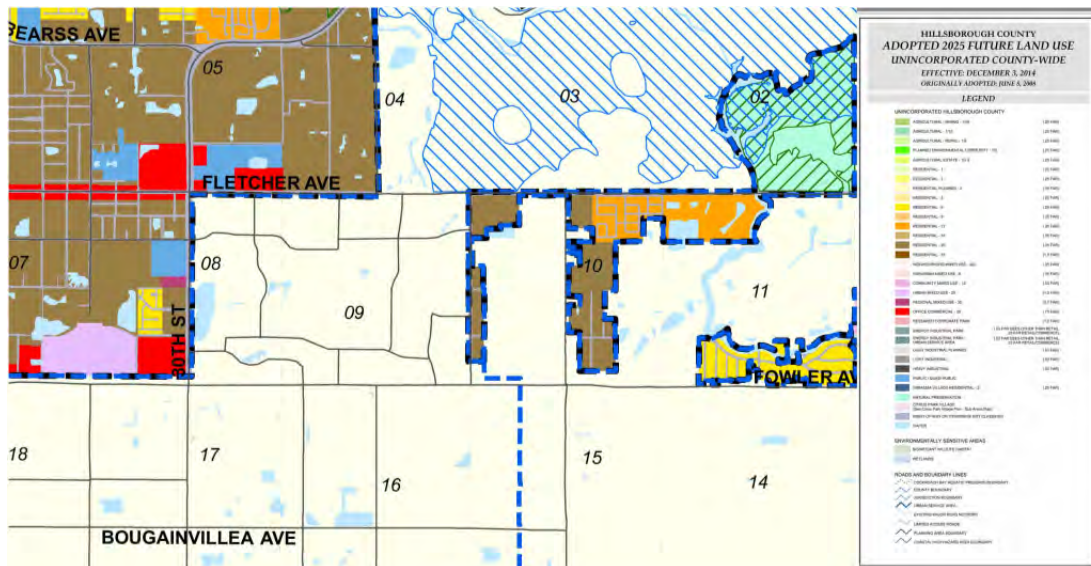


LU Map 1 - Future Land Use Map*



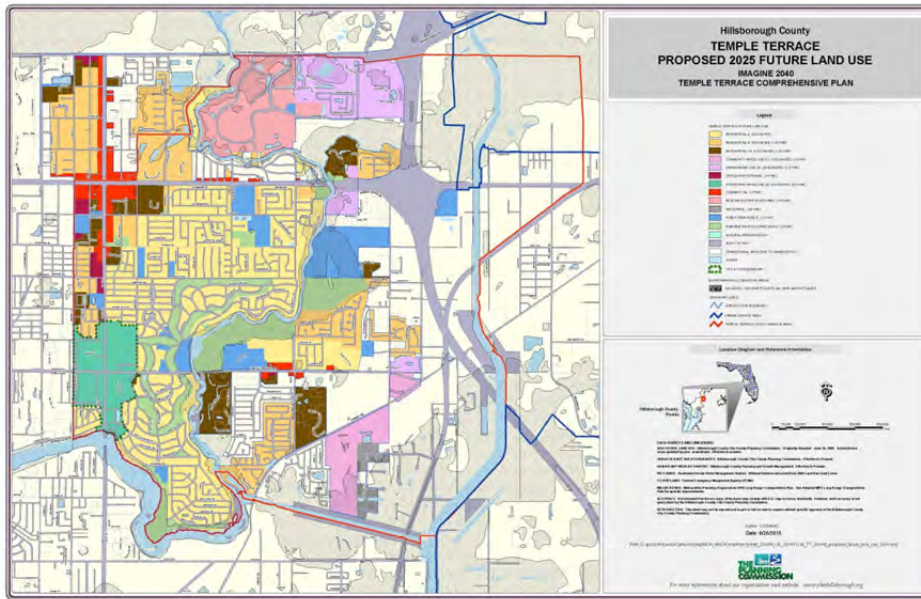
http://www.planhillsborough.org/wp-content/uploads/2014/12/Tampa-2040-Comp-Plan-September9_18_15.pdf

Hillsborough County Future Land use Map:



<http://www.planhillsborough.org/wp-content/uploads/2014/09/Pages-from-CPA-14-09-A-M-Future-Land-Use-Map-Series-Proposed-Map-Series.pdf>

City of Temple Terrace Future Land use Map:



Page 64

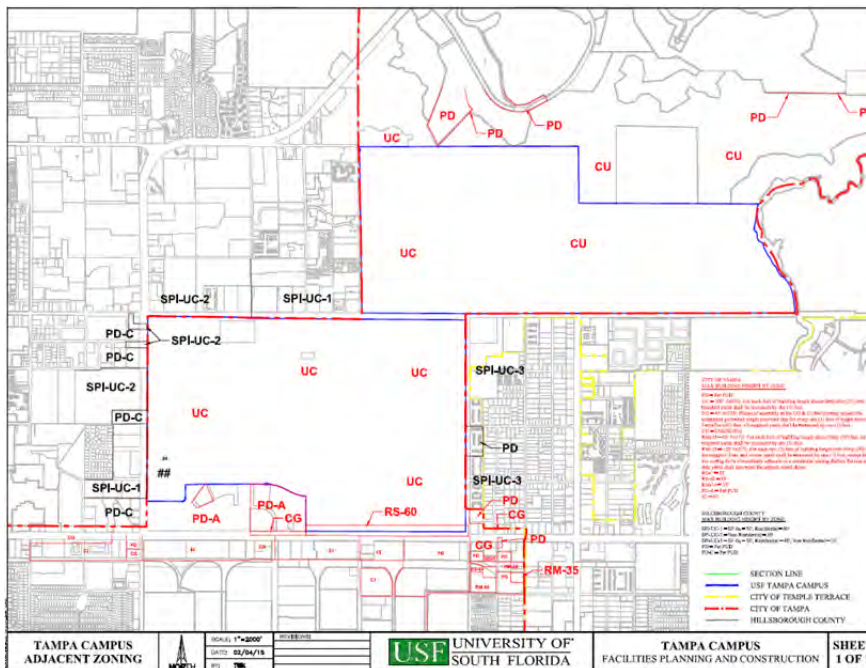
Future Land Use



Website

<http://www.planhillsborough.org/wp-content/uploads/2015/07/Full-TT-Plan-Draft-9.17.15.pdf>

Adjacent zoning areas



(h) Campus Development Agreement

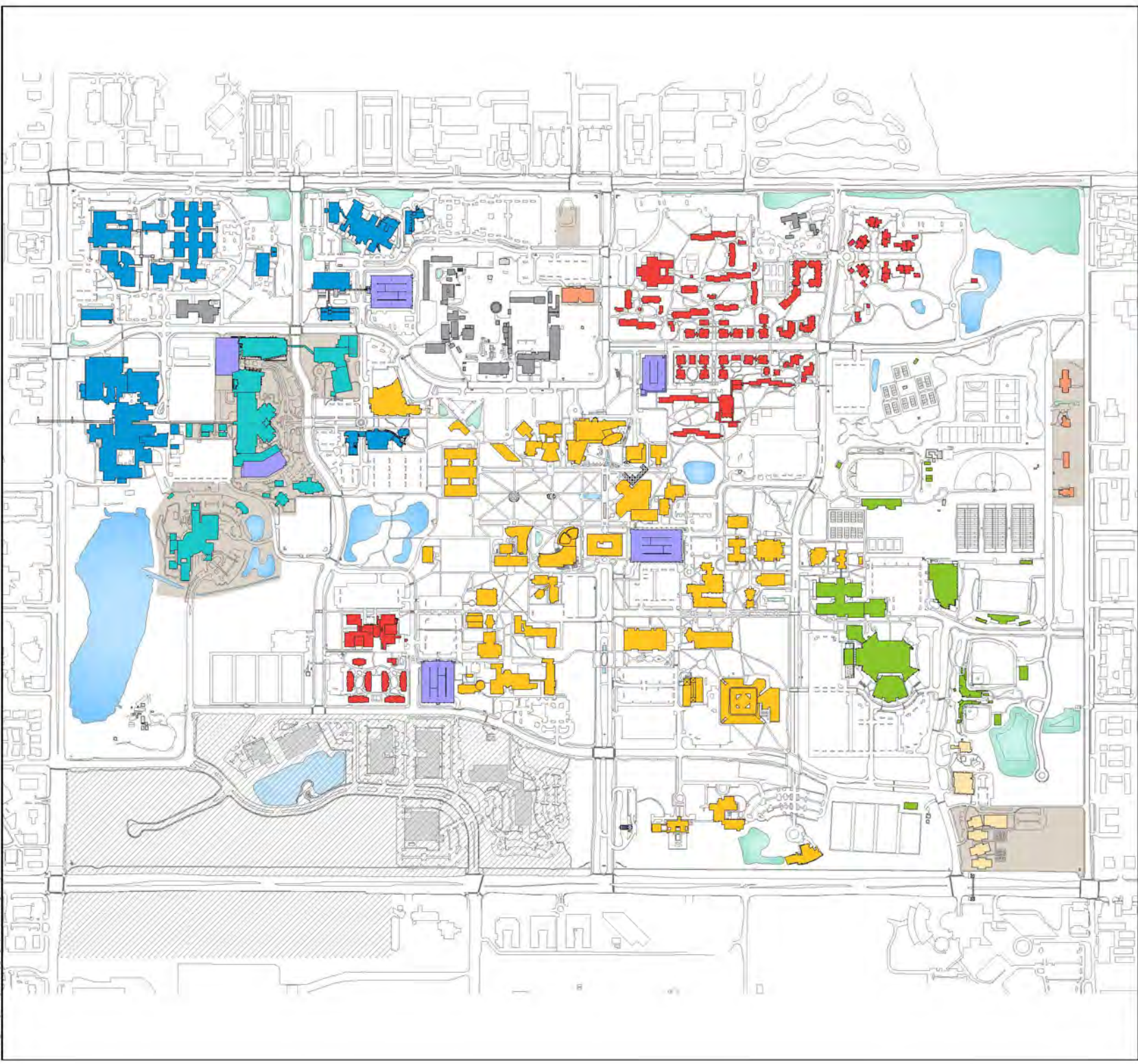
USF has an Agreement with the City of Tampa regarding development. It was based on the 2005-2015 Tampa Campus Master Plan Update and executed in April 2007 and expires on December 31, 2015. In summary it provides for maximum net increases in Academic, Support, Medical, and Sport/Recreation space as well as Housing Beds, Parking, and Outdoor Seating. These are listed in Exhibit A of the Agreement. It also requires USF to remove the northwest corner of campus from City potable water service. USF is in the process with the City of Tampa to extend the Agreement to 2025.

<http://www.usf.edu/administrative-services/facilities-planning/documents/master-dev-agreement.pdf>

The fair share of cost for off-campus roadway and intersection improvements, based on projected headcount enrollment increases, was a payment of \$5,273,205 from the State Concurrency Trust Fund (this fund no longer exists). Of this amount, \$3,000,000 was retained by the City and \$2,273,205 was received by the USF Parking and Transportation Services to improve USF BullRunner transit service to the Campus. This resulted in the expansion of service with a new route to the south of the USF Campus and has been very successful.

ENROLLMENT	2004-05	2014-15	Change	2005 MP projection for 2013-14	less than 2013-14 projection	Current projection for 2025
Headcount enrollment	36,160	41,888	5,728	47,136	5,248	42,730.00

Benchmarks to the USF Campus Development Agreement				
8.19.15	Development Allowed	Current Used	Remaining balance	% used
Academic GSF	1,723,269	686,101	1,037,168	40%
Support GSF	683,566	150,391	533,175	22%
Parking	11,200	2,971	8,229	27%
		incl Moffitt		
Medical GSF	2,580,384	589,888	1,990,496	23%
		incl Moffitt		
Housing beds	2,526	1,000	1,526	40%
Sports and Recreation GSF	546,800	142,443	404,357	26%
Outdoor Seating (seats)	16,000	2,055	13,945	13%
GSF Totals	5,534,019	1,568,823	3,965,196	



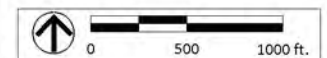
- Academic (USF)
- Academic (non-USF)
- Residence Halls (USF)
- Support (non-USF)
- Health Sciences (USF)
- Health Sciences (non-USF)
- Facilities (USF)
- Athletics (USF)
- Parking facilities
- Sub-Lease


Area Not Included in Campus Master Plan


Element 4
Future Land Use

Figure 4.1
Existing Building Uses

Date
08/21/2015



-  1-2 Story Building
-  > 2 Story Building
-  Parking Structure
-  Surface Parking

 Area Not Included in
Campus Master Plan

Element 4
Future Land Use

Figure 4.2
Campus Development
Density

Date
08/21/2015



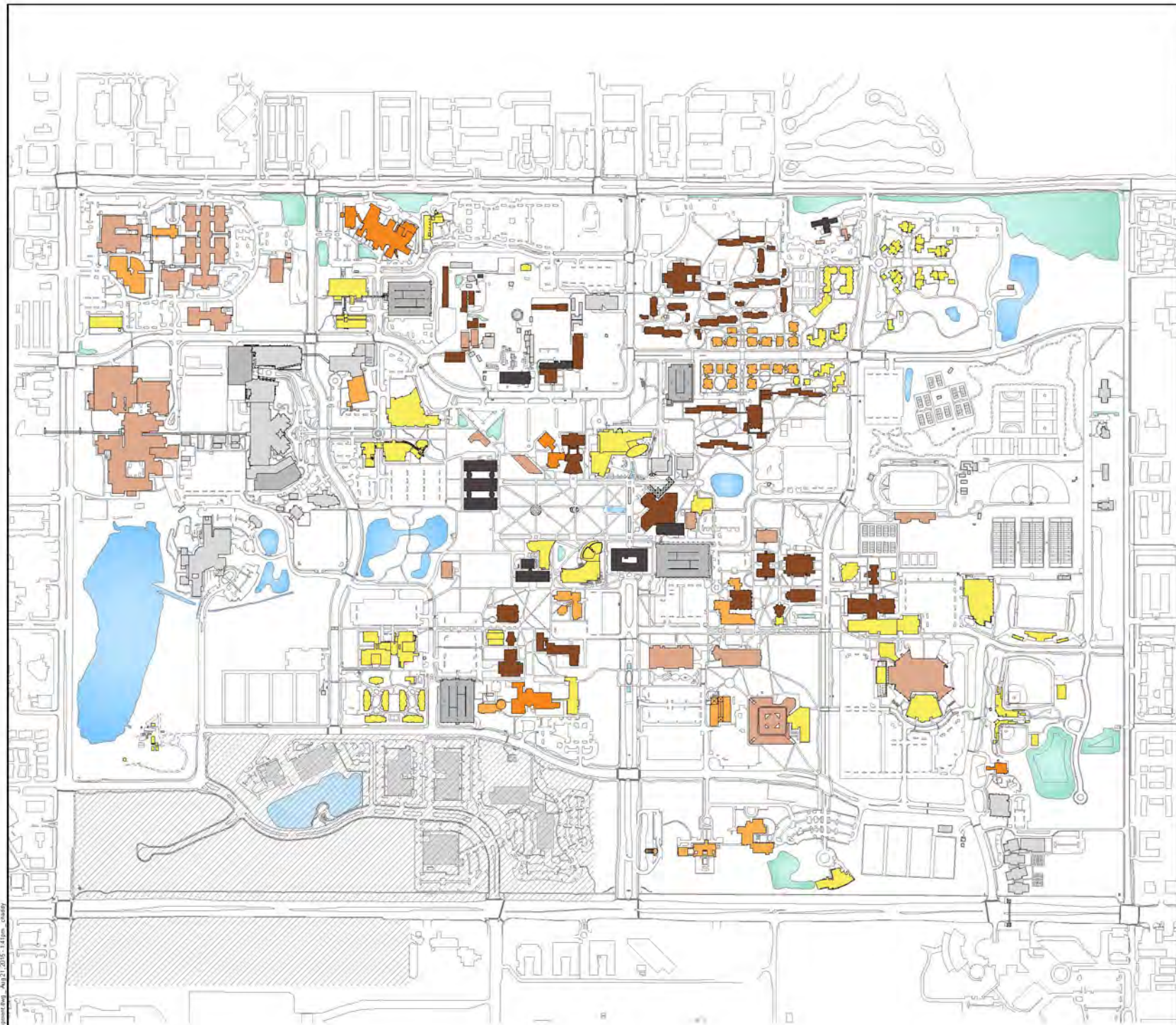
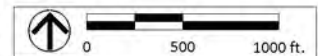
- 1956 - 1960
- 1961 - 1970
- 1971 - 1980
- 1981 - 1990
- 1991 - 2000
- 2001 - 2015

Area Not Included in
Campus Master Plan

Element 4
Future Land Use

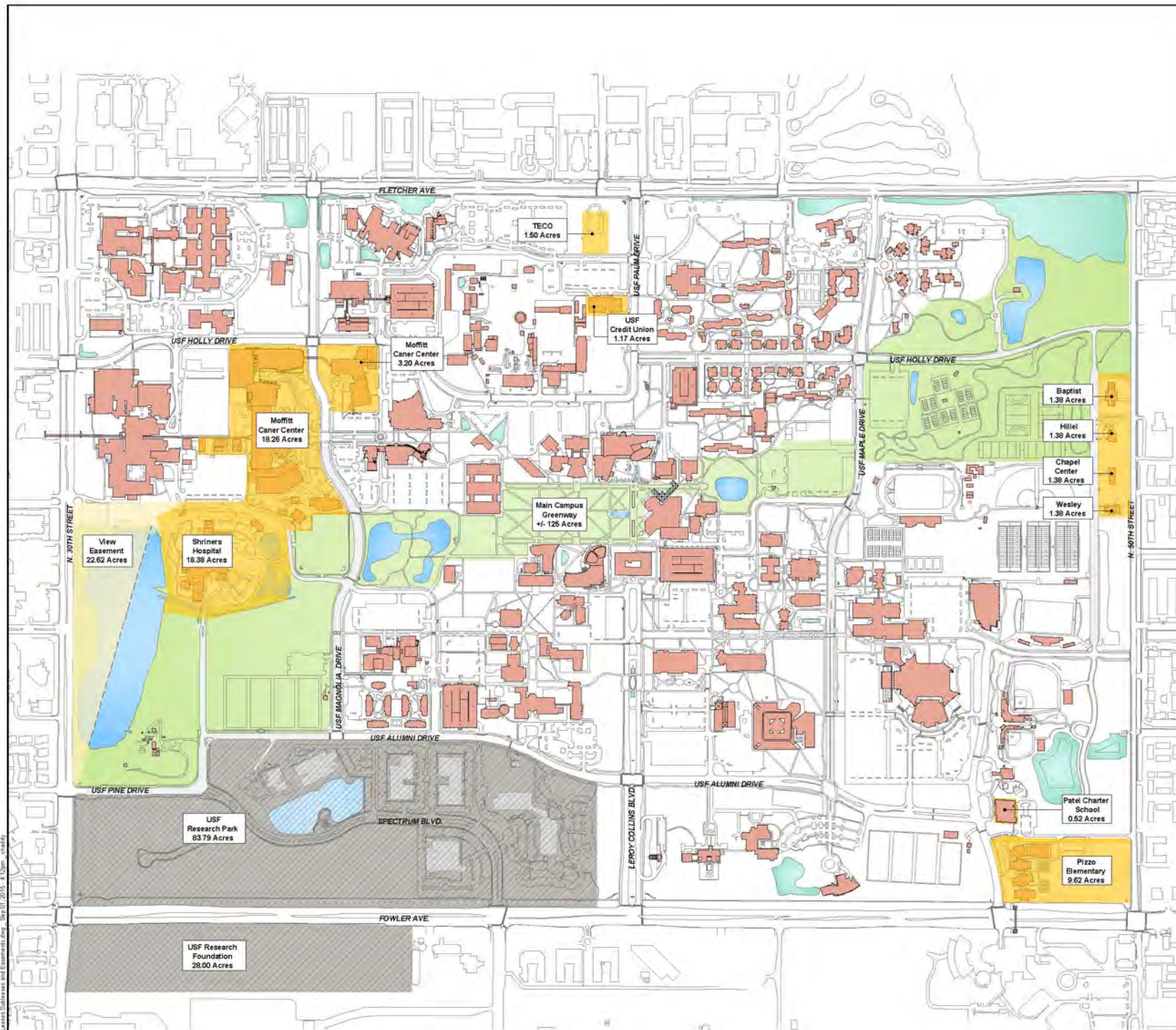
Figure 4.3
Building Development

Date
08/21/2015



- Sub-lease
(Total = 58.17 Acres)
- Research Park
- Protected View
- Greenway

Area Not Included in Campus Master Plan

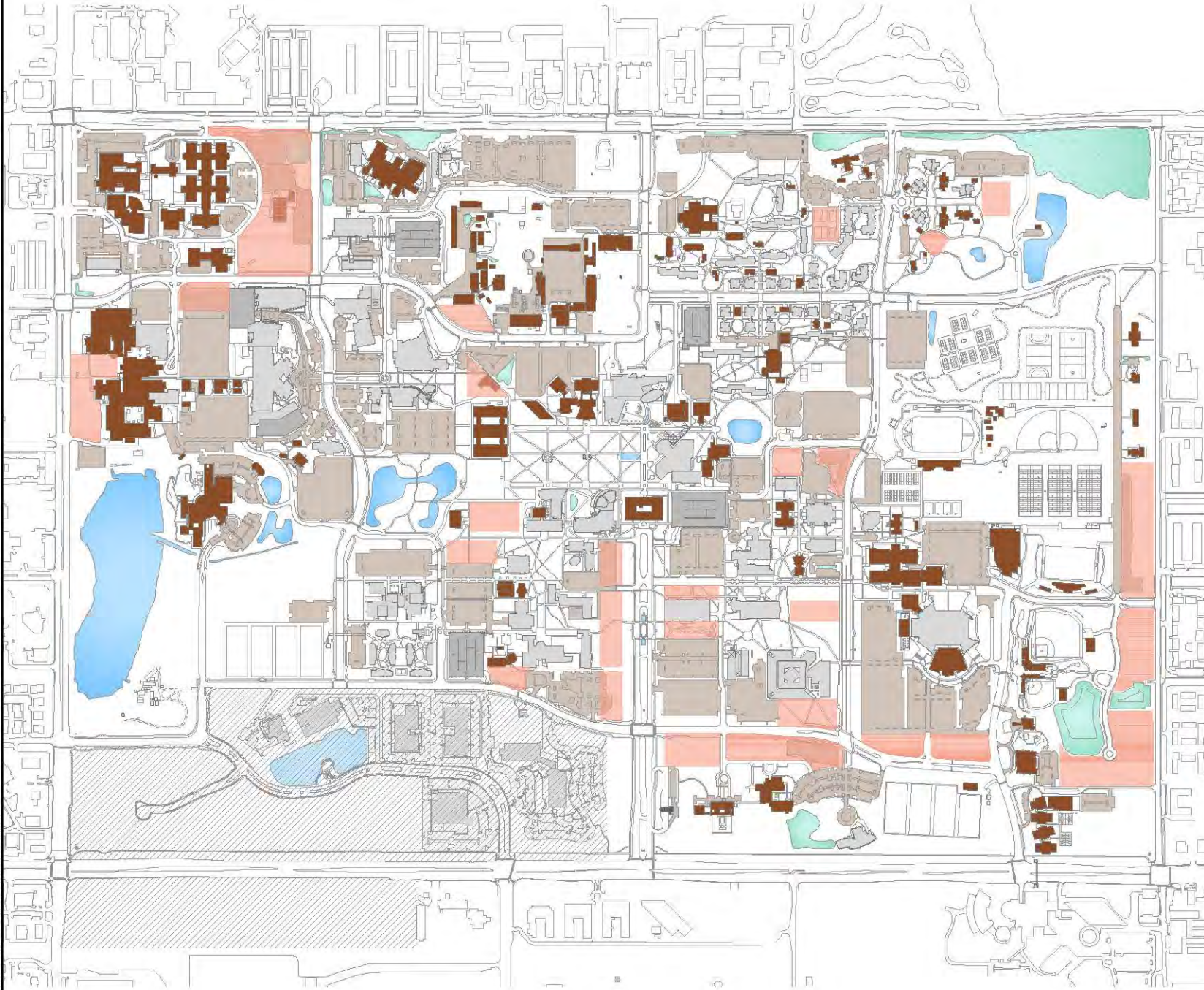






Element 4
Future Land Use


Figure 4.4
Encumbrances, Leases,
Subleases and Easements

Date
08/21/2015





-  1 - 2 Story Buildings
-  Low Density Buildings
-  Non-Parking Vacant
-  Surface Parking

 Area Not Included in
Campus Master Plan

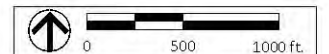
Notes

Non-Parking Vacant: 75 Acres
Surface Parking: 86 Acres

Element 4
Future Land Use

Figure 4.5
Developable and
Underdeveloped Areas

Date
08/21/2015





Element 4
Future Land Use

Figure 4.6
Existing Campus Aerial

Date
08/21/2015

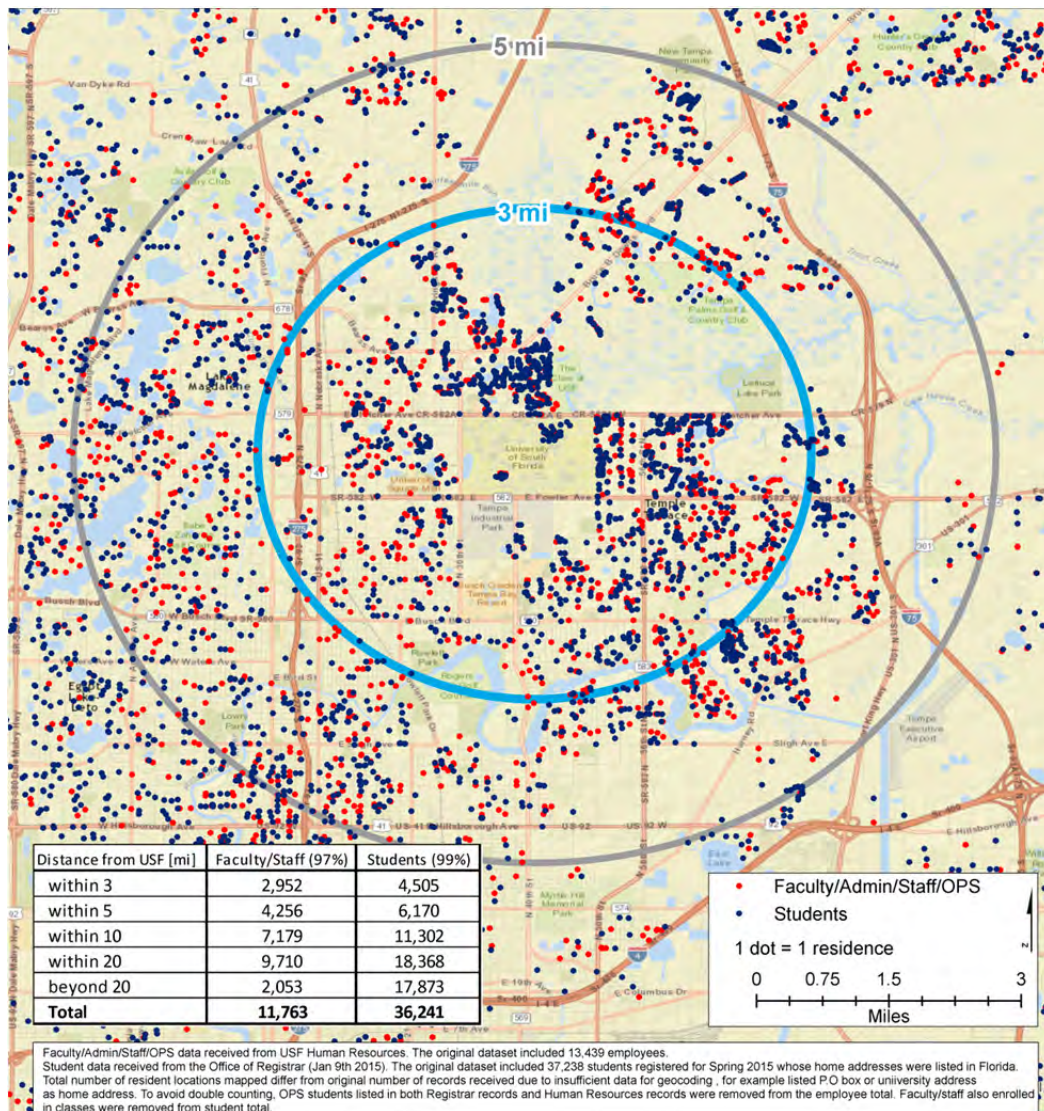


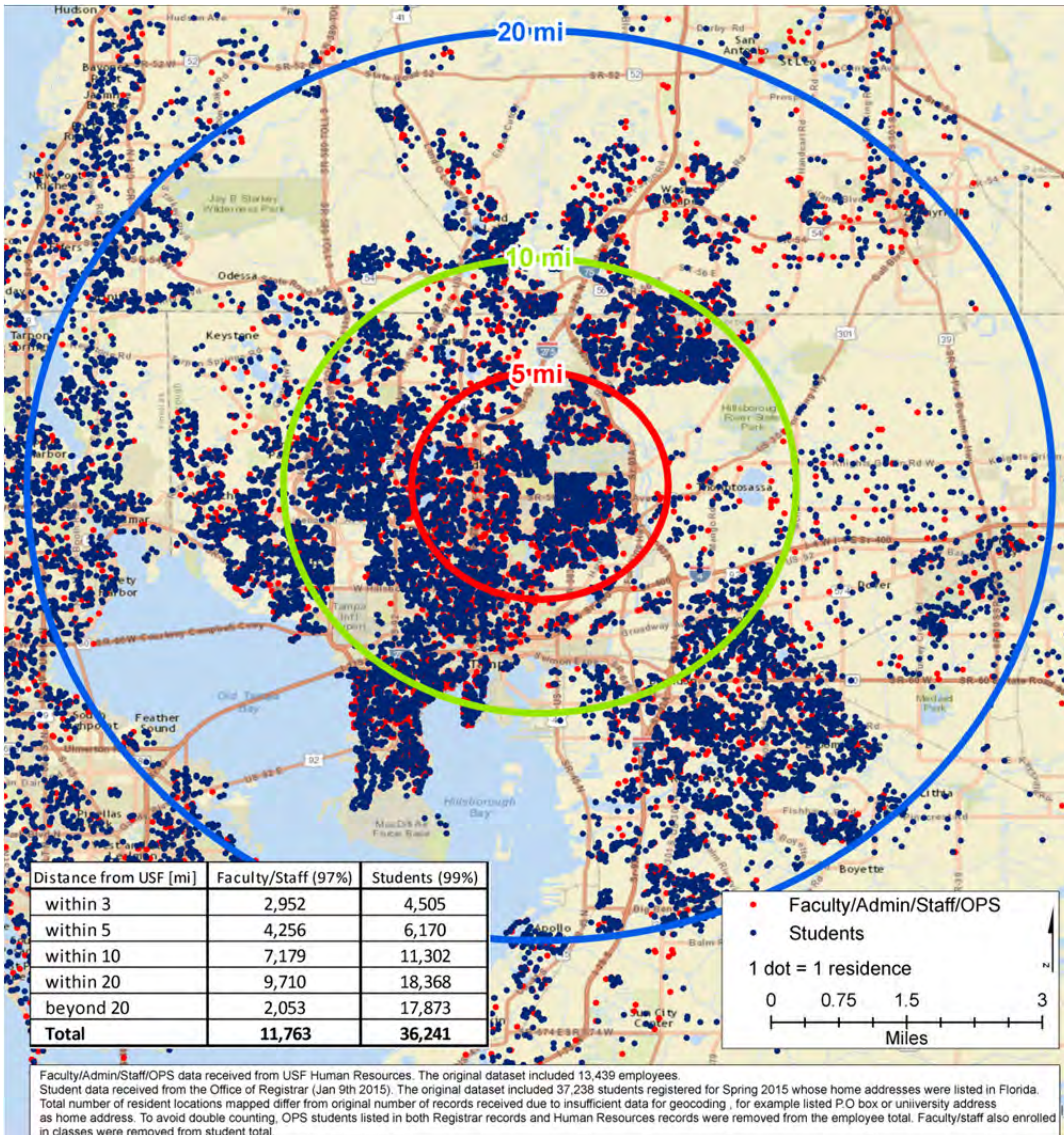
Element 5 Transportation

This element assesses and makes transportation recommendations for integrating all modes of travel (bicycle, pedestrian, bus/transit, and motor vehicle) both on campus and in the off-campus planning study area. These recommendations shall coordinate policies, programs and projects with the host and/or affected local governments, as well as with other state and regional agencies.

(1) TRANSPORTATION DATA AND ANALYSIS

Non-resident Students, Faculty, and Staff are distributed across the Tampa Bay area. The number of faculty, staff, and students residents is illustrated in the dot density maps below for the 3, 5, 10, 20 mile campus radius. Note there are a few students shown with a USF address but there are 5,390 students living on campus that have likely used a different permanent address.



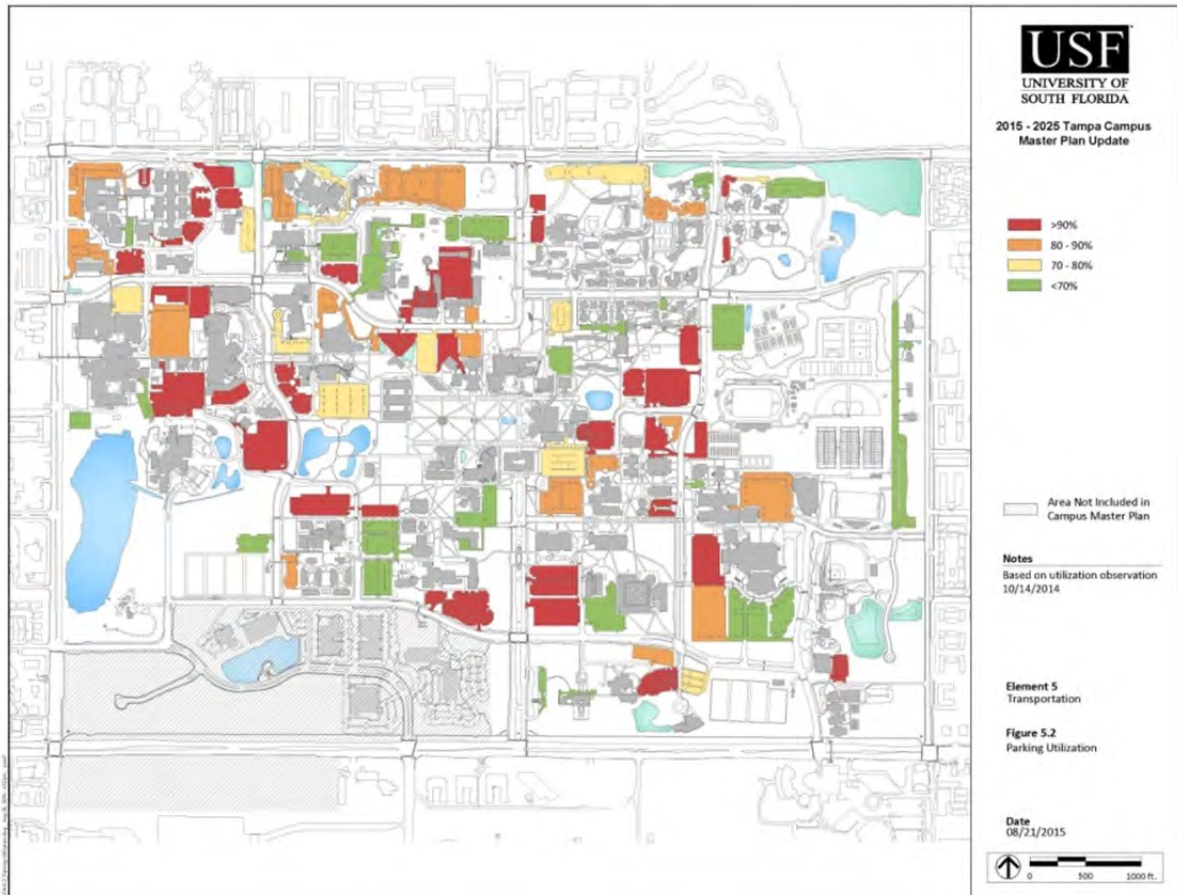


(a) Parking

USF-Tampa conducted an inventory of University-controlled parking facilities to understand overall parking capacity and occupancy in the University parking system. The University does not control or operate any off-campus parking. Parking at the University is provided in approximately 45 separate parking lots and six parking structures on the USF campus. Students, faculty, staff, vendors, and visitors are required to display a parking pass to park on campus property. There are a variety of daily, semester, and annual passes at different rates for different users.

The University currently makes no special on-campus parking assignments for specific special events (football, basketball, baseball, swimming, auditoriums, performing arts facilities, concert halls, conference centers, etc.). Sun Dome patrons may use the parking areas adjacent to the facility for a fee during most events. The Sun Dome parking lots include Lots 6, 22A, 22D, 22E, and 22F, which contain a total of 2,184 parking spaces.

Note see larger map at the end of this section



Lot Observation Summary			Monday, October 13, 2014		
			Morning		Afternoon
Day	Capacity	AM Count	Utilization	PM Count	Utilization
Average	20,840	14,618	70%	15,937	76%

Lot Observation Summary			Tuesday, October 14, 2014		
			Morning		Afternoon
Day	Capacity	AM Count	Utilization	PM Count	Utilization
Average	20,840	14,860	71%	16,811	81%

Lot Observation Summary			Wednesday, October 15, 2014		
			Morning		Afternoon
Day	Capacity	AM Count	Utilization	PM Count	Utilization
Average	20,840	13,822	66%	16,535	79%

Lot Observation Summary			Thursday, October 16, 2014		
			Morning		Afternoon
Day	Capacity	AM Count	Utilization	PM Count	Utilization
Average	20,840	14,680	70%	16,671	80%

Lot Observation Summary			Friday, October 17, 2014		
			Morning		Afternoon
Day	Capacity	AM Count	Utilization	PM Count	Utilization
Average	20,840	11,376	55%	11,937	57%

Moffitt Cancer Center sublease has 1,765 parking spaces in surface and structured parking

Lot Observation Counts as of Tuesday, October 14, 2014

Note Tuesdays hold the largest number of campus classes. Statistics for all weekdays are available upon request.

Colors on the Average % column are keyed to Fig 5.1

Lot / Designation	Capacity	AM Count	AM %	PM Count	PM %	AVG
01-E	326	270	83%	307	94%	89%
02A-G22	92	11	12%	87	95%	54%
02B-G22	118	41	35%	64	54%	45%
02C-G22	16	16	100%	4	25%	63%
03A-E	105	82	78%	97	92%	85%
03B-E/S/D	115	108	94%	109	95%	95%
03C-E/S/D	198	135	68%	169	85%	77%
03D-E/S/D	107	107	100%	107	100%	100%
03E-E	18	16	89%	16	89%	89%
04-E	40	31	78%	36	90%	84%
05A-R	121	89	74%	33	27%	51%
05B-Designated	27	9	33%	12	44%	39%
05D-Designated	16	2	13%	2	13%	13%
05E-R	168	159	95%	163	97%	96%
06-E/S/D	534	392	73%	476	89%	81%
07A-E	178	156	88%	166	93%	91%
07B-E	118	90	76%	110	93%	85%

07C-Designated	30	19	63%	27	90%	77%
08A-E	92	86	93%	85	92%	93%
08B-E/D	276	116	42%	191	69%	56%
08C-E/S	250	214	86%	233	93%	90%
09A-E/S	417	243	58%	354	85%	72%
09C-E/D	99	86	87%	87	88%	88%
10-Designated	108	81	75%	88	81%	78%
11-E	67	48	72%	46	69%	71%
12-E/D	226	184	81%	185	82%	82%
13A-R	28	23	82%	25	89%	86%
13-R	73	70	96%	71	97%	97%
14-Designated	68	35	51%	39	57%	54%
15-E	15	10	67%	10	67%	67%
16-R	418	337	81%	318	76%	79%
17A-R	117	116	99%	116	99%	99%
17B-S/R	450	441	98%	440	98%	98%
18B-Y/S/R//E/ALLGZ/HE/D/WB	416	140	34%	160	38%	36%
18T-Y/S/R//E/ALLGZ/HE/D/WB	240	65	27%	68	28%	28%
19-E/S/D/HE	479	479	100%	469	98%	99%
20-R/S/E/D	232	124	53%	124	53%	53%
21-S/E	113	104	92%	103	91%	92%
22A-E/S/D	348	324	93%	323	93%	93%
22D-E/S/D	533	433	81%	493	92%	87%
22E-E/S/D	364	32	9%	235	65%	37%
22F-E/S/D	196	29	15%	130	66%	41%
23A-E	134	121	90%	124	93%	92%
23B-E/D	105	67	64%	82	78%	71%
23T-E/S/D	150	109	73%	137	91%	82%
24-R	314	295	94%	304	97%	96%
25-R	177	155	88%	152	86%	87%
26-Designated	49	31	63%	31	63%	63%
27-Designated	3	2	67%	3	100%	84%
28Sub-Designated	34	30	88%	31	91%	90%
29A-S	320	320	100%	319	100%	100%
29B-S	365	364	100%	358	98%	99%
30-GZ33/S	76	44	58%	49	64%	61%
31-GZ33	28	15	54%	18	64%	59%
32-E/S	477	472	99%	468	98%	99%

33-GZ33	543	436	80%	446	82%	81%
33T-S	113	112	99%	109	96%	98%
34-E/S/D	127	99	78%	100	79%	79%
35-R/S	384	223	58%	258	67%	63%
36-GZ36	247	181	73%	137	55%	64%
37-E	117	104	89%	113	97%	93%
37T-E/S	66	46	70%	66	100%	85%
38A-E/S/HE	110	99	90%	99	90%	90%
38B-E/HE	251	220	88%	219	87%	88%
38C-Designated	297	246	83%	241	81%	82%
38D-E/S	63	59	94%	61	97%	96%
38E-E	25	24	96%	22	88%	92%
38F-E/S/HE	135	124	92%	129	96%	94%
38G-E	107	100	93%	98	92%	93%
38H-Designated	20	11	55%	15	75%	65%
38R-Designated	67	62	93%	62	93%	93%
38T-E/S/D/HE	96	84	88%	91	95%	92%
38U-E/S/HE	100	68	68%	73	73%	71%
40-E/S/D	22	16	73%	11	50%	62%
41-E	60	52	87%	57	95%	91%
42-E/D	116	115	99%	112	97%	98%
43-Y/S/R/E/GZ/D	698	580	83%	655	94%	89%
44-R/E/S/D/W	76	0	0%	10	13%	7%
45-E/S	69	66	96%	61	88%	92%
46-E/HE	182	165	91%	172	95%	93%
47A-R	88	74	84%	76	86%	85%
47-E/S/D/R	109	38	35%	64	59%	47%
50-R	30	27	90%	27	90%	90%
51-R	21	16	76%	17	81%	79%
52-R	200	118	59%	102	51%	55%
52T-S/D	35	11	31%	17	49%	40%
53-R	43	40	93%	41	95%	94%
APPLE-Designated	35	14	40%	31	89%	65%
BDGL1-Designated	256	201	79%	209	82%	81%
BDGL2-Designated	262	115	44%	93	35%	40%
BDGL3-Designated	262	260	99%	254	97%	98%
BDGL4-Designated	262	257	98%	249	95%	97%
BDGL5-Designated	262	201	77%	238	91%	84%

BDGL6-Designated	262	96	37%	234	89%	63%
BDGL7-Designated	262	38	15%	209	80%	48%
BDGL8-Designated	182	3	2%	73	40%	21%
CBGL1-Designated	347	288	83%	313	90%	87%
CBGL2-Designated	320	176	55%	229	72%	64%
CBGL3-S	325	286	88%	325	100%	94%
CBGL4-S	325	139	43%	322	99%	71%
CBGL5-S	233	14	6%	232	100%	53%
Cedar Drive-Designated	7	7	100%	6	86%	93%
CHGL1-E/S/D	137	134	98%	135	99%	99%
CHGL2-E/S/D	142	142	100%	142	100%	100%
CHGL3-E/S/D	145	144	99%	143	99%	99%
CHGL4-E/S/D	145	136	94%	140	97%	96%
CHGL5-E/S/D	146	87	60%	115	79%	70%
CHGL6-E/S/D	116	5	4%	24	21%	13%
CIC-E/S/D	35	4	11%	18	51%	31%
Intramural Field-Designated	11	10	91%	7	64%	78%
LDGL1-Designated	259	207	80%	171	66%	73%
LDGL2-Designated	267	246	92%	229	86%	89%
LDGL3-Designated	267	220	82%	222	83%	83%
LDGL4-Designated	267	132	49%	117	44%	47%
LDGL5-Designated	267	93	35%	102	38%	37%
LDGL6-Designated	186	1	1%	2	1%	1%
Life Science Annex Lab	3	0	0%	0	0%	0%
Lifsey-Designated	17	1	6%	2	12%	9%
Morsani Service Area	3	3	100%	1	33%	67%
Sago Drive	13	6	46%	8	62%	54%
Varsity Tennis Court-Designated	11	0	0%	1	9%	5%


Full Summary Report for week of Oct 13, 2014 - Oct 17, 2014

Provided by USF Parking and Transportation Services

(b) Transit facilities and services on campus and in the planning study area include:

1. Service providers; Bull Runner, Moffitt, Hart
2. Routes; Bull Runner, Moffitt, Hart

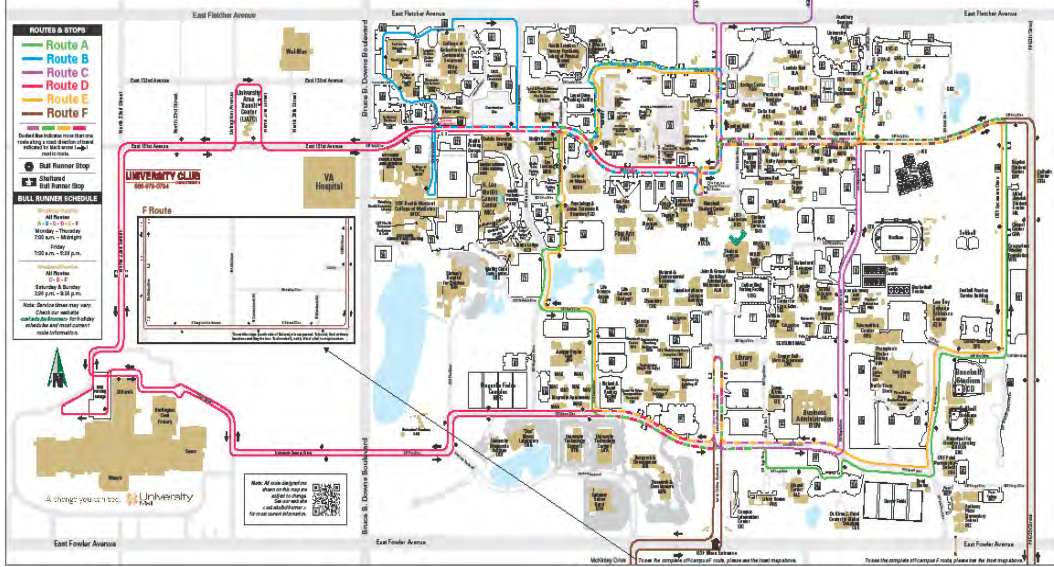
Bull Runner



Use the **BULL TRACKER** to locate the low-free bull runner transit!

- Get Buses location online or from your mobile device.
- Find bus locations in real time.
- Get bus arrival predictions.
- Get up alerts for bus arrival at your stop.
- View a specific route on the online system.
- Find out if space is available on the bus.

usbullrunner.com



ROUTES & STOPS

- Route A
- Route B
- Route C
- Route D
- Route E
- Route F

BULL RUNNER STOP

UNIVERSITY CLUB
508-97-0164

BULL RUNNER SCHEDULE

All Routes
6:30 a.m. - 10:30 p.m.
Monday - Thursday
2:00 a.m. - 10:00 p.m.
Friday
1:00 a.m. - 10:00 p.m.

VI A Hospital

VI A Schedule & Routes
6:30 a.m. - 10:30 p.m.
Monday - Thursday
2:00 a.m. - 10:00 p.m.
Friday
1:00 a.m. - 10:00 p.m.

Check for weekly schedule changes and most current route information.

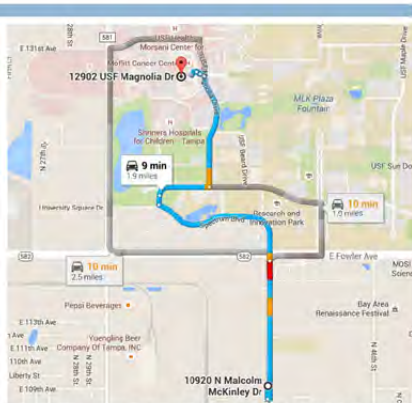
QR Code

Scan the QR code to get more information.

Moffitt Cancer Center Shuttles



Route: The Escot Shuttle Bus begins their route at the McKinley Garage at 5:45 am. The route begins going south on McKinley Dr. Then west on Bougainvillea Ave. to 30th St. North on 30th St. to Holly Dr. Then east on Holly Dr. to Magnolia Dr. The return route to McKinley is Magnolia Dr. to USF Spectrum Blvd. via USF Pine Dr. Spectrum becomes McKinley Dr. south of Fowler Ave. There are two buses that run approximately 12 minutes apart.



Ridership: The Escot Shuttle Bus averages 240 riders a day. Peak times are from 6:30 am to 8:30am and 4:15pm to 6:00pm.

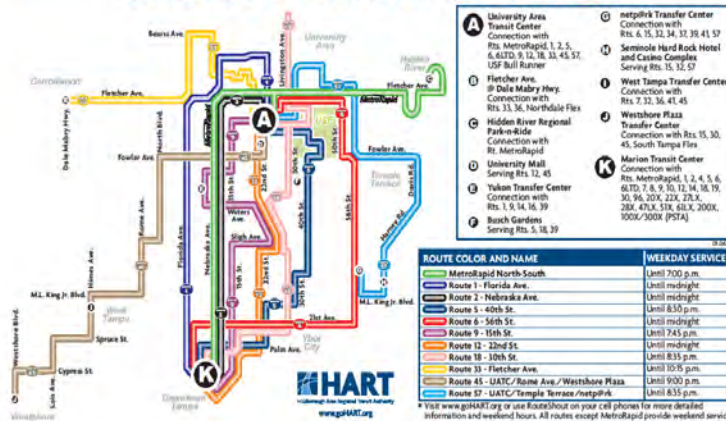


Route: The shuttle begins with a 7:40 am pick-up at MBC and is scheduled to arrive at MCC at 7:55 am. The travel route is Fletcher Ave. to Magnolia Dr., and back. The shuttle is scheduled for a 30 minute turnaround. During heavy afternoon traffic the shuttle will go east on Holly Dr. to take a left on Palm Dr. to access Fletcher Ave.

Ridership: The MBC Shuttle averages between 40 to 50 riders a day, evenly divided between a.m. and p.m. hours.

HART Service Routes

ELEVEN HART BUS ROUTES SERVE USF AREA CHECK OUT THE LATE NIGHT SERVICE!



3. Transit stop locations

Bullrunner :

Route A	Route B	Route C	Route D	Route E	Route F
<ul style="list-style-type: none"> Marshall Student Center Andros Housing/ Lot 13 Park-n-Ride Lot 43, 2 stops Laurel Drive Garage Eye Institute Communicatio 	<ul style="list-style-type: none"> Marshall Student Center Andros Housing/ Lot 13 Park-n-Ride Lot 43, 2 stops Laurel Drive 	<ul style="list-style-type: none"> Marshall Student Center Holly Mail Room Maple Suites at Holly Maple Suites Social Science 	<ul style="list-style-type: none"> Marshall Student Center Post Office Parking and Transportation Central Receiving Morsani Center Moffitt 	<ul style="list-style-type: none"> Marshall Student Center Holly Mail Room Maple Suites at Holly Greek Housing Cypress Housing 	<ul style="list-style-type: none"> Marshall Student Center Holly Mail Room Maple Suites at Holly Tennis Courts/ Lot 35 Holly at 50th 50th St southbound, 2 stops north of Fowler and 2 stops south of Fowler

<ul style="list-style-type: none"> n Sciences • Hope Lodge • Juniper-Poplar • Research and Development • Library • Engineering • Alumni Center • Patel Center • Softball Stadium • Soccer Stadium • Park-n-Ride Lot 18, 3 stops • Tennis Courts/ Lot 35 • Greek Housing • Cypress Housing • Holly Security Office • Epsilon Hall • Marshall Student Center 	<ul style="list-style-type: none"> Garage • Morsani Health Center • Moffitt Tower/ Heart Health • College of Nursing • Westside Conference Center • College of Public Health • Continuing Education • FMHI • Moffitt Research • School of Music • Fine Arts Studio • Theater • Marshall Student Center 	<ul style="list-style-type: none"> • Cooper Hall • Business Administration • Business Administration at Alumni • Library • Engineering • Sun Dome/ Lot 22 • Recreation Center • CW Young Hall • Tennis Courts/ Lot 35 • Holly Security Office • Epsilon Hall • Andros Housing/ Lot 13 • 46th Street, 3 stops • Skipper Road, 2 stops • 42nd Street, 3 stops • Palm and Laurel • Marshall Student Center 	<ul style="list-style-type: none"> Tower/ Heart Health • Holly at Banyan • Children Medical Services • UATC to Library • Campus Palms to Library • University Mall to Library • University Collection • Botanical Gardens to Library • University Diagnostic Institute • University Technology Institute • Research and Development • Library • Engineering • CUTR • Magnolia Apartments • Magnolia Fields • Botanical Gardens to Mall • Fountainwood Apartments • University Mall to MSC • University Club to MSC • Campus Palms to MSC • UATC to MSC • College of Medicine • Moffitt 	<ul style="list-style-type: none"> • Tennis Courts/ Lot 35 • Park-n-Ride Lot 18, 3 stops • Soccer Stadium • Sun Dome, Lot 22 • Business Administration at Alumni • Library • Engineering • Center for Transportation Research • Juniper-Poplar • The Lakes • Fine Arts • Psychology • Eye Institute • Laurel Drive Garage • Park-n-Ride Lot 43, 2 stops • Marshall Student Center 	<ul style="list-style-type: none"> • Serena/Bougainville a westbound, 3 stops • McKinley northbound, 3 stops • Library • Engineering • McKinley southbound, 3 stops • Bougainvillea/ Serena eastbound, 3 stops • 50th St northbound, 2 stops south of Fowler and 3 stops north of Fowler • Tennis Courts/ Lot 35 • Holly Security Office • Epsilon Hall • Marshall Student Center
---	---	--	--	---	---

			<ul style="list-style-type: none"> • Tower • Moffitt Research • School of Music • Fine Arts Studio • Theater • Marshall Student Center 		
--	--	--	--	--	--

4. Transit frequency of service

Bull Runner, 12 min. headway;
Moffitt, 8 – 12 minutes
Hart
Route 5 = 30 min
Route 6 = 20 min peak 30 min. off-peak
Route18 = 30 min.
Route 57 = 60 min.

MetroRapid (on Fletcher) = 30 min.5. ridership;

Bull Runner FY14 Total – 1,398,217
Route A – 73,576
Route B – 126,879
Route C – 618,928
Route D – 321,148
Route E – 76,264
Route F – 181,422

Moffitt: 30,000

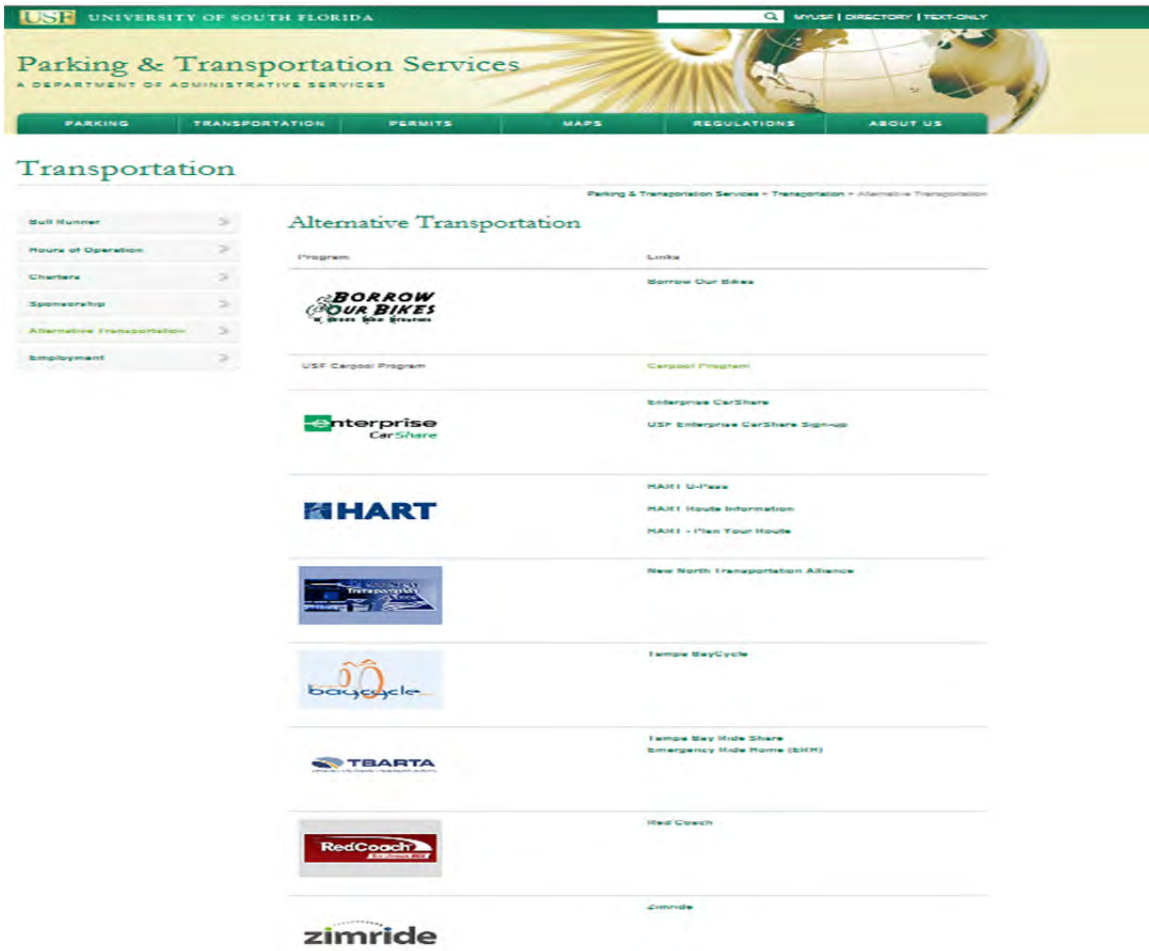
Hart:

Route 5 = 111 boarding 145 alighting
Route 6 = 318 boarding 408 alighting
Route18 = (includes student housing north of campus) 285 boarding 408 alighting
Route 57 = 77 boarding 135 alighting
MetroRapid (on Fletcher) = 39 boarding 27 alighting

6. Vehicle capacity

The Bull Runner fleet has a fleet ranging from 25’ – 40’ with average seating of 25 and average maximum capacity of 40
Moffitt: 36 seats
Hart: 39 seats + 19 standing

Alternative Transportation options are listed with connective links on the USF Parking and Transportation web site:



<http://www.usf.edu/administrative-services/parking/transportation/alternative-transportation.aspx>

(c) Facilities and services for bicycling and walking

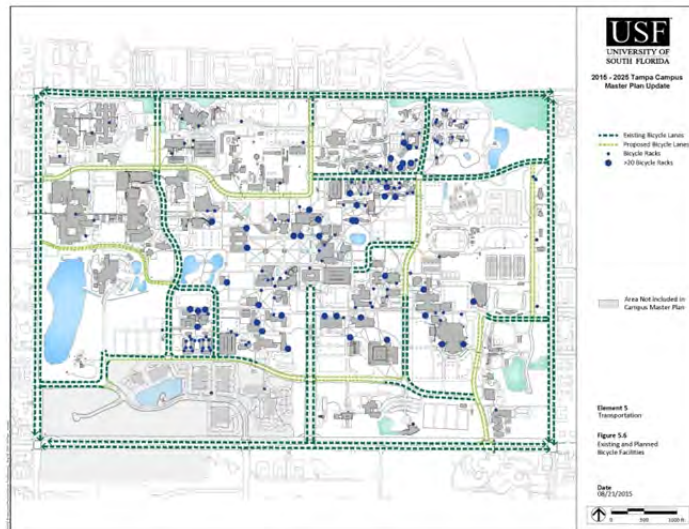
Pedestrians and bicyclists significantly outnumber vehicles on most college campuses. Campus sustainability is dependent on the adequacy of facilities in order to accommodate the high number of trips generated from pedestrians and bicyclists. Facilities accommodating these mode choices include bicycle lanes, and sidewalks and pedestrian pathways which are present throughout the campus. Along the perimeter roads of the campus, sidewalks are present along Fowler Avenue, Fletcher Avenue, and 50th Street. Crosswalks are marked at most intersections and numerous mid-block locations throughout campus and at gateway intersections along the campus perimeter.

Bicycle lanes are provided on roadways or pathways throughout the campus. Existing bicycle lanes are present along one or both sides of sections of Magnolia Drive, Leroy Collins Boulevard, Beard Drive, Holly Drive, Maple Drive, Palm Drive, Alumni Drive, Elm Drive, and Willow Drive. Bicycle signage is posted along selected bicycle lanes within campus. Bicycle lanes are also marked on all public roadways surrounding the campus (Fowler Avenue, Bruce B. Downs Boulevard, Fletcher Avenue, and 50th Street) as well as at intersections with right-

turn lanes. Lanes for bicycle traffic proceeding straight through an intersection are typically marked to the left of right-turning vehicle traffic.

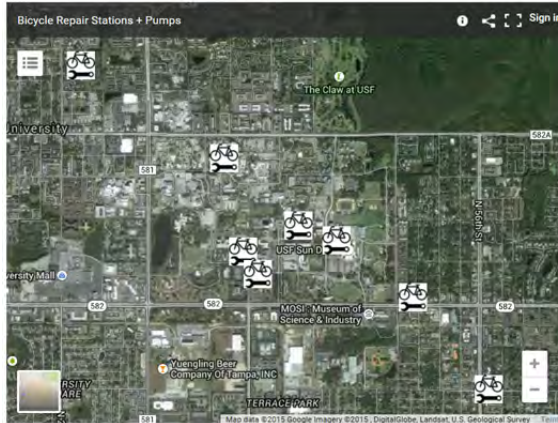
Figure 5-6, Existing and Planned Bicycle Facilities, shows the locations of existing and proposed bicycle lanes. The completion of the bicycle lane network is very important for the safety of bicyclists on campus, as it designates a separate space for bicyclists to ride, reduces dangerous sidewalk riding, improves predictability for bicycle movements, sends a message to motorists that bicyclists have rights and responsibilities as roadway users, and encourages operation of one's bicycle according to Florida state rules of the road. Current University policy provides for the establishment of bicycle lanes concurrent with the construction of other planned roadway improvements, such as widening or repaving. Such roadway improvements are sometimes completed in small segments. As a result, several existing bicycle lanes abruptly end at a midblock location. Until funding is available, in locations where there are no bike lanes or incomplete bike lanes, sharrows are recommended to be considered to be marked on the roadway surface, according to MUTCD guidelines. Sharrows reduce wrong way riding by bicyclists, indicate to motorists where bicyclists are likely to be positioned and encourage safe passing.

Note see larger bike and pedestrian maps at the end of this section



USF and other organizations offer services and benefits to encourage the USF community to use bicycles. The USF Outdoor Recreation Program operates a bike shop with maintenance personnel in the Recreation Building, as well as the bike rental program, Borrow Our Bikes and the new Share-a-Bull bike share program. Tampa BayCycle is a bicycling encouragement and support program that was co-created by the New North Transportation Alliance (NNTA) and the Tampa Downtown Partnership. Tampa BayCycle provides free bicycle safety courses to USF students and employees.

The New North Transportation Alliance (NNTA) with funding from the Florida Department of Transportation District 7 provided several bike repair stations around the area. The stations include heavy duty air pumps and tools for making small adjustments and are planned to be increased in locations in the future.



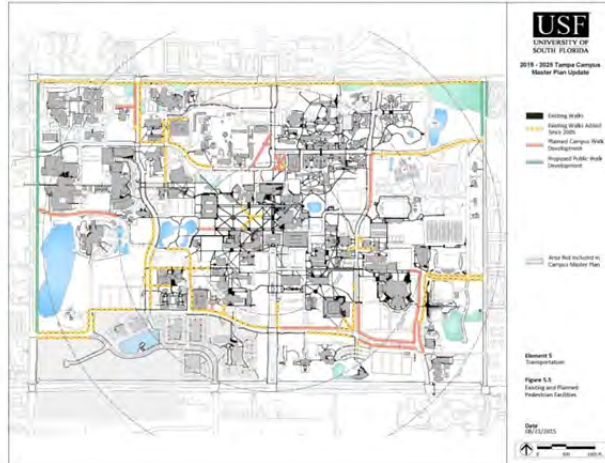
<http://www.tampabaycycle.com/resources/bicycle-repair-stations/>

A count of 1537 racks, with typically storage for 2 bicycles each, yields existing storage capacity of 3,074 bicycles. In addition, approximately 150 bike racks are in the process of installation. In September 100 bikes will be added to campus with the new Share-a-Bull student funded bike share program. Current pedestrian and bicycle challenges include:

- The volume of students traveling by foot, bicycle, and skateboard to the northern off-campus neighborhoods. A count of 1500 crossings to campus at USF Palm and Fletcher taken on a Tuesday in October 2014 roughly equates to 3,000 crossings for round-trips.
- On-campus vehicle conflicts: USF East Holly Dr between USF Maple and USF Palm, Leroy Collins Blvd at the Library, USF Maple Dr between the Sundome and the Muma College of Business.
- Shared use of sidewalks by pedestrians, bicyclists, and golf carts.

WalkWise Tampa Bay is a program managed by the Center for Urban Transportation Research providing free interactive pedestrian safety presentations to USF students and employees. USF has continued to plant shade trees along sidewalks and bikelanes to increase the comfort of those using them. Sections of bike lanes and sidewalks have been constructed on campus including:

- East USF Holly between USF Maple and 50th St.
- USF Elm between Bull Run and 50th St
- USF Pine drive to Bruce B Downs
- Short sections of USF Magnolia and USF Palm at Fletcher



(d) Transportation Demand Management (TDM) strategies

The existing USF TDM programs are primarily focused on the existing transit services and some additional commuter flexibility services. Additional or expanded TDM programs would support the University’s goals of reducing single occupant vehicles and developing more sustainable transportation patterns throughout the campus and community. The following is a list of additional measures, representing a range of options to consider for incorporation into its TDM program:

- Provide Additional Student Housing – Increasing the proportion of students living on or adjacent to the campus can significantly reduce the level of trip activity associated with student commuting.
- Bicycling Improvements (pathways, intersections, showers, racks) – The University is providing additional bicycle lanes and should consider further safety improvement on campus roadways. Additionally, bicyclist amenities, like access to shower facilities in new and renovated buildings would aid and encourage bicycle commuters. Expansion of the bicycle sharing program could also reduce vehicle dependence within the USF community. USF-related bicycle trips are generally possible within five miles of the campus, depending on the presence and quality of bicycle facilities that provide casual bicyclists with sufficient comfort to consider bicycle travel as a viable alternative to vehicles.
- Pedestrian Improvements (sidewalks, signal priority, street trees, etc.) – Improvements to the pedestrian environment both on and off-campus are essential to demonstrating to commuters that walking is a viable alternative to driving to campus. Pedestrians are typically willing to walk distances up to ¾ mile, which corresponds to a 15-minute walk, to and from a campus.
- No Parking Expansion –The University would maintain its current parking supply and not build additional spaces to accommodate increased parking demand.
- Consider a staged approach to the decision whether to build two additional parking structures in Zones 1 and 3. For example, a funded plan for coordinated TDM strategy implementation should be included in the Master Plan to achieve a 10% reduction in parking demand by providing effective transportation options to single-occupant vehicle travel. If TDM strategy implementation does not achieve the necessary parking demand reduction, then plans for parking structure building could be triggered.

- It is recommended to provide real time message signs at parking facilities and smartphone apps that indicate the availability of parking spaces. This can reduce circulating and increase the effective capacity of the parking facility.
- Parking Price Increase – An aggressive pricing approach (i.e. across-the board fee increase) would help the University decrease the number of single occupant vehicles that travel to campus. Some institutions vary their permit prices based on parking location, which can influence some commuters to use transit or carpool.
- If new parking structures are built, then the raised parking fees would likely go toward paying for the garages. Instituting TDM strategies does not necessarily require raising parking fees. If increasing parking fees is used as a TDM strategy (whether for this purpose alone, or as an addition to increases required to pay for any new parking garages), then those raised revenues can get channeled back into bolstering alternative transportation facilities and services, such as the Bull Runner Shuttle. Paying for TDM strategies (executed properly and on a scale that yields a measurable difference) is not a “forfeiture” of University funding and resources. It is an investment in a more effective, affordable and sustainable transportation system for the campus, and needs to be consistently expressed as such.
- Restrict parking permit access based upon progress through a degree program, such as prohibiting freshman from having cars on campus. Although USF is making strides in providing on-campus student housing, USF attracts many nontraditional students. Many freshmen hold down jobs and need the use of a car. Additionally, this strategy would send the wrong message that allowing upperclassmen to have parking permits is a reward. Parking permit privileges for driving alone should never be a reward. Instead, continue to incentivize parking for doing the right things, such as carpooling, or at least driving a smaller car.
- Parking Permit Buyback – A permit buyback program rewards current parking permit holders by paying commuters to surrender their parking permit and choosing an alternative commute mode (i.e. rideshare, transit, bicycling, or walking). The program can also be structured to reward anyone currently using alternative transportation modes.
- Housing Incentives – Some institutions provide subsidies to employees who purchase homes in proximity to their workplace to incentivize their employees to commute by walking or bicycling. Some states maintain commute-distance-based housing subsidy programs for employers to offer to their employees.
- TDM Coordinator –A full-time TDM coordinator can be very helpful to coordinate changes with local and regional transportation authorities, assist commuters with their options, provide program marketing, and assess effectiveness. A key function for a TDM coordinator would be to develop systems for commuters to find appropriate ride share partners.
- Commuter Membership Program – An alternative commuter program could be created, so the University can track participation, commuting behavior, and market program updates. To market the program, the use of rewards, prize drawings, and refer-a-friend bonuses can help increase participation. For instance, a modest financial reward could be provided for people who commute to campus by bicycle or walking. This reward could either be a direct cash reward, or could be provided through an outside service provider through a sponsored reward program (i.e. www.muride.com).
- Member Spot-Rewards – Providing spot rewards as overall transportation milestones are achieved would help maintain interest in alternative commuting and possibly lure new participants while encouraging the USF community to work together on achieving mode split or parking goals.
- Transportation Events – Campus-wide events, like employee and new student orientations provide great forums to communicate commuting options before people have already developed a travel pattern. The TDM manager would emphasize the cost

savings and ecological benefits of alternative commutes, while providing guidance to individuals wondering what the most appropriate option is for them.

- Transit Advocacy/Coordination – The University should continue to offer the HART U-pass and seek additional opportunities to coordinate with HART, TBARTA, or other transit providers and connect USF systems to others. USF should also consider new opportunities to provide transit service to off-campus housing to maximize the proportion of students and staff using transit options to travel to the campus.
- Transit Financial Incentives – The University could better publicize the HART Pass and pre-tax payroll deduction for transit expenses. Other financial incentives for transit use could also be considered.
- Flexible Work Arrangements – Telecommuting has the clear benefit of taking commuters off the road. Permitting flexible schedules would help shift commuters to different time schedules and may help reduce congestion at the typical peak hours.
- Occasional Parking Program – This program provides flexibility to commuters who transition to alternative modes by allowing commuters who choose to relinquish their parking permits to still occasionally park on campus.
- Program Marketing – Frequent communications, including email newsletters, articles in student and faculty newspapers, print advertisements, banners, and involvement in University events would help increase the recognition and benefits of alternative commuting.
- Website Enhancements – The TDM website could be enhanced present a more interactive and impressive resource for information on different commuting options. Attention would continue to be given to the various resources available to the campus community and the ecological and economic benefits of non-single occupancy vehicle commutes.
- Pre-tax payroll deduction could be expanded to include the option to purchase transit and vanpool fares with pre-tax dollars.
- In addition to riders' use of their smartphones, include the placement of more monitoring screens in lobbies of campus buildings to display Bull Runner Shuttle location and service updates.

The discussion of TDM strategies includes a recommendation to provide additional student housing to reduce student commuting activity yet there are concerns cited regarding insufficient proximate parking for student housing, both for convenience and for safety concerns at night. Some students do need cars and proximate access and this option should be available. But it should also be a focus to make resident student life easy without a car. Those resident students who desire a car on campus but not for regular use could have the opportunity to purchase a discounted parking permit for a parking space in a remote lot that is served by the Bull Runner. Supporting services to reduce the need for a car, in addition to the Enterprise campus car sharing program, and Zimride, the USF ridematching service, also promote the existing USF Student Government's intercity motor coach service provided for weekend travel and the USF Safe Team which provides golf cart service on-call between classes, residence halls, and parking lots.

USF plays an active role in the New North Transportation Alliance (NNTA), a public/private partnership. The New North Transportation Alliance (NNTA) is a public-private partnership in Northeast Tampa that provides a forum for businesses, local governments, residents, and commuters to address the transportation needs of the area. The group's purpose is to improve and expand transportation options for all travelers in the New North area. NNTA receives funding from the Florida Department of Transportation (District Seven), Hillsborough County, and the University of South Florida.

NNTA already attempts to do many of the TDM strategies listed in the draft Campus Master Plan, without any direct funding support of the University. NNTA receives funding from FDOT to provide a forum, technical support and promotional services to all businesses and government partners throughout the entire New North service area. Because of USF's size and influence, the funding by the University of its own TDM program is especially important. NNTA also advocates for traffic congestion relief on roadways adjacent to the campus and fosters public-private partnering on solutions.

The USF Center for Urban Transportation Research (CUTR) is a leader in Transportation Demand Management research and advocacy. CUTR maintains excellent resources for the USF community and other area employers to utilize in starting or refining TDM programs. CUTR staff can be consulted and utilized to research and develop effective TDM programs that are appropriate for the University. Other resources can be found at:

<http://www.nctr.usf.edu/clearinghouse/index.htm>

(e) Safety of the on-campus transportation system

The University of South Florida places a priority on safety for its students, employees, and visitors. USF maintains evacuation and emergency plans, and coordinates with neighboring jurisdictions, in the event of severe weather. USF and surrounding communities have implemented pedestrian treatments and bicycle lanes to provide non-vehicular traffic with safe and dedicated facilities. \Traffic calming measures, such as raised crosswalks, have been installed to improve pedestrian and bicyclist safety. As the result of a speed limit study by USF Center for Transportation Research (CUTR), consistent posted speed limits of 25 miles per hour were implemented campus-wide on roadways also encourage slower speeds on campus. USF provides lighting on most major roadways and pedestrian pathways to reduce potential conflicts and other safety concerns during dark conditions.

Hillsborough County has made significant safety improvements west of campus on Fletcher, east of campus on 50th St, and completed construction of a continuous sidewalk along the north edge of campus on Fletcher. USF continues to work with Hillsborough County to improve pedestrian and bicycle safety along roads that provide access to the campus.

University Police publishes an Annual Security and Fire Safety Report (ASR) and distributes it to all current students and employees. Such publication and distribution of the ASR is an important part of our ongoing effort to encourage all USF Community members to be aware of safety concerns, to report issues, and to prevent crime. Briefly, the ASR contains information about USF policies and procedures regarding campus security, fire safety, emergency response and evacuation procedures, sexual assault, missing student notification, and other matters as required by The Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act (the “Clery Act”). The ASR also contains statistics for the previous three calendar years concerning reported crimes occurring on the USF campus; in certain off-campus buildings or property owned or controlled by USF; and on public property within, or immediately adjacent to and accessible from, the USF campus. The 2015-2016 Security and Fire Safety Report is available on the USF Police Department web site at:

<http://www.usf.edu/administrative-services/university-police/documents/safety-guide-2015-16.pdf>

Traffic crash data for bicycles; pedestrians and motor vehicles:

Maps below based on data provided by USF Police. Data spreadsheets are available upon request.

Lighting assessment for bicycle and pedestrian facilities:

Lighting assessments are done on an annual basis with students, USF Police and others to determine additional campus lighting needs. Nite Walk findings are available upon request.

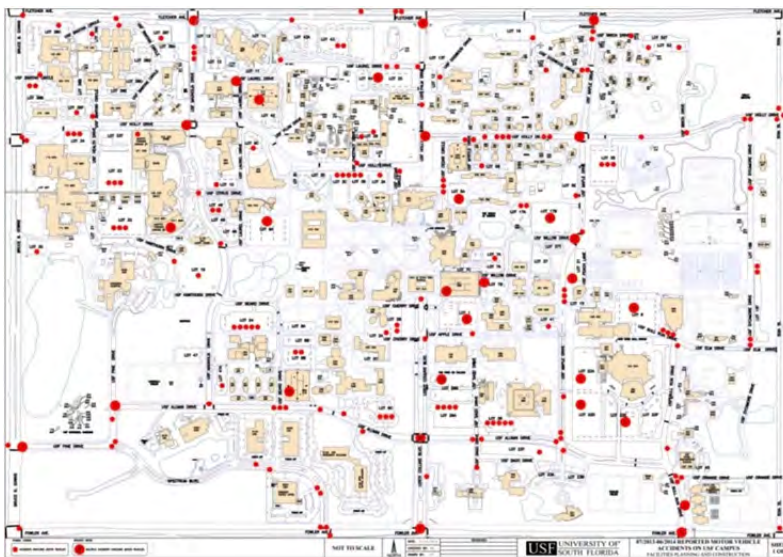
Identification of high traffic crash locations and other safety concerns on campus.

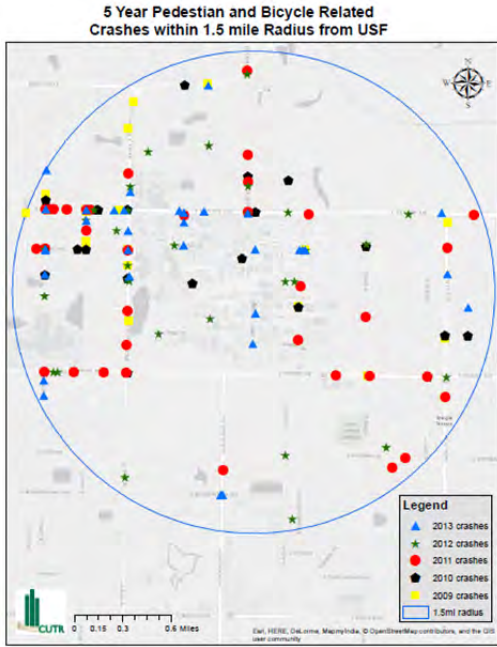
Maps below based on data from USF Police

Pedestrian, bicycle, skateboard accident locations



Motor vehicle accident locations:





(f) Planned new roads, road modifications, and other planned transportation system modifications.

USF has expanded the Bull Runner shuttle service to the south of the campus.

- New proposed roads include (require coordination with Hillsborough County):
 - Extension of USF Dogwood Dr. from USF Palm to USF Maple to facilitate closing East USF Holly Dr between USF Palm and USF Maple except to bicycles, transit, emergency, service, and move-in move out. This will create a more safe pedestrian connection of the residential students living north of USF Holly. Provide a connection north to Fletcher and 46th ST at the existing traffic signal.
 - Extend USF Hawthorn from USF Magnolia to Bruce B Downs to alleviate long wait times at USF Pine and USF West Holly at peak hour.



**USF – Tampa Campus
Transportation 2014 Survey Results**

Prepared by the New North Transportation Alliance and the USF Center for Urban Transportation Research
January 22, 2015

[Survey Purpose](#)

The survey provides measures of various aspects of travel by students, staff and faculty, commuting to and from the USF Tampa Campus. Survey has three purposes:

- Measure travel mode changes as part of the Tampa Campus Master Plan Update process, by USF Facilities Planning and Construction.
- Plan for future parking and improvements to the Bull Runner Shuttle and HART UPASS program, by USF Parking & Transportation Services.
- Guide activities and submit progress reports in keeping with campus sustainability commitments made by USF, by the USF Office of Sustainability.



NNTA’s mission is to provide a forum for public and private partners in the area surrounding USF (aka “New North”) to jointly address shared transportation concerns, such as traffic congestion, safety, and parking.

Overview

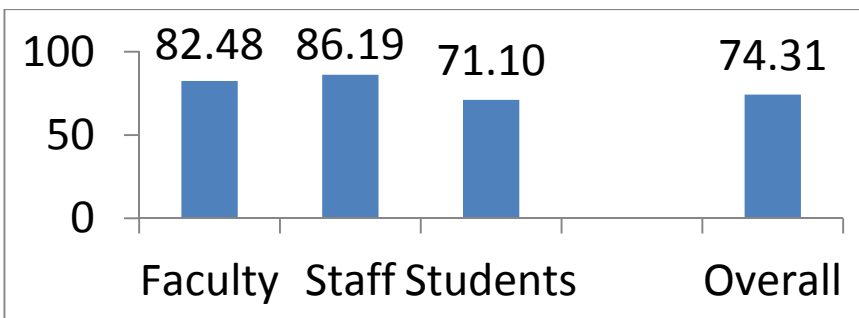
- Methodology
- Section 1 – Commuting Characteristics
- Section 2 – Awareness and Self-Reported Levels of Use of Various Travel Choices
- Section 3 – Interest in Valet Parking and Potential Effect of More Plug-in Locations on EV Consideration
- Section 4 – Survey Profiles

Methodology

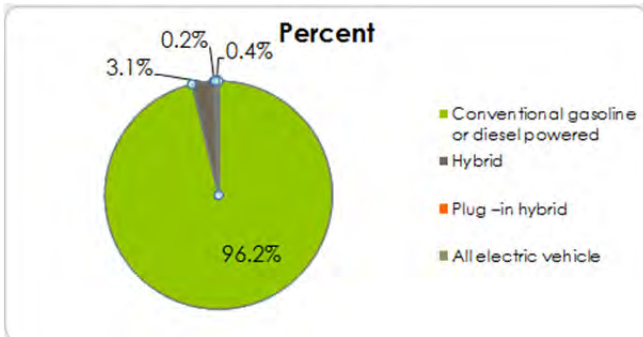
- Online survey link distributed by USF IT to faculty, staff and students
- 2,821 respondents (est. 4.6% of USF)
- Limitations
 - No incentive provided to increase response rate
 - Single email sent to official USF email account
 - Minority populations underrepresented slightly
 - Open-ended responses yet to be analyzed

Section 1 Commuting Characteristics

Auto Dominates: 74 private vehicle trips per 100 People

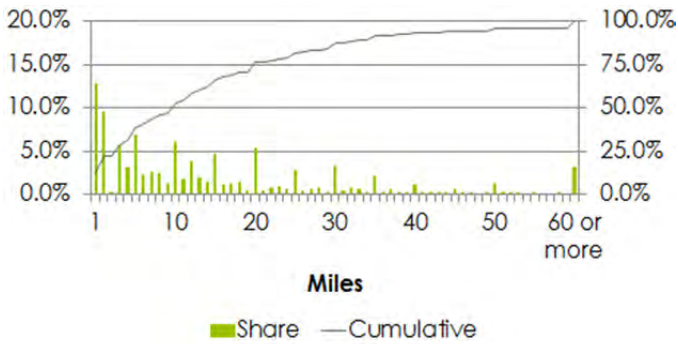


Conventionally Fueled Vehicles Dominate



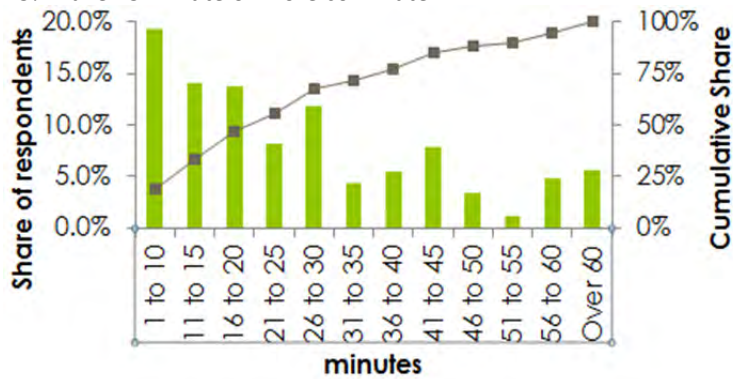
Mileage

The average trip to campus, excluding on-campus residents, is 15.8 miles one-way. 13% commute 30 miles or more

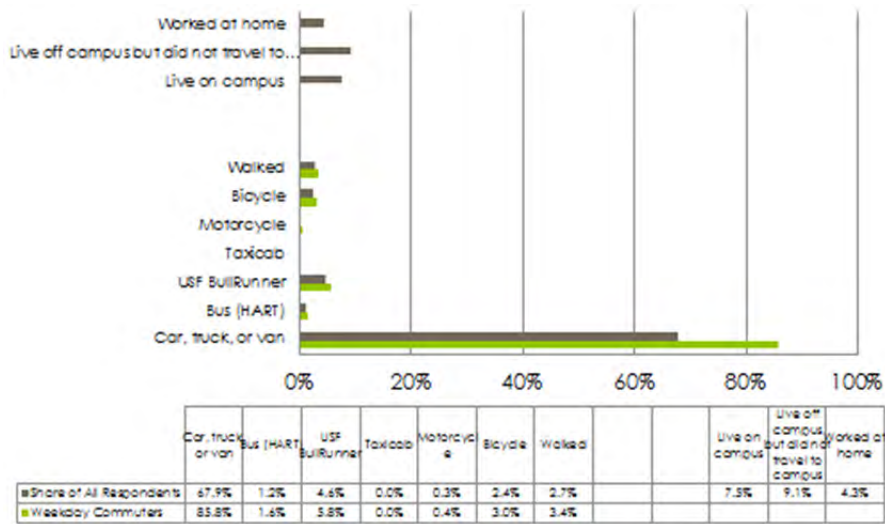


Minutes

19% have 10 minute or less commute but 15% have 45 minute or more commute



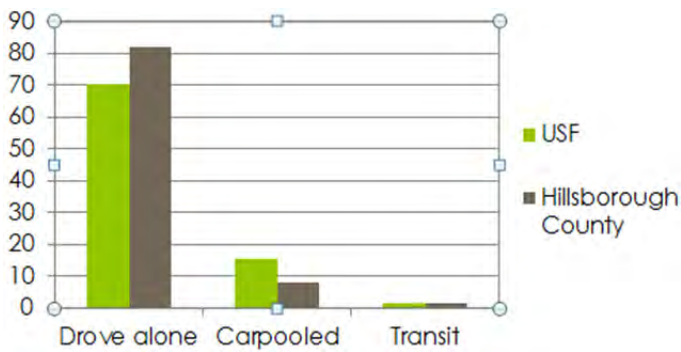
Commute Method of an Average Weekday in the Previous Week



Single Occupant Vehicles

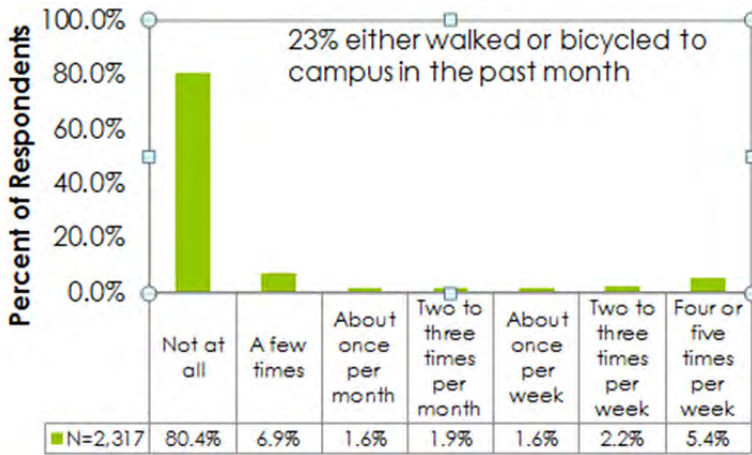
- Overall, 81.8% of USF commuters who travel by car, truck or van are single-occupant vehicles

USF versus Hillsborough County Commute Mode

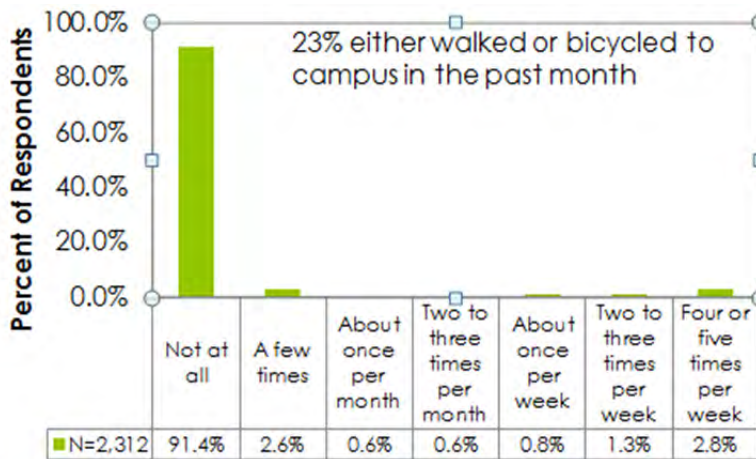


Hillsborough County data from 2013 American Community Survey 1-Year Estimates

Walk to and from Campus



Bike to and from Campus



Section 1 Findings and Recommendations

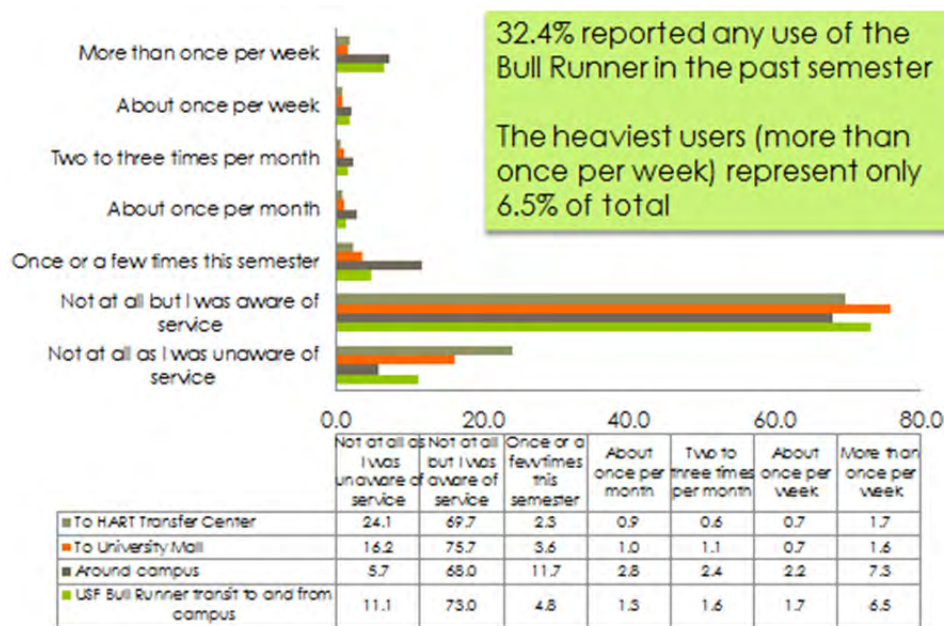
- While 23% either walked or bicycled to campus in the past month, the data suggest that commuters may find walking and bicycling to campus is not easy. Less than 5 percent bicycle to campus at least once per week and less than 10 percent walk to campus at least once per week.
 - With an estimated 4,500 students and 2,900 faculty/staff within 3 miles of campus, USF should partner with surrounding municipalities to creating a safe and pleasant walking and bicycling environment to campus
 - USF should continue to improve the connectivity of bicycle facilities on campus



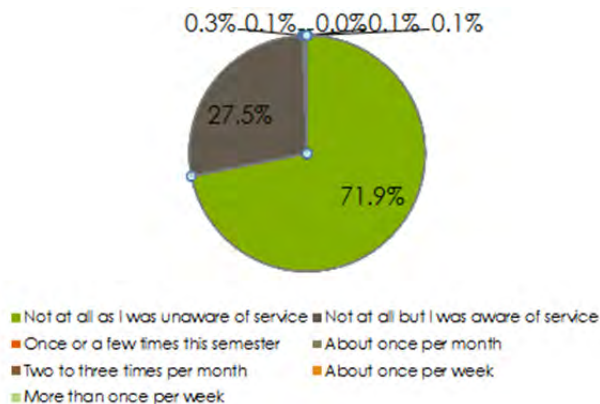
- For those who live in Hillsborough County: USF should actively promote HART’s U-Pass that allow students showing a USF ID to ride HART Local, Limited Express, MetroRapid and Flex routes for free and USF faculty and staff to pay 50¢ with a valid USF ID card.
- For the 13% who live outside of the County and commute at least 30 miles, USF should work with TBARTA and its vendor to create vanpools by funding a new vanpool incentive program for USF. PATS should provide free parking for the vanpools (may reduce parking demand by 4 to 9 spaces per vanpool)

Section 2 Awareness and Self-Reported Levels of Use of Various Travel Choices

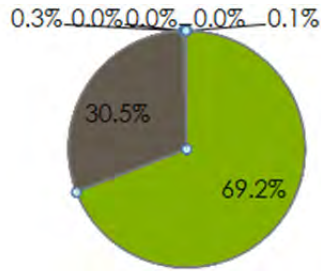
USF Bull Runner Awareness and Self-Reported Use



Emergency Ride Home Awareness and Self-Reported Use

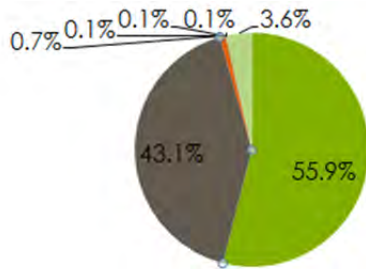


Zimride Ridematching Service Awareness and Self-Reported Use



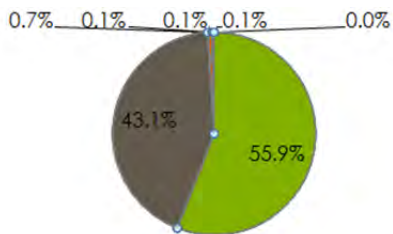
- Not at all as I was unaware of service
- Not at all but I was aware of service
- Once or a few times this semester
- Two to three times per month
- More than once per week
- About once per month
- About once per week

USF Bicycle Rack or Lid Awareness and Self-Reported Use



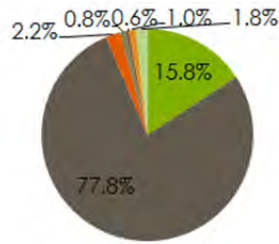
- Not at all as I was unaware of service
- Not at all but I was aware of service
- Once or a few times this semester
- Two to three times per month
- More than once per week
- About once per month
- About once per week

Enterprise Carshare Awareness and Self-Reported Use



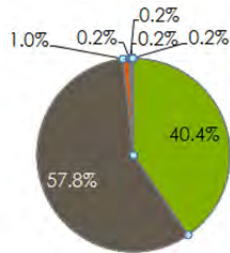
- Not at all as I was unaware of service
- Not at all but I was aware of service
- Once or a few times this semester
- Two to three times per month
- More than once per week
- About once per month
- About once per week

HART Awareness and Self-Reported Use



- Not at all as I was unaware of service
- Not at all but I was aware of service
- Once or a few times this semester
- About once per month
- Two to three times per month
- About once per week
- More than once per week

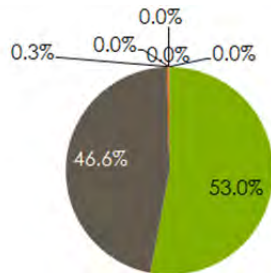
USF Borrow Our Bikes Awareness and Self-Reported Use



N=2,307

- Not at all as I was unaware of service
- Not at all but I was aware of service
- Once or a few times this semester
- About once per month
- Two to three times per month
- About once per week
- More than once per week

Moffitt Parking Shuttle Awareness and Self-Reported Use



N=2,302

- Not at all as I was unaware of service
- Not at all but I was aware of service
- Once or a few times this semester
- About once per month
- Two to three times per month
- About once per week
- More than once per week

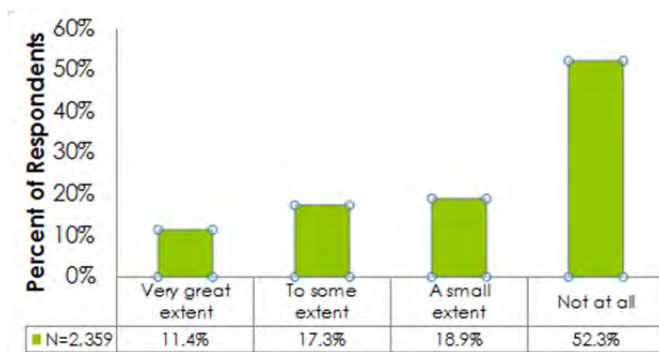
Section 2 – Findings and Recommendations

- About one in three use at least one of the Bull Runner services (to/from campus, on-campus, University Mall and HART transfer center).
- However, the heaviest users (more than once per week) of Bull Runner around campus represent only about seven percent of all respondents.
- Low level of awareness of Bull Runner services to University Mall and HART Transit Center.
 - PATS should promote Bull Runner’s access to off-campus destinations and activities
 - Increase Awareness of Travel Choices

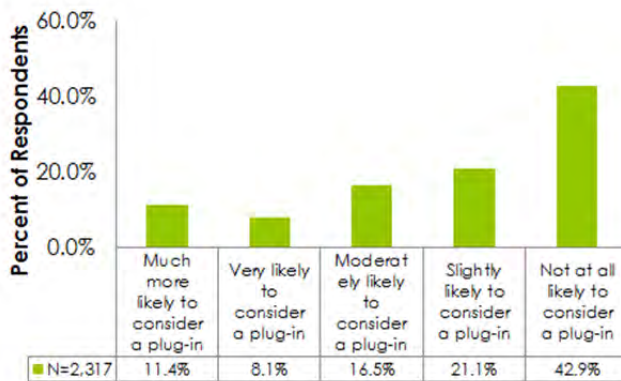
- Opportunity for growth in usage of travel options is great. The high lack of awareness levels of travel options range from Borrow Our Bikes at 40% to TBARTA’s emergency ride home at 72%.
- NNTA should work with TBARTA to promote the ERH program on campus
 - USF email policy and restrictions on direct marketing USF-sponsored services provided by private vendors like Enterprise Carshare and Zimride and is inconsistent with USF’s stated commitment to promoting sustainability. USF should modify the email policy to allow regular communication on transportation and parking issues via email for USF sanctioned services like Enterprise Carshare and Zimride.
- PATS and NNTA should promote how to download Bull Tracker and OneBusAway (HART’s real-time bus information app)

Section 3 Interest in Valet Parking Interest in Electric Vehicle

To what extent would you be interested in a valet parking service on the Tampa campus?



If there was access to more electric vehicle charging options on campus, how likely would you consider an electric plug-in vehicle as your next vehicle?



Section 3 – Findings and Recommendations

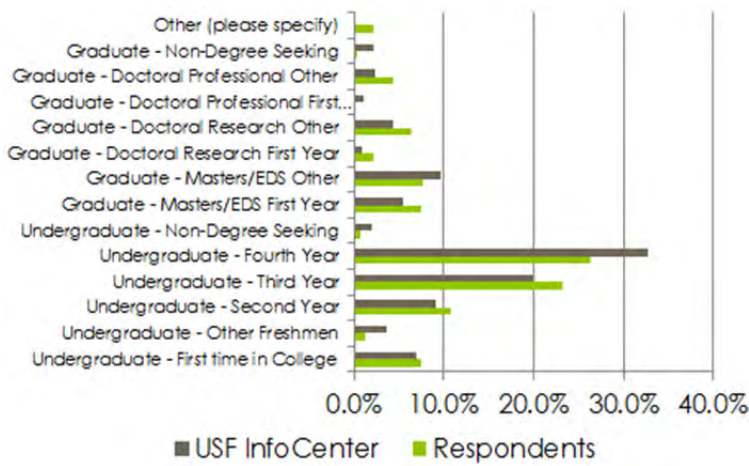
- 11% have high level of interest in valet parking service
 - PATS may want to examine this option in high demand areas.
- 57% would consider an electric vehicle as their next vehicle if there was access to more electric vehicle charging options on campus with 20% much more to very likely

Section 4 Survey Respondent Profiles

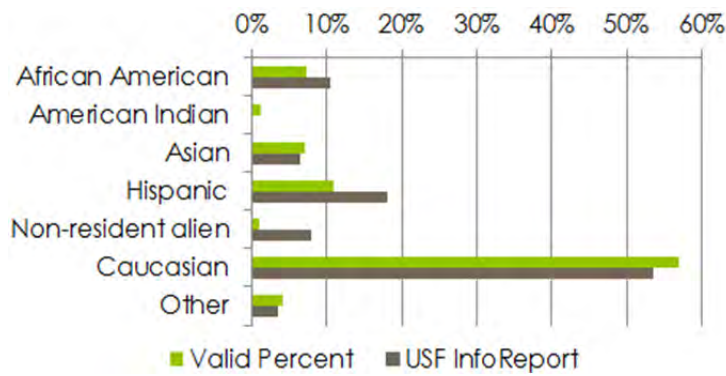
Survey Respondents

- Faculty 5.6%
- Staff 14.9%
- Student 69.3%
- Unknown 10.2%
- Female 67.2%
- Male 32.8%

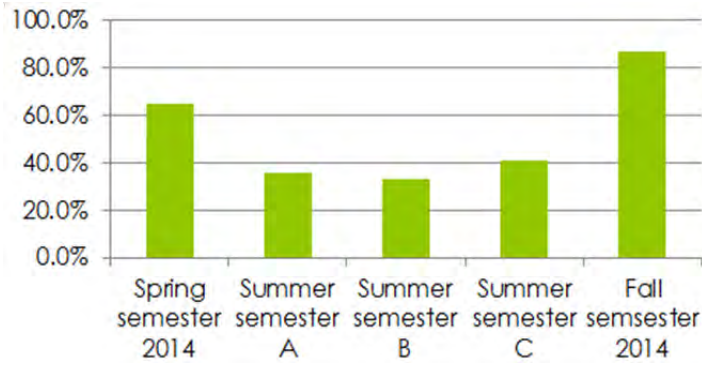
Survey Respondents – Students



Survey Respondents – Students by Race/Ethnicity

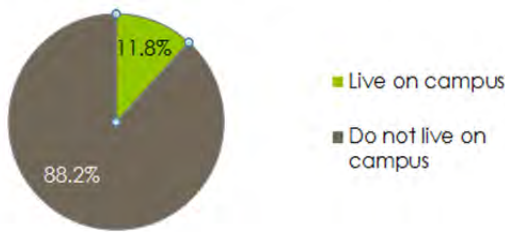


Share of Student-Respondents Who Traveled to/from USF-Tampa by Semester

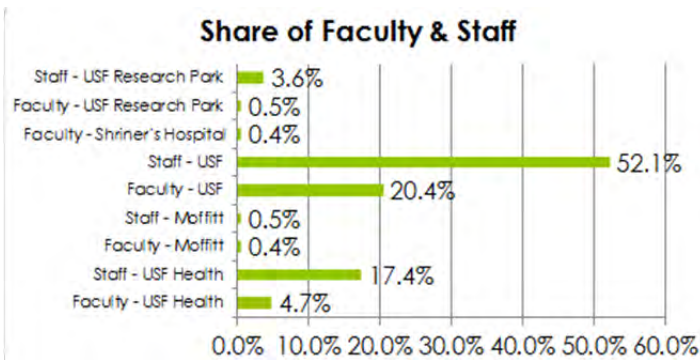


Survey Respondents – Residency

Share of Respondents



Respondents – Share of Faculty and Staff by Campus Location



Contacts

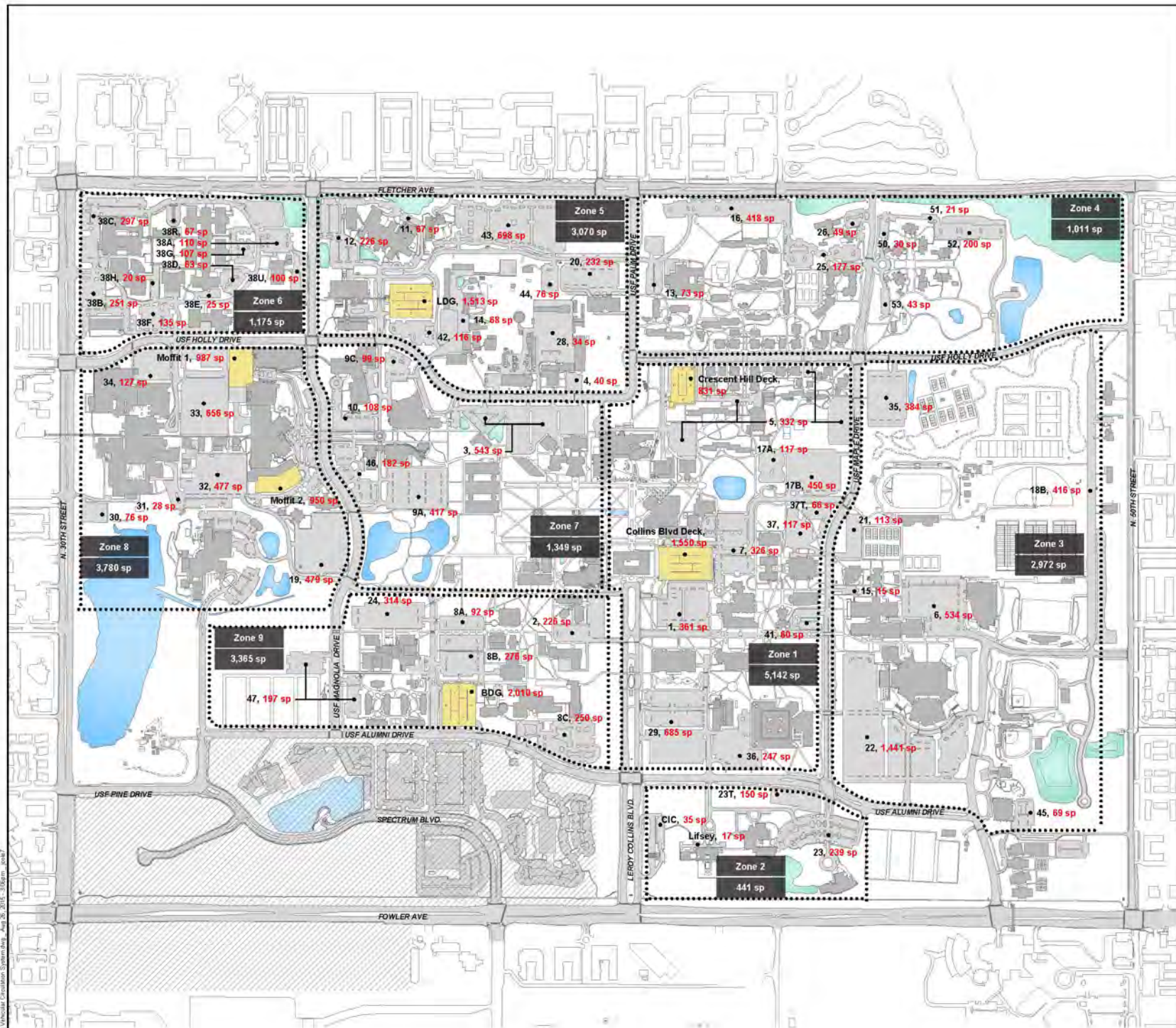
Phil Winters
 Director, TDM Program
 Center for Urban Transportation Research
 University of South Florida
winters@cutr.usf.edu
 813-974-9811

Sara Hendricks
 Senior Research Associate
 Center for Urban Transportation Research
 University of South Florida
hendricks@cutr.usf.edu
 813-974-9801

Links to Sustainability Tracking, Assessment & Rating System (STARS) report:
<https://stars.aashe.org/institutions/university-of-south-florida-fl/report/2014-01-14/>

See:

- Transportation
 - [OP-14: Campus Fleet](#)
 - [OP-15: Student Commute Modal Split](#)
 - [OP-16: Employee Commute Modal Split](#)
 - Tier 2 Credits
 - [OP-T2-26: Bicycle Sharing](#)
 - [OP-T2-27: Facilities for Bicyclists](#)
 - [OP-T2-28: Bicycle and Pedestrian Plan](#)
 - [OP-T2-29: Mass Transit Programs](#)
 - [OP-T2-30: Condensed Work Week](#)
 - [OP-T2-31: Telecommuting](#)
 - [OP-T2-32: Carpool/Vanpool Matching](#)
 - [OP-T2-33: Cash-out of Parking](#)
 - [OP-T2-34: Carpool Discount](#)
 - [OP-T2-35: Local Housing](#)
 - [OP-T2-36: Prohibiting Idling](#)
 - [OP-T2-37: Car Sharing](#)



- Surface Parking
- Structured Parking
- #, # sp Lot #, Space #

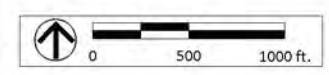
Area Not Included in Campus Master Plan

Notes
Based on utilization observation
10/14/2014

Element 5
Transportation

Figure 5.1
Existing Parking and
Vehicular Circulation System

Date
08/21/2015



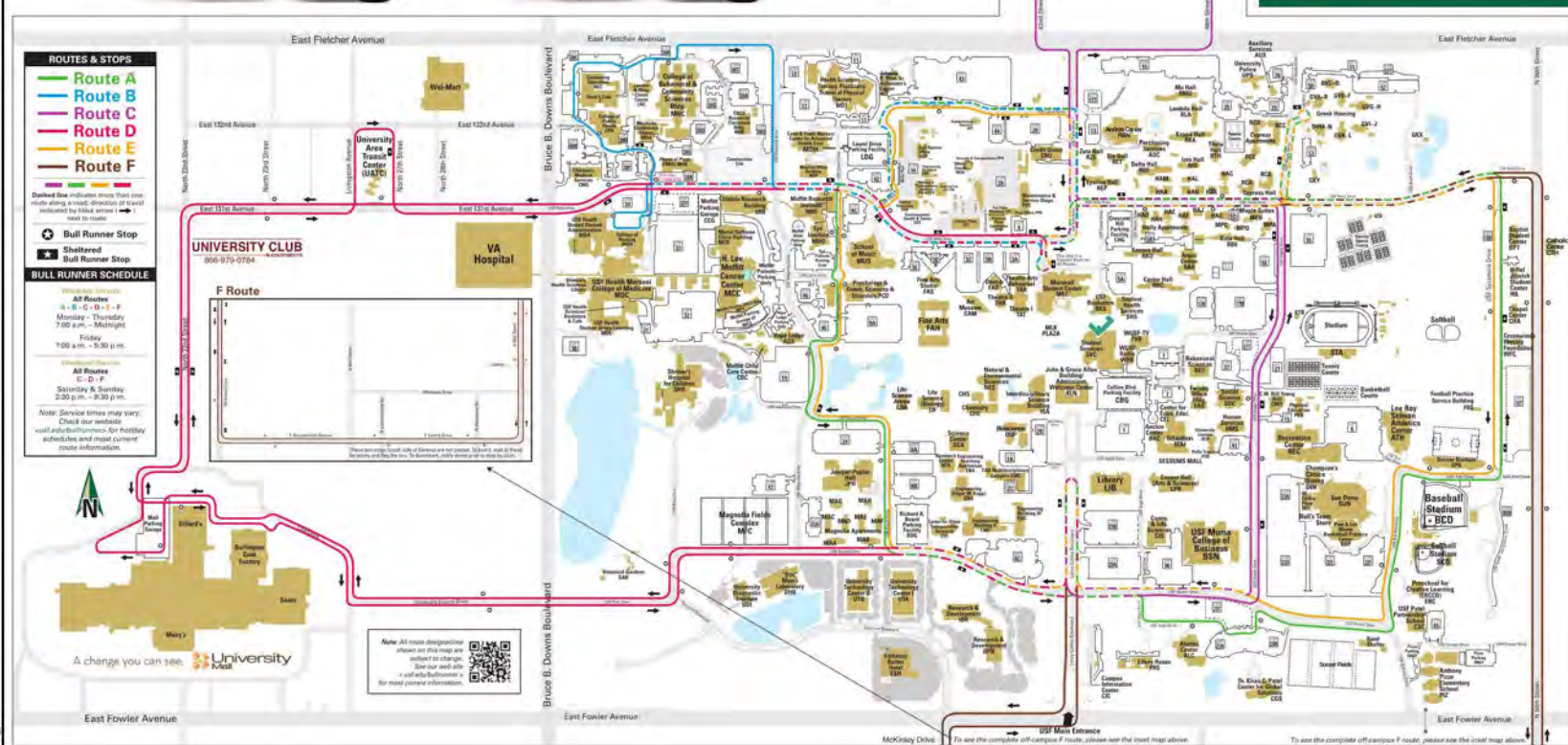


Use the **BULL TRACKER**
to locate the fare-free Bull Runner Transit!

Get these features online or from your mobile device:

- Find bus locations in real time
- Get bus arrival predictions
- Set up alerts for bus arrival at your stop
- View a specific route or the entire system
- Find out if space is available on the bus

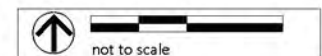
usfbullrunner.com





Element 5
Transportation

Figure 5.3
Bull Runner Route Map

Date
08/21/2015



-  Route Number
-  University of South Florida

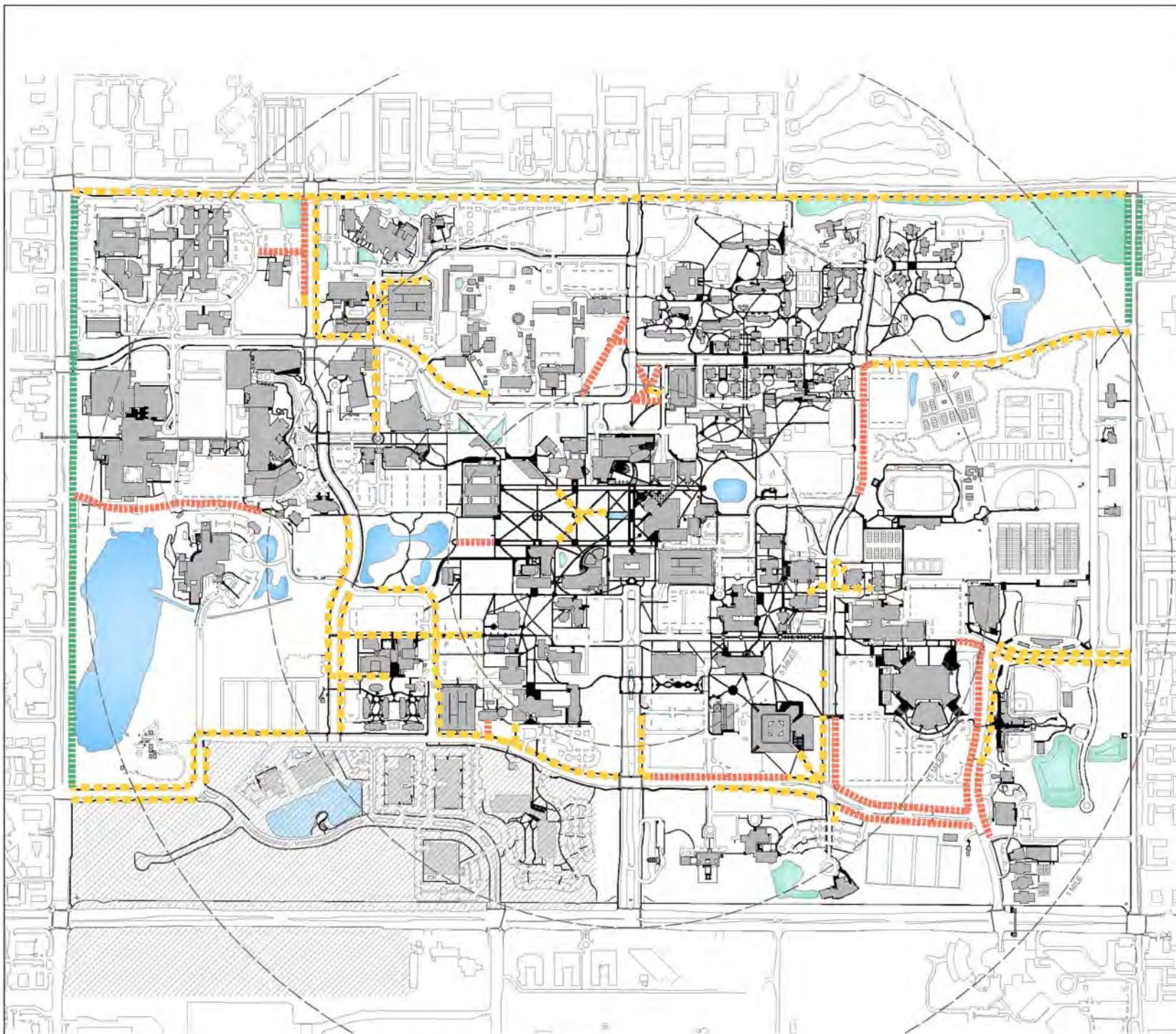




Element 5
Transportation


Figure 5.4
Bus Route Map

Date
08/21/2025





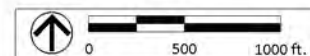
-  Existing Walks
-  Existing Walks Added Since 2005
-  Planned Campus Walk Development
-  Proposed Public Walk Development

 Area Not included in Campus Master Plan

Element 5
Transportation

Figure 5.5
Existing and Planned
Pedestrian Facilities

Date
08/21/2015



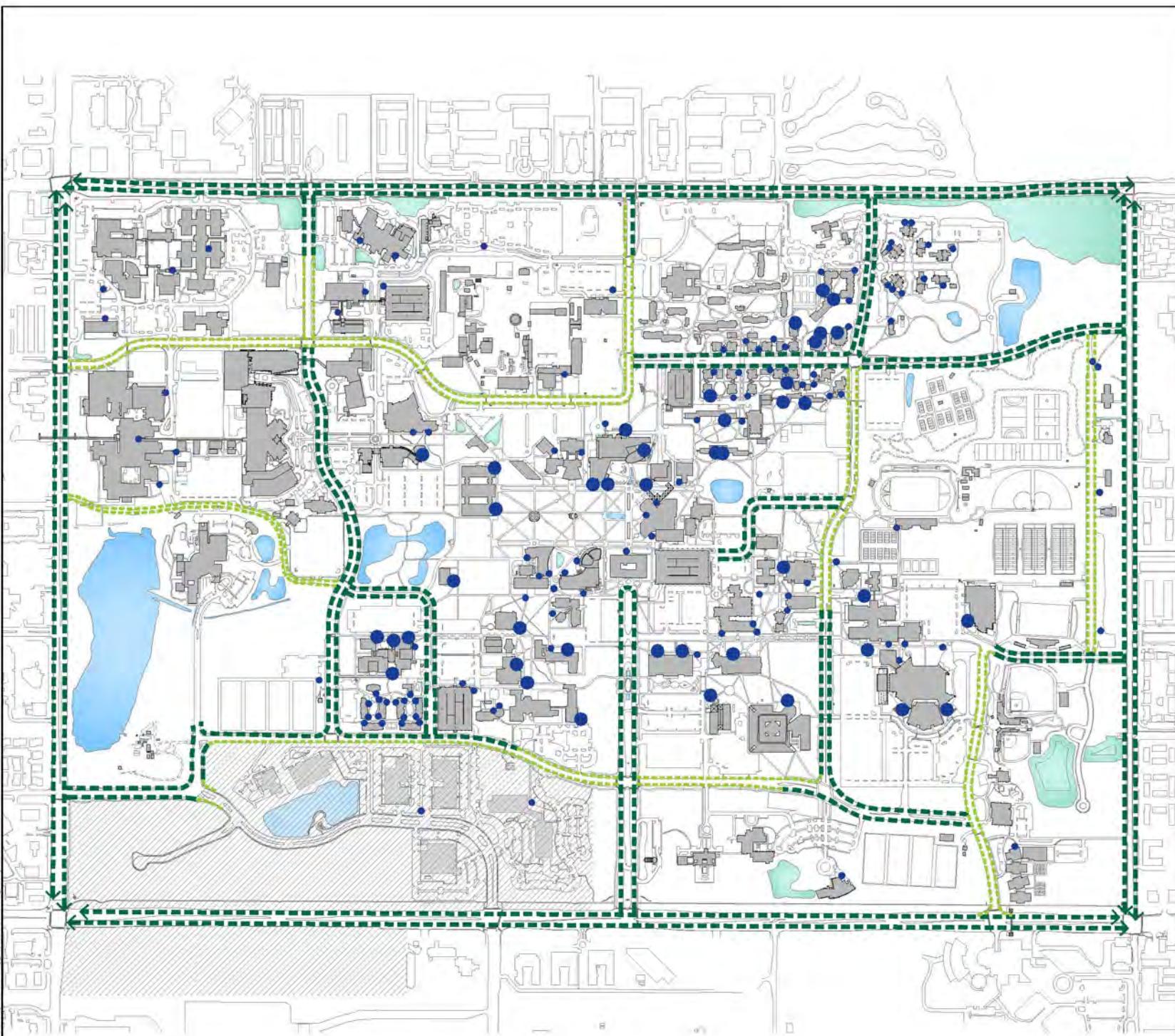
- Existing Bicycle Lanes
- Proposed Bicycle Lanes
- Bicycle Racks
- >20 Bicycle Racks

Area Not Included in
Campus Master Plan


Element 5
Transportation

Figure 5.6
Existing and Planned
Bicycle Facilities

Date
08/21/2015



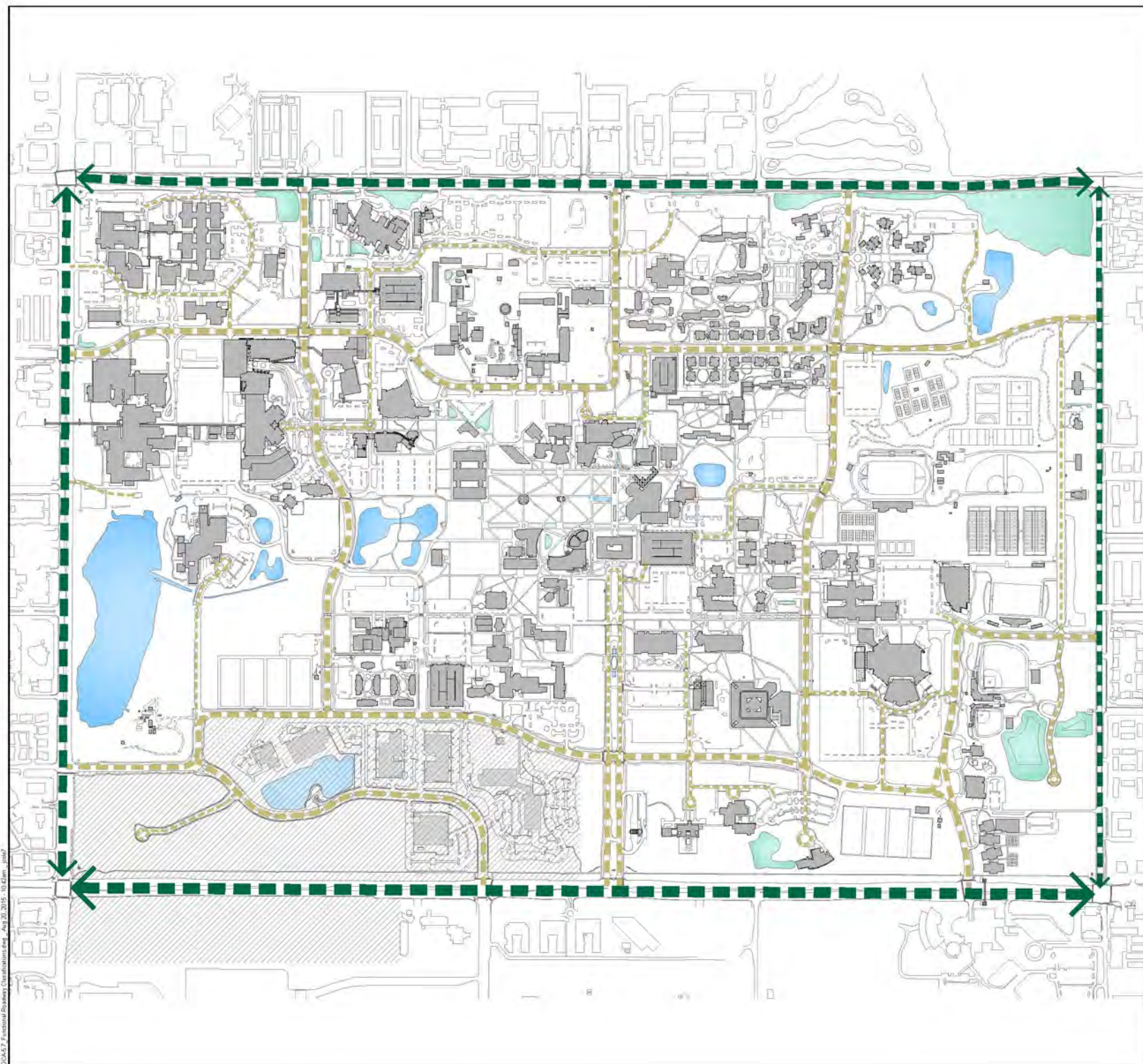
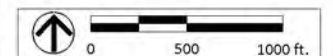
-  Principal Arterial
-  Minor Arterial
-  Collector Roadway
-  Collector Roadway (USF)
-  Drive (USF)




 Area Not Included in
Campus Master Plan


Element 5
Transportation

Figure 5.7
Functional Roadway
Classifications

Date
08/21/2015



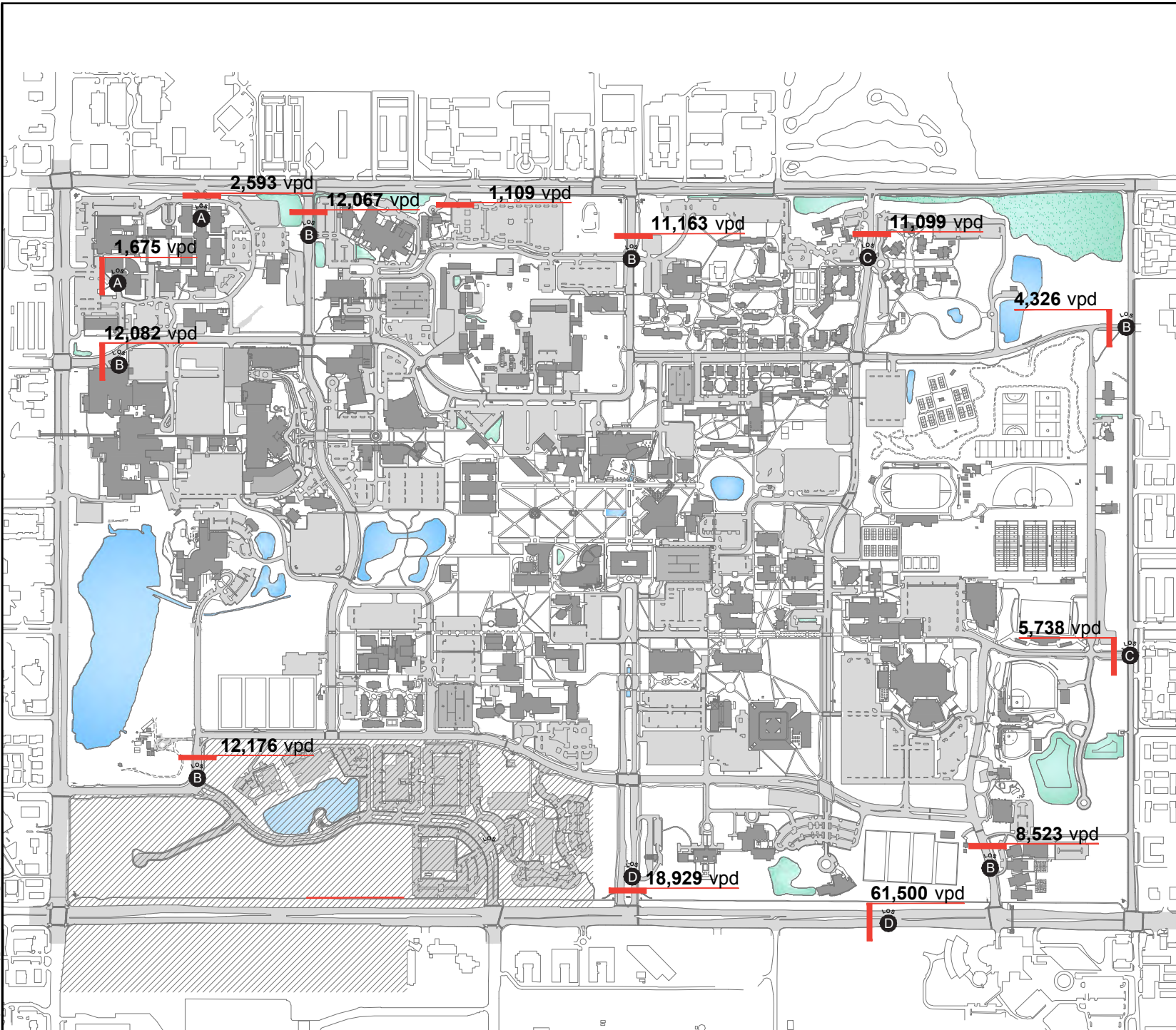
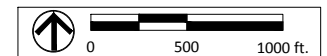
-  Surface parking
-  Vehicles Per Day
-  Daily Level of Service

 Area Not Included in Campus Master Plan

Element 5
Transportation

Figure 5.8
Existing Average Daily
Traffic Volumes

Date
10/20/2015



Element 6 Housing and Student Support Services

This element ensures the provision of public and private housing facilities on the University campus and within the host and/or affected communities that is adequate to meet the needs of the projected University enrollment.

Housing & Residential Education's vision is for the dynamic residential experience to produce proud USF alumni and engaged global citizens. Housing & Residential Education is dedicated to creating safe and welcoming residential communities that promote student success.

Due to the University's first year live-on requirement, first time in college students comprise the majority of the on campus residential community. For Fall 2013, demand for housing by returning undergraduate students exceeded capacity and allowed for only limited transfer student space to be available.

The strategic enrollment plan goals to increase out-of-state and international students will dictate an even higher demand for on-campus housing. With increased access to an affordable, high-quality residential experience, demand will continue to grow beyond the current capacity.

With a current capacity of 5,390, Housing & Residential Education is a mix of single and double occupancy spaces in traditional, suite, and apartment style beds along with doubles in the fourteen Greek Village houses. While the primary focus of Housing & Residential Education is supporting the needs of our full-time enrolled students, accommodations are also offered to faculty, staff, visiting scholars, camps and conferences.

Acknowledging strategic priorities to keep a high quality residential experience accessible to the USF student body and the focus on first time in college student needs, new construction will add traditional double and single rooms with modern, spa-like community bathrooms and suite style housing to the inventory. Initial estimates project 85% double and 15% single options in new construction. The competitive off-campus apartment style options satisfy the market demand and inform the decision to not expand beyond the 1,750+ three and four bedroom apartment options already on-campus.

(1) HOUSING DATA AND ANALYSIS

The USF BOT approval of the Student Housing Development Project:

<http://system.usf.edu/board-of-trustees/meetings/pdfs/upcoming-meetings/2015/06.04.15/FL%20114.pdf>

Student Housing Demand Assessment Report:

<http://system.usf.edu/board-of-trustees/meetings/pdfs/upcoming-meetings/2015/06.04.15/Demand%20Assessment%20Report.pdf>

2014-15 Standard Capacity Projections																							
Configuration	Building Name	Building Abbreviation	# of Floors	Room Type								Total Capacity	Standard Bed Capacity by Room Type								Total		
				Double	Corser Double	Single	Super Single	Faculty Staff	Non-Revenue	RA	Guest		Double	Corser Double	Single	Super Single	Faculty Staff	Non-Revenue	RA	Guest	Complete Capacity	Student Capacity	Revenue Capacity
Traditional	Barn	RBE	5	138	0	0	0	2	0	5	0	286	276	0	0	0	2	0	0	0	286	284	276
Traditional	Center	RBC	5	172	0	10	0	1	1	9	0	465	444	0	10	0	1	1	9	0	465	464	454
Argee Totals:				310	0	10	0	3	1	17	0	651	630	0	10	0	3	1	17	0	651	648	630
Suite	Dalta	RDE	3	108	0	0	2	4	16	6	0	244	216	0	0	2	4	16	6	0	244	240	218
Suite	Epsilon	REP	3	112	0	0	2	0	6	6	0	240	224	0	0	2	0	6	6	0	240	240	226
Suite	Eta	RET	2	40	0	0	0	0	0	2	0	82	80	0	0	0	0	0	2	0	82	82	80
Suite	Iota	RJO	3	0	0	60	0	0	1	2	0	63	0	0	60	0	0	1	2	0	63	63	60
Suite	Kappa	RKA	3	0	0	112	0	0	0	8	0	116	0	0	112	0	0	0	8	0	116	116	112
Suite	Lambda	RLA	2	0	0	40	0	0	0	2	0	42	0	0	40	0	0	0	2	0	42	42	40
Suite	Mu	RMU	3	0	0	108	2	0	8	6	0	124	0	0	108	2	0	8	6	0	124	124	110
Suite	Theta	RTH	2	0	0	36	2	0	0	2	0	40	0	0	36	2	0	0	2	0	40	40	38
Suite	Zeta	RZT	2	40	0	0	0	0	0	2	0	82	80	0	0	0	0	0	2	0	82	82	80
Andros Totals:				309	0	356	8	4	41	34	0	1043	690	0	356	8	4	41	34	0	1043	1039	964
Suite	Maple A	MPA	4	54	0	0	0	1	4	4	0	117	108	0	0	1	4	4	0	117	116	108	
Suite	Maple B	MPB	4	54	0	0	0	1	0	4	0	113	108	0	0	1	0	4	0	0	113	112	108
Suite	Cypress A	RCA	5	68	5	0	0	1	0	5	0	152	136	10	0	0	1	0	5	0	152	151	148
Suite	Cypress B	RCB	5	54	4	0	0	0	0	4	0	120	108	8	0	0	0	4	0	0	120	120	116
Apartment	Cypress C	RCC	4	0	0	164	0	0	0	4	0	168	0	0	164	0	0	0	4	0	168	168	164
Apartment	Cypress D	RCD	4	0	0	124	0	1	0	4	0	129	0	0	124	0	1	0	4	0	129	128	124
Cypress-Maple Totals:				230	9	288	0	4	4	25	0	799	460	18	288	0	4	4	25	0	799	795	766
Apartment	Knolls	RKO	5	87	0	65	0	1	3	8	0	254	174	0	68	0	1	3	8	0	254	253	241
Apartment	Holly A	HAA	3	0	0	72	4	1	0	2	0	85	0	0	78	4	1	0	2	0	85	84	81
Apartment	Holly B	HAB	3	0	0	81	6	0	0	3	0	90	0	0	81	6	0	0	3	0	90	90	87
Apartment	Holly C	HAC	4	0	0	105	8	1	0	3	0	117	0	0	105	8	1	0	3	0	117	116	113
Apartment	Holly D	HAD	4	0	0	93	8	0	0	3	0	104	0	0	93	8	0	0	3	0	104	104	101
Apartment	Holly E	HAE	4	0	0	85	8	1	4	3	0	101	0	0	85	8	1	4	3	0	101	100	93
Apartment	Holly F	HAF	4	0	0	108	8	0	0	4	0	120	0	0	108	8	0	0	4	0	120	120	116
Apartment	Holly G	HAG	4	0	0	104	8	1	0	4	0	115	0	0	104	8	1	0	4	0	115	114	110
Holly-Knolls Totals:				87	0	722	48	5	7	30	0	986	174	0	722	48	5	7	30	0	986	981	944
Apartment	Magnolia A	MAA	3	0	0	67	0	0	0	2	0	69	0	0	67	0	0	0	2	0	69	69	67
Apartment	Magnolia B	MAB	3	0	0	67	0	0	0	2	0	69	0	0	67	0	0	0	2	0	69	69	67
Apartment	Magnolia C	MAC	4	0	0	80	0	1	0	2	0	83	0	0	80	0	1	0	2	0	83	82	80
Apartment	Magnolia D	MAD	4	0	0	83	0	0	0	2	0	85	0	0	83	0	0	0	2	0	85	85	83
Apartment	Magnolia E	MAE	4	0	0	83	0	0	0	2	0	85	0	0	83	0	0	0	2	0	85	85	83
Apartment	Magnolia F	MAF	4	0	0	72	0	0	0	2	0	78	0	0	72	0	0	0	2	0	78	74	72
Apartment	Magnolia G	MAG	3	0	0	10	0	2	0	0	0	12	0	0	10	0	2	0	0	0	12	10	10
Suite	Juniper	RJH	7	192	12	0	0	0	0	12	0	420	384	24	0	0	0	0	12	0	420	420	408
Suite	Poplar	RPH	7	264	18	0	0	2	4	18	0	632	572	36	0	0	2	4	18	0	632	630	608
Magnolia Totals:				478	30	462	0	5	4	42	4	1533	956	60	462	0	5	4	42	4	1533	1524	1478
Greek House	Greek Villa A	GVA	3	14	0	0	0	1	0	1	0	30	28	0	0	1	0	1	0	0	30	29	28
Greek House	Greek Villa B	GVB	3	14	0	0	0	0	1	0	0	29	28	0	0	0	1	0	0	0	29	29	28
Greek House	Greek Villa C	GVC	3	14	0	0	0	0	0	1	0	29	28	0	0	0	0	1	0	0	29	29	28
Greek House	Greek Villa D	GVD	3	13	0	0	0	0	0	1	0	27	26	0	0	0	0	1	0	0	27	27	26
Greek House	Greek Villa E	GVE	2	10	0	0	0	0	0	1	0	21	20	0	0	0	0	1	0	0	21	21	20
Greek House	Greek Villa F	GVF	2	9	0	0	0	0	0	1	0	19	18	0	0	0	0	1	0	0	19	19	18
Greek House	Greek Villa G	GVG	3	13	0	0	0	0	0	1	0	27	26	0	0	0	0	1	0	0	27	27	26
Greek House	Greek Villa H	G VH	3	13	0	0	0	0	0	1	0	27	26	0	0	0	0	1	0	0	27	27	26
Greek House	Greek Villa I	GVI	2	10	0	0	0	0	0	1	0	21	20	0	0	0	0	1	0	0	21	21	20
Greek House	Greek Villa J	GVI	2	9	0	0	0	0	0	1	0	19	18	0	0	0	0	1	0	0	19	19	18
Greek House	Greek Villa K	GVK	2	10	0	0	0	0	0	1	0	21	20	0	0	0	0	1	0	0	21	21	20
Greek House	Greek Villa L	GVL	2	9	0	0	0	0	0	1	0	19	18	0	0	0	0	1	0	0	19	19	18
Greek House	Greek Villa M	GVM	3	14	0	0	0	0	0	1	0	29	28	0	0	0	0	1	0	0	29	29	28
Greek House	Greek Villa N	GVN	3	14	0	0	0	0	0	1	0	29	28	0	0	0	0	1	0	0	29	29	28
Suite	OPB - RCB2	RCB2	1	14	1	0	0	0	0	1	0	31	28	2	0	0	0	0	1	0	31	31	30
Greek Village Totals:				164	0	0	0	1	0	15	0	378	360	2	0	0	1	0	15	0	378	346	362
Totals:				1571	39	1838	56	22	57	163	4	5390	3170	80	1838	56	22	57	163	4	5390	5333	5144
Total Revenue Spaces:													3170	80	1838	56	0	0	0	0			5144

Provided by USF Housing and Residential Education

(b) University controlled facilities off-campus.
The University does not control any off-campus facilities.

(c) Students housed in non-University controlled facilities on-campus (fraternities, sororities, etc...)
Fraternities & Sororities are located in University controlled facilities, included in table above. (d)
Assess the number of students to be housed in non-University controlled facilities off-campus. .
Off campus there is one Fraternity house currently unoccupied with 20 spaces and another organization with 12 spaces available.

The number of students housed in the area is illustrated in the dot density map Figure 6.1.

Available occupancy information provided below for major apartments in the vicinity of campus (source: Brailsford & Dunlavy). Additionally, a new complex of 600 beds is in planning across Bruce B. Downs Boulevard.

University of South Florida
Off-Campus Analysis
Unit-Type / Rent / Square Feet

COMMUNITY	ADDRESS	CITY	ZIP	MILES TO MSC	NO. OF UNITS	OCCUPANCY
The Venue at North Campus	13702 N 42nd St	Tampa	33613	0.6	N/A	N/A
4050 Lofts	4050 Rocky Circle	Tampa	33613	0.7	N/A	N/A
Union Park on Fletcher	3900 East Fletcher Avenue	Tampa	33613	0.7	84	100%
Avalon Heights	13508 Avalon Heights Blvd	Tampa	33613	0.8	212	100%
Monticello	4201 Monticello Gardens Place	Tampa	33613	0.8	132	94%
ONSC	5005 Excellence Blvd	Tampa	33617	0.8	N/A	N/A
The Pointe	3424 Jefferson Commons Drive	Tampa	33613	1.1	N/A	93%
Cambridge Woods	14138 Monterey Pines Drive	Tampa	33613	1.1	275	97%
Willow Brooke	14414 Holliston Drive	Tampa	33613	1.1	248	100%
42 North	14502 Valor Circle	Tampa	33617	1.2	127	100%
Malibu USF	11711 N. 50th Street	Tampa	33617	1.2	52	100%
The Province	10921 N. McKinley Drive	Tampa	33612	1.3	N/A	98%
Fairway Oaks	4512 Blue Tree Court	Tampa	33613	1.3	235	96%
Oak Ramble	14627 Granada Dr	Tampa	33613	1.4	256	97%
Hidden Palms	14555 Bruce B. Downs Blvd	Tampa	33613	1.4	256	98%
Campus Club	5651 East Fletcher Avenue	Tampa	33617	1.5	N/A	100%
The Flats at 4200	4202 Fletcher Avenue	Tampa	33613	1.7	314	N/A
College Court	5610 Graduate Circle	Tempe Terrace	33617	1.7	52	97%
Lakeview Oaks	14201 Cyber Place	Tampa	33613	1.8	252	96%
Ashford Place	10610 N 30th St	Tampa	33612	2.0	N/A	N/A
Reflections Apartments	14525 Prism Circle	Tampa	33613	2.0	198	100%
Arbiter Place	5100 Live Oaks Blvd	Tampa	33647	2.7	770	99%
Campus Lodge	15115 Livingston Ave	Lutz	33550	2.8	312	98%
Boardwalk at Morris Bridge	80 Boardwalk Trail Drive	Tempe Terrace	33637	3.8	144	90%

University of South Florida
Off-Campus Analysis
Amenity Offerings

Apartment	Distance to Campus	Swimming Pool	Fitness Center	Dishwasher	Patio/Balcony	BBO Cooling Areas	Private Bathrooms	Plumbing Utilities Included	WiFi in Unit	Furnished Units Available	Closet	Business Ctr/Comp Lab	Campus Transit Service	On-Site Management	Individual Leases	Pet Friendly	Shed/Storage Units	Roundtable Meeting	Ballroom/Event	Laundry Facility	Controlled Access	Study Rooms	Tennis Courts	Flexible Lease Terms	Storage
The Venue at North Campus	0.6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
4050 Lofts	0.7	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Union Park on Fletcher	0.7	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Avalon Heights	0.8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Monticello	0.8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ONSC	1.1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
The Pointe	1.1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Cambridge Woods	1.1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Willow Brooke	1.2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
42 North	1.2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Malibu USF	1.3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
The Province	1.3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Fairway Oaks	1.4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Oak Ramble	1.4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Hidden Palms	1.5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Campus Club	1.7	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
The Flats at 4200	1.7	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
College Court	1.8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Lakeview Oaks	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Ashford Place	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Reflections Apartments	2.7	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Arbiter Place	2.8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Campus Lodge	3.8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Off-Campus Total		23	22	21	20	20	18	17	16	15	15	13	13	12	12	12	11	9	9	7	7	7	6	5	3

(e) Historically significant housing on-campus.

There are no historically significant housing facilities on the Tampa campus.

(f) Potential on-campus sites where additional housing facilities may be created.

The Fig 6-2 depicts the current housing development areas.

Student Support Services

Marshall Student Center

The Marshall Student Center is a vibrant gathering place that strengthens a person's connectivity to USF, cultivates a sense of community, and hosts campus traditions by providing exceptional facilities, event services and student employment opportunities.

The Marshall Student Center houses a variety of student services and activities, including:

- A variety of food and dining locations
- Student meeting rooms
- Student Government
- Ballroom
- Retail
- Student organizations
- Oval Theater
- Student lounges
- Computer lab
- Outdoor amphitheater
- Orientation
- Special events
- Multi-cultural affairs

Current square footage: 235,000 square feet

Current annual users:

- 2.25 million points of traffic
- 15,000 annual events (approx.)

Additional square footage anticipated to be needed in the next 10 years:

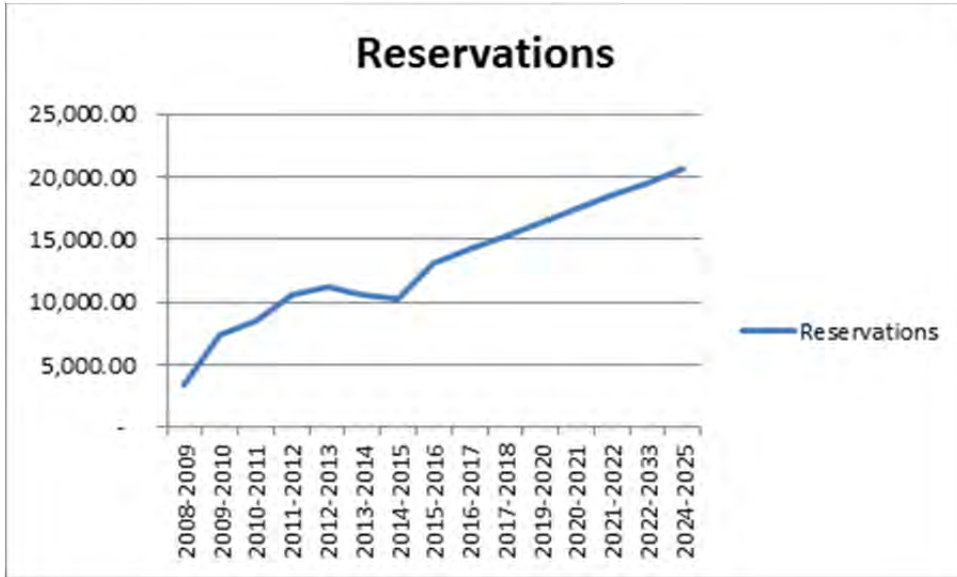
Within the next 2-3 years - 30,000 square feet of growth to accommodate retail, mission central offices, student lounge space and larger meeting rooms. This 3 story expansion is expected to occur over the existing loading dock area.

At the end of ten years – We should consider a larger venue that can accommodate 4000-5000 students in an assemble format. Something between the Ballroom and the Sun Dome which becomes cost prohibitive for our event planners.

Increased number of users in the next 10 years:

Annual traffic is difficult to estimate as it will depend on enrollment.

Event load – anticipated numbers after calendar year 2014-2015



Career Services is currently housed in the SVC building and is planned to move into the Marshall Center Expansion in the near future to be more central to students and expand services to them.

- Current gross square footage: 5,810 sq ft (main offices) + 906 sq ft (interview suites)= TOTAL 6,716 gross sq ft
- Current number of annual users/student contacts = approximately 10,000 (9,890)
- Amount of square footage needed in the next 10 years= 9,750 gross sq ft (size of anticipated floor in MSC expansion)
- Anticipated number of future users is difficult to estimate (minimum of 20,000 if internships increase significantly)

Student Wellness

Student Wellness includes services such as: Wellness Education, Campus Recreation (included in the Recreation & Open Space Element) Center for Victim Advocacy & Violence Prevention, USF Office of Outreach & Support, USF Counseling Center, and Student Health Services Healthy Campus.

Current Square Footage:

15,000 sq. ft. main clinic
3,000 square feet in Annex (basement of bookstore)
700 square feet for pharmacy in MSC
18,700 total sq. ft.

Current encounters/numbers served annually:

Clinical visits: 29,000
Clinical users: 12,200
Immunization Compliance Office (ICO): 17,617

Insurance Compliance Office (ISO estimated): 25,300
Pharmacy transactions: 36,940
Pharmacy prescriptions: 17,031

Interim Plan:

- Request Health Fee funding for additional physician and nurse in 2015-2016.
- Request use of Health Fee reserves for internal renovation to create additional exam rooms at an approximate cost of \$220,000.
- Rent space for Call Center staff, requiring approximately 400 square feet.

Predicted number of users/visits annually in 10 years:

Clinical visits: 36,000

ICO: 18,000

ISO: 40,000 (It is anticipated that insurance will be a requirement for enrollment)

Pharmacy prescriptions: 19,000

Square footage needs predicted in 10 years: 53,000 GSF

Campus Ministries

The Religious and Spiritual Life at USF is a network of member faith communities committed to an agreed upon set of ethical standards. They provide access to programs, services, and activities that encourage a campus atmosphere of healthy religious and spiritual expression. This is accomplished through meetings, resources allocation, and collaboration between member organizations and the Division of Student Affairs.

The RSL is a forum for the sharing of information and viewpoints helpful for the common task of the spiritual development of students at USF. As such, it shall serve as an official point of contact between the campus religious communities and the Division of Student Affairs.

There are four campus ministry facilities on USF Sycamore Drive, including:

- Baptist Collegiate Ministries
- Episcopal Chapel Center
- Hillel Jewish Student Center
- Wesley Foundation at USF

The Catholic Student Center is located just across 50th Street off campus.

<http://campusministries.usf.edu/page.asp?id=80>

Veterans Services

1. Current SQ FT: 3600
2. Annual users:
 - a. Full Time Staff: 7 USF / 1 VA
 - b. Part-Time Staff (OPS): 9
 - c. VA Work-Study: 30
 - d. Students Supported: 1800-2000 annually
3. Additional SQ FT needed: 2000
4. Projected Additional Users:
 - a. Full-Time Staff: 3 Coordinators / 1 Admin Assistant (Certifying Official)
 - b. Part-Time Staff: 3
 - c. VA Work-Study: 5
 - d. Additional Students Supported: 700 annually

Food Service:

USF Dining, currently through the nationally known food service provider, ARAMARK, serves more than 40,000 students and 10,000 Staff and Faculty daily across 25 dining venues. From the most popular quick service retail brands (i.e. Panda Express, Pollo Tropical, Moe’s Southwest Grill, Subway, and Starbucks), to 3 full scale dining halls, (Juniper, FCC at Argos and Champion’s Choice) a large variety of dining options are provided for USF students. In addition, operations also include in-house full service catering, 2 full service restaurants (Beef O’ Brady’s and Top of the Palms), 4 convenience stores, and service to 10,000 fans at USF’s Sun Dome.

USF Dining serves over 4 Million meals annually. This includes meal plan programs for over 5,000 student participants and 685 Faculty and Staff participants. Over 20,000 meals are served on a typical operating day on campus.

USF Dining’s goal is to provide the USF Community with convenient, safe and connective environments where customers eat, learn, connect, and relax. Many options are offered to suit specific needs, from International cuisine to Allergen friendly offerings. USF Dining strives to provide quality and a variety of options which are continually updated to satisfy the ever changing preferences of students, staff and faculty.

The USF Dining program is broad and robust. Daily events are hosted that reinforce our mission to: Deliver Experiences that Enrich and Nourish Lives. In doing so, the USF Community is enhanced and better connected. The meal offerings and brand selection is customer centric with an enhanced focus on health, wellness, and nutrition. USF Dining is consistently ranked in the Top 5 institutions nationwide for Most Vegan Friendly campus. The *Healthy for Life* program is hosted at USF, which provides students with resources such as a resident dietitian, nutritional information and tracking, healthy picks suggestions for each meal, and seasonal menus that focus on fresh in-season ingredients.

Out of 750 associates employed by USF Dining, 51% of are student employees. USF Dining aligns with the campus’ master plan and brings innovative dining spaces to the future of USF. Subject matter experts from around the country are brought in to develop and bring the latest dining trends to our dining program at USF. In-depth and thorough analysis is conducted to gain consumer insights into the campus community. Some of the studies include demographic mix, traffic flow studies, energy efficiency, water conservation, and competitive analysis. In the near future, the Andros re-development project will include a new dining facility and prove to be a cornerstone of innovation and growth for the USF Dining program.

USF Dining Sustainability Practices

USF has adopted Green Thread™. This program was launched by Aramark in 2008, and encompasses a range of environmental stewardship programs. Green Thread™ allows Aramark to efficiently customize an environmental strategy that educates and engages students and staff in environmental practices that help to improve their community.

Some specific initiatives that are a part of the Green Thread program:

- Re-Usable To-Go Containers in all Residential Dining Halls – over 100,000 reusable to-go box meals served per year average.

- Sustainable Purchasing – Partner with local providers for dairy, bread, produce, and seafood vendors. Through our main distributors, we use 'local purchasing availability guides' that highlight and incentivize local farm purchases.
- Recycle 100% of used cooking oil into biodiesel product conversion.
- Work closely with student organizations who have received the 'student green energy fund' to convert campus cooking oil to biodiesel products on-site. This biodiesel fuel will be used to supplement Hart Line and USF fleet demands.
- Discontinued the use of trays in order to conserve the water required for washing
- Green Cleaning policy - Daily Green cleaning products used, rated by Green Seal.
- Styrofoam Free Initiative – began a 2 year phased program to eliminate Styrofoam from USF Dining Operation by 2015.
- Composter/Pulper added to Fresh Food Company – creating ability to create usable compost at busiest dining hall on campus.
- Equipment Replacement Agenda – All new equipment purchases at USF are specified to be Energy Star Certified – reducing electric (and other) consumption
- Every Day is Earth Day information sessions and activities surrounding “Earth Month”.
- Information sessions hosted by USF Dining on key focus areas surrounding waste, environmental impact, and sustainable dining habits.



BLDG	ROOM	DEPARTMENT NAME	TYPE	SQ FT
BSN		BOARS HEAD CAFÉ & JAVA CITY	TOTAL	1,765
BKS	EST.	BARNES & NOBLE	TOTAL	3,300
CPR		SUBWAY	TOTAL	1,573
DIN		JAMBA JUICE	TOTAL	568
DIN		CHAMPION'S CHOICE		10,276
ENB		COLL ENGINEERING EXPRESS	TOTAL	330
FSB		POLLO TROPICAL	TOTAL	2,577
JPH		SMOKEHOUSE	TOTAL	552
JPH		P. O. D.	TOTAL	485
JPH		STARBUCKS	TOTAL	711
JPH		JUNIPER DINING	TOTAL	17,329
LIB		STARBUCKS	TOTAL	1,638
MSC		FOOD COURT	TOTAL	16,411
MSC		EINSTEINS	TOTAL	2,633
MSC		JAMBA JUICE	TOTAL	589
MSC		BEEF O'BRADY'S	TOTAL	5,495
MSC		ON TOP OF THE PALMS	TOTAL	3,742
RAN		ANDROS DINING	TOTAL	20,406
RAN		P. O. D. AND BEN & JERRY'S	TOTAL	1,044
RAR		FRESH FOOD COMPANY	TOTAL	12,541
			TOTAL TAMPA	103,965
USF HEALTH				
MDH		CAMILLE'S SIDEWALK CAFÉ		3,554
NEC		TAREK'S CAFÉ		1,201
			TOTAL USF HEALTH	4,755
Provided by FPC			Total Campus	108,720

Links to Sustainability Tracking, Assessment & Rating System (STARS) report:

<https://stars.aashe.org/institutions/university-of-south-florida-fl/report/2014-01-14/>

See:

- Dining Services
 - [OP-6: Food and Beverage Purchasing](#)
 - Tier 2 Credits
 - [OP-T2-3: Trayless Dining](#)
 - [OP-T2-4: Vegan Dining](#)
 - [OP-T2-5: Trans-Fats](#)
 - [OP-T2-6: Guidelines for Franchisees](#)
 - [OP-T2-7: Pre-Consumer Food Waste Composting](#)
 - [OP-T2-8: PostConsumer Food Waste Composting](#)
 - [OP-T2-9: Food Donation](#)
 - [OP-T2-10: Recycled Content Napkins](#)
 - [OP-T2-11: Reusable Container Discounts](#)
 - [OP-T2-12: Reusable To-Go Containers](#)

Bookstore

The USF Bookstore is operated by Barnes & Noble College Booksellers, the industry leader in campus bookstores. With our focus on higher education and commitments to students, faculty, technology, and innovation, we promise to deliver unsurpassed service to the USF campus community and the next generation of educational content.

Whether renting or buying, new, used, or digital textbooks, the USF Bookstore offers the most purchasing options for students in the most convenient place at competitive prices. Through our cost-saving purchase options and our cash for books buyback program, for the 2013-2014 academic year, the USF Bookstore saved students over \$2.1 million dollars. In this same academic year, rental availability grew to 67% and

digital textbook availability grew to 32%. The growth of these areas creates savings for USF Students. Additionally, during the back-to-school period, over 90% of the booksellers in the bookstore are student workers. USF Bookstore a leader on campus in both textbook affordability and on-campus employment – two areas critical student success at USF.

The USF Bookstore also strives to connect with faculty on-campus as well. Collecting information for more than 5,000 courses offered each semester isn't easy, but through our new, enhanced faculty resource, *Faculty Enlight*, faculty are able to easily research and adopt the books they need for their courses in one place. *Faculty Enlight* allows faculty to know upfront the estimated student price and if their text selection will be available for rent, or digitally. With direct, easy access to this information, faculty can choose texts for their courses that will help lower the cost for their students. Additionally, the site allows faculty to see and write reviews of textbooks, see what other institutions are using a particular book, find previous year's orders for a particular course and much more.

Barnes & Noble College is committed to USF, most recently illustrated by an extensive remodel of the entire bookstore. With our promise to deliver unsurpassed service, we completed the entire project while never closing the bookstore. The total gross square footage of the Bookstore building is 55,000 gsf. With the renovation, the café was relocated to the main level, which increased the seating capacity by more than 100, and now serves as a hub of student activity with the Marshall Student Center next door. In 2012, Barnes & Noble invested in new registers for the USF Bookstore, which cut our typical transaction time in half. This investment in technology helped reduce lines in the store year-round, but was particularly significant during the back-to-school period where the bookstore services approximately 5,000 customers a day who typically wait less than 10-minutes to checkout.

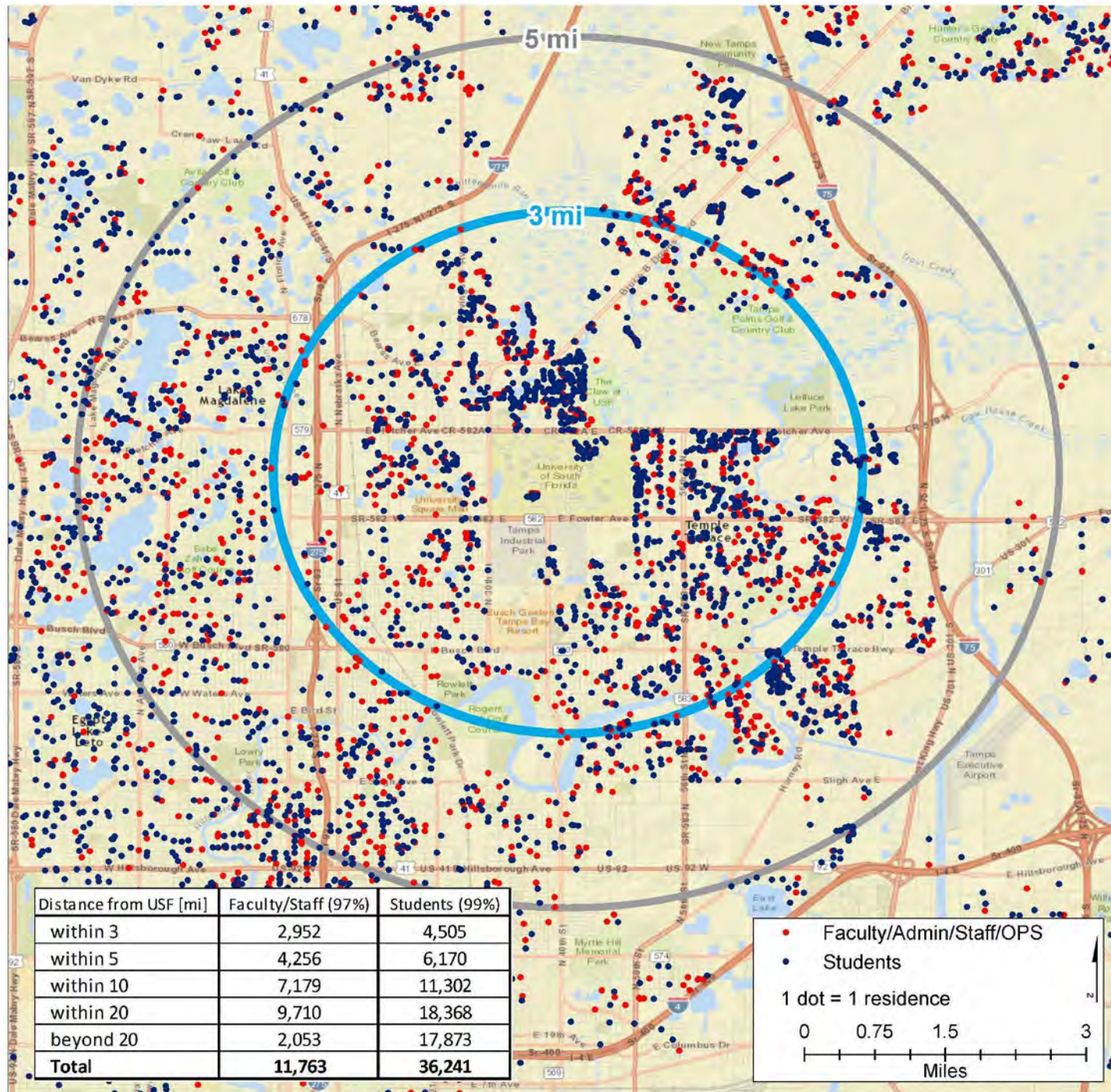
The USF Bookstore, with Barnes & Noble College, is committed to bringing the latest innovations to the USF campus community. With our recently enhanced research department, we are continually surveying our campuses' students, faculty, staff and administrators to bring USF what's next in campus retail.

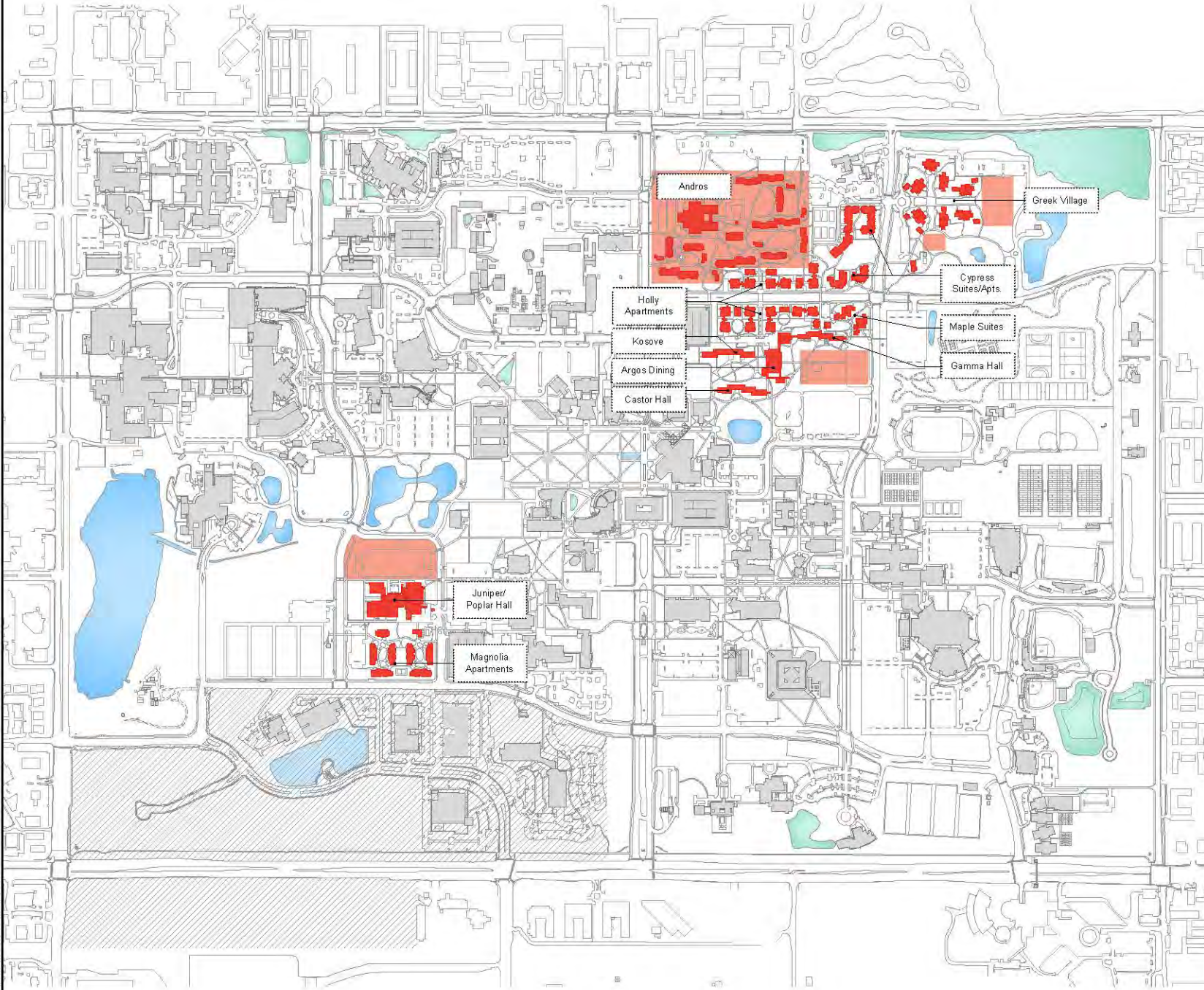
- Student Residence
- Staff Residence

Element 6
Housing

Figure 6.1
Student and Staff
Off-Campus Residences

Date
08/21/2015





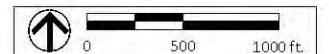
- Existing Housing
- Potential Housing Development Site

Area Not Included in Campus Master Plan

Element 6
Housing

Figure 6.2
Campus Housing

Date
08/21/2015



Element 7 General Infrastructure

General Infrastructure

- 7.1 Stormwater Management
- 7.2 Potable Water
- 7.3 Sanitary Sewer
- 7.4 Solid Waste
- 7.5 Steam and Hot Water
- 7.6 Chilled Water
- 7.7 Electrical Power and Other Fuels
- 7.8 Communications

This element ensures the provision of adequate capacity for the general utilities infrastructure required to meet the future needs of the University. The General Infrastructure Element includes Stormwater Management, Potable Water, Sanitary Sewer, Solid Waste, Steam/Hot Water, Chilled Water, Electrical Power and Other Fuels, and Communications.

7.1 Stormwater Management

Stormwater management plays a key role in the overall management of water resources, and negating the negative impacts of development. With the continual straining of resources such as the availability of potable water, stormwater management not only mitigates environmental concerns it also controls flooding and enhances the replenishment of groundwater reserves that are essential to the long-term sustainability of the University. The planning, analysis, and design of stormwater management systems will need to meet the regulations set forth by the Southwest Florida Water Management District (SWFWMD). These regulations are set in place to ensure that minimum surface water quality, quantity and flood preventative objectives are achieved.

There are a number of best management practices (BMPs) to meet these stormwater standards. Traditional BMPs include wet detention and dry retention ponds. The new trend for BMPs is to minimize impacts from development by including Low Impact Development (LID) techniques. The overall goal of LID techniques is to minimize development impacts by mimicking pre-development hydrology, and promoting the infiltration of storm water to recharge the surficial aquifer. The inclusion of three overall approaches, BMPs, will be evaluated for use: (1) supplement water for irrigation by capturing and reusing storm water); (2) enhancements to further improve water quality; (3) and mimicking “pre-development” hydrology.

- (a) **Inventory and assess all public and private facilities and natural features which provide stormwater management for the campus, including natural and man-made stormwater systems.**

1. Facility Capacity Analysis by geographic service area, indicating capacity surpluses and deficiencies.

Figure 7.1-1 *Stormwater Management Plan* shows the existing campus, and the key components that comprise the stormwater management plan. USF Tampa Campus is divided north-south about its center into two major drainage basins, East and West. The stormwater systems in each consists of a network of drainage pipes, culverts, swales and ditches that convey stormwater runoff to the treatment ponds and discharge points of each basin. Water within the East Basin works its way into the wetland system in the northeast quadrant of campus and eventually north of Fletcher Ave. into the Cypress Creek water shed of the Hillsborough River. Water within the West Basin travels to Lake Behnke located along the western edge of the campus. Controlled overflow from this system then discharges westward into Hillsborough County’s Duck Pond system that eventually makes its way to the lower Hillsborough River.

Under the current Master Environmental Resource Permit (ERP) with SWFWMD, the University's Stormwater Management Plan tracks the treatment and attenuation capacity of each basin's stormwater system in terms of developable area (impervious coverages). A review of the capacities at the time of this Master Plan update reveals that there is approx. 29 acres of impervious development available for the West Basin and 19.5 acres of impervious development available in the East Basin. These capacities are more than adequate to permit the construction activities proposed in this next 10 yr. planning period.

2. Analyze the general performance of existing stormwater management facilities, evaluating current level of service, conditions, and impact of facility upon adjacent natural resources.

Localized flooding does occur on campus. In a previous stormwater master plan report prepared by TEK Science and Engineering, the performance of the stormwater drainage network was analyzed. Utilizing AdicPR stormwater modeling, the report confirmed that minor flooding in certain localized areas can be expected due to inlet and pipe capacity issues. Figure 7.2-2 *Stormwater Problem Areas*, reflects the findings of this analysis.

Such areas include south of Fletcher Avenue to the north and east of Andros Center which sees flooding during seasonal heavy storm events. Natural buildup of vegetative growth and accumulated debris at the inlets of pipe culverts within the Fletcher Avenue right-of-way, restrictions to stormwater flow in Campus culverts in that area, and the restrictions of a County owned control structure at Maple Drive all contribute to this condition. With proper pro-active maintenance, USF grounds crews have been able to alleviate the flooding within this and other areas of the campus. Funding requests to help address stormwater conveyance improvements and flood control ponds about the campus have been included in the Capital Improvements Listings.

3. Proportional capacity of shared facilities between the University and local governments that are required to meet existing university needs, including capacity allocation.

In the southwest of the West Drainage Basin, Lake Behnke's discharge control structure serves to hold back the needed collection volume within the lake to help prevent downstream flooding of City, County and private properties. A set of culverts, (three - 14"x23") connected to the control structure allow for downstream discharge into the City/County Duck Pond stormwater system.

In a cooperative interest, the City of Tampa and Hillsborough County requested the University to modify its lake's control structure to provide more storage and delay the peak discharge into the City/County receiving stormwater system. In exchange, the City lifted their 100year pre-post storage criteria on the University's West Basin discharge. Now, discharge is limited by the 25year/24hour criteria. This added considerable capacity to the University's West Basin's developable area credit account. The City's criteria only apply to the Campus' West Basin.

The East Basin discharge is limited by the SWFWMD's criteria which is the same 25 year/24 hour criteria mentioned above with modification for Impaired Water Body Rules as applicable to the Hillsborough River Basin. Under these permit criteria, the East Basin stormwater management system has enough buildable area capacity to meet the proposed 10 yr. Master Plan.

4. General performance of natural stormwater management and hydrologic features, showing these features on a map.

USF-Tampa Campus has a distinctive component to its stormwater management system. As identified in Figure 7.1-3, the campus has defined a greenway connecting the northeast wetlands to the southwest Lake Behnke. Within this greenway, the proposed Master Plan limits construction, parking areas are to be removed, and stormwater collection ponds are to be interconnected and utilized as outdoor environmental and collegiate enhancements. This series of ponds and swales for the collection and treatment of runoff referred to as a "treatment train" is one of the BMPs utilized to improved water quality prior to discharging from the University and entering into downstream receiving systems and wetland habitat.

It should be noted that organizations in favor of low-impact development report estimates that a single tree removes 800 gallons of water from a traditional stormwater collection system annually. With a significant emphasis on campus-wide tree planting initiatives, a noteworthy amount of rainfall will not make it to the ground and become a source of flooding and pollutant latent run-off.

(b) Problems and opportunities for stormwater management facility expansion or replacement to meet the projected needs of the university.

As campus populations increase, buildings such as dormitories, classroom facilities, and auxiliary service facilities will be needed (See Element 4, *Future Land Use*, and Element 6, *Housing*). Increased stormwater regulations can be expected to increase the efficiency requirements of traditional wet retention/detention ponds, thereby requiring more traditional pond area for stormwater treatment. As a counter measure where needed, underground infiltration systems can be utilized in high-density low water table areas of campus because of their effective treatment of stormwater. Generally, underground stormwater collection and infiltration systems require less space than traditional retention/detention ponds.

Currently as proposed in the Master Plan Land Use Element, expansion of the stormwater management system is to occur within the designated Green Way. Removal of surface parking (landholdings for other future uses) within this area will provide the space as needed to expand or relocate the stormwater management facilities.

Another measure to reduce the need to expand the stormwater management facilities is that USF-Tampa requires all campus buildings to be certified LEED Silver under the U.S. Green Building Council's (USGBC) designation for Leadership in Energy and Environmental Design. Stormwater reuse is a key element within LEED. Rather than a new building contributing to the added total run-off, future buildings will harvest and reuse the stormwater from rainfall events.

(c) Existing regulations and programs which govern land use and development of natural drainage features, including an analysis of the strengths and deficiencies of those programs and regulations in maintaining the function of stormwater management features.

As mentioned above, the campus falls under the existing rules set forth by the SWFWMD. These rules focus on standards for water quality and water quantity. However, it should be noted that the stormwater rules are currently being updated by the Florida Department of Environmental Protection (FDEP). The new rules will provide more stringent standards for water quality and are anticipated to be adopted by the State of Florida in the near future. The impaired water body rules have already been implemented. Specifically, these new rules will address the reduction of nutrient discharge to receiving waters, the addition of new LID BMPs, and the unification of all of the Water Management Districts methods to calculate and address water quality. The FDEP has prepared a Draft Rule and Draft Applicant's Handbook which provide the framework for the new standards and approaches for water quality. The draft information can be found at:

<http://www.dep.state.fl.us/water/wetlands/erp/rules/stormwater/index.htm>

Internal to the USF-Tampa Campus, there exists a single known location where existing regulations govern/prevent, the development of drainage features. Within the region of the H. Lee Moffitt Cancer Center, southeast of the above-ground fuel storage tank, there was an identified petroleum spill. Proper protocols were followed for identifying and remediating the spill. November of 2008, Hillsborough County Environmental Protection Commission accepted a proposal for no further *action*, with controls, for this petroleum spill area. The report and corresponding legal description of the spill location are included in Appendix E, [Resolution of Petroleum Discharge at the H. Lee Moffitt Cancer Center](#).

The following restrictions apply to this "restricted area":

There shall be no use of groundwater;

There shall be no drilling for water nor shall any wells be installed other than monitoring wells pre-approved by the Florida Department of Environmental Protection Division of Waste Management;

There shall be no stormwater swales, stormwater detention or retention facilities or stormwater ditches; and

For any dewatering activities, a plan must be in place to address and ensure the appropriate handling, treatment, and disposal of any extracted groundwater that may be contaminated.

Sources:

The following is a list of sources reviewed for information to support the General Infrastructure and Utilities Element – Stormwater Management data collection and analysis.

2015 Evaluation and Appraisal Report update

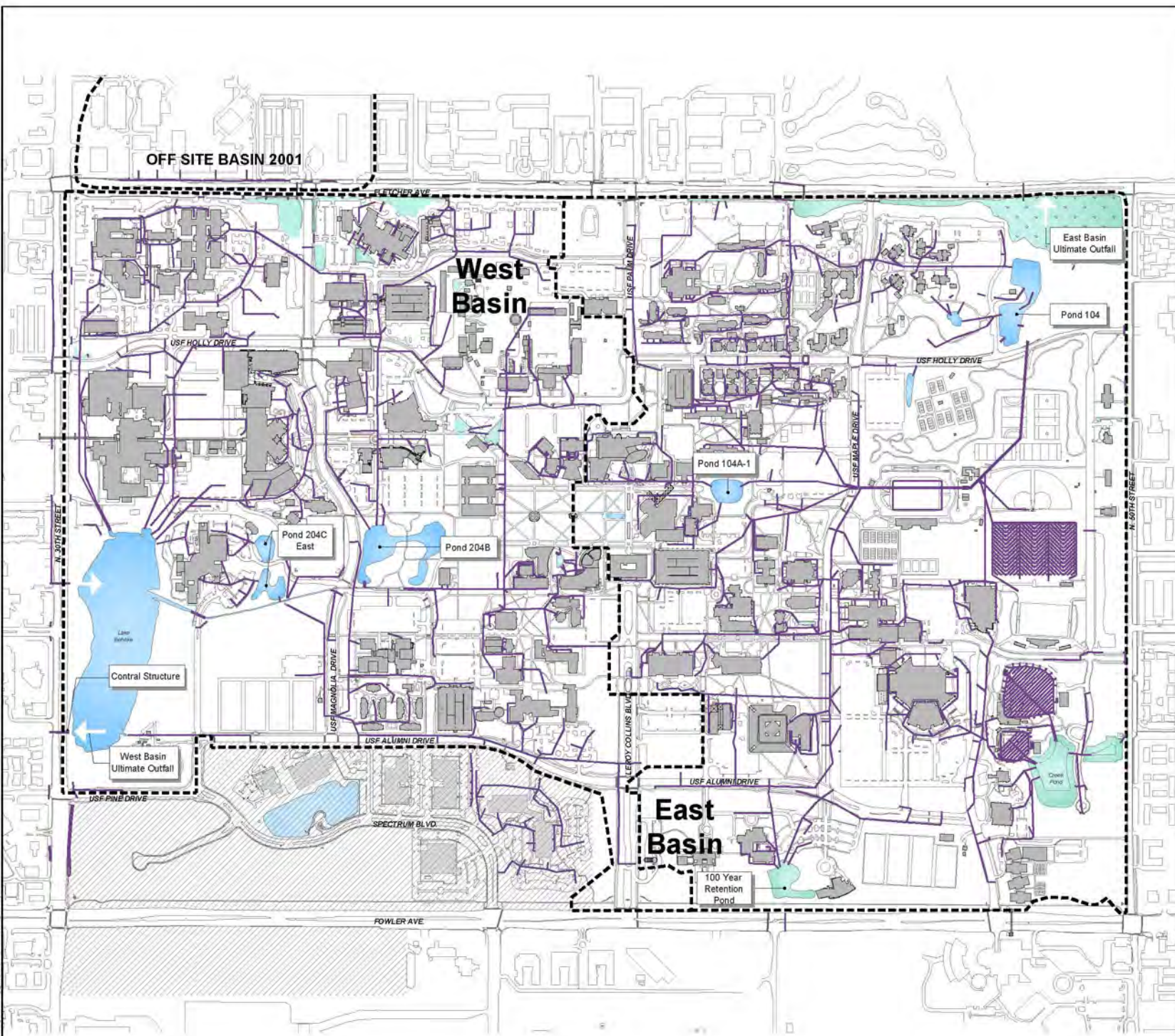
FDEP website, (www.dep.state.fl.us/water/wetlands/erp/rules/stormwater/index.htm)

SWFWMD regulations


Stormwater Basin Credits, USF FPC (VDW), July/2015

Master Plan Stormwater Report prepared by TEK Science and Engineering

USF-Tampa FPC utility maps, USF FPC (AL)



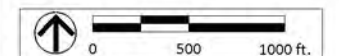
-  Stormwater Pipes
-  Stormwater Collection Areas
-  Wetland Area
-  Stormbasin

 Area Not Included in Campus Master Plan

Element 7
Infrastructure

Figure 7.1-1
Stormwater Management Plan

Date
08/21/2015



**2015 - 2025 Tampa Campus
Master Plan Update**

- 100 Year/24 Hour
- ◆ 25 Year/24 Hour
- ▲ 3 Year/24 Hour
- Possible Structure Flooding
- Stormwater Pipes
- ▨ Area Not Included in Campus Master Plan

Notes

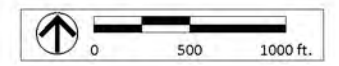
Possible Structure Flooding



Node	Bldg.
104A	0024 RBC
242	0050 HAC
256	0063 RQF
286	0060 RMU
380	0066 EDU
63	0091 LSA
642	0129 MHA

**Element 7
Infrastructure**

**Figure 7.1-2
Stormwater Problem Areas**


Date
08/21/2015



-  Permeable Area
-  Greenway

Notes

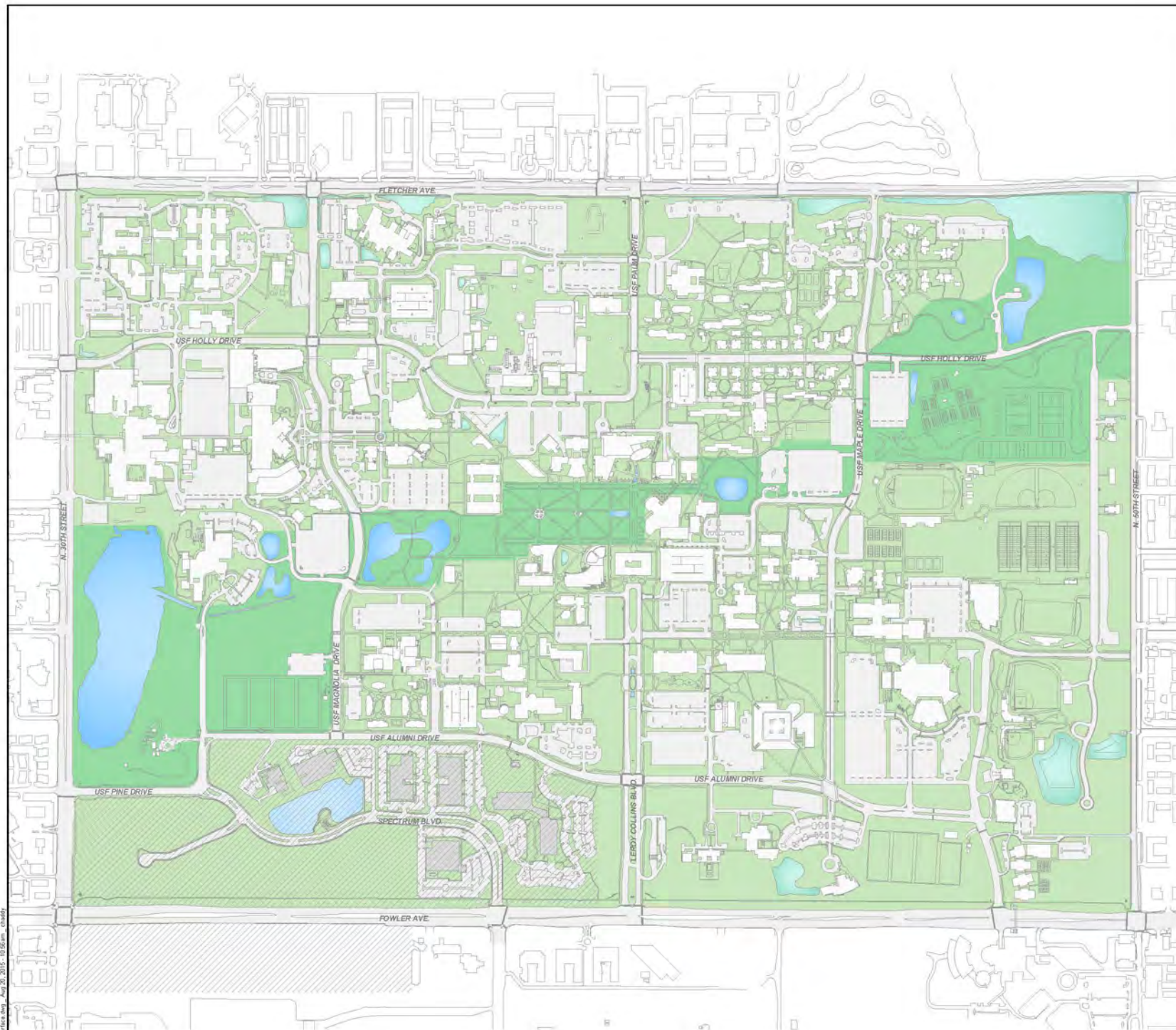
The USF Campus contains approximately 60% pervious surface, to 40% impervious surface.

-  Area Not Included in Campus Master Plan

Element 7
General Infrastructure

Figure 7.1-3
Permeable Surface

Date
08/21/2015



This Page Intentionally Left Blank.

7.2 Potable Water

Minimizing potable water consumption is critical for long-term sustainable growth on campus. State and federal regulations continue to grow more restrictive regarding the use of wells to withdraw water for open space irrigation. Likewise, obtaining permits to increase the amount of groundwater withdrawal will become more restrictive.

(a) Inventory and assess all public and private facilities (including main distribution lines) which provide potable water to the campus. Assessment should include:

1. Review of Facility Capacity by geographic service area, indicating capacity surpluses and deficiencies.

The potable water infrastructure adequately supplies the campus with a safe, reliable drinking and fire protection water supply. The Campus has its own well system which is permitted through state agencies to supply water for drinking, fire protection, chilled and hot water generation and irrigation throughout the academic core. The most current campus potable water system map is shown as Figure 7.2-1, *Potable Water Plan*. The campus irrigation system is shown in Figure 7.2-2, *Irrigation Plan*. For the Campus core potable and fire protection needs, Facilities maintains its own water tower to ensure adequate water pressure throughout a separate distribution system. These pressures meet fire protection and safe drinking water standards (F.A.C. Rules 62-4.540 and 62-555). The City of Tampa provides potable/fire water to the perimeter areas of campus for the buildings within the medical center, northwest FMHI area, Greek Housing in the northeast of campus, the religious organizations along 50th Street, and Moffitt Hospital. The City of Tampa does not provide irrigation or mechanical water supply to these areas other than to the Moffitt Research Facility.

As part of the ongoing efforts by USF Facilities staff to maintain compliance with the Water Management District, USF FPC renewed the University's Water Use Permit, filing in 2010. The SWFWMD issued the new permit for the 10 year period of 2011 to 2021. As a baseline bench mark, the previous 3-year avg. water use of 1,786,419 GPD was determined. Building on this with the anticipated growth during the next 10-year permit cycle, an average day allotment of 2,364,300 GPD was justified and permitted.

2. General performance of existing potable water facilities, evaluating current level of service, conditions, and impact of facility upon adjacent natural resources.

The existing main campus potable and fire protection water supply consists of five Floridian Aquifer withdrawal wells (wells 5, 7, 17, 23, 29) that supplies water to the water tower serving the Academic Core, Central and SE Plants. The capacity of this system is permitted with the FDEP/HCHD as 3.2 MGD. With the largest well out of service, the system still has the capacity to exceed a recorded peak day demand of 1.84 MGD.

Well 30 supplies water exclusively to the NW Chiller Plant which serves the cooling needs for the Medical Center and the NW FMHI complex. This well currently meets the load for this area. As the load may increase in the future, the plant is set up such that it can receive augmented water from wells 19 and 21 as well as the potable system. Well 20 supplies water to the SE Chiller Plant, and water for irrigation. This well currently meets the demand of its area.

The existing water distribution system is planned for expansion to cover the northwest region of campus, formerly known as the FMHI complex. This area is currently serviced by the City of Tampa. Low water main pressures have required USF-Tampa to initiate incorporation of this region into its revised Water Use Permit coverage and severing its service connection with the City. This change is acknowledged in the Development Agreement USF has with the City of Tampa and is provided for within the USF-Tampa 2011 Water Use Permit with SWFWMD. Other facilities served by the City are either multi-level booster pumps or single story for which City pressures are adequate.

As part of the Water Use Permitting process with SWFWMD, regional impact from pumpage of the University's wells in conjunction with other regional withdrawals was analyzed and reviewed with the permitting staff. The

District's DWRM model enhanced with the FTMR focused refinement was used to assess the impacts on the Surficial Aquifer, Floridian Aquifer and Hillsborough River. It was shown that the University's requested permitted amounts had a negligible effect.

3. Proportional capacity of shared facilities between the University and local governments that are required to meet existing university needs, including capacity allocation.

Currently, the USF Tampa Campus utilizes groundwater for the majority of its potable and irrigation needs, with the City of Tampa only supplying water to the buildings within the medical center, northwest FMHI area, Greek Housing, Religious Organizations, and Moffitt Hospital. As previously mentioned, with the removal of the northwest FMHI complex from the City's water system and placing it on the University's, capacity of City of Tampa's regional system will be freed up to better serve the other University facilities and neighboring community establishments.

4. Underground hydrology of the campus, including its potential as a potable water source.

USF Tampa Campus utilizes the Floridian Groundwater Aquifer as its source for potable water, fire protection and irrigation needs. Overall, the north central region of the campus has the best water supply meaning the water has the lowest hardness and requires the least amount of chemical treatment. Wells from this region serve as the main source for potable water on campus. The southern and southeastern regions of campus have been found to contain very hard water with sulfur content and have been deemed undesirable for a potable groundwater source. Research of other areas of campus is planned for locating an alternative backup well source for potable and fire protection needs.

(b) Problems and opportunities for potable water facility expansion or replacement to meet the projected needs of the University.

Currently, there are no expected problems with meeting the needs of the campus, from the perspective of system expansion. Within close proximity to the campus water tower, the well-field in the central north portion of campus serves as the main source for potable and fire protection water. By designating this area as a No-Build Zone to protect it as a well-field, a source for meeting the largest need for water can be most economically met. USF FPC intends to add additional wells within a portion of campus greenway to reduce the overall groundwater withdrawal at each existing well, thereby extending the lifetime of each as well as provide redundant capability to meet campus needs.

(c) Existing regulations and programs which govern land use to protect potable water supply and delivery facilities.

The Department of Environmental Protection has regulations in place to safeguard public drinking water supply. The following table comes from DEP Rule Chapter 62-532.

Table 7.2-1 Drinking Water Supply Wells Serving Public Water Systems

Rule	Installation	Setback (in feet)
Reuse of Reclaimed Water and Land Application 62-610.421(3)	Slow Rate Land Application Restricted Public Access	500 (a)
62-610.521(2)	Rapid Rate Land Application	500 (b)
62-610.621(2)	Overland Flow Systems	500
62-610.621(4)	Transmission Facilities Conveying Reclaimed Water to Restricted Public Access Slow Rate Land Application Systems, Rapid Rate Land Application System, or Overland Flow Systems	100
62-610.471(1)	Public Access, Residential Irrigation, or Edible Crop Slow-rate Land Application Systems	75
62-610.471(3)	Transmission Facilities Conveying Reclaimed Water to Public Access, Residential Irrigation, or Edible Crop Slow-rate Land Application Systems	75
Domestic Wastewater Residuals 62-640.700(4) (b)	Domestic Wastewater Residuals Land Application Areas	500
Phosphogypsum Management 62-673.340(2) (d)	Phosphogypsum Stack Systems	500 (c)
Petroleum Storage Systems 62-761.500(1) (a)	Aboveground or Underground Storage Tanks	100
Solid Waste Management Facilities 62-701.300(2) (b)	Solid Waste Disposal Facilities	500
62-701.300(12) (c)	Yard Trash Disposal	200
62-701.300(13)	Storage or Treatment of Solid Waste in Tanks	100
Permitting and Construction of Public Water Systems 64E-8.002(2)(b)2	Onsite Sewage Disposal Systems	200 (d), 100 (e)
Public Water Systems 62.555.312 (4)	Sanitary Hazard as defined in 62-550 for drinking water supply wells serving public water systems	100
Feedlot and Dairy Wastewater Treatment and Management Requirements 62-670.500(6) (a)	Dairy Farm Waste- Unlined Storage and Treatment, or High Intensity Areas	300
62-670.500(6) (b)	Dairy Farm Waste- Land Application	200

(d) Existing and future uses and opportunities for the use of reclaimed water on the campus and identify the source and entity having operational responsibility for the provision of reclaimed water on or near campus.

As identified, the campus wells that have a reoccurring overuse of their water allotment are some of the irrigation wells. As part of the future plans to reduce groundwater withdrawal for non-potable uses, the opportunity to utilize reuse and reclaimed water is desirable.

Opportunities for creating a reuse supply on campus exist. USF-Tampa has already begun utilizing reuse cisterns for the collection of condensate and stormwater to offset current potable and non-potable demand. These cisterns are operated and maintained by the Campus Grounds Department who oversees the operation and maintenance of the irrigation systems. Currently, the University has rooftop collection for the Patel Center, condensate collection at the Marshall Student Center, and both rooftop and condensate collection at the Library.

The USF-Tampa Campus falls within the extents of the City of Tampa 180 overlay district. Therefore, the City of Tampa currently holds the rights to provide reclaimed water to the campus. However, the City of Tampa’s reclaimed water distribution lines remain too far away to feasibly extend reclaimed water to the USF-Tampa Campus.

Sources:

The following is a list of sources reviewed for information to support the General Infrastructure and Utilities Element – Potable Water data collection and analysis.

2015 Evaluation and Appraisal Report update

FDEP website, (www.dep.state.fl.us/water/wetlands/erp/rules/stormwater/index.htm)

Irrigation_Areas_Campus, USF FPC 2015

SWFWMD regulations

Status of Update of Infrastructure Plans.xlsx, USF FPC

USF Campus Development Agreement, April 2007

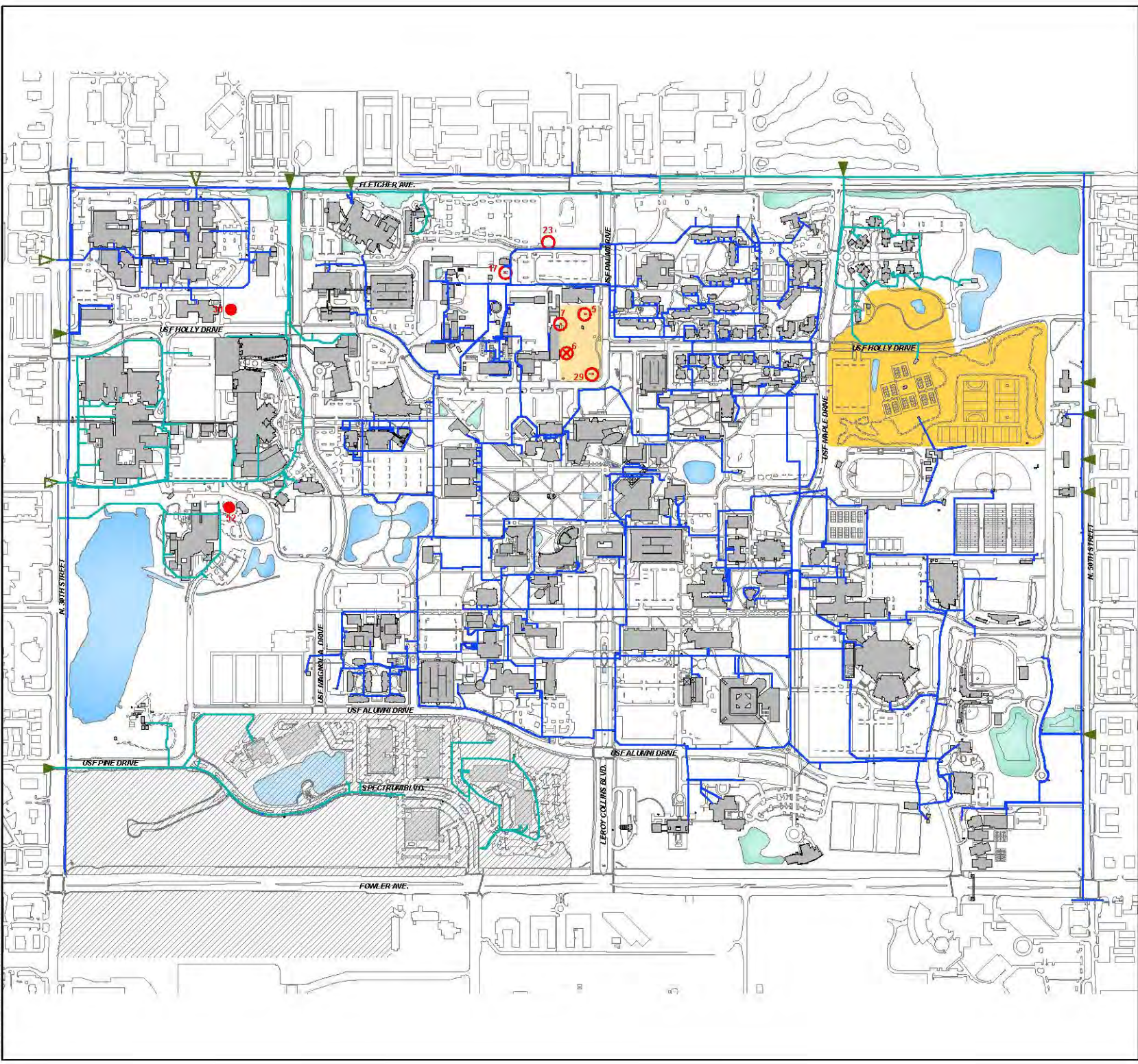
USF-Tampa FPC utility maps, USF FPC

USF MP well-locations and map, USF FPC

Water Consumption Data for 2014, USF Physical Plant

2010 Water Use Permit Renewal Application, Permit No. 20001960.016

2011-2021 Issued Water Use Permit, No. 20001960.017



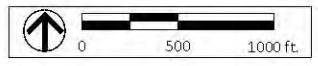
- City Supplied Water Mains
- Potable Water Mains
- Water Well
- Abandoned Water Well
- Irrigation Well
- Existing Wellfield
- Future Wellfield Site
- City of Tampa Water Connection
- City Backup Service
- Area Not Included in Campus Master Plan

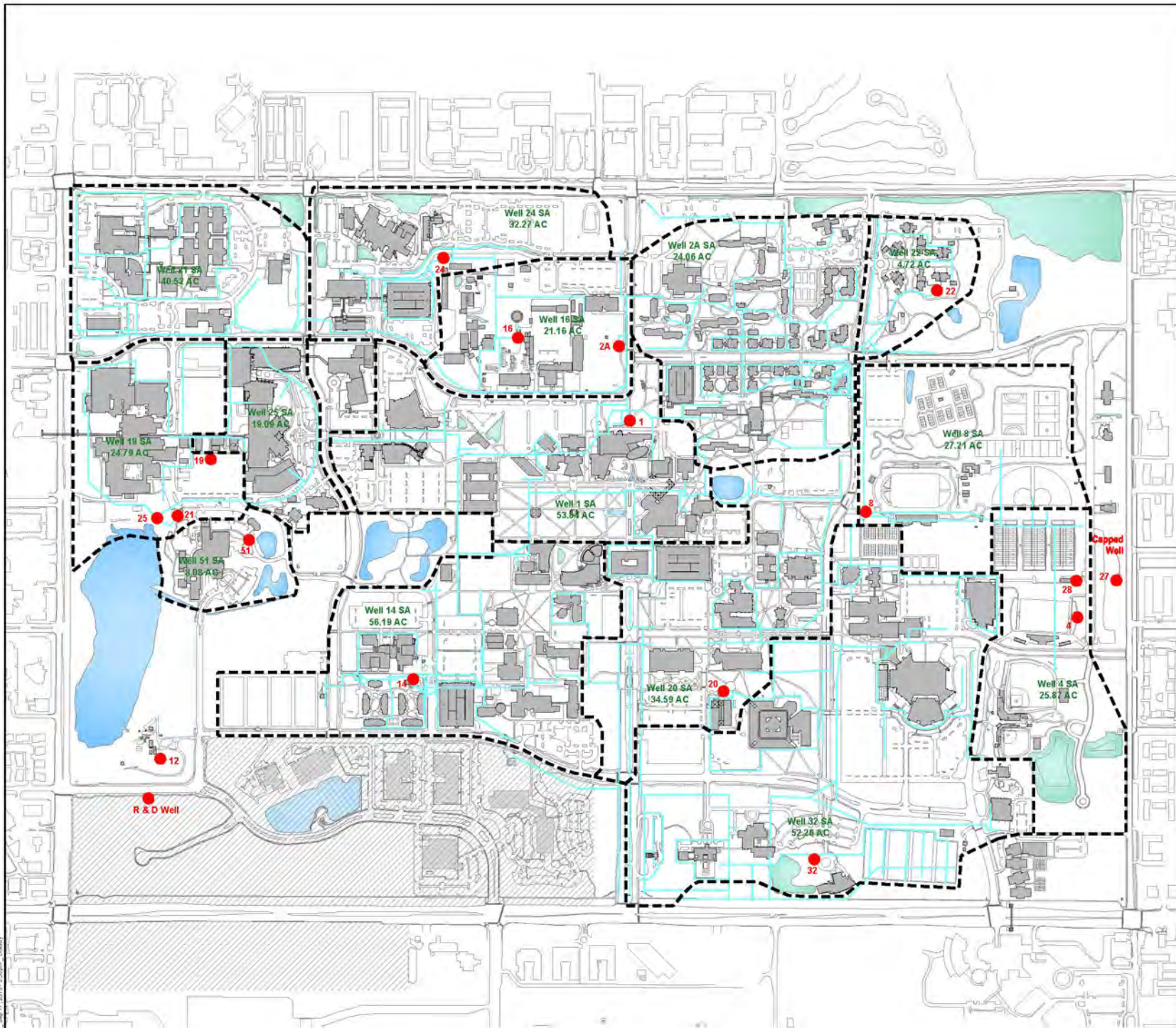
Notes
Well numbers 05, 07, 17, 23, 29, 52 also supply water to the mechanical water system.

Element 7
General Infrastructure


Figure 7.2-1
Potable Water Plan

Date
08/21/2015





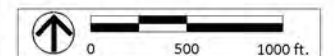
-  Irrigation Mains
-  Irrigation Well
-  Well Irrigation Zones
-  Well # SA Well's Service Area

 Area Not Included in
Campus Master Plan

Element 7
General Infrastructure

Figure 7.2-2
Irrigation Plan

Date
08/21/2015



7.3 Sanitary Sewer

The wastewater collection and transmission systems on the University grounds consists of approximately 5.0 miles of gravity sewers, 3.5 miles of force mains and (18) pump stations. Of the (18) pump stations, (14) are maintained by USF, (3) by Moffitt and (1) by Hillsborough County Schools. Based on topographical constraints and other factors, the collection systems are divided into 14 discrete service areas. The extent of these and the collection/transmission systems are shown in Figure 7.3-1 *Sanitary Sewer Plan*. The wastewater collected by this system is transmitted to the City of Tampa’s sanitary sewer systems along Bruce B. Downs Blvd., Fletcher Avenue and 50th Street. The City’s collection system then conveys this wastewater flow to its Howard F. Curren (Hookers Point) Advanced Wastewater Treatment Plant located at Maritime Blvd. for treatment.

(a) Inventory and assess all public and private facilities (including main collection lines) which provide sanitary sewer services to the campus. Assessment should include:

1. Facility Capacity Analysis by geographic service area, indicating capacity surpluses and deficiencies.
 Currently, all sanitary waste generated on campus is pumped off-site to the Howard F. Curren Advanced Wastewater Treatment Plant, operated by the City of Tampa. This treatment plant has the capacity to treat 96 million gallons per day (MGD). Within this total capacity, the standing 2007 USF Tampa Campus Development Agreement with the City allocates 3.63 MGD to the University. The total campus wastewater flow for 2014 based on City of Tampa sewer and water bills averaged 715,000 GPD. With a projected 10 yr. increase of 154,000 GPD, a total of 869,000 GPD is well within the City’s allotment and capability to provide service for the present and future planned growth.

2. General performance of existing sanitary sewer facilities, evaluating current level of service, conditions, and impact of facility upon adjacent natural resources.
 In 2007, TEK Science and Engineering, Inc. submitted a Wastewater Master Plan to USF FPC. The study delineates the 14 service areas within the Tampa Campus, as seen in Figure 7.3. Excluded are the Shriners’ hospital and the Alzheimer’s Center. Both are directly metered to the City of Tampa, and are not maintained by USF.

Conveyance Off Campus:

There are two service areas, 12 and 13, that utilize gravity sewer mains to discharge sewage to the City of Tampa. Capacity or level of service issues neither exist nor are expected with these two systems. The remaining service areas use lift stations/pump stations to connect to the City of Tampa wastewater collection system. An updated review of Table 7.3-1 (taken from the previous master planning TEK report), summarizes the adequacy of the pumping system serving each of the other service areas. Based upon a calculated 10yr. wastewater flow increase of 21.5% over 2014 data, the table identifies two the pump stations as not having the capacity to serve the anticipated growth. These are the stations for service areas SA 2 and SA 8 (the eastern academic core and Medical Center respectively).

Table 7.3-1 Adequacy of Existing Service Area Systems for Future Flow Capacity

Service Area	Adequate	Service Area	Adequate
SA 1	YES	SA 8	NO
SA 2	NO	SA 9	YES
SA 3	YES	SA 10	YES
SA 4	YES	SA 11	YES
SA 5	YES	SA 12	YES
SA 6	YES	SA 13	YES
SA 7	YES		

Source: Re-review of the USF Tampa Campus Wastewater Master Plan, Feb. 2007, TEK Science and Engineering, Inc. in conjunction with staff review of 2014 flow data disaggregated among the service areas and existing and future square footages.

Collection System:

An SSES study was performed by Hartman & Assoc. in 1997 that assessed the performance and condition of the existing main campus sanitary gravity sewer lines. It identified pipe sections within the system that were reaching capacity. Based upon these report findings, sanitary utility adjustments were put into action per the 2005 Master Plan. The objective was to alleviate, through re-direction, a portion of the sanitary sewer effluent directly to the City of Tampa’s sewage force-main systems. Previously, lift stations 2 and 3 discharged to lift station 1. This configuration, commonly called “daisy-chaining,” placed a large liability on lift station 1 and its service area’s collection system. By re-routing lift stations 2 and 3 north to Fletcher Avenue per the 2005 Mater Plan, the burden on Service Area 1’s lift station and collection system was significantly lessened. A subsequent review of the previously identified pipe sections with capacity issues were found to no longer be problematic in handling the current and 10yr. projected flows.

3. Proportional capacity of shared facilities between the University and local governments that are required to meet existing University needs, including capacity allocation.

Hooker Point Advanced Wastewater Treatment Plant operates and maintains the City of Tampa’s 96 million gallon advanced wastewater treatment plant and 211 pumping stations. Of that total, 3.63 MGD are allocated for the USF-Tampa Campus, which equates to 2524GPM.

Hooker Point Advanced Wastewater Treatment Plant’s level of service is reported in Table 7.3-2, Maximum Concentrations for Discharged Treated Water. The values reported in the table equate to the plant’s daily processing limit of 4,003lbs of Biochemical Oxygen Demand (BOD), 4,003 pounds of SS, and 2,402 pounds of Nitrogen (N). Based on the University’s service allotment, the maximum contributing portion from USF Tampa Campus would be approximately 3.8%. When considering the University’s current and estimated Master Plan flows, the estimated actual contribution would be approximately 1%.

Table 7.3-2 Maximum Concentration for Discharged Treated Water

Biochemical Oxygen Demand (BOD)	0.000042 pounds/gallon/day
Suspended Solid (SS)	0.000042 pounds/gallon/day
Total Nitrogen (N)	0.000025 pounds/gallon/day

Source: 2007 Campus Development Agreement

(b) Problems and opportunities for sanitary sewer facility expansion or replacement to meet projected needs of the University.

With the development of the 2015 Campus Master Plan Update, capacity analyses were performed for specific portions of the existing gravity mains and the receiving lift stations. As shown in Table 7.3-1, the existing campus lift stations have adequate capacity for an increase in future sewage demand, except for Service Areas 2 and 8. Analysis of Service Area 2 shows its pump station has capacity for the current flows it is receiving. However, depending on the direction of the proposed Andros Housing redevelopment initiative, its rated capacity could be exceeded by the 10 yr. projected growth. The review of the pump stations in Service Area 8 shows that their capacities are theoretically exceeded for current and future flows. Pump upgrades are recommended and are identified in capital improvement listings.

(c) Existing regulations and programs which govern land use and development of sanitary sewer facilities, including an analysis of the strengths and deficiencies of those programs and regulations in maintaining the functions of sanitary sewer collection.

As a university, USF Tampa Campus has the right to construct, operate, and maintain a privately owned wastewater collection and transmission system. University Facilities staff are required to submit FDEP Form 62-604.300(8)(a) Notification/Application for Constructing a Domestic Wastewater Collection/Transmission System, along with designs and supporting calculations per Florida Department of Environmental Protection (FDEP) requirements. The local Hillsborough County Environmental Protection Commission (HCEPC) administers this program for the FDEP. The effluent amount must be approved by the wastewater facility serving the collection/transmission systems, in this case the City of Tampa, prior to submittal to FDEP/HCEPC.

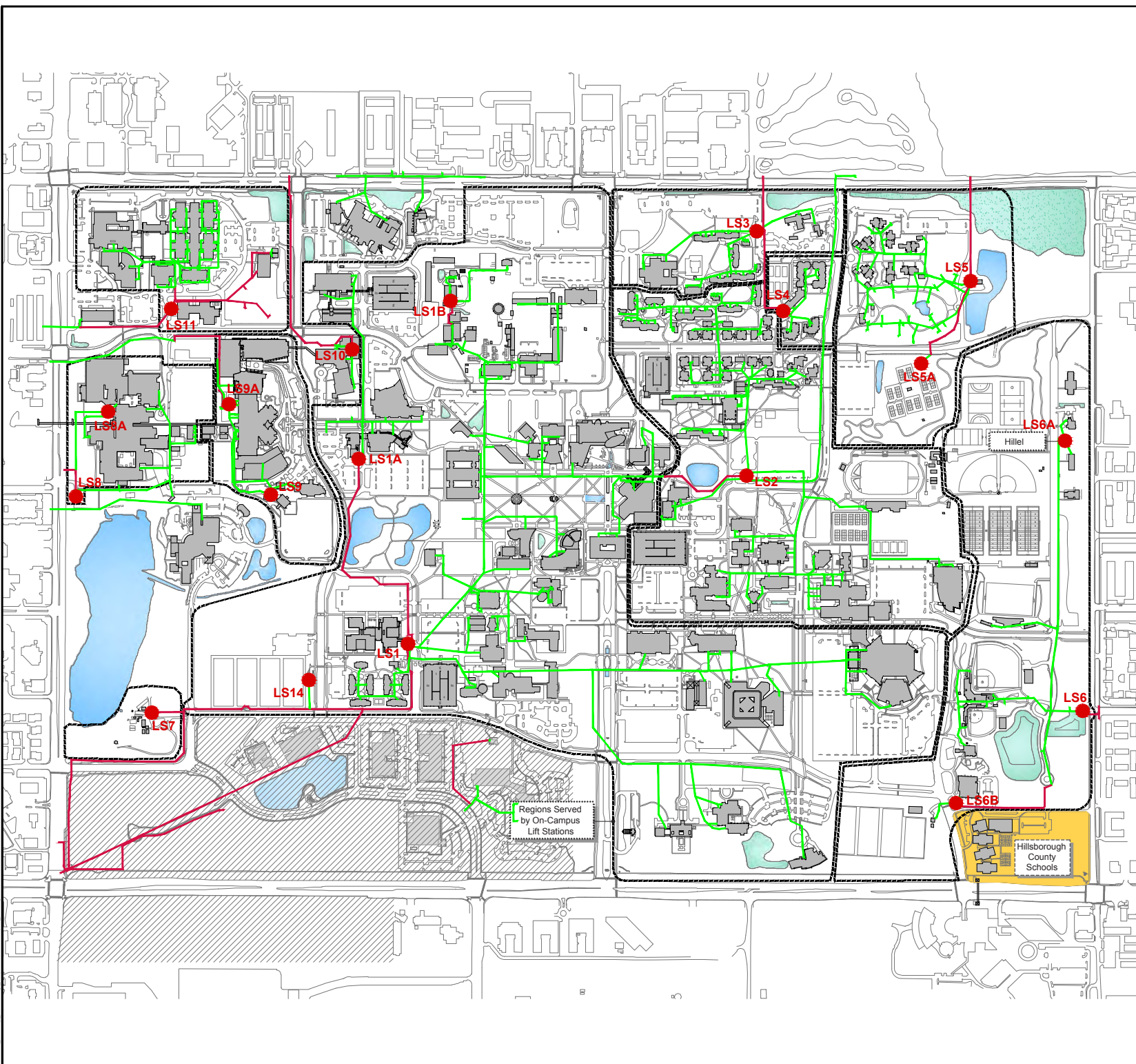
USF does not intend to operate its own wastewater treatment facility due to the burdensome state and federal regulations for operation. The liability associated with the operation of such a facility, as well as the land required not being available without displacing other uses defined in the Master Plan is not advisable. However, based upon future campus growth, the campus may continue to improve and expand its collection and transmission system within the campus as needed.

Sources:

The following is a list of sources reviewed for information to support the General Infrastructure and Utilities Element – Sanitary Sewer data collection and analysis.

- 2015 Evaluation and Appraisal Report update
- Sanitary and Water Service Distribution , USF FPC (VDW), updated June/2015
- USF Campus Development Agreement, April 2007
- USF-Tampa FPC spreadsheets, USF FPC
- USF-Tampa FPC utility maps, USF FPC (AL)
- USF-Tampa Campus Wastewater Master Plan by TEK, Feb. 2007
- USF-Tampa Campus Hartman Wastewater Study, 1997

**2015 - 2025 Tampa Campus
Master Plan Update**



- Service Area Boundary
- Sanitary Sewer - Force Main
- Sanitary Sewer - Gravity Main
- Lift Station
- Hillsborough County School Site
- Area Not Included in Campus Master Plan

Element 7
General Infrastructure

Figure 7.3
Sanitary Sewer Plan

Date
08/21/2015



DC17.2_Sanitary_Sewer.dwg, Sep 20, 2015 - 1:02pm, chdsh

7.4 Solid Waste

Solid Waste on the USF-Tampa campus is collected and processed by the City of Tampa and Hillsborough County. Private collection companies are contracted for the collection and removal of medical waste and hazardous waste. As an effort to extend the lifetime of the county landfill, USF strives to reduce construction, maintenance, and student waste through minimization and recycling.

Private recycling companies are utilized for certain categories of recycled materials. Internal to campus, Physical Plant operates its own collection of recyclable materials. With the recently formed Office of Sustainability, efforts to minimize waste and increase recycling have also increased. In 2010, USF students participated in a program called, "Recyclemania." Over ten weeks, students competed against other universities in specific categories, where they placed second in Florida for waste minimization. Results showed that USF students produced 20.8 pounds/student over the 10 weeks; that is less than 0.3 pounds of waste a day.

USF-Tampa first began its recycling program in 1994. Now, USF Physical Plant operates two full-time recycling trucks, and recycles the following: mixed paper, aluminum cans, glass and plastic, mixed metals, yard debris, fluorescent bulbs, fixture ballasts, electronics equipment, and concrete waste.

(a) Public and private facilities which provide solid waste collection, storage and disposal services to the campus.

1. A facility capacity analysis by geographic service area, indicating capacity surpluses and deficiencies

Hillsborough County Solid Waste Management Department operates the Hillsborough County Integrated Solid Waste Management System which provides for the collection, transportation, and disposition of the solid waste generated or brought into the System service area. This service area is well defined by State legislation as the unincorporated area of the County as of June 1983. USF Tampa Campus is part of this service area.

The campus' Community Recycling Site is on the east side of campus, along the west edge of Sycamore Drive, south of the religious centers, as shown in Figure 7.4-1, *Solid Waste Plan*.

The City of Tampa and Hillsborough County are able to maintain the current level of service for the foreseeable future. Solid Waste is processed at the Faulkenburg Road Facility in Hillsborough County, where it is separated into burnable and non-burnable solid waste. Non-burnable, non-recyclable solid waste goes to the landfill.

USF Physical Plant operates two full-time recycling trucks, running on-campus routes daily. The collection and storage of paper, aluminum cans, glass and plastic occurs on the east side of campus near the religious centers. This area is referred to as the Community Recycling Site, since these collection bins are accessible to the public. Earnings from these and other, recycled materials serve to fund this recycling program.

2. General performance of existing solid waste facilities,

The 2007 Campus Development Agreement states that Hillsborough County will be responsible for solid waste disposal at a level of service of 6.5 pounds/capita/day. Solid waste generated within the campus will be collected by USF.

3. Proportional capacity of any facilities shared between the University and the host and/or affected local governments.

The 2007 Campus Development Agreement states that Hillsborough County will be responsible for solid waste disposal at a level of service of 6.5 pounds/capita/day. Solid waste generated within the campus will be collected by USF.

(b) Problems and opportunities for solid waste facility expansion or replacement to meet projected needs of the University.

There are no identifiable needs for solid waste facility expansion or replacement. The Campus Development Agreement between the USF Board of Trustees and the City states both parties are in agreement that no off-campus solid waste improvements are needed to maintain the City's adopted level of service standards for solid waste.

(c) Existing regulations and programs which govern land use and development of solid waste facilities

Florida Administrative Code, Chapter 62-701 addresses the regulations for Solid Waste Management Facilities. In January of 2010, FDEP issued revisions to the current regulations. In general, these regulations define a solid waste facility, its prohibitions, design guidelines, operational requirements, closure and long-term care procedures.

Established within the guidelines, FDEP mandates that recyclable waste be removed from waste stream prior to deposit in the landfill. Other requirements, such as prohibition to divert whole tires to landfills, are also in place as an attempt to extend the landfill lifetime. Yard debris is collected using separate systems so that organic plant matter is not deposited into landfills.

The regulations for operating a landfill are extensive. In the region of Hillsborough County, the Solid Waste Management Division has awarded Waste Management Corporation a "lifetime-of-landfill" contract to collect, process, and dispose of the solid waste for this county and surrounding counties. Separate contracts with other companies are in place for recycling and incineration processes.

(d) Inventory and assess opportunities for the reduction, recycling and re-use of solid waste

USF Physical Plant reports 40 percent of campus waste is recycled, by weight. Additionally, more than 94 percent of all new construction waste is recycled, through traditional recycling processes. With increasing recycling efforts from USF students, waste minimization and recycling efforts continue to improve on the USF-Tampa campus.

USF-Tampa has contracted the services of Republic Waste Services, in partnership with Frito-Lay, to collect and recycle all cardboard from the USF Bookstore, operated by Barnes & Noble.

In another effort by USF Dining and ARAMARK, students can now use reusable food containers in lieu of Styrofoam food containers. USF Dining also uses corn-based recyclable utensils in place of plastic, keeping used utensils out of the landfill.

Plant waste/yard debris may be utilized in the near future as fuel for creating a bio-fuel called SYNGAS.

(e) Existing agreements for the collection, storage and disposal of University-generated solid waste.

Solid Waste generated at USF is processed at the Faulkenburg Road Facility in Hillsborough County. Burnable waste is incinerated at the Faulkenburg incinerator. Non-burnable solid waste is taken by Kimmins Recycling to their facility at 7th Avenue and 34th Street in Tampa. Non-burnable, non-recyclable solid waste is placed within the Hillsborough County landfill. This process does not apply to the medical facilities on the USF campus, which have their own medical waste collection and disposal program. Recycling performance may be limited, due to the

fact that the management of the campus recycling is divided into three separate groups: housing, auxiliary services, and physical plant.

Links to Sustainability Tracking, Assessment & Rating System (STARS) report:

<https://stars.aashe.org/institutions/university-of-south-florida-fl/report/2014-01-14/>

See:

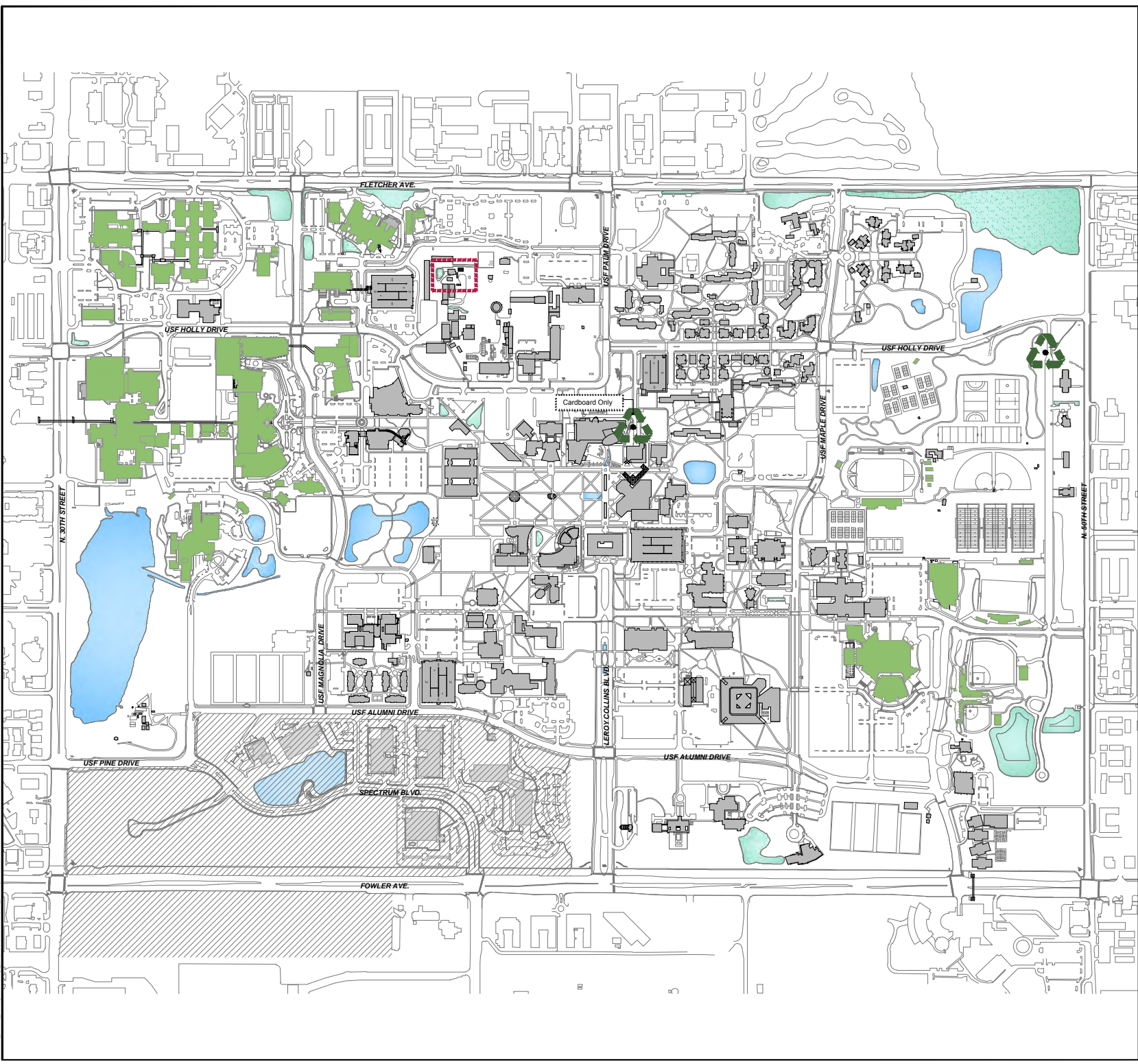
- Waste
 - [OP-17: Waste Reduction](#)
 - [OP-18: Waste Diversion](#)
 - [OP-19: Construction and Demolition Waste Diversion](#)
 - [OP-20: Electronic Waste Recycling Program](#)
 - [OP-21: Hazardous Waste Management](#)
 - Tier 2 Credits
 - [OP-T2-38: Materials Exchange](#)
 - [OP-T2-39: Limiting Printing](#)
 - [OP-T2-40: Materials Online](#)
 - [OP-T2-41: Chemical Reuse Inventory](#)
 - [OP-T2-42: Move-In Waste Reduction](#)
 - [OP-T2-43: Move-Out Waste Reduction](#)

Sources:


The following is a list of sources reviewed for information to support the General Infrastructure and Utilities Element – Solid Waste data collection and analysis.

- USF Campus Development Agreement, April 2007
- USF FPC sustainability website, (<http://usfweb2.usf.edu/FacilitiesPlan/FPC/SACS/sustainhome.html>)
- USF News website, (<http://usfweb3.usf.edu/absolutenm/templates/?a=2266&z=113>)
- USF Office of Sustainability website, (<http://www.usf.edu/sustainability>)
- USF Physical Plant sustainability website, (<http://www.pplant.usf.edu/index.php/additional-information/sustainability-initiatives>)
- USF Physical Plant recycling website, (<http://www.pplant.usf.edu/pdf/USFPPlantRecyclingPresentation.pdf>)
- USF-Tampa FPC spreadsheets, USF FPC
- USF-Tampa FPC utility maps, USF FPC (AL)

**2015 - 2025 Tampa Campus
Master Plan Update**



-  Facilities Under Separate Waste Contract
-  Recycling Storage
Cardboard, Newspaper,
Glass, Plastic, Cans
-  Hazardous Waste
Storage Area

 Area Not Included in
Campus Master Plan

Element 7
General Infrastructure

Figure 7.4
Waste Management Plan

Date
08/21/2015



7.5 Steam/Hot Water

This chapter is not a required element of the Master Plan; however, it has been included to facilitate utilities infrastructure planning in support of the future growth plans for the campus. Additionally, energy production and consumption are significant factors in the carbon footprint of the campus and as such provide one of the greatest opportunities for reducing the campus's greenhouse gas emissions (GHGE) in support of the College and University Presidents Climate Commitment.

Inventory and Assessment of Existing Conditions

Steam is generated on the USF Campus at the main Central Plant (CPT). Steam heats water in the campus closed loop which is distributed to the buildings for heating and reheat.

The main Central Plant (CPT) includes three 45,000 lbs/hour saturated steam boilers which have the capability to produce 135,000 lbs/hour of steam at 175 pounds per square inch gauge (psig) and 377 degrees Fahrenheit (°F), however as shown in Table 7.5-1 **Boilers – Main Plant (CPT)**, the plant typically produces saturated steam between 120 psig and 350°F - 160 psig and 370°F. The Boiler plant design capacity is 107,784. The maximum plant capacity with all three boilers operating at full capacity is 147,660MBH. The steam is then routed through heat exchanges that convert it to heating hot water (ranging from 140°F to 160°F) which is then pumped through the campus distribution piping system to the building level. The capacity which can be delivered to each building on campus is limited by the Central Plants hot water pumping capacity and combination of main and branch underground distribution piping installed to serve them. These limitations must be evaluated on a case by case basis due the complexity of this campus distribution system.

As the University facilities continue to grow, the heating demand will also grow. The current demand load varies throughout the year and the maximum demand has been observed to be approximately 62,865 MBH. The anticipated future connected load within the next ten years is anticipated to be approximately 135,000 MBH of heating demand. This growth is shown to exceed the Central Plants capacity and additional hydronic heating capacity will be needed to serve this growth. Since it is not practical to significantly expand the Central Plant/distribution system capacity, another source of heating will be required to serve these demands. This capacity will need to be provided from either a centralized or a decentralized hydronic heating source.

There are several buildings on campus which do not receive hot water from the central plant and are either heated by decentralized hydronic heating or electric duct heating. The northwest portion of campus (Health and Medical facilities), the Greek Park (new dormitory facilities located on the Northeast side of campus), MDT building (old Psychiatric facility) and the Patel Center for Global Solutions) are electric heat. Decentralized heating hot water occurs at facilities such as Children's Medical Services (CMS), the Sun Dome facilities (SUN), and Juniper-Poplar Residence Hall (JPH).

Table 7.5-1 Boilers – Main Central Plant (CPT)

Boiler No.	Steam Output	Gas Burner	Oil	Burner	Age	Notes
5	45,000 lb/hr @ 175 psig, 377 F	61,000 cfh @ 4"	3,300 lb/hr	#6	18	
6	45,000 lb/hr @ 175 psig, 377 F	61,000 cfh @ 4"	3,300 lb/hr	#6	13	
7	45,000 lb/hr @ 175 psig, 377 F	61,000 cfh @ 4"	3,300 lb/hr	#6	4	Replaced Boiler 3
Total Capacity		135,000	lb/hr @ 175 psig			

There are specific buildings that have heating needs served by other means, including electric heat and decentralized hydronic heating (or distributed boilers). Areas that are primarily served by electric reheat are the

Currently there are no cogeneration facilities at the University; however, the University has kept this option open. Potential opportunities for cogeneration at the University are further described below in *Future uses/opportunities for increased efficiency*.

Problems and opportunities for expansion/replacement

Several areas in existing underground heating hot water piping have been identified with leaks. The leaking heating hot water piping affects the capacity of the heating hot water system. As new infrastructure modifications are required, the existing failed conduit piping systems should be replaced.

Existing regulations/programs which govern sub-element and assessment





The Steam/Hot Water sub-element is not a required sub-element. Inclusion and evaluation of this sub-element is in support of other required sub-elements.


Future uses/opportunities for increased efficiency

Opportunities for increased efficiencies exist in converting existing electric resistance heating districts to district heating systems. Consideration should be given to adding a satellite district heating plant providing flexibility and service to the southeast quadrant. The existing heating hot water distribution system is known to have areas of leaking pipe; these areas should be repaired or replaced and make-up water meters dedicated to the heating hot water system should be installed. Installation of dedicated make-up water meters will allow for improved monitoring of system leakage rates to be used for performance monitoring and system repair/replacement evaluations for use in prioritizing infrastructure projects.

The University should continue to study the feasibility of cogeneration with expanded consideration given to operating the existing boiler plant at or near maximum operating pressure and utilizing backpressure turbo-generators to reduce the pressure to the hot water converter operating pressure. This approach could allow the University to diversify the fuel mix for improved cost and reduced carbon emissions, furthering the sustainability efforts of the University. Additionally, high pressure steam could be utilized to generate chilled water through a steam turbine driven chiller providing additional fuel mix flexibility and cost control ability.

**2015 - 2025 Tampa Campus
Master Plan Update**

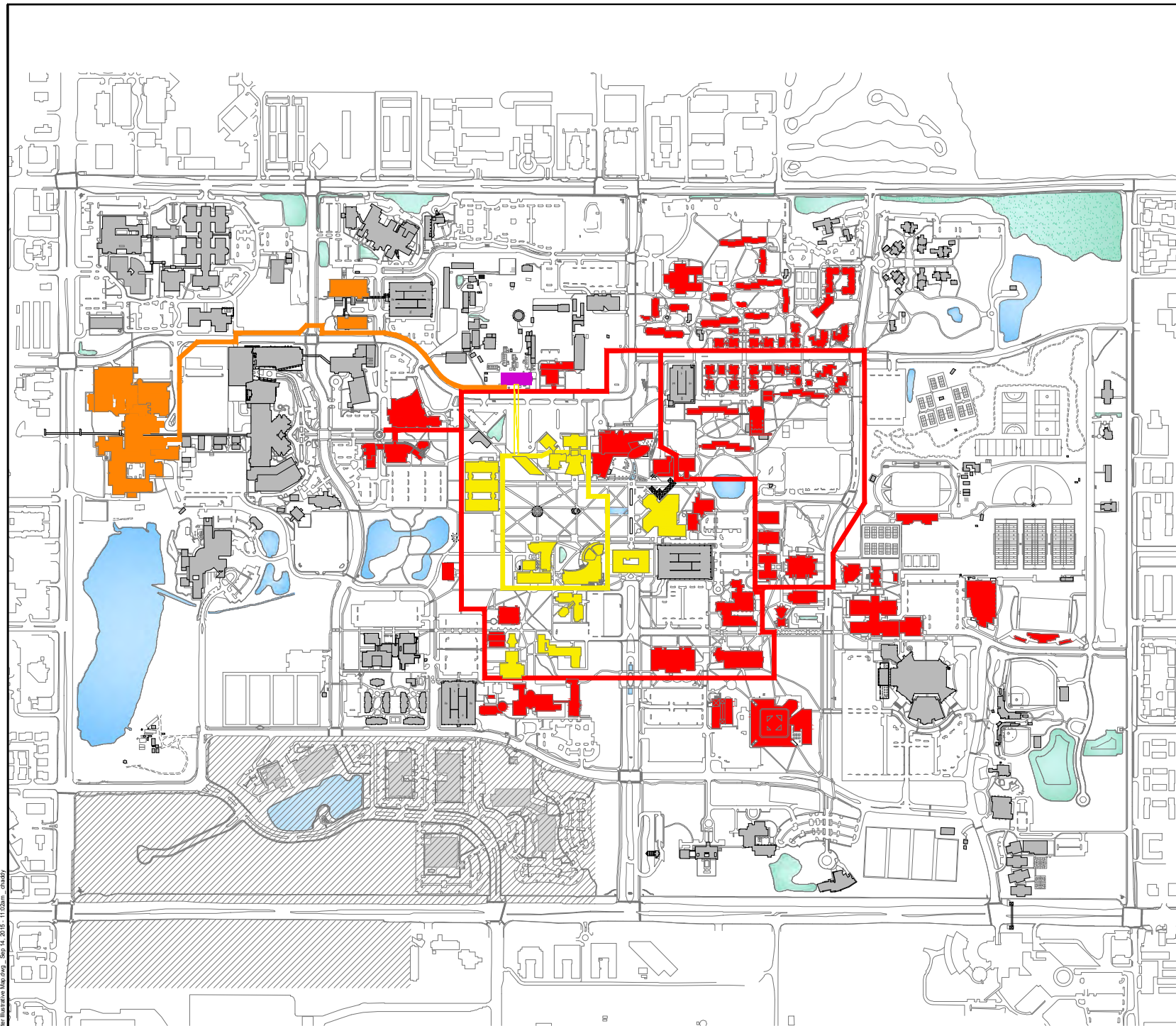
-  District Plants
-  Central Hot Water Loop
-  East/West Hot Water Loop
-  Medical Hot Water Loop

 Stacked text
Special Use

Element 7
General Infrastructure

Figure 7.5
Heating Hot Water Plan

Date
08/21/2015



This Page Intentionally Left Blank.

7.6 Chilled Water

This chapter is not a required element of the Master Plan; however, it has been included to facilitate utilities infrastructure planning in support of the future growth plans for the campus. Additionally, energy production and consumption are significant factors in the carbon footprint of the campus and as such provide one of the greatest opportunities for reducing the campus’s greenhouse gas emissions (GHGE) in support of the College and University Presidents Climate Commitment.

Inventory and assessment of existing conditions

Currently, there are three main chilled water generation plants on the USF Campus, the main central plant (CPT), the Northwest Central Plant (formerly the FMHI plant at MHB) and the Southeast Chiller Plant (SEC). Additionally, there is distributed cooling available at the MDT building, ALZ Building and JPH residential facility. In 2013 the University removed the chilled water generation equipment at the MDU, MDT and CPH facilities as part of an effort to eliminate equipment on campus with CFC refrigerants

The main central plant (CPT) is capable of producing 11,500 tons of chilled water at 45°F via the six chillers. Averaging a temperature differential of 13°F, this equates to 21,231 gpm. This chiller plant was converted to variable primary flow and operates at a system temperature differential of 13°F -15°F to minimize pipe velocity and maximize plant efficiency.

Table 7.6-1 Chillers – Central Plant (CPT)

Chiller	Type	Refrigerant Type	Rated Tons	GPM	Delta T Deg. F	Age	Notes
3	York/Centri.	R-11	800	1371	14	21	Targeted for Replacement
9	Trane/Centri.	R-11	1500	2657	14	21	Targeted for Replacement
10	Carrier/Centri.	R-22	2300	4246	13	21	Replaced CH-1,2 (1994)
11	Carrier/Centri.	R-22	2300	4246	13	17	Replaced CH-4 (1995)
12	York/Centri.	R-134A	2300	4246	13	15	Replaced Ch-7 (2000)
14	Trane/Centri.	R-123	2300	3680	15	12	Replaced Ch-6 (2005)
Total Capacity			11,500	Tons			

The main central plant has similar capacity in cooling towers, but the desire is to eventually replace towers with increased capacity to match chillers. Manifolding has been upgraded and new controls added so the chillers and cooling towers can be operated interchangeably.

Also of note is the age of the cooling towers. According to ASHRAE HVAC Applications, the estimated service life of a cooling tower is only 20 years. Most of the cooling towers exceed this age limit.

Table 7.6-2 Cooling Towers – Central Plant (CPT)

No.	Pump GPM	Pump		No. of Fans	HP/ Fan	Nom. Ton Cap.	Age	Notes
		TDH (ft)	Pump HP					
3	2200	70	50	2	30	750	47	
4	4000	60	75	2	30	1300	49	Refurnished in 2007
5	9850	70	200	4	40	3300	47	
6	3600	62	75	2	40	1200	39	Pump Housing Rebuilt
7	10500	76	250	4	40	3500	21	
8	11040	80	350	4	75	4600	17	Targeted to be replaced
Total Capacity		41,190	GPM			14,650	Nom Tons	

The Northwest Plant includes four 1750-ton chillers, and associated pumps, and cooling towers, etc. in a primary-secondary flow arrangement. This plant will need to be converted to a variable primary flow system arrangement to provide a more efficient and reliable operation to serve the Health and Medical facilities in the Northwest quadrant of campus.

Table 7.6-3 Chillers – Northwest Plant (NWP)

Chiller	Type	Refrigerant	Tons	GPM	Temp. Diff.		Age	Notes
					Deg. F			
1	Centrifugal	R-123	1750	3231	10		15	Trane Chiller
2	Centrifugal	R-123	1750	3231	10		11	Trane Chiller
3	Centrifugal	R-123	1750	3231	10		11	Trane Chiller
5	Centrifugal	R-123	1750	3231	13		6	Trane Chiller
Total Capacity			7,000	Tons				

Table 7.6-4 Cooling Towers – Northwest Plant (NWP)

Cooling Tower No.	Pump GPM	CWR		Fan No.	HP/ Fan	Tons	Age	Notes
		(deg. F)	(deg. F)					
1	5250	95	85	1		1500	15	NWP; Marley # 82525-6
3	5250	95	85	1		1500	11	NW Plant; Marley # 82525-6
5	5250	95	85	1		1500	11	NW Plant; Marley # 82525-6
2A-2B	5250	85	85	2		1750	6	NW Plant; BAC
4A-4B	5250	95	85	2		1750	6	NW Plant; BAC
Total Capacity	25,44 6	GPM				7602	Nom Tons	

The Southeast Chiller Plant supports future growth of the campus in the southeast quadrant as well as to provide supplemental capacity of the main plant (CPT). This chiller plant operates in a variable primary flow configuration and with a 13°F system temperature differential minimizing pipe velocity and maximizing plant efficiency. The currently installed capacity of 6,900 tons will need to be increased to 11,500 tons capacity to serve the anticipated campus growth within 10 years.

Table 7.6-5 Chillers – Southeast Chiller Plant (SEC)

Chiller	Type	Refrigerant		GPM	Temp.	Age	Notes
		t	Tons		Diff. Deg. F		
1	Centrifugal	R-123	2300	4246	13	7	
2	Centrifugal	R-123	2300	4246	13	7	
3	Centrifugal	R-123	2300	4246	13	5	
Total Capacity			6,900	Tons			

Table 7.6-6 Cooling Towers – Southeast Chiller Plant (SEC)

Clg. Tower No.	Pump GPM	CWR	CWS	Fan No.	HP/Fan	Tons	Age	Notes
		(deg. F)	(deg. F)					
1A – 1B	6900	95	85	2	100	2300	7	BAC 31301C-2
2A – 2B	6900	95	85	2	100	2300	7	BAC 31301C-2
3A – 3B	6900	95	85	2	100	2300	5	BAC 31301C-2
Total Capacity		13,800	GPM			4,600	Nom Tons	

Problems and opportunities for expansion/replacement

Several areas in existing underground chilled water piping have been identified as leaking. The leaking chilled water piping affects the capacity of the chilled water system. As new infrastructure modifications are required, the existing failed conduit piping systems should be replaced.

Several existing chillers utilize non-environmentally friendly refrigerants and will need to be replaced in support of Campus goals for U.S. Green Building Council (USGBC) Leadership in Energy and Environmental Design (LEED) certification.

Existing regulations/programs which govern sub-element and assessment








The Chilled Water sub-element is not a required sub-element. Inclusion and evaluation of this sub-element is in support of other required sub-elements.


Future uses/opportunities for increased efficiency

Opportunities for increased efficiencies exist in replacing aging, inefficient chillers. The existing chilled water distribution system is known to have areas of leaking pipe, these areas should be repaired/replaced and make-up water meters installed dedicated to the chilled water system. Installation of dedicated make-up water meters will allow for improved monitoring of system leakage rates to be used for performance monitoring and system repair/replacement evaluations for use in prioritizing infrastructure projects.

Cooling towers utilize a significant amount of make-up water for blow down and evaporation. Water use on campus is limited by the water use permit with projected use approaching the limits of the permit. Installation of dedicated make-up water meters for cooling towers and cooling tower blow down will improve monitoring and evaluation of the system's performance. Additionally, efforts to capture and reuse cooling tower blow down should continue with consideration given to alternative water treatment methods that may reduce blow down frequency and water treatment chemical usage

**2015 - 2025 Tampa Campus
Master Plan Update**

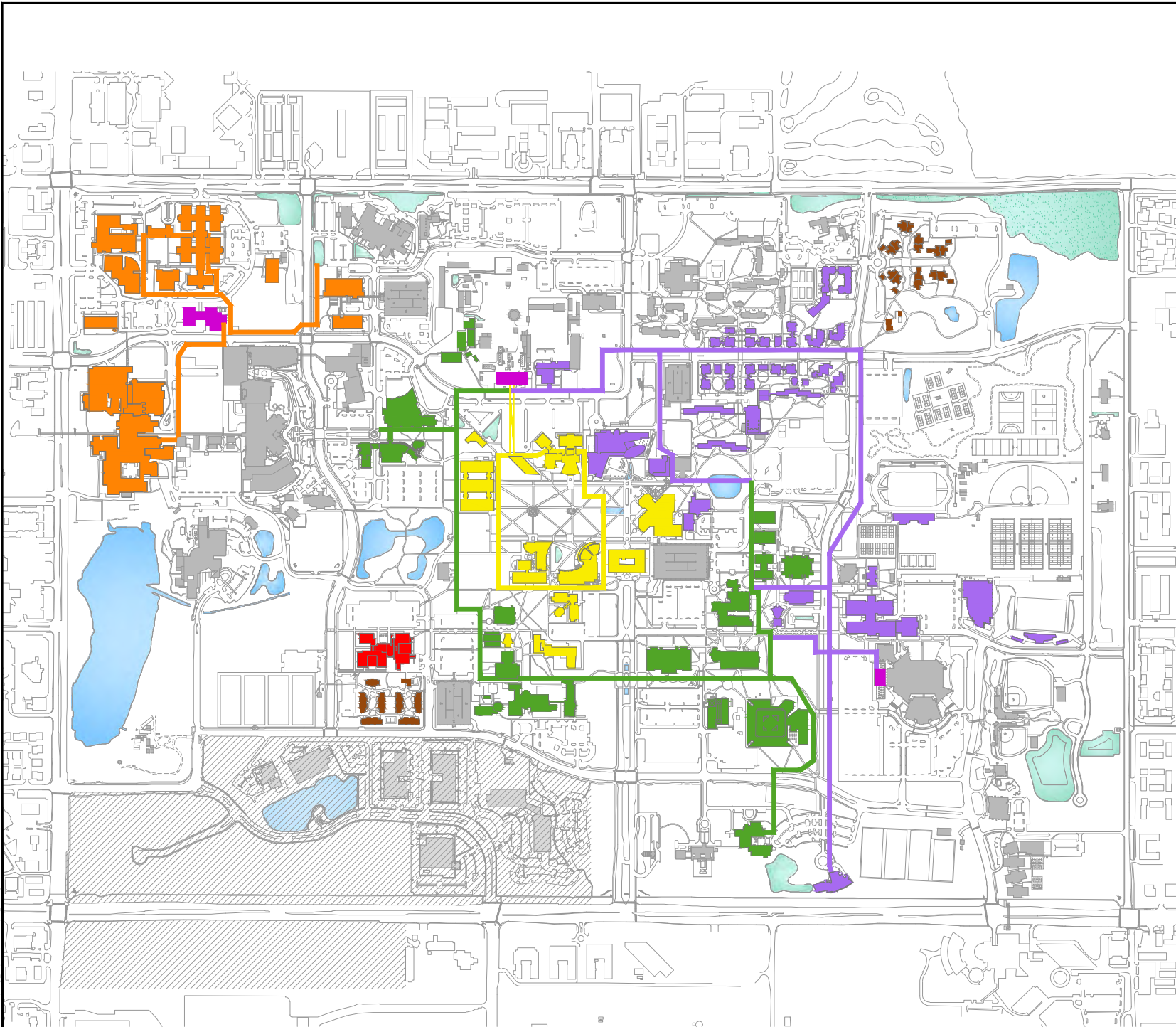
-  District Plants
-  14" Chilled Water Loop
-  18" Chilled Water Loop
-  24" Chilled Water Loop
-  Northwest Loop
-  Dedicated Air Cooled Chiller
-  DX System

 Area Not Included in
Campus Master Plan

Element 7
General Infrastructure

Figure 7.6
Chilled Water Plan

Date
08/21/2015



This Page Intentionally Left Blank.

7.7 Electrical Power and Other Fuels

This chapter is not a required element of the Master Plan Update; however, it has been included to facilitate utilities infrastructure planning in support of future growth on campus.

Inventory and Assessment of Existing Campus Electrical Services

The campus electrical service is provided from a combination of Tampa Electric Company (TECO) primary metered services served at 13.2 kV and secondary metered services. Multiple TECO substations serve the campus from differing geographic campus entrances reducing the possibility of total campus power failure, blackout, from a single substation failure. TECO/USF Substation serves the core campus, 27th Street Substation serves the northwest campus, and 46th Street Substation serves the south campus.

TECO/USF Substation

The majority of the core campus electrical service is provided from a 69 kV primary - 13.2 kV secondary substation located on the southwest corner of Fletcher Avenue and North Palm intersection accessible from Laurel Drive. The substation is divided into two sections: the north side containing TECO primary equipment and the south side containing USF primary equipment.

TECO provides service to the substation via two overhead 69 kV circuits: circuit number 66028 and circuit number 66029. The 69 kV circuits are stepped down to 13.2 kV via two 37 MVA transformers. TECO serves the USF Substation section and neighboring communities along and north of Fletcher from their section of the substation; therefore, the substation is not dedicated to the campus. However, the majority of the electrical load connected to the substation is from the core campus.

TECO's primary and secondary distribution system is a selective system with manual switchover via tie circuit breakers. The selective system allows restoring or maintaining service to the campus in the event of catastrophic transformer or bus failure. The substation capacity is indicated in the table below:

Table 7.7-1 TECO Substation Capacity

TECO Circuit No.	Feeder Capacity	Transformer	Substation Peak	Percent Load
		Capacity	Demand	
66028	37 MVA	37 MVA	22.6 MVA	61%
66029	37 MVA	37 MVA	27.4 MVA	74%

The substation cannot support the core campus and neighboring communities on one transformer during peak load conditions without load shedding by TECO.

Four TECO 13.2 kV feeders serve the USF Substation section with available switching between the feeders. In the event of cable failure, the load can be switched to another feeder providing redundancy. USF Substation primary distribution system consists of four USF feeders arranged in loop configurations. Each feeder loop is split into A and B feeders as follows: F131A, F131B; F132A, F132B; F133A, F133B; and F134A, F134B. The intent is to limit the load on each feeder to 50% of its capacity to allow switching load from a failed feeder to another feeder without requiring load shedding and minimizing power interruptions.

The existing load on each feeder is indicated in the following table:

Table 7.7-2 USF Substation Service Feeders Capacities

USF Feeder	Rated Capacity	Peak Demand Load	Remaining Capacity	Percent Load
F131	440A	275A	165A	63%
F132	440A	205A	235A	47%
F133	440A	171A	269A	39%
F134	440A	175A	265A	40%

The peak demand load is intermittent maximum recorded load occurring only under peak campus occupant load and peak central chiller plant operation. The percent load allows switching between feeders providing redundancy and minimizing prolonged power interruptions due to failures. Feeder F131 is the highest loaded feeder due to serving majority of the Central Chiller Plant. Careful load monitoring and possibly load shedding are required when combining this feeder load with other feeders. The load added to the TECO/USF Substation feeders will be managed during the next 10-year campus growth to limit the load on each feeder to 50% of its capacity. Planning consideration will include serving perimeter campus growth from existing perimeter primary meter services and continue implementing energy saving electrical systems such as energy efficient lighting, motors, and chillers.

A TECO feeder originating from TECO/USF Substation enters the northwest area of campus at Magnolia Drive that once served the northwest FHMI area and Northwest Chiller Plant (NWCP). The load on this feeder was moved to a new TECO/USF Bruce B Downs (BDD) feeder provided on the west side of NWCP in 2010. Magnolia Drive primary meter service is located at the northeast corner NWCP. The primary meter service is a potential backup to the NWCP in the event of BDD feeder failure. The feeder has limited spare capacity and cannot accommodate the entire load of NWCP, so coordination with TECO and load shedding are required before any NWCP loads can be switched to the Magnolia Drive feeder. There are no plans to increase the capacity of this feeder to accommodate growth on the northwest corner of the campus. BDD feeder and possibly a future TECO feeder depending on load growth in the NWCP will serve the northwest corner of campus.

27th Street Substation

27th Street Substation feeder enters the campus from Bruce B Downs Boulevard at Holly Drive. The feeder serves a campus primary meter service at the west side of the Northwest Chiller Plant. The service serves the northwest area of campus including the Northwest Chiller Plant. The feeder is not dedicated to the campus as neighboring community loads are connected to the circuit. TECO is able to reduce the amount of neighboring community loads or change the feeder to a dedicated campus feeder if required to accommodate future growth. The University will monitor the campus load and coordinate with TECO to ensure adequate capacity is available, or increase the capacity to accommodate the northwest campus growth. A new northwest feeder is not anticipated to accommodate the Five-Year Capital Improvement Plan.

46th Street Substation

Four 46th Street Substation feeders enter the south side of campus: from 50th Street at Elm Drive, from Fowler Avenue south of Alumni Center, from Fowler Avenue at Leroy Collins and Alumni Drive intersection, and from Magnolia Drive at Juniper-Poplar Hall. Each feeder entrance serves a campus primary meter service.

Elm Drive primary meter service serves the Athletics area of campus. The 50th Street feeder is via overhead TECO cables serving neighboring communities east of the campus. The feeder has limited capacity. There is minimal campus growth planned around Elm Drive, so there are no plans to increase this service capacity.

The Fowler Avenue feeder enters the campus at two locations: primary meter service south of Alumni Drive serving the southeast area of campus including the Southwest Chiller Plant, and the primary meter service at Alumni Drive and Leroy Collins intersection added in 2014 serving the southwest area of campus. The TECO feeder to these services is a dedicated feeder from the 46th Street substation. The feeder has capacity to accommodate future growth in the Five-Year Capital Improvement Plan on the south side of campus.

Magnolia Drive primary meter service at Juniper-Popular Hall is served from a TECO temporary feeder part of the Moffitt Cancer Center Emergency Relay service. The service serves Magnolia Drive intramural fields (MFC), Juniper-Popular Hall (JPH) including JPH chiller plant and the Beard Parking Garage (BDG). JPH and BDG load will move to the Leroy Collins feeder in 2015. Residential Housing expressed concern over the lack of redundancy for their largest housing facility JPH, so TECO agreed the Magnolia Drive temporary feeder may remain to continue serving MFC and provide a backup feeder for JPH. There are no plans to add load onto this feeder.

Secondary Metered Electrical Services

Secondary metered electrical services are provided for some athletic facilities and auxiliary buildings around the perimeter of the campus where extending primary meter services are cost prohibitive.

Problems and Opportunities for Expansion/Replacement

Services and Feeders Redundancy

There are six primary meter services for the campus. TECO/USF substation serves a majority of the core campus, and peripheral services serve campus perimeter loads. Presently there is no service and feeder redundancy between four of the six primary meter services. The lack of redundancy exposes portions of the campus to prolong power interruptions resulting from catastrophic TECO transformer or gear failures, distribution line failures, or failures caused by forces outside the campus. Redundant services and feeders provide the University options for switching critical campus loads from a failed service or feeder to an alternate source in emergency situations improving reliability. Coordination with TECO and possibly load shedding of noncritical facilities are required before any switching.

Redundancy via feeders ties is planned for the following areas of campus.

Planned Redundant Services / Feeders Ties

Campus Quadrant	Redundant Services (Tie Between Feeders)
Northwest	USF Substation Feeders F131 & F134 and BBD Feeder
Northeast and Southeast	USF Substation Feeders F132 & F134 and Fowler Feeder South of Alumni Drive

The Fowler Avenue TECO feeder serving the south campus is a radial feeder from the 46th Street Substation. The University is coordinating with TECO to provide a redundant feeder from TECO's McKinley Substation improving service redundancy and reliability to the south side of campus.

Campus Feeders Monitoring

There is no monitoring of campus feeders. Therefore, there is no historical load profile for determining historical peak load useful in campus planning, or real-time monitoring of existing load while switching between feeders. The Master Plan infrastructure improvements include providing campus feeders monitoring on all primary meter service feeders that report back to the Physical Plant Department (PPD) via BACnet. Feeder monitoring will provide real-time and historical load profiles for the campus feeders to assist in master planning, investigation during power failures, and preventive maintenance.

The Five-Year Capital Improvement Plan buildings locations require relocating some existing electrical infrastructure. The CIP Utilities Costs include relocating and improving electrical infrastructure to serve the CIP buildings.

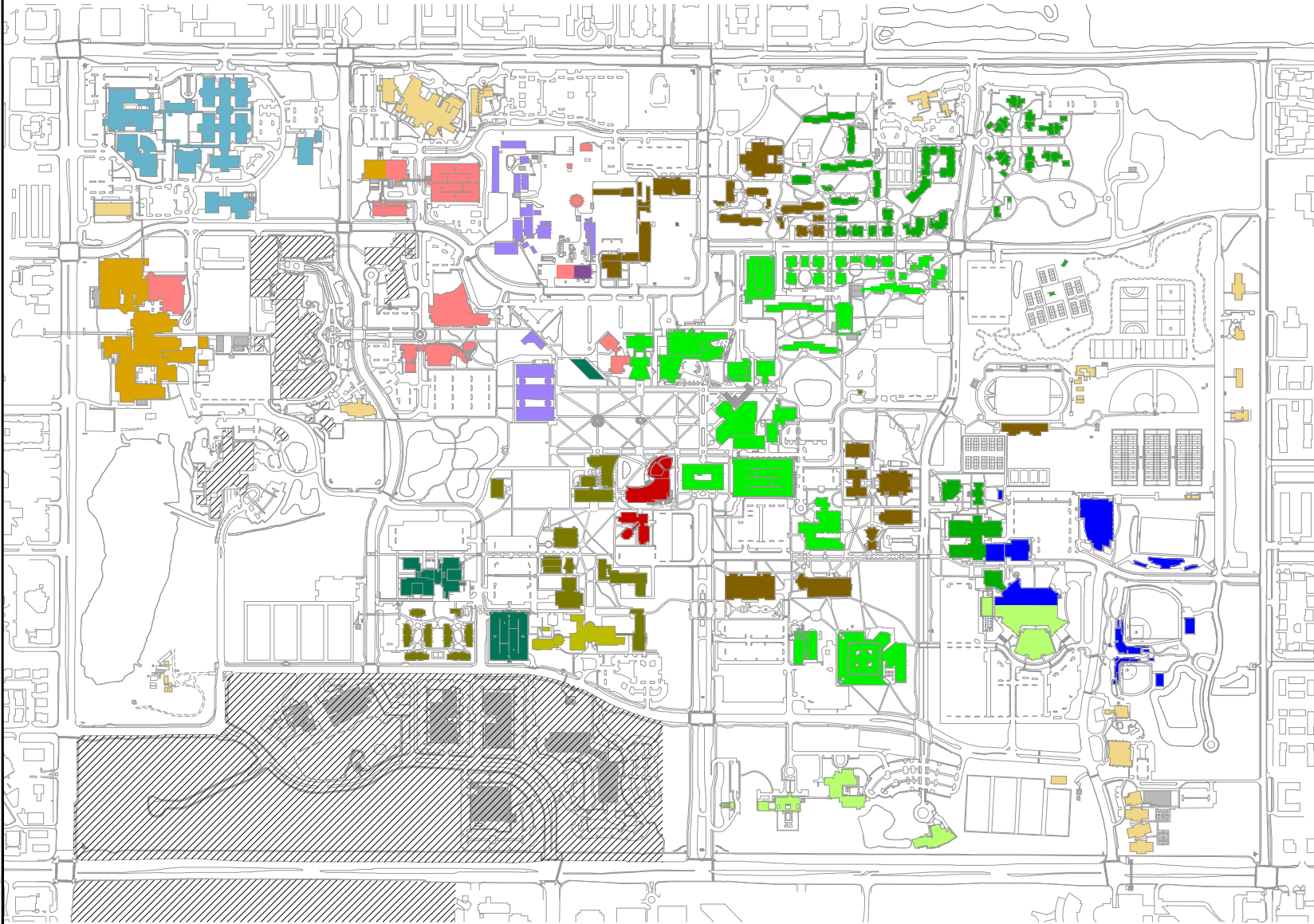
Existing Regulations/Programs Which Govern Sub-Element and Assessment

The electrical power and other fuels sub-element is not a required sub-element. Inclusion and evaluation of this sub-element is in support of other required sub-elements.

Future Uses/Opportunities for Increased Efficiency

Energy conservation opportunities should be evaluated to reduce the load on existing feeders thus recovering additional spare capacity for future growth.

Utilize energy usage index for each building to determine buildings that may have the most opportunity to reduce energy consumption. Once these buildings are identified, an energy analysis can be conducted to determine the scope of energy conservation measures that will alleviate load on existing feeders and reduce energy consumption and cost. The energy reduction measures should be conducted on buildings served by feeders accommodating the Five-Year Capital Improvement Plan.



USF/TECO Substation Feeders

- F-131A
- F-131B
- F-132A
- F-132B
- F-133A
- F-133B
- F-134A
- F-134B
- Not in Scope

TECO Primary Services

- BBD
- Magnolia
- 50th Street
- Fowler
- F136A
- F136B

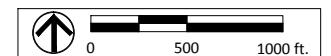
TECO Secondary Services

- Standard Secondary Service
- Areas Not Included in Campus Master Plan

**Element 7
General Infrastructure**

Figure 7.7
Electrical Illustrative Map
Current Distribution

Date
08/21/2015



This Page Intentionally Left Blank.

7.8 Communications

This chapter is not a required element of the Master Plan Update; however, it has been included to facilitate utilities infrastructure planning in support of the future growth plans for the campus. Additionally, energy production and consumption are significant factors in the carbon footprint of the campus and as such provide one of the greatest opportunities for reducing the campus’s greenhouse gas emissions (GHGE) in support of the College and University Presidents Climate Commitment.

Inventory and Assessment of Existing Conditions

Existing and projected major telecommunications corridors are positioned principally along primary circulation patterns and seams between development sites so as to minimize disruption by new construction.

1. Campus data communications infrastructure

Major campus cabling infrastructure is provided through seven nodes located in buildings: MHB, PCD, AOC, MPB, ENB, SVC and EDU. (See Table 7.8-1 Campus Data Communication Infrastructure.) These nodes provide service to the cluster of buildings physically adjacent to and surrounding them. These nodes are connected to the outside world for MAN/WAN access through four service provider (utilities) in various combinations for redundancy from physically diverse locations around campus.

Table 7.8-1 Campus Data Communication Infrastructure

Network Node	Service Provider	Data Center/Server Centers
MHB		MDC
PCD		
AOC	Verizon & Time Warner	
MPB		
ENB	Verizon & Time Warner	
EDU		
	Verizon, Level 3 & Brighthouse	SVC

Existing campus outside plant cabling infrastructure contains four main media types:

- Legacy copper cabling (traditional telephone infrastructure)
- Multimode optical fiber cabling
- Singlemode optical fiber cabling

Please refer to campus infrastructure communications cabling map for routing of the optical fiber media.

2. Data Center/Server Centers

There are currently two main data center/server centers on campus: ENB and SVC. The old ENB data center has been phased out and has been replaced by a commercial, third party data center located off campus for security and redundancy.

The current data center on campus is located in the SVC building and occupies 5,000 sq ft of space. Power is redundant with dual 350kw UPS (uninterruptible power supplies) and one 350kw diesel generator. Current cooling

capacity is 80 tons with redundancy being provided up to 90 tons through three 30 ton chillers. While efforts have been made to upgrade the infrastructure, this data center is still vulnerable to a variety of threats and a new data center should be established in order to provide the high-availability housing for critical systems at USF.

Problems and Opportunities for Expansion/Replacement

Existing buildings are currently being provided with telephone service from the on-campus Avaya Communications Manager. The Avaya system provides traditional telephone service to buildings which do not have the new network infrastructure and VoIP to buildings which have an infrastructure which can support it. As new buildings come online and as older facilities are refurbished, telephone service is migrating to Voice over Internet Protocol with optical fiber connectivity.

The newer buildings are being provided with voice and data services through optical fiber connectivity. Limited amounts of copper cable are still provided for analog services such as fire alarm and security services.

Buildings currently being planned for migration to singlemode optical fiber include: Sun Dome, OPM, UPB, and Botanical Gardens.

Existing Regulations/Programs Which Govern Sub-element and Assessment

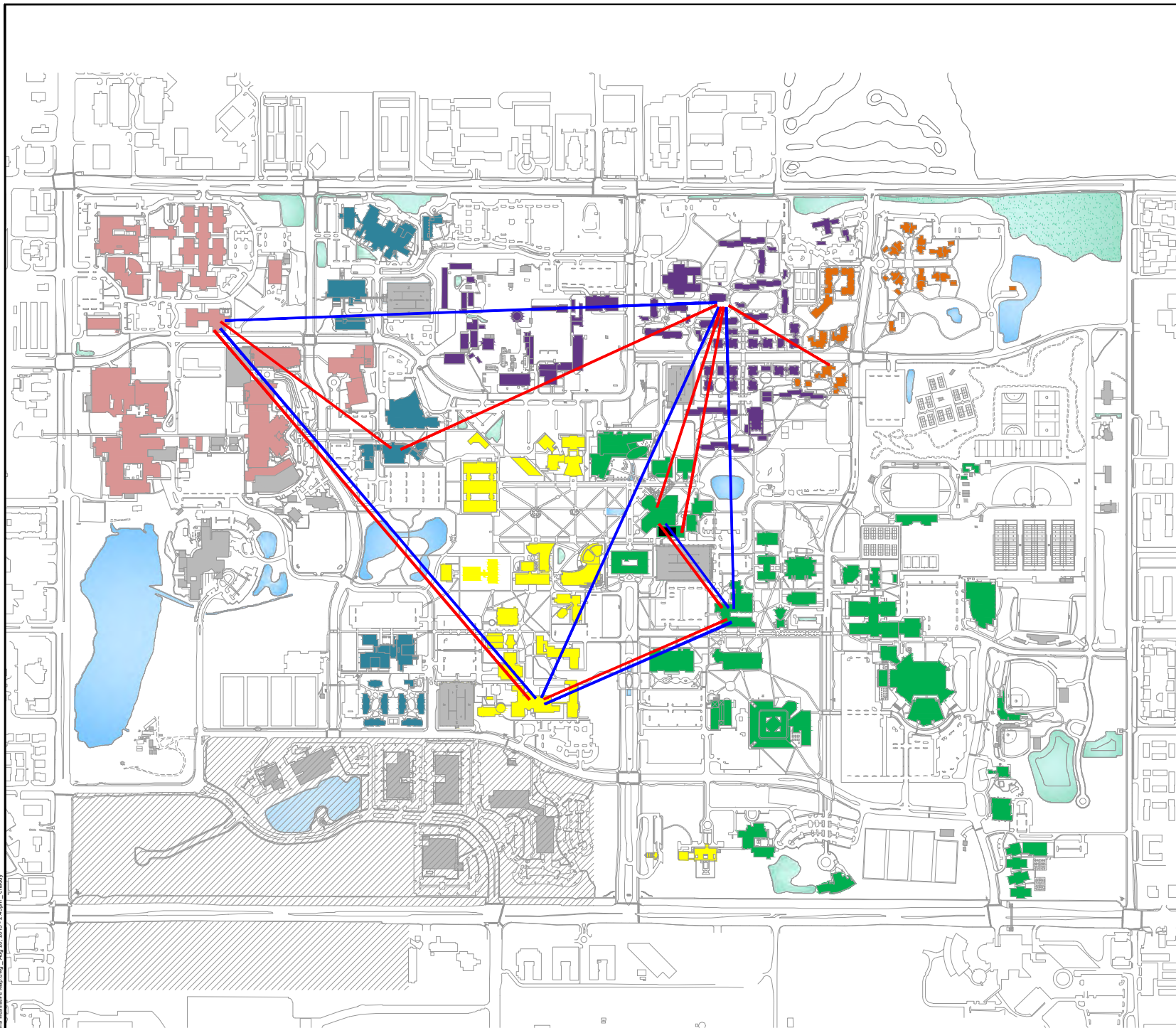
The communications sub-element is not a required sub-element. Inclusion and evaluation of this sub-element is in support of other required sub-elements.

Future Uses/Opportunities for Increased Efficiency

As more bandwidth capabilities are required for greater data carrying capacity, the nodes are migrating from multimode to singlemode optical fiber connectivity.

The future communications needs of the campus will continue to converge onto the IP data infrastructure. BAS requirements for energy management and conservation are already moving to this platform. Other applications such as video transport, imaging, cell signal boosting (DAS) and data storage will require ever more bandwidth and additional fiber capacity to keep up with growth.

As new campus buildings come online, the data network will continually expand from the current network nodes to accommodate them. No new network nodes are planned for the next five years.



- SVC
- MHB
- PCD
- AOC
- MPB
- ENB
- EDU

- Single Mode Fiber
- Multi Mode Fiber




- Area Not Included in Campus Master Plan

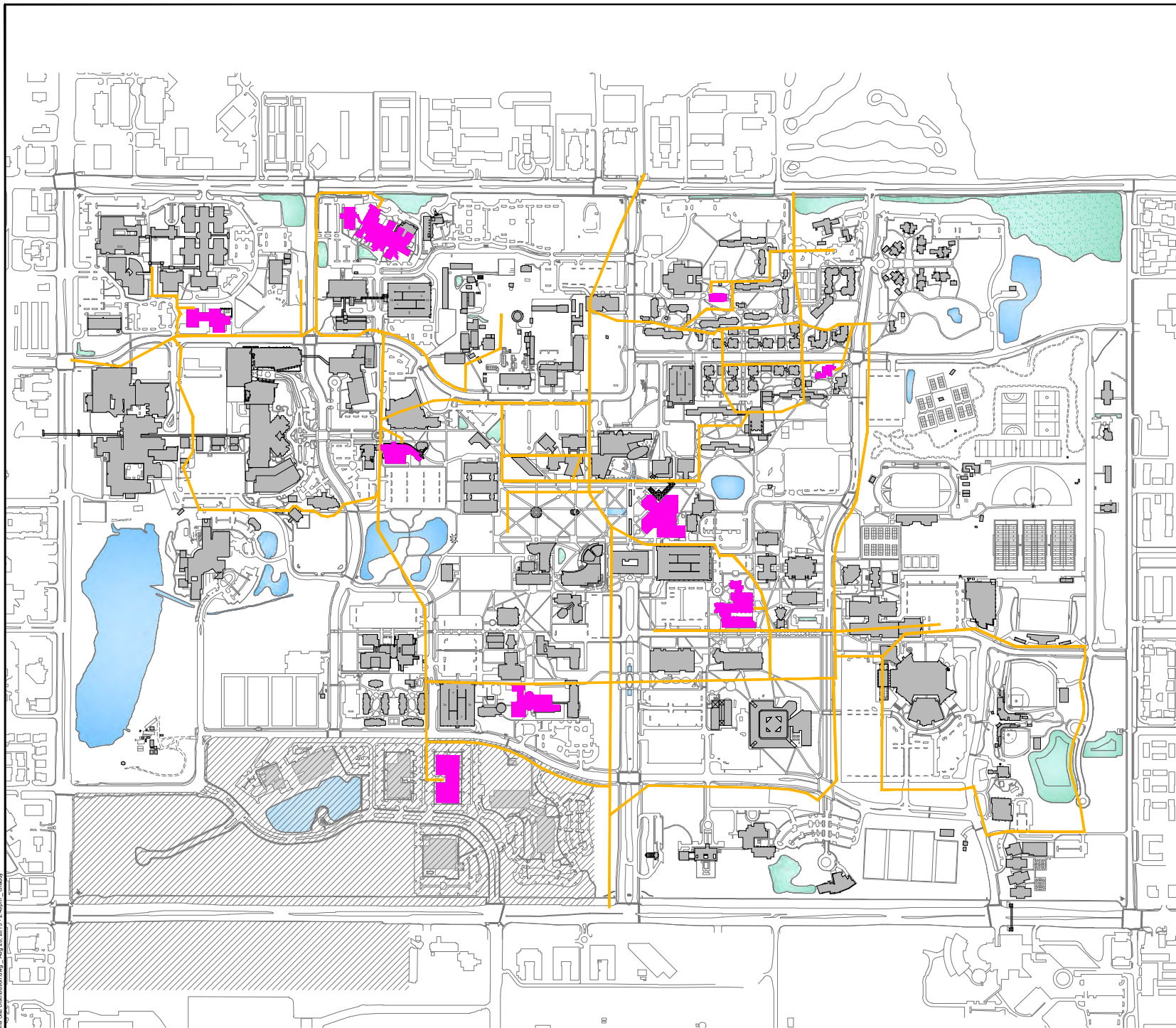
Element 7
General Infrastructure

Figure 7-8.1
Communications
Illustrative Map

Date
08/21/2015



-  Network Operation Center
-  Communication Conduit
-  Area Not Included in Campus Master Plan



Element 7
General Infrastructure

Figure 7.8-2
Communications Site
Distribution

Date
08/21/2015



Element 8 Conservation

This element ensures the conservation, protection and wise use of all natural ecosystems and natural resources on the University campus and in the planning study area.

Inventory of Existing Natural and Environmental Resources

1. Wetlands, lakes, rivers, and other surface waters and bottom lands

The University has a total of 410 acres of wetlands, including wetlands within the USF Forest Preserve (386 acres), the wetland on the Northeast corner of the Main Campus (6 acres), and Lake Behnke (18 acres). Rainwater runoff is collected in the University's 29 acres of stormwater collection areas and 18 acres of surface waters (see Figure 8.1, *USF Campus Open Space* and Figure 8.2, *Natural and Environmental Resources*).

2. Floodplains

USF Tampa campus has approximately 386 acres of floodplain areas within the USF Forest Preserve (see Figure 8.6, *Floodplains*). There are currently no floodplain areas on the USF Tampa main campus.

3. Known unique geological features (Springs, Sink Holes, etc.)

The only known geological features on the USF Tampa campus are sinkholes. USF monitors the campus for sinkholes and tracks the sizes and dates of identified sinkholes (see Figure 8.4, *Sinkhole Plan*). There are approximately 110 sinkholes on campus. The sinkholes that appear within Hillsborough County are directly related to the lowering of the surficial groundwater table. With such extensive karst limestone geography throughout the county, protecting and restoring the groundwater table is one means to prevent the likelihood of more sinkholes occurring on USF Tampa campus.

4. Existing mitigation sites

A small strip of approximately 0.35 acres was donated along Fletcher Avenue near the USF Riverfront Park as mitigation for the Fletcher Avenue widening project.

5. Existing naturalized vegetative communities, including nesting or feeding habitat

The primary natural vegetative community on campus property is the USF Forest Preserve north of Fletcher Avenue. It is outside the main campus superblock, but within the study area. The USF Forest Preserve is primarily wetland and sandhill habitat (see aerial below). It is home to a variety of plants and animals, many of whom are threatened or endangered and also several that are fire-dependent. Part of the area is routinely burned in order to conduct research on ecological succession. The Forest Preserve has two primary functions: research and teaching. It is managed by the College of Arts and Sciences.

Research: It is the setting for many research projects and conservation efforts. The Forest Preserve offers considerable value to research at USF by supporting a variety of types of research projects (ecology, biology, geology, archaeology, engineering, etc.).

Teaching: Besides its role as a research facility for scientists and other researchers, the Forest Preserve is a learning tool for USF students and teachers, and a valuable asset to the University community. It provides hands-on experience for USF students and teaches a better understanding of the web of relationships in this habitat. It is a central part of the ecology courses and students taking ecology classes have several Forest Preserve based labs. Other departments at USF use the Forest Preserve for teaching as well. For more information please use the links on the right of the first webpage below to explore specific information on courses and the materials used in the PCB 3043 Ecology course taught every semester.

An inventory of plants and animals that are found in the USF Forest Preserve are located on this website:

<http://facilities.cas.usf.edu/forestpreserve/studies/>

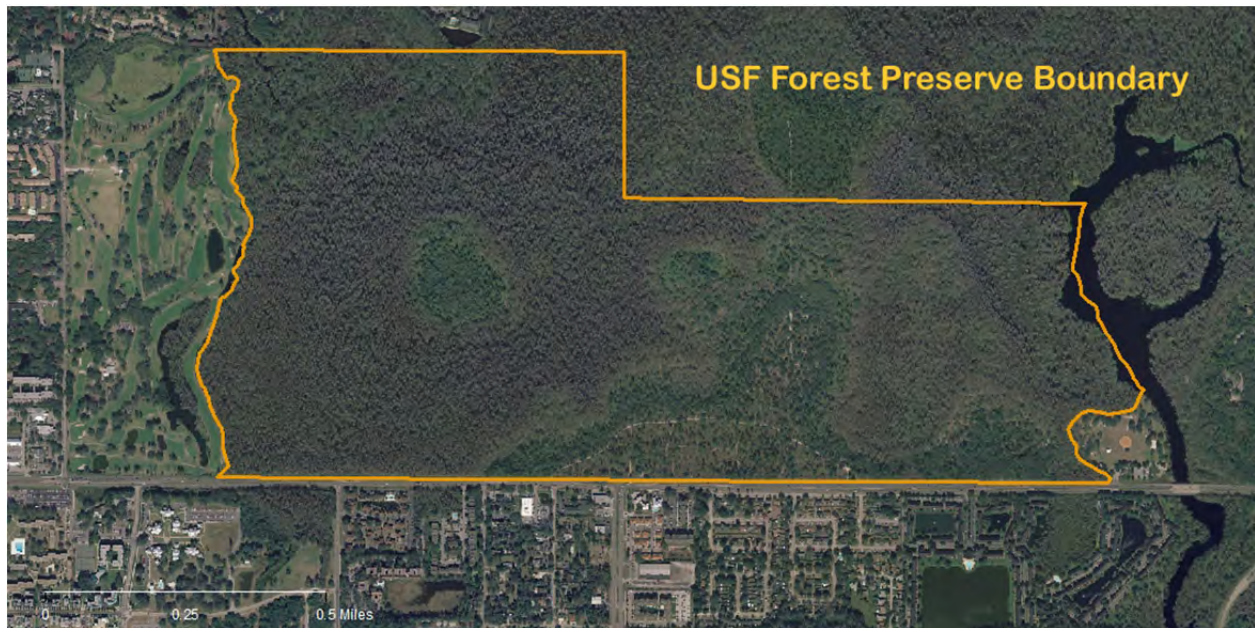
For more information see also:

<http://facilities.cas.usf.edu/forestpreserve/>

<http://facilities.cas.usf.edu/forestpreserve/data/ForestPreserve-WhitePaper.pdf>

The main academic campus has been largely developed with buildings, parking lots, and underground utilities. There are isolated pockets of minimally disturbed areas, the larger of these are:

- Hardwood hammock and wetland area at the corner of Fletcher Avenue and 50th Street
- USF Botanical Gardens and Lake Behnke, at Bruce B. Downs Boulevard and USF Pine Drive



- Greenway (as identified in Element 9, *Open Space and Recreation*)

6. Native Plants

Since 1995, the use of drought-tolerant, native plants has increased. The Patel Center for Global Solutions landscape design was the first project to fully commit to full xeric and natural plant materials. The University has been investigating and testing new varieties of drought-tolerant plants. The University also maintains a large number of trees on campus, providing a 228-acre extent of tree cover throughout the USF campus (see Figure 8.5, *Tree Cover*). However, the overall diversification of the trees and plant material on campus is generally limited with 8-10 tree types, with the vast majority of these being a Florida-native tree species, Live Oak, (*Quercus virginiana*). USF was designated as a National Arbor Day Tree Campus USA in 2011 and has continued to meet the requirements each year since. Since 2010 USF has planted over 2,500 trees, predominately Live Oak but also native Cypress and Pine.

7. Aquifers, Aquifer Recharge Areas, and Well-field Cones of Influence

USF Tampa Campus utilizes the Upper Floridian Aquifer as its source for potable water and irrigation needs. This aquifer is a safe and reliable source for meeting the drinking water needs on campus. The pumping of water from

this aquifer does not impact the surficial aquifer. However, minimizing water withdrawal, mostly through eliminating withdrawal for irrigation, is a means to protect and extend the life of the Upper Floridian Aquifer. Recharge for the Upper Floridian Aquifer occurs further to the north of the state, in Citrus County.

Because shallow wells for irrigation are not used by USF Facilities, the lowering of the groundwater table through pumping is eliminated on campus. In addition, retaining stormwater on the campus maximizes water infiltration to recharge the surficial aquifer, thereby keeping the groundwater table elevated. These efforts protect the nearby wetland and upland buffer areas on campus and in the USF Forest Preserve north of the main campus. USF follows SWFWMD and EPA water conservation guidelines. The NPDES MSR4 permit from EPA/DEP is a pollution control abatement permit governed by best management practices. The permitted groundwater withdrawal is a fixed quantity controlled by SWFWMD.

8. Air

USF reports that Air Quality Emissions Reports and Permits with Hillsborough County EPC are not available for this document. The most recent USF Greenhouse Gas Report was submitted to the American College and University Presidents Climate Commitment (ACUPCC) in January 2014: <http://rs.acupcc.org/ghg/2854/>. The report shows net emissions of 686, 173 metric tons of CO₂e per Full-Time Enrollment, 69.2 metric tons of CO₂e Per 1000 Square Feet.

9. Energy

Due to the costs and associated greenhouse gas emissions, reducing the University's dependence on fossil fuels is critical to this conservation element. The University has adopted a LEED Silver Certification for new buildings. It provides for energy efficient practices and objectives in building construction. USF has implemented numerous practices, including heat pipes for energy recovery, led/induction lighting replacements, replacement of aging chillers with those that operate more efficiently, elimination of chillers with CFCs to comply with the commitment for LEED certification, reflective roof replacements, planting trees to reduce the heat island effect, bio-diesel use in the campus shuttle buses, use of solar panels, etc. USF continues to be engaged in research activities to reduce energy consumption; examples: algae conversion to biofuel, development of solar films for windows, etc. Energy consumption-related information is included in Element 7 Infrastructure Sub-Elements.

10. Water see also 7. above

The majority of the campus water consumption is drawn from campus wells. Subleased properties are served by the City of Tampa. USF continues to reduce per capita water use. SWFWMD and EPA water conservation guidelines are in use. The campus water use is under the USF Water Use Permit. Water conservation efforts include low flow fixtures, reuse of roof runoff for flushing, stormwater reuse in irrigation, alternative use of condensate water in water features, etc. Xeriscape and efficient irrigation systems have also been implemented to reduce water consumption. See also Element 7 Infrastructure and Element 10 Intergovernmental Communication.

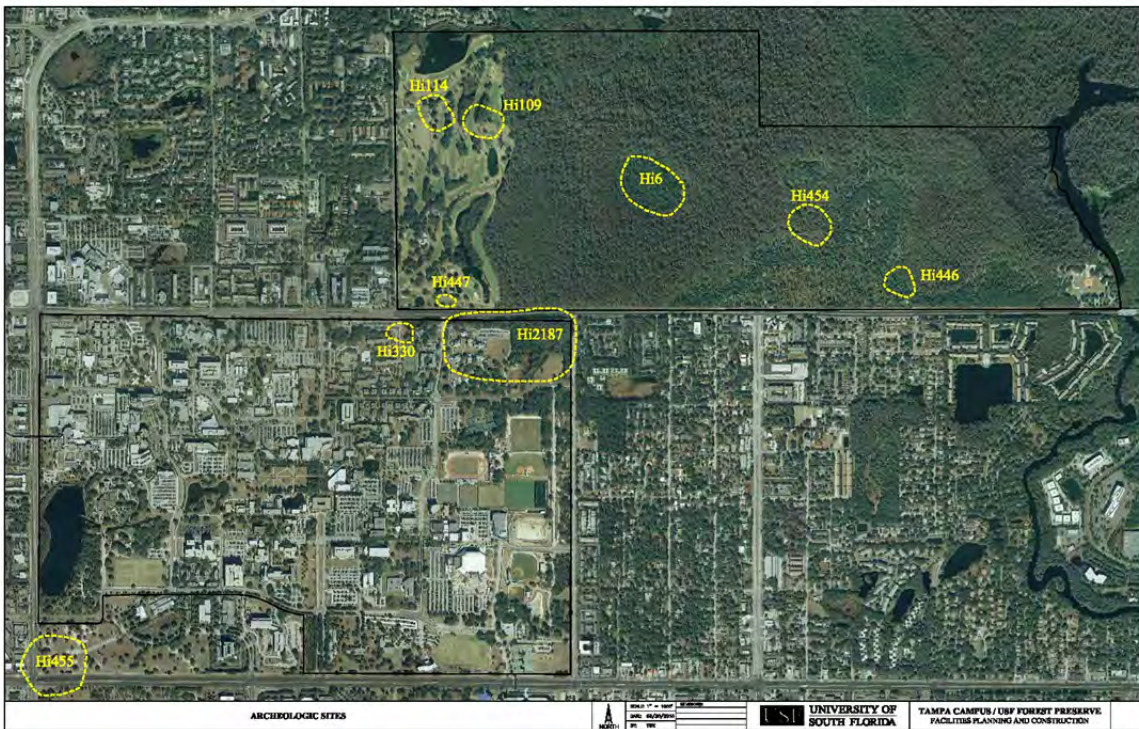
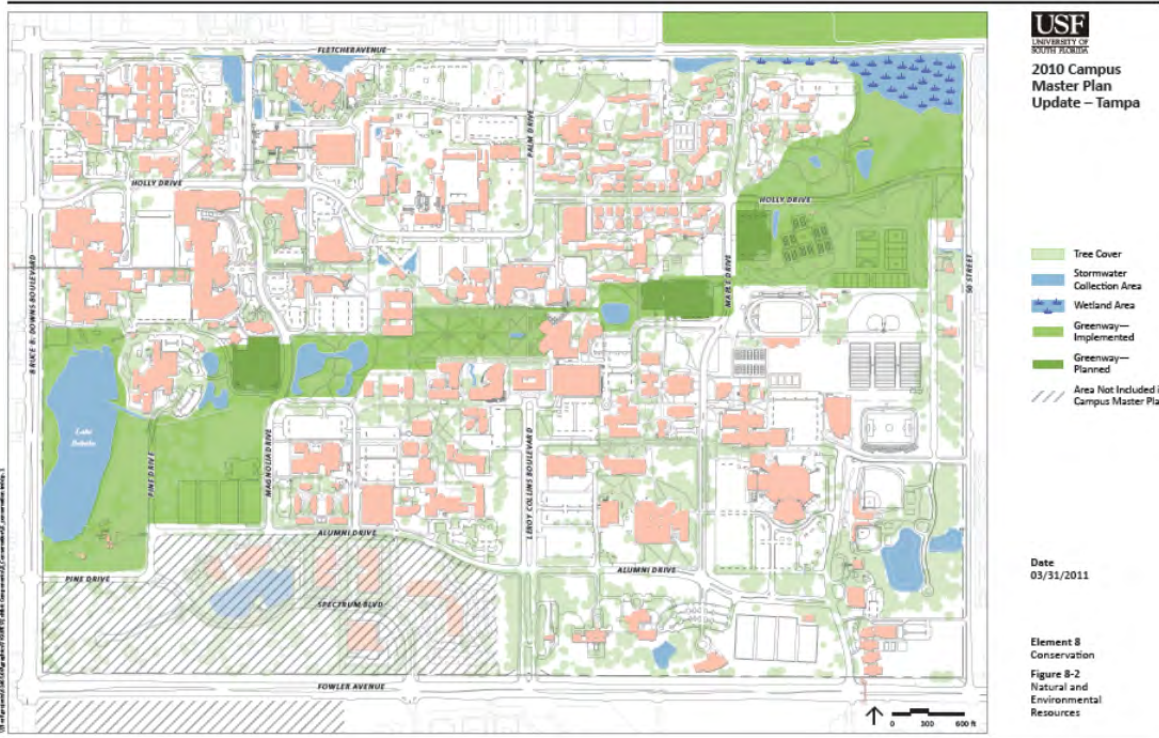
11. Materials

University use of materials (e.g. paper and other office supplies, construction materials) for construction and operations often constitutes an indirect use of natural resources. Minimization of materials is considered an aspect of this Conservation element. Information regarding University management of solid waste, including recycling, is addressed in Element 7 Infrastructure Sub-Elements.

Assessment of Existing and Natural Resources

Environmental Resources	Existing or potential commercial/recreational/conservation uses	Protection/restoration opportunities and methods	Assessment Information		Ecological functions and values
			Known University-generated pollution sources (rates, where available) or impacts	Pollution minimization strategies/techniques	
Surface Water (wetlands, lakes, ponds)	See Element 4, Future Land use	Protected through SW Florida Management District	Fertilizer use	Limit fertilizer use	Local Biodiversity Water Filtration
Floodplains	See Element 4, Future Land use	Policy not to develop in floodplains	Fertilizer use	Limit fertilizer use	NA
Existing Mitigation Sites	See Element 4, Future Land use	Protected as a mitigation area	NA	NA	Water Filtration
Naturalized Vegetative Communities	See Element 4, Future Land use	Protected through policy to protect the Greenway Planting of additional trees	Fertilizer use	Limit fertilizer use	Carbon sequestration Water filtration Local biodiversity
Native Plants	See Element 4, Future Land use	Investigating and testing different native plant varieties	NA	NA	Water conservation Water quality enhancement (through reduced fertilizer use) Greenhouse gas emissions reductions (through reduced fertilizer use) Local biodiversity
Geological Features	See Element 4, Future Land use	Water use reduction	Over-extraction of water	Implement a campus "water diet" Investigate use of reclaimed water for irrigation	NA
Aquifers, Aquifer Recharge Areas, and Well-field Cones of Influence	See Element 4, Future Land use	Protection of well-fields Water use reduction Aquifer recharge			NA
Air	NA	See Element 5, Transportation	Campus vehicular traffic	See Element 5, Transportation	Ecosystem health
Energy	See Element 7.7, General Infrastructure, Electrical Power and Other Fuels Sub-Element				
Materials	Element 7.4, General Infrastructure, Solid Waste Sub-Element.				
NA Not Applicable					

As identified in the USF Climate Action Plan, the University can continue to improve air, water, and open space quality by reducing traffic volume and idle time, increasing water storage and re-use, preserving open space for conservation, and erecting any new buildings compactly so as to consume less land. The Climate Action Plan is in the process of being updated: <http://rs.acupcc.org/cap/607/>



Links to Sustainability Tracking, Assessment & Rating System (STARS) report:
<https://stars.aashe.org/institutions/university-of-south-florida-fl/report/2014-01-14/>
See:

- Climate
 - [OP-4: Greenhouse Gas Emissions Inventory](#)
 - [OP-5: Greenhouse Gas Emissions Reduction](#)
 - Tier 2 Credits
 - [OP-T2-1: Air Travel Emissions](#)
 - [OP-T2-2: Local Offsets Program](#)
- Energy
 - [OP-7: Building Energy Consumption](#)
 - [OP-8: Clean and Renewable Energy](#)
 - Tier 2 Credits
 - [OP-T2-13: Timers for Temperature Control](#)
 - [OP-T2-14: Lighting Sensors](#)
 - [OP-T2-15: LED Lighting](#)
 - [OP-T2-16: Vending Machine Sensors](#)
 - [OP-T2-17: Energy Management System](#)
 - [OP-T2-18: Energy Metering](#)
- Grounds
 - [OP-9: Integrated Pest Management](#)
 - Tier 2 Credits
 - [OP-T2-19: Native Plants](#)
 - [OP-T2-20: Wildlife Habitat](#)
 - [OP-T2-21: Tree Campus USA](#)
 - [OP-T2-23: Landscape Waste Composting](#)
- Water
 - [OP-22: Water Consumption](#)
 - [OP-23: Stormwater Management](#)
 - Tier 2 Credits
 - [OP-T2-44: Waterless Urinals](#)
 - [OP-T2-45: Building Water Metering](#)
 - [OP-T2-46: Non-Potable Water Usage](#)
 - [OP-T2-47: Xeriscaping](#)
 - [OP-T2-48: Weather-Informed Irrigation](#)

See also Element 5 Transportation, Element 7 Infrastructure, Element 6 Housing and Student Support Services



- USF Property Line
- Greenway
- Surrounding Open Space


- Area Not Included in Campus Master Plan

Element 8
Conservation

Figure 8.1
USF Campus Open Space

Date
08/21/2015

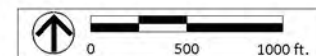
-  Tree Cover
-  Greenway - Existing
-  Parking to be Relocated
-  Wetland Area
-  Stormwater Collection Area

 Area Not Included in
Campus Master Plan

Element 8
Conservation

Figure 8.2
Natural and
Environmental
Resources

Date
08/21/2015



— Campus Boundary



Notes

Acreage of the USF Forest Preserve Area (including the Claw Golf Course) is 721.4

Element 8
Conservation

Figure 8.3
USF Forest Preserve Area

Date
08/21/2015



Sinkhole Year Recorded

- → - 1965
- 1966 - 1975
- 1976 - 1985
- 1986 - 1995
- 1996 - 2005
- 2006 - →


▨ Area Not Included in
Campus Master Plan

Element 8
Conservation

Figure 8.4
Sinkhole Plan


Date
08/21/2015



 Tree Cover

Notes

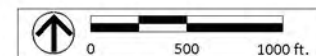
Approximate acreage of
the tree cover is: 228

 Area Not Included in
Campus Master Plan

Element 8
Conservation

Figure 8.5
Tree Cover

Date
08/21/2015



USF FOREST PRESERVE

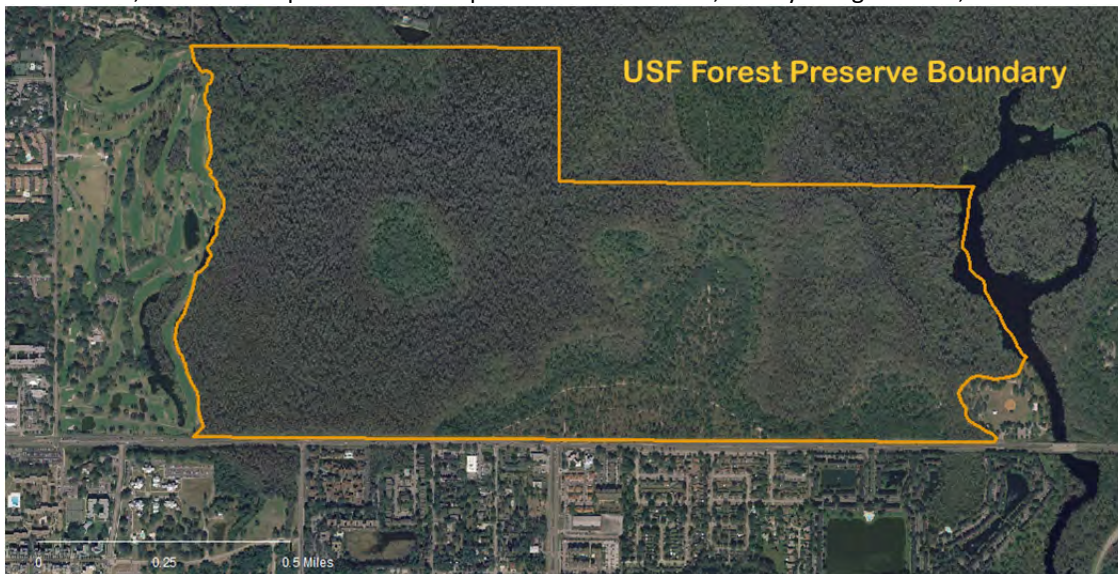
WHITE PAPER*

Gordon A. Fox, David Lewis, Earl D. McCoy, and Henry Mushinsky
Department of Integrative Biology

INTRODUCTION

The USF Forest Preserve (FP) is a major asset to the University. It is used extensively for student and faculty research. More than 70 research papers in the peer-reviewed literature have been focused on the FP, as have more than 20 M.S. theses and Ph.D. dissertations. USF researchers from the departments of Anthropology, Civil Engineering, Geography, Geology, and Integrative Biology have conducted research at the FP in the last 5 years. Undergraduate and graduate classes from Anthropology, Geography, Geology, and Integrative Biology have similarly made use of the FP.

The FP comprises roughly a square mile of land (Figure 1), located north of Fletcher Avenue, roughly between the Golf Course and Riverfront Park. It has been administered by the Biology (and subsequently, Integrative Biology) Department since 1960s, with the goals of conservation, teaching, and research. Starting in the 1970s, a series of experimental burn plots were established, mainly along Fletcher, and controlled



burns were conducted until 2005. Since then it has been difficult to meet the regulatory standards for prescribed fires, and they have not been conducted in the last few years. The FP has been protected for many years by being incorporated in the Master Plan.

HOW THE FP IS USED

TEACHING

The FP provides a resource unlike any other for courses. In the last several years, the FP has been used by these classes:

- Principles of ecology (PCB3043L)
- Population biology (PCB6462C)
- Statistical ecology (PCB6455)
- Wetland environments (EVR4027)
- Ecosystems of Florida (EVR4930)
- Soils in archaeological research (ANG 6115.001)
- Diversity and evolution of plants (BSC4933)
- Hydrogeology field methods (GLY4947L)
- Ecology of plants (BSC4933)
- Ecohydrology (GLY6824)
- Herpetology (BSC 5425)



Figure 1. Dr. Earl McCoy and students.

Moreover, numerous undergraduate students have participated in unstructured coursework, conducting research in the FP. In a typical year, some 15-20 students gain research experience through this route.

The FP has also provided an important resource for student research. A few examples of student research there within the last several years include:

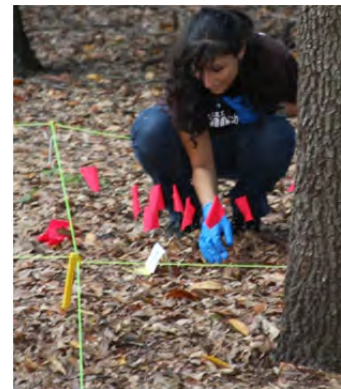
- Maria del Pilar Lopera Blair (Ph.D. student, IB): gene flow and speciation in *Liatrix*.
- Neal Halstead. (M.S., IB): fire in an urban habitat island
- Dave Jennings (Ph.D. student, IB): competition between plants and animals
- Stephanie Butera (Honors thesis, Anthropology): decomposition processes and soil chemistry
- Additional research by Ph.D. students from University of California-Davis and Louisiana State University.

HOW THE FP IS USED

FACULTY RESEARCH

A considerable number of short- and long-term faculty research projects are conducted in the FP. One can get an impression of the breadth of these projects by considering the following, all of which have been conducted within the last several years.

- Dr. Erin Kimmerle (Anthropology): changes in experimental gravesites.
- Dr. Mark Ross (Civil & Environmental Engineering): hydrology of Florida sandhills.
- Dr. Ruiliang Pu (Geography): remote sensing to estimate environmental parameters.
- Dr. Jason Rohr (Integrative Biology): causes of amphibian decline
- Dr. Mark Rains (Geology): water availability to vegetation.



- Shawn Landry (Architecture): urban forests.
- Drs. Earl McCoy and Henry Mushinsky: studies of the gopher tortoise

Figure 3. Experimental grave site research.

Over the years, USF’s ability to attract externally funded research grants has been considerably strengthened by the FP. In some cases, the FP itself proved to be the location of funded research, such as in the 2002 NSF grant (for \$2.2 million) to E. D. McCoy and H. Mushinsky on “upper respiratory tract disease and environmentally threatened gopher tortoises.” In other cases, research at the FP provided the initial data to support the case for external grants.



Figure 4. The sandhill habitat has been the site of much student and faculty research.

Perhaps the most telling measure of the FP’s importance for research at USF is the list of more than 70 peer-reviewed publications based on research there.

HOW THE FP IS USED

SERVICE

In recent years, the FP committee, together with the Botanical Garden, has organized wildflower walks involving dozens of people from the community. Tampa Audubon Society conducted a segment of its Christmas Bird Count in the FP.

The FP directly abuts Riverfront Park. We have cooperated with the Campus Recreation department to develop a self-guided nature walk through the FP, to educate students.

THE FUTURE OF THE FP

The FP has, for several decades, been a resource of considerable value to USF as an outdoor classroom, and as the laboratory for many studies. We believe it is possible for the University to get more value from the FP in both of these respects, and in some others as well. The value of the FP in both of these senses stems from the fact that it is a stone’s throw from the main campus, yet is large and relatively wild, and has diverse habitats.

Two other aspects of the FP make it particularly valuable for research. First, it preserves the last remaining sizable patch of sandhill habitat in the area. Many species of animals and plants that depend on this kind of habitat and are present in the FP would otherwise be absent from a substantial area. Second, the FP is near the edge of a substantial “island” of undeveloped land that is surrounded by increasing urbanization. This presents numerous opportunities for research, teaching, and community outreach. This also means that the FP plays an important role in such ecosystem functions as CO₂ uptake and regulation of runoff, and thus its preservation may be increasingly important to the University.

Finally, the Department of Anthropology has special interest in some areas of the FP. These may be important in future research, but in any event the University has a legal obligation to protect the resource.

MANAGEMENT ISSUES & RECOMMENDATIONS

There are a number of management issues facing the FP and the University's ability to use it more effectively. Our central recommendations involve institutionalizing USF's support for the FP's mission. Here we outline the particular issues faced by the FP, and recommend ways in which they may be addressed.



Figure 5. The extensive wetlands in the FP are an important part of USF's interaction with the environment of Tampa Bay, and also provide opportunities for teaching and research.

PUBLIC FACE

At present the FP has no public face save some web pages on the IB Department's web site. There is a fence along Fletcher Ave., and the gates have faded signs telling the public that they may not trespass.

- **Recommendation 1:** Develop an attractive web site for the FP. A well-maintained website will prove useful for those interested in research or teaching there. It will also be an important avenue by which USF can publicize its preservation of this important resource.
- **Recommendation 2:** Install new signage. New signage along Fletcher Avenue and at trails that enter the FP from adjacent properties can be a low-cost way of simultaneously reducing trespassing and publicizing USF's mission.



Figure 6. We need to manage the FP's resources.

MANAGEMENT

Land management issues include physical maintenance of fencing and fire lanes, control of invasive species (including feral hogs as well as such plant pests as *Melaleuca* and cogongrass), and maintenance of signs.

Both trespassing and poaching occur in the FP with some regularity.

Much of the trespassing is benign, but it requires regular checking both because USF may face liability issues and because some trespassers may cause fires. Similarly, incidents

of poaching have occurred in the FP. Here the principle concern is the safety of those involved in teaching or research.

- **Recommendation 3:** Establish a Director of the FP as part of a faculty position. The Director's job would be to expand and coordinate research and teaching in the FP, seek external funding for the FP, and coordinate the use of the FP in public outreach work. We envision this as constituting a significant part of a faculty appointment.
- **Recommendation 4:** Hire a manager for the FP. At least initially, this can be a half-time position. The manager would report to the Director. The manager will, among other duties, coordinate and conduct much of the regular maintenance work, check many areas for signs of unauthorized use,

supervise the maintenance of a database on permitted uses, and prepare and organized prescribed burning.

- **Recommendation 5:** Provide an annual budget for maintenance and management.

PRESCRIBED BURNING

Fire is a key feature of Florida ecosystems, and this is true in the FP. Many of the habitats in the FP are normally fire-dependent. Moreover, many species – especially the threatened gopher tortoises – depend strongly on frequent fire to maintain appropriate habitat. Without fire, the value of the FP to USF will decline. Moreover, without a fire program, the chance of wildfire – started by lightning strikes, cigarettes or sparks from passing vehicles, or by trespassers – greatly increases, and as fuel accumulates, the potential liability to the University increases as well.

Faculty in the IB Department have conducted prescribed fire in the sandhill portion of the FP, but in recent years regulations and lack of resources have made this quite difficult to do. Because the FP is in an urban setting, permits for prescribed fires can only be issued under a narrow range of weather conditions. However, burning also requires trained and licensed personnel, and proper equipment – none of which the IB Department nor the university have.

- **Recommendation 6:** Purchase appropriate equipment for maintaining fire lanes, or (more likely) contract with others to provide the equipment.
- **Recommendation 7:** Work with urban forestry professionals to inventory the biological resources of the FP and develop a burning plan.
- **Recommendation 8:** Contract with others to conduct the prescribed burning.



Figure 2. The FP has been one of USF's best-kept secrets. It's time to make it one of our best-known assets.

GROWING THE FP'S USE

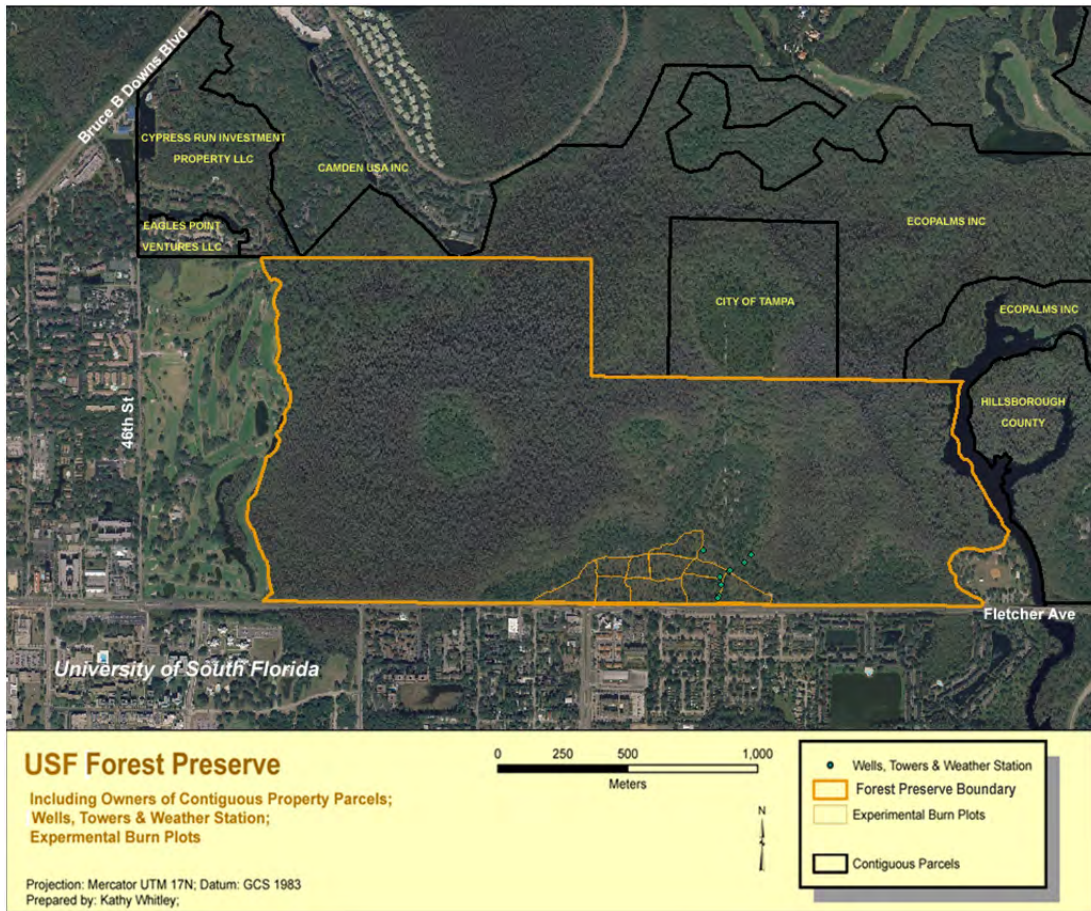
Key to the success of the FP will be to develop new opportunities. These include interactions between departments to use the FP in new and creative ways, proposals for research grants, proposals for grants to the FP as an institution, development of small courses, public tours, and interactions with other universities and government agencies.

- **Recommendation 9:** Provide University resources and connections to the Director. The Director position needs to be meaningful. The University can provide important support in several ways, for example, by collaborating on fund-raising with the Director.
- **Recommendation 10:** Establish an Advisory Board. The board would be composed of representatives of those USF departments with a stake in the FP, as well as representatives from the community. The mission would be to support the Director's efforts to develop new opportunities.

- **Recommendation 11:** Seek membership in national organizations of research stations. Doing so will help establish USF's presence in organized environmental research, and will encourage cross-fertilization of ideas with other universities.

University of South Florida Department of Integrative Biology September 2013





This Page Intentionally Left Blank.

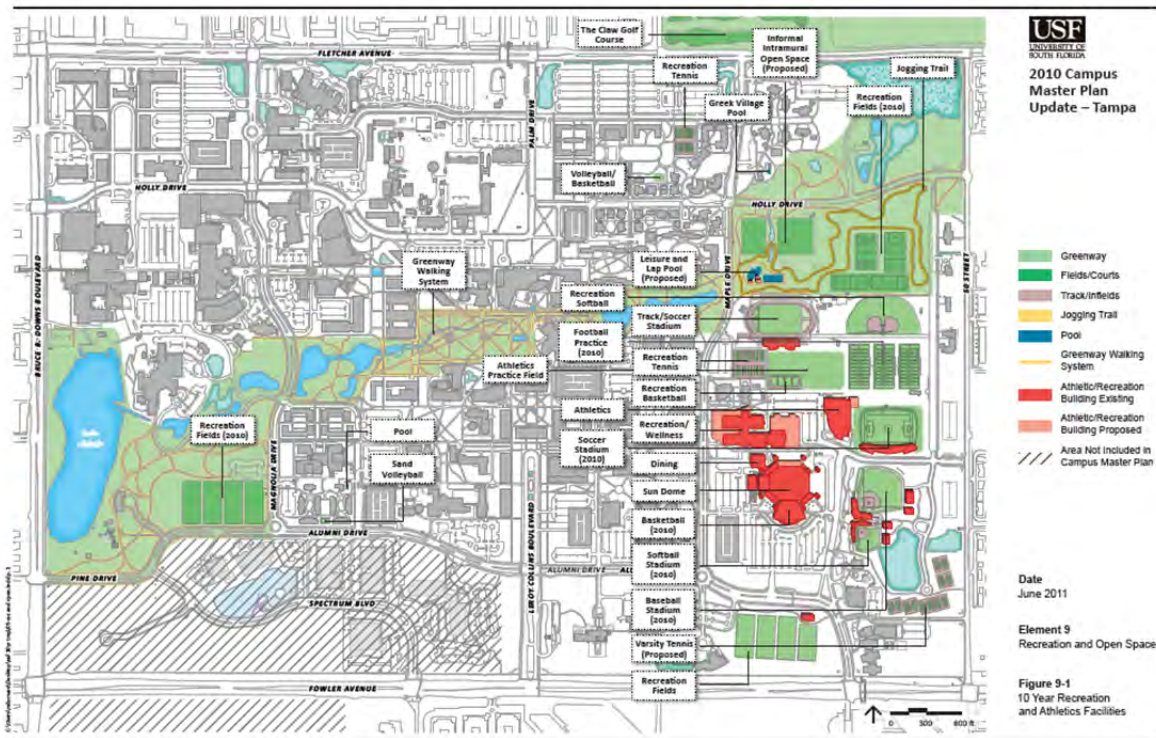
Element 9 Recreation and Open Space

This element ensures the provision of adequate and accessible recreation facilities and open space to meet the future needs of the University.

Existing conditions university-owned or managed recreational sites:

Recreation and Athletics

Campus recreation and open spaces are composed of dedicated recreation and athletic facilities and varied informal open spaces. Tables 9-1 and 9-2 present an inventory of existing recreation and athletic facilities.



Campus Recreation

Campus Recreation offers students programs and facilities including a 28,000 square-foot, fully-wired fitness center, group fitness classes, aquatics, intramural sports, club sports and outdoor recreation opportunities. Campus Recreation operates many fields and facilities across the campus as well as the Riverfront Park. <http://usfweb2.usf.edu/CampusRec/>

Table 9-1 Inventory and Usage of Existing Recreation Facilities

Facility Type	Number/Account	Estimated/ Projected* Usage	Acreage/ Square Footage
<u>GYMNASIUM BUILDING</u>			
Offices (REC 111)			3,650 sf
Maintenance (GYM 0030)			1,100 sf

Dance (GYM 005)		475/wk	2,717 sf
Outdoor Resource Center (GYM 007)			978 sf
Office (GYM 007)			126 sf
Athletic Training(GYM 008)			146 sf
ORC Equipment (GYM 013)			690 sf
Classroom (GYM 009)		100/wk	1,185 sf
Fitness (GYM 021)		5,698/wk	7,619 sf
Lower Gym (GYM 022) (multi-use arrangement)	Strength and conditioning, group fitness Mezzanine: Cardio fitness	972/wk	12,658 sf 9,000 sf
Equip. Checkout & Storage (GYM 023)			1,023 sf
Racquetball Courts (GYM 024, 026, 028, 030, 032, 034)	6 courts	569/wk	4,800 sf
Lower Aerobics (GYM 033)		722/wk	1,930 sf
Upper Gym (GYM 100) (multi-use arrangement)	1 center BB court 2 crosswise BB courts 3 volleyball/8 badminton courts	595/wk	13,928 sf
Mat Room (GYM 101)		345/wk	2,112 sf
Upper Aerobics (GYM 107)		887/wk	3,638 sf
Indoor Pool (GYM 108)	25 yards, 8 lanes	950/wk	11,105 sf w/deck
Men's Student Locker/Showers	--lockers		2,919 sf
Women's Student Locker/Showers	--lockers		2,302 sf
Men's Staff Locker/Showers	--lockers		1,326 sf
Women's Staff Locker/Showers	--lockers		1,042 sf
Magnolia Fitness Center	Strength and cardio equipment		
Argos Fitness Center	Strength and cardio equipment/ group fitness studio		
<u>CAMPUS RECREATION CENTER AND EXPANSION</u>			
Cycling Studio			
Weight Room			6,500 sf
Basketball Courts/Volleyball Courts	4 courts/6 courts		14,000 sf
Aerobics/Dance (REC 022B)			
OUTDOOR CAMPUS FACILITIES			
Andros Pool	25 yards, 6 lanes	1,100/wk	18,000 sf w/deck
Greek Village Pool			
Tennis Courts (lighted)	10 courts PE	850/wk	64,800 sf
	6 courts Andros	650/wk	38,400 sf
Intramural Football/Soccer Fields	4 fields Fowler		
	5 fields NE		
	4 fields SW		
Outdoor Basketball Courts	8 courts	1,000/wk	30,324 sf
	2 BB/VB Argos	300/wk	4,200 sf
	2 BB/VB Andros	300/wk	4,200 sf
Sand Volleyball Courts	1 court Argos	100/wk	1,800 sf
	1 court Andros	100/wk	1,800 sf
Softball Fields	2 fields		

Para Course Fitness Trail	1.4 mile loop, 18 exercise stations	650/wk	16.5 ac
Argos Picnic Area			.5 ac
Andros Picnic Area			.5 ac
<u>RIVERFRONT PARK FACILITIES</u>			
	Picnic Pavilion	500/wk	12.6 ac
	Boathouse		
	Softball Field		
	Sand VB Court		
	Restroom Bldg.		
	Kayak/Rope Shed		
	Ropes Course		
	Disc Golf Course		

Source: USF Recreation

Athletics

USF is a member of the American Athletic Conference, with 17 men's and women's varsity teams competing at the NCAA Division I level. New facilities for practice and competition, along with a completely renovated USF Sun Dome, put the University's athletic facilities on par with virtually every top program in the country. The following intercollegiate women's sports teams compete for USF: soccer, basketball, softball, volleyball, tennis, golf, cross country/track and field, and sailing. USF men's intercollegiate teams compete in: football, soccer, basketball, baseball, tennis, golf, and cross country/track and field. <http://www.gousfbulls.com/>

Table 9-2 Inventory and Usage of Existing Athletic Facilities

Facility Type	Number/Account	Estimated/ Projected* Usage	Acreage/ Square Footage
<u>SUN DOME</u>	4 BB or 6 VB Courts	Summer camp only	25,000 sf
Arena – Level 2 (multi-use arrangement)			
Arena – Level 1 (multi-use arrangement)	1 BB or VB Court	540/wk (seasonal)	20,000 sf
Corral	1 BB or VB Court	200/wk (seasonal)	11,000 sf
	3 Offices	160/wk	
	Conference Room		
	Reception Area		
	3 Storage Rooms		
	Locker Room		
Sun Dome Service Level			
Sun Dome Administrative Suite	13 Offices/Reception	560/wk	
Men's Basketball Suite	Offices/Support	320/wk	
Women's Basketball Suite	Offices/Support	240/wk	
Sports Medicine Clinic	Treatment Area/Support	215/wk	
Strength and Conditioning	Weight Room and Storage	215/wk	
Men's Basketball Locker/Showers		75/wk	
Women's Basketball Locker/Showers		75/wk	
Visiting Basketball Team Locker Room	2 Locker Rooms		
Ticket Office	2 Offices Conference Room	160/wk	
Maintenance/Production	7 Offices Conference Room Support	320/wk	
Housekeeping	Office/Support	160/wk	

Concessions	2 Offices/Support	120/wk	
Meeting Rooms	2 Meeting Rooms	150/wk	
Performance Dressing Complex	6 Dressing Rooms	75/wk	
Laundry	Laundry/Support	28/wk	
ATHLETIC TRAINING CENTER			
Strength and Conditioning	3 Offices/Support Weight Room Cardio Room	2,400/wk	10,696 sf
Sports Medicine Clinic	4 Offices/Support 2 Exam/4 Treatment Therapy/Work Rooms	2,400/wk	6,133 sf
Equipment Room	2 Offices/Support Laundry	2,400/wk	4,859 sf
Big East Conference Room	Conference/Kitchen Support	150/wk	1,388 sf
Athletic Director's Suite	13 Offices 2 Conference Rooms Kitchen/Support	1,040/wk	5,869 sf
External Affairs Suite	16 Offices 20 Work Stations 2 Conference Rooms Kitchen/Support	1,440/wk	5,951 sf
Olympic Sports Suite	15 Offices 10 Work Stations Conference Room Support	1,000/wk	4,372 sf
Academic Enrichment Center	6 Offices/Support Study Lounge	1,200/wk	7,518 sf
Football Suite	17 Offices 10 Meeting Rooms 3 Conference Rooms Kitchenette/Support	1,200/wk	10,790 sf
Men's Staff Locker Room	24 Full, 12 Half	150/wk	550 sf
Women's Staff Locker Room	15 Full/10 Half	100/wk	438 sf
Football Staff Locker Room	19 Lockers	95/wk	454 sf
Football Locker Room	116 Lockers	580/wk	6,073 sf
Baseball Locker Room	36 Lockers	180/wk	706 sf
Softball Locker Room	22 Lockers	110/wk	593 sf
Men's Tennis Locker Room	12 Lockers	60/wk	269 sf
Women's Tennis Locker Room	14 Lockers	70/wk	327 sf
Men's Soccer Lockers Room	29 Lockers	145/wk	450 sf
Women's Soccer Locker Room	33 Lockers	165/wk	480 sf
Men's Track/XCC Locker Room	18 Full/12 Half	120/wk	269 sf
Women's Track/XCC Locker Room	34 Full/42 Half	275/wk	638 sf
SUN DOME MUMA BASKETBALL PRACTICE EXPANSION			
Basketball Courts	2 full court	TBD	51,000 sf
Locker Rooms			
Support Offices			
OUTDOOR FACILITIES			
Varsity Tennis	12 Courts (no lights)	360/wk (seasonal)	3.6 ac
Soccer/Track Stadium	Soccer Fields (lights)	1,000/yr	6.9 ac

	400 M Track	(seasonal) 1,200/wk (seasonal)	
Soccer Practice Field	1 Field (no lights)	360/wk (seasonal)	2.7 ac
Soccer Stadium	Seats 1,000		
Baseball Stadium	1 Field (lights) Seats 1,500	800/wk (seasonal)	4.5 ac
Softball Stadium	1 Field (lights) Seats 750	480/wk (seasonal)	1.8 ac
Football Practice fields	3 Fields (lights)	3,000/wk (seasonal)	5.0 ac

Source: USF Department of Athletics

Currently, USF Athletics also uses the following off-campus facilities:

- USF Football competes in the Raymond James Stadium, Downtown Tampa.
- USF women’s and men’s Golf teams use the following “home” courses for practice and competition; Lake Jovita in Dade City, Innisbrook in Innisbrook, Saddlebrook in Wesley Chapel, and Tampa Palms, Hunter’s Green and The Claw, all in Tampa. The Claw, located on USF land immediately north of Fletcher Avenue from the core campus, includes an 18 hole course, club house and restaurant – all privately managed.
- USF Sailing sails out of USF St Petersburg Campus.

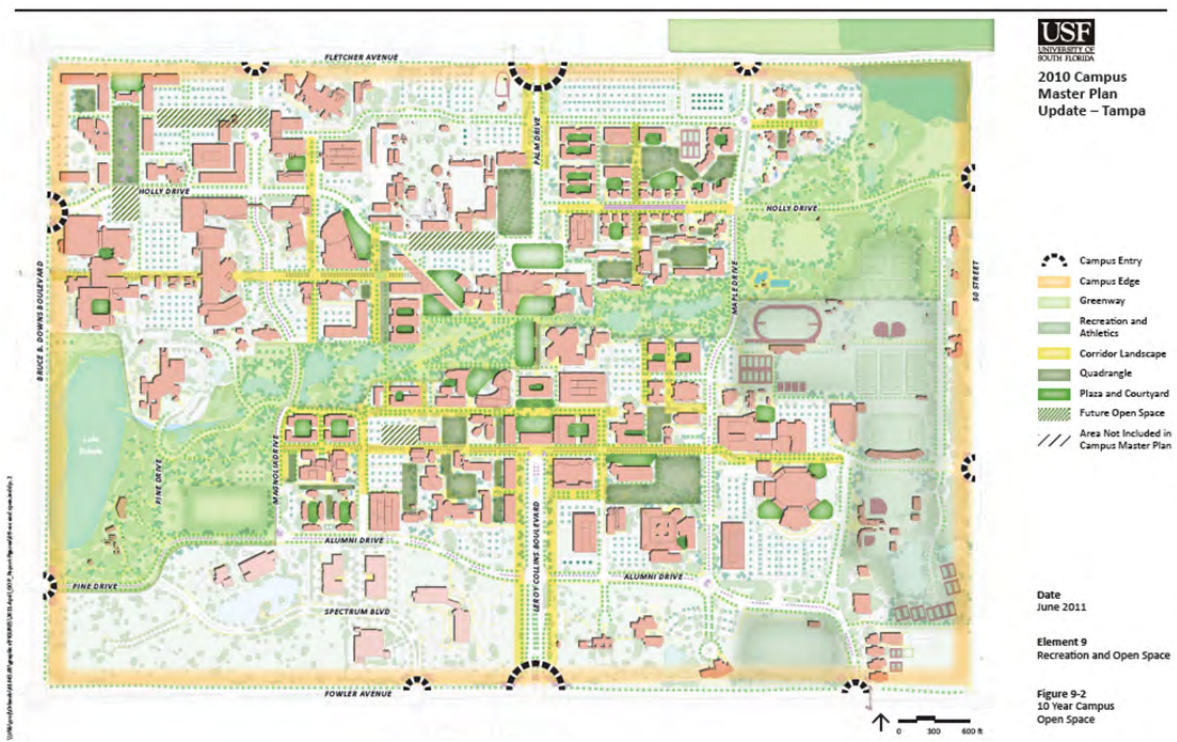
Main Campus Open Spaces

The framework for a system of interconnected campus open spaces has been promoted and developed through previous master plans. Within the main campus, the open space framework components include:

- perimeter landscape and gateways,
- pedestrian corridors,
- the Greenway,
- Central Quadrangle
- precinct quadrangles, and
- Courtyards and plazas.

Both spatial and programmatic considerations are important in evaluating and planning for the campus open space framework.

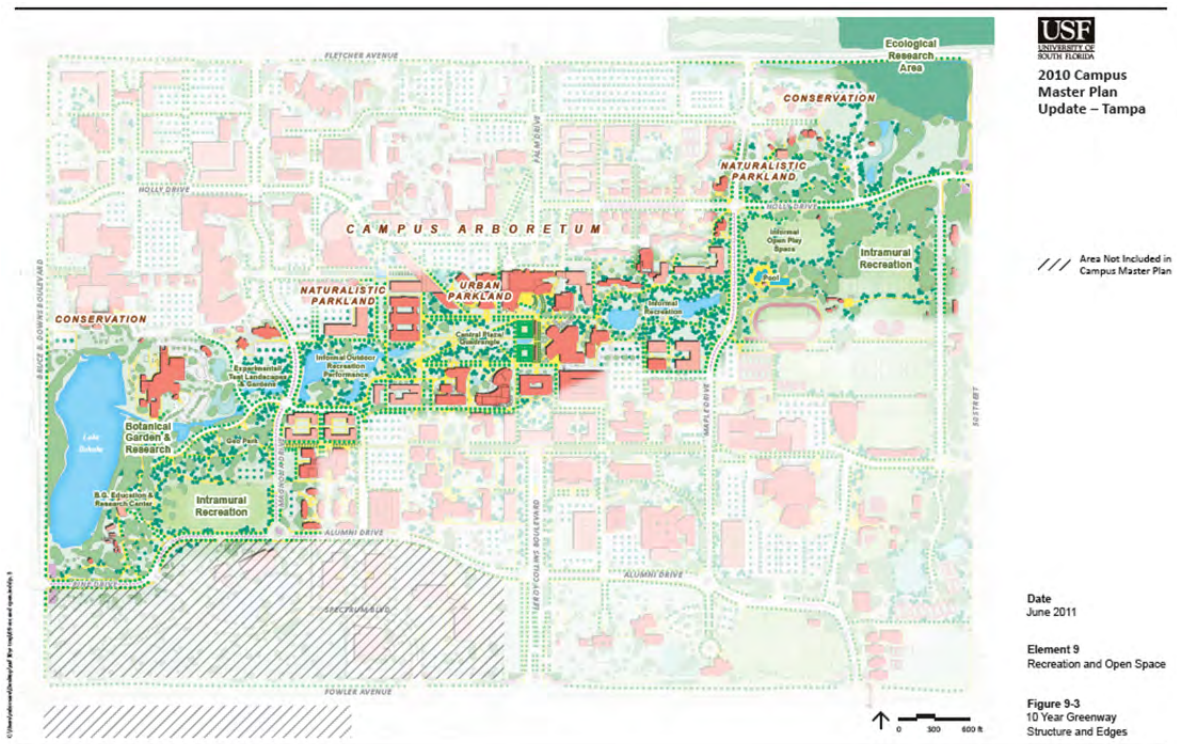
Figure 9.2, *Open Space*, provides an overview of the open space framework components of the USF Tampa campus.



Perimeter landscape and campus gateways:

The landscape character of the campus perimeter is an important component of the public face of USF both as an institution and as part of the overall wayfinding of the USF-Tampa campus setting. The existing perimeter landscape is generally a “low level treatment” landscape of open lawn and live oak trees, with little active programmatic use or definition. As a large campus setting with almost five miles of campus edge, the perimeter landscape poses visual and maintenance concerns, as well as opportunities to shape a distinctive USF public identity that responds to the viewing speed of passing motorists. As a large distinct open space one passes through in entering campus, the perimeter landscape provides an opportunity to “layer” the entry, reinforce campus wayfinding, and establish greater cohesiveness of the overall campus open space framework. Within the context of the perimeter landscape, special gateway identification treatments further assist in establishing institutional identity and providing essential wayfinding cues. The Master Plan Update is being coordinated with signage and wayfinding design efforts and will address

identification, hierarchy, and treatment of the gateways and campus edges.



Greenway:

The Greenway is intended as the dominant element of the campus open space system. The identified boundary includes a contiguous corridor of over 125-acres from Lake Behnke at Bruce B. Downs Boulevard on the southwest corner to the wetland area at Fletcher Avenue and 50th Street on the northeast and continues across Fletcher to include the Ecological Research Area to the northeast. The Greenway has been established as a “no-build” zone because of the ecological importance and the role it plays in establishing an open space counterpoint to the urban environment and in providing a sense of clarity and orientation to the campus. Integration of stormwater management in the overall Greenway design continues to be a desired objective and one that is fitting with the desire for a more sustainable, low impact approach to campus site design, including a desire to make resource management and natural processes such as water cycle a “visible” element of the campus environment.

Efforts have been made, beginning with the 1995 Campus Master Plan, to establish continuity of the open space for the length of the Greenway by strengthening the definition of the edges through building placement, such as the Natural and Environmental Sciences and Integrated Sciences Buildings at the south edge of the Central Quadrangle, and by prohibiting building within the Greenway. However, the discontinuity of the Greenway remains a challenge to establishing it as a visually strong, contiguous, organizing element. Continuity is impeded by the presence of two popular parking areas Lots 17 A and B near the Argos Complex and Lot 19 east of Shriners Hospital for Children and further reduced in impact by parking areas 5 and 35 (also near Argos) at its edges. The narrow “choke point” of the Greenway, located at its high point as it passes between Student Services Building and the Bookstore and Student Health Services, visually separates the Greenway into two distinct sections – east and west with minimal visual connection or even a “reminder” of its presence as it passes through this narrow link.

Programming for varied experiences along the length of the Greenway is consistent with the desire for creation of a diversity of landscapes ranging from conservation areas, to naturalistic parkland, to highly developed plazas. Program ideas cited in interviews and observed on campus include:

- Passive recreation, such as reading, sunbathing, socializing, observing wildlife, listening to and playing live music, and display of public art; and
- Active recreation, such as walking, biking, Frisbee and games of catch, team recreational sports, and performances.

Accommodating recreation and athletic fields while preserving the integrity of the Greenway is an ongoing concern.

Central Quadrangle:

The 15-acre Central Quadrangle is the largest of the campus' discreet open spaces and the mid-point of Greenway activity. Buildings, including the Phyllis P. Marshall Center, Natural and Environmental Sciences and the Interdisciplinary Science Teaching and Research Facility help to define and constrain the edges of the expansive space and provide activity at the edges. Double rows of trees on walks at the north and south edges and dense planting with pool and fountain at MLK Plaza on the east end provide strong edges that invite pedestrians with shade and the cooling feel and sound of water. In contrast, the expansive lawn with formal ordered crossing walks is forbidding on hot days due to the lack of shade or varied groundplane. Two shade structures located within the Central Quadrangle along the east-west axis provide intermediate respite, but are isolated within the large open space and lack the landscape context massings of trees would provide to integrate the structures within the larger space. Consequently, the isolation not only discourages use of the shade structures, but the larger quadrangle as well. Plans for tree planting along the crossing quadrangle walks will make the crossing the quadrangle more comfortable. Additional planting – primarily trees – will continue to help to shape the interior of this expansive undefined space, create varied and more interesting spaces and use activity areas, and provide connection to the Greenway as it transitions east and west away from the Central Quadrangle.

Programmatically, the space is active on the edges for reasons cited above (spill over from buildings, plazas, shade, and water) but much less used within. Attention to the Central Quadrangle space as a whole, with an emphasis on enhancing connections to the Greenway, especially as it transitions to the west, provides opportunity to activate the lower portion of the Center Quadrangle. The scale of the space, if shaded, provides a distinct opportunity as a setting for on-campus large group outdoor gatherings and events in mild weather.

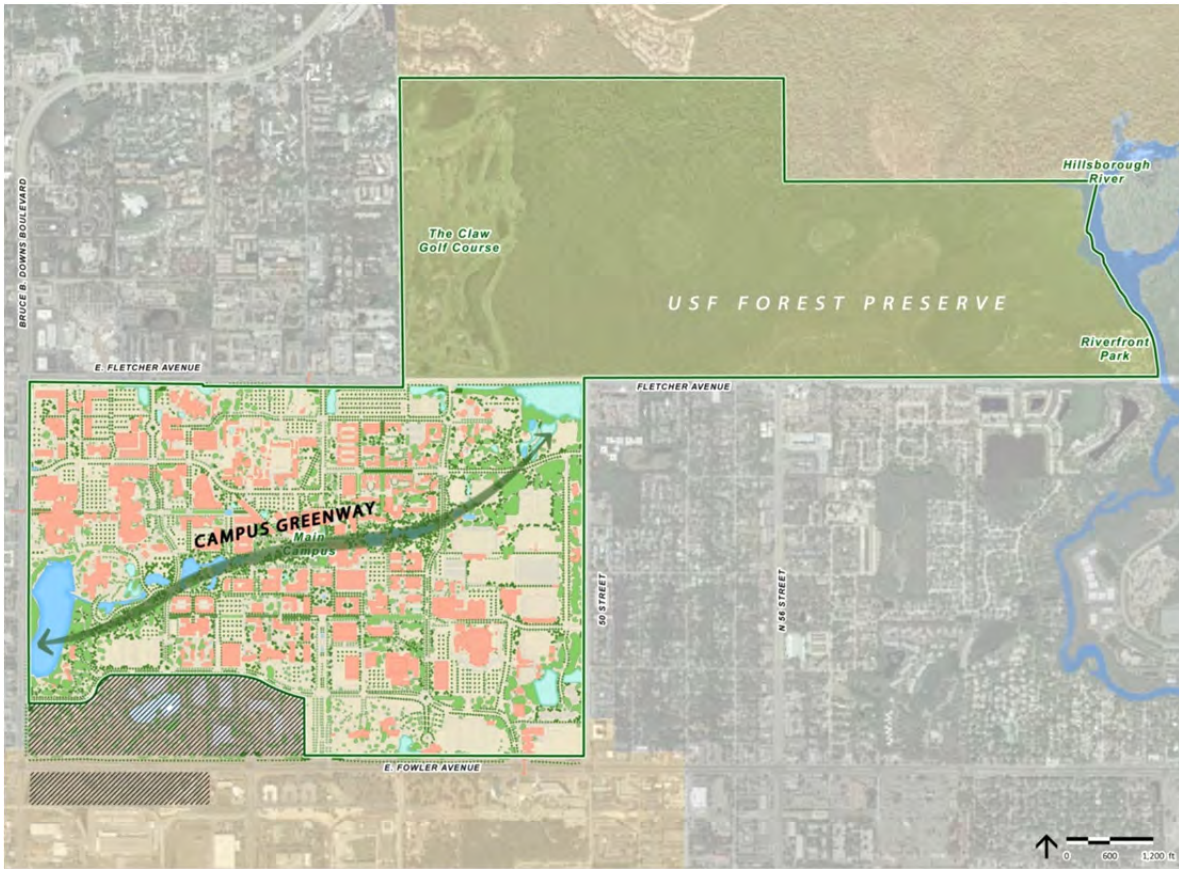
Precinct Quadrangles:

Within campus precincts, quadrangles provide opportunity for larger scaled civic/community open spaces connecting individual buildings around the edges of the space into a community of facilities. Areas for quadrangles exist in all precincts, but generally lack strongly defined edges – neither through planting or architecture. Adjacent uses and programming of the quadrangles should be considered in planning for each precinct. Overlaying botanical data and public art locations will be useful in designing distinct quadrangles with institutional links to the larger campus (through campus arboretum or art collection for example).

Courtyards and Plazas:

Courtyards, plazas and gardens, developed in high density areas of campus provide inviting, humane outdoor living spaces appropriate to the climate of west central Florida. As more intimate spaces, their direct relationship to adjacent building(s) provides an opportunity to extend interior activities and community to the outdoors, provide “owned space,” and establish distinct identity. The introduction of “owned space” or sites in which campus users feel comfortable or a sense of belonging are essential and best accomplished in these active and intimate spaces. Particularly important for a campus with a large commuting population, students need places to belong – as participants and/or observers – to come together with other community members or spend time comfortably in quiet. The Marshall Center

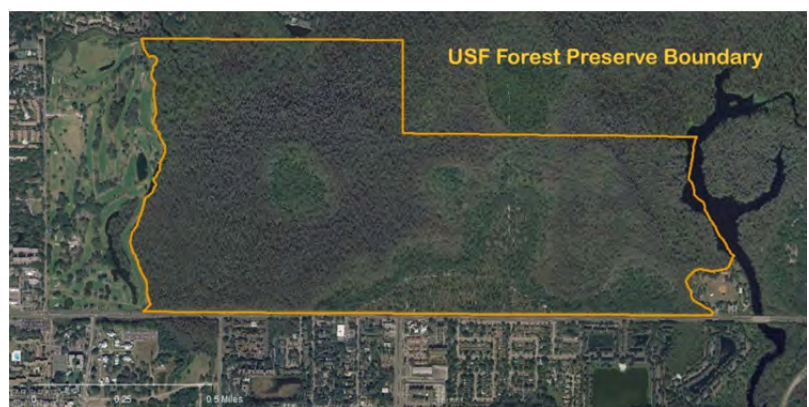
amphitheater works well in this regard, as does the Sessums Mall outside Cooper Hall. Shade and amenities such as seating, tables, food and wireless access are critical to the success of these spaces.



In addition to core campus open space, USF Tampa has these additional recreational/open space facilities – extending the Greenway to the north- north east and forming a valuable part of USF’s open space framework:

USF Forest Preserve

The USF Forest Preserve, formerly known as the Ecological Research Area, is located north of Fletcher Avenue to the northeast of the campus proper. It consists of nearly one square mile of forest, mostly swamp/wetland. It was set aside by the University as a preserve for research and teaching, and is one of the largest urban forests in the country the area is administered by the Department of Biology. In addition to its use by the Department of Biology, it is also the site of research conducted by the Departments of Environmental Science and Policy, Geology, and Anthropology. Interest has been expressed to increase opportunities for general campus population access to the area as an eco-recreation site with controlled access through guided recreation/field trips



such as hiking and kayaking. For additional information see Element 8 Conservation.

The Claw

The Claw, the USF Tampa golf course, is professionally managed by Billy Casper Golf, LLC (BCG). BCG is paid a monthly management fee and has the opportunity for profit sharing based on performance, as applicable. The course is State land and is leased to USF from the Board of Trustees of the Internal Improvement Trust Fund.

The Claw facilities are open to the public and include an 18 hole golf course, grass tee driving range, learning center, and putting/chipping green, as well as club house with golf shop and sports grill dining. The Chowdhari Golf Center, completed in 2013, replaced the existing facilities for the purposes of the golf team practice area. It contains locker rooms, coaches offices, conference room, and a covered practice area. The USF women’s and men’s Golf teams use the following “home” courses for practice and competition; Lake Jovita in Dade City, Innisbrook in Innisbrook, Saddlebrook in Wesley Chapel, and Tampa Palms, Hunter’s Green and The Claw, all in Tampa.



Riverfront Park

Located on the Hillsborough River and Fletcher Avenue at southeast corner of the Ecological Research Area, this 12.6 acre USF recreational park includes a picnic pavilion, boathouse, softball field, sand volleyball court, restroom facility, kayaks, canoes, rope course and disc golf. The park is managed by USF Campus Recreation and is the base site for a variety of USF Outdoor Recreation classes, events, and recreational offerings. Access is limited to current USF students, staff and faculty. A current USF ID is required for all activities within the park. A small storage structure (size yet to be determined) may be needed in the future to support activities at the park. Figure 9.3, *Riverfront Park*, identifies park facilities and layout.



Projected Recreation and Open Space Needs

The National Intramural Recreational Sports Association (NIRSA) *Space Planning Guidelines for Campus Recreational Sport Facilities* identifies a level of service recommended for university recreation facilities. In applying these planning guidelines to USF-Tampa there are a number of considerations in defining the potential student population serviced by recreational facilities. The chart below identifies the recommended standard and presents varied student categories to arrive at a range of “needs”. As the University continues to increase the number of students living on campus and works to develop the campus into a 24-hour vibrant area, identifying recreational needs for a changing campus population is critical to planning for the campus as a whole. Identifying recreation facility needs will involve weighing a number of “sustainability” factors, including large area land use, water consumption, and the physical and social health of students/faculty and staff.

The Wellness Center, currently in planning stage and not yet funded, is planned to be approximately 250,000 gsf. It will include Student Health Services, Counseling Center, Victims Advocacy, Wellness Education and Promotion, among other student services. For greater detail a copy of the Wellness Center Feasibility Study can be requested from USF - Facilities, Planning and Construction.

Table 9-3 Projected Recreation Facility Needs

Recreation Facility (# of fields/courts per 1,000 students)	Planning Guide	Existing Facilities	2009 Total 25,073 FTE Field Needs	2020 Projected Total U/G 28,310 HC Field Needs	2020 Additional Field Program U – U/G
Total Outdoor fields (# of acres)	0.94	23 acres	23.6 acres	26.6 acres	3.3 acres
Football Fields	0.23	12 fields	5.8 fields	6.5 fields	1 field
Soccer Fields	0.20	combined	5.0 fields	5.7 fields	combined
Softball Fields	0.15	2 fields	3.8 fields	4.2 fields	2 fields
Tennis Courts	0.41	16 courts	10.3 courts	11.6 courts	-
Outdoor Basketball Courts	0.11	8 courts	2.8 courts	3.1 courts	-
Outdoor Volleyball Courts	0.12	3 courts	3.0 courts	3.4 courts	-
Leisure Pool (1 per 25,000)		2 pools	2 pools	2 pools	Issues of Design & Size

Privately-owned, state owned, or local government-owned recreational facilities and open spaces

The City of Tampa Comprehensive Master Plan, has a strong sustainability focus that places great value on the role city parks, open space, trails, and recreation facilities can play in creating a healthy urban environment. The City of Tampa Parks and Recreation Master Plan supports the findings and goals of the Comprehensive Plan. The Parks and Recreation Master Plan focuses on evaluating existing conditions, establishing planning principles, and soliciting community involvement. The Parks and Recreation Master Plan implementation is ongoing and is intended to address a Local Level of Service Guideline (LLOS) to delineate planning districts and criteria for LLOS calculation and determination of amount and types of facilities each district should be provided in order to more effectively provide park and recreation services to residents in all areas.

In considering park and recreational resources accessible to the host /campus community, it is useful to establish a service radius related to the campus area for various types of facilities. The City of Tampa Parks and Recreation Master Plan has established a guide for facility types and service areas, as identified in Table 9-4, Classification Structure and Service Area Radius. Table 9-4 also identifies host facilities that fall within the service area of USF.

Definitions of Recreation Facility types:

- Major Park – park of 41-150 acres that serve a minimum radius of three miles, are located on major transportation routes and attract uses based on the availability of a major attraction or natural resource (zoo, lake, river, etc.)
- Neighborhood Park – park that serves the population of a neighborhood, serves a minimum radius of 1 mile and is generally accessible by bicycle or pedestrian way.
- Mini-Park – park subset to Neighborhood Park, but less than 2 acres in size and serving a half mile radius.
- Special Use Facility – includes athletic complexes and facilities for particular or dedicated activity, for example skateboard parks, softball, golf course, tennis, etc. and may be located within a Major or Neighborhood Park.
- Urban Relief Area – open space that offers beautification and aesthetic visual enhancement to the community.

- Resource Based Park – park subset of Urban Relief Area provides predominantly passive-based recreation opportunities such as a combination of open space, resource protection areas and unprogrammed park lands.
- Greenways and Trails - linear open space, such as wildlife protection and trailway corridors.

Table 9-4 Classification Structure and Service Area Radius

Type of Recreation Facility/Resource	Typical size	Service Area	Identification of Facility(ies) Located within USF Campus Service Area
Major Parks	41-150 acres	3 miles	Lettuce Lake Regional Park Copeland Park Rowlett Park
Neighborhood Parks	2-40 acres	1 mile	Bonnie Brae Park Greco Softball Complex Takomah Trail Park
Mini-Parks	<2 acres	.5 miles	
Special Use Facilities	N/A	N/A	
Urban Relief	Varies	N/A	
Resource Based Parks	Varies	City-wide	
Greenways and Trails	Varies	City-wide	Tampa Bypass Canal Withlacoochee/Hillsborough Riverine Corridor "D" Brooker Creek River System Corridor "A"

Source: Modified from city of Tampa Parks and Recreation Master Plan Phase 1, March 28, 2007.
Special use facilities include sports fields and courts, dog parks, skate parks, cemeteries, marinas, etc.

The City of Temple Terrace has 312 acres of park space. The City’s recreational facilities include the Family Recreation Complex (25 acres) and Riverhills Park (34.5 acres) on the Hillsborough River. Hillsborough County provides district, neighborhood, and special parks, in addition to its regional park system. Total acreage of neighborhood, district, and special parks is approximately 21,335 acres, or approximately 38 acres per 1,000 unincorporated population and 24 acres per 1,000 total county population. The 240-acre Lettuce Lake Regional Park, located at 6920 Fletcher Avenue, immediately east of the University, is located directly on the Hillsborough River. The park offers boardwalks, a multi-level observation tower, trails, and a 2,000 square foot visitor center operated by the Tampa Audubon Society.

Southwest Florida Water Management District (SWFWMD) manages a number of regional recreation facilities offering boating, hiking, and nature study. In general, SWFWMD owns the land and cooperates with City, County, State and Federal agencies to furnish and encourage recreational use.

SWFWMD sites within Hillsborough County include:

- Tampa Bypass Canal 12 ½ mile long canal
- Withlacoochee/Hillsborough Riverine Corridor "D" 8,412 acres
- Brooker Creek River System Corridor "A" 705 acres

Areas targeted for acquisition by the SWFWMD in Hillsborough County include: Buckhorn Creek (146 acres), Lithia Springs (160 acres supplementing the existing County Park) and the Cone Ranch site (12,000 acres).

Planned future recreation and open space facilities
On-campus

The following University Recreation and Athletic Facilities are planned for construction in the 2015-2025 Campus Master Plan Update.

Recreation facilities scheduled to be constructed:

- Campus Recreation Center Expansion
- 3-4 Intramural fields
- Leisure Pool and satellite Campus Recreation Center at the redeveloped Andros area currently in planning.

Athletic facilities scheduled to be constructed:

- Varsity Tennis Clubhouse
- Baseball/Softball Clubhouse

The following on-campus facilities have been discussed:

- On-campus Football Stadium - The University may explore the physical, operational, and fiscal feasibility of pursuing development of a new stadium (to include football) on campus or on land near the campus. A new stadium on campus would enhance the USF experience for students and the community at large, and serve a variety of uses and activities. It could also become a gathering place for all-campus events.
- Future redevelopment of The Claw golf course and land it occupies.

Off-campus

Of particular note in the City of Tampa Parks and Recreation Master Plan is the need for improved linkages such as walks and bikeways between residents and park and recreational facilities. One of the most important issues/problems cited by residents is the ability to safely access facilities through adequate walks and trails, bikeways, and transit. This is a critical issue shared by the University and City of Tampa.

Another finding of the City of Tampa Parks and Recreation Master Plan with implications for the broader USF area community is the identification of “underserved” neighborhoods. The neighborhood of North Central Tampa, located immediately south of the campus, was identified as one of three areas of the City that are currently underserved by neighborhood park facilities, based upon the desired service area of a neighborhood park within 1 mile.



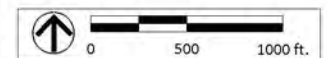
- Fields/Courts
- Track/Infields
- Jogging Trail
- Athletic/Recreation Buildings
- Pool

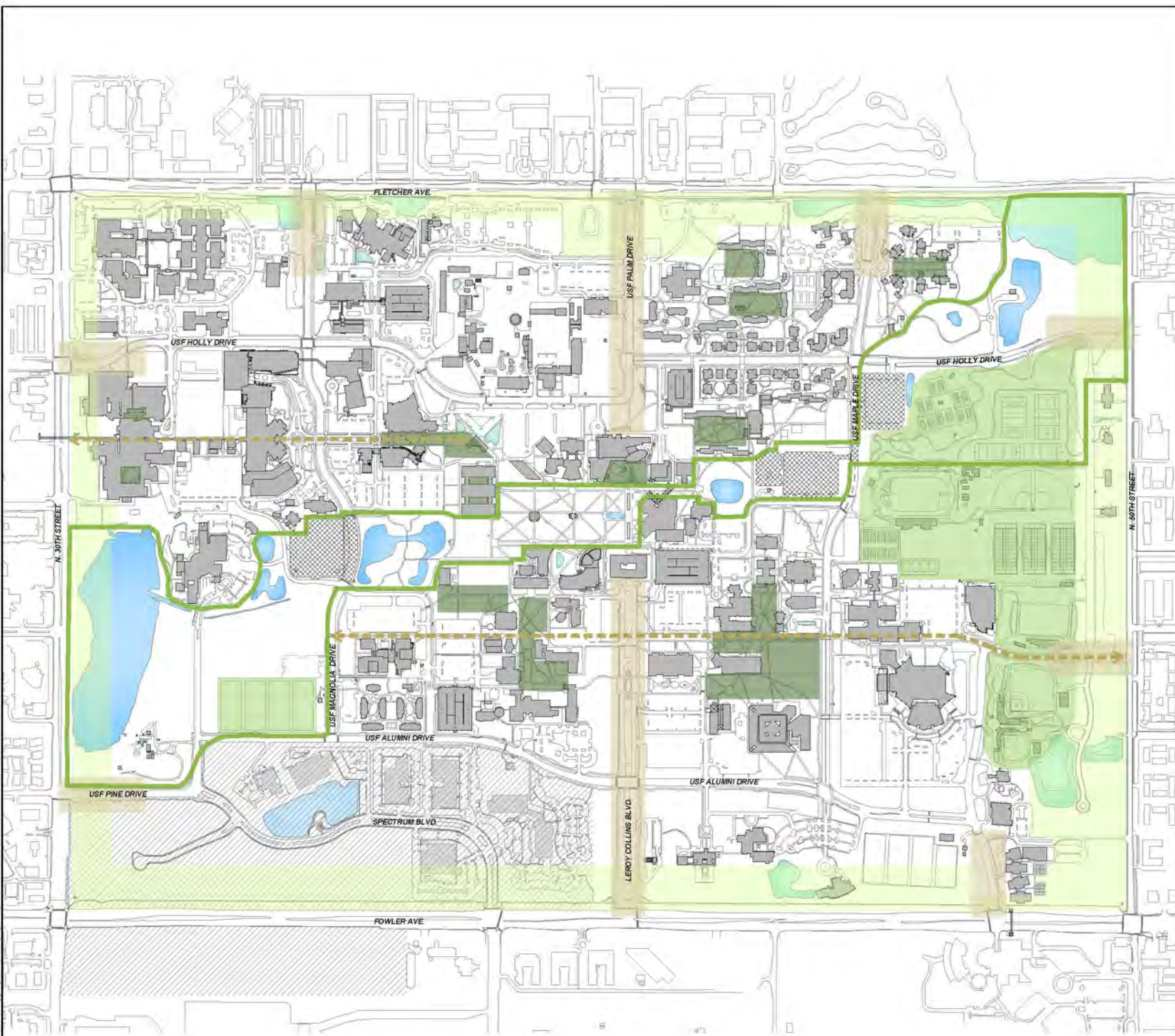
Area Not Included in Campus Master Plan

Element 9
Recreation and
Open Space


Figure 9.1
Athletic and
Recreation Facilities

Date
08/21/2015





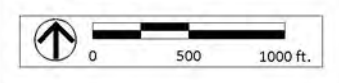
-  Greenway
-  Perimeter Open Space
-  Recreation/Athletics
-  Quadrangles/
Courtyards
-  Gateways
-  Gateways
-  Parking Area
within Greenway

 Area Not Included in
Campus Master Plan

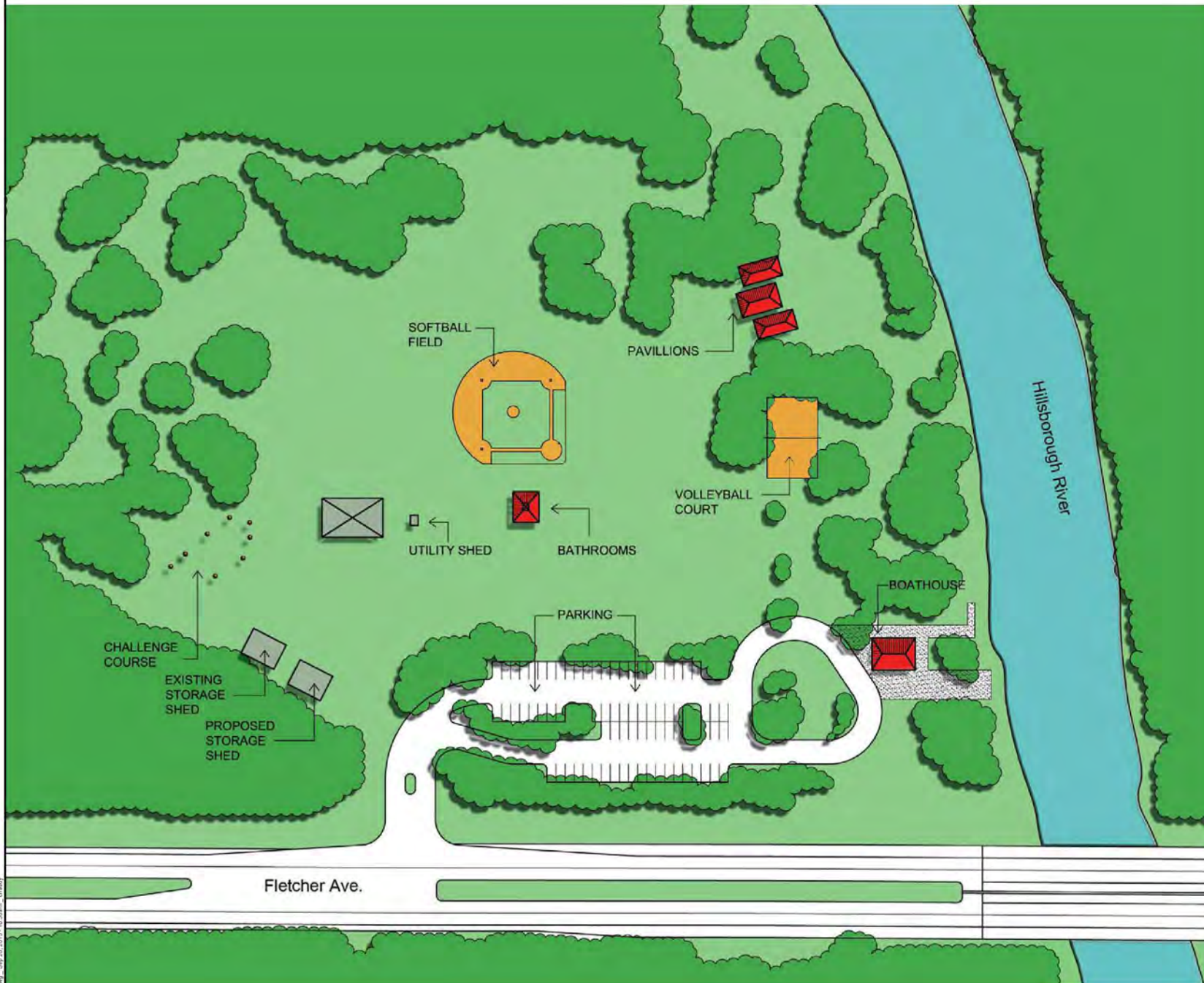
Element 9
Recreation and
Open Space

Figure 9.2
Open Space

Date
08/21/2015



Locus



Element 9
Recreation and
Open Space

Figure 9.3
Riverfront Park Plan

Date
08/21/2015



This Page Intentionally Left Blank.

Element 10 Intergovernmental Coordination

This element identifies and resolves goals, objectives, policies and development proposed in campus master plans that may be incompatible with adjacent local governments, and regional and state agency plans. Intergovernmental coordination shall be utilized to the extent required to carry out the provisions of this Chapter.

Host and affected local governments, agencies, and utility companies with which the University coordinates or is regulated by:

Regional and State:

Florida Department of Community Affairs (DCA): DCA is the state's land planning and community development agency. Its role is to assist Florida's communities in meeting the needs of Florida's continually expanding population. The department ensures that new growth complies with the state's vital growth management laws, while also assisting established communities revitalize their older or traditional neighborhoods.

Division of State Lands/Land Management Advisory Council (LMAC): LMAC acquires and disposes of lands, as directed by the Board of Trustees of the Internal Improvement Trust Fund. Among other functions, the division administers and maintains the records of all lands held by the Board of Trustees and sets boundary lines for lands owned by the Board of Trustees. The LMAC provides oversight for approximately 11 million acres of state lands, including upland leases for state parks, educational facilities, forests, wildlife management areas, historic sites, vegetable farming, and mineral, oil, and gas exploration.

Florida Department of Transportation (FDOT) – District 7: FDOT is responsible for preparing plans to construct and maintain roadways within the State of Florida. The University is located within District 7, which encompasses Citrus, Hernando, Pasco, Hillsborough and Pinellas counties. The FDOT roads adjacent to campus are Fowler Avenue and Bruce B Downs Boulevard. The University is required to maintain transportation concurrency at the State and local levels and some of the roads influenced by the traffic generated by the USF-Tampa campus external to the University are governed by the FDOT.

Florida Department of Environmental Protection (FDEP): FDEP is the lead agency in the state government for environmental management and stewardship, responsible for protecting Florida's air, water, and land. The Department is divided into three primary areas: Regulatory Programs, Land and Recreation, and Planning and Management. Florida's environmental priorities include restoring America's Everglades, improving air quality, restoring and protecting the water quality of Florida springs, lakes, rivers and coastal waters, conserving environmentally-sensitive lands, and providing citizens and visitors with recreational opportunities, now and in the future. USF complies with the National Pollutant Discharge Elimination System (NPDES) requirements through its participation with the FDEP Municipal Separate Storm Sewer System (MS4) permitting program.

Southwest Florida Water Management District (SWFWMD): SWFWMD manages water and related natural resources to ensure their continued availability while maximizing environmental, economic and recreational benefits. Areas of responsibility include: water supply; natural systems; water quality and flood protection. The District encompasses all or part of 16 counties and contains 98 local governments spread over approximately 10,000 square miles. A 13-member board appointed by the Governor and confirmed by the Senate governs the District. USF submits through SWFWMD for its Environmental Resource Permits (ERP) for all campus development impacts, as well as maintains its Water Use Permit (WUP) which establishes limits for its groundwater water withdrawal.

Tampa Bay Regional Planning Council (TBRPC): TBRPC is an association of local governments and gubernatorial representatives, created to coordinate planning and provide an opportunity for sharing solutions among the 43 jurisdictions in the Tampa Bay region. The region's four counties and numerous incorporated areas are required by law to exercise regional cooperation through membership on the Council. TBRPC is responsible for maintaining the Strategic Regional Policy Plan for the Tampa Bay Region, as well as for functions related to environmental management, water quality, emergency preparedness planning, protection and restoration of the Tampa Bay estuary, coastal zone management, housing and infrastructure analysis and review, local government comprehensive plan review, cross-acceptance, dispute, and review of transportation plans.

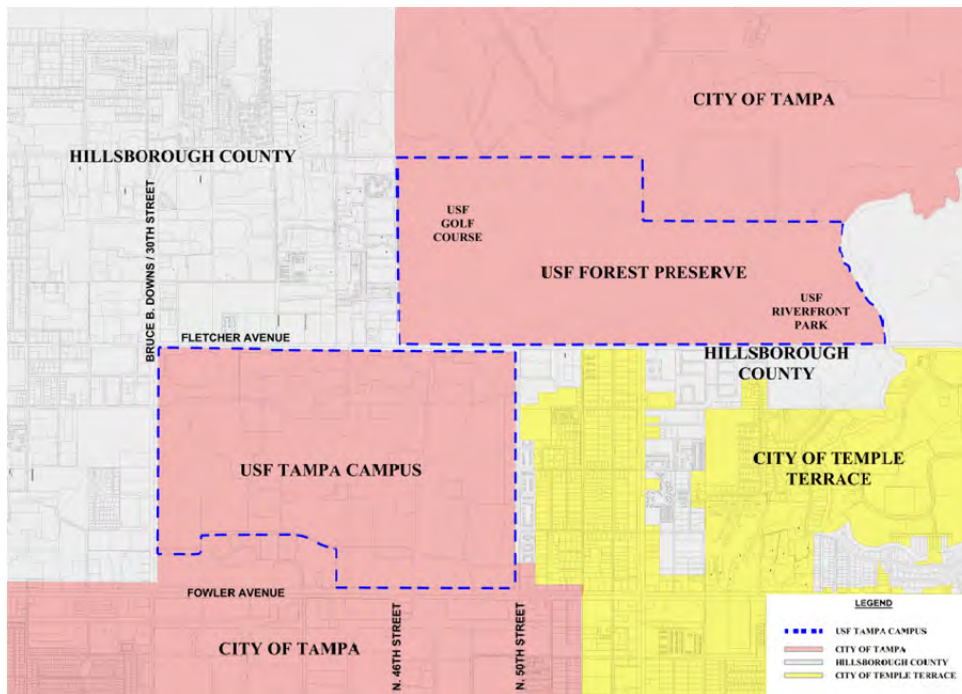
Tampa Bay Regional Transportation Authority (TBARTA): TBARTA was created by the Florida State Legislature in 2007 to develop and implement a Regional Transportation Master Plan for the seven county West Central Florida region consisting of Citrus, Hernando, Hillsborough, Manatee, Pasco, Pinellas, and Sarasota Counties. The agency consists of: a Governing board made up of elected officials and appointed members from across the region; a Citizens Advisory Committee (CAC) made up of citizen representatives appointed by the TBARTA Board; a Transit Management Committee (TMC) made up of the executive directors of the transit agencies in the region; and a Land Use Working Group (LUWG) made up of representatives from local government and regional land use planning agencies, environmental groups, the development community, transportation agencies, and the public. TBARTA's purpose is to improve mobility and expand multimodal transportation options for passengers and freight throughout the seven-county region.

Tampa Bay Water (formerly West Coast Regional Water Supply Authority): Tampa Bay Water is a regional water supply authority that provides wholesale water to three cities and three counties in the Tampa Bay region. The authority is funded through the sale of water to member governments. Member governments share the cost of developing new supplies, share in environmental stewardship, share voting rights equitably among the three counties, and pay the same wholesale water rates.

Tampa Bay Water responsibilities include:

- Planning, developing, producing and delivering a drinking water supply.
- Meeting the wholesale drinking water needs of Hillsborough County, Pasco County, Pinellas County, New Port Richey, St. Petersburg and Tampa (about 186 million gallons every day).
- Advocating for the protection of the public's water resources. Tampa Bay Water is a non-profit, special district of the state created by interlocal agreement among member governments. Policies are established by a nine-member board of directors, with two elected commissioners from each member county and one elected representative from each member city.

Adjacent Municipalities: USF is located in the City of Tampa boundaries. Boundary roads Fletcher Ave, Bruce B Downs Blvd, and 50th ST ar Hillsborough County roads and Fowler Ave is Florida Department of Transportation (FDOT)



City of Tampa

Transportation Division: The Transportation Division of the City of Tampa focuses on transportation planning, project development and management, traffic engineering, right of way permitting, and mass transit initiatives, as well as the City's overall mobility needs. The Transportation Division reports directly to the Administrator of Public Works and Utilities Services for the City of Tampa.

Land Development Coordination (LDC): The LDC is part of the Growth Management and Development Services Department of the City of Tampa. LDC houses the Community Planning and Zoning Section, Subdivision/Development of Regional Impact (DRI) Section and Right-of-Way and Mapping Section and the Comprehensive Planning Section. The mission is to efficiently and fairly administer City Codes and Policies related to land development. The goal of the department is to be responsive to the public's need for accurate information related to the development of their property.

Tampa Police Department: The University context area located within the City of Tampa limits is served by the District Two Patrol Division. The District Two Patrol Division provides uniformed officer patrols, Street Anti-Crime squads, Quick Uniformed Attack on Drugs (Q.U.A.D.) squads, and property crime detectives. USF Police Department has a mutual aid agreement with the City of Tampa Police and Hillsborough County Sheriff Departments.

Fire Department: Tampa Fire Rescue provides essential services in the areas of fire prevention, fire protection, fire suppression, and emergency medical care for the seriously ill and injured. Tampa Fire Rescue also provides hazardous materials response, aircraft rescue, marine firefighting, and fire and life safety education to the public. The Fire Marshal's office, a division of Tampa Fire Rescue, investigates causes of fire, conducts building code reviews, and enforces fire and life safety codes.

Department of Growth Management and Development Services: The City of Tampa Department of Growth Management and Development Services is comprised of the following divisions: Administration, Historic Preservation and Urban Design, Construction Services, Housing & Community Development (HCD), Land Development Coordination (LDC), and Real Estate. The overall department function is to ensure safe and affordable housing and commercial structures that are compatible and compliant with applicable codes and ordinances. The Department is also home to the City's Green Officer, who guides the City in programs and services as they work toward becoming a more sustainable community – “A GREEN CITY.”

Water Department: The Tampa Water Department, a department under Public Works and Utility Services, treats and delivers drinking water to a service population of approximately 652,000 people in the Tampa Bay area, encompassing 211 square miles. It is one of the few in the Country that treats both ground and surface water for drinking purposes. The Department is responsible for city-wide water conservation efforts to help manage local water demands.

Solid Waste Department: The Department of Solid Waste & Environmental Program Management provides environmentally-safe, time-responsive, and cost-effective collection, disposal, and recycling services for over 82,000 residential and commercial customers. The department also oversees the City of Tampa's environmental Programs. Approximately 360,000 tons of solid waste is processed annually at the McKay Bay Refuse-to-Energy Facility where it is converted to electrical energy.

Wastewater Department: The Wastewater Department collects, treats, and disposes of more than 50 million gallons of wastewater per day from over 98,000 customers in the City of Tampa and its immediate suburbs. Sanitary treatment requires the careful removal of pollutants and pathogens from wastewater in a manner consistent with federal, state, and local regulations so that the end product can be returned to the environment for natural recycling. The Wastewater Department has four primary divisions: Administration; Engineering; Advanced Wastewater Treatment Plant; and Wastewater Collection.

Tampa City Council: The Tampa City Council is a legislative branch of City Government and operates in accordance with the provisions of the 1974 Revised Charter of the City of Tampa. The City Council is responsible for enacting ordinances and resolutions that the Mayor of Tampa administers as chief executive officer. The USF Development Agreement is approved by the Tampa City Council after public hearings.

Public Works Department: The City of Tampa Public Works Department is composed of the following divisions: Clean City; Facility Management Division; Fleet Management Division; Parking Division; Stormwater Department; Right of Way Management Division. The Department of Public Works is dedicated to providing safe transportation mobility by maintaining all the Right of Way assets such as roads, sidewalk, traffic signals, traffic signs, pavement markings, street lights, special events, permit inspections and movable bridges.

Hillsborough County

Board of County Commissioners: The Board approves the County's operating and capital budgets and the County's capital improvement program. It may take action on any programs for the improvement of the county and the welfare of its residents. Under a Charter Ordinance that went into effect May 1985, County Commissioners are directed to perform legislative functions of government by developing policy for the management of Hillsborough County.

Planning and Growth Management Department: The Planning and Growth Management is a full service community development department responsible for conducting planning, zoning, development review, permitting, and inspections services. The Department serves the public under the direction of the Board of County Commissioners and the County Administrator. Basic services for planning and managing the County's

growth are focused on planning for future additions of new residential subdivisions and commercial development, meeting the provisions of the County's Land Development Code, planning for capital improvements, and ensuring development is built to lifesafety and codes construction standards.

Public Works Department: The Mission of the Public Works Department is to provide and manage safe, efficient, and environmentally sensitive transportation and storm water systems to satisfy diverse mobility needs and to provide flood protection to public and private lands.

Solid Waste Department: The Hillsborough County Solid Waste Management Department (SWMD) is responsible for the overall operation of the Hillsborough County Integrated Solid Waste Management System (System), which is responsible for collection, transportation, and disposal of all solid waste generated or brought into the System service area. In addition, based on inter-local agreements with the City of Tampa and Temple Terrace, the System also provides various services to these communities. To accomplish this mission, the SWMD provides a wide range of services which combine to make up the Integrated System. The SWMD's efforts are focused on quality customer service and on the continuous improvement of the effectiveness and efficiency of the services provided.

Emergency Management Operations: Emergency Management is responsible for planning and coordinating the evacuation and sheltering of county residents in the event of a natural or manmade disaster. Hillsborough County Emergency Management takes command of all jurisdictions. This agency is also responsible for planning, orchestrating and coordinating response actions and continuity of government in the aftermath of a major disaster. USF serves Emergency Management Operations as the primary Special Needs Shelter at the Sun Dome. Pizzo Elementary School located on USF campus property (corner of 50th St. and Fowler Ave.) is a general public emergency shelter. These are links to the USF emergency information and coordinating entities:

<http://www.usf.edu/pdfs/USF-Emergency-Operations-Plan.pdf>

<http://usfweb2.usf.edu/Adminsvc/publicsafety/>

Hillsborough Area Regional Transit Authority (HART): HART was created in October of 1979 to plan, finance, acquire, construct, operate, and maintain mass transit facilities and supply transportation assistance in Hillsborough County. HART provides the following services: Local Fixed Route and Express Bus Service; In-Town Trolleys; Vanpool & Guaranteed Ride Home Service; 100% Wheelchair/Bike Accessible Buses; Transportation Accessible Program (TAPS); Door-to-Door Paratransit Service; Travel Planning Assistance; Circulator Service in South County; Travel Training; Employer/Subscription Mini-Bus Service; and Bus Buddy Training. This provides a multimodal approach to allow the region to meet the transportation needs of citizens, reduce congestion on the Bay Area's roadways, improve air quality, and provide more sustainable options for traveling. HART has implemented Bus Rapid Transit on Fletcher from Telecom Park to Downtown Tampa. The cooperative U-Pass allows USF students to ride Hart Buses free. The HART Transfer Center is located near the USF Campus on 131st Street. The campus is served by several HART Routes. USF Parking and Transportation Services coordinates the USF Bull Runner shuttle with HART services on an as-needed basis. See Element 5 Transportation for more information.

Hillsborough County Planning Commission: The Planning Commission serves the citizens of Hillsborough County, City of Plant City, City of Temple Terrace, and the City of Tampa by providing a vision for improving the quality of life of county residents. The Planning Commission is an independent, consolidated planning agency, led by 10 citizen appointees from each of the 4 local jurisdictions. The Commissioners are tasked to promote and coordinate comprehensive long-range planning, growth-management, transportation, and environmental protection, through recommendations to the local jurisdictions.

Hillsborough Metropolitan Planning Organization (MPO): Mandated by federal and state law, the MPO is responsible for establishing priorities to meet short-term (next 5 years) and long-term multimodal

transportation needs for Tampa, Temple Terrace, Plant City, and unincorporated Hillsborough County. USF is represented on the MPO Livable Roadways Committee.

Environmental Protection Commission (EPC) of Hillsborough County: The EPC of Hillsborough County was created in 1967 by special act of the Florida Legislature to control and regulate activities that are or may reasonably be expected to cause pollution or contamination of air, water, soil, and property, or cause excessive and unnecessary noise.

Hillsborough County Sherriff Department: USF Police Department has a mutual aid agreement with Hillsborough County Sheriff Department and the City of Tampa Police Department.

City of Temple Terrace

Temple Terrace City Council: The Temple Terrace City Council is the policy-making branch of the City of Temple Terrace and is comprised of the Mayor and City Council. These elected officials, together with a City Manager, govern the City and represent the citizens as they review activities and establish policies for implementation in the best interest of the health, safety and welfare of the community.

Community Development Department: The Community Development Department is primarily responsible for administrating, directing, coordinating, and supervising land development regulation functions and City operations involving site planning, permitting, inspections, geographical information systems and mapping. The department's work is divided into two programs:

Planning and Development and Building. Planning and Development is responsible for coordination and implementation of the City's land development regulation and review process. Key areas of responsibility include: Site plan review; Comprehensive plan changes; Rezoning; Variances; Business district redevelopment planning, including support staff to the City's Community Redevelopment Agency; and Maintenance of the City's Geographic Information System (GIS) database. The Building Division has two main functions: Regulation of building construction activities through permitting and inspection; and Enforcement of the non-criminal aspect of city codes with regard to private and public property.

Public Works Department: The Public Works Department consists of seven divisions: Sanitation, Sewer, Water, Streets, Facility Maintenance, Central Garage, and Central Warehouse under the supervision of Public Works Administration.

Fire Department: The Operations Division includes all emergency and non-emergency responses made by the department's fire and medical teams. The Operations Division oversees and maintains manpower, equipment, vehicles, training, and communications and protects lives and property in the City from all hazards. This is achieved by managing staffing, training, equipment and other apparatus to provide City residents with fire, paramedic medical treatment, and protection from threats to life and property. Police Department: The Police Department is the law enforcement branch of Temple Terrace municipal government. One of the primary objectives of the Police Department is to provide a safe, secure community environment for all residents, businesses, and visitors. The Department serves the community by protecting life and property, preserving peace and order, preventing and detecting crime, enforcing all laws and ordinances and promoting the safe, efficient use of the City's streets and highways.

Specific problems and needs:

USF deals with specific issues through scheduled meetings on an as needed basis. The majority of problems requiring coordination for resolution are related to adjacent roadway conditions of safety for pedestrians and bicyclists due to traffic congestion. For example, Hillsborough County quickly responded to USF's concern for pedestrian/bicycle safety on 50th Street by conducting a Safety Audit of conditions and then implemented the recommendations with concurrence of USF. Similarly, USF staff was also in coordination

for the Fletcher Pedestrian Study and Safety Improvements, including a sidewalk the length of the north campus edge. These issues typically also have the involvement of the USF Center for Urban Transportation Research (CUTR), the New North Transportation Alliance (NNTA), and the MPO Livable Roadways Committee. Hillsborough County continues to work with USF for future off-campus pedestrian and bicycle improvements on 42nd St., 46th ST., 56th St., and Bruce B Downs in addition to signal modifications for the proposed new campus road connections the Bruce B Downs and Fletcher at 46th ST.

Previous fair share payments made by the University to its host or affected local government as a result of existing Campus Development Agreement(s):

For the Development Agreement based on the 1995 Campus Master Plan, the City of Tampa received \$6,000,000 from the State of Florida Concurrency Trust Fund. Of that, \$3,000,000 was distributed to USF to implement an off-campus shuttle route to serve the many students living to the north of campus and thereby reduce off-campus traffic. From the Development Agreement based on the 2005 Plan, the City received \$5,273,305 from the State Concurrency payments and USF Parking and Transportation Services (PATS) received \$2,273,305 for the expansion of the Bull Runner shuttle with a new route to the south of Fowler Avenue. The current Agreement expires on December 31, 2025. The University is currently working with the City of Tampa to extend the current Agreement to 2025.

<http://www.usf.edu/administrative-services/facilities-planning/documents/master-dev-agreement.pdf>

This Page Intentionally Left Blank.

Element 11 Capital Improvements

This element evaluates the need for public facilities as identified in other campus master plan elements; to estimate the cost of improvements for which the University has fiscal responsibility; to analyze the fiscal capability of the University to finance and construct improvements; to adopt financial policies to guide the funding of improvements; and to schedule the funding and construction of improvements in a manner necessary to ensure that capital improvements are provided when required based on needs identified in the other Campus Master Plan Elements. All development is contingent upon the availability of funding.

Funding mechanisms available for capital improvement financing:

1. Public Education Capital Outlay and Debt Service Trust Fund (PECO)

PECO is Florida's financing program for capital improvements at the state's public schools, community and state colleges and universities. PECO funds are used for construction, as well as the remodeling, renovation and repair of existing educational facilities.

2. Capital Improvement Trust Fund (CITF)

This source of funds is a student fee that each SUS institution collects. It is used for student support facilities.

3. Revenue bonds

Revenue bonds can be used by universities to fund capital improvement projects that are approved by the Board of Governors and, if required by Florida Statute, the State Legislature. They are backed by revenue authorized for such purposes such as student fees, revenues from sales and services of auxiliary enterprises or component units of the University, royalties and licensing fees, assets of University foundations or other University direct support organizations, or any other revenues permitted by law. Revenue bonds are used to fund facilities functionally related to the University operation or direct-support organization financing the capital outlay project.

4. Facilities Enhancement Challenge

This is a program that encourages gifts from private sources to specific projects that the University can justify as instructional or research-related. The State provides matching funds from general revenue or lottery funds. This fund was suspended indefinitely in 2011.

5. Grants and Donations

The University may receive grants or private donations from third-party sources specifically for facilities.

6. Auxiliary Enterprises

Auxiliary enterprises include activities that directly or indirectly provide a product or a service, or both, to the campus community and for which a charge is made. These are self-supporting enterprises and include activities such as housing, bookstores, student health services, continuing education programs, food services, college stores, operation of vending machines, specialty shops, day care centers, golf courses, student activities programs, data center operations, and intercollegiate athletics programs.

7. General Revenue and Lottery Funds

These funds must be appropriated by the legislature for a specific project.

8. Student Green Energy Fund

The USF Student Government passed a referendum expressing support for a Student Green Energy

Fund at the University. The fund is designed to support projects that increase energy efficiency on campuses. The fund for USF was approved by the BOT and BOG. Every three years, students will vote on this assessment. The fund is managed by the Office of Sustainability. Student project proposals are evaluated for funding based on established criteria, including return on investment, two times per year after an advertised call for proposals. Some of the recently funded projects include: installation of photovoltaic systems, LED retrofits, lighting sensors, Smart Parking Guidance System, and a campus Bike Share system, among others.

9. Revolving Loan Fund (RLF)

USF may have the opportunity to establish an RLF, a fund that can be used to finance projects that have a cost-savings component, often tied to energy efficiency. The money saved as a result of the project is then paid back into the fund to be made available for future projects. A revolving loan fund is an effective “paid from savings” approach that would allow the University to implement repairs and upgrades necessary to reduce energy and water use and associated costs. This fund would represent a new source of funding for USF and requires obtaining appropriate approvals.

10. Public-Private Partnerships

The University may have the opportunity to enter into an agreement with a private partner to construct additional facilities such as housing, dining, etc.

11. Power Purchase Agreements (PPA)

USF may have an opportunity to enter into PPA to help finance renewable energy generation projects. A PPA is a financial arrangement in which a third-party developer owns, operates, and maintains a renewable energy system, and a host customer agrees to site the system on its property purchase the system’s electric output from the electricity services provider for a predetermined period. Entering into a PPA would allow USF to receive stable, sometimes lower cost electricity, and avoid many of the traditional barriers to install renewable energy installations, such as high up-front capital costs; system performance risk; and complex design and permitting processes. The project feasibility will depend on type of project, campus site availability, cost savings to USF, special funding for purchased utilities if cost increases, reliability of power, and administrative approval.

Future capital improvements

The 5 year capital improvement plan includes funding requests from Public Education Capital Outlay (PECO) for future capital projects to be between 2016-2017 to 2020-2021.

STATE UNIVERSITY SYSTEM
Five-Year Capital Improvement Plan (CIP-2) and Legislative Budget Request
Fiscal Years 2016-17 through 2020-21

University of South Florida System

7/14/2015

PECO-ELIGIBLE PROJECT REQUESTS

Priority No	Project Title	Fiscal Year					Academic or Other Programs to Benefit from Projects	Net Assignable Square Feet (NASF)	Gross Square Feet (GSF)	Project Cost (Proj. Cost)	Project Cost Per GSF (Proj. Cost/ GSF)	Educational Plant Survey Recommended Data/Rec No.	Approved by Law - Include GAA Reference
		2016-17	2017-18	2018-19	2019-20	2020-21							
1	TPA-Utilities/Infrastructure/Capital Renewal/Roofs	\$ 10,000,000	\$ 11,000,000	\$ 11,000,000	\$ 11,500,000	\$ 11,500,000	All	Not Applicable	Not Applicable	\$ 0,000,000	Not Applicable	2.12 / FSES	
2	STP-Utilities/Infrastructure/Capital Renewal/Roofs	\$ 2,500,000	\$ 3,000,000	\$ 3,000,000	\$ 3,500,000	\$ 3,500,000	All	Not Applicable	Not Applicable	16,000,000	Not Applicable	2.12 / FSES	
3	SM-Utilities/Infrastructure/Capital Renewal/Roofs	\$ 1,900,000	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000	All	Not Applicable	Not Applicable	7,000,000	Not Applicable	2.12 / FSES	
4	TPA-USF Health Heart Institute	\$ 15,755,000					Health	80,000	100,000	\$2,148,118	\$ 501	2.12 / 28 #4.1	
5	TPA-USF Health Morsani College of Medicine Facility	\$ 20,000,000	\$ 20,000,000				Health	94,450	141,675	\$2,000,000	\$ 438	2.12/28#4.2&4.3	
6	TPA-Interdisciplinary Science Teaching & Research Facility	\$ 9,031,204					Sciences	115,758	193,282	\$3,763,787	\$ 433	8.05#1-3.3	
7	TPA-Cybersecurity/Data Center	\$ 7,178,955	\$ 15,755,578	\$ 14,000,000			Multiple	25,925	38,000	\$8,934,563	\$ 559	5.63	
8	SM-Academic STEM Facility	\$ 2,223,854	\$ 22,744,971	\$ 4,160,000			Multiple	51,724	75,000	\$9,128,955	\$ 388	780	
9	TPA Health College of Pharmacy	\$ 5,071,375	\$ 35,763,040	\$ 2,520,000			Health	60,333	102,200	\$3,254,415	\$ 425	780	
10	TPA-STEM (Engineering Expansion)	\$ 8,425,888	\$ 35,674,213	\$ 37,932,493			Multiple	104,970	173,235	\$2,032,794	\$ 230	2.12 / 1 # 3.3	
11	TPA-STEM Learning Center	\$ 5,580,201	\$ 31,700,585	\$ 16,630,787			Multiple	88,960	133,440	\$5,911,573	\$ 419	2.12 / 1 # 3.1	
12	TPA-Public Safety Building Phase I		\$ 4,454,555	\$ 19,171,220	\$ 8,063,740		All	40,000	60,000	\$1,689,515	\$ 528	2.12 / 1 # 3.9	
13	STP-STEM Teaching/Research Facility		\$ 2,662,932	\$ 22,568,330	\$ 2,590,000		Multiple	49,200	69,600	\$7,522,480	\$ 498	780	
14	TPA-CMC Remodeling (PHY)		\$ 2,116,026	\$ 13,491,860	\$ 1,289,186		Multiple	49,734	81,765	\$6,896,072	\$ 207	2.12 / 1 # 2.1	
15	TPA-USF Health Renovate/Reconfigure Medical Research Lab Facility		\$ 4,677,890	\$ 20,313,600	\$ 30,313,600		Health	128,990	128,990	\$5,305,150	\$ 436	2.12 / 38 # 2.4	
16	TPA-USF Health Major Renovation/Remodeling/Addition Research Space		\$ 3,774,297	\$ 8,283,309	\$ 22,852,362		Health	44,200	75,900	\$4,512,048	\$ 591	2.12 / 38 # 4.2	
17	TPA-USF Health Center of Excellence for Diabetes & Autoimmune Disorders		\$ 5,300,400	\$ 32,715,000	\$ 1,820,000		Health	64,200	96,300	\$8,844,400	\$ 414	780	
TOTAL		\$ 86,766,637	\$ 177,138,387	\$ 116,229,210	\$ 133,044,899	\$ 93,338,888							

CITF PROJECT REQUESTS

Priority No	Project Title	Fiscal Year					Academic or Other Programs to Benefit from Projects	Net Assignable Square Feet (NASF)	Gross Square Feet (GSF)	Project Cost (Proj. Cost)	Project Cost Per GSF (Proj. Cost/ GSF)	Committee Approval Date
		Year 1	Year 2	Year 3	Year 4	Year 5						
1	USF Tampa Phyllis P. Marshall Student Center (MSC) Expansions Phase I (Planning)	\$ 3,022,369					Student success	28,354	38,065	\$14,708,388	\$ 388	2/21/2013
2	USF Health Student Union Annex Facility Phase IV	\$ 641,646					Student success	15,000	20,000	\$5,892,500	\$ 295	2/21/2013
3	USF St. Petersburg Safety, Environmental and Co-Curricular/Wellness Upgrades Ph I	\$ 644,141					Student success	0	0	\$2,253,827	2/1/2013	
4	USF Sarasota-Manatee Student Outdoor/Recreation Facilities Phase IV	\$ 202,852					Student success	0	0	\$887,048	5/14/2012	
TOTAL		\$ 3,913,008	\$ 0	\$ 0	\$ 0	\$ 0						

- Off Campus
- Remodeling
- Complete

Projects from other funding sources may include:

- International facility for the INTO Program
- Marshall Student Center (MSC) Addition
- MSC Expansion/Student Success Building
- Student Housing and Support
- Campus Recreation Housing Annex
- USF Wellness Center
- Student Housing and Support
- Parking Structures
- Clubhouses for Tennis, Baseball, Softball
- Sidewalks, bikelanes
- Roads and Intersection Improvements
- Utility and Infrastructure Improvements

Operations and maintenance costs for existing facilities:

2014-2015:


PHYSICAL PLANT	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	
025000-000000 ADMINISTRATION PHY. PLANT	8.00	405,561	555,658					40,200			595,859	
025002-000000 TECHNICAL SVCS PHY. PLANT	6.00	304,495	425,244					178,174			678,818	
025004-000000 FAC ENHANCEMENT PHY. PLANT	6.00	329,562	427,308					66,000			514,568	
025006-000000 MOVES PHY. PLANT											18,173	
025008-000000 QUALITY ASSURANCE PHYD PLANT	1.00	81,035	70,463					12,000			82,953	
025100-000000 UTILITIES PHY. PLANT	22.00	852,059	1,231,553					22,300			1,774,289	
025100-PPE001 UTILITIES PHY. PLANT BOILERS											43,420	
025100-PPE002 UTILITIES PHY. PLANT CHILLERS											194,440	
025100-PPE003 UTILITIES PHY. PLANT COOLING TOWERS											22,900	
025100-PPE004 UTILITIES PHY. PLANT PLUMBING											1,670	
025100-PPE005 UTILITIES PHY. PLANT LIFT STATIONS											2,300	
025102-000000 ENGINEERING PHYSICAL PLANT								19,000			30,540	
025300-000000 POST OFFICE PHY. PLANT	12.00	376,141	548,026					5,700			592,876	
025400-000000 BUILDING SVCS PHY. PLANT	159.95	3,661,609	5,345,905					950,000			6,738,602	
025500-000000 MAINTENANCE PHY. PLANT	49.00	1,816,125	2,631,826					96,000		10,000	3,544,126	
025500-PPE006 MAINTENANCE PHY. PLANT KEY SHOP											44,500	
025500-PPE007 MAINTENANCE PHY. PLANT HVAC											53,700	
025500-PPE008 MAINTENANCE PHY. PLANT ALARM SHOP											59,810	
025603-000000 STORED PHY. PLANT	5.00	174,236	248,732					29,000			283,312	
025600-000000 GROUNDS PHY. PLANT	36.00	1,085,764	1,624,126					228,000			2,133,502	
025700-000000 VEHICLE PHY. PLANT	7.00	240,361	367,861								412,111	
PHYSICAL PLANT TOTAL	311.95	9,305,948	13,476,692					1,605,174		2,730,531	10,000	17,822,397

Complete USF Operating Budgets by Year can be found on the website:

<http://usfweb2.usf.edu/bpa/opbudgets.htm>

For the most recent year, 2014-2015, the Tampa Campus information is found on pages 2-1 through 2-34 and for USF Health on pages 5-1 through 5-16.

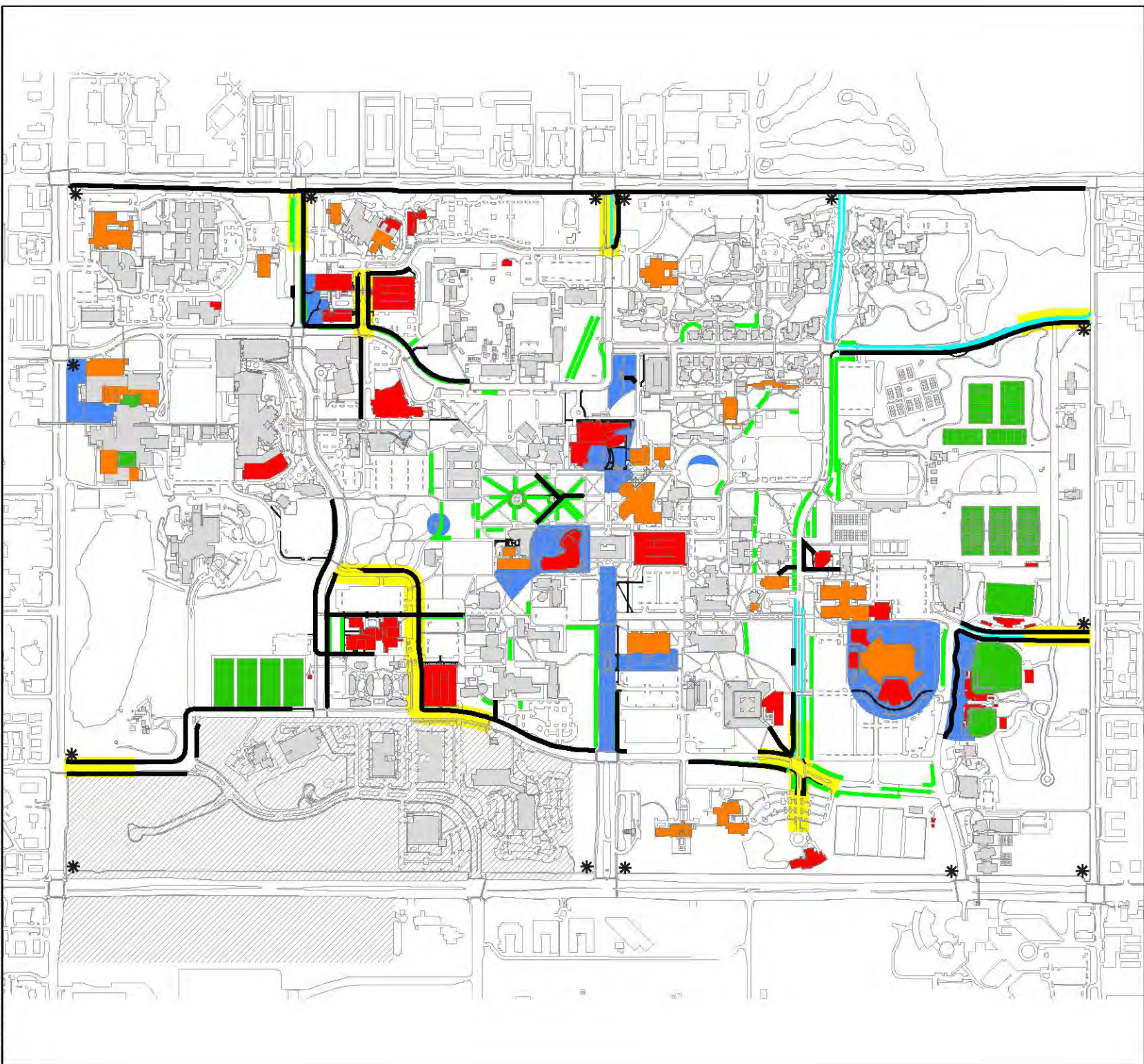
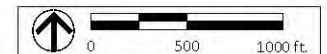
-  Renovated Building
-  New Building
-  New Park/Plaza
-  Field Improvement
-  Road Improvement
-  New Bike Lane
-  New Sidewalk
-  New Trees

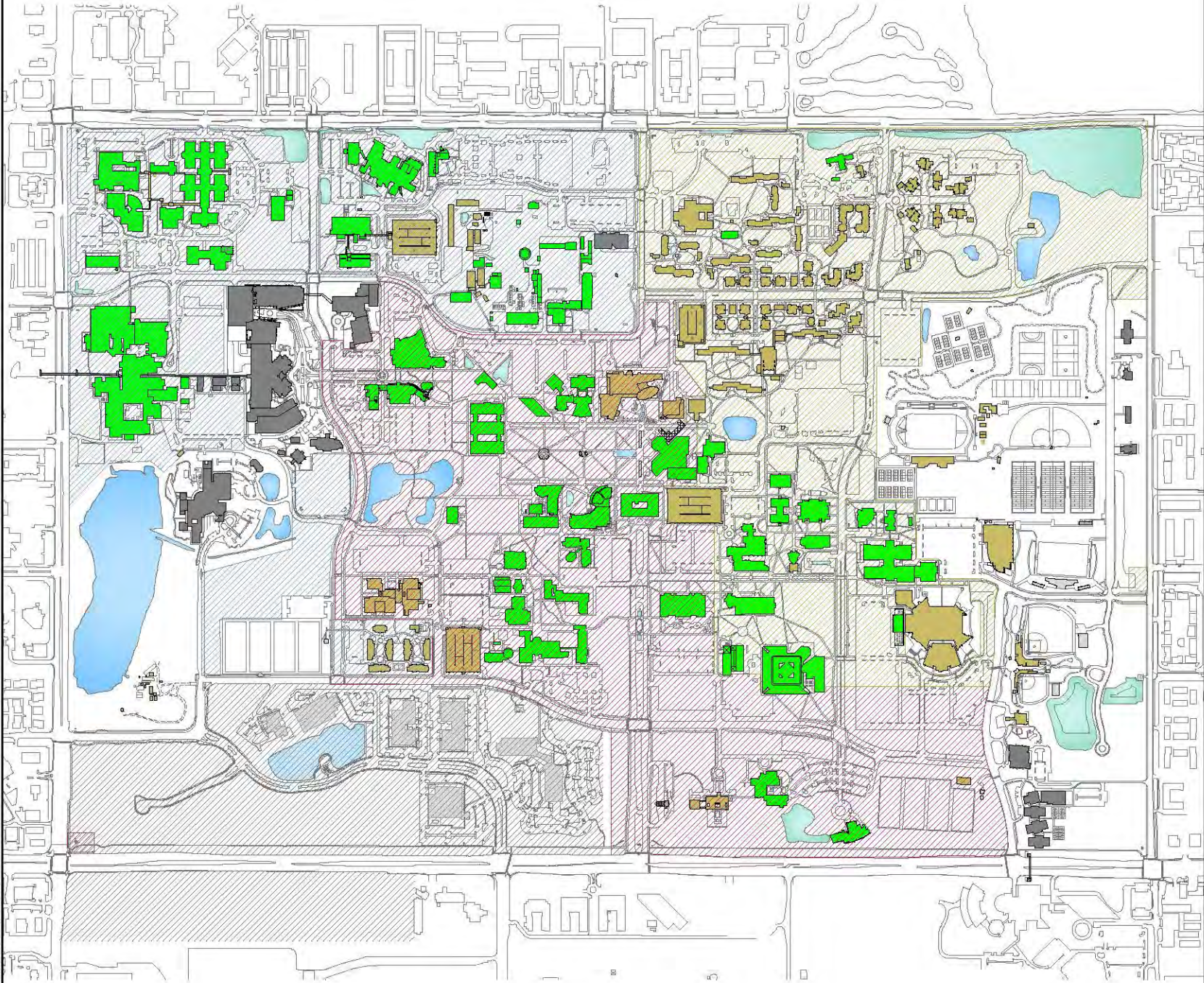
 Area Not Included in
Campus Master Plan

Element 11
Capital Improvements


Figure 11.1
2005-2015
Projects
Completed

Date
08/21/2015





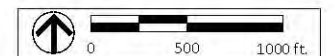
-  Non-PPD Buildings
-  PPD Buildings
-  Sub-Leases
-  Maintenance Core 1
-  Maintenance Core 2
-  Maintenance Core 3

 Area Not Included in
Campus Master Plan

Element 11
Capital Improvements

Figure 11.2
Building Maintenance
Responsibilities

Date
08/21/2015



This Page Intentionally Left Blank.

2015-2025
USF System
Campus Master Plan Update

Appendix C
Evaluation and Appraisal Report

Tampa



Evaluation and Appraisal Report

Table of Contents

Introduction

Element 4 Future Land Use

Element 5 Transportation

Element 6 Housing and Student Support Services

Element 7 Infrastructure

7.1 Stormwater Management

7.2 Potable Water

7.3 Sanitary Sewer

7.4 Solid Waste

7.5 Hot Water

7.6 Chilled Water

7.7 Electrical Power and other Fuels

7.8 Data/Voice Communications

Element 8 Conservation

Element 9 Recreation and Open Space

Element 10 Intergovernmental Coordination

Element 11 Capital Improvements

This Page Intentionally Left Blank.

Evaluation and Appraisal Report

2015-2025 USF Campus Master Plan Update

The Evaluation and Appraisal Report was the documentation of the first review of the Goals, Objectives, and Policies of the 2010-2020 USF Campus Master Plan Update. It was a preliminary assessment of whether each item was completed, an on-going effort, not implemented, or should be deleted.

The Report was done in 2014 for the required Elements 4 – 11 with the participation of the Master Plan workgroups which had been assembled for each Element in preparation for the five year 2015-2025 USF Campus Master Plan Update. The workgroups were composed of USF students, faculty and staff with knowledge of each area and who could contribute to the Update documents.

As the Update work progressed over time, most of the initial assessments and recommendations for the updates to the Goals, Objectives, and Policies were included in the proposed revisions, some were reconsidered, and some new edits were made based on feedback and reducing duplication throughout the document.

This Page Intentionally Left Blank.

2015-2025 USF - Tampa Campus Master Plan Update
 Evaluation and Appraisal Report

Element 4: Future Land Use.

Goal 1: The Future Land Use goal of the Tampa Campus Master Plan is to clarify and strengthen the established campus land use pattern and improve the relationship between land uses on and off the campus. (See Figures 4-1, 10 Year Campus Master Plan Concept, 4-2, Long Range Campus Master Plan Concept, and 4-3, Context Area).

		Status			Delete?	Comments/Problems/Recommendations
		Complete	Ongoing	Not Implemented		
Objectives & Policies						
Objective 4.1	Ensure more effective use of land and containment of walking distances in the academic/residential core through higher density development and infill. Concentrate program expansion in existing land use districts. Abide by the recommended minimum, and where indicated maximum, build out and FAR limits for each land use district as described and illustrated in this plan element and the USF Design and Construction Guidelines.					
Policy 4.1.1	The University shall abide by the land use districts as described and illustrated in this plan element in locating facilities, to maintain compatibility of uses, to maintain efficient use of the land resource, and to reduce distance and improve quality of connections between functions so as to reduce vehicle use on campus by encouraging non-vehicular circulation – walking and bicycling – and shared shuttle and potential tram access. Further, the adoption of land use/density districts as described herein will guide the concentration of academic and residential expansion within existing use districts. The maximum allowable intensity of development for each respective district shall be the "recommended maximum build out" for the eight land use districts as indicated in this element. The "mix" of allowable land uses for each respective district shall be as specified for the districts in this element. It is expressly clear and understood that district densities are recommendations. Any calculations for determining threshold changes per s. 1013.30(9), F.S., will be based on total campus density or impact. Policy 4.1.2: The University shall abide by land(...)		x			check wording at end

Policy 4.1.2	The University shall abide by land management procedures to ensure careful use of the University's existing land resources. Those procedures shall consist of the application of policy actions as described in Element 4, Future Land Use policies, and will be administered by the Office of Facilities Planning and Construction.		x				
Policy 4.1.3	One-story temporary structures are inefficient in terms of land use, energy consumption, and maintenance funds, and create potential risks in the event of a hurricane or other natural disaster. The University shall remove one-story occupied temporary buildings as soon as practical. Installation of additional units shall be prohibited, except on an emergency basis with removal dates prescribed and monitored.		x				to consider adding "perminent" and "threshold"
Policy 4.1.4	The University shall assess the appropriate location for unforeseen functions or land uses that may arise from grant awards or other unanticipated circumstances by comparing those unforeseen uses with the uses and 10-year density guidelines set forth for land use districts in this plan element. Upon the determination of appropriate location and consistency with adjacent programs, open space and circulation functions, and density guidelines, the University will undertake pre-planning and site planning studies. In the event that the appropriateness is in question, the subject use will be submitted for review under the procedures of Policy 4.9.2 below.		x				
Policy 4.1.5	The University shall concentrate academic and residential program expansion in their respective Land Use districts as shown in Figure 4-4, 10 Year Campus Land Use Districts. Building locations indicated in Figure 4-1, 10-Year Campus Master Plan Concept may be exchanged for other building locations, as depicted in Figure 4-2, Long Range Campus Master Plan Concept, if the alternative location is deemed preferable due to unforeseen or changed conditions related to program, cost, or other justifiable reason, and is within the same Future Land Use District. Any such location changes shall be effected by approval of the USF Board of Trustees without a Campus Master Plan amendment, provided that the project supports the primary land use function and is consistent with Figure 4-2, Table 4.1, Potential Building Development Capacity – 10 Year Plan and Table 4.2, Potential Structured Parking Capacity – 10 Year Plan in this element, as well as with the Campus Development Agreement with the City of Tampa.		x				

Policy 4.1.6	The University shall, through its monitoring and management of future development, ensure that the amount of future development within each land use district will meet or exceed the capacities identified in Table 4.1 in this element.		x			
Objective 4.2	Preserve and protect existing natural resource areas including Lake Behnke, located along Bruce B. Downs Boulevard, the wetland area at the corner of Fletcher and 50th Street and the 735-acre USF Forest Preserve Area north of Fletcher Avenue.					"USF Forest Preserve Area"
Policy 4.2.1	The University shall protect natural resources in three ways:					
	• The USF Forest Preserve Area shall not be developed.		x			"USF Forest Preserve Area"
	• Open spaces within land use districts shall be preserved in accordance with provisions in Element 9, Recreation and Open Space.		x			
	• The University shall adhere to Element 8, Conservation policies regarding environmental management, and shall require adherence to these standards by all parties performing design and construction of facilities on University property.		x			
Objective 4.3	Identify, evaluate, and protect historically significant cultural, architectural, and archaeological resources that are known or may be discovered on the Tampa campus.					
Policy 4.3.1	The University shall maintain an inventory and evaluation of all archaeological and historic properties under University ownership that have been determined by professional architectural historian or preservation planner to qualify for the National Register of Historic Places. Buildings that have not yet been reviewed, but appear to the University Office of Facilities Planning and Construction to qualify for the National Register of Historic Places shall be identified for potential evaluation.		x			

Policy 4.3.2	The University shall identify campus buildings which will reach the 50-year threshold for “historical resource” during the 10 year planning timeframe of the Campus Master Plan. In respect of the possibility that such a building may come under consideration for demolition, renovation, or addition, the University will endeavor to assess such building for its historical and architectural significance prior to a building’s reaching 50 years of age. The assessment will be conducted by a qualified architectural historian. (See Figure 4-7, Potential Demolition.)			x			revisit
Policy 4.3.3	The University shall consult and coordinate with the Department of State's Division of Historical Resources prior to any land clearing, ground disturbing, or rehabilitation activities which may disturb or otherwise affect any property which is included, or eligible for inclusion, in the National Register of Historic Places.			x			
Policy 4.3.4	The University shall consider the effects of such an undertaking identified in Policy 4.3.2 above on any historic property that is included, or eligible for inclusion, on the National Register for Historic Places. The University shall afford the State Division of Historical Resources a reasonable opportunity to comment on such an undertaking.						refer to 4.3.2
Policy 4.3.5	Prior to a historic property or site being demolished or substantially altered in a way that adversely affects its character, form integrity or archaeological or historical value, the University shall consult with the Department of State's Division of Historical Resources to avoid or mitigate any adverse impacts, or to undertake any appropriate archaeological salvage excavation or recovery action.			x			revisit
Policy 4.3.6	In cases where avoidance or mitigation strategies are not feasible, the University shall undertake Phase III recovery prior to disturbing any site identified as significant in the USF archaeological survey.						research
Objective 4.4	Continue to implement, enhance and maintain the Greenway as a natural and cultural resource on the campus.						
Policy 4.4.1	The University shall protect existing natural resources by designating the Greenway area (which contains most of the significant natural resources of the main campus) as a separate and distinct land use district, within which:						

	<ul style="list-style-type: none"> • No new buildings will be constructed except those which support recreational activities, i.e., restrooms, natural and cultural resource interpretive activities, such as the Botanical Garden and Arboretum facilities, or those which serve sound stormwater management practices. 		x			
	<ul style="list-style-type: none"> • Existing paved parking and vehicular circulation functions, except those that traverse the Greenway as part of the campus loop road system, will be removed as replacement facilities are developed. Emergency and maintenance vehicular access will be provided through pedestrian facilities designed to accommodate vehicular weight and movement. 		x			
	<ul style="list-style-type: none"> • Planting and reclamation of native plant communities will be undertaken 		x			
	<ul style="list-style-type: none"> • The creation of wet and dry retention/detention facilities will be undertaken to provide for the stormwater management needs as generated by the projected land use development. 		x			
Policy 4.4.2	The University shall abide by the delineation of the Greenway Corridor as identified in Figure 4-6, Encumbrances, Leases, Subleases, and Easements to:					
	<ul style="list-style-type: none"> • Establish a primarily permeable landscape corridor 		x			
	<ul style="list-style-type: none"> • Reduce heat island effect 		x			
	<ul style="list-style-type: none"> • Maintain a strong complement to the developed sectors of the campus; 		x			
	<ul style="list-style-type: none"> • Ensure the capacity to provide for and make visible stormwater management treatment. A definitive stormwater management plan will continue to be maintained to accommodate campus stormwater needs within the Greenway area and throughout campus lands. 		x			
Policy 4.4.3	The University shall undertake phased implementation of a campus wide Botanical Garden/Arboretum, administered through expanded facilities located near the current site at Lake Behnke. Initial expansion shall focus on Greenway implementation, but shall also include localized quadrangles and courtyards as opportunities arise.			x		discuss with Lori
Policy 4.4.4	The University shall encourage student and community engagement with the Greenway through implementation of educational, research, and informal recreational opportunities within the Greenway and activation of the edges through priority siting of building facilities such as housing, arts, recreation, student life, and dining at its edges.		x			

Policy 4.4.5	The University shall seek to maximize the benefits of “identity” and “wayfinding” gained through implementation of the Greenway as a visually strong and distinct element in the campus framework.		x			
Objective 4.5	Preserve and amend existing street and major utility corridors to ensure adequate utility access compatible with implementation of planned development, open space framework, and non-vehicular circulation.					
Policy 4.5.1	The face of all future buildings shall be set back at least seventy-five (75) feet from the adjacent roadway center line (as illustrated in Figure 4-8, Build to Framework. This policy shall extend to new construction on sub-leased lands shown in Figure 4-6.		x			
Policy 4.5.2	The University shall preserve existing street corridors for circulation and open space use. In support of 2010 planning principles establishing a more pedestrian dominated core, improving campus wayfinding, and increasing pedestrian, bicycle and vehicular safety, roadway modifications are recommended, as follows:					
	<ul style="list-style-type: none"> The campus loop road system shall be modified to establish stronger visual and physical connections, with greater pedestrian safety, between housing areas north of Holly and campus areas south of Holly by closing the section of Holly extending east of the Crescent Garage to west of Maple Hall B to regular vehicular traffic and limiting this section of the corridor to pedestrian, bicycle, Bull Runner, emergency, and service access (special allowances lifting restrictions during move-in, move-out periods shall be permitted). 					revisit
	<ul style="list-style-type: none"> The modified primary internal campus loop road shall divert vehicular traffic from East Holly to a proposed extended Laurel Drive (Maple to Magnolia) and will be composed of made up of Laurel (and secondarily West Holly between Palm and Magnolia), Magnolia, Alumni, and Maple Drives. 					
	<ul style="list-style-type: none"> Leroy Collins shall be modified to reduce vehicular-pedestrian conflict and become primarily ceremonial drive north of Alumni Drive. Primary modifications include: termination of roadway just south of Sessums Mall to allow free pedestrian flow east to west on Sessums; and reduction in traffic accessing parking areas including surface lots and Collins Garage by redirecting portions of this traffic to an extended Sago Drive and administrative measures regulating parking access. 		x			

	<ul style="list-style-type: none"> • North Palm, Bull Run, Alumni, and Sycamore Drives will be maintained, with selective adjustments to horizontal alignment for improved wayfinding clarity and safety. 					revisit
	<ul style="list-style-type: none"> • Elm Drive will be discontinued as a general vehicular way, but will continue to be used for service and emergency access as it is converted into an extension of Sessums Mall. 					reword to make clear
	<ul style="list-style-type: none"> • Various access driveways to parking and other destinations on the campus may be altered or realigned in conjunction with development projects. (See Element 5, Transportation, for additional policy regarding roadways, vehicular and non-vehicular circulation.) 				x	
Objective 4.6	Ensure that future land uses are compatible with and appropriate to topographic and soil conditions on campus.					
Policy 4.6.1	The University shall, through the Office of Facilities Planning and Construction, maintain its regular procedure of assessing the suitability of development sites relative to topography, soil condition (including the presence of sink holes), drainage, utility and infrastructure connections, and vehicular and service access and program affinities as part of the initial pre-planning and siting studies for individual projects as those projects are brought into implementation. USF shall require the integration of natural topographic and other features in project designs in order to develop the campus in harmony with its natural environment.		x			reduce text
Policy 4.6.2	The University, through the Office of Facilities Planning and Construction, shall maintain existing soil data and topographic conditions, which shall be updated as additional data developed for future construction projects becomes available.		x			
Policy 4.6.3	As part of the design process for any programmed improvement (major project) and prior to approval and acceptance of the design by the University, USF shall require that geotechnical testing be conducted to determine relevant soil characteristics of the site and to ensure that the design reflects consideration of these conditions.		x			
Policy 4.6.4	The University shall ensure that appropriate methods of controlling soil erosion and sedimentation intended to minimize the destruction of soil resources and reduce impact on adjacent watersheds and storm management facilities shall be used throughout site development and shall ensure protection in final state following implementation. Such methods shall include, but not be limited to:		x			

	• Phasing and limiting the removal of vegetation		x			
	• Minimizing the amount of land area that is cleared		x			
	• Limiting the amount of time bare soil is exposed to rainfall		x			
	• Use of temporary ground cover on cleared areas if construction is not imminent		x			
	• Protection of drains, watersheds, and stormwater facilities during construction		x			
	• Special consideration given to maintaining vegetative cover on areas of high soil erosion potential (i.e., steep or long slopes, banks of streams, stormwater conveyances, etc.).		x			
	• For any land disturbance considered for Lot 32 or the land immediately north of Lot 32 including certain areas of the Moffitt Sub-lease, see Appendix E, Petroleum Discharge Resolution of Petroleum Discharge at the H. Lee Moffitt Cancer Center for restrictions: http://usfweb2.usf.edu/FacilitiesPlan/Campus%20Planning/Data_Collection_Analysis_Elements.html		x			
Objective 4.7	Ensure that the development of future land uses takes place in a way that is coordinated with the availability of adequate facilities and services to support the uses. This includes establishing appropriate location and adequate area set asides to accommodate utility requirements necessary for serving the estimated 10-year development, and implementing utility extensions in cost-effective increments.					
Policy 4.7.1	Each development project representing a change in the amount of impervious surface will be measured to assess the effect it will have on stormwater detention capacity on an east and west basin approach.		x			
Policy 4.7.2	The University shall, preserve the existing physical plant/maintenance area north of Holly Drive for future physical plant operation expansion adequate to serve utility needs of future land use development.		x			
Policy 4.7.3	The University shall, through the Office of Facilities Planning and Construction, coordinate future land uses with the availability of facilities and services to ensure that utilities and infrastructure needed to support future development are available at adopted levels of service, consistent with the concurrency provisions contained in s. 1013.30, F.S. The Office of Facilities Planning and Construction shall review and evaluate all future construction projects to ensure that adequate provisions for infrastructure and utilities have been incorporated into the design by documenting:		x			
	• The provision and maintenance of necessary utility easements, corridors, and points of connection.		x			

	• The provision of adequate supply lines to accommodate future development and facility expansion.		x			
	• The provision of open space, safe convenient pedestrian and bicycle circulation, vehicular traffic flow, and parking at established levels of service consistent with the 10 year Master Plan.		x			
Objective 4.8	Ensure that measures can be undertaken to minimize or avoid off-campus constraints to campus development and to minimize or avoid conflicts of campus development within the context area. Accordingly, the density and scale of development on the campus properties should be compatible with the adjacent off-campus uses.					
Policy 4.8.1	Through inter-local agreements and memoranda of understanding, the University shall work with the host community to minimize both campus conflicts with the host community land uses within the context area and off-campus constraints that may limit future development on the campus.		x			
Policy 4.8.2	The University shall maintain and refine the existing procedural model for review and monitoring of growth and change in land use, and continue to use such model as a monitoring and coordinating measure with the host communities (see also Element 10, Intergovernmental Coordination).		x			
Policy 4.8.3	The University shall, through the Office of Facilities Planning and Construction, include in its project and site suitability assessments an evaluation of the relationship of the project to on-campus and off-campus development constraints, conflicts, or limits vis-à-vis multimodal circulation, infrastructure, open space, and stormwater management.					revisit
Policy 4.8.4	Where the acquisition of additional land is necessary for continued growth and expansion, the University shall coordinate with the appropriate local government on any required amendment to the local government's Comprehensive Plan.		x			
Policy 4.8.5	Proposed amendments to the adopted campus master plan which do not exceed the thresholds established in s.1013.30, F.S., and which have the effect of changing land use designations or classifications, or impacting off-campus facilities, services or resources, shall be submitted to the host local government for a courtesy review.		x			dup.

Policy 4.8.6	The University shall participate with the City of Tampa in the reciprocal review of plans and development proposals, consistent with provisions established in Element 10, Intergovernmental Coordination.		x			
Policy 4.8.7	The University shall ensure that uses at the edges of the campus are compatible with off-campus uses by:					
	Maintaining the use and density levels for the land use districts described and illustrated in this element to the degree that they define use patterns that are compatible with the offcampus medical, residential and commercial uses on the west side of Bruce B. Downs Boulevard and the north side of Fletcher Avenue.		x			
	Accommodating uses of compatible density and compatible building heights adjacent to the 50th Street residential units.		x			
	Providing park-like open space with views of the campus from Fowler Avenue, and landscaped street edges on all sides of the campus.		x			
Policy 4.8.8	The University shall coordinate through the Office of Facilities Planning and Construction with the City of Tampa, City of Temple Terrace, Hillsborough County and FDOT to construct pedestrian/bicycle linkages between USF and adjacent neighborhoods and edge conditions.		x			
Policy 4.8.9	Storage and non-vehicle trip generating support space shall be allowed at the Golf Course and Riverfront Park.		x			
Objective 4.9	Ensure that incompatible use relationships are eliminated or mitigated in the event that such incompatibilities exist or arise.					
Policy 4.9.1	The University shall, through the Office of Facilities Planning and Construction, undertake an annual review of the schedule of capital improvements to ensure that the capital improvements are consistent with the land use and development factors as described in this plan element and that such improvements are acknowledged in the periodic review set forth in Policy 4.9.2.		x			

Policy 4.9.2	<p>The University's Campus Development Committee (CDC) and Academics and Campus Environment (ACE) Work Group shall periodically review the status of land use and facilities program development on the campus, including projects and grant award opportunities that are currently unforeseen. The Work Group shall identify trends or needs for change in use patterns, density, program affinities and relationships to open space, circulation and utility patterns that might affect the land use plan, and determine whether such circumstances should be corrected to maintain the integrity of the land use plan and constraining factors, or cause the plan to be altered or amended to reflect valid needs. The group will report its periodic findings to the president and recommend circumstances when and by which amendment of the adopted Campus Master Plan may be merited, or where projects should be limited or amended.</p>		x				add ACECA
Policy 4.9.3	<p>In the pursuit of Policy 4.9.2 above, the University shall identify any circumstance whereby future land acquisition may be necessary or appropriate to accommodate currently unforeseen development projects or strategies (such as remote parking, grant opportunities, utility corridors, etc.), and shall determine the appropriate timetable, funding, and development coordination measures associated with the prospective acquisition. Similar measures will be applied in the event of any circumstance calling for the sublease of University land to others.</p>		X				
Policy 4.9.4	<p>Campus Master Plan amendments that, alone or in conjunction with other amendments, exceed thresholds established in s. 1013.30(9), F.S., shall be reviewed and adopted under the provisions of s. 1013.30(6), F.S.</p>		X				

This Page Intentionally Left Blank.

2015-2025 USF - Tampa Campus Master Plan Update
 Evaluation and Appraisal Report

Element 5: Transportation.

Goal 1: The Transit, Circulation, and Parking goal of the Tampa Campus Master Plan is to encourage options for sustainable transit and vehicular access to the campus that reduce reliance on single-occupant

Objectives & Policies	Current Condition	Status			Delete?	Comments/Problems/Recommendations
		Complete	Ongoing	Not Implemented		
Objective 5.1	Vehicular Traffic and Transit Sub-Element					
Policy 5.1.1	Reduce the impacts on-campus of future vehicular traffic generated by the 10-year master plan, especially at peak hours.		x			
Policy 5.1.1.1 (on campus)	The University shall continue to construct additional on-campus housing as marketing and financial opportunities are available. This housing will reduce both internal and external traffic generation, especially at peak hours.		x			
Policy 5.1.1.2 (off campus)	The University may pursue establishing an off-campus park/ride program and an off-campus shared use parking lots to meet future parking needs without constructing new parking facilities. Upon receipt of such funds, needed to support this initiative, the adopted campus master plan shall be amended as needed to reflect the operation of this program.					revisit
Policy 5.1.1.3 (off campus)	The University shall continue to provide, promote, and evaluate the use of distance learning, telecommuting, and compressed work week to reduce the need to travel to the University.		x			
Policy 5.1.1.4 (on campus)	The University shall evaluate and implement, as appropriate, opportunities of incorporating secure, covered bicycle parking and commuter centers within the proposed parking structures to encourage the use of transit, carpooling, and bicycling.					revisit
Policy 5.1.1.5	The University shall construct new parking facilities outside of the campus core and manage the parking permit system to encourage the use of periphery lots in conjunction with Bull Runner shuttle service to peripheral parking facilities, to decrease the volume of traffic on the interior and loop roads of the campus.					revisit

Policy 5.1.1.6	The University shall analyze and implement as appropriate, techniques such as computerized technology to govern parking spaces and better utilize existing and future resources. Such techniques may include revenue access control systems and transportable variable message signs to facilitate traffic flow.		x			
Policy 5.1.1.7	The University shall review and revise class scheduling policies to achieve greater balance in daily and weekly class schedules and reduce peak demands on the campus transportation systems associated with student arrival and dismissal.		x			"maintain"
Objective 5.1.2	Reduce the impacts off-campus of future traffic generated by the 10-year master plan.					
Policy 5.1.2.1 (off-campus)	The University shall continue to jointly plan with the host communities, City of Temple Terrace, Metropolitan Planning Organization (MPO), Hillsborough Area Regional Transit (HART), the Hillsborough County City/County Planning Commission (HCCCPC), Pasco County, Pinellas County, New North Transportation Alliance (NNTA), and the Center for Urban Transportation Research (CUTR) to develop programs and incentives to enhance transit service in the campus context area. A few of the examples are:		x			
	•Continuation of the U-pass system, giving privileges to University users of the local transit system.		x			
	•Additional on-campus housing and proximate off-campus housing to help further reduce the on-campus demands of traffic and parking.		x			
	•The University is coordinating with the MPO and HART to establish a Preliminary Plan for a rail stop to support the Tampa Rail Project.					revisit edit
Policy 5.1.2.2 (off-campus)	The University may explore opportunities and potentials for "partnering" with the private sector to construct residential housing in the context area around campus.			x		consider to housing
Policy 5.1.2.3 (off-campus)	Consistent with provisions contained in F.S. 1013.30, the University shall continue to mitigate impacts on the surrounding transportation network caused by development on-campus according to the current development agreement.					revisit
Policy 5.1.2.4 (on-campus)	The University shall coordinate on-campus traffic signalization and its connectivity to the surrounding transportation network with the City of Tampa.					revisit

Policy 5.1.2.5	The University shall continue to participate in the New North Transportation Alliance (NNTA), a public/private transportation demand management advocacy organization for the North Tampa area, as well as USF's CUTR.		x			
Policy 5.1.2.6	The University shall continue to work with the CUTR to identify and implement specific best practices for transportation planning.		x			
Objective 5.1.3	Provide a safe, efficient transportation system considering vehicle circulation, transit facilities, and the needs of motorized and non-motorized vehicle parking.					
Policy 5.1.3.1 (on-campus)	The University shall implement traffic circulation and transit improvements as described in this element and shown in the Master Plan Update figures as funding allows.		x			
Policy 5.1.3.2 (off campus)	The University shall evaluate opportunities to utilize off-campus or remote parking lots in proximity to the University, supported by convenient access to Bull Runner shuttles and non-vehicular transit options.					revisit
Policy 5.1.3.3 (on-campus)	The University shall continue to evaluate and upgrade, as appropriate, the Bull Runner shuttle service along the internal loop of the campus to supplement the regional and neighborhood circulators.		x			
Policy 5.1.3.4 (on-campus)	The University shall explore various routing and technology alternatives associated with implementing an internal tram, or other circulator conveyance system(s) to improve personal mobility in the campus core, connect the campus core with planned light rail station on Bruce B. Downs Boulevard, and/or connect major parking facilities with the academic core.					revisit
Policy 5.1.3.5 (on-campus)	The University shall continue to evaluate designs/improvements for intersections as idle times and accident reports warrant. If these designs prove to be economically feasible, practical, and promote transportation safety, the University shall amend the adopted campus master plan to incorporate these strategies into the overall transportation plan.		x			revisit diagrams from 2005
Policy 5.1.3.6	Following the Bull Runner system's use of biofuels as an example, the University shall consider providing additional alternative fuel vehicles for its campus fleet with biofuels and electric vehicles as potential options to reduce the University's carbon footprint and reduce reliance on non-renewable energy including fossil fuels.		x			revisit
Objective 5.1.4	Provide for convenient pedestrian and bicycle ways within the transportation program.					

Policy 5.1.4.1 (on-campus)	The University shall enhance the pedestrian corridors with provision of shade and weather protection, including shade trees, trellises, shade structures and/or arcades, seating, and implementation of design standards as established in USF Design and Construction Guidelines (http://usfweb2.usf.edu/FacilitiesPlan/process/guidelines.html).		x				
Policy 5.1.4.2 (on-campus)	The University shall incorporate pedestrian safety features, including high-visibility crosswalks, warning signage, countdown pedestrian signals, and generous pedestrian landings, at new or improved mid-block, intersection, and roundabout crossings, as well as countdown pedestrian signals at all new or improved signalized intersections.		x				revisit
Policy 5.1.4.3 (on-campus)	The University shall provide convenient bike racks, or covered bicycle storage if possible, at all new and renovated facilities and endeavor to complete the installation of continuous bike lanes.		x				
Policy 5.1.4.4 (on-campus)	The University shall consider installing bike lanes on all new or improved roadways, assuming that the planned bike lanes will fully extend between intersections, rather than ending abruptly at unanticipated locations.		x				revisit
Objective 5.1.5	Enhance and encourage the utilization of alternative modes of transportation (including mass transit, bicycle and pedestrian modes) that reduce dependence on single-occupant vehicles as the primary mode of travel.						
Policy 5.1.5.1 (off-campus)	The University shall continue to evaluate opportunities to incorporate bus locations at high activity commuter nodes, and provide facilities to assist in attracting riders to the mass transit system.		x				
Policy 5.1.5.2 (on-campus)	The University shall continue to provide convenient routes for the Bull Runner shuttle service and explore opportunities for expanding on-campus transit with the addition of a tram, or similar people-mover system, supplement other alternative modes in the campus core, connect major parking facilities with the campus core, and which could eventually link the campus to future light rail in the University area.		x				revisit

Policy 5.1.5.3 (off-campus)	The University shall adhere to guidelines established for the Bull Runner shuttle stops. The University shall continue to explore opportunities for mass transit rail to the University area in cooperation with HART, TBARTA, MPO, CUTR, and the host communities. Opportunities for creating stations near the campus shall be encouraged with the implementation of mass transit rail.			x			revisit
Policy 5.1.5.4 (on-campus)	The University shall endeavor to provide covered and/or partially enclosed shelters and seating at on-campus transit stops, whenever possible.		x				
Policy 5.1.5.5	At Orientation, the University shall provide to all enrolling students information regarding the availability and scheduling of the HART bus system and Bull Runner transit system as well as other options such as the car-sharing, van-pooling, ride-matching, bike-loan, and Bicycle Club options.						partial implementation and revisit
Policy 5.1.5.6	The University shall continue to work with HART to provide the U-pass or other reduced public transit pass prices and van-pooling (offered by TBARTA) for students, faculty, and staff to promote the use of mass transit.		x				
Policy 5.1.5.7 (off-campus)	The University shall continue to implement transportation demand management (TDM) strategies designed to encourage the use of alternative modes of transportation and reduce the dependence on the single-occupant automobile as the primary mode of travel. The University shall consider:		x				
	• Expanding Bull Runner shuttle service to additional off-campus residential areas		x				
	• Improvement of pedestrian and non-vehicular facilities		x				
	• Increasing the number of students living on campus		x				
	• Location student oriented housing in close proximity to the campus						revisit
	•Academic scheduling modifications, including scheduling more classes during non-peak hours		x				
	•Parking pricing strategies designed to make other modes of travel more economical and to provide revenue for improved TDM services and facilities.		x				
	•Parking permit buyback program			x		x	
	•Provide qualified transportation fringe benefits, including pre-tax or employer-provided transit, vanpool, and/or bicycle benefits		x				
	•Traffic System Management approaches			x			revisit

	<ul style="list-style-type: none"> • Further promotion of ridematching services (i.e., HART, TBARTA Commuter Services, Zimride, etc.) and designating preferential parking locations for carpoolers 		x				
	<ul style="list-style-type: none"> •Distance learning programs for students and telework or staggered work hours for faculty and staff. 		x				
Policy 5.1.5.8 (off-campus)	The University shall coordinate with the Cities of Tampa and Temple Terrace and Hillsborough County to evaluate other options and strategies for reducing the dependence on the personal automobile.		x				
Policy 5.1.5.9 (on-campus)	The University shall continue to evaluate and implement enhanced mass transit opportunities with Hillsborough Area Regional Transit Authority (HART), the Metropolitan Planning Organization (MPO) and the host communities in accordance with procedures described in Element 10, Intergovernmental Coordination.		x				
Policy 5.1.5.10 (on-campus)	The University shall continue to provide, enhance and coordinate the Bull Runner shuttle routes with HART service. In particular, the University shall maintain and consider new providing transit connections to major regional transit facilities, such as the University Area Transit Center and planned light rail stations, and major destinations to reduce the demand		x				
Policy 5.1.5.11 (on-campus)	The University shall encourage increased pedestrian and bicycle mobility through the provision of shaded sidewalk/pathway connections and continuous on-road bike lanes to reduce vehicle trips and inter-modal conflicts. The University shall also provide secure bicycle storage and consider providing changing and shower facilities for bicycle commuters.		x				revisit
Objective 5.1.6	Ensure that transportation system improvements shall be coordinated and phased with the University's future land uses.						
Policy 5.1.6.1	The face of all future buildings shall be set back at least seventy-five (75) feet from the adjacent roadway center line as shown in Figure 4-8, Build to Framework, in Element 4, Future Land Use. This policy shall extend to new construction on sub-leased lands.						move to future landuse

Policy 5.1.6.2	The University shall adopt a transportation funding strategy to ensure adequate revenue to finance parking improvements and other transportation alternatives consistent with the Master Plan. This may include increased parking rates, new parking revenue (i.e. daily or metered parking), and/or a transportation access fee.		x				"increase fee"
Policy 5.1.6.3	The University shall plan on performing identified transportation improvements in conjunction with future projects. The timing and phasing requirements and priorities for these improvements are established in Element 11, Capital Improvements, and as opportunities arise through future development projects that are currently unforeseen.						revisit
Objective 5.1.7	Coordinate required transportation improvements within the context area with the host communities.						
Policy 5.1.7.1 (off-campus)	The University shall continue regular coordination with the host and affected local governments and the FDOT to ensure that transportation facility improvements are available when needed to support the growth of the University. The University shall pursue memoranda of understanding or interlocal agreements necessary to ensure that transportation facilities are available to meet the future needs of the University.		x				
Objective 5.1.8	Coordinate resolution of issues associated with projected impacts in level of service with the host community.						
Policy 5.1.8.1 (on-campus)	The University shall monitor all on-campus intersections along the loop roads and campus access points onto Fletcher Avenue, Bruce B. Downs Boulevard, Fowler Avenue and 50th Street. On-campus intersections and campus access points shall be evaluated concurrent with future projects and be consistent with the recommendations presented in this Element 5, Transportation.						revisit
Policy 5.1.8.2	Level-of-Service (LOS) E conditions will be tolerated on the main campus loop roadways to minimize impacts on pedestrian safety associated with capacity improvements intended to reduce vehicle delays.						revisit
Policy 5.1.8.3 (off-campus)	The University shall continue to coordinate with the City, County, MPO and FDOT to assure planned public roadway projects along the periphery of the campus are scheduled and funded and include lighting, transit, pedestrian, and bicycle improvements.		x				

Objective 5.1.9	Provide emergency travel routes and a building identification system to all new and renovated campus buildings.					
Policy 5.1.9.1	All new and renovated buildings shall be designed in accordance with NFPA1. The University shall remediate access and building justification as soon as practical. Following the street addressing system in place, future lanes and streets shall be named after native trees. The designation "USF" shall be added to all street names. Numbering shall match the City of Tampa's grid.	x				
Objective 5.2	Parking Sub-Element					
Objective 5.2.1	Provide adequate parking capacity for the University's needs while reclaiming existing surface parking sites in the campus core for programmatic uses or open space.					
Policy 5.2.1.1	The University shall program new multi-level parking facilities as needed, taking into consideration multi-modal use, for during the planning 10 year planning time frame as shown in Figures 5-6 and 5-7. The recommended locations for new parking structures are south of the Library (Zone 1), adjacent to the Sun Dome (Zone 3), and in the health sciences (Zone 6). Alternative locations - health sciences area south of Holly (Zone 6) and north of Cypress Hall south of Fletcher Avenue (Zone 4) are identified for consideration if specific conditions restrict development of recommended sites or parking demand conditions indicate these as earlier priority development. (All of these sites are included in long term recommendations.) The schedule for parking facility completion will be based on continued review of campus parking demands, development, and funding.		x			revisit
Policy 5.2.1.2	The University shall strongly encourage the use of periphery parking areas for students and staff through permit pricing incentives. On campus shuttle service shall be routed to support this parking strategy.		x			
Policy 5.2.1.3	The University shall evaluate on-street parking and bicycle lanes on some campus roadways, as recommended in Figure 5-8, to affordably maintain or expand parking capacity on the campus as needed.					revisit
Policy 5.2.1.4	The University shall review existing parking facilities for opportunities to expand capacity through lower-cost measures such as re-striping or surface lot expansion.					revisit

Policy 5.2.1.5	The University shall coordinate with host communities regarding opportunities to provide off-campus Park and Ride parking for University use, if such parking facilities are deemed beneficial to overall campus parking operations.						revisit, link to 5.1.3.2
Objective 5.2.2	Provide methods to reduce the impacts and demands of future on-campus parking.						
Policy 5.2.2.1	The University shall continue to monitor parking needs as development progresses and evaluate and implement, as appropriate, mitigation techniques. These programs may include the following:						revisit, link to 5.1.3.2
	•Explore the possibility of establishing remote Park and Ride parking lots off campus and shuttle systems to these lots						revisit, link to 5.1.3.2
	•Encourage the utilization of peripheral parking facilities and mass transit with the establishment of commuter centers, shuttle service, and utilization of bicycles						revisit
	•Consider parking lot and/or permit designation modifications to discourage visitors, faculty, and students from moving vehicles between different parking locations on campus		x				
	•Evaluate academic classroom schedules encouraging more classes to be scheduled in off-peak hours, thus reducing parking demands by increasing utilization throughout the day – "reusing" the same parking space		x				revisit, link to previous 5.1.5.7
	•Provide preferential parking locations for those who carpool and vanpool regularly		x				
	•Evaluate preferred parking for alternative fuel vehicles and consider electric vehicle charging facilities during design of new or improved parking facilities		x				
	•Consider restrictions in the use and parking of personal vehicles on campus by freshmen.						revisit
Policy 5.2.2.2	The University shall continue to evaluate and refine the parking permit fee structures to adequately incentivize parking in more remote parking lots, while maximizing revenue.		x				
Objective 5.2.3	Locate program and design on-campus parking facilities to be accessible to the various land uses and circulation systems while minimizing pedestrian vehicle conflicts.						

Policy 5.2.3.1	The University shall adhere to its design guidelines that ensure proper signage and traffic circulation to the parking structures and lots to avoid potential confusion and conflicts with pedestrians. The University shall, during the design of parking lots and garages, address concerns regarding landscaping, lighting, signage, security and pedestrian circulation issues.		x			
Policy 5.2.3.2	The University shall implement parking improvements as described in this element and on Figures 5-6 and 5-7. The timing and phasing requirements and priorities for these improvements are established in Element 11, Capital Improvements.		x			
Objective 5.3	Pedestrian and Non-Motorized Circulation Sub-Element. Goal: The Pedestrian and Non-Motorized Circulation goal of the Tampa Campus Master Plan is to shift the primary transportation focus within the campus from vehicles to pedestrians, bicycles, and transit modes through improvement and implementation of functional and inviting pedestrian, bicycle, and transit facilities in order to reduce personal vehicular traffic, improve safety, and support sustainable University operations.					
Objective 5.3.1	Provide convenient, safe and direct on-campus pedestrian and bicycle way connections, as shown in Figures 5-8 and 5-9, to off-campus pedestrian and bicycle ways where the campus interfaces with the public roadway network and neighboring communities.					
Policy 5.3.1.1	The University shall coordinate with the City of Tampa, City of Temple Terrace and Hillsborough County in the systematic implementation of on-campus pedestrian and bicycle facilities to ensure continuity of such facilities within the larger regional system of pedestrian/bicycle facilities in accordance with procedures described in Element 10, Intergovernmental Coordination.		x			

Policy 5.3.3.1	The University shall consult the University Police Department in determining locations for additional lighting along pedestrian and non-vehicular circulation routes, recognizing that the most effective lighting safety response may be to light the edges of the open space rather than the actual walk. University Police acting as Crime Prevention Through Environmental Design (CPTED) consultant to Facilities Planning and Construction shall provide input to identify areas in which they feel a risk factor exists. Their input will be based on on-site observation and crime data.		x			
Policy 5.3.3.2	The University shall continue the campus-wide blue light emergency telephone plan to complement existing University Police escort and "Safe Team" services.		x			
Objective 5.3.4	Provide pedestrian and non-motorized circulation facilities to meet both the aesthetic and functional needs of the users and to encourage increased pedestrian and bicycle movement on campus.					
Policy 5.3.4.1	The University shall give priority to mitigation of existing pedestrian/vehicle conflicts on campus through the following actions:		x			
	•Consider time-based vehicular access restrictions from Leroy Collins Boulevard to the Collins Boulevard Garage to reduce vehicle-pedestrian conflicts at the intersection of Leroy Collins and Sessums Mall.					revisit
	•Prohibit vehicular access to Holly Drive, for most of the section between Palm Drive and Maple Drive, to eliminate vehicle-pedestrian conflicts with residents of the Andros/Argos housing area and strengthen the connection between Andros area housing and the campus south of Holly.					revisit
	•Review pedestrian safety treatment options for the relocated Maple Drive/Willow Drive intersection, and other intersections experiencing pedestrian collisions, including crosswalk treatment upgrades (i.e., high-visibility materials, raised crosswalks, etc.), relocating crosswalks to align with pedestrian desire lines, median refuges, curb extensions, pedestrian signal improvements, signal cycle length reductions, warning signage, and speed/safety enforcement.					revisit

	<ul style="list-style-type: none"> • Largely relocate central campus parking toward the edges of the campus and construct new pedestrian and multi-use pathways providing logical and continuous connections between uses along the campus Greenway. 		x			
	<ul style="list-style-type: none"> •Converge pathway alignments within the Greenway at intersections with campus collector roadways and install high-visibility crossings and traffic-calming treatments at mid-block crossing locations. 		x			revisit
	<ul style="list-style-type: none"> • Consider using Sharrow markings on roadway sections that do not yet have dedicated bikelanes. Sharrows assist bicyclists with lateral positioning in lanes that are too narrow for a motor vehicle and a bicycle to travel side by side within the same traffic lane; alert road users of the lateral location bicyclists are likely to occupy within the traveled way; encourage safe passing of bicyclists by motorists; and reduce the incidence of wrong-way bicycling. Sharrows are typically (but not exclusively) utilized on roads that are popular with bicyclists but lack right of way for conventional bike lanes. http://bike.emory.edu/2010/08/18/sharrows-coming-soonto-clifton-road 					revisit
	<ul style="list-style-type: none"> •Continue to support the development and funding of the "Open Trip Planner" developed by CUTR. This is a web-based tool for creating point to point campus pedestrian route planner which will help students, especially physically challenged, plan the best route to navigate the campus. 		x			
Policy 5.3.4.2	<p>The University shall consider implementation of convenient and well-maintained bicycle sharing services at key locations throughout the USF-Tampa campus, such as residential quads and major parking facilities, to facilitate bicycle mode choice and reduce dependence on automobiles within the campus. These facilities may include bicycle and commuter facilities in the programming for all parking garages. Commuter facilities shall include locked covered storage and lockers at minimum, and may include bicycle rental facilities as well.</p>		x			revisit
Policy 5.3.4.3	<p>The University shall continue to work with partners to review bicycle parking quality and availability at all on-campus facilities and install bicycle parking equipment in beneficial locations.</p>		x			modify

Policy 5.3.4.4	The University shall encourage utilization of pedestrian and non-motorized facilities and improve the safety of persons using the facilities through implementation of pathway and roadway improvements, including increasing shade along walks and pathways and converting some four-lane roadways to two-lane roadways with bike lanes and on-street parking, as identified in this element. The timing and phasing requirements and priorities for these improvements are included in Element 11, <u>Capital Improvements under Infrastructure</u> .		x				revisit
Policy 5.3.4.5	The University shall encourage "24 hour" activity on campus by concentrating and reinforcing programmatic activity and by expanding the hours of intense activity. (See Element 6, Housing.)						move to element 6 housing
Objective 5.3.5	Establish a series of strong pedestrian corridors to link campus precincts, as shown in Figure 5-9.						
Policy 5.3.5.1	The University shall continue the maintenance and development of primary east-west and north-south pedestrian corridors as follows:						
	•Sessums Pedestrian Mall between athletics/recreation and business/education/social science precincts on the east and the engineering/natural sciences, housing precincts on the west;		x				
	• Interdisciplinary Pedestrian Mall extending from the north edge of the Central Lawn northwest to the interdisciplinary /proposed arts precinct and west to Moffitt/Health extending to Bruce B. Downs Boulevard		x				
	•Proposed Holly Pedestrian Mall extending between Maple Drive on the east and Palm Drive on the west						revisit
	•Proposed North-South Pedestrian corridor extending from redeveloped Andros housing area south, crossing the Greenway to the business/education/social science precinct.		x				
Policy 5.3.5.2	The University shall establish strong diagonal northwest to southeast and northeast to southwest pedestrian and multi use (pedestrian/bicycle) corridors as follows:						
	•Cross-campus Greenway Corridor extending from the northeast Greek Village and Fletcher Avenue southwest to the Botanical Garden continuing to Pine Drive and Bruce B. Downs, and including a proposed diagonal crossing of the Central Quadrangle.		x				

<ul style="list-style-type: none">•Cross-campus southeast to northwest corridor extending from Alumni/Bull Run Drive and Fowler Avenue, through the academic precinct, to proposed connection to Administration crossing Central Quad and extending northwest along proposed Center for Advanced Study of Visual Arts (CASVA), and continuing to the redeveloped Health Sciences via Holly Drive walks and bicycle lanes.						revise
---	--	--	--	--	--	--------

This Page Intentionally Left Blank.

2015-2025 USF - Tampa Campus Master Plan Update
 Evaluation and Appraisal Report

Element 6: Housing

Goal 1: The Housing goal of the Tampa Campus Master Plan is to encourage the availability of diverse, safe, affordable housing opportunities for students on and in the vicinity of the campus in support of the educational success, personal development, and social experience of all University students.

Objectives & Policies	Status			Current Condition	Delete?	Comments/Problems/Recommendations
	Complete	Ongoing	Not Implemented			
Objective 6.1 Provide approximately 2,000 net new undergraduate and graduate student beds in on-campus residence facilities over the next 10 years. In addition, replace 1,036 beds lost to proposed demolition and redevelopment of Andros Complex site. Endeavor to achieve and maintain The Carnegie Foundation for Advancement of Teaching classification as a "L4/R/Large Four Year, Primarily Residential" school as stated in the 2007-2012 USF Tampa Strategic Plan.						revise number of beds
Policy 6.1.1 The University shall locate such new housing as is determined to be financially feasible in Land Use Districts 4 and 5 (Student Housing East and West) as delineated in Figure 4-4, 10-Year Campus Land Use Districts, Element 4, Future Land Use.		x				

Policy 6.1.2	<p>Building locations indicated in Figure 4-1. 10-Year Campus Master Plan Concept may be exchanged for other building locations, depicted in Figure 4-2, Long Range Campus Master Plan Concept, if the alternative location is deemed preferable due to unforeseen or changed conditions related to program, cost, or other justifiable reason, and is within the same Future Land Use District. Any such location changes shall be effected by approval of the USF Board of Trustees without a Campus Master Plan amendment, provided that the project supports the primary land use function and is consistent with Figure 4-4, 10 Year Campus Land Use Districts, and Tables 4.1 and 4-3 included in Element 4, Future Land Use, as well as with the Campus Development Agreement with the City of Tampa.</p>	x			
Policy 6.1.3	<p>The University shall, through this 2010 Master Plan Update and USF Design and Construction Guidelines (http://usfweb2.usf.edu/FacilitiesPlan/process/guidelines.html), specify that new construction or renovation of housing be designed to reinforce and enhance the spatial order and coherence of the campus, thus lending to a sense of continuity and unity in the development of the campus. Additionally, housing shall be located – and entries, views, public spaces oriented – in a way that engages and activates adjacent spaces such as the Greenway, framed residential quadrangles and courtyards, and circulation routes such as Sessums Mall to encourage more vibrant community engagement in these spaces.</p>	x			
Objective 6.2	<p>Provide the land area and infrastructure to accommodate development of a student organization community facility in support of student organization housing over the next 10 years.</p>				

Policy 6.2.1	During the next 10 years, the University shall seek to enable development of a student organization residential community facility available to student organizations on a lease basis, in the Fletcher/Maple area of the campus (Land Use District #4 as delineated in Figure 4-4, 10-Year Campus Land Use Districts, Element 4, Future Land Use). Such construction will be subject to USF Design and Construction Guidelines (http://usfweb2.usf.edu/FacilitiesPlan/process/guidelines.html).			x		
Objective. 6.3	Continue to improve the environment and coherence of the existing Andros and Magnolia residential areas by continued infill of new residence facilities forming residential courtyards; by taking advantage of existing and planned open space amenities such as the Greenway edge, by minimizing vehicular circulation and surface parking obstructions in the housing environment, and by improvements to existing housing facilities.					
Policy 6.3.1	The University shall study the feasibility and proforma for providing an additional 2,000 new student beds with the first 1,500 beds proposed for construction in the five year planning time frame. The housing shall be distributed in the area north of Holly and between North Palm and Maple Drive, south of Beta Hall on the north edge of the Greenway and west of Maple, and east of Laurel, north of the existing Juniper-Poplar Hall, adjacent to the south edge of the Greenway as illustrated in Figure 6-1, 10 Year Housing.			x		

<p>Policy 6.3.2</p>	<p>The University shall vacate the section of Holly Drive located between Myrtle Drive (east of Crescent Garage) and the existing small parking area just west of Maple Hall 'B' and reconfigure this roadway cross section as a pedestrian/bicycle corridor to strengthen connection between housing area north of Holly and housing to the south as well as the campus at large, improve safety, and establish greater open space amenity value for existing housing along Holly Drive. (See also Element 5, Transportation.)</p>		<p>x</p>		<p>workgroup supports concept</p>
---------------------	---	--	----------	--	-----------------------------------

2015-2025 USF - Tampa Campus Master Plan Update
 Evaluation and Appraisal Report

Element 7: General Infrastructure and Utilities

Goal 1: The Stormwater Management goal for the Tampa Campus Master Plan is to provide an adequate stormwater management system that accommodates the future University stormwater needs.

Objectives & Policies	Current Condition	Status			Delete?	Comments/Problems/Recommendations
		Complete	Ongoing	Not Implem		
Objective 7.1	Sub Element: Stormwater Management					
Policy 7.1.1			X			
Policy 7.1.1.1			X			
Policy 7.1.1.2						Revisit Figure 7.1-1
Policy 7.1.1.3			X			
Policy 7.1.1.4			X			
Policy 7.1.1.5			X			
Policy 7.1.1.6					X	This item is missed placed.

Policy 7.1.2	Recognizing that natural drainage flows east and west from the central ridge line, appropriate considerations will be given for maintaining and protecting the natural drainage patterns and hydrological conditions.		X				
Policy 7.1.2.1	The University shall enhance the stormwater facilities and greenway system with the following appropriate design features:						
	• Gradual and varied side slopes		X				
	• Natural aquatic plant material						Revised statement to include: as appropriate for the stormwater system utilized.
	• Walkways/boardwalks		X				reconsider boardwalks due to increased maintenance
	• Seasonal hardwoods and native-understory plant materials		X				
	• Properly designed "feature" ponds that include retention liners and sufficient water flows and aeration to maintain a healthy environment and habitat for wildlife.		X				Revise "flows" to " volumes".
Policy 7.1.2.2	Recognizing that increasing the tree canopy reduces the amount of runoff entering stormwater ponds, the University shall continue to implement an active tree planting program, making it a priority to plant areas adjacent to roadways, surface parking lots, and other paved surface areas.		X				You may need to add a statement to say that there is a need to train the grounds people for an arborist qualification or hire an arborist (Ghebremichael, Kebreab)
Objective 7.1.3	Prevent any further degradation and improve the quality of receiving waters.						
Policy 7.1.3.1	The University shall implement an ongoing, regularly scheduled stormwater facility maintenance program to ensure adequate water quality and design capacity of the facilities.		X				
Policy 7.1.3.2	The University shall coordinate, as appropriate, with the host -communities regarding the National Pollutant Discharge Elimination System (NPDES) program.					X	We have our own NPDES - MS4 Program. Delete or readdress as a current condition
Policy 7.1.3.3	USF shall continue to construct on-site stormwater treatment systems that remove suspended solids and nutrients per Southwest Florida Water Management District standards.		X				

Policy 7.1.3.4	The University shall mitigate University-generated stormwater and minimize stormwater-borne pollutants through the implementation of a system of Best Management Practices (BMPs), which includes, but is not limited to:					
	• Incorporating stormwater management retention and detention features into the design of parks, trails, commons, and open spaces, where such features do not detract from the recreational or aesthetic value of a site.		X			
	• Use of slow release fertilizers and/or carefully managed fertilizer applications timed to ensure maximum root uptake and minimal surface water runoff or leaching to groundwater.		X			verify
	• Educating maintenance personnel about the need to maintain motor vehicles to prevent the accumulation of grease, oil and other fluids on impervious surfaces, where they might be conveyed to surface and ground waters by runoff, and the need to regularly collect and dispose of yard debris.		X	X		Ongoing for educating maintenance personnel about motor vehicle maintenance but not for collecting and removing yard debris. An upcoming effort to change this is underway. PPD is acquiring a yard vac machine to recycle mulch that is washed out of place by rains.
	• Avoiding the widespread application of broad spectrum pesticides by involving only purposeful and minimal application of pesticides, aimed at identified target species.		X			
	• Coordinating pesticide application with irrigation practices to reduce runoff and leaching into groundwater.		X			
	• Use of turf blocks and other pervious surface treatments to minimize impervious surface area and reduce the flow of runoff pollutants.		X			
	• Incorporating features into the design of fertilizer and pesticide storage, mixing and loading areas that are designed to prevent or minimize spillage.		X			Revisit with PPD.

	<ul style="list-style-type: none"> Pursue licensing for grounds superintendents and staff to permit handling and administering restricted pesticides and to ensure that fertilizers will be selected and applied to minimize surface water runoff and leaching to ground water. 		X			Revisit with PPD. Revise to reflect liscenced outside contractors
Policy 7.1.3.5	It shall be the policy of the University that no stormwater discharges may cause or contribute to a violation of water quality standards in waters of the State. Post-development rates of discharge shall not exceed pre-development rates.		X			Revisit: Need to compare to the University's MS4 Stormwater Policy. If this stays, should separate the water quality restriction from the post development rate restriction.
Objective 7.1.4	Coordinate and phase the increased stormwater facility capacity to meet the future needs of the University.					Revisit : Needs to be combined with 7.1.1.5
Policy 7.1.4.1	The University shall ensure that the detailed Stormwater Management Sub-Element will comply with the host communities and SWFWMD level of service regulations for quantity and quality. In addition, the University shall adopt a level of service standard for stormwater quality and quantity as established in Chapters 40D-4, 40D-40 and 40D-400 FAC.		X			This is redundant to Policy 7.1.3.3. If stays, the reference to host communities can be deleted as that does not apply any more with the changes made to the Lake Behnke control structure.
Policy 7.1.4.2	Stormwater management facilities shall comply with the design criteria established in the USF Design and Construction Guidelines and shall be in place and operational, at established levels of service, prior to the construction of any new University improvement.		X			Revisit: This overlaps 7.1.4 and 7.1.1.5. Could be combined.

Policy 7.1.4.3	The University shall devise and implement ongoing monitoring and evaluation activities to survey, document and assess the existing and future system needs, as a result of proposed land redevelopment, transportation system improvements, reconfiguration of existing drainage conveyances, and improvements within the drainage basins. These engineering study efforts shall address the data and analysis requirements contained in Rules 6C-21.207(1) and (2) F.A.C., and shall also:						reword
	• Establish priorities for replacement, correcting stormwater management facility deficiencies, and providing for future facility needs		X				
	• Establish the timing and phasing requirements and identify the projected funding sources for stormwater management facility improvements to meet future USF needs.		X				Revisit: Covered in 7.1.4 and 7.1.1.5.
	• Classify existing utility corridors as no build zones. In the event the utility cannot be avoided, the Director of Facilities shall be contacted.					X	Revisit: Covered in 7.1.1.1.
	• Following the completion of the engineering study described in Policy 7.1.3.3, the University shall prioritize and correct identified stormwater system deficiencies. The adopted campus master plan will be amended as needed to reflect the survey results and priorities assigned to them.		X				Revisit: 7.1.3.3 does not describe study.
Policy 7.1.4.4	The University shall ensure proper coordination between the construction of any future retention ponds and underground stormwater system with the removal of existing parking areas and infrastructure.		X			X	
Policy 7.1.4.5	The University shall coordinate planning and design efforts through its capital improvement projects and building program to ensure that existing stormwater pipes that are to be relocated or replaced shall be consistent with the Stormwater Management Sub-Element.		X				verify covered elsewhere

Policy 7.1.4.6	The University shall, by utilizing its capital improvement program, continue to identify appropriate phasing programs for the construction of the stormwater management facilities in a logical and coordinated manner to meet the University's future needs as described in Element 11, Capital Improvements.					X	Context covered elsewhere. If stays, reference to Element 11 is wrong.
Policy 7.1.4.7	The USF Office of Facilities Planning and Construction shall review all proposed construction and development on campus to ensure that any proposed increase in campus impervious surfaces shall be implemented only upon a finding that existing facility capacity is already on-line to accommodate the increased impacts, or that additional capacity will be funded and on-line at the time of planned construction.					X	Is a restatement of 7.1.4.6 but can be deleted as its context is covered elsewhere.
Policy 7.1.4.8	The University shall annually review future construction programs and priorities for deficiency remediation as part of the capital improvements requirements and procedures to ensure capacity and capital improvements required to meet future University needs are provided when required, based on needs identified in other master plan elements.					X	Not needed. Context covered elsewhere.
Sub Element 7.2	Potable Water Sub-Element						
Goal	The Potable Water goal for the Tampa campus plan is to provide an adequate potable water system that accommodates the future University potable water needs.						Add potable water "and fire fighting " needs.
Objective 7.2.1	Provide at a minimum a level of service of 0.12 GPM per 1,000 gross square feet of building area and provide distribution and building plumbing systems to maintain a building operating pressure of 40 psi minimum.		X				verify values
Policy 7.2.1.1	The University shall establish and adopt the following level of service standards for potable water and fire flow:						
	• Provide a minimum a level of service of 0.12 GPM per 1,000 gross square feet of building area for general office / classroom space.		X				verify values

	Provide adequate fire protection with a goal of 3,000 GPM for four hours.		X				verify values
	• Maintain an operating pressure of a minimum of 40 psi throughout the building systems.		X				verify values
	• System identified in Figure 7.2-.1 is designed to achieve and maintain these standards.						Revisit to make sure of correct Figure.
Policy 7.2.1.2	Proposed increases in consumptive uses, whether residential or non-residential, shall be approved only upon a finding that existing potable water treatment and distribution facility capacity is already on-line to accommodate the increased need, or that additional capacity will be funded and on-line when needed.		X				
Objective 7.2.2	Provide adequate fire protection with a goal of 3,000 GPM for four hours.						
Policy 7.2.2.1	The University shall provide sufficient fire protection with strategically placed fire hydrants during the construction of new facilities.		X				
Policy 7.2.2.2	The University, in order to provide sufficient fire protection, shall install fire hydrants only on six-inch or larger water lines.		X				
Policy 7.2.2.3	The University shall provide sufficient fire protection by maintaining sufficient water levels in the water tower for 4 hour fire flow during maximum day demand.		X				
Policy 7.2.2.4	The University shall conduct on-site fire flow tests at least annually to verify adequacy of fire protection or identify deficiencies. The tests shall be conducted in accordance with the methodology described in the American Water Works Association Manual Number 31, entitled "Distribution System Requirements for Fire Protection" and NFPA 25. The results of such tests shall be provided to the City of Tampa Fire Department.		X	X			Revisit: Need to verify with EHS as to whether fire flow data has been shared with Fire dept.
Objective 7.2.3	The University shall continue to implement and expand its water conservation program.						Greywater is mentioned but I would strengthen that by stating it similar as for rainwater harvesting for new buildings. If we want to reuse greywater, we need to plan dual piping in new buildings. (Ghebremichael, Kebreab)

Policy 7.2.3.1	The University shall implement and promote its water conservation program as follows:					
	• The use of xeric landscaping materials, technology, and maintenance practices, including the maintenance or installation of selected native and environmentally fitting vegetative species, low irrigation and compact hydrazone concepts, shall be required for all new and renovated building, ancillary, and site facility construction.					Revisit: Need to verify with PPD if policy is being followed.
	• Maintain and install sub-metering on existing and new facilities to be able to monitor accurately the amount of water being utilized in the various irrigation and building facilities.		X			
	• The University shall create an awareness program of water usage utilizing the information above.			X		
	• Establish computerized, rain-sensitive system controls for all irrigation systems.			X		Athletics was proposing to install such, need to verify. PPD considering whether to use Athletics' system or implement their own.
	• Explore opportunities to coordinate with the host communities in providing a reclaimed water irrigation system, if system is extended to the University area.		X			not currently available from host community
	• Explore use of collected stormwater or other gray water sources for landscape irrigation purposes.		X			
	• Require air conditioning condensate collection for all new buildings. Prioritization shall be established for retrofitting existing facilities to collect condensate, on the basis of availability and proximity to a source requiring reuse water.			X		Not implemented as standard for new construction, prioritization of retrofitting existing buildings not implemented. The Patel building incorporated a cistern for the collection of roof runoff and condensate for the purpose of toilet flushing. Revise to use the term "consider"
	• Require use of efficient low water volume plumbing fixtures in new and renovated University buildings.			X		
• Conduct annual water audits in addition to other leak detection programs.			X		Not all water uses metered. Need to complete metering and backflow prevention program.	
Objective 7.2.4	Cooperate with the City of Tampa Water Department and other appropriate State and Federal agencies to ensure safe and sufficient water supply at a cost effective rate.					

Policy 7.2.4.1	The University shall implement a replacement program of smaller diameter existing potable water pipes or lines with a minimum of eight inch diameter distribution pipes at building service interface provided minimum velocities are maintained.			X			Revisit the basis of this. Not necessarily an absolute for a policy statement.
Policy 7.2.4.2	The University shall, through its capital improvements program, ensure that potable water service capacity is available to meet future potable water facility service needs as prescribed in Element 11, Capital Improvements.		X				Verify Element No.
Policy 7.2.4.3	The University shall maintain, as appropriate, a "technical design standards" manual to ensure the compatibility of future potable lines for ease of on-going maintenance.		X				Design and Construction Guidelines manual satisfies this.
Policy 7.2.4.4	The University shall coordinate the provisions of off-campus potable water facilities required to meet future University needs with the host community or appropriate service provider as described in Element 10, Intergovernmental Coordination. The University shall follow established procedures for coordinating with appropriate City of Tampa officials relative to University water needs. USF shall pursue any interlocal agreements or memoranda of understanding necessary to ensure that potable water will be supplied to the campus to meet the future needs of the University, for those portions of the campus to be served by outside sources.		X				
Objective 7.2.5	Correct any existing potable water facility deficiencies and maximize its level of service where feasible.						You should probably mention somehow that the water quality should meet the latest USEPA water quality standards (Ghebremichael, Kebreab)
Policy 7.2.5.1	The University shall maintain "loops" within the water system and avoid dead-end distribution lines. New water mains shall be designed to be in close proximity to existing utilities, following established utility corridors where possible, thereby minimizing impact to areas of open space.		X				

Policy 7.2.5.2	The University shall establish an on-going maintenance program to replace deteriorated or undersized pipes. Existing utility corridors shall be classified as no build zones.						The first sentence is obvious (“The university shall establish an ongoing maintenance program...). I am not sure why we need to state this as a policy. “Existing utility corridors shall be classified as no build zone” is fine. (Ghebremichael, Kebreab) Revisit to rewrite. The policy has exclusive terms. Replace deteriorated or undersized pipes is Capital Renewal not maintenance. (D. Wagner)
Policy 7.2.5.3	The University shall, through its capital improvements program, ensure that when a project requires the relocation of potable water utilities, that those utilities be appropriately upgraded and replaced as necessary to provide service to the capital improvements programmed in Element 11, Capital Improvements.		X				Verify Element No.
Policy 7.2.5.4	The University shall investigate and ascertain presence of hazardous material when any existing lines (installed prior to 1980) are to be relocated, replaced or removed have the potential to contain asbestos, also known as "transite."		X				
Policy 7.2.5.5	Annually review future construction programs and priorities for deficiency remediation as part of the capital improvements requirements and procedures to ensure that potable water facility improvements required to meet future University needs are in place and operational, at the adopted levels of service, prior to occupancy of any new University building.					X	Context addressed elsewhere.
Policy 7.2.5.6	Implement and maintain a hydraulic model of the potable water system on campus. The model should identify areas of low pressure. Alternatives should be developed to increase pressure to the affected areas. Areas for potential water service expansion should also be considered.			X			Model developed. Needs testing and updating. Needs to be expanded to include NW service area once that area is taken off the City system and placed on the University's water supply system.

Objective 7.2.6	Protect and conserve potable water sources and facilities.						You may need to mention the following with respect to groundwater: Sampling and monitoring should be in accordance with xxxx (Local, State or Federal regulations). You may also add statement like “ Assess the potential for artificial recharge and encourage to do it” (Ghebremichael, Kebraab)
Policy 7.2.6.1	Protect and conserve potable water sources and facilities.		X				
Policy 7.2.6.2	The University shall identify the potable water well fields as “no-build” zones, except for recreation facilities.		X				
Policy 7.2.6.3	The University shall seek additional well sources to ensure adequate un-interruptible supply. Additional wells must be permitted through Florida Department of Environmental Protection.		X				Revisit: Need to correct policy. Additional wells are to be permitted through the SWFWMD and the delivery/conveyance facilities permitted through the FDEP.
Sub Element 7.3	Sanitary Sewer Sub-Element						
Goal:	The Sanitary Sewer goal for the Tampa campus plan is to provide an adequate sanitary sewer system that accommodates the future University sanitary sewer needs.						
Objective 7.3.1	Provide for reliable and efficient collection and transmission of all wastewater generated by the University in an environmentally safe manner.		X				
Policy 7.3.1.1	The University shall continue a preventative maintenance program for existing lines as established in this Sanitary Sewer Sub-Element.			X			Revisit with PPD.

Policy 7.3.1.2	The University shall coordinate with the host communities to ensure that off-campus sanitary sewer facilities that may be affected by additional demands are improved as appropriate in accordance with procedures identified in Element 10, Intergovernmental Coordination. The University shall continue to follow established procedures to coordinate with appropriate City officials relative to University sewage requirements. USF shall pursue any interlocal agreements or memoranda of understanding necessary to ensure that sanitary sewer service will be supplied to the campus to meet the future needs of the University.		X			
Policy 7.3.1.3	The University shall recognize that future adjustment may be required in the sanitary sewer improvement program in response to changes in building programs and funding.		X			
Policy 7.3.1.4	Proposed increases in consumptive uses, whether residential or non-residential, shall be approved only upon a finding that existing sanitary sewer treatment and collection system capacity is already on-line to accommodate the increased load, or that additional capacity will be funded and on-line when needed. The system identified in Figure 7.3-1 is designed to achieve and maintain these standards.		X			Verify Figure No.
Objective 7.3.2	Maintain at a minimum the wastewater collection service at its present level of service with the implementation of the 10-year Master Plan					
Policy 7.3.2.1	The University shall ensure that the detailed sanitary sewer master plan maintains a level of service of 0.12 gallons per minute (GPM) minimum per 1,000 square feet of building area on an average daily basis.		X			Need to revisit and verify load value.

Objective 7.3.3	Coordinate any required sanitary sewer relocation and improvement program with the implementation of the capital improvement program and Master Plan.		X				
Policy 7.3.3.1	The University shall identify the main sanitary sewer trunk lines as "no build" zones. In the event the utility cannot be avoided, the Director of Facilities Planning and Construction should be contacted.		X				
Policy 7.3.3.2	The University shall, through its capital improvements program, ensure that the sanitary sewer system will be appropriately upgraded and expanded on-campus, as necessary to meet the future University needs described in Element 11, Capital Improvements.		X				Redundant to 7.3.1.2 and 7.3.1.4. Could be combined.
Policy 7.3.3.3	The University shall annually review future construction programs and priorities for deficiency remediation as part of the capital improvements requirements and procedures to ensure capacity and capital improvements required to meet future University needs are provided when required, based on needs identified in other master plan elements.					X	Covered in above policy. Combine or delete.
Objective 7.3.4	Correct any existing and future sanitary sewer deficiencies needed to maintain a reliable level of service.						
Policy 7.3.4.1	The University shall investigate and ascertain presence of hazardous materials when any of the existing lines (installed prior to 1980) or lift stations that are to be upgraded, removed or relocated and have the potential to contain asbestos, also known as "transite." Appropriate action will be taken by the University to have these lines removed, remediated, or replaced by a certified contractor or be allowed to remain; if associated risks are minimized.					X	No transite used in sanitary system.

Policy 7.3.4.2	The University, through Facilities Planning and Construction and Physical Plant, shall annually review future construction programs and priorities for deficiency remediation as part of the capital improvements requirements and procedures to ensure that sanitary sewer facility improvements required to meet future University needs are in place and operational, at the adopted levels of service, prior to occupancy of any new University building.		X			
Policy 7.3.4.3	The University shall devise and implement ongoing monitoring and evaluation activities to survey, document and assess the existing and future sanitary sewer system needs. This study shall address the data and analysis requirements contained in Rules 6C-21.207(7) and (8), F.A.C., and shall also:					Revisit FAC
	• Establish priorities for replacement, correcting sanitary sewer facility deficiencies found, providing for future facility needs.		X			
	• Establish the timing and phasing requirements and identify the projected funding sources for sanitary sewer facility improvements determined to be needed to meet future USF needs.		X			
Objective 7.3.5	Reduce the impacts of sewage generation.					
Policy 7.3.5.1	The University shall implement, where practical, the following techniques for reducing the impacts of sewage generated on the campus:					
	• Utilizing low volume plumbing fixtures.		X			
	• Implementing a leak detection and repair program.		X			
	• Eliminating stormwater, swimming pool and other illegal connections.		X			Delete swimming pool - not illegal connection.
	• Using pump stations and force mains to bypass bottlenecked gravity mains.				X	Not a preferred SOP. Would only be used if not feasible to upgrade gravity system.
	• Re-routing air-conditioning condensate drain lines from the sewer system to alternate locations (such as rain barrels, cisterns, infiltration areas).			X		Not actively pursued.

Sub Element 7.4	Solid Waste Sub-Element					
Goal:	The Solid Waste goal for the Tampa campus plan is to provide for future University solid waste collection and disposal requirements in a safe, cost-effective, environmentally sound and an aesthetically satisfactory manner.					
Objective 7.4.1	Coordinate with the City of Tampa and Hillsborough County in establishing an appropriate level of service for solid waste collection.					
Policy 7.4.1.1	The University shall continue to assist in providing solid waste collection services for the residential and non-residential uses on campus.		x			
Policy 7.4.1.2	The University shall establish a level of service standard for solid waste collection consistent with the Hillsborough County provision of two years of permitted landfill space at the current fill rate, plus 10 years of land under county control for purposes of solid waste.					need further investigation and basis for statement
Policy 7.4.1.3	The University shall coordinate the provision of on and off-campus solid waste collection and disposal facilities required to meet future University needs with the host community or appropriate service provider as outlined in Element 10, Intergovernmental Coordination. USF shall pursue any interlocal agreements or memoranda of understanding necessary to ensure that solid waste collection and disposal services will be supplied to the campus to meet the future needs of the University.		x			revisit with B Donerly (where in Element 10 states solid waste)
Policy 7.4.1.4	Specific training shall be developed and administered to all employees who handle solid waste.		x			"provided" instead of "developed"
Objective 7.4.2	Define procedures to reduce University-generated solid waste and increase scope of recycling and reuse programs.					

Policy 7.4.2.1	The University shall continue to take steps to reduce the quantity of solid waste generated by expanding its recycling program to include additional interior and exterior, easily accessible drop-off locations. These drop-off facilities shall be installed in the individual buildings, residential areas or in other convenient locations. The University will strive to provide, at a minimum, for the recycling of paper, corrugated cardboard, glass, plastics, and metals. Awareness programs directed toward students, faculty and staff shall be included in this recycling program.		x				
Policy 7.4.2.2	The University shall recycle and / or salvage construction, demolition and land clearing waste as practical and possible.		x				
Objective 7.4.3	Establish a program to modify existing solid waste collection locations for convenient service while avoiding potential pedestrian conflicts and visual impacts.						
Policy 7.4.3.1	The University shall establish a unified screening program for solid waste collection locations. Included will be the implementation of aesthetic coordination as well as standardized solid waste containers.		x				
Policy 7.4.3.2	The University shall, during the design of specific building programs, evaluate the relationship of the proposed buildings with the existing buildings, and identify opportunities to reconfigure, enhance or screen solid waste collection facilities from pedestrian corridors.		x				
Objective 7.4.4	Encourage and support proper management in the disposal of hazardous and other special wastes.						
Policy 7.4.4.1	The University shall meet all State and Federal regulations in the collection and transportation of its hazardous wastes and materials.		x				

Policy 7.4.4.2	The University shall monitor the volume and type of hazardous waste collection and temporary storage on site to determine feasibility of constructing and operating the next higher level of storage facility on campus. If such a determination is made to proceed, the University shall amend the adopted campus master plan to reflect the timing, location, and scope of such a facility.		x				
Objective 7.4.5	Establish procedures to correct any existing solid waste facility deficiencies.						
Policy 7.4.5.1	The University shall ensure that solid waste collection and disposal facilities are appropriately provided and phased accordingly to meet the future University needs while correcting any disposal facility deficiencies. USF does not anticipate the need for any solid waste facility improvements at this time. If this condition changes, the University shall amend the adopted campus master plan to identify said improvements, and to establish the timing and phasing requirements and priorities for the improvements.		x				
Policy 7.4.5.2	The University shall establish that the timing and phasing of disposal facility improvements shall be coordinated with Element 11, Capital Improvements.		x				
Policy 7.4.5.3	The University shall annually review future construction programs and priorities for deficiency remediation as part of the capital improvements requirements and procedures of the Florida Board of Trustees to ensure capacity and capital improvements required to meet future University needs are provided when required, based on needs identified in other master plan elements.		x				"shall review as needed" in lieu of "annually"
Sub Element 7.5	Hot Water Sub-Element						
Goal:	The Hot Water Sub-Element goal of the Tampa campus is to provide adequate heating in the most cost effective manner while providing for flexibility in the growth of the campus and limiting the generation of greenhouse gas emissions.						

Objective 7.5.1	Based on Life Cycle Cost Analysis, and if cost effective, phase out the existing Central Plant heating equipment and underground hot water pipe distribution system as existing facilities are renovated.					
Policy 7.5.1.1	The University shall install hot water generation facilities in the Southeast quadrant of campus with 96,000 MBTU/h of capacity.			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/> Requires a new satellite facility and distribution piping to be constructed within the future parking structure if implements. However, since this conflicts with Policy 7.5.1.4 decentralizing concept, this policy should be reevaluated or deleted.
Policy 7.5.1.2	The University shall evaluate methods to use waste heat recovery to reduce consumption of hot water. If any of these methods are demonstrated to be cost effective or otherwise feasible, the adopted campus master plan shall be amended as needed to reflect their implementation.		<input checked="" type="checkbox"/>			
Policy 7.5.1.3	The University shall prepare a study that evaluates the possible benefits of decentralizing the hot water system.		<input checked="" type="checkbox"/>			
Policy 7.5.1.4	The University shall implement energy conservation measures to reduce the hot water load demand and use of high efficiency heating gas-fired equipment.		<input checked="" type="checkbox"/>			
Policy 7.5.1.5	The University shall implement energy conservation measures to reduce the hot water load demand and use of high efficiency heating gas-fired equipment.		<input checked="" type="checkbox"/>			
Policy 7.5.1.6	The University shall evaluate use of heat pump chiller technology as a cogeneration option. Heat pump chiller technology is in fact a type of cogeneration as chilled water and hot water are produced simultaneously and eliminates water consumption associated with cooling towers used as part of traditional chilled water generation.		<input checked="" type="checkbox"/>			Heat recovery chiller for hot water production has been considered at JPH.
Objective 7.5.2	Provide hot water, steam or electric resistance heating plants and/or components for each new or renovated facility.					

Policy 7.5.2.1	The University's Facilities Planning and Construction and Physical Plant Department will be responsible for reviewing all proposed development projects to ensure that adequate hot water capacity exists.		<input checked="" type="checkbox"/>			
Policy 7.5.2.2	Proposed increases in hot water use, whether residential or non-residential, shall be approved only after finding that existing hot water distribution capacity is already on-line to accommodate the increased need, or that additional capacity will be funded and on-line at the forecasted time of need.		<input checked="" type="checkbox"/>	The University's Facilities Planning and Construction and Physical Plant Department are responsible for evaluating and assessing the project impact fees for all non-E&G facilities as a basic part of the utilities planning process.		All non-E&G facilities shall bear the cost (via impact fees) of utilizing hot water utilities that are either existing in capacity or are being added in order to serve the needs of the said non-E&G facility from existing campus Boiler plant and/or hot water distribution infrastructure.
Objective 7.5.3	Provide sufficient hot water to correct existing deficiencies and to meet the future needs of the University.					
Policy 7.5.3.1	The University shall implement hot water improvements as identified on Figure 7.5-1. The timing and phasing requirements for these improvements are established in Element 11, Capital Improvements.		<input checked="" type="checkbox"/>			

Policy 7.5.3.2	The University shall establish and adopt a level of service standard for hot water which provides and maintains a range of 140-180 degrees (F) hot water supply temperature to meet building heating demands. The guideline has been set to establish a 30°F temperature differential. Plant leaving heating hot water temperatures may be reduced down to 160°F during the off season and reduce temperature differential down to 20°F.	<input checked="" type="checkbox"/>			The university has adopted this policy. Currently the hot water supply is controlled and maintained within a range of 140 - 160 degrees F. Adjustments are made between the stated range to optimize efficiency and operational requirements.		
Policy 7.5.3.3	Hot water facility improvements shall be implemented based on the following priorities:						
	• Elimination of existing system deficiencies		<input checked="" type="checkbox"/>				
	• Maintaining the existing system		<input checked="" type="checkbox"/>				
	• Expanding the system to accommodate new hot water needs		<input checked="" type="checkbox"/>				
	• Develop and plan a program to replace aging Rickwell hot water piping with non-corrosive material in the northwest quadrant and the center core of the campus		<input checked="" type="checkbox"/>				Campus Master Plan and infrastructure improvements when funding is available work towards meeting this goal.
Policy 7.5.3.4	The University shall refurbish and add isolation shut off valves and service valves in the heating hot water distribution loop to allow a continuous supply of hot water in other areas of the campus when piping leakages occur.		<input checked="" type="checkbox"/>				

Policy 7.5.3.5	The University shall evaluate possible ways to preserve the life service of existing heating hot water piping by providing corrosion protection to all underground heating hot water piping distribution systems.		<input checked="" type="checkbox"/>	A large percentage of the underground hot water distribution piping system has been in service 50 years or more, Condition unknown. However, where samples have been observed, there appears to be excessive corrosion on the steel carrier pipe exterior. These corrosion dimples result in a compromised wall thickness approximately one-half of the pipes original thickness.	A standard practice includes adding and maintaining corrosion inhibitors to the water circulating through the hot water distribution system in order to preserve the interior surface of the piping system life service.
Policy 7.5.3.6	The University shall develop heating hot water hydraulic piping modeling to simulate the actual hot water flow rate condition of the existing distribution system and identify the present and future pumping deficiencies.		<input checked="" type="checkbox"/>		Campus model completed for existing facilities. Future distribution and piping to be developed during planning and forecasted time of need.
Policy 7.5.3.7	The University shall update and maintain complete verified hydraulic models for the modifications and expansions of the piping system throughout the campus.		<input checked="" type="checkbox"/>		

Policy 7.5.3.8	The University shall develop and implement non-destructive testing procedures and practices to evaluate the status of existing underground piping systems.	<input checked="" type="checkbox"/>		Whenever underground piping is exposed as a result of excavation in support of unrelated projects, the opportunity is used to make observations of the existing underground distribution piping where practical. Whenever possible, samples are collected for further metallurgical evaluation.		
Policy 7.5.3.9	The University, through the Office of Physical Plant, shall meter hot water loads to implement load management and load history for planning and conservation measures.	<input checked="" type="checkbox"/>				
Policy 7.5.3.10	The University shall implement energy conservation measures to reduce the hot water load demand and use of high efficiency gas fired heating equipment.	<input checked="" type="checkbox"/>				
Policy 7.5.3.11	The University shall continue to evaluate the possibility of implementing a waste heat recovery program by placing an electric utilities co-generation plant in the campus to supplement heating plant load demand.	<input checked="" type="checkbox"/>				
Policy 7.5.3.12	The University shall continue to evaluate the possibility of implementing a waste heat recovery program by placing an electric utilities co-generation plant in the campus to supplement heating plant load demand.	<input checked="" type="checkbox"/>				

Policy 7.5.3.13	The University shall pursue opportunities in clean fuel options (natural gas, synthetic gas, propane, etc.) and eliminate use of electric heat in existing facilities and new construction.		<input checked="" type="checkbox"/>				
Sub Element 7.6	Chilled Water Sub Element						
Goal:	The Chilled Water Sub-Element goal of the Tampa Campus Master Plan is to provide an adequate chilled water service to the campus facilities in the most cost efficient manner that will support future expansion while limiting the generation of greenhouse gas emissions (GHG).						
Objective 7.6.1	Expand the Southeast chilled water plant to a thermal capacity level of 11,000 tons.						
Policy 7.6.1.1:	The Energy Models and Load Calculations shall be used to determine the amount of chilled and hot water. Equipment selection and energy conservation measures will be evaluated based on life cycle cost analysis.		<input checked="" type="checkbox"/>				
Policy 7.6.1.2:	Chilled water facility improvements shall be implemented based on the following priorities:						
	• Expand the system to accommodate new chilled water needs.		<input checked="" type="checkbox"/>				
	• Consideration given to heat pump chiller technology for simultaneous chilled and hot water generation.			<input checked="" type="checkbox"/>			Heat recovery chiller for hot water production has been considered at JPH.
Objective 7.6.2	Campus Utility Plant facilities shall expand to accommodate the future new and renovation of facilities in USF Health and the NW quadrant of campus						
Policy 7.6.2.1	The University shall require that the current Chilled/Hot Water Master Utility Plan be modified based upon the amount of chilled water required for each new and/or renovated facility. The adopted campus master plan shall be amended as needed to incorporate any new chilled water requirements.		<input checked="" type="checkbox"/>				
Policy 7.6.2.2	The University shall implement chilled water improvements as identified on Figure 7.6-1. The timing and phasing requirements for these improvements are established in Element 11, Capital Improvements.		<input checked="" type="checkbox"/>				

Policy 7.6.2.3	No outside sources from either private or public facilities will be required for chilled water production because all chilled water originates from within the campus.	<input checked="" type="checkbox"/>				
Policy 7.6.2.4	The University shall establish and adopt a level of service standard for chilled water which provides and maintains a maximum of 45 degrees chilled water supply temperature at a minimum pressure of 60 psig to meet building cooling demands.	<input checked="" type="checkbox"/>				
Policy 7.6.2.5	The University's Facilities Planning and Construction and Physical Plant Department will be responsible for reviewing all proposed development projects to ensure that adequate chilled water capacity exists.		<input checked="" type="checkbox"/>			
Policy 7.6.2.6	Proposed increases in chilled water use, whether residential or non-residential, shall be approved only after finding that existing chilled water distribution capacity is already on-line to accommodate the increased need, or that additional capacity will be funded and on-line at the forecasted time of need.		<input checked="" type="checkbox"/>	The University's Facilities Planning and Construction and Physical Plant Department are responsible for evaluating and assessing the project impact fees for all non-E&G facilities as a basic part of the utilities planning process.		All non-E&G facilities shall bear the cost (via impact fees) of utilizing chilled water utilities that are either existing in capacity or are being added in order to serve the needs of the said non-E&G facility from existing campus chiller plant and/or chilled water distribution infrastructure.
Policy 7.6.2.7	The University shall continue to adhere to its policy for replacing ozone-depleting refrigerants with environmentally safe refrigerants.		<input checked="" type="checkbox"/>			

Policy 7.6.2.8	The University shall continue to grow the Northwest satellite plant to meet the ongoing demands of the entire Northwest quadrant. Projected 10 year planning period future loads will require capacity expansion to 15,000 tons.		<input checked="" type="checkbox"/>		The Northwest satellite plant (NWP) current includes 7000 tons of chiller capacity (4 x 1,750 ton high efficiency water cooled chillers).		Current facility is 7000 tons. Space for expansion of the existing chiller facility and cooling tower yard should be considered and included in this Master Plan update. Plan should include consideration of preserving the IT Main Distribution facility located in west side of MHB (room 0151). This MDF serves as a major hub for IT serving the Health Complex. Custodial Services house approximately 250 employees within this building. The Master Plan should consider and include any necessary expansion to handle displacements and Custodial Services growth needs manifested by the NWP expansion.
Policy 7.6.2.9	The University shall develop and implement a campus utility load profile for chilled water peak demand to determine the campus diversified peak load factor and establish firm capacity of the existing chiller plants that will be essential in accommodating future campus growth.		<input checked="" type="checkbox"/>				
Policy 7.6.2.10	The University shall set and implement a 75% firm capacity criterion to optimize the chiller plant capacity redundancy to an acceptable level commonly used in educational institutions and still provide satisfactory cooling load demand when chilled water equipment failures occur.		<input checked="" type="checkbox"/>		The current policy includes an N+1 strategy for firm capacity redundancy.		This policy should be revised to reflect the current N+1 strategy in lieu of 75% firm capacity.
Policy 7.6.2.11	The University shall evaluate possible ways to preserve the life service of existing chilled water piping by providing corrosion protection to the underground chilled water distribution system.		<input checked="" type="checkbox"/>		A large percentage of the underground chilled water distribution piping system has been in service 50 years or more, Condition unknown. However, where samples have		A standard practice includes adding and maintaining corrosion inhibitors to the water circulating through the chilled water distribution system in order to preserve the interior surface of the piping system life service.

Policy 7.6.2.12	The University, through Facilities Planning and Construction, shall develop and maintain a NW satellite plant chilled water hydraulic piping model to simulate the actual chilled water flow rate condition of the existing distribution system and identify the present and future pumping deficiencies.		<input checked="" type="checkbox"/>			
Policy 7.6.2.13	The University, through the Offices of Facilities Planning and Construction and Physical Plant, shall maintain complete verified hydraulic models for the modification and expansion of the piping system throughout the campus.		<input checked="" type="checkbox"/>			
Policy 7.6.2.14	The University shall develop and implement non-destructive testing procedures and practices to evaluate the status of existing underground piping systems.			Whenever underground piping is exposed as a result of excavation in support of unrelated projects, the opportunity is used to make observations of the existing underground distribution piping where practical. Whenever possible, samples are collected for further metallurgical evaluation.		
Policy 7.6.2.15	The University, through the Office of Physical Plant, shall meter chilled water loads to implement load management and load history for planning and conservation measures.		<input checked="" type="checkbox"/>			

Sub Element 7.7	Electrical Power and Other Fuels Sub-Element					You should propose auditing at regular intervals (Every 2, 3, ... years) to assess efficiency of energy use. This can be supported by the building monitoring systems that we are planning to implement with Johnson Control for potable water, hot water, chilled water and electricity. (Ghebremichael, Kebreab)
Goal	The Electrical Power and Other Fuels Sub-Element goal for the Tampa Campus Master Plan is to provide adequate, reliable, and cost effective electrical service to support campus operations and expansions through the 10 year planning period.		X		Campus Master Plan and infrastructure improvements when funding is available work towards meeting this goal.	
Objective 7.7.1	Update and implement design and construction standards to establish the levels of service and installation required to ensure that adequate, reliable, and cost effective electrical service is provided to future and rehabilitated facilities.		X		Design and Construction Guidelines updates are available on the	Updating the Design and Construction Guidelines is an ongoing process to ensure the most current Physical Plant standards are followed and constantly improving energy conservation technologies beneficial to the University are incorporated.

Policy 7.7.1.1	The University shall implement electrical energy system improvements as described in this sub-element or as identified on Figures 7.7-1 and 7.7-2. The timing and phasing requirements for these improvements are established in Element 11, Capital Improvements.	X		A new TECO feeder and southwest campus medium voltage system improvements were completed in 2014 to facilitate the improvements in Figures 7.7-1 and 7.7-2 reducing load on existing main substation feeders, increasing, capacity for growth, and improving redundancy of electrical service to the campus..	Additional infrastructure improvements are planned when funding is available to improve service reliability, capacity, and redundancy.
Policy 7.7.1.2	The University shall develop a phasing schedule for upgrading the existing electric power supply capacity and distribution system to meet future University needs when required. The adopted campus master plan shall be amended as needed to reflect any changes to the timing and phasing requirements.		X	A 5-10 year electrical infrastructure master plan has been developed, and infrastructure	The electrical infrastructure master plan is updated to meet the 5 year CIP and Master Plan updates.
Policy 7.7.1.3	The University shall hold regularly scheduled meetings with TECO to negotiate the terms and conditions under which TECO would continue to provide primary service to future University facilities.		X	Regular meetings, planning discussions, and negotiations are held with TECO.	Rates, service reliability and capacity, metering and service points are items discussed.

Policy 7.7.1.4	The University shall include TECO participation in all modifications to the master plan and in planned expansion programs to ensure adequate electrical service will be available when needed.		X	TECO participates in regular planning meetings discussing modifications to the Master Plan.	Facilities Planning and Construction Electrical Engineer regularly meets with TECO's Central Service Area Engineer, and conducts an annual meeting with TECO's planning personal.
Policy 7.7.1.5	The University shall require that a computerized life cycle cost analysis be submitted for all new and renovated facilities to determine whether natural gas and/or electricity will be the source of fuel.		X	Computerized life cycle cost analysis are submitted for all major projects.	Facilities Planning and Construction Mechanical and Electrical Engineers coordinate with the design team for each project.
Objective 7.7.2	Continue to reduce energy losses in the USF owned distribution system and in USF-owned and operated facilities.		X	Ongoing objective for all renovations and new projects..	Energy efficient lights, motors, and air conditioning equipment are provided in all projects. Campus power factor is monitored to avoid utility penalties.
Policy 7.7.2.1	The University shall continue to study the use of alternative energy sources (e.g., solar power, co-generation, on-site generation for peak demand shaving, etc.).		X	Alternate energy sources are considered when funding is available and has a favorable return on investment.	Continue researching new and improving technologies for alternate and renewable energy sources.
Policy 7.7.2.2	The University shall continue the use of energy efficient lighting fixtures, electronic ballasts, and high lumen efficiency lamps in all new and renovated buildings and shall continue to implement upgrades as technology evolves and funding is available.		X	Energy efficient fluorescent fixtures and LED fixtures are implemented.	Campus Design and Construction Guidelines are continuously updated to include improving LED and other energy efficient technologies in fixtures.
Policy 7.7.2.3	The University shall continue the use of infrared survey equipment to determine the status of the primary electrical distribution for energy reliability.		X	Infrared survey equipment is utilized by campus contractors and Physical Plant Department for preventive maintenance.	Infrared scans are provided periodically and preventive maintenance performed when required to improve distribution system reliability.

Policy 7.7.2.4	The electrical design of all future building construction shall be designed to achieve at minimum a Silver LEED rating.		X	Minimum Silver LEED rating is pursued on all new major projects.	All completed major projects achieve LEED certification.
Policy 7.7.2.5	The University shall continue to improve the reliability of the 13.2 KV underground system by selectively replacing the aged power transformers, high voltage switches, power cables, and refurbishing the manholes.		X	Capital Improvement list includes replacing transformers, medium voltage gear, and cable deemed at the end of their life expectancies as funding comes available.	Improvements are made when funding is available.
Policy 7.7.2.6	The University shall continue to identify energy conservation opportunities to reduce greenhouse gas emissions and reduce the load on existing feeders to allow additional capacity for future buildings.		X	The University constantly researches energy conservation opportunities to reduce greenhouse gas	Energy conserving measures are incorporated into campus guidelines.
Policy 7.7.2.7	The University shall provide consideration for a demand control strategy using the existing metering instrumentation available throughout campus to reduce the overall campus electrical demand. The existing equipment has the capabilities to be combined as an enterprise management system to increase the efficiency of the campus energy usage.		X	Building monitoring and control strategies are considered and implement where feasible and funded.	Automatic energy saving measures such as automatic vacant off lighting control in existing buildings are implemented as funding comes available.
Objective 7.7.3	Continue to update a computerized data based load tabulation of electric power requirements, for existing facilities and for new buildings proposed in the master plan, which can be upgraded for changes on as needed or programmed basis.		X	Load tabulation data for existing buildings and proposed new buildings is maintained and updated for Master Plan updates.	Upgrading Physical Plant Department current metering system to include recording historical demand load profiles will be implemented when funding becomes available.

Policy 7.7.3.1	The University shall continue to require that a report be submitted for each new and/or renovated facility indicating the amount of electricity which will be required for each renovated and/or new facility.		X		Load calculations are required for all projects.		None
Policy 7.7.3.2	The University shall continue to require that the campus electrical power distribution system be modified to meet the electricity demands created by the renovated and/or new facilities.		X		The University is complying with this policy.		None
Policy 7.7.3.3	The University's Office of Physical Plant and Facilities Planning and Construction will continue to be responsible for reviewing all proposed development projects to ensure that adequate electrical energy capacity exists.		X		All proposed development projects are reviewed to ensure adequate electrical capacity exists.		None
Policy 7.7.3.4	Proposed increases in electrical energy use shall continue to be approved only after finding that existing electrical energy distribution capacity is already on-line to accommodate the increased need, or that additional capacity will be funded and on-line at the forecasted future time of need. New loads shall be evaluated and selectively added to the existing campus electrical distribution.		X		The University is complying with this policy.		None
Objective 7.7.4	Limit the expansion of the University-owned electrical distribution system to within the boundaries established by USF. (See Figures 7.7-1 and 7.7-2.)		X		The University is complying with this policy.		None
Policy 7.7.4.1	Electrical system improvements shall be implemented based on the following priorities:						
	• Maintaining the existing system		X		The University is complying with this policy.		None
	• Expanding the system to accommodate new electrical energy needs.		X		The University is complying with this policy.		None

Objective 7.7.5	Inventory of emergency generators on the campus.	X			Campus generators locations and sizes are included in the campus master utilities plan. Physical Plant Department maintains the inventory list.		None
Policy 7.7.5.1	The University shall keep an updated inventory of emergency generators on campus.		X		The University is complying with this policy.		None
Objective 7.7.6	Develop a means or standard for the assessment of disaster preparedness in existing and future buildings.		X		Disaster preparedness and response plans are developed and updated by Environmental Health and Safety, Physical Plant Department, and Facilities Planning and Construction.		None
Policy 7.7.6.1	The University shall determine the potential risk, liability and economic impact of long term power outages for existing and new buildings.		X		The University is complying with this policy.		None
Policy 7.7.6.2	The University shall assess the environmental exposure of electrical service equipment for worst case weather scenarios.		X		The University is complying with this policy.		None
Sub Element 7.8	Telecommunications Sub-Element						
Goal	The Telecommunications Sub-Element goal for the Tampa Campus Master Plan is to provide each existing building and planned new buildings on the Tampa campus with communications connectivity for telephone, data, and video/media networks.						

Objective 7.8.1	To plan, design and implement communications infrastructure at the Tampa campus, as shown in Figures 7.8-1 and 7.8-2, in order to correct existing deficiencies and meet the voice, data and video communications needs of the 10 year planning period.					
Policy 7.8.1.1	The University shall program funding for design and construction to extend the infrastructure to encompass the student organization housing (SE quadrant) and the physical education, recreation, and athletics areas.	X				
Policy 7.8.1.2	The University shall program funding for design and construction to extend the infrastructure south of the Sun Dome to connect the Patel Center and associated development, and provide redundant/alternative pathways for the campus fiber backbone.	X				
Policy 7.8.1.3	The University shall program funding for design and construction to extend the infrastructure to the southwest to connect the USF Research and Development Park with the main campus.			X		
Policy 7.8.1.4	The University shall program funding for design and construction to extend fiber optic cable to classrooms, offices, and dormitories to provide connectivity for faculty, staff, students, and residents.			X		Lack of funding
Policy 7.8.1.5	The University shall program funding for design and construction to interconnect the medical office buildings at the regional Davis Island campus (USF Health South Tampa Center for Advance Healthcare) and the College of Medicine Infrastructure located on the Tampa campus.		X			
Policy 7.8.1.6	Participation by local exchange carriers (LEC) and the local CATV company and other service companies shall be required in all modifications to the Master Plan and in planned expansion programs to ensure adequate telecommunications will be available when needed.		X			

Policy 7.8.1.7	The University shall program funding for design and construction to upgrade and create additional licensed and unlicensed wireless systems to meet the needs of the University's educational mission.		X				
Policy 7.8.1.8	The University shall implement telecommunications system improvements as identified on Figures 7.8-1 and 7.8-2. The timing and phasing requirements for these improvements are established in Element 11, Capital Improvements.		X				*Replace "telecommunications" with "Data Communications"
Policy 7.8.1.9	Telecommunications system improvements shall be implemented based on the following priorities:						*Replace "telecommunications" with "Data Communications"
	• Elimination of existing system deficiencies		X				
	• Maintaining the existing system		X				
	• Expanding the system to accommodate new telecommunications system needs.		X				
Policy 7.8.1.10	The University's Information Technologies Department shall be responsible for reviewing all proposed development projects to ensure that adequate telecommunications system capacity exists.		X				*Replace "telecommunications" with "Data Communications"
Policy 7.8.1.11	Proposed increases in telecommunications system use, whether residential or non-residential, shall be approved only after a finding that existing telecommunications system capacity is already on-line to accommodate the increased need, or that additional capacity will be funded and on-line at the forecasted future time of need.		X				
Policy 7.8.1.12	The University shall program funding for data and voice infrastructure in support of new buildings and facilities.		X				
Objective 7.8.2	Standardize on a data local wide area network, for campus-wide use, that will serve USF's network needs through the 10 year planning period and beyond.						

Policy 7.8.2.1	The University shall program funding for design and construction to provide adequate copper connectivity for voice, multi-mode fiber for data, and single mode fiber for video/data to all buildings on the Tampa campus.		X				generic - cabling infrastructure to replace specifics
Policy 7.8.2.2	The University shall identify, inventory, and study any electromagnetic field generators on the campus.		X				
Policy 7.8.2.3	The University shall program funds to perform an inventory and study of electromagnetic fields on campus.		X				
Objective 7.8.3	Identify, inventory, and assess any media or high bandwidth application on the campus.						
Policy 7.8.3.1	The University shall program funds to perform an inventory and study of video systems on campus.		X				
Objective 7.8.4	Maintain a periodically revised USF voice/data/video Construction Standard for use in all new construction and renovation projects requiring these services.						
Policy 7.8.4.1	Information Technologies and other designated entity, shall produce, distribute, and update as necessary a set of construction standards for campus-wide voice/data/video systems, based on technology to support the University through		X				

This Page Intentionally Left Blank.

2015-2025 USF - Tampa Campus Master Plan Update
 Evaluation and Appraisal Report

Element 8: Conservation

Goal 1: The Conservation goal of the 2010 Campus Master Plan is to be an institutional model for conservation policies, to meet the ACUPCC goals, to minimize negative environmental impacts, and better the environment through improved air, water and open space quality in the vicinity of the campus.

		Status			Current Condition	Delete?	Comments/Problems/Recommendations
		Complete	Ongoing	Not Implemented			
Objectives & Policies							
Objective 8.1	Identify mitigation techniques in order to reduce greenhouse gas emissions and improve the air quality.						
Policy 8.1.1	The University shall continue to participate in and consider expanding those programs that contribute to improving existing air quality and reducing greenhouse through the reduction of campus traffic and parking demands. Such programs include, but are not limited to, participation in local transportation management associations such as New North Transportation Alliance (NNTA), transit routing and terminal servicing activities and the promotion of bicycle and pedestrian circulation improvements.		x				
Policy 8.1.2	The University shall reduce mobile sources of air pollution through implementation of Element 5, Transportation policies designed to discourage dependence on single occupancy vehicles (SOV) as the primary transportation mode for commuting to and from and/or moving on campus, reduce emissions caused by idling times at signals, and to encourage alternative modes of transportation.		x				
Policy 8.1.3	The University shall explore and implement, as appropriate, alternative fuel vehicles including automobile and golf cart fleets and campus shuttle systems for on-campus utilization.		x				

Policy 8.1.4	The University shall determine the potential impacts on air quality before construction of parking structures. Parking structures shall be sized and designed to facilitate rapid ingress and egress of vehicles to minimize idling time, and to maximize air flow through them to eliminate pockets of stagnation where pollutant levels can build up.		x				revisit
Policy 8.1.5	The University shall minimize emissions of air pollutants from and within buildings on campus, minimizing the storage and use of volatile and hazardous materials,		x				check with EH&S & revisit (You may also want to add that labs should be equipped with fume hoods (Ghebremichael, Kebreab))
Policy 8.1.6	The University shall continue monitoring both indoor and outdoor air quality.						revisit
Policy 8.1.7	The University shall implement tree planting programs targeting 1,000 trees per year over the initial five-year planning period (See Figure 8-3, 10 Year Tree Cover) as a means to provide the following benefits onto campus:		x				report new tree count
	• Increased carbon absorption for improved air quality						
	• Reduced the heat-island effect on campus						
	• Reduced stormwater runoff						
	• Enhanced outdoor space, providing shade for campus population and encouragement for increased alternative non-vehicular circulation.						
Objective 8.2	Conserve and protect the quantity and quality of water sources including groundwater and surface water.						
Policy 8.2.1	The University shall identify all existing and proposed potable well locations as "no build" zones, except for recreation facilities.		x				
Policy 8.2.2	The University shall not undertake activities on-campus which would contaminate groundwater sources or designated recharge areas unless provisions have been made to prevent such contamination or otherwise provide mitigation for such activities so as to maintain established water quantity and quality standards. (See Sub-Elements 7.1, Stormwater Management and 7.2, Potable Water.)						need further discussion
Policy 8.2.3	The University shall continue to monitor and test treated potable water on a monthly basis. (See Sub-Element 7.2, Potable Water.)		x				DOH req.
Policy 8.2.4	The University shall monitor surface waters for compliance with existing standards for water quality. (See Sub-Element 7.1, Stormwater Management.)						revisit

Policy 8.2.5	<p>The University shall continue to implement its comprehensive Water Conservation Plan, to include, but not be limited to the following measures:</p> <ul style="list-style-type: none"> • Exploration of the potential interdependencies between chilled water make-up/discharge, stormwater, and treated wastewater and irrigation (See Element 9, Infrastructure) • The use of automated timers, irrigation flow monitoring mechanisms, rain and ground moisture sensors • Application of low maintenance xeriscape, native plant landscape treatments for new and renovated building construction and new and renovated campus open space site and facilities • The use of low-flow and low-flush fixtures in new building construction, and water audits and other leak detection programs. • Continue to maximize the use of condensate and storm water to offset the consumption of water in irrigation, water features, water closets, and urinals. 					<p>USF should work on awareness raising for conservation (Again the displays from the building monitoring systems would be helpful) (Ghebremichael, Kebreab)</p>
Policy 8.2.6	<p>The University shall ensure the status and integrity of all identified underground storage tanks on a periodic basis through its ongoing monitoring program.</p>	x				
Policy 8.2.7	<p>The University shall construct a series of stormwater management facilities located within the Greenway providing reduction of stormwater pollutants prior to their eventual outfall. As part of new construction, additional, visible pilot and permanent low-impact design and stormwater management projects shall be considered for implementation within the public campus realm in support of demonstrating institutional commitment to protecting and conserving water, including reduction of pollutants, on campus and within the water shed. (See Sub-Element 7.1, Stormwater Management.)</p>	x				<p>edit wording</p>
Objective 8.3	<p>Protect identified jurisdictional native vegetative communities whether upland or wetland, as shown in Figure 8-1, 10 Year Natural and Environmental Resources and campus plantings.</p>					<p>revisit "jurisdictional native"</p>

Policy 8.3.1	The University, through a qualified professional, shall conduct a campus wide landscape documentation and assessment including location and identification of existing plant materials, and assessment of health and condition, horticultural, environmental, and spatial significance, for the purpose of establishing a University tree and plant inventory data base. This data base will enable development of long term management and protection of campus horticultural resources and investments, including budgeting for landscape implementation and staff operations.					possible map to hl "no build" zone
Policy 8.3.2	The University, in order to maintain the aesthetic quality, health, and investment in the main campus landscape and the vegetative resources of the USF Forest Preserve Area, shall provide for the development of a Campus Landscape Management Plan by a qualified professional. This plan shall focus on long term sustainability of the landscape and include identification and description of tasks, schedule and frequency, operational requirements including equipment, materials, and identification of personnel by skill appropriate to tasks and budgeted hours.		x			
Policy 8.3.3	Based on the landscape assessment, the University shall identify and protect jurisdictional and other areas of native plant communities from development by designating these areas as "no build" zones. Areas of native plants may include:			x		
	• The USF Forest Preserve north of Fletcher Avenue, shown in Figure 8-2, 10 Year Greenway and USF Forest Preserve, except for research activities as required, and recreation activity within Riverfront Park described in Element 9, Recreation and Open Space, Figure 9-4, Riverfront Park Recreation Area.					revisit
	• The open area east of Leroy Collins Boulevard along Fowler Avenue.			x		
	• The hardwood hammock and wetland area at the southwest corner of Fletcher Avenue and 50th Street.			x		
	• The retention lake, Lake Behnke, at Bruce B. Downs Boulevard and area of the existing Botanical Gardens.			x		
	• Other areas of the Greenway specifically identified in Element 9, Recreation and Open Space, as conservation areas.			x		

	<ul style="list-style-type: none"> • Other opportunities to protect environmentally sensitive lands based upon State and local criteria shall be evaluated. Should development be necessary to occur within these areas, mitigation techniques as provided by the regulatory agencies shall be coordinated with the host community and permitting agencies by the University. 		x			
Policy 8.3.4	The University shall endeavor to use plant species that are indigenous to the natural plant communities of the Tampa Bay area. In cases where non-invasive exotic plants are used to enhance the landscape, plantings shall be limited to those non-invasive species that are able to resist periods of drought and which require little fertilization or the use of pesticides.		x			froz resistance
Policy 8.3.5	As part of ongoing planting efforts, the University shall introduce a greater variety of tree and other plant species and greater numerical balance between various species in order to reduce likelihood of collective loss of a single species or group of species that may occur due to an existing or potential yet unknown blight condition. Additionally, the University shall continue to develop age diversity in the tree stock through a phased introduction of trees within given areas overtime to improve the long-term sustainability of the aesthetic landscape and vegetative communities.		x			reword
Policy 8.3.6	The University shall maintain and improve existing vegetative communities through the removal of ecologically undesirable vegetation. It is the intent of the University to remove all non-native invasive plants (whether grasses, shrubs or trees) which are identified on the most current Exotic Pest Plant Council's "Florida's Most Invasive Species List" from the campus grounds. As these species are identified on the campus. The University shall coordinate with the Florida Department of Environmental Protection and other appropriate governmental entities to ensure the proper removal and disposal of these exotic species.		x			

Policy 8.3.7	The University shall endeavor to reduce the extent of turf grass on campus in favor of alternative native and xeriscape groundcovers (shade tolerant where required) and designation of areas of naturalized groundplane, to thereby reduce water consumption, fertilizer application, and overall mowing maintenance requirements.		x			
Objective 8.4	Designate environmentally sensitive lands for protection based on state and locally determined criteria.					
Policy 8.4.1	The University shall maintain the jurisdictional areas based upon the most recent Florida Department of Environmental Protection criteria, standards and guidelines.		x			
Policy 8.4.2	The University shall maintain, in a managed natural state, all of those sites identified for preservation on the 10 Year Natural and Environmental Resources (8-1). No construction is anticipated in these areas except for minimal structures and improvements necessary to ensure safe access and essential recreational support functions.					revisit
Policy 8.4.3	During the initial planning phase of any physical changes to the campus, the University shall perform a census of plants and wildlife in the area to be affected. Existing plants or animals identified in the most current "Official Lists of Endangered and Potentially Endangered Fauna and Flora in Florida", Florida Fish and Wildlife Conservation Commission, or otherwise afforded protection by the host communities and state and federal agencies, shall be noted. Protection plans for those identified species shall be formulated consistent with those of the host communities and appropriate state and federal agencies.					reword to environment
Objective 8.5	Restrict University activities known to threaten the habitat and survival of threatened and endangered species and species of special concern.					
Policy 8.5.1	The University shall continue to require the use of best management construction practices, including the use of soil stabilizers, silt screens, surface moisture applications and other techniques to reduce the impact of development activities as identified in the USF Design and Construction Guidelines http://usfweb2.usf.edu/FacilitiesPlan/process/guidelines.html		x			

Policy 8.5.2	The University shall minimize site disturbance on previously undeveloped sites, and shall utilize native or adapted non-invasive xeriscape vegetation when restoring disturbed areas.		x			
Policy 8.5.3	Future development, including buildings, parking facilities, utilities, walkways, paths, stormwater facilities, and recreation fields, shall be carefully sited to minimize impacts to existing trees. Prior to initiating construction, trees shall be protected from damage through the use of perimeter barricades placed at the tree drip lines or critical root zones (whichever is greater), and shall remain in place throughout the period of construction. Existing trees that are removed due to construction shall be replaced with new trees; total caliper of all new trees combined shall equal total caliper of trees removed or lost through construction. Replacement trees may be planted at the site of construction or elsewhere on campus depending on the site and overall campus needs as determined by USF Facilities Planning and Construction.		x			edit wording
Policy 8.5.4	Any proposed development adjacent to an environmentally sensitive area shall be carefully sited and integrated into the existing landscape to have minimal visual impact on the area. Landscape treatment shall preserve significant existing vegetation to allow a gracious transition from developed areas to undeveloped areas to preserved areas. The existing vegetation shall serve to essentially buffer proposed development in order to maintain the natural and undeveloped character of the area. (See USF Design and Construction Guidelines http://usfweb2.usf.edu/FacilitiesPlan/process/guidelines.html)		x			
Policy 8.5.5	The University shall protect and conserve the natural functions of soils, rivers, flood-plains and wetlands. The University shall continue to support the designation of Hillsborough River as an Outstanding Florida Water by protecting and enhancing this important resource.		x			

Policy 8.5.6	The University shall construct new facilities in respect of appropriate flood zone requirements. The University shall, to the maximum practical extent, locate buildings outside of the Federal Emergency Management Agency's (FEMA) recognized 100 year flood zone. In those locations where encroachment into the floodplain is deemed unavoidable, the University shall provide Base Flood protection and abide by all regulatory requirements to provide compensatory flood storage areas.		x			
Policy 8.5.7	The University shall continue to protect and conserve threatened and endangered species of plants and animals, and species of special concern, as required by the Endangered Species Act of 1973, as amended, Chapter 39, F.A.C., and federal and state management policies relating to the protection of threatened and endangered species, and species of special concern. The campus has been largely disturbed but known gopher tortoise habitats occur to the north of the existing Botanical Garden and in the USF Forest Preserve. Both areas are designated as no-build zones.		x			coordinate. with previous policy
Policy 8.5.8	University personnel shall, when encountering listed species, follow procedures and seek consultation with the appropriate agencies as identified in the Florida Fish and Wildlife Conservation Commission's most current "Wildlife Methodology Guidelines."		x			
Policy 8.5.9	The University shall endeavor to reduce and prevent "light pollution" and its impact on nocturnal environment by meeting relevant LEED credit guidelines in new development and through phased replacement of non-compliant lighting campus wide.		x		is this location right?	
Objective 8.6	Reduce the quantity of waste generated on campus and expand the percentage of waste recycled or reused.					
Policy 8.6.1	The University shall continue its ongoing evaluation of monitoring, reducing, and disposing of hazardous chemical and medical wastes. New technologies to assist in transporting and disposing of such wastes shall be evaluated by the University. (See Sub-Element 7.4, Solid Waste Management.)		x			

Policy 8.6.2	The University shall provide on-campus facilities for the collection and storage of hazardous materials used in University operations as required by federal, state and local regulations. (See Sub-Element 7.4, Solid Waste Management.)		x			
Policy 8.6.3	The University shall continue to encourage reduction of generated waste materials and expanded use of its recycling and reuse programs by establishing mechanisms for coordinating efforts of USF Physical Plant and Auxiliary services, creating awareness through varied communication methods, and installing additional convenient recycling centers. (See Sub-Element 7.4, Solid Waste Management.)		x			
Policy 8.6.4	The University shall coordinate on-campus recycling programs with those of local government in regard to materials collected, and disposal/collection procedures. (See Sub-Element 7.4, Solid Waste Management).			x		
Policy 8.6.5	The University shall, through USF Purchasing and Auxiliary Services, endeavor to establish mechanisms for developing and maintaining a "green" products data base and shall encourage use of those environmentally preferable products with lower environmental impact.		x			Make reference to the "purchasing guidelines" that was developed recently (Ghebremichael, Kebreab)
Objective 8.7	Identify measures to conserve and appropriately reduce energy use.					
Policy 8.7.1	The University shall evaluate and implement, as appropriate, solar energy and other clean energy sources as alternative sources of power for irrigation systems and lighting, shuttles, phones, etc. (See Sub-Element 7.7, Electrical Power and Other Fuels.)		x			
Policy 8.7.2	The University shall establish administrative, operational and other procedures to monitor energy use on a building specific basis and provide enhanced feedback to end users on their energy use, and incentives for reduction.		x			You can make reference to the building monitoring systems (Ghebremichael, Kebreab)
Objective 8.8	Expand the use of conservation and energy saving techniques with the planning, design, and construction of new facilities.					
Policy 8.8.1	The design of new buildings shall be consistent with the climatic response and sustainability guidelines contained in the USF Design and Construction Guidelines http://usfweb2.usf.edu/FacilitiesPlan/process/guidelines.html .		x			

Policy 8.8.2	Energy conservation fixtures, air conditioning and lighting systems and other building specific energy use and management techniques shall continue to be a required element of all new and renovated buildings constructed on the campus.		x			
Policy 8.8.3	The University shall consider, during development of building programs and design, the building orientation, increased daylighting measures, utilization of courtyards, arcades and other shade and ventilation techniques to further reduce energy demands.		x			
Policy 8.8.4	The University shall consider, during development of building programs and design, use of low-maintenance, local (within 500 miles per USGBC LEED), durable, and sustainable materials, with priority placed on durable materials with long term life cycle benefit.		x			
Policy 8.8.5	The University shall require all major new construction and renovation projects to seek USGBC LEED certification with goal of achieving Silver rating or above. Commissioning is required on all projects. The University has a target of energy saving of 15-20% above the ASHRAE 90.1-2004 Baseline.		x			
Policy 8.8.6	Copies of land development criteria and design standards which reflect the policies contained in the adopted Campus Master Plan, USF Design and Construction Guidelines, http://usfweb2.usf.edu/FacilitiesPlan/process/guidelines.html and Final Climate Action Plan shall be provided to design consultants and appropriate University staff. The University shall standardize the construction review process to assure adherence to appropriate Master Plan and Design and Construction Guideline policies.		x			

2015-2025 USF - Tampa Campus Master Plan Update
 Evaluation and Appraisal Report

Element 9: Recreation and Open Space Element

Goal 1: The Recreation and Open Space goal of the Tampa Campus Master Plan is to provide enhanced recreational options for the campus community in a diverse open space environment that links the campus and the larger host community.

Objectives & Policies	Current Condition	Status			Delete?	Comments/Problems/Recommendations
		Complete	Ongoing	Not Implemented		
Objective 9.1 Provide recreational facilities and open space to meet campus community demand through the coordinated use of public and private resources.						revise
Policy 9.1.1 The University shall establish a private donor program for the purpose of contributing to the development and maintenance of on-campus athletics, recreation and open space facilities and shall coordinate the distribution of these funds with other public University funding sources.			x			
Policy 9.1.2 The University shall work with the Campus Recreation and Athletics Departments, campus organizations, Sun Dome management, and public/private off campus organizations to investigate and seek expanded opportunities for generating income through campus facility rentals and programs at the main campus, The Claw, USF Forest Preserve, and Riverfront Park.			x			
Policy 9.1.3 The University shall work with host communities and agencies to explore shared or swapped recreation/open space development, maintenance, and/ or use of facilities to better serve the University and local populations.			x			
Objective 9.2 Provide increased facilities to serve on-campus recreation, physical education, and intercollegiate athletic demands.						

<p>Greenway—The University shall commit to the protection of the delineated Greenway comprising 158.7 acres including 22.62 acres of Unobstructed View Easement at Lake Behnke as indicated in Figure 9-3, 10 Year Greenway Structure and Edges, extending from Lake Behnke to the wetlands at Fletcher Avenue and 50th Street (including the Central Quadrangle), as a restricted no-build zone in order to establish an open space Greenway. Continued implementation of the Greenway and its enhancement is a high priority because of its:</p>					<p>too lengthy, look at element 8, possible individual objective/policy. All are too general statements not policy</p>
<ul style="list-style-type: none"> • Functional importance in addressing stormwater management requirements and providing greater visibility to natural hydrological systems and University sustainability initiatives 					<p>too lengthy, look at element 8, possible individual objective/policy. All are too general statements not policy</p>
<ul style="list-style-type: none"> • Unique form-giving characteristic establishing a sense of clarity and orientation to the campus 					<p>too lengthy, look at element 8, possible individual objective/policy. All are too general statements not policy</p>
<ul style="list-style-type: none"> • Enhancement of recreation and social opportunities 					<p>too lengthy, look at element 8, possible individual objective/policy. All are too general statements not policy</p>
<ul style="list-style-type: none"> • Role in carbon sequestration and reducing the heat island effect 					<p>too lengthy, look at element 8, possible individual objective/policy. All are too general statements not policy</p>
<p>The Greenway should continue to be implemented in a strategic, incremental way in advance of individual campus projects so as to maintain the stormwater management capacity necessary to support future building projects and provide the open space amenity that makes engagement with adjacent development and campus constituents more likely.</p>					<p>too lengthy, look at element 8, possible individual objective/policy. All are too general statements not policy</p>
<p>The Greenway is comprised of the following landscape character sub-districts and programmatic zones (See Figure 9-3, 10 Year Greenway Structure and Edges.):</p>					
<ul style="list-style-type: none"> • Urban Parkland. Within the Greenway, the Central Quadrangle is designated as “urban” parkland at the heart of the campus. It includes a combination of formalistic, “designed” signature plaza and tree lined walkway edges and strong informal designed spaces connecting to the more naturalistic areas to the northeast and southwest. 					<p>too lengthy, look at element 8, possible individual objective/policy. All are too general statements not policy</p>

<p>• Naturalistic Parkland. These are areas within the Greenway that are pastoral in character and may be used for informal recreation facilities and open play space. Areas designated as naturalistic parkland may not be converted to another use without a formal Master Plan Amendment.</p>		x			
<p>• Recreation. In contrast to the naturalistic parkland areas, recreation areas within the Greenway may be used for organized striped play fields. In order to be used for this function. The play fields within the Greenway must be designed with subsurface drainage systems that maintain, at a minimum, the water percolation rate that would be associated with campus lawn areas. It is also required that such fields not be enclosed with fences, so as to maintain the visual continuity of the Greenway and a park-like pastoral character when the fields are not in use. Areas designated as recreation areas may not be converted to another use without a formal Master Plan Amendment.</p>		x			<p>We may need to alter the term "required" as it pertains to fences since there are already some areas in the greenway that have fences and there are other areas that desire fences (EH)</p>
<p>• Conservation and Research. This designation includes areas that provide conservation of land, habitat, water and vegetative resources, soil, and/or endangered species and site for ecological research. These areas include the Lake Behnke/Botanical Garden area (adjacent to Bruce B. Downs Boulevard) and proposed reclaimed site currently occupied by Lot 19, the wetlands located in the northeast corner of the main campus at Fletcher Avenue and 50th Street, and—while not part of the Greenway per se—the USF Forest Preserve north of Fletcher Avenue.</p>					<p>look at element 8, too general statement not policy - revise</p>
<p>In addition, the Greenway is intended to accommodate an array of stormwater management facilities and existing groundwater well fields including:</p>					
<p>• Stormwater management lakes and ponds. This designation includes existing and proposed lakes and ponds that will remain filled with water throughout the year. While some relocation of future water areas may be possible, subject to USF engineering review, the overall surface area designated in the Campus Master Plan for this function cannot be reduced without a formal Campus Master Plan Amendment.</p>		x			

<p>• Stormwater management swales and retention areas. This designation includes existing and proposed areas that are designed to be detention areas. Normally these areas will be dry, but will detain stormwater runoff for a period of time during a storm event. The amount of land designated for this function cannot be reduced without a formal Campus Master Plan Amendment.</p>		x			
<p>• Below grade storage. Subsurface storm water retention/infiltration devices can be utilized on campus to accommodate the additional storm water needs of a growing university campus. Below grade storage chamber systems allow storm water to infiltration into the ground, thereby recharging the immediate groundwater table. This helps to provide the needed water for native wetland environments on campus. Storage chambers allow for storm water collection which can then be diverted for such uses as irrigation or water features. Most importantly, when acreage on campus is limited, below grade storage devices can be installed beneath facilities, preserving the land surface above for other uses such as recreational activity.</p>		x			
<p>• Protection of future well fields. In order to ensure a sustainable campus, the University must provide safe drinking water for the campus community. To do so, the campus has protected its current drinking well field from future development. Likewise, the region of campus designated for a future well field must have similar safeguards. The restrictions within the Greenway may also serve to protect the future well field. Because the actual wells require little space, it can easily share use with space designated as greenway recreational area.</p>		x			
<p>• Wetlands. The northeast corner of the campus, south of Fletcher Avenue and west of 50th Street, contains a significant area of wetlands which links the Greenway to the existing USF Forest Preserve (north of Fletcher Avenue), providing for stormwater management and contributing to the preservation of native habitat linkages. These wetlands are located within a designated "conservation" sub-district and are not suitable for informal recreation use.</p>		x			

(See Sub-Element 7.1, Stormwater Management and Figure 7.1,-1 10 Year Stormwater Management Facilities and Sub-Element 7.2, Potable Water, Figure 7.2-1, 10 Year Potable Water.)					
<p>Central Quadrangle—Continue to design and implement Central Quadrangle improvements in order to provide a physical setting that provides a quality collegiate atmosphere and identifiable place-making campus center. Although not identified with a specific building project, improvements to the Quadrangle are considered important as they contribute memorable spaces, thereby improving the sense of campus community, while enhancing the visual impact of this “signature” landscaped space. The spatial character of this central space should reflect and respond to the strong primary diagonal circulation desire lines identified in to the Plan with an asymmetry that complements the existing Martin Luther King plaza and trellis at the east end of the quad. Greater landscape variation and plant material diversity should be employed to establish a cohesive central quadrangle that is both spatially unified and interesting. While tree planting to shade walks is a priority, overall planting design shall include informal massing of diverse plant material to increase the usable area with the shade of tree masses, establish stronger and more interesting spatial definition and provide greater aesthetic interest. The overall resulting character will be of a naturalized, informal landscape within a framework of urban spaces and strong diagonal reflecting the proposed major circulation routes crossing the open quad.</p>					<p>"Continue to design and implement Central Quadrangle improvements in order to provide a physical setting that provides a quality collegiate atmosphere and identifiable place-making campus center." (other is good description but unnecessary for policy)</p>

<p>Corridors—Extend the development of the Sessums Mall through phased implementation of the full length of the cross-campus east-west mall as a high priority. Additional corridors are indicated on Figure 9-2 and in Element 5, Transportation Figure 5-9. Existing corridors shall be enhanced with shade through tree planting, or other means such as trellises, shade structure, or building arcades. Implementation of new corridors shall be phased in coordination with adjacent building development or redevelopment or as independent projects ahead of development.</p>		x				
<p>Quadrangles—Continue to implement a hierarchy of “local” quadrangles distributed throughout the campus as shown in Figure 9-2, 10 Year Campus Open Space, by means of judicious building placement which provides inviting, humane outdoor living spaces appropriate to the climate of west central Florida. Quadrangles should include programmatic opportunities for food, seating, wireless access, and shade.</p>		x				
<p>Courtyards—Encourage inclusion of interior courtyard spaces in all new buildings or closely clustered groups of buildings when and where appropriate.</p>					"Require to include...or other green space according to best practice"	
<p>See USF Design and Construction Guidelines, http://usfweb2.usf.edu/FacilitiesPlan/process/guidelines.html for additional information</p>						
<p>Policy 9.3.2</p>	<p>The University shall affirm a belief that naturalistic parklands are necessary to the quality of urban life and that the institution seeks continuity with the natural communities and processes that support human life. The University will ensure that the Greenway reflects design for the future by connecting to the USF Forest Preserve north of Fletcher Avenue and that adjacent spaces are developed appropriately.</p>		x			

Policy 9.3.3	The stormwater areas reserved in the Greenway as shown on Figure 4-2, Long Range Campus Master Plan Concept will be retained for future ultimate growth needs. Until that time, the areas may be used for geologic and hydrologic academic studies and recreational use, as well as for their visual amenity value, which enhances the overall quality of the campus setting.		x				review element 8, retained for stormwater, academic studies and rec. use
Policy 9.3.4	The University shall maintain densities and intensities for the development of its campus (as established in Element 4, Future Land Use), including sites for infrastructure, academic, housing, and support space, which maximize permeable campus land and the retention and creation of meaningful open space.		x				
Objective 9.4	The University endorses a campus open space planning approach that envisions the entire campus as an ecologically appropriate "Campus as Arboretum/Botanical Garden."						
Policy 9.4.1	The University shall expand the domain of the USF Botanical Garden to include all campus open space, with administrative functions centered at an expanded facility in the current location and priority expansion emphasis on documentation and enhancement of the Greenway as Campus Arboretum.		x				
Policy 9.4.2	In recognition of the value of trees to the campus the University shall initiate measures to protect, manage, and increase the number of trees and quality of the campus tree stock. (See Element 8, Conservation.)		x				
Objective 9.5	Preserve and protect the USF Forest Preserve as a unique and irreplaceable reserve of undeveloped native woodland contiguous with the Hillsborough River wetland corridor.						
Policy 9.5.1	The University shall preserve and protect the USF Forest Preserve as a unique and irreplaceable natural resource for teaching and research. (See Figure 9-4, 10 Year Campus Greenway and USF Forest Preserve and 2010 Data Collection and Analysis Report, Appendix H, USF Forest Preserve.)		x				
Policy 9.5.2	Storage and non-vehicle trip generating support space related to the USF Forest Preserve shall be allowed at The Claw golf course and Riverfront Park only.		x				

Objective 9.6	Coordinate with the host communities to promote provision of adequate recreation and open space off-campus to serve the community living in the context area and to ensure continuity of campus open space resources within the larger regional open space system.						
Policy 9.6.1	The University shall establish a procedure and assign responsibility for regularly scheduled coordination meetings with the City of Tampa, City of Temple Terrace, and Hillsborough County Parks and Recreation Departments relative to the provision of recreational facilities. The University shall pursue inter-local agreements or memoranda of understanding that may be necessary to ensure that parks and recreational facilities will be available to meet the future needs of the University.						this is still an established procedure and is correct as written - EH

This Page Intentionally Left Blank.

2015-2025 USF - Tampa Campus Master Plan Update
 Evaluation and Appraisal Report

Element 10: Intergovernmental Coordination

Goal 1: The Intergovernmental Coordination goal of the Tampa Campus Master Plan is to achieve the goals, objectives and policies of the campus master plan through the use of joint processes for collaborative planning, decision making, and coordinating growth and development with local agencies and governmental entities.

		Status			Delete?	Comments/Problems/Recommendations
		Complete	Ongoing	Not Implemented		
Objectives & Policies						
Objective 10.1	Establish a process for the reciprocal review by University and local government officials of growth management plans, campus master plans, and plan amendments.					revise terminology "maintain"
Policy 10.1.1	The University shall continue to work with the Cities of Tampa and Temple Terrace, and Hillsborough County to implement procedures allowing the University—through the Office and Facilities Planning and Construction—to review and comment on proposed amendments to local government comprehensive plans which:					
	• Have the effect of changing land uses or policies that guide the development of land within the designated context area surrounding the University		x			no change recommended
	• Affect the provision of local service		x			no change recommended
	• Otherwise impact University facilities and resources.		x			no change recommended
Policy 10.1.2	Proposed amendments to the adopted campus master plan which exceed the thresholds established in s. 1013.30(9), F.S., shall be transmitted to the appropriate local, regional and state agencies for review in accordance with the procedures established in Chapter 21.108-21.110, Florida Administrative Code.		x			threshold has not been exceeded
Policy 10.1.3	Proposed amendments to the adopted campus master plan which do not exceed the thresholds established in s. 1013.30(9), F.S., and which have the effect changing land use designations or classifications, or impacting public facilities, services or natural resources, shall be transmitted to the host and affected local governments for a courtesy review.		x			no change recommended

Policy 10.1.4	University planning officials shall meet with officials from the City of Tampa, City of Temple Terrace, and Hillsborough County on a regular (at least annual) basis, or as required for the purpose of coordinating planning activities. Other local, regional, state and federal agencies shall be invited to participate in these meetings as appropriate.		x			no change recommended
Policy 10.1.5	Disputes between the University and a local government shall be resolved by the process established in s. 1013.30(8), F.S.		x			review 1013.30(8)
	new policy fpc receive from city - notices					review wording for internal
Objective 10.2	Continue reciprocal development review processes that assess the impacts of proposed campus development on significant local, regional and state resources and facilities, and assess the impacts of off-campus development of University resources and facilities.					
Policy 10.2.1	Continue to work with the Cities of Tampa and Temple Terrace, Hillsborough County, and other pertinent agencies, to ensure that Comprehensive Plan amendments and rezoning requests within the designated context area, which have the potential to impact or affect University facilities and resources, shall be transmitted to the University's Director of Facilities Planning and Construction for review and input to the City Council.					no change recommended
Policy 10.2.2	The University's Director of Facilities Planning and Construction shall periodically meet with City and County officials to review and refine the criteria and thresholds for development proposals which would be subject to review by the University. The University shall adhere to development thresholds, developed in cooperation with City and County officials, which allow for both to review significant development proposals within the context area. Established thresholds for review will allow for exceptions to the review process for development proposals which are mutually agreed to be not significant.					no change recommended
Policy 10.2.3	Upon receipt of an application for a development order proposed for the context area, the University's Director of Facilities Planning and Construction shall assess the potential impacts of the proposed development on University facilities and resources. Findings shall be remitted in writing to the appropriate local government.					no change recommended

Policy 10.2.4	When it has been determined that proposed development on campus would have an adverse impact on local services, facilities or natural resources, University officials will participate and cooperate with respective City and County officials in the identification of appropriate strategies to mitigate the impacts.						no change recommended
Policy 10.2.5	and cooperate with respective City and County officials in the identification of appropriate strategies to mitigate the impacts.						finish typing
Policy 10.2.6	Any dispute between the University and any host or affected local government regarding the assessment or mitigation of impacts shall be resolved in accordance with the process established in s. 1013.30(8), F.S.						no change recommended, review 1013.30 (8)
Policy 10.2.7	All campus development may proceed without further review by the host local government if it is consistent with the Campus Development Agreement and the adopted campus master plan.						reword into policy statement
Policy 10.2.8	Once the University pays its "fair share" and annually reports construction of capital improvements, as identified in the Campus Development Agreement, all concurrency management responsibilities of the University are deemed to be fulfilled.						reword into policy statement
Objective 10.3	Increase ongoing coordination between the University and public agencies to create a better community and environment.						
Policy 10.3.1	The University shall work with host community agencies and organizations as described in Element 6, Housing, Policy 6.4.1, to coordinate, improve, and increase the availability of safe, diverse, affordable housing in the USF area to serve the needs of its students, faculty, and employees.						review
Policy 10.3.2	USF is within the City of Tampa service area and has experienced effective and efficient provision of fire, rescue, and emergency medical services. Existing systems shall remain in effect.						reword into policy statement - verify chapter 21
Policy 10.3.3	The University shall continue to coordinate with the City of Tampa, City of Temple Terrace, and Hillsborough County in support of the use of CMAQ and Tea3 (formerly ISTE and TEA-21) funds for USF area projects that coordinate and facilitate the safe use of bicycles and reduce automobile impacts on the area.						no change recommended

Policy 10.3.4	The University shall continue to cooperate with the appropriate entities in the evaluation of traffic impact on adjacent roadways and endeavor to mitigate impact through increased on-campus housing, improved transit service, and other mitigation techniques described in Element 5, Transportation. The University shall participate in the planning of improvements to Fletcher Boulevard, Bruce B. Downs Boulevard and 50th Street, to ensure that adequate pedestrian and bicycle facilities are incorporated.						no change recommended
Policy 10.3.5	The University shall continue to work with the Hillsborough Area Regional Transit (HART) to promote bus transit and possible future alternative transit mode ridership by disseminating information at the time of registration, through target mailings, and at appropriate locations and events on and off-campus. Strategically placed bus stop shelters will continue to be installed to increase convenience of service.						refer to element 5 and chapter 21
Policy 10.3.6	The University shall continue to work with the Tampa Bay Area Regional Transportation Authority (TBARTA) to establish a Preliminary Plan for a light rail stop(s) serving the University campus, medical facilities, and the Research and Development Park.						refer to element 5 and chapter 21
Policy 10.3.7	The University shall continue to develop and implement the Master Stormwater Management System and associated permits, and produce a technical design standards manual for new systems to ensure adequate level of service and ease of maintenance.						refer to element 7 and chapter 21
Policy 10.3.8	The University shall continue operating its own water system for the Academic core while working closely with the City of Tampa to ensure that adequate supply is available to the University's perimeter users. Close involvement with regulatory agencies must also continue to ensure that health, safety and quantity issues are addressed.						refer to element 7 and chapter 21
Policy 10.3.9	The University shall continue with the regulatory process of Hillsborough County Environmental Protection Commission (HCEPC) to ensure that State sanitary codes are met. Also, the University shall meter its utility upgrade so accurate flow data can be generated and used for service needs and future projections.						refer to element 7 and chapter 21

Policy 10.3.10	As long as it remains economically feasible, the University shall continue to self transport its dry wastes to the Hillsborough County incinerator and use franchise services for all other organic and recyclable wastes.						refer to element 7 and chapter 21
Policy 10.3.11	The University shall maintain and periodically update its Emergency Operations Plan in coordination with Hillsborough County Emergency Management Operations (EMO), the American Red Cross, and the host communities. The plan shall identify the extent to which University buildings can, and will, be used to provide shelter for students, faculty, staff, and the general public, and will designate suitable campus open spaces for use as staging areas for emergency supplies, equipment, and resources.						no change recommended
Policy 10.3.12	The information prepared through the implementation of Policy10.3.11 shall be made available each year to the Hillsborough County EMO for inclusion in local emergency management plans.						no change recommended
Policy 10.3.13	The University shall continue to coordinate with the City of Tampa, Hillsborough County, and the City of Temple Terrace, to achieve an appropriate integration of the campus recreation and open space resources into the larger regional open space system, and to ensure that an adequate provision of recreation of open space is available through the 10-year planning horizon to serve the campus and off-campus communities.						refer to element 9 and chapter 21

<p>Policy 10.3.14</p>	<p>The University shall coordinate with the Department of State, Division of Historical Resources, prior to any land clearing or ground-disturbing activities that may impact sites identified as significant in the University archaeological survey, and prior to any alteration or demolition affecting historic structures on campus. While it has been determined that no significant archaeological resource remain within the boundaries of the main Tampa campus, there is a significant prehistoric mound site located north of Fletcher Avenue, in the Ecological Research Area. In addition, many standing structures on the campus will reach 50 years of age during the timeframe of the 2010 Campus Master Plan. In respect of the possibility that such a building may come under consideration for demolition, renovation, or addition, the University will endeavor to assess such building for its historical and architectural significance prior to a building's reaching 50 years of age. The assessment will be conducted by a qualified architectural historian (Secretary of the Interior's Professional Qualification Standards (36 CFR 61)).</p>					<p>revise wording, change from Ecological research area to "USF Forest Preserve"</p>
-----------------------	--	--	--	--	--	--

2015-2025 USF - Tampa Campus Master Plan Update
 Evaluation and Appraisal Report

Element 11: Capital Improvements

Goal 1: Provide educational, research and support facilities to all enrolled students, faculty staff and community partnerships, in a manner that protects the investment and maximizes the use of existing facilities and promotes orderly, planned sustainable campus development.

		Status			Delete?	Comments/Problems/Recommendations
		Complete	Ongoing	Not Implemented		
Objectives & Policies					Current Condition	
Objective 11.1	The University shall, through the coordination of land use decisions and available projected fiscal resources, provide a schedule of capital improvements to maintain the levels of service established in the master plan and to address the existing and projected facilities needs.					
Policy 11.1.1	The University, in cooperation with the Florida Board of Governors and in conformance with criteria established in Policy 14.1.3, shall schedule and fund capital improvements identified in Table 11-1, 10 Year Capital Improvements Schedule and Table 11-2 2011-2012 Five Year Capital Improvement Program (CIP2).		x			revise - refer to current - website
Policy 11.1.2	The University shall evaluate, rank and revise the order of priority as required for facilities and projects identified in Table 11-2, 2011-2012 Five Year Capital Improvement Plan (CIP2) and Legislative Budget Request (2011-2012 through 2015-2016), approved by USF Board of Trustees January 6, 2011. (See Element 4, Future Land Use, Policy 4.1.5.)					revise - refer to current - website
Policy 11.1.3	The University shall adopt the following criteria to evaluate and prioritize capital improvement projects related to the individual elements of the master plan:					
	strategic mission and strategic plan					new
	• University budget impact and financial feasibility					
	• The elimination of existing capacity deficits					
	• Locational and programmatic needs based on projected student enrollment increases					
	• The accommodation of expansion and improvement demands					
	• Related benefits/detriments to adjacent campus development of site areas					
	• Life cycle costs of the project					
	• Plans and priorities based on funding availability.					

Objective 11.2	To provide the needed improvements identified in the other elements and manage the expansion or improvement process so that facility needs do not exceed the ability of the University to fund and provide the needed capital improvements, including initial construction costs, ongoing operation and maintenance costs and impact costs.						revise wording
Policy 11.2.1	The University shall base the coordination of land use decisions associated with the implementation of capital improvements upon the development requirements of this Master Plan, the development agreements called for by this Plan and the availability of resources necessary for implementing required supporting facilities at the time needed of proposed capital improvement/development.						revise wording
Policy 11.2.2	The University shall make provisions for programming the budget for future facility development to consider the cost of the site improvements, utility extensions and associated easements, parking, traffic, pedestrian and bicycle circulation improvements, and operation and maintenance, necessary for the proper function of the individual facility and, to the extent funding levels allow, to include the cost of facilities necessary to support future capacity requirements.						revise wording
Policy 11.2.3	The University shall make provisions for the adoption of the capital budget as part of the annual budgeting process and will include provisions which are consistent with the campus development agreement resulting from the adopted Master Plan.						no change recommended
Policy 11.2.4	The University shall apply the level of service standards adopted as part of the Design and Construction Guidelines, http://usfweb2.usf.edu/FacilitiesPlan/process/guidelines.html , in implementing the capital improvements identified in this Campus Master Plan.						no change recommended
Policy 11.2.5	The University shall ensure that future facility costs and programming efforts include consideration of the following:						remove "future", review chapter 21; nsolidate with 2.6 and
	• Site improvements						
	• Utility extension and easements						
	• Parking needs and traffic, pedestrian, and bicycle circulation improvements						
	• Life cycle cost/benefits related to these site elements						
	• Compliance with applicable policies and standards.						

Policy 11.2.6	The University shall adhere to sound fiscal policies, including life cycle cost/benefit assessment, in providing the capital improvements of this campus master plan and shall proceed with new capital improvements, expansions or replacements based upon the identification and commitment of adequate funding and resources for design, implementation, operation, and maintenance.						consolidate with 2.2 and 2.5
Policy 11.2.7	The University shall increase sustainable construction practices by incorporating the USGBC LEED certification process in the USF Design and Construction Guideline requirements.						revise to make "action" or delete
Objective 11.3	To use the Capital Improvements Element as a means to meet the needs of the University for the construction of capital facilities to correct existing deficiencies, accommodate desired future growth, and replace exhausted or obsolete facilities.						
Policy 11.3.1	The University shall make provisions for the replacement and renewal of capital facilities when it is determined that the building facility, site element or infrastructure, including transportation facility (road, walk, bikeway) or utility line, is nearing the end of its useful life.						create new first policy regarding condition assessment and renewal
Policy 11.3.2	The University shall prohibit construction of academic and research buildings less than the minimum heights established in Element 4, Future Land Use, and in separate documentation found in USF Design and Construction Guidelines, except by special approval from the President. (For more detailed architectural requirements and guidelines see the USF Design and Construction Guidelines, http://usfweb2.usf.edu/FacilitiesPlan/process/guidelines.html).						consider reference note in lieu of policy
Policy 11.3.3	The University shall discourage and limit the renovation of existing buildings that are two stories or less in height, except for reasons of preservation of buildings designated as historic resources or by special approval from the President for health and safety reasons. Building two stories or less in height are less efficient and not in keeping with the Master Plan objective of increasing F.A.R. campus density in order to reduce impermeable surface, concentrate activity, and gain efficiencies in land and energy use. For these reasons, with the exception of buildings of historic significance, the 2010 Campus Master Plan recommends buildings two stories or less be phased out.						revise wording, insure repeats in element 4

Policy 11.3.4	The University shall continue to adhere to existing capital improvement programming procedures and shall update this master plan, as needed, to revise the Capital Improvement Program priorities established in the Five-Year Capital Improvements Schedule.						the most current CIP is the one that stands
---------------	---	--	--	--	--	--	---

2015-2025
USF System
Campus Master Plan Update

Appendix D
Moffitt Oil Spill

Tampa



SECTION 8, TOWNSHIP 28 SOUTH, RANGE 18 EAST

Additions or deletions by other than the Professional Land Surveyor in responsible charge is prohibited.
Land Description is invalid without signature and/or embossed seal of the Professional Land Surveyor

DESCRIPTION

A portion of land lying within Section 8, Township 28 South, Range 19 East, Hillsborough County, Florida, more particularly described as follows:

Commence at the North $\frac{1}{4}$ corner of said Section 8, thence along the west line of the Northeast $\frac{1}{4}$ of said Section 8 bearing S.00°07'27"W. a distance of 2009.65 feet; thence leaving said line S.89°52'33"E. a distance of 1106.38 feet to the POINT OF BEGINNING; thence N.71°35'45"E. a distance of 147.30 feet; thence S.52°55'25"E. a distance of 71.33 feet; thence S.05°56'37"E. a distance of 22.38 feet; thence S.42°35'44"W. a distance of 126.24 feet; thence N.73°07'59"W. a distance of 93.48 feet; thence N.15°54'01"W. a distance of 87.93 feet to the POINT OF BEGINNING.

Said description containing 20,025 square feet, more or less.

Basis of bearings are based on the north line of the Northeast $\frac{1}{4}$ of Section 8, Township 28 South, Range 18 East, bearing being N89°55'05"W.



TBE GROUP, INC.

*Engineers · Planners · Subsurface Utility Engineers
Surveyors and Mappers*

380 Park Place Boulevard, Clearwater, Florida 33759
Telephone (727) 431-1642, Facsimile (727) 431-1701

Certificate of Authorization: LB 6668
State of Florida

SECTION 8, TOWNSHIP 28 SOUTH, RANGE 18 EAST

Additions or deletions by other than the Professional Land Surveyor in responsible charge is prohibited.
Land Description is invalid without signature and/or embossed seal of the Professional Land Surveyor

P.O.C.
N. 1/4 COR.
SEC. 8
FND. R.R. SPIKE

NE COR.
SEC. 8
F.P.K.D
"G&O LB3935"

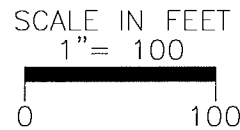
N89°55'05"W 2660.62'

(BASIS OF BEARING)

LINE TABLE:

L1	N.71°35'45"E.	147.30'
L2	S.52°55'25"E.	71.33'
L3	S.05°56'37"E.	22.38'
L4	S.42°35'44"W.	126.24'
L5	N.73°07'59"W.	93.48'
L6	N.15°54'01"W.	87.93'

- ☐ 2'X2' CONCRETE PAD WITH 8" DIAMETER MONITORING WELL LID
- △ SET PK NAIL
- ☐ 3.2'X3.2' CONCRETE PAD WITH 2.1'X2.1' METAL LID



SKETCH
NOT A SURVEY

2659.76'
2009.65'

WEST LINE OF THE
NORTHEAST 1/4

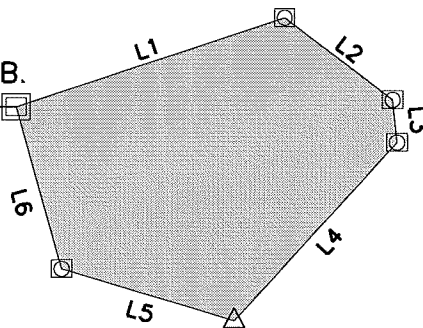
S.00°07'27"W.

S.89°52'33"E.
1106.38'

P.O.B.

LEGEND:

- (C) = CALCULATED
- COR. = CORNER
- FND. = FOUND
- F.P.K.D. = FOUND PARKER KALON NAIL & DISK
- ID = IDENTIFICATION
- NO = NUMBER
- P.O.B. = POINT OF BEGINNING
- P.O.C. = POINT OF COMMENCEMENT
- R.R. = RAILROAD
- SEC. = SECTION



CENTER
SEC. 8



TBE GROUP, INC.
Engineers-Planners-Subsurface Utility Engineers
Surveyors and Mappers
380 Park Place Boulevard, Clearwater, Florida 33759
Telephone (727) 431-1642, Facsimile (727) 431-1701
Certificate of Authorization: LB 6668
State of Florida

CALCULATED BY:
MWP
CHECKED BY:
DJH

The above Sketch and/or Land description was prepared under my supervision and is true and correct to the best of my knowledge and belief.

Deborah J. Hill

DATE

11/03/06

DEBORAH J. HILL, PROFESSIONAL SURVEYOR AND MAPPER LICENSE NUMBER: 5196
STATE OF FLORIDA, PHONE # (727) 531-3505

SEAL

ATL1

BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT
TRUST FUND OF THE STATE OF FLORIDA

AMENDMENT NUMBER 4 TO LEASE NUMBER 2725

THIS LEASE AMENDMENT is entered into this 20th day of October, 2008, by and between the BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA, hereinafter referred to as "LESSOR" and THE UNIVERSITY OF SOUTH FLORIDA BOARD OF TRUSTEES, a public body corporate of the State of Florida (successor in interest by operation of law to the Florida Board of Education, which was the successor in interest by type two transfer pursuant to s. 20.06(2), Florida Statutes to the Florida Board of Regents), hereinafter referred to as "LESSEE";

W I T N E S S E T H

WHEREAS, LESSOR, by virtue of Section 253.03, Florida Statutes, holds title to certain lands and property for the use and benefit of the State of Florida; and

WHEREAS, on January 22, 1974, LESSOR and LESSEE entered into Lease Number 2725; and

WHEREAS, LESSOR and LESSEE desire to amend the lease to include a prohibition as to groundwater use and well installation on a portion of the leased premises which has poor quality/low yield groundwater contaminant concentrations as a result of the 1991 rupture of a 10,000 gallon underground storage tank.

NOW THEREFORE, in consideration of the mutual covenants and agreements contained herein, the parties hereto agree as follows:

1. The following provisions are added to this lease:

A. That portion of the leased premises depicted on the survey prepared by TBE Group, Inc., attached hereto as Exhibit "A" and by reference made a part hereof ("restricted area"), shall be subject to a restrictive

covenant ("Restrictive Covenant") on LESSEE'S leasehold estate during the LESSEE'S term, shall prohibit groundwater use and future well installation. This Restrictive Covenant during the LESSEE'S term, shall prohibit stormwater swales, stormwater detention or retention facilities in the restricted area. Plans for dewatering activities must be in place to ensure appropriate handling, treatment, and disposal of potentially contaminated groundwater prior to extraction from the restricted area."

B. Nothing herein shall limit or conflict with any legal requirements regarding construction methods and techniques that must be used to minimize risk of exposure while conducting work in the restricted area.

C. The Restrictive Covenant is for the benefit of LESSOR and is binding upon LESSEE until LESSOR amends the lease to release the Restrictive Covenant. LESSEE shall be required to observe cleanup target levels established pursuant to Florida Statutes and State of Florida Department of Environmental Protection rules prior to LESSOR releasing the Restrictive Covenant. The Restrictive Covenant may be modified in writing only by mutual agreement of the parties.

Any subsequent amendment must be executed by both LESSOR and LESSEE, or their respective successors and assigns.

2. It is understood and agreed by LESSOR and LESSEE that in each and every respect the terms of the Lease Number 2725, except as expressly amended hereby and by previous amendments to this lease, shall remain unchanged and in full force and effect and the same are hereby ratified, approved and confirmed by LESSOR and LESSEE.

3. The terms of this amendment shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns.

IN WITNESS WHEREOF, the parties have caused this Lease Amendment to be executed on the day and year first above written.

BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA

Joseph Duncan
Witness

Joseph Duncan
Print/Type Witness Name

Judy Woodard
Witness

Judy Woodard
Print/Type Witness Name

By: Gloria C. Barber (SEAL)
GLORIA C. BARBER, OPERATIONS AND MANAGEMENT CONSULTANT MANAGER, BUREAU OF PUBLIC LAND ADMINISTRATION, DIVISION OF STATE LANDS, DEPARTMENT OF ENVIRONMENTAL PROTECTION

"LESSOR"

STATE OF FLORIDA
COUNTY OF LEON

The foregoing instrument was acknowledged before me this 20th day of October, 2008, by Gloria C. Barber, Operations and Management Consultant Manager, Bureau of Public Land Administration, Division of State Lands, Florida Department of Environmental Protection, as agent for and on behalf of the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida. She is personally known to me.

Sylvia S. Roberts
Notary Public, State of Florida

Print/Type Notary Name

Commission Number:

Commission Expires:



Approved as to Form and Legality

By: [Signature]
Attorney

This Page Intentionally Left Blank.

COMMISSION
Brian Blair
Rose V. Ferlita
Ken Hagan
Al Higginbotham
Jim Norman
Mark Sharpe
Kevin White



Roger P. Stewart Center
3629 Queen Palm Dr. • Tampa, FL 33619
Ph: (813) 627-2600

Fax Numbers (813):
Admin. 627-2620 Waste 627-2640
Legal 627-2602 Wetlands 627-2630
Water 627-2670 ERM 627-2650
Air 627-2660 Lab 272-5157

Executive Director
Richard D. Garrity, Ph.D.

November 4, 2008

Mr. David Smith, Coordinator
University of South Florida
Environmental Health, Safety & Risk Management
4202 E. Fowler Avenue, CRS 104
Tampa, Florida 33620-5060

RECEIVED U.S.F.
2008 NOV -5 AM 11:17
OFFICE OF THE
GENERAL COUNSEL

Dear Mr. Smith:

**SUBJECT: NO FURTHER ACTION WITH CONTROLS; H. LEE MOFFITT
CANCER CENTER, 12902 MAGNOLIA DRIVE, TAMPA,
FLORIDA, FDEP FACILITY ID #298838645 – PETROLEUM
DISCHARGE DISCOVERED ON FEBRUARY 18, 1991**

On October 30, 2008, Environmental Protection Commission (EPC) staff received a copy of the fully executed Amendment Number 4 to Lease Number 2725 submitted under an October 28, 2008 cover letter from the Florida Department of Environmental Protection (FDEP) Division of State Lands (DSL). The fully executed Amendment Number 4 to Lease Number 2725 has been submitted to help address J.J. Sosa & Associates, Inc.'s (JJSA) March 22, 2006 No Further Action with Controls (NFAC) proposal for the above-referenced petroleum discharge on State-owned property. The engineer of record, Mr. Jose Morales, P.E., proposes to use the Chapter 62-777 of the Florida Administrative Code (F.A.C.), Table I groundwater of poor quality criteria as alternative groundwater cleanup target levels (GCTLs) in accordance with Rule 62-770.680(2)(d)1, F.A.C.

EPC staff has reviewed the petroleum cleanup file and the above referenced rule. Per Section D.5.A. of the Florida Department of Environmental Protection (FDEP) Division of Waste Management's (DWM) November 2004 document entitled, *Institutional Controls Procedures Guidance*, EPC staff finds that the engineer of record's NFAC proposal is an acceptable closure option in accordance with Rule 62-770.680(2)(d)1, F.A.C. The following restrictions must be applied to the "restricted area":

- There shall be no use of the groundwater;
- There shall be no drilling for water nor shall any wells be installed other than monitoring wells pre-approved by the FDEP DWM;
- There shall be no stormwater swales, stormwater detention or retention facilities or stormwater ditches; and

Page 2 of 2
November 4, 2008
Mr. Smith

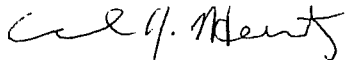
- For any dewatering activities, a plan must be in place to address and ensure the appropriate handling, treatment, and disposal of any extracted groundwater that may be contaminated.

As the tenant, it is the University of South Florida's (USF) responsibility to seek authorization from the FDEP DSL to move forward with the engineer of record's NFAC proposal in accordance with the Florida State Lands provisions on pages 12 through 14 and pages 53 through 64 of the FDEP DWM's November 2004 FDEP document entitled, *Institutional Controls Procedures Guidance*. If the FDEP DSL is agreeable, the FDEP DSL must prepare a memorandum and send it to the FDEP DWM in order to create the institutional control mechanism for the above-referenced FDEP DSL property in accordance with Sections D.5.B. and D.5.C and Attachment J.13.1-2 of the FDEP DWM's November 2004 FDEP document entitled, *Institutional Controls Procedures Guidance*. A complete copy of the FDEP DWM's November 2004 document entitled, *Institutional Controls Procedures Guidance*, can be obtained from the FDEP's website at http://www.dep.state.fl.us/waste/quick_topics/publications/wc/csf/icpg.PDF.

Please keep EPC staff advised concerning USF's site rehabilitation effort.

Please contact me at (813) 627-2600 ext. 1302 if you wish to discuss these matters. Please reference the FDEP facility identification number if you call.

Sincerely,



Carl J. Heintz, P.G.
Professional Geologist

c: Grace Rivera, FDEP Tallahassee
Henry W. Lavandera, Esquire, University of South Florida, Office of General Counsel, 4202 East Fowler Avenue, ADM 250, Tampa, Florida 33620-6250
Joseph Duncan, FDEP/Division of State Lands, Bureau of Public Land Administration, 3900 Commonwealth Boulevard, M.S. 130, Tallahassee, Florida 32399-3000
Jose Morales, P.E., J.J. Sosa & Associates, Inc., 6911 Pistol Range Road, Suite 101, Tampa, Florida 33635-9613
FDEP Facility #298838645 File