

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 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												
<b>1. New Construction/Acquisition Projects</b>															
1	\$21,000,000			\$21,000,000			3	1	60,000	42,000	E&G	No	10/01/2014	01/01/2016	B, E
2	\$1,500,000			\$1,500,000			all	17-infrastructure	10 acres		Other	No	10/01/2014	07/30/2015	L-infrastructure
3			\$6,000,000	\$6,000,000		Gifts & Auxiliary		5	65,000	50,000	Auxiliary	No	10/01/2014	06/15/2015	C, F
4			\$1,000,000	\$1,000,000		Gifts & Auxiliary		13	5,000	3,500	Auxiliary	No	10/01/2014	12/15/2015	B
5	\$1,000,000			\$1,000,000				16	5 acres		Other	No	10/01/2014	12/15/2015	D, J
<b>Subtotal</b>	<b>\$23,500,000</b>		<b>\$7,000,000</b>	<b>\$30,500,000</b>											
<b>2. Renovation/Remodeling Projects</b>															
16	\$1,000,000			\$1,000,000			15	1		15,000	E&G	No	10/01/2014	09/30/2015	B, D
<b>Subtotal</b>	<b>\$1,000,000</b>			<b>\$1,000,000</b>											
<b>3. Major Capital Equipment Projects</b>															
1	\$1,100,000			\$1,100,000			all	17-infrastructure			E&G	No	10/01/2014	09/30/2015	J
3	\$1,200,000			\$1,200,000			all	17-infrastructure			E&G	No	10/01/2014	09/30/2015	E, G
5	\$500,000			\$500,000			all	17-infrastructure			E&G	No	10/01/2014	09/30/2015	L-wayfinding
<b>Subtotal</b>	<b>\$2,800,000</b>			<b>\$2,800,000</b>											
<b>4. Deferred Maintenance/Facilities Renewal (See Instructions)</b>															
6	\$110,000			\$110,000			63	17 (Hotel)			Auxiliary	No	10/01/2014	09/30/2015	E
7	\$100,000			\$100,000			all	1			E&G	No	10/01/2014	09/30/2015	L - Energy Savings
8	\$100,000			\$100,000			all	1			E&G	No	10/01/2014	09/30/2015	E
10	\$100,000			\$100,000			all	1			E&G	No	10/01/2014	09/30/2015	J
9	\$100,000			\$100,000			all	1			E&G	No	10/01/2014	09/30/2015	E, F
11	\$100,000			\$100,000			91	17 (Research)			E&G	No	10/01/2014	09/30/2015	F, G
12	\$250,000			\$250,000			62	1			E&G	No	10/01/2014	09/30/2015	E
17	\$700,000			\$700,000			62.64	1,17 (radio station)			E&G/WLRH= AUX	No	10/01/2014	09/30/2015	E
18	\$225,000			\$225,000			81	1-25%, 2T-25%, 2R-50%			E&G	No	10/01/2014	09/30/2015	E
19	\$155,000			\$155,000			81	1-25%, 2T-25%, 2R-50%			E&G	No	10/01/2014	09/30/2015	E, J
20	\$100,000			\$100,000			1	1			E&G	No	10/01/2014	09/30/2015	E
21	\$250,000			\$250,000			1	1			E&G	No	10/01/2014	09/30/2015	E
22	\$225,000			\$225,000			30	1			E&G	No	10/01/2014	09/30/2015	E
23	\$290,000			\$290,000			99	1			E&G	No	10/01/2014	09/30/2015	E
24	\$675,000			\$675,000			89,110	1, 13 (Lowe House)			E&G/LH=AUX	No	10/01/2014	09/30/2015	E
25	\$175,000			\$175,000			61	8			E&G	No	10/01/2014	09/30/2015	E
26	\$400,000			\$400,000			2	2R			E&G	No	10/01/2014	09/30/2015	G
<b>Subtotal</b>	<b>\$4,055,000</b>		<b>\$7,000,000</b>	<b>\$4,055,000</b>											
<b>Total Immediate Year 1 Capital Requirements</b>	<b>\$31,355,000</b>		<b>\$7,000,000</b>	<b>\$38,355,000</b>											

**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 2015-2016)**

	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												
<b>1. New Construction/Acquisition Projects</b>																
1. Engineering/Technology Research Bldg, Phase 1	4	\$50,000,000			\$50,000,000			2	2R	200,000	160,000	E&G	No	10/01/2015	09/30/2016	B, E
2. Fraternity/Sorority House	13			\$1,200,000	\$1,200,000	Gifts & Auxiliary		13		5,000	3,500	Auxiliary	No	10/01/2015	09/30/2016	B
3. Greenway Phase 3	14	\$1,500,000			\$1,500,000		all	17-infrastructure	10 acres			Other	No	10/01/2015	09/30/2016	L-infrastructure
4. Acquisition of Property Near Campus	15	\$500,000			\$500,000			16	5 ACRES			Other	No	10/01/2015	09/30/2016	D
<b>Subtotal</b>		\$52,000,000		\$1,200,000	\$53,200,000											
<b>2. Renovation/Remodeling Projects</b>																
1. Ben Graves Drive: Road Relocation	1	\$2,500,000			\$2,500,000			17-infrastructure				E&G	No	10/01/2015	09/30/2016	F
<b>Subtotal</b>		\$2,500,000			\$2,500,000											
<b>3. Major Capital Equipment Projects</b>																
1. IT Infrastructure Improvements	2	\$1,200,000			\$1,200,000		all	17-infrastructure				E&G	No	10/01/2015	09/30/2016	E, G
2. SKH: Replace Mechanical & Electrical System	3	\$750,000			\$750,000		99	1				E&G	No	10/01/2015	09/30/2016	G
<b>Subtotal</b>		\$1,950,000			\$1,950,000											
<b>4. Deferred Maintenance/Facilities Renewal (See Instructions)</b>																
1. BAB: Modernize EMCS	5	\$170,000			\$170,000		75	1				E&G	No	10/01/2015	09/30/2016	E,F
2. BAB: Repave Parking Lot & Upgrade Lighting	6	\$195,000			\$195,000		75	17-infrastructure				E&G	No	10/01/2015	09/30/2016	E,F
3. Campus: Implement Energy Initiative Savings Projects	7	\$100,000			\$100,000		all	1				E&G	No	10/01/2015	09/30/2016	L - energy projects
4. Campus: Repave Ben Graves Drive	8	\$380,000			\$380,000			17-infrastructure				E&G/AUX	No	10/01/2015	09/30/2016	E
5. Campus: Replace Worn Carpets & Ceiling Tiles	9	\$100,000			\$100,000		all	1				E&G/AUX	No	10/01/2015	09/30/2016	E
6. Campus: Standardize Outside Lighting & Add Sidewalk	10	\$150,000			\$150,000			17-infrastructure				E&G	No	10/01/2015	09/30/2016	F,J
7. CCRH: Replace 50 Water Source Heat Pumps, Phase 1 of 2	11	\$225,000			\$225,000		83	14				AUX	No	10/01/2015	09/30/2016	E,F
8. EB: Replace HVAC Equip. & Controls, Phase 3 of 3	12	\$250,000			\$250,000		62	1				E&G	No	10/01/2015	09/30/2016	E,F
9. EB: Upgrade Interior Lighting, Phase 1 of 2	16	\$250,000			\$250,000		62	1				E&G	No	10/01/2015	09/30/2016	E,F
10. JRC. CSR, PPB: Install EMCS	17	\$125,000			\$125,000		29,32,58	17				E&G	No	10/01/2015	09/30/2016	E,L
11. MSB: Upgrade Lab Control System, Phase 3 of 3	18	\$160,000			\$160,000		81	1-25%, 2T-25%, 2R-50%				E&G	No	10/01/2015	09/30/2016	E,F
12. MH: Upgrade HVAC Systems, Phase 2 of 3	19	\$250,000			\$250,000		1	1				E&G	No	10/01/2015	09/30/2016	E,F
13. OB: Fire Alarm System Upgrade	20	\$100,000			\$100,000		82	1				E&G	No	10/01/2015	09/30/2016	E,F
14. RH: General Mech. & Elec. Upgrade	21	\$340,000			\$340,000		17	1				E&G	No	10/01/2015	09/30/2016	E,F
15. SECH: General Upgrades	22	\$175,000			\$175,000		129,130,131	14				AUX	No	10/01/2015	09/30/2016	E,F
16. SH: Modernize Elevator, Repair Rock Wall	23	\$100,000			\$100,000		31	5				E&G/AUX	No	10/01/2015	09/30/2016	E,F
17. UC: Replace Roof	24	\$200,000			\$200,000		61	8				E&G	No	10/01/2015	09/30/2016	E
18. VBRH: Replace Chiller	25	\$350,000			\$350,000		2	2R				E&G	No	10/01/2015	09/30/2016	E
<b>Subtotal</b>		\$3,620,000			\$3,620,000											
<b>Total Intermediate Year 2 Capital Requirements</b>		\$60,070,000		\$1,200,000	\$61,270,000											

**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 2016-2017 through FY 2018-2019)

	Estimated Total Cost
<b>1. New Construction/Acquisition Projects</b>	
1. Engineering/Technology Research Bldg	\$ 30,000,000
2. Multifunction Facility	\$ 50,000,000
3. Fraternity/Sorority House	\$ 1,200,000
4. University Fitness Center Expansion	\$ 5,000,000
5. Charger Village, Phase 2	\$ 23,000,000
6. On-campus Apartments	\$ 10,000,000
7. North Campus Elevated Parking Facility	\$ 13,500,000
8. Acquisition of Property	\$ 2,000,000
<b>Subtotal</b>	<b>\$ 134,700,000</b>
<b>2. Renovation/Remodeling Projects</b>	
1. UC: Renovation	\$ 2,500,000
2. IMF: Expand Parking Facility	\$ 4,000,000
3. RH: Replace/Renovate Performing Arts Theatre	\$ 4,000,000
<b>Subtotal</b>	<b>\$ 10,500,000</b>
<b>3. Major Capital Equipment Projects</b>	
1. VBRH - Replace Mechanical & Electrical Sys	\$ 2,500,000
<b>Subtotal</b>	<b>\$ 2,500,000</b>
<b>4. Deferred Maintenance/Facilities Renewal (See Instructions)</b>	
1. BC: Replace AHU1 and Cooling Tower	\$ 165,000
2. BC: Pressure Wash & Re-caulk Building	\$ 200,000
3. BC: Replace 100 Heat Pumps	\$ 200,000
4. BC: Upgrade Lighting in Meeting Rooms	\$ 200,000
5. Campus: Implement Energy Saving Initiatives	\$ 300,000
6. Campus: Landscaping Improvements	\$ 100,000
7. Campus: Roof Replacements - 3 Buildings	\$ 690,000
8. Campus: Standardize Outside Lighting	\$ 200,000
9. CCRH: Modernize Elevators, EMCS Upgrade	\$ 440,000
10. CCRH: Replace 50 Water Source Heat Pumps, Phase 2 of 2	\$ 250,000
11. CP: Mechanical Upgrades	\$ 360,000
12. EB: Upgrade Interior Lighting, Phase 2 of 2	\$ 250,000
13. LIB, Phase 1: Abate Asbestos, Replace Boiler & Lighting Upgrade	\$ 550,000
14. LIB Phase 1 and UC: Modernize Elevators	\$ 150,000
15. MH: HVAC Upgrade 3 of 3, Chiller Replacement	\$ 400,000
16. MSB & OPT: Pressure Wash & Re-caulk Building	\$ 190,000
17. MSB: Auditorium Lighting Upgrade & Landscaping	\$ 180,000
18. MSB: Install Emergency Power for Sub-zero Freezers	\$ 250,000
19. MSB: Replace Carpet - Offices & Classrooms	\$ 175,000
20. OPT: Replace All Lab Exhaust Fans	\$ 275,000
21. SECH: Replace Indoor Blower Sections, Phase 1 & 2	\$ 200,000
22. SKH: Replace Carpet	\$ 100,000
23. SH: Replace HVAC Units on Lower Roof	\$ 225,000
24. RH, LIB I, TH: Replace Chiller	\$ 625,000
25. TH: Replace Hallway Floor Tile	\$ 150,000
26. UC: Replace Exhibit Hall Floor	\$ 200,000
27. UC: Replace Main Electrical Switch Board and MCC	\$ 350,000
28. UC, BSB, CP: Modernize Fire Alarm System	\$ 260,000
<b>Subtotal</b>	<b>\$ 7,635,000</b>
<b>Total Long Term Capital Requirements</b>	<b>\$ 155,335,000</b>
<b>Funding Source for All Long Term Projects:</b>	
Education Trust Fund	\$ 125,335,000
Other State Funding	\$
Other Funds	\$ 30,000,000

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**D. TOTAL ALL CAPITAL PROJECTS** \$ 254,960,000  
 (The total of Form1A, 1B and 1C  
 should be reported in Part D)

**STATEMENT OF BONDED INDEBTEDNESS AS OF SEPTEMBER 30, 2013**

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 9/30/2013	AMOUNT OF DEBT SERVICE As of 9/30/2013			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	\$605,000	\$75,000	\$20,400	\$95,400	Housing Fees	5/1/2020
Dorm revenue Bond 1981	SE Campus Housing Ph3	7/23/1982	\$2,602,000	\$776,000	\$90,000	\$25,980	\$115,980	Housing Fees	5/1/2021
Revenue Bond 2004-A	North Campus Resid Hall (Ph2)	9/30/2004	\$13,130,000	\$10,705,000	\$305,000	\$477,466	\$782,466	Housing Fees	9/1/2034
Revenue Bond 2004-B	Central Campus Residen Hall	9/30/2004	\$7,515,000	\$2,215,000	\$685,000	\$102,525	\$787,525	Housing Fees	9/1/2016
Revenue Bond 2005-A	Fitness & NSSTC Annex	10/1/2005	\$8,580,000	\$5,810,000	\$375,000	\$253,525	\$628,525	Stu Tuition/Fees	6/1/2025
Revenue Bond 2009-A	Wilson Hall Renovation	8/4/2009	\$8,115,000	\$6,905,000	\$310,000	\$279,081	\$589,081	Stu Tuition/Fees	7/1/2029
Revenue Bond 2010-A	Charger Village Resid Hall	7/14/2010	\$27,990,000	\$27,610,000	\$380,000	\$1,087,873	\$1,467,873	Stu Tuition/Fees	6/1/2042
Revenue Bond 2012-A	Franz Resid Hall Ph1/Eng Bldg	4/3/2012	\$11,170,000	\$11,038,400	\$470,000	\$325,456	\$795,456	Housing Fees & Tuition Fees	10/1/2031
Revenue Bond 2012-B	Several Campus Bldgs	9/5/2012	\$13,700,000	\$12,940,000	\$760,000	\$363,299	\$1,123,299	Stu Tuition/Fees	12/1/2026
Revenue Bond 2013 A-1	Nursing Bldg Renovation	4/4/2013	\$7,550,000	\$7,550,000		\$58,280	\$58,280	Stu Tuition/Fees	4/1/2023
Revenue Bond 2013 A-2	Charger Union Stu Center	4/4/2013	\$24,455,000	\$24,455,000		\$480,948	\$480,948	Stu Tuition/Fees	4/1/2043
Total			\$126,987,000	\$110,609,400	\$3,450,000	\$3,474,834	\$6,924,834		

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. 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.
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. Tennis Center. The proposed project would be an indoor tennis membership facility serving students, faculty, and staff at UAH, the UAH men's & women's tennis teams, and the surrounding Huntsville community. The development of a Tennis Center supports the 2010 Campus Master Plan by providing additional spaces to improve student life. The facility will host the men's and women's tennis programs as well as club tennis, physical education classes, and student recreation. It will also improve the university's student athlete recruitment ability and enable the team to remain competitive on a national level.
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 UAH 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

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## The University of Alabama in Huntsville

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 UAH 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.

### 2. Renovation/Remodeling Projects

1. Wilson Hall: Third Floor 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.

### 3. Major Capital Equipment Projects

1. Mass Communication System, Phase 2. A public address system will be installed in each building on campus to facilitate mass communication from a central location. The system will comply with new codes and ADA requirements. The current fire alarm system in some buildings will already allow for integration of this new system, while the older systems will require complete replacement. Outdoor speaker towers installed across campus, and connected to the central control point will provide mass communication to our outdoor users. In an effort to manage the project in-house, the project was addressed in two phases.

Phase 1 was approved at the April 2013 Board of Trustees meeting and focused on residence halls, key student life facilities, and north campus academic buildings. Phase 2 will complete campus-wide coverage.

The new emergency notification system, combined with existing systems, will provide for immediate delivery of emergency notifications to building occupants and people outdoors on campus. The equipment upgrades and additions will allow individuals to receive specific life-safety and shelter instructions in the event that a crisis or emergency situation poses an imminent threat. The primary object of this project is to provide an improved disaster alert system capable of alerting a high percentage of the campus

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**The University of Alabama in Huntsville**

population of an impending or existing emergency situation, conveying the exact nature of the threat, and communicating protective measures.

2. IT Infrastructure Improvements. IT Infrastructure Improvements will occur annually in order to provide an integrated IT environment that advances the core missions of UAH as well as the operational processes that support these missions and to position the network for future technology changes. Increased enrollment will cause growth in infrastructure needs that will require additional resources; however enrollment will not be the only reason for a rise in basic infrastructure requirements. The technologies used to provide today's services are constantly and quickly evolving. To remain competitive in student and faculty recruitment, UAH must stay current in its technology infrastructure. The university must maintain a robust infrastructure, and stay ahead of the demand for new infrastructure services so that basic infrastructure is never an issue or an obstacle to faculty or student needs. Security continues to be a substantial issue, especially for the data network and server infrastructure. Information Technology must provide secure access for wired, wireless and remote users; implement monitoring and detection to identify security breaches; implement safeguards and remedies to lessen the possibility of security exploits in applications and systems; and provide encryption for mobile data.
  
3. Campus 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.

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**The University of Alabama in Huntsville**

**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: Standardize Exterior Door Locks. Converting exterior door locks to keyless entry provides several advantages. In case of an emergency or threat, buildings can be locked down quickly from a remote location. Employees and students no longer have to safeguard mechanical keys; so a lost building entrance key would no longer create an extended liability or risk. In addition, after-hours entry becomes controlled access with an automatic record of anyone who enters after-hours.
5. 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.
6. 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. These funds would provide for the design and installation of drainage in these older areas.

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7. Engineering Building: Replace HVAC Equip. & Controls, Phase 2 of 3. The current HVAC equipment has exceeded its life cycle resulting in frequent needed repairs and indoor air quality problems. The system has a low efficiency rating compared to modern equipment. This upgrade will replace the deteriorated equipment with high efficiency new equipment.
8. Engineering Building and WLRH. The roof of each of these facilities has deteriorated to the point that it will soon need to be replaced.
9. Materials Science Building: Clean, Seal, Caulk Building Exterior. The Materials Science Building was constructed in 1991 and operates as a teaching research facility that requires mechanical supportive of the research environment. Reducing air leakage in a building's envelope will improve energy efficiency by reducing the loss of conditioned air and structural durability by preventing water vapor from entering the building.
10. 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 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: 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.
12. 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.
13. Nursing Building: Replace Roof. The roof of each of this facility has deteriorated to the point that it will soon need to be replaced.
14. Shelbie King Hall: Replace Chiller. The current chiller has exceeded its life cycle resulting in inefficiency and frequent needed repairs. The system has a low efficiency rating compared to modern equipment. This upgrade will replace the deteriorated equipment with high efficiency new equipment
15. 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

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16. 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.
  
17. Von Braun Research Hall: Install Emergency Generator. 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 the Office of Information Technology. The building was constructed in 1964 with an addition in 1987, and all original infrastructures are still in use. VBRH requires an emergency generator to ensure continuity during a power outage.

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**1. New Construction/Acquisition Projects**

1. Engineering/Technology Research Building, 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 the Office of Information Technology. The building was constructed in 1964 with an addition in 1987, and all original infrastructures are 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. Fraternity/Sorority House. The addition of fraternity and sorority housing has created an exciting new dimension for campus life. For many years, members of UAH 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 continue the development of UAH as a traditional residential campus.
3. Greenway, Phase 3. The proposed project is the third phase of an interconnecting pedestrian spline within the core of campus. It will be located north of Holmes Avenue, adjacent to the University Center, Morton Hall, and Frank Franz 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.
4. Acquisition of Property near Campus. This expansion anticipates future needs as UAH 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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**2. Renovation/Remodeling Projects**

1. 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.

**2. Major Capital Equipment Projects**

1. IT Infrastructure Improvements. IT Infrastructure Improvements will occur annually in order to provide an integrated IT environment that advances the core missions of UAH as well as the operational processes that support these missions and to position the network for future technology changes. Increased enrollment will cause growth in infrastructure needs that will require additional resources; however enrollment will not be the only reason for a rise in basic infrastructure requirements. The technologies used to provide today's services are constantly and quickly evolving. To remain competitive in student and faculty recruitment, UAH must stay current in its technology infrastructure. The university must maintain a robust infrastructure, and stay ahead of the demand for new infrastructure services so that basic infrastructure is never an issue or an obstacle to faculty or student needs. Security continues to be a substantial issue, especially for the data network and server infrastructure. Information Technology must provide secure access for wired, wireless and remote users; implement monitoring and detection to identify security breaches; implement safeguards and remedies to lessen the possibility of security exploits in applications and systems; and provide encryption for mobile data.
2. Shelbie King Hall: Replace Mechanical and Electrical System. The building's general mechanical/electrical infrastructure has exceeded its life cycle resulting in inefficiency and frequent needed repairs. The air handler units, motor control centers, and breaker panels will be upgraded with high efficiency new equipment.

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**3. 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: 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.
5. 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
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 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. Central Campus Residence Hall: Replace Fifty Water Source Heat Pumps, Phase 1 of 2. The water source heat pumps were installed during original construction and are at the end of their life cycle resulting in frequent needed repairs. They will be replaced with high efficiency, more sustainable pumps.

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8. Engineering Building: Replace HVAC Equip. & Controls, Phase 3 of 3. The current HVAC equipment has exceeded its life cycle resulting in frequent needed repairs and indoor air quality problems. The system has a low efficiency rating compared to modern equipment. This upgrade will replace the deteriorated equipment with high efficiency new equipment.
9. Engineering Building: Upgrade Interior Lighting, Phase 1 of 2. The Engineering Building contains T12 lights, which are no longer manufactured. The interior lighting will be upgraded to be more energy efficient and sustainable.
10. 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.
11. 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.
12. 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.
13. Optics Building: Upgrade Fire Alarm System. The fire alarm system is outdated and needs to be modernized to meet today's codes and standards.
14. Roberts Hall: General Mechanical & Electrical Upgrade. The building's general mechanical/electrical infrastructure installed during original construction has exceeded its life cycle resulting in inefficiency and frequent needed repairs. The air handler units, motor control centers, and breaker panels will be upgraded with high efficiency new equipment.

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15. 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.
16. 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.
17. University Center: Replace Roof. The facility's roof has deteriorated to the point that it will soon need to be replaced.
18. Von Braun Research Hall: Replace Chiller. The chiller has exceeded its life cycle resulting in inefficiency and frequent needed repairs and has a low efficiency rating compared to modern equipment. This upgrade will replace the deteriorated equipment with high efficiency new equipment.