

FACILITIES MASTER PLAN / CAPITAL PROJECT REQUEST
CAPITAL REQUIREMENTS SUMMARY AND NEEDS ASSESSMENT FORM
(Form 1A)

Institution: University of Alabama in Huntsville
Name of Respondent: Michael S. Finnegan

Telephone Number: 256-824-6480
E-Mail Address: michael.finnegan@uah.edu

A. IMMEDIATE CAPITAL REQUIREMENTS - YEAR 1 (FY 2013-2014)

	Institutional Priority	Funding Sources			Estimated Total Cost	Specify Source(s) Other State	Specify Source(s) Other Funds	Building Number (If existing Facility or Facilities)	Space Utilization Description (If more than 1 Code used include % for each Code. Click here to view Codes)	Projected Gross Square Feet. (Should be used only for Subsection 1 or 2 Projects)	Projected Net Assignable Square Feet. (Should be used only for Subsection 1 or 2 Projects)	Space Category (If more than 1 Code used include % for each Code. Click here to view Codes)	Change in Purpose (Yes or No Depending on Project)	Projected Start/ Acquisition Date (Date reported cannot be before the start of the fiscal year to be reported on the form. Fiscal Years run from Oct. 1 - Sept. 30)	Projected Completion Date	Basis of Requirement (Use no more than 2 Codes. Click here to view Codes) USE LETTER OF CODE ONLY
		Education Trust Fund	Other State Funding	Other Funds												
1. New Construction/Acquisition Projects																
1. Nursing Building Renovation & Expansion	1	\$17,200,000			\$17,200,000			30	1-70%, 2T-30%	85,000	60,000	E&G	No	10/01/2013	10/01/2014	B, E
2. Greenway-Phase 2	19	\$1,500,000			\$1,500,000			all	17-infrastructure	10 acres		Other	No	10/01/2013	07/30/2014	L-infrastructure
3. Von Braun Research Hall Reno/Replacement-Phase 1	20	\$25,000,000			\$25,000,000			2	2R	200,000	145,000	E&G	No	10/01/2013	06/15/2015	B, E
4. Fraternity/Sorority House	21			\$1,000,000	\$1,000,000		Gifts & Auxiliary		13	5,000	3,500	Auxiliary	No	10/01/2013	12/15/2014	B
5. Acquisition of Property Near Campus	22	\$500,000			\$500,000				16	5 acres		Other	No	10/01/2013	12/15/2014	D, J
Subtotal		\$44,200,000		\$1,000,000	\$45,200,000											
2. Renovation/Remodeling Projects																
1. Technology Hall Replace Exterior Skin	5	\$1,200,000			\$1,200,000			89	2R	20,000	18,000	E&G	No	10/01/2013	12/15/2014	E
Subtotal		\$1,200,000			\$1,200,000											
3. Major Capital Equipment Projects																
1. Mass Communication System-Phase 1	2	\$1,700,000			\$1,700,000			all	17-infrastructure			E&G	No	10/01/2013	09/30/2014	J
2. IT Infrastructure Improvements	3	\$12,700,000			\$12,700,000			all	17-infrastructure			E&G	No	10/01/2013	09/30/2014	E, G
3. Campus Signage & Exterior Wayfinding	11	\$750,000			\$750,000			all	17-infrastructure			E&G	No	10/01/2013	09/30/2014	L-wayfinding
Subtotal		\$15,150,000			\$15,150,000											
4. Deferred Maintenance/Facilities Renewal (See Instructions)																
1. BC: Modernize Elevators	4	\$110,000			\$110,000			63	17 (Hotel)			Auxiliary	No	10/01/2013	09/30/2014	E
2. Campus: Implement Energy Savings Projects	6	\$100,000			\$100,000			all	1			E&G	No	10/01/2013	09/30/2014	L - Energy Savings
3. Campus: Replace Worn Carpets & Ceiling Tiles	7	\$100,000			\$100,000			all	1			E&G	No	10/01/2013	09/30/2014	E
4. Campus: Upgrade Walkways & Lighting	8	\$100,000			\$100,000			all	1			E&G	No	10/01/2013	09/30/2014	E,F
5. CH: Install Sub-surface Drainage along Sparkman	9	\$100,000			\$100,000			91	17 (Research)			E&G	No	10/01/2013	09/30/2014	F,G
6. EB: Modernize EMCS	10	\$175,000			\$175,000			62	1			E&G	No	10/01/2013	09/30/2014	E
7. LIB-Phases 1&2, TH, LH: Replace Roof	12	\$775,000			\$775,000		14,89,32,110		1			E&G/LH=AUX	No	10/01/2013	09/30/2014	E
8. MSB: Upgrade Lab Control System-Phase 2 of 3	13	\$155,000			\$155,000		81	1-25%, 2T-25%, 2R-50%				E&G	No	10/01/2013	09/30/2014	E,J
9. MH: Upgrade HVAC System-Phase 1 of 3	14	\$250,000			\$250,000		1	1				E&G	No	10/01/2013	09/30/2014	E
10. MH: Replace Exterior Doors and Store Front	15	\$100,000			\$100,000		1	1				E&G	No	10/01/2013	09/30/2014	E
11. SH: Replace Roof	16	\$350,000			\$350,000		31	5				E&G	No	10/01/2013	09/30/2014	E
12. UC: Modernize EMCS	17	\$175,000			\$175,000		61	8				E&G	No	10/01/2013	09/30/2014	E
13. VBRH: Install Emergency Generator	18	\$350,000			\$350,000		99, 2	2R				E&G	No	10/01/2013	09/30/2014	G
Subtotal		\$2,840,000			\$2,840,000											
Total Immediate Year 1 Capital Requirements		\$63,390,000		\$1,000,000	\$64,390,000											

A brief description and justification must be attached for each project listed above.

Provide a succinct but thorough justification of the need for the capital project. This information may be included in a separate Word Processing document. See instructions for further information.

* NIST = National Institute for Science and Technology

FACILITIES MASTER PLAN / CAPITAL PROJECT REQUEST
CAPITAL REQUIREMENTS SUMMARY AND NEEDS ASSESSMENT FORM
(Form 1B)

Institution: University of Alabama in Huntsville
Name of Respondent: Michael S. Finnegan

Telephone Number: 256-824-6480
E-Mail Address: michael.finnegan@uah.edu

B. INTERMEDIATE CAPITAL REQUIREMENTS - YEAR 2 (FY 2014-2015)

	Institutional Priority	Funding Sources			Estimated Total Cost	Specify Source(s) Other State	Specify Source(s) Other Funds	Building Number (If existing Facility or Facilities)	Space Utilization Description (If more than 1 Code used include % for each Code Click here to view Codes)	Projected Gross Square Feet. (Should be used only for Subsection 1 or 2 Projects)	Projected Net Assignable Square Feet. (Should be used only for Subsection 1 or 2 Projects)	Space Category (If more than 1 Code used include % for each Code. Click here to view Codes)	Change in Purpose (Yes or No Depending on Project)	Projected Start/ Acquisition Date (Date reported cannot be before the start of the fiscal year to be reported on the form. Fiscal Years run from Oct. 1 -Sept. 30)	Projected Completion Date	Basis of Requirement (Use no more than 2 Codes. Click here to view Codes) USE LETTER OF CODE ONLY
		Education Trust Fund	Other State Funding	Other Funds												
1. New Construction/Acquisition Projects																
1. North Campus Parking Facility	2	\$2,700,000		\$10,800,000	\$13,500,000		Federal		17(Parking)	200,000	200,000	Other	No	10/01/2014	12/15/2015	D, J
2. Acquisition of Property Near Campus	13	\$500,000			\$500,000				16	5 ACRES		Other	No	10/01/2014	09/30/2015	D
3. Fraternity/Sorority House	14			\$1,200,000	\$1,200,000		Gifts & Auxiliary		13	5,000	3,500	Auxiliary	No	10/01/2014	09/30/2015	B
4. Madison Hall Renovation/Replacement	12	\$20,000,000			\$20,000,000			3	1	88,000	64,000	E&G	No	10/01/2013	06/15/2015	B, E
5. Von Braun Research Hall Reno/Replacement-Phase 2	21	\$25,000,000			\$25,000,000			2	2R	200,000	145,000	E&G	No	10/01/2013	06/15/2015	B, E
Subtotal		\$48,200,000		\$12,000,000	\$60,200,000											
2. Renovation/Remodeling Projects																
1. Wilson Hall Renovation	11	\$2,000,000			\$2,000,000			15	1	20,000	14,500	E&G	No	10/01/2014	09/30/2015	B, D
2. Ben Graves Drive-Road Relocation	15	\$2,500,000			\$2,500,000				17-infrastructure			E&G	No	10/01/2014	09/30/2015	F
Subtotal		\$4,500,000			\$4,500,000									10/01/2014	09/30/2015	
3. Major Capital Equipment Projects																
1. Mass Communication-Phase 2	1	\$1,700,000			\$1,700,000			all	17-infrastructure			E&G	No	10/01/2014	09/30/2015	J
2. Campus Signage & Interior Wayfinding	3	\$750,000			\$750,000			all	17-infrastructure			E&G	No	10/01/2014	09/30/2015	L-wayfinding
Subtotal		\$2,450,000			\$2,450,000											
4. Deferred Maintenance/Facilities Renewal (See Instructions)																
1. BAB: Modernize EMCS	4	\$170,000			\$170,000			75	1			E&G	No	01/02/2015	04/15/2015	E, F
2. BAB: Repave Parking Lot & Upgrade Lighting	5	\$165,000			\$165,000			75	1			E&G	No	10/01/2014	12/30/2014	E, F
3. Campus: Implement Energy Savings Projects	6	\$100,000			\$100,000			all				E&G	No	10/01/2014	09/30/2015	L
4. Campus: Improve Lights, Clocks, Wayfinding, etc.	7	\$220,000			\$220,000			all	17-infrastructure			E&G	No	10/01/2014	09/30/2015	F
5. Campus: Repave Ben Graves Drive	8	\$380,000			\$380,000				17-infrastructure			E&G	No	06/01/2015	07/15/2015	E
6. Campus: Standardize Outside Lighting & Add Sidewalk	9	\$150,000			\$150,000				17-infrastructure			E&G	No	06/01/2015	07/30/2015	F
7. EB, WLRH: Replace Roof	10	\$375,000			\$375,000			62.64	1,17(radio station)			E&G/AUX	No	05/01/2015	08/30/2015	E
8. JRC, CSR: General Repairs	16	\$100,000			\$100,000			29,32	17			E&G	No	10/01/2014	07/15/2015	E, F
9. JRC, CSR, PPB: Install EMCS	17	\$125,000			\$125,000			29,32,58	17			E&G	No	04/01/2015	09/01/2015	E, L
10. MSB: Upgrade Lab Control System-Phase 3 of 3	18	\$160,000			\$160,000			81	1-25%, 2T-25%, 2R-50%			E&G	No	06/01/2015	08/01/2015	E, F
11. MH: Upgrade HVAC Systems-Phase 2 of 3	19	\$250,000			\$250,000			01	1			E&G	No	05/15/2015	08/01/2015	E, F
12. OB: Fire Alarm System Upgrade	20	\$100,000			\$100,000			82	1			E&G	No	03/01/2015	04/01/2015	E, F
13. SECH: General Upgrades	22	\$175,000			\$175,000			129,130,131	14			AUX	No	01/02/2015	03/01/2015	E, F
14. SH: Modernize Elevator, Repair Rock Wall	23	\$100,000			\$100,000			31	5			E&G/AUX	No	06/01/2015	07/15/2015	E, F
Subtotal		\$2,570,000			\$2,570,000											
Total Intermediate Year 2 Capital Requirements		\$57,720,000		\$12,000,000	\$69,720,000											

A brief description and justification must be attached for each project listed above.

Provide a succinct but thorough justification of the need for the capital project. This information may be included in a separate Word Processing document. See instructions for further information.

FACILITIES MASTER PLAN / CAPITAL PROJECT REQUEST
CAPITAL REQUIREMENTS SUMMARY
(Form 1C)

Institution: University of Alabama in Huntsville

Name of Respondent: Michael S. Finnegan

Telephone Number: 256-824-6480 E-Mail Address: michael.finnegan@uah.edu

C. LONG TERM CAPITAL REQUIREMENTS - YEARS 3-5
(FY 2015-2016 through FY 2017-2018)

	Estimated Total Cost
1. New Construction/Acquisition Projects	
1. Engineering/Technology Research Bldg	\$ 30,000,000
2. Multifunction Facility	\$ 50,000,000
3. Fraternity/Sorority House	\$ 1,200,000
4. Residence Hall, Phase 2	\$ 23,000,000
5. On-Campus Apartments	\$ 10,000,000
6. Track & Field Complex	\$ 2,000,000
7. North Campus Entrance	\$ 1,000,000
8. Greenway, Phase 3	\$ 1,500,000
9. Acquisition of Property	\$ 2,000,000
Subtotal	\$ 120,700,000
2. Renovation/Remodeling Projects	
1. Renovate University Center	\$ 2,500,000
2. Expand IMF Parking Facility	\$ 4,000,000
3. Replace/Renovate RH Performing Arts Theatre	\$ 4,000,000
Subtotal	\$ 10,500,000
3. Major Capital Equipment Projects	
1.	\$
Subtotal	\$ -
4. Deferred Maintenance/Facilities Renewal (See Instructions)	
01 BC: Upgrade Lighting in Meeting Rooms	\$ 100,000
02 BC: Replace AHU1 and Cooling Tower	\$ 165,000
03 BC: Pressure Wash & Re-caulk Building	\$ 200,000
04 Campus: Landscaping Improvements	\$ 100,000
05 Campus: Standardize Outside Lighting	\$ 200,000
06 Campus: Implement Energy Saving Initiatives	\$ 300,000
07 Campus: Roof Replacements - 3 Buildings	\$ 550,000
08 Campus: Install Storm Drainage System - North Campus	\$ 225,000
09 CCRH: 3-Modernize Elevator, EMCS Upgrade	\$ 440,000
10 CP: Mechanical Upgrades	\$ 360,000
11 ENG: Replace all HVAC Units	\$ 750,000
12 LIB, Phase 1: Abate Asbestos & Lighting Upgrade	\$ 450,000
13 LIB, Phase 1, and UC: Modernize Elevators	\$ 140,000
14 MH: HVAC Upgrade 3 of 3, Chiller Replacement	\$ 475,000
15 MSB & OPT: Pressure Wash & Re-caulk Building	\$ 190,000
16 MSB: Replace Carpet	\$ 175,000
17 MSB: Replace Two Energy Recovery Coils	\$ 100,000
18 MSB: Auditorium Lighting Upgrade	\$ 125,000
19 MSB: Install Emergency Power for Sub-zero Freezers	\$ 250,000
20 OPT: Replace All Lab Exhaust Fans	\$ 300,000
21 SH: Replace HVAC Units on Lower Roof	\$ 225,000
22 UFC, RH, VBRH, SKH, OB: Replace Domestic Heater	\$ 100,000
23 RH, SKH, VBRH, MDH, LIB I, TH: Replace Chiller	\$ 1,275,000
24 SKH: Replace Carpet	\$ 100,000
25 SKH: Electrical Renovation	\$ 550,000
26 TH: Replace Floor Tile	\$ 150,000
27 UC, BSB, CP: Modernize Fire Alarm System	\$ 260,000
28 UC: Replace Main Electrical Switch Board and MCC	\$ 350,000
Subtotal	\$ 8,605,000
Total Long Term Capital Requirements	\$ 139,805,000
Funding Source for All Long Term Projects:	
Education Trust Fund	\$ 109,805,000
Other State Funding	\$
Other Funds	\$ 30,000,000

D. TOTAL ALL CAPITAL PROJECTS \$ 273,915,000
(The total of Form1A, 1B and 1C
should be reported in Part D)

STATEMENT OF BONDED INDEBTEDNESS AS OF SEPTEMBER 30, 2012

Institution: University of Alabama in Huntsville

Component (E&G, Auxiliary, Hospital, Health, Other) _____

Name of Respondent: Ray M. Pinner, CPA

Telephone Number: 256.824.6350

E-Mail Address: ray.pinner@uah.edu

NAME OF BOND ISSUE	PROJECT USE (Briefly describe project)	DATE OF ORIGINAL ISSUANCE	ORIGINAL VALUE	AMOUNT OUTSTANDING As of 9/30/2012	AMOUNT OF DEBT SERVICE As of 9/30/2012			SOURCE OF DEBT SERVICE PAYMENT	DATE OF MATURITY
					PRINCIPAL	INTEREST	TOTAL		
Dorm Revenue Bond 1980	SE Campus Housing Ph2	5/1/1980	\$2,180,000	\$680,000	\$75,000	\$22,660	\$97,660	Housing Fees	5/1/2020
Dorm Revenue Bond 1981	SE Campus Housing Ph3	7/23/1982	\$2,602,000	\$866,000	\$85,000	\$28,530	\$113,530	Housing Fees	5/1/2021
Student Housing 2001	Franz Residence Hall (Ph1)	12/27/2001	\$9,370,000	-	\$7,860,000	\$204,383	\$8,064,383	Housing Fees	12/1/2031
General Fees 2002-A	Engineering Building	12/19/2002	\$3,965,000	-	\$3,150,000	\$72,013	\$3,222,013	Stu Tuition/Fees	9/30/2027
General Fees 2003-A	Several Campus Bldgs	2/3/2003	\$17,890,000	-	\$13,910,000	\$629,369	\$14,539,369	Stu Tuition/Fees	9/30/2027
Revenue Bond 2004-A	North Campus Resid Hall (Ph2)	9/30/2004	\$13,130,000	\$11,010,000	\$295,000	\$486,685	\$781,685	Housing Fees	9/1/2034
Revenue Bond 2004-B	Central Campus Resid Hall	9/30/2004	\$7,515,000	\$2,900,000	\$640,000	\$122,525	\$762,525	Housing Fees	9/1/2016
Revenue Bond 2005-A	Fitness Ctr & NSSTC Annex	10/1/2005	\$8,580,000	\$6,185,000	\$360,000	\$266,125	\$626,125	Stu Tuition/Fees	6/1/2025
Revenue Bond 2009-A	Wilson Hall Renovation	8/4/2009	\$8,115,000	\$7,215,000	\$305,000	\$288,231	\$593,231	Stu Tuition/Fees	7/1/2029
Revenue Bond 2010-A	Charger Village Resid Hall	7/14/2010	\$27,990,000	\$27,990,000		\$1,063,001	\$1,063,001	Stu Tuition/Fees	6/1/2042
Revenue Bond 2012-A	Refinanced 2001 & 2002 Bonds	4/3/2012	\$11,170,000	\$11,170,000		\$161,768	\$161,768	Housing Fees & Tuition Fees	10/1/2031
Revenue Bond 2012-B	Refinanced 2003 Bonds	9/5/2012	\$13,700,000	\$13,700,000				Stu Tuition/Fees	12/1/2026
Total			\$126,207,000	\$81,716,000	\$26,680,000	\$3,345,290	\$30,025,290		
*Actual annual Debt Services Not including Refinancing						\$2,665,000	\$3,345,290	\$6,010,290	

Please be as specific as possible regarding the sources of debt service payments.

**FACILITIES MASTER PLAN / CAPITAL PROJECT REQUEST
(Form 1A)**

The University of Alabama in Huntsville

1. New Construction/Acquisition Projects

1. Nursing Building Renovation & Expansion. Nursing is an area with significant potential for growth that is needed to support the community and meet demands. The program will not be able to grow without the expansion of space. When the Nursing building was constructed with federal grant funding, projected enrollment in the undergraduate program was 235, and the projected graduate enrollment was twenty-five. As the program expanded, the College of Nursing Learning Resources Center (LRC), originally housed on the fourth floor, was moved to Wilson Hall. As a result of relocating the LRC, the fourth floor of the Nursing building was vacated and is currently being used as a temporary location for faculty and staff to support growth of the College. The present goal for the College of Nursing is to increase enrollment to 1,307 students by 2019. This goal is based upon 918 undergraduates and 389 graduate students. To support this goal, additional faculty, staff, and building space are required. Additionally, after further programming and upon completion of the 2012-2013 Annual Consolidated Capital Projects and Facilities Report, the University determined that the College of Nursing's Learning Resource Center should be moved from its present location in Wilson Hall to the Nursing Building. An addition of approximately 45,000 GSF is planned in conjunction with this project. In addition to supporting program growth, the renovation will bring current facilities into compliance with ADA.

2. Greenway-Phase 2. The proposed project is the second phase of an interconnecting pedestrian spline within the core of campus. It will be located north of Holmes Avenue, adjacent to the Library, Nursing Building, and Roberts Hall. Its composition will include seating areas, walkways for pedestrians, bicycle lanes, extensive landscaping and green space, and other pedestrian-use amenities for the use of faculty, staff and students. The area is anticipated to become an active and vibrant location for gatherings and events in addition to becoming the passageway among all University facilities by pedestrian traffic. This phase of the Greenway supports the 2010 Campus Master Plan and is the means of pedestrian travel on campus, allowing the decreased use of vehicular travel by faculty, staff, and students. With a growing student population and numerous campus visitors, this project will facilitate the increased safety of pedestrians while setting the framework for an improved campus and university image.

3. Von Braun Research Hall Renovation/Replacement-Phase 1. Von Braun Research Hall contains offices for Research Administration, offices and research laboratories for the Center for Microgravity & Materials Research, and the Center for Automation and Robotics. Additionally, it houses the University's mainframe computer facility and i.t. Solutions. The building was constructed in 1964 with an addition in 1987, and all original infrastructure is still in use. This equipment has reached the end of its life cycle and needs replacement. However, because of the high levels of asbestos used in original

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The University of Alabama in Huntsville

construction, new construction is significantly more cost effective than abatement and renovation.

4. Fraternity/Sorority House. The addition of fraternity and sorority housing has created an exciting new dimension for campus life. For many years, members of UAHuntsville fraternities and sororities have had the dream of occupying freestanding chapter houses directly on the campus. Fraternities and sororities play important roles on campus by enhancing the quality of academic and social lives of their members and by creating the social fabric that bonds the campus together. An additional house will help anchor the eastern edge of the new campus green and will continue the development of UAHuntsville as a traditional residential campus.

5. Acquisition of Property near Campus. This expansion anticipates future needs as UAHuntsville continually seeks new federal research dollars that require additional facilities. Established residences lie adjacent to the campus on the east; the campus is bounded by an interstate highway to the south; the west boundary of the campus is Research Park; and the north campus boundary is a major highway and a city school. High priority must be given to acquiring property in close proximity as it becomes available to meet future expansion needs.

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The University of Alabama in Huntsville

2. Renovation/Remodeling Projects

1. Technology Hall Replace Exterior Skin. Due to deterioration of the existing exterior building facade, removal of sheathing and finish coating is required followed by installation of new sheathing, brick veneer panels, and synthetic stucco. Work must also include structural “stiffening” of the building as a result of this veneer installation and current building code compliance. Foundation work will be required at location of brick facade.

3. Major Capital Equipment Projects

1. Mass Communication System-Phase 1. Current emergency notification methods in use by the university rely on telephone, text/SMS, and email to deliver life-safety messages. It’s the universities goal to further enhance our mass communication system and has identified the use of building emergency notification systems and outdoor high power speaker arrays as the best method to accomplish this goal.
2. IT Infrastructure Improvements. The IT Infrastructure Improvements Project will occur in two phases. Phase 1 is a Data Center Revitalization designed to extend the current data center’s lifespan for up to five more years by retrofitting a portion of the existing facility then modernizing and consolidating the required equipment to the improved area at an estimated cost of \$1.2 M. The work will include significant improvements to power, lighting, security, fire-suppression, and moisture detection systems in one room of the current facility. It will also include replacement of many systems and network components that have reached or passed the end of their serviceable life. The new equipment will enable the modernization of data center architecture and will significantly reduce the operational complexity, power and cooling demands, and the overall physical footprint for required services and applications. Power, cooling, equipment racks, cable management, security, and management components are all part of an integrated, planned system which is evident in the resulting aesthetics, functionality, and modularity of the new environment to ensure that critical application and service availability targets are met while yielding savings and efficiencies in design, construction, and ongoing costs. Beyond the Data Center environment, the viable infrastructure plan will be enhanced with the addition of an on-campus failover location intended to provide a secondary route for network traffic, redundant network services, and a future base for other critical systems and storage redundancies.

Phase 2, with an approximate cost of \$11.5 M, involves upgrading main network routing and switching equipment, developing “dematerialized zones” (DMZs) enabling collaborative service capabilities, establishing the foundational infrastructure for extending wireless capabilities to all campus buildings and common areas, and enhancing Network Team operations and capabilities through utility acquisitions and infrastructure

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The University of Alabama in Huntsville

development in order to develop a versatile, fast, and reliable network coverage capable of meeting current and anticipated needs.

3. Campus Signage & Exterior Wayfinding. The proposed project will implement the findings and recommendations of the 2012 Signage Master Plan to provide a researched, engineered campus signage and way finding that addresses directional needs, guides visitors to key destinations, aligns with building pathways, and strengthens the university brand. The proposed project will enhance the aesthetics of campus and provide assistance to students, visitors, faculty, and staff. With a growing student population and numerous campus visitors, this project will facilitate the increased safety of pedestrian and vehicular traffic and provide directional signage that is beneficial to all campus users.

4. Deferred Maintenance/Facilities Renewal

1. Bevill Center: Modernize Elevators. As part of the ongoing program to modernize and upgrade all of the campus elevators, elevators will be scheduled as funds become available. Priority is placed on the elevators with the old-style, single-bottom jacks.
2. Campus: Implement Energy Savings Projects. These initiatives will develop and implement energy conservation measures and energy saving operations and maintenance procedures, utilize an extensive University-wide building energy management system, and seek to develop a University-wide commitment to modifying local behavior to decrease energy consumption and promote the use of sustainable energy alternatives.
3. Campus: Replace Worn Carpets and Ceiling Tiles. Carpet and ceiling tiles in various facilities have deteriorated to the point that they will soon need to be replaced
4. Campus: Upgrade Walkways & Lighting. The outdoor lighting system that was originally installed in campus parking areas has become obsolete making it difficult to nearly impossible to replace failing parts. The system's overall candle power has fallen well below current code for parking lot lighting. Due to safety and energy concerns, the system needs to be fully replaced. The installation of a cohesive lighting system with unique, consistent, recognizable characteristics will improve campus aesthetics, save time, and enhance building and personnel security.

Portions of the asphalt walkways throughout campus have deteriorated to the point that they are no longer ADA-compliant and will soon need to be repaved.

5. Cramer Hall: Install Sub-surface Drainage along Sparkman Drive. The campus has enjoyed expansion in several areas. This growth along with growth of the surrounding community has created an increase in the amount of storm drainage water on campus. There are older sections of campus that are currently not plumbed with storm drainage.

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These funds would provide for the design and installation of drainage in these older areas.

6. Engineering Building: Modernize EMCS. The installation of an up-to-date computerized system will allow us to monitor and control HVAC equipment remotely. Through EMCS we can focus on programming mechanical systems to provide building occupants comfort and optimize the use of energy.
7. Library-Phases 1 &2, Technology Hall & Lowe House: Replace Roof. The roof of each of these facilities has deteriorated to the point that it will soon need to be replaced
8. Materials Science Building: Upgrade Lab Control System-Phase 2 of 3. The Materials Science Building was constructed in 1991 and operates as a teaching research facility that requires mechanical support of the research environment. The aforementioned equipment is part of the original installation and has reached the end of its life cycle and needs replacement.
9. Morton Hall: Replace Exterior Doors & Store Front. The exterior doors are those originally installed during the building's construction in 1961. They have exceeded their life cycle and need to be replaced.
10. Morton Hall: Upgrade HVAC System-Phase 1 of 3. Morton Hall was constructed in 1961 with an expansion to the building in 1977. The equipment is over 50 years old and has exceeded its life cycle. Also the system has low efficiency rating compared to modern equipment. This upgrade will replace the deteriorated equipment with high efficiency new equipment.
11. Spragins Hall: Replace Roof. This building has a built-up asphalt roof system that is near the end of its life. The perimeter base flashing, which has been repaired and replaced on different occasions, is brittle and deteriorated. It should be replaced before major leaks develop and cause damage to the building's interior.
12. University Center: Modernize EMCS. The installation of an up-to-date computerized system will allow us to monitor and control HVAC equipment remotely. Through EMCS we can focus on programming mechanical systems to provide building occupants comfort and optimize the use of energy.
13. Von Braun Research Hall: Install Emergency Generator. VBRH requires an emergency generator to ensure continuity during a power outage.

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1. New Construction/Acquisition Projects

1. North Campus Parking Facility. Enrollment and athletic program growth has rendered a need for additional parking support in the northern portion of campus.
2. Acquisition of Property near Campus. This expansion anticipates future needs as UAHuntsville continually seeks new federal research dollars that require additional facilities. Established residences lie adjacent to the campus on the east; the campus is bounded by an interstate highway to the south; the west boundary of the campus is Research Park; and the north campus boundary is a major highway and a city school. High priority must be given to acquiring property in close proximity as it becomes available to meet future expansion needs.
3. Fraternity/Sorority House. The addition of fraternity and sorority housing has created an exciting new dimension for campus life. For many years, members of UAHuntsville fraternities and sororities have had the dream of occupying freestanding chapter houses directly on the campus. Fraternities and sororities play important roles on campus by enhancing the quality of academic and social lives of their members and by creating the social fabric that bonds the campus together. An additional house will help anchor the eastern edge of the new campus green and will continue the development of UAHuntsville as a traditional residential campus.
4. Madison Hall Renovation/Replacement. Madison Hall was constructed in 1966, and currently houses student support services including Graduate Studies, Graduate Admissions, the Student Success Center, International Programs, and General College Advisement, Multicultural Affairs, and the Offices of Career Services and Cooperative Education. All the original equipment remains in use in the building. If renovated, the project will renovate the vacated space into more modern and efficient office and programs space. Also within the renovation will be the renewal of the 40-year old mechanical and electrical systems, creating a more reliable, comfortable, and adaptable building. In addition, hazardous material will be abated, the fire alarm system will be upgraded, and the restrooms will be modernized to meet ADA code. If replaced, the building will house student support services on the ground level. Upper levels will house the executive administrative offices, which are presently located in Shelbie King Hall. Centrally relocating these offices to Madison Hall will be more convenient to students, parents, and guests.
5. Von Braun Research Hall Renovation/Replacement-Phase 2. Von Braun Research Hall contains offices for Research Administration, offices and research laboratories for the Center for Microgravity & Materials Research, and the Center for Automation and

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Robotics. Additionally, it houses the University's mainframe computer facility and i.t. Solutions. The building was constructed in 1964 with an addition in 1987, and all original infrastructure is still in use. This equipment has reached the end of its life cycle and needs replacement. However, because of the high levels of asbestos used in original construction, new construction is significantly more cost effective than abatement and renovation.

2. Renovation/Remodeling Projects

1. Wilson Hall Renovation. Upon the completion of the Nursing Building Renovation/Expansion the third floor of Wilson Hall will be vacant. The renovation will repurpose the vacated space to support programming in Wilson Hall.
2. Ben Graves Drive-Road Relocation. A portion of Ben Graves Drive will be removed between Morton Hall and Frank Franz Hall to extend the Greenway. This will greatly enhance safety as pedestrians travel between Frank Franz Hall and North Campus Residence Hall to the central core of campus.

3. Major Capital Equipment Projects

1. Mass Communication System-Phase 2. Current emergency notification methods in use by the university rely on telephone, text/SMS, and email to deliver life-safety messages. It's the university's goal to further enhance our mass communication system and it has identified the use of building emergency notification systems and outdoor high power speaker arrays as the best method to accomplish this goal.
2. Campus Signage & Interior Wayfinding. The proposed project will implement the findings and recommendations of the 2012 Signage Master Plan to provide a researched, engineered campus signage and way finding that addresses directional needs, guides visitors to key destinations, aligns with building pathways, and strengthens the university brand. The proposed project will enhance the aesthetics of campus and provide assistance to students, visitors, faculty, and staff. With a growing student population and numerous campus visitors.

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4. Deferred Maintenance / Facilities Renewal

1. Business Administration Building: Modernize EMCS. The installation of an up-to-date computerized system will allow us to monitor and control HVAC equipment remotely. Through EMCS we can focus on programming mechanical systems to provide building occupants comfort and optimize the use of energy.
2. Business Administration Building: Repave Parking Lot & Upgrade Lighting. The parking lot that serves the Business Administration Building has deteriorated to the point that it will soon need to be repaved.
3. Campus: Implement Energy Savings Projects. These initiatives will develop and implement energy conservation measures and energy saving operations and maintenance procedures, utilize an extensive University-wide building energy management system, and seek to develop a University-wide commitment to modifying local behavior to decrease energy consumption and promote the use of sustainable energy alternatives.
4. Campus: Improve Lights, Clocks, Wayfinding, etc. The outdoor lighting system that was originally installed in campus parking areas has become obsolete, making it difficult to nearly impossible to replace failing parts. The system's overall candle power has fallen well below current code for parking lot lighting. Due to safety and energy concerns, the system needs to be fully replaced. The installation of a cohesive lighting system with unique, consistent, recognizable characteristics will improve campus aesthetics, save time, and enhance building and personal security.

Installing a GPS clock system and clocks in all classrooms will synchronize all classrooms to one accurate time source. It will also eliminate the need for manual clock setting.

The installation of a cohesive way-finding system with unique, consistent, and recognizable characteristics will be a critical component of planning that connects services, functions, and people. In addition, it will save time, reduce stress, encourage self-reliance, and enhance building and personnel security.

5. Campus: Repave Ben Graves Drive. Ben Graves Drive serves the portion of the campus that is located north of Holmes Avenue. The pavement has deteriorated to the point that it will soon need to be repaved. It was last repaved in 1986.
6. Campus: Standardize Outside Lighting and Add Sidewalk. The outdoor lighting system that was originally installed in campus parking areas has become obsolete, making it

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difficult to nearly impossible to replace failing parts. The system's overall candle power has fallen well below current code for parking lot lighting. Due to safety and energy concerns, the system needs to be fully replaced. The installation of a cohesive lighting system with unique, consistent, and recognizable characteristics will improve campus aesthetics, save time, and enhance building and personal security.

A sidewalk will begin at the intersection of Sparkman and Technology Drives. It will be built along the south side of Technology Drive and continue along John Wright Drive until it ties to the sidewalk already in existence just west of the Athletic Complex. This sidewalk is needed to ensure pedestrian safety.

7. Engineering Building & WLRH: Replace Roof. The roof of each of these facilities has deteriorated to the point that they will soon need to be replaced.
8. Johnson Research Center & Central Shipping & Receiving: General Repairs. The exterior skin and roof of Central Shipping & Receiving have rusted and deteriorated and must be replaced. The installation of an up-to-date computerized system at Central Shipping & Receiving and Johnson Research Center will allow us to monitor and control HVAC equipment remotely. Through EMCS we can focus on programming mechanical systems to provide building occupants comfort and optimize the use of energy.
9. Johnson Research Center, Central Shipping & Receiving, Physical Plant Building: Install EMCS. The installation of an up-to-date computerized system will allow us to monitor and control HVAC equipment remotely. Through EMCS we can focus on programming mechanical systems to provide building occupants comfort and optimize the use of energy.
10. Materials Science Building: Upgrade Lab Systems-Phase 3 of 3. The Materials Science Building was constructed in 1991 and operates as a teaching research facility that requires mechanical supportive of the research environment. The aforementioned equipment is part of the original installation and has reached the end of its life cycle and needs replacement.
11. Morton Hall: Upgrade HVAC System-Phase 2 of 3. Morton Hall was constructed in 1961 with an expansion to the building in 1977. The equipment is over 50 years old and has exceeded its life cycle. Also the system has lower efficiency ratings compared to modern equipment. This upgrade will replace the deteriorated equipment with high efficiency new equipment.

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12. Optics Building: Upgrade Fire Alarm System. The fire alarm system is outdated and needs to be modernized to meet today's codes and standards.
13. Southeast Campus Housing: General Upgrades. This complex, built in the late 1970's, is in need of several upgrades. These upgrades include roofs, a sub-surface drainage system, and landscaping.
14. Spragins Hall: Modernize Elevators & Repair Rock Wall. As part of the ongoing program to modernize and upgrade all of the campus elevators, elevators will be scheduled as funds become available. Priority is placed on the elevators with the old-style, single-bottom jacks. Spragins Hall was built in 1977 and has a large rock retaining wall on the north side of the building. Over the past 28 years this wall has deteriorated from surface water running off an adjacent piece of property. From observation, the wall's design was based more on aesthetics than retaining capabilities. These funds would be used to replace this wall with a poured-in-place concrete wall both for appearance and soil retention.