Strategic Planning Template

Fiscal, Physical, and Technology

June 8, 2021

Committee Charge

Conduct an analysis of the scope and adequacy of existing resources—fiscal (Research, Advancement, State Appropriations), physical (classrooms, labs, housing, recreation, library, meeting spaces, general assembly spaces), labs and scientific equipment, technology to meet the mission and vision of the institution. Present a well-planned resource management model that will support continuing institutional growth and excellence. Identify emerging needs that are not adequately addressed in our current plans.

Data Collection - Sources

- Identified UNC Peer institutions- Western Carolina, Fayetteville State University and North Carolina Central University
- Identified External Peer institutions – Eastern Illinois University, Norfolk State University, University of Maryland Eastern Shore
- Aspirant institutions – Tennessee State University and Villanova University
- Various higher education data repository such as Integrated Postsecondary Education Data System(IPEDS), Educause and UNC System Datamart
- Internal documents and reports

Data Analysis - Overview

- Evaluate existing internal and external databases, reports and summaries
- Assess benchmark data from industry repository
- Use quantitative and qualitative data to classify dataset
- Identify comparative data trends
- Analyze space availability and use of resources to determine surplus or shortage
- Determine remaining useful life of assets

Data Collection - FISCAL

- Sponsored Programs & Research
- Enrollment Funding (2014, 2015, 2016, 2017,2018, 2019, 2020)
- Scholarships
- Donor Information (2017, 2018,2019, 2020)
- Certified Budget (2015, 2016, 2017, 2018, 2019)
- Student Enrollment Statistics (2016, 2017,2018, 2019, 2020)
- State Appropriations (2015, 2016,2017, 2018, 2019)
- Financial Statements (2016, 2017,2018, 2019, 2020)
- Key Performance Indicators
- UNC System Dashboard

Data Collection - PHYSICAL

- Gross Square Footage
- Type, Age and Relevance of Laboratory Equipment
- Building Age and Current Usage
- Space Utilization Report (2017)
- Master Plan (2018)
- Capital Projects Report

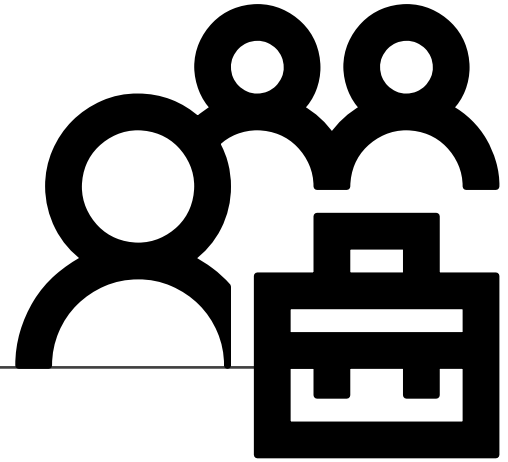
Data Collection - TECHNOLOGY

- Educause Benchmarking & Assessment Analytics
  - Core Data Services (2019, 2020)
  - Peer Group & Technology Profiles (2020)
  - Peer Benchmarking (2019, 2020)
  - Digital Capabilities Maturity Index (2019)
- UNC Graduate Senior Survey Results (2016, 2017, 2018, 2019)
- UNC Sophomore Survey Results (2016, 2017, 2018)
- WSSU Classroom A/V Technology Inventory & Upgrade Costs (2021)
- WSSU Research Lab Equipment Inventory (2021)
- WSSU Faculty Survey (2017, 2018)
- WSSU Staff Survey (2017, 2018)
- WSSU First Day Online Book Access Data (Fall 2019, Spring 2021)

Data Collection - TECHNOLOGY

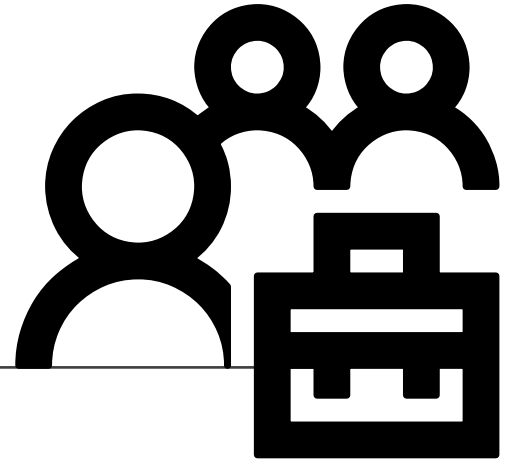
- WSSU Strategic Plan 2016-2021
  - OIT Activities & Milestones Report (2019) - Goal 5: Enhance the Quality of Physical and Operational Infrastructure, Objective 1: Information and learning technologies will be current, ubiquitous, mobile and adequate to support learning and business operations across the campus.
  - Strategic Plan Closeout Report (Dec. 2020)
- WSSU OIT Enterprise & Department Projects (2018, 2019, 2020)
- WSSU OIT RAMTech Data (2018-2020
- WSSU EAB Distance Learner Reports, CASBE, SoHS, Total (Spring 2019)
- WSSU IT SHRA Salary Scorecard (2020)*
- CLS Student Labs Equipment/Supplies (2018)
- Scientific Equipment Longevity Reports
- Classroom Technology Peer Interview Summary with NCCU (2021)

Data Analysis – FISCAL



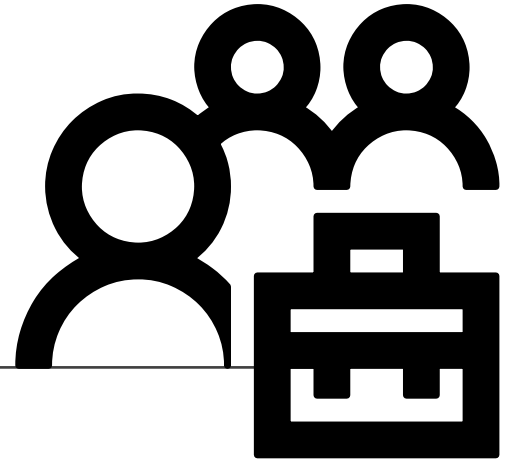
- Research & Sponsored Programs Review
- Research Publications Review
- Scholarship Review – Academic, Need Base and Athletics
- Student Enrollment and Related Impact on State Appropriations, including Expenses & Revenues
- Impact of Enrollment Funding Model – Appropriation
- Comparison of Budgetary Data

Data Analysis – PHYSICAL



- Mainsaver Work Order System / Business Practices Assessments
- Management Systems and Utilization Levels
- Master Plan (%executed/Update and Emerging Needs
- Assignable Square Feet (ASF) /Gross Square Feet (GSF)= Net-To-Gross(NTG) Ratio
- Sq. Ft. Of Academic Facilities Per FTE Student (S.F/FTE)
- Capacity/Enrollment Ratio (C/E Ratio) = Instructional & Library Space/Total Weekly Clock Hours
- Average Weekly Room Hours of Instruction in Classrooms = Total Room Hours of Instruction in Classrooms/Total Number of Classrooms

Data Analysis – TECHNOLOGY

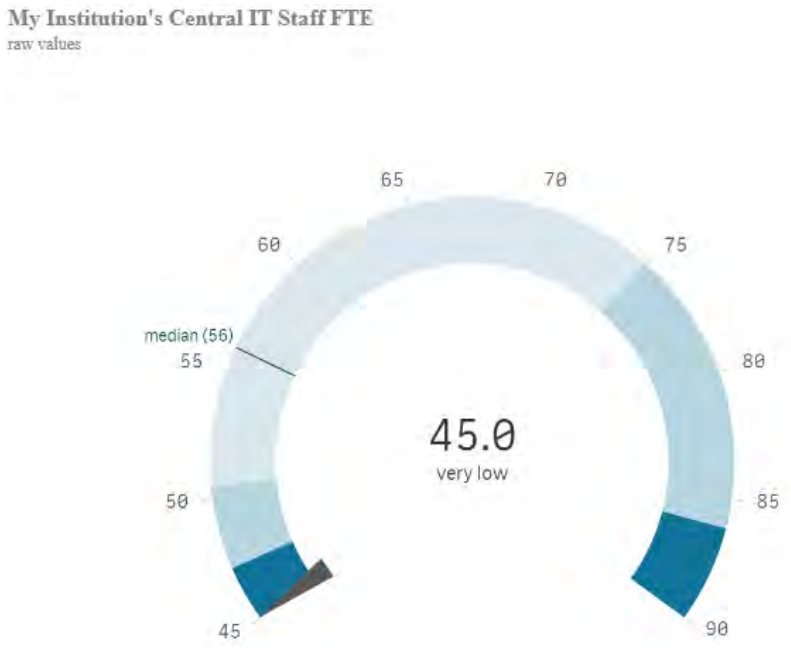


Spending Metrics
raw values

Measure Type	Metric	Winston-Salem State University's value	My institution's value as compared to peers
Total	Central IT Total Expenditures	$7,513,743	similar to peers (between 25th and 75th percentile)
By Area	Central IT Capital Expenditures	$73,510	very low (lower than 10th percentile)
By Area	Central IT One-time Expenditures	$0	very low (lower than 10th percentile)
By Area	Central IT Operating Expenditures	$4,334,000	very high (higher than 90th percentile)
By Area	Central IT Compensation Expenditures	$3,106,233	very low (lower than 10th percentile)
By Area	Central IT Professional development Expenditures	$0	very low (lower than 10th percentile)
By Domain	Central IT Admin./mgmt. Expenditures	$3,690,000	very high (higher than 90th percentile)
By Domain	Central IT Information security Expenditures	$70,000	very low (lower than 10th percentile)
By Domain	Central IT Research computing Expenditures	$0	similar to peers (between 25th and 75th percentile)
Total	Distributed IT Total Expenditures	$1,099,951	very low (lower than 10th percentile)

Areas of spending that are out of range with peers' spending.

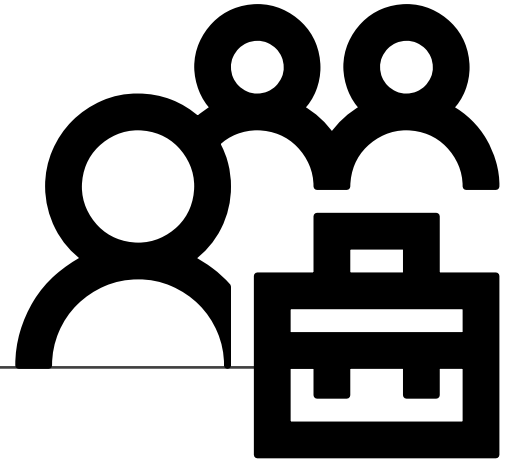
Data Analysis – TECHNOLOGY



External Peers

Stretch Institutions

Data Analysis – TECHNOLOGY



Central IT Service Staff FTE
raw values

Service Area	Winston-Salem State University's value	My institution's value as compared to peers
Delivery & support	14.0	very high (higher than 90th percentile)
Device support	7.0	very low (lower than 10th percentile)
Academic tech. & support	2.0	very low (lower than 10th percentile)
Learning mgmt.	2.0	very low (lower than 10th percentile)
Instructional tech.	0.0	similar to peers (between 25th and 75th percentile)
Conferencing & phones	2.0	similar to peers (between 25th and 75th percentile)
Network & connectivity	4.0	similar to peers (between 25th and 75th percentile)
Database	1.0	very high (higher than 90th percentile)

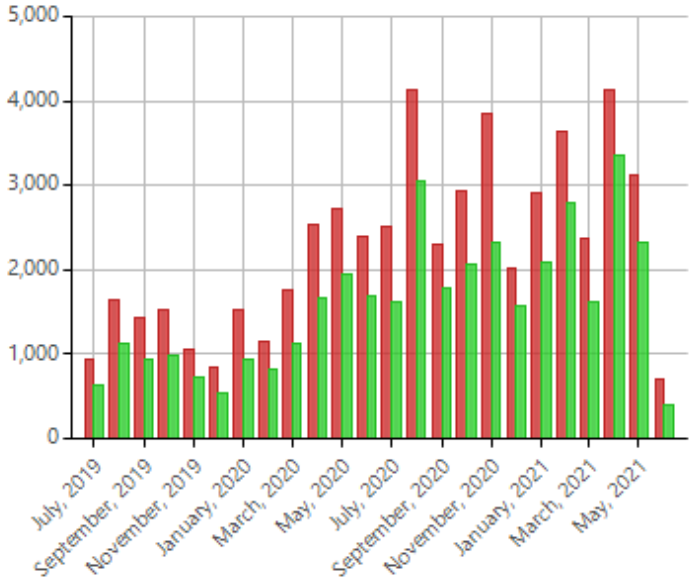
Areas of spending or staffing that are out of range with peers' spending or staffing on Central IT Services.

Central IT Service Student employee FTE
raw values

Service Area	Winston-Salem State University's value	My institution's value as compared to peers
Delivery & support	0.0	similar to peers (between 25th and 75th percentile)
Device support	5.0	very high (higher than 90th percentile)
Academic tech. & support	0.5	similar to peers (between 25th and 75th percentile)
Learning mgmt.	0.0	very low (lower than 10th percentile)
Instructional tech.	0.0	similar to peers (between 25th and 75th percentile)
Conferencing & phones	0.0	similar to peers (between 25th and 75th percentile)
Network & connectivity	2.0	similar to peers (between 25th and 75th percentile)
Database	0.0	similar to peers (between 25th and 75th percentile)
Data center	0.0	similar to peers (between 25th and 75th percentile)
Server & storage	0.0	similar to peers (between 25th and 75th percentile)

Data Analysis – TECHNOLOGY

Year	Sum Opened	Sum Closed
2018	3868	3619
2019	7822	7672
2020	9636	9419
2021	5223	5067
Grand Total	**26549**	**25777**



54,152 - New / In Process 38,116 - Completed

Top 5 'Type' by total 'Ticket Count'

Service Area	Sum of Ticket Count
Computers and Peripherals	4221
Applications	4043
User Account Access	3746
Banner-Related	2525
Website & Intranet Services	1907
Grand Total	16442

Top 5 'Resp Group' by total 'Ticket Count'

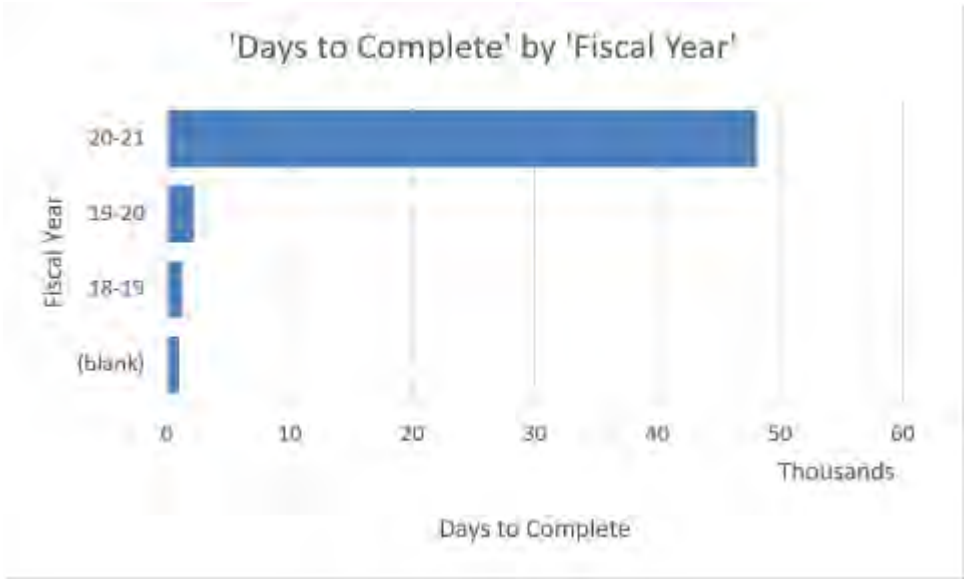
Service Department	Sum of Ticket Count
TSS - Technology Support Services	5272
NCI - Network, Communications, and Infrastructure	3271
AIS - Administrative Information Systems	2596
AAS - Web Support Services	2211
TSS - Level 1	2000
Grand Total	15350

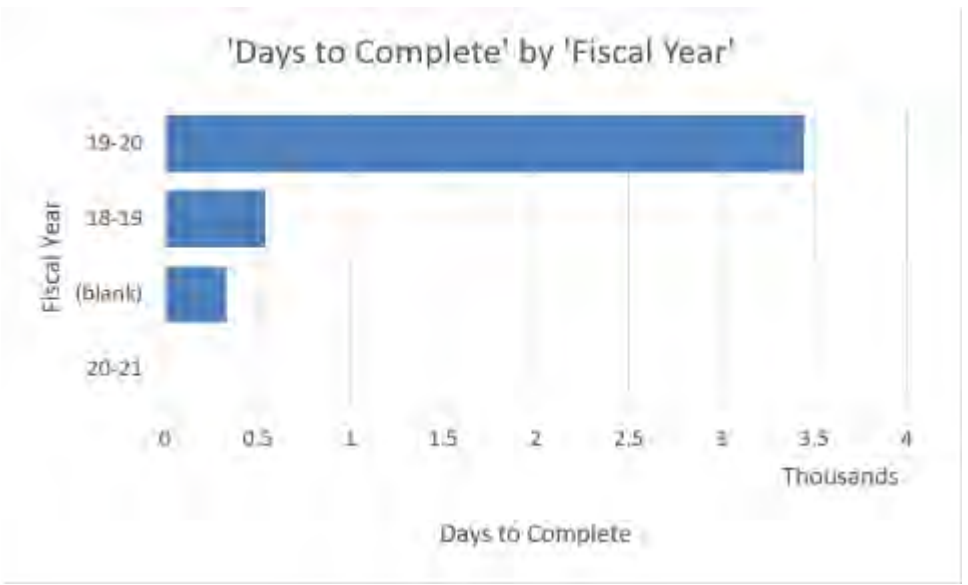
RAMTech Ticket Count Since Inception & Top Service Request Areas

Data Analysis – TECHNOLOGY

Fiscal Year	Department Project Count	Sum Closed
20-21	37	52.86%
19-20	17	24.29%
18-19	16	22.86%
Grand Total	**70**	**100%**

Fiscal Year	Enterprise Project Count	Sum Closed
20-21	6	30%
19-20	11	55%
18-19	3	15%
Grand Total	**20**	**100%**





Summary of Findings

Fiscal

- WSSU has a higher dependency of State Appropriation than the Peer institutions
- Has been significant increase in Sponsored Programs activity, thereby producing revenue stream and opportunity for growth in university research
- Enrollment for the past few years has been materially flat impacting resources
- Improvement needed in diversified funding sources

Physical

- Ongoing concerns with maintaining building standards to foster a comfortable physical work environment

Technology

- Historical survey data for students indicated issues with wireless; faculty & staff does not provide actionable insight
- First Day Access has been a successful program
- Need classroom audiovisual equipment standardized to Level 1
- The increase in service requests, projects, and IT investment isn't reflected in the current staffing levels used to maintain service delivery
- Staffing levels, professional development, and salary studies should be conducted for OIT staff
- Overall IT expenditure in Info security and digital capabilities IT DR & Business Continuity (2019) is very low/below median to peers

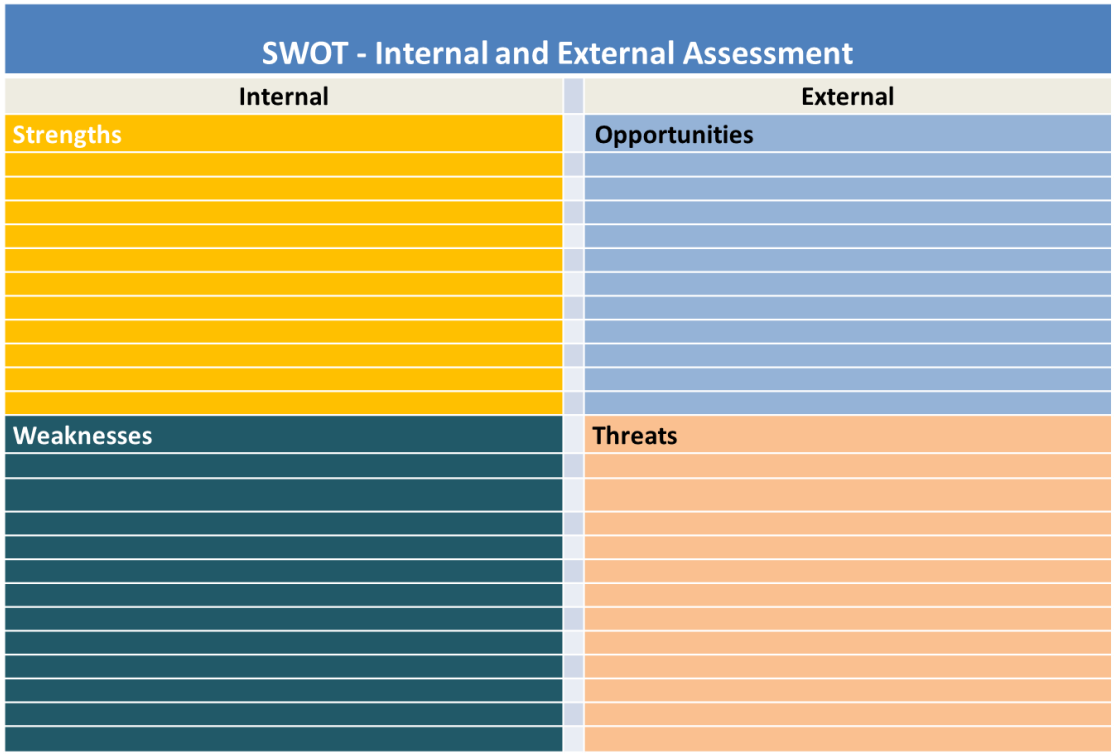
S.W.O.T. Analysis

Strengths (S): Analysis and institutional knowledge to identify factors that set the University apart from peers. What are the University's internal strengths?

Weaknesses (W): Analysis and institutional knowledge to identify factors that must be improved to become effective. What are the University's internal weaknesses?

Opportunities (O): What are the external factors that can enable the University to achieve desired outcomes? What are the internal and external opportunities that might move the University closer to its vision?

Threats (T): What are the external factors, situations, or changes that could have negative impacts?



Strength -Fiscal

- Significant growth in the area of Sponsored Programs and Research
- Endowment funding increase
- Private Funding Increase (Major gift Recipient)
- Member of UNC Constituent University System and public entity
- Diverse opportunities related to New Sciences Building (Academic Programming, Enrollment, Revenue Generation- Naming Opportunities)
- Impact of HEERF Funding

Strength -Physical

- WSSU has new building with modern technologies to expand student exposure and updated instructional spaces.
- Extensive renovation to Rams Commons Residence Hall to improve the on campus living and learning experience/communities.
- Movement toward spatial campus themes

Strength –Technology

- Overall IT total expenditures for the current year budget are similar to peers (between 25th and 75th percentiles), Educause CDS.
- Based on historical data from 2019, our Digital Capabilities on Student Success Technologies maturity level is at or above our peer group median, Educause Digital Capabilities.
- Skilled faculty members to support and leverage research equipment in labs
- First Day access program provided online textbooks on day 1 of class instruction that provides opportunities to learners to have access to material.

Weaknesses - Fiscal

- Scholarships not aligned with university departments thereby making it difficult to sync students with respective program
- Need to diverse course and academic programs to expand enrollment opportunities
- Limited Continuing Education and Certificate Programs

Weaknesses – Physical

- Formula used by UNC System for funding Repair and Renovation does not take into consider long standing funding disparities for certain universities which contributes to current condition of some buildings.

- Limited funding availability to upkeep maintenance of older buildings, support technology,

Weaknesses - Technology

- IT professional development expenditures for previous fiscal year and current year budget are very low compared to peers (lower than 10th percentiles), Educause CDS.
- Central IT total staffing levels are very low compared to peers (lower than 10th percentiles), Educause CDS.
- IT staffing compensation are very low compared to peers (lower than 10th percentiles), Educause CDS, affecting retainment and recruitment of skilled employees.
- Approximately 22% of IT SHRA staff have compensation less than 90% of market rate, affecting retainment and recruitment of skilled employees.
- 78 classrooms require upgrades to support synchronous & asynchronous learning.
- Funding and budgetary constraints to upgrade technology and maintain a lifecycle refresh schedule

Opportunities - Fiscal

- Expand the First Day Program to more courses
- New programs aimed to support on-line course delivery
- Increase academic staffing to more closely align with UNC peer group.
- Increase collaboration between Advancement Division and Academic Deans to identify and nurture relationships with corporate partners.
- Assess and update scientific equipment; scientific equipment should be replaced every 10-15 years
- Create an electronic repository for research data storage

Opportunities - Physical

- WSSU ranked lower than 2 out of three of our peer institutions in average weekly room hours of instruction classroom and Labs; hence providing opportunity to support more classes.
- Opportunity to improve Athletic facilities to engage in other revenue generating programs and events.
- Increase collaboration between Advancement Division and Finance & Administration to identify and nurture relationships with corporate partners to increase funding for facility comprehensive renovations.

Opportunities - Technology

- Increase staffing in the following service areas that are very low (lower than 10th percentile) in comparison to peers:
  - Device Support
  - Academic Tech & Support
  - Learning Management
  - Data Center
  - Server & Storage
- Participation with Educause industry benchmark surveys for receiving input on satisfaction of services provided to Faculty and Students.
- Participation in the Educause Learning Space Rating System (LSRS) project to assess how well the design of classrooms supports and enables multiple modalities of learning and teaching, especially that of active learning.
- Expand online programs to include the ability to complete entire degree programs

Opportunities - Technology

- Promote learning via collaboration and active learning classrooms
- Enhance the students, faculty and staff perception by having current technology in classrooms, for research, and administrative functions
- Increased capacity to conduct research and collaboration by replacing legacy lab equipment
- Upgrade infrastructure, invest in additional staffing and expertise skillset to support and implement new classroom technology

Threats - Fiscal

- University heavily dependent on State Appropriations that is tied to the UNC Enrollment Funding Model
- Limited graduate programs may limit research activity
- Financial deficit related to Athletic Program, has a negative impact on the overall financial cash liquidity outlook.
- Time and spending constraints related to HEERF funding

Threats - Physical

- Growing repair and renovation needs against reduced repair and renovation funding allocations
- Negative impact on enrollment related to facility conditions not being conducive for learning

Threats - Technology

- Lack of up-to-date technology and equipment in classrooms impacts our ability to attract, recruit and retain students and faculty
- Delay of technology equipment upgrades have a rate of inflation increase cost by 15%-20% ($212-$282K) based on industry experiences
- Based on historical data from 2019, our university's maturity level for IT Disaster Recovery and Business Continuity was below the peer group median, Educause Digital Capabilities
- IT staffing compensation doesn't keep up with market rates causing turnover to other organizations in the area or other Triad institutions and loss of institutional knowledge and expertise

Threats - Technology

- IT staffing compensation impacted by UNC System Tiering of institutions and subsequent salary ranges, causing turnover to other organizations in the area or other Triad institutions and loss of institutional knowledge and expertise
- Stagnant IT staffing levels not matching the increased IT expenditure and services procured impacting ability to deliver solutions to the campus in a timely manner and affects our ability to support new technology
- Central IT Professional Development expenditure are very low compared to peers (lower than 10th percentiles) impacting the skillset, implementation time, and exposure of the staff to newer technologies, industry best practices, peer knowledge sharing, and skills needed for IT services secured by the campus, Educause CDS
- Central IT Information Security expenditure are very low compared to peers (lower than 10th percentiles) impacting the university's ability to protect and defend university data and respond to cyber incidents.

Priorities or Areas of Focus

- Assess, enhance and expand strategic academic offerings to increase academic footprint – new academic programming, on-line, certificate and continuing education
- Creative ways to increase and retain enrollment to increase overall funding.
- Need diversified funding opportunities – Scholarships, Endowment, Sponsored Research and other Non-State Revenue Streams
- Improved partnerships with naming opportunities to assist with facility multi-funding major renovation projects
- Assessing facility needs and seek alternative funding to meet unfunded requirements

Priorities or Areas of Focus

- Classroom upgrades to Level 1 standard, assess design, and identify candidates for Level 2
- Invest in staffing, professional development, and digital/technical literacy
- Opportunities for further cost- and environmental savings from energy consumption
- Investigate using more digital books and open access resources for our students

Priorities or Areas of Focus

- **Short-Term Priorities (Years 1-2)**
  - **Increase Institutional Enrollment**: Because of significant decreases in state funding appropriations compared to other state peer institutions, WSSU must strategically grow its undergraduate and graduate student enrollment.
    - Establish an infrastructure to launch a Distance Education program
    - Build an infrastructure to initiate a Graduate School
  - **Diverse Revenue Streams**: University heavily dependent upon state appropriations, need to explore other revenue streams.
    - Increase support of Sponsored Programs
    - Investigate potential of Continuing Education Program and additional Certificate Programs
    - In the aftermath of COVID-19, university needs to explore opportunities to generate revenue via Business Services operations
  - **Assess Scientific Equipment Inventory**: Of the 257 items listed as scientific inventory, 33% is aged 15 years or greater while 84% represents aged 10 years or greater
  - **Increase Donor Giving Base to extend additional Scholarships & Professorship:**
    - Continue to grow Donor base among the affinity groups to include– Alumni, Friends and Corporations
  - **Create an electronic repository for research data storage**
    - This would assist the university with moving from a community engaged university to a R2 designation. Will allow standardization of storage of research data

Priorities or Areas of Focus

- **Short-Term Priorities (Years 1-2)**
  - **Upgrade Academic Spaces to Level 1 Standard:** Invest in upgrading outdated campus classrooms to level 1 standard as a baseline to support synchronous/asynchronous course delivery and online programs.
  - **Perform a Learning Space Rating System (LSRS) Assessment:** The LSRS assesses classrooms' design to support multiple modalities of learning and teaching, including that of active learning. “70% of students reported better grades, better attendance or improved creativity in newly designed active learning environments.” (Fehlandt, 2017. Flexible Classroom Design and Its Effects on Student-Centered Teaching and Learning. Hamline University.)
  - **Strategic Adoption of Digital and Open Access Textbooks:** Reduce student textbook expenditures by using low/no-cost digital learning resources such as First Day and expand to include Open Access materials used standalone or alongside traditional textbooks as supplemental study material. Many universities have developed initiatives to produce high-quality, peer-reviewed open access textbooks for their students. The response has been positive: open access textbooks are now seen as affordable alternatives to traditional learning materials. - https://affordabilitycounts.org/

Priorities or Areas of Focus

- **Short-Term Priorities (Years 1-2)**
  - **Information Technology Staffing Crisis Response:** As indicated by the Educause CDS study, WSSU is currently understaffed in the central IT area, an institutional problem, and a threat to research and academic programs, not just operations or administrative systems. Anyone who uses a computer or relies on someone who uses a computer or system is affected by technical staff turnover, and staff shortage affects both academic and administrative effectiveness.
    - Increase technical staff compensation in the upper tier of the institution's technical salaries, market rate, and competitive within the local area. Most people do not leave their jobs because of salary only
    - Allocate budgetary line item for Travel & Training for technical staff to attend conferences and seminars, read books in their field, and take time to learn, as these activities affect the implementation of the institution's goals for technology
    - Identify funding for five (5) staff positions to be in range with peers, to address efficiency shortages and operational risk management of technical staff

Priorities or Areas of Focus

- **Intermediate Priorities (Years 3-4)**
  - **Diversified Funding Portfolio:**
    - Continue managing and growing diversified funding portfolio
    - Partner with WSSU affiliates seeking opportunities for a revenue stream into the university
    - Continue to move forward to achieve an R2 Sponsored Research designation
  - **Increase infrastructure to accommodate Enrollment**: As enrollment increases, need to build infrastructure to service students based upon programming:
    - Wrap Business Services around Distance Learning Programs students
    - Expand Library Services to accommodate Distance Learning
    - Seek opportunities to engage Distance Learners in extra-curricular (build Alumni base)
  - **Invest in comprehensive renovation of Themed Arts District**: Need to move forward with a modified Restore the Core 2 Program to provide an enhanced Academic space for the Music and Visual Arts program. This will also provide increased opportunity for revenue generation
    - Comprehensive renovation of Hauser Hall using a multi-funding approach
    - Build a connector between Hauser Hall and KR Williams
    - Renovate KR Williams, 2nd largest entertainment venue in Winston-Salem

Priorities or Areas of Focus

- **Intermediate Priorities (Years 3-4)**
  - **Invest in Campus Community Technical & Digital Development Skills and Instructors**: Technologies can have a transformational impact, increasing student learning and engagement and improving pedagogical practice. The rate at which WSSU has adopted digital transformation requires faculty and staff to develop their technical skills to utilize the resources. Students also need exposure to digital and technical literacy to enter into the digital workforce. This priority will also address ongoing professional development and training of technical staff to maintain skillsets in the rapidly changing digital world.
    - Invest in additional Technology Learning Center staff to provide instruction and support initiatives that ensure staff and students develop digital literacy skills
    - Require Intro to Technology courses for each degree plan
    - Invest in additional Educational Technologists staff to provide instruction and support initiatives that ensure faculty use of educational technology in course delivery
    - Establish a per person budgetary line expenditure for professional development and training allocation for technical staff
  - **Develop Technology Lifecycle and Refresh Program:** Develop a sustainable lifecycle replacement program to ensure that technology is current and refreshed regularly with associated funding - to include computing endpoints (desktop/laptop) and infrastructure hardware in scope. Less than optimal performance or non-operable computer devices can severely impact employee productivity and standard business processes, including teaching and learning by faculty and students.

Priorities or Areas of Focus

- **Long-Term Priorities (Years 5+)**
  - **Fully achieve ADA Compliance within all Facilities**: Institutional data indicate that only 65% of WSSU's facilities meet ADA compliance standards, so the institution must make strategic investments to bring all facilities into compliance.

  - **Master Plan:** As the university continues to grow enrollment via Academic programming, Speaker Series, etc. there may be a need to begin planning to revisit the Master Plan based upon the progress of the Strategic Plan and goals of the university. The current plan was completed in 2018.

Priorities or Areas of Focus

- **Long-Term Priorities (Years 5+)**
  - **Achieve Energy Consumption Efficiencies within all Facilities**: To minimize our impact on the natural environment and reducing energy consumption, WSSU must perform an energy consumption study and implementing technology or changing behaviors to provide cost-saving opportunities and carbon footprint reduction
    - Install motion sensors in classrooms and office spaces to conserve power consumption by turning lights and equipment off
    - Adding HVAC motion sensors to control heating and cooling
    - Creating Computing Energy Conservation Guidelines for Technology
  - **Achieve Level 2 Classroom Technology Standard: the Institution's Governmental Affairs and External Relations:** Where feasible and based on the results of the LSRS assessment, space utilization, and capacity to support infrastructure, identify at least one room per academic building for an upgrade to Level 2 classroom technology standard.