



**U.S. Department of Transportation  
Federal Railroad Administration**

**PRELIMINARY ASSESSMENT OF OPTIONS FOR INCREASING  
PARTICIPATION OF HISTORICALLY BLACK COLLEGES AND  
UNIVERSITIES (HBCUs) IN THE FEDERAL RAILROAD ADMINISTRATION  
RESEARCH AND DEVELOPMENT PROGRAM**

**FINAL REPORT**

Prepared for:

**Office of Railroad Development  
FEDERAL RAILROAD ADMINISTRATION  
U.S. DEPARTMENT OF TRANSPORTATION**

by

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## **Chapter I            BACKGROUND**

Historically Black Colleges and Universities have served as the primary training centers for Black leadership in the United States. More than 50 percent of the nations black business executives and elected officials are graduates of black colleges, as are 75 percent of Black Americans with Ph.D. degrees, 75 percent of black military officers, 80 percent of black Federal judges and 85 percent of black physicians. HBCUs have made a tremendous contribution to our nation and continue to be of vital importance.

Despite the pivotal role HBCUs have played in bringing Black citizens into the mainstream of American economic life, Federal funding to minority education overall has averaged 6% of the total funding of all institutions of higher education. To address the need to expand the participation of HBCUs, Minority Institutions and Small Economically Disadvantaged Businesses, the President issued Executive Order 12928. This Executive Order requires each Federal department and agency to promote procurement with HBCUs.

Executive Order 12928 further directs all departments of the Federal government to promote increased participation of HBCUs in Federal procurements. It lists three methods for agencies to promote this involvement; first, the award of contracts to HBCUs through existing programs and through specific statutory authority or appropriate means; second, the establishment of particular goals for HBCUs on an agency-by-agency basis and the requirement that prime contractors and other recipients of Federal funds attain similar goals in their procurement; and third, the establishment of other mechanisms that ensure that HBCUs have a fair opportunity to participate in federal procurements.

A special review conducted by the Secretary of Education, pursuant to the Executive Order governing HBCUs, revealed that the primary barriers impeding HBCU involvement in Federal programs were either technical in nature or related to a lack of resources, i.e., faculty, facilities, previous experience, etc. Another significant barrier hindering HBCU participation in Federal programs was related to communications between the agency and HBCU. In this regard a lack of knowledge on the part of HBCUs concerning research opportunities and a lack of a mechanism

on the part of Federal agencies to provide that information to HBCUs is the primary issue. The review further indicated that funding, although a barrier, was not the primary barrier to participation by HBCUs in Federal programs.

The Federal Railroad Administration (FRA) in meeting its mission and complying with the provisions of Executive Order 12928 supported this study to review options for expanding the participation of Historically Black Colleges and Universities (HBCUs) in the FRA research and development program. This report addresses several areas pertaining to the involvement of HBCUs in FRAs research and development efforts. It examines the FRA research program to identify opportunities for involvement by universities, it examines the barriers (if any) that would prohibit such participation and it provides a description of elements necessary for an institution to undertake projects under the FRA research and development program and the implications for HBCUs. Secondly, alternatives for HBCU participation in FRA research and development activities are provided. These alternatives focus on increasing the participation from several viewpoints, the institutional perspective, faculty perspective and student perspective. Finally, this report evaluates each alternative to assess the initial costs, operating costs, extent of outreach, future sustainability and other factors as appropriate. This evaluation, to the extent possible for this study, is both quantitative and qualitative.

## **Chapter II            Review of the Federal Railroad Administrations Research and Development Program**

The review of FRAs research and development program consisted of interviews with FRA staff and an examination of the Procurement Forecast for FY 97 issued by the U.S. DOT. It is understood that the forecast may contain items that will not be funded but for the purpose of this study the information contained in the forecast provides a focal point for the discussion of research projects being considered at FRA. The report provides a starting point for determining the resources necessary for HBCUs to participate in the research effort.

The FRA research and development program is housed in the Office of Research and Development under the Associate Administrator for Railroad Development. The primary areas of research for the FRA are safety research and research that fosters the development of high speed rail. The latter includes research on trains, controls, grade crossings, non-electric locomotives, etc.

This research is conducted through various avenues. Most of it is through direct competitive procurement, however, other research is conducted via grants with State DOTs, or in the case of new technology, is funded through the IDEA program at the Transportation Research Board, while other research topics are funded through the SBIR program. These various mechanisms for funding research allow a broad spectrum of organizations that are interested to participate in FRAs research program. None of the mechanisms for funding research involve a dedicated source of funding for universities, however, several universities receive research funding from FRA, these include; Massachusetts Institute of Technology, Texas A&M, University of Massachusetts, the University of Nebraska, University of Illinois-Champaign, West Virginia University, and the Oregon Graduate Institute. The House Appropriations Committee, on occasion, has earmarked funding for specific universities, i.e. University of Nebraska, Railroad Safety Institute. Given the utilization of universities to conduct studies for FRA there appear to be no barriers to using HBCUs to engage in research and development projects. There is only one university providing FRA with research that may not be easily replicated at other universities, that is the Oregon Graduate Institute which requires special equipment to conduct its research for FRA.

The types of research described in the forecast of procurement opportunities generally falls into two categories, technical/applied research and policy research. There is no basic research funded by FRA. Examples of policy research from the procurement forecast include,

- Redesign of the FRAs Performance Management System,
- Programming and Data Entry for Railroad Safety Databases,
- and Grade Crossing Monitoring of Driver Behavior.

On the technical/applied side of the equation examples of projects include;

- High Speed Rail Test Support Equipment,
- Tank Car Puncture Model Tests,
- Equipment and Component: Passenger Rail Vehicle Safety Model Validation
- and Vehicle/Track System (VTS) Program.

The complete listing of topics proposed in the procurement forecast is attached to this report. In addition to the areas listed in the procurement forecast the FRA has developed a research and development plan that identifies priority areas for the next fiscal year. The items on the Research and Development Program Plan for FY 97 are listed below.

1. Equipment, Human Factors, Operating Practices, Hazardous Materials.
2. Track Safety
3. Grade Crossings
4. Next-generation High-Speed Rail
  - a. Train control
  - b. Non-electric locomotives
- c. Grade crossings
5. Commuter Rail Safety
6. Facilities
  - a. Transportation Technical Center, Pueblo, CO
  - b. Locomotive Simulator, Chicago, IL

The elements necessary for HBCUs to participate in the FRA research and development program are: 1. Interest in transportation research; 2. Engineering department active in engineering research; 3. Policy programs that examine issues in the transportation field; and 4. Mechanisms for communicating with FRA concerning research opportunities. The contents of the proposed FRA R&D program do not present any institutional barriers to including HBCUs in the research and development activities of FRA. In this regard the remainder of this report addresses

mechanisms that may be used to accomplish the intent of the Executive Order.

Tables A and B below, are based on numbers supplied by the Department of Transportation's, Office of the Secretariat, Office of the Secretary for legislative and discretionary funding of R&D. This data was originally compiled for the White House Initiative on Historically Black Colleges and Universities. It provides a breakdown of research and development funds, by modal administration for all Institutions of Higher Education compared with funding for HBCUs.

***Table A. Breakdown of Funds to IHEs and HBCUs in Legislative Category by Modal Administration***

Modal Administration	*IHE Funding FY 95	**HBCU Funding FY 95	% of Total
Federal Aviation Admin.	\$1,000,000	\$0	0
Federal Highway Admin.	7,586,000	85,000	1.1
Federal Railroad Admin.	1,000,000	0	0
Federal Transit Admin	3,000,000	0	0
Research and Special Programs Admin	5,600,000	732,404	1.3
<b>Total</b>	<b>\$17,386,000</b>	<b>\$817,404</b>	<b>4.7</b>

**Table B. Breakdown of Funding to IHEs and HBCUs in Discretionary Category by Modal Administration**

Modal Administration	IHE Funding FY 95	HBCU Funding FY 95	% of Total
Federal Aviation Admin.	\$40,815,288	\$402,122	.9
Federal Highway Admin	35,862,830	239,711	.000006
Federal Railroad Admin	101,400	0	0
Federal Transit Admin	19,249,900	0	0
Research and Special Programs Admin.	5,615,000	470,000	.8
<b>Total</b>	<b>\$102,919,008</b>	<b>\$1,311,833</b>	<b>1.27</b>

\* Institutions of Higher Education - IHE

\*\*Historically Black Colleges and Universities - HBCU

As noted in the tables above FRA did not support any research and development projects at HBCUs in either the legislative or discretionary portions of the R&D program. It did however support \$1.1 million in research and development at other Institutions of Higher Education. The remainder of this report addresses mechanisms that FRA may use to accomplish the intent of Executive Order 12928 and increase the participation of HBCUs in it's research and development program. The report describes three methods for achieving this goal, each one focuses on a different level of partnering with HBCUs. Each approach is evaluated based on costs, barriers, and strategies for implementing and recommendations are made for FRAs consideration.



### **Chapter III            OPTIONS FOR EXPANDING PARTICIPATION BY HBCUs IN FRAS RESEARCH AND DEVELOPMENT PROGRAM**

Historically Black Colleges and Universities are an often overlooked and underutilized source of assistance for the Federal government. The last four Presidents, Carter, Reagan, Bush and Clinton, have each issued Executive Orders emphasizing the commitment of the Federal government to strengthening and utilizing the capabilities of HBCUs. The most recent Executive Order from the Clinton Administration states that, "Although the Federal Government has made substantial strides toward meeting established SDB, HBCU, and MI participation goals, certain departments and agencies have from time to time failed to aggressively pursue such goals. Department and agency heads are henceforth directed to execute, implement, and otherwise aggressively strive to fulfill the statutorily-mandated procurement participation goals. In addition, all departments and agencies are encouraged to set reasonable participation goals that exceed statutory requirements, to the extent permitted by law."

This report proposes three approaches that the Federal Railroad Administration can employ in responding to this requirement. These three approaches are; 1. The Institutional Option, 2. The Faculty Option, and 3. The Student Option. Each of these options may be instituted alone or in coordination with the other two depending on the level of commitment FRA is willing to make. Each of these options is described below.

#### **Option 1. Institutional Option**

The institutional option provides for the potential inclusion of the greatest number of HBCUs. It is a tailored approach designed to satisfy the objectives of the Executive Order, while at the same time, providing an opportunity for FRA to significantly strengthen its relationship with HBCUs. This institutional approach is divided into two tiers, either of which can be implemented independent of the other. The first tier addresses "immediate needs."

The FRA has "immediate needs" in the area of research and development, that is the research and development program consists of projects that must be awarded immediately to meet the needs of the agency. These projects reflect the immediate concerns and direction of the agency and their

successful implementation will help FRA accomplish its mission. It would be unwise to recommend an approach that would place the agency at jeopardy in accomplishing its mission. Therefore, the approach identified in this first tier is to identify HBCUs with a high potential for successfully competing for research and development contracts. Once they have been identified, FRA would concentrate on the actual award of research projects to these institutions. This would require FRA to establish a means of identifying these institutions and a mechanism for ensuring that information on projects are provided to the institutions. The identification of these institutions would utilize existing sources of information on the activities and capabilities of HBCUs. It would require the dedication of resources to evaluating the programs at HBCUs to determine which ones demonstrate the ability to perform research needed by FRA. The logical starting point for this tier would be with HBCUs that have transportation institutes or transportation programs in place. Out of the 117 HBCUs in the country there are two dozen that would fall into this category. The second part of this approach would be to utilize a mechanism for communicating the information on FRA projects to HBCUs. FRA could create a newsletter or place this information in existing publications or use an electronic means of distribution such as the Internet.

Although these items would appear to be sufficient there may be a need to provide an additional element. Since HBCUs have traditionally been teaching institutions, even when they have the capabilities for performing and conducting research there may be a need for technical assistance in ensuring the success of the project. This may take the form of matching HBCUs with outside resources that could provide them with project management expertise. Finally, FRA could identify specific opportunities for HBCUs to pursue. The Executive Order suggests that agencies be directed to execute, implement, and otherwise aggressively strive to fulfill the statutorily-mandated procurement participation goals. In the case of the FRA and the Department of Transportation, it is 10% of contracting opportunities. This may be accomplished by establishing an HBCU-University Research program that receives 10 % of the R&D funding.

*This approach basically consists of four elements; 1. Identification of HBCUs capable of competing for research and development opportunities at FRA; 2. Developing a mechanism for communicating FRAs needs in the R&D area to the HBCUs; 3. If necessary identifying sources of technical assistance for HBCUs to use in pursuing contract opportunities; and 4. Identifying specific opportunities for HBCUs to pursue.*

The second tier of this program consists of a "long-term development strategy." This strategy

would divide HBCUs into three categories, "high", "medium" and "low." Those HBCUs in the "high" category would be award-ready. That is, they would be the HBCUs participating in tier 1 of the effort mentioned above. In this category FRA would make actual research and development awards HBCUs through set asides and small awards. In addition, FRA would facilitate teaming arrangements between HBCUs and majority universities.

The "medium" category would consist of HBCUs with the potential to compete for FRA contracts but in need of technical assistance. FRA would seek to establish ties between these HBCUs and majority universities with major FRA research and development contracts to facilitate the involvement of HBCUs. This would allow HBCUs to establish effective working relationships and facilitate the interchange of ideas with their predominantly counterparts, while at the same time receiving "hands on" training and experience through their performance on an actual FRA research project.

FRA would establish a technical assistance program that would provide these institutions with input from FRA personnel and consultants who would assist the institution in developing the necessary expertise, skills, and facilities to move into the "high" category and receive research contracts or grants.

The last category would consist of HBCUs with "low" potential for receiving FRA contracts. The interest here would be to identify individuals who could conduct FRA research and form the nucleus for the development of further activities at the institution.

This approach would require a coordinated, long-term response on the part of FRA. Realistically, this approach may not be consistent with accomplishing the goals of FRA in the short-term, or for that matter, the medium-term. However, what it would accomplish is providing FRA with a framework for increasing the participation of HBCUs in its activities on a long-term bases. This approach would allow FRA to establish relationships similar to those established by majority universities with other modal administrations in the Department of Transportation.

The two tier approach can be accomplished in two ways. FRA can use its staff to develop, implement and conduct either tier of the program or it can rely on the services of an outside consultant to develop the program for FRA and provide the technical assistance to HBCUs that will allow them to compete for FRA research and development projects.

## **Option 2: Faculty Option**

HBCUs have traditionally been teaching institutions. Therefore, there is a need to change the mind set of the institution if it is to successfully pursue research opportunities. The level at which the change in mind set should occur is debatable, but for the purposes of this project it will be assumed that making a change in the institution begins with the faculty.

In addition to the teaching institution "mind set", the other elements that impede the research abilities of HBCU faculty is "release time" to develop proposals, identify proposal opportunities and writing research proposals. The need to account for the time spent preparing proposals impedes the ability of faculty at HBCUs to pursue opportunities.

This option has two objectives, first to develop research management skills in faculty at HBCUs; and second, to involve faculty in FRA research and development projects. The development of research management skills will provide faculty with an understanding of the research process. This understanding will allow them to pursue projects that are within their range of expertise and ability to manage.

To accomplish the objectives of this option will require the development and management of a program that identifies faculty to participate in the effort. In addition it will require the development of a program that will provide them with the research skills and the staff necessary to make the effort successful. The elements of the program would include: educating faculty at HBCUs about every feasible opportunity for research and development contracts; FRA staff would visit HBCUs to assess capabilities and interest related to railroad research; FRA would establish a program at its laboratories in Pueblo, CO and Chicago, IL that would bring HBCU faculty members on-site to assist in conducting FRA in-house research projects. The other element would be a small awards program. FRA could establish an initiative that would provide small contracts, \$50,000 and less, to faculty at HBCUs for small projects that would allow them to demonstrate their research expertise on actual projects.

The thrust of this option is on the development of human resources and not on institutions. It is intended to accomplish the purpose of providing faculty members with additional exposure in the railroad research field. To accomplish this, FRA will need to establish closer linkages with HBCUs. One method for accomplishing this would be to convene a meeting of representative HBCUs to discuss a structure for establishing these linkages.

### **Option 3: The Student Option**

The most successful university research programs not only rely on faculty trained to pursue research opportunities but also rely on support for the research program from students participating in these programs. The participation of students in research provides new and fresh insights into topics in a particular field and often results in cutting edge discoveries.

In addition this emphasis on students provides a method for replenishing the ranks of the profession as retirements and career changes shrink the talent pool. This particular option provides a means for improving minority representation in railroad related career fields.

The student option relies on an intern program to provide exposure for students to the activities of the Federal Railroad Administration. These intern programs will be conducted on a year-round bases. It would be designed to attract the brightest and most talented minority students from HBCUs to the FRA intern program. The goal of the intern program would be to provide minority students with career paths in the railroading industry.

The intern program would be competitive and selection would be based on students meeting the following criteria; maintaining a 3.0 or better GPA, majoring in a field applicable to the mission of FRA, interest in pursuing a career in the transportation field, and demonstrated possession of research skills. The FRA would select 10 students to participate in the initial intern program with the understanding that subsequent years the number could increase depending on the success of the effort. The internships would be semester based and would allow the students to work with the FRA for approximately 16 weeks. This length of time would provide substantial exposure to the programs and projects at FRA. The interns would be selected from HBCUs throughout the country. They would be assigned to specific projects at FRA headquarters, in the regional offices, and at the two research facilities. The program would provide the interns with a stipend and would require that they generate a research paper capable of being presented at a major railroading conference or meeting with railroad interest and participation, such as the Transportation Research Board Annual Meeting.

This program would generate interest at HBCUs in the activities of the FRA. Students and faculty would be encouraged to establish a relationship with FRA to showcase their talents and to maintain an awareness of the activities at FRA. This program would generate interest on the part

of HBCUs in participating in other FRA activities including the research and development program.

Intern programs, if run properly, have the potential for being “win-win” situations. They are valuable experiences that generate goodwill for the organization running the program and for participants in the program. The potential for using the internships as a mechanism for involving HBCUs in the activities of the FRA to a greater degree is high.

These options are not without risk and will require developing implementation strategies that will ensure the success of the efforts. The next section of this report addresses these concerns.

## CHAPTER IV                      EVALUATION OF OPTIONS

The three options presented above provide the FRA with opportunities to comply with the Executive Order. Each has its own set of pros and cons and provides FRA with different products. Each option is evaluated below on three factors, cost, barriers, and strategies for implementing. Under cost the evaluation is based using estimates for each of the three options. These costs are based on work conducted in the past for the Department of Transportation for similar programs. The barriers are those that can be readily identified. Some of these have been identified from conversations with HBCUs. The strategies for implementing are based on reasonable and timely methods for proceeding with the program. It takes into consideration the ability of FRA to provide staffing and other resources needed to make the effort successful.

### **OPTION 1: Institutional Option**

#### **Cost: \$2 Million**

This amount was derived by taking the low-end estimate from the FY 97 procurement forecast which is approximately \$20,050,000 and allocating 10% for the institutional option. The amount contained in the forecast is only a best guess and may not reflect the actual amount of funding allocated are available for awards. In any event 10% of the total should be allocated for the institutional option. This would fund the cost of staffing the effort, creating a mechanism for ranking HBCUs, engaging the services of a consultant if necessary, and providing HBCUs with research projects.

#### **Barriers**

1.     **FRA willingness to commit the necessary funding.**
2.     **FRA developing a commitment to multi-tiered approach.**
3.     **FRA developing the mechanisms to identify HBCUs for participation.**

#### **Strategies for Implementation**

1.     **Develop support within the FRA for such a program effort.**

Work with the various offices within FRA to establish the need for the program and to enlist their commitment to the program effort. The creation of a uniform front will make

the program easier to implement.

**2. Dedicate a staff person to develop and implement the program.**

The FRA will need to dedicate a staff person to developing and implementing the elements of the program. This staff person would be the focal point of the program and would establish a relationship with HBCUs that would facilitate FRAs research and development agenda in this area. This individual would generate communications, identify research opportunities, work with HBCUs to showcase their capabilities, provide technical assistance, and provide research management expertise.

**3. Utilize consultants with knowledge of and expertise in this area to implement program.**

The contractor will perform the duties stated above in lieu of dedicated staff.

**OPTION 2: FACULTY OPTION**

**Cost: \$1 Million**

The cost of implementing this option is approximately \$1 million dollars. These funds would be used to provide small research projects for faculty at HBCUs that would help to establish expertise in the field of railroads. These funds would also support an individual dedicated to developing the relationships with HBCUs that would identify the faculty members for participation in the program. This option could be accomplished by utilizing Intergovernmental Personnel Agreements (IPA). The FRA would select several professors from HBCUs for IPA assignments with the FRA. Utilizing IPAs will be beneficial to FRA and HBCUs in that there will be an exchange of professional knowledge and experience.

**Barriers**

- 1. Developing support for the concept.**
- 2. Funding for the concept.**
- 3. Identifying faculty to participate in the project.**
- 4. Mechanisms for directing money to faculty rather than University.**

**Strategies for Implementation**

- 1. Dedicated Staff**

-



The FRA will need to dedicate a staff person to implement the elements discussed in Option 2. This person would be responsible for identifying faculty at HBCUs, working with faculty to develop research management skills, identify areas of expertise that could be used on FRA projects, and implement communications vehicles between faculty and FRA.

**2. Utilize Consultants**

The FRA could use consultants to provide the services mentioned above, in lieu of staff.

**OPTION 3: STUDENT OPTION**

**Cost: \$350,000 per year for 3 years minimum**

The student option would require \$350,000. The majority of the funds would be used to for stipends for the students, to cover student travel cost and housing cost. The project would be run by a consultant and administered on a year round basis. The program would provide exposure for the interns to professionals in the railroad industry who would be instrumental in assisting the interns in pursuing careers. This program would require a commitment of 3 years as a minimum, preferably 5 years, to allow for the successful implementation, operation and evaluation of the program.

**Barriers**

- 1. Finding the funds to support the program in the R&D budget at FRA.**
- 2. Staffing the project in-house.**
- 3. Generating support for the project at FRA.**

**Strategies for Implementation**

- 1. Contractor to develop, implement, and conduct the program**

This program requires the skills of a contractor who understands the needs of FRA and yet has conducted successful internships programs. The program will require a full-time individual to manage and operate the competition for interns, placement of students, and to review the research generated by the students. This strategy will require FRA to support the use of a contractor.

### HBCU Questionnaire Results

CTTER , at the request of FRA, conducted a telephone survey of eight HBCUs with established transportation programs. This survey used the survey instrument that is displayed in the appendix to determine which of the options being proposed by CTTER provided HBCUs and MIS with the greatest opportunity to access the programs of FRA. The results of that survey are discussed below.

The Universities participating in the telephone survey were; North Carolina A&T State University, Greensboro, NC; Morgan State University, Baltimore, MD; Clark Atlanta University, Atlanta, GA; Texas Southern University, Houston, TX; Florida A&M University, Tallahassee, FL; Hampton University, Hampton, VA; Norfolk State University, Norfolk, VA; and Florida International University, Miami, FL.

The questionnaire consisted of two parts. First, a general section consisting of seven questions that established the Universities background. The first question asked if there was a transportation program at the University, 100 % of the respondents answered yes. The second question asked which of the modal administrations at DOT the transportation program had contracts with;

FHWA	100%
FTA	75%
FAA	50%
FRA	0%
USCG	0%
RSPA	62%
OST	37%
MARAD	0%
NHTSA	37%

The respondents were then asked which of the administrations they had submitted proposals to none of the respondents had submitted proposals to FRA. When asked if they had considered submitting proposals to FRA 50% indicated that they had considered it. When searching for information on transportation projects 87% of the respondents relied on all of the resources listed, CBD, Federal Register, direct contact, and the Internet. Finally, in part one they were asked to

list five items that would be of help in pursuing research opportunities at FRA, the majority of respondents indicated more information and greater communications.

Part two of the questionnaire asked ten questions concerning the options proposed by CTTER. The respondents were asked to rank each question on a scale of 1 to 5 with 1 being extremely helpful and 5 being don't know. The following table contains the results of the questionnaire.

**Table C: HBCU Questionnaire**

Questions	Extremely Helpful	Helpful	Somewhat Helpful	Not Helpful	Don't know
1. The development of a mechanism for communicating FRA's needs in research to HBCUs	100%	0	0	0	0
2. Identifying sources of technical assistance for HBCUs to use in pursuing contract opportunities.	75%	0	25%	0	0
3. Identifying specific opportunities for HBCUs and MIS to pursue.	75%	25%	0	0	0
4. Communicating opportunities to faculty through seminars and workshops.	25%	50%	25%	0	0
5. Conduct visits to HBCUs by FRA staff to identify research opportunities	50%	50%	0	0	0
6. On-site programs for HBCU faculty at FRA research sites	75%	0	25%	0	0
7. Provide small contract awards (\$50,000) to faculty of HBCUs for small demonstration projects.	50%	50%	0	0	0
8. Establish railroad curriculums at HBCUs	50%	0	50%	0	0
9. Establish year-round intern programs at HBCUs to develop the next generation of railroad professional.	75%	10%	15%	0	0
10. Establish an intern program at FRA for students from HBCUs to interact with FRA staff.	75%	25%	0	0	0

Based on the results of this survey CTTER recommends that FRA concentrate its' efforts on developing a mechanism for communicating research needs to HBCUs and MIS, identify sources of technical assistance; identify specific opportunities for HBCUs and MIS; establish an on-site program for faculty from HBCUs and MIS; establish a year-round intern program at HBCUs and MIS that would focus on railroad issues; and establish an FRA intern programs for students from HBCUs and MIS.

## CHAPTER V            RECOMMENDATIONS

The need to involve HBCUs and MIS in the research and development activities of FRA constitutes a significant challenge that will not be easily met. The need for staffing and funding dedicated to ensuring the success of such efforts has been noted in the report above. The following recommendations are made to the FRA based on the preceding discussion.

**FRA97001.**    **The FRA should continue to pursue efforts that would increase the participation of HBCUs in the research and development program.**

This is a generic recommendation that recognizes the need for an agency to be committed to an objective. The objective here is to increase HBCU and MIS participation in FRA research activities. A statement of this objective should be contained in the mission statement of FRA and it should be emphasized to managers throughout the agency. If necessary, how well the goal is met could constitute a performance measure for managers during their job evaluations.

**FRA97002.**    **CTTER recommends that FRA implement all the options developed in this report.**

CTTER recommends that FRA convene a meeting of HBCUs and MIS to discuss and develop a strategy that will allow for the full implementation of Option 1. This meeting would last for a period of two days and would involve representatives from HBCUs and MIS with transportation programs. Second, CTTER recommends that FRA strongly consider the establishment of a year round internship program that will compliment existing programs and specifically attract students to railroad careers. Finally, CTTER recommends that FRA establish linkages with faculty at HBCUs and MIS in order to provide them with information on FRA projects and to develop a pool of interested and capable researchers.

**FRA97003.** FRA should, if deemed necessary, employ the services of a contractor to assist in implementing the option(s) selected.

CTTER recommends that FRA employ the services of a consultant in implementing the recommendations contained in this report. CTTER recognizes that the FRA operates with small staff and that the personnel resources necessary to implement the options mentioned above may not be available. CTTER therefore recommends that FRA contract with an organization to assist in the implementation of the options listed in this report. This would provide FRA with guidance, a program advocate and individuals focused solely on ensuring that HBCUs and MIS participate fully in the FRA research and development program.

## ATTACHMENTS



Title 3--

**The President**  
**Executive Order 12928 of September 16, 1994**

**Promoting Procurement With Small Businesses Owned and Controlled by Socially and Economically Disadvantaged Individuals, Historically Black Colleges and Universities, and Minority Institutions**

By the authority vested in me as President by the Constitution and the laws of the United States of America, in order to enforce rigorously the letter and spirit of public laws that promote increased participation in Federal procurement by Small Businesses Owned and Controlled by Socially and Economically Disadvantaged Individuals (SDBs) as described in section 8 of the Small Business Act (15 U.S.C. 637), Historically Black Colleges and Universities (HBCUs) as described in 34 C.F.R. 608.2, and Minority Institutions (MIs) as referred to in sections 1046(3) and 316(b)(1) of the Higher Education Act of 1965, as amended (20 U.S.C. 1135d-5(3) and 1059c(b)(1), respectively), it is hereby ordered as follows:

Section 1. Policy Statement. It is the policy of the United States Government that all department and agency heads and all Federal employees involved in the procurement of any and all goods and services shall assist SDBs, HBCUs, and MIs, as applicable, to develop viable, self-sustaining businesses capable of competing on an equal basis in the mainstream of the American economy. To that end, all Federal personnel shall commit to the letter and spirit of all laws promoting the participation of SDBs, HBCUs, and MIs in Federal procurement. The laws promote:

- a. the award of contracts to SDBs, HBCUs, and MIs through the Small Business Administration Section 8(a) Program, the Department of Defense Small and Disadvantaged Business Program, other agency programs, and through other specific statutory authority or appropriate means;
- b. the establishment of particular goals for SDBs, HBCUs, or MIs on an agency-by-agency basis and the requirement that prime contractors and other recipients of Federal funds attain similar goals in their procurement; and
- c. the establishment of other mechanisms that ensure that SDBs, HBCUs, and MIs have a fair opportunity to participate in Federal procurement.

Sec. 2. Attainment of Goals. All departments and agencies are required by law to establish participation goals of not less than 5 percent (15 U.S.C. 644(g)) or a greater percentage where otherwise required by law, as further provided in the Office of Federal Procurement Policy Letter No. 91-1 of March 11, 1991. Although the Federal Government has made substantial strides toward meeting established SDB, HBCU, and MI participation goals, certain departments and agencies have from time to time failed to aggressively pursue such goals. Department and agency heads are henceforth directed to execute, implement, and otherwise aggressively strive to fulfill the statutorily-mandated procurement participation goals. In addition, all departments and agencies are encouraged to set reasonable participation goals that exceed statutory requirements, to the extent permitted by law.

Sec. 3. Subcontracting Plans. The Small Business Act, (15 U.S.C. 637(d)) and other related laws require certain prime contractors to maximize the use of SDBs in subcontracting plans and strive to achieve stated goals through prime contractors' subcontracting practices. Department and agency heads are directed to aggressively enforce these prime contractors' obligations to maximize awards of subcontracts to eligible SDBs.

Sec. 4. Office of Small and Disadvantaged Business Utilization ("OSDBU").

- a. Section 15(k) of the Small Business Act (15 U.S.C. 644(k)) establishes in each Federal department and agency an OSDBU and requires that the Director of the OSDBU be responsible only to, and

report directly to, the head of such agency or to the deputy of such head" (15 U.S.C. 644(k)(3)). To the extent not prohibited by law, each department and agency shall ensure that the aforementioned direct reporting requirements are henceforth vigorously enforced.

- b. Because of the importance of the OSDBU function, each department and agency shall also, to the extent not prohibited by law, comply with the Office of Federal Procurement Policy Letter No. 79-1 of March 7, 1979, which provides implementation guidance on section 15k and the organizational placement and functions of the OSDBU.

Sec. 5. Anti-fraud Enforcement. All department and agency heads shall ensure that in enforcing the laws and requirements mentioned in this order, Federal benefits or contracts intended for SDBs, HBCUs, and MIs are not awarded to entities that are not legitimate SDBs, HBCUs, and MIs. Department and agency anti-fraud enforcement, however, shall not diminish agency vigor in achieving the aforementioned participation goals, which exist to promote the development of legitimate SDBs, HBCUs, and MIs. Nothing herein is intended to change self-certification requirements.

Sec. 6. Periodic Reports to the President. The Administrator of the Small Business Administration and the Administrator of the Office of Federal Procurement Policy shall report to the President periodically on the progress of all departments and agencies in complying with the laws and requirements mentioned in this order.

Sec. 7. Independent Agencies. Independent agencies are requested to comply with the provisions of this order.

Sec. 8. This order shall be effective immediately.

(Presidential Signature)

THE WHITE HOUSE,

September 16, 1994.

Federal Register  
Vol. 59, No. 181  
Tuesday, September 20, 1994

# Total Federal Agency Awards to IHEs and HBCUs

Table II  
 FY 1994  
 Total Federal Agency Awards to Institutions of Higher Education (IHE)  
 and  
 Historically Black Colleges and Universities (HBCUs)  
 (HBCU Dollar Awards-Descending Order)

Agency	Total Awards HBCUs	Total Awards IHE	% To HBCUs
U.S. Department of Education	651,531,187	7,137,374,338	9%
U.S. Department of Health and Human Services	143,811,292	6,417,703,355	2%
U.S. Department of Agriculture	92,947,467	1,001,403,713	9%
U.S. Department of Energy	53,000,000	753,000,410	7%
U.S. Department of Defense	51,914,335	1,427,513,714	4%
National Aeronautics & Space Administration	37,272,350	741,748,640	5%
National Science Foundation	29,179,999	2,054,619,000	1%
Agency for International Development	28,000,000	367,500,000	8%
U.S. Environmental Protection Agency	14,380,994	111,134,217	13%
U.S. Department of the Interior	13,045,097	46,737,700	28%
U.S. Department of Transportation	7,805,305	55,975,742	14%
U.S. Department of Housing and Urban Development	7,423,854	18,678,863	40%
U.S. Department of Labor	4,664,136	20,697,910	23%
Veterans Affairs	3,525,370	230,673,223	2%
U.S. Small Business Administration	1,962,629	75,195,236	3%
U.S. Department of Treasury	1,903,412	3,407,873	56%
U.S. Department of Commerce	1,811,417	201,137,365	1%

National Endowment for The Humanities	1,406,444	72,297,235	2%
U.S. Information Agency	1,343,437	35,700,000	4%
U.S. Department of State	1,045,761	16,213,920	6%
Central Intelligence Agency	975,290	10,024,119	10%
U.S. Department of Justice	788,279	5,075,019	16%
Corporation for National Service	730,397	29,678,795	2%
Nuclear Regulatory Commission	304,000	6,647,000	5%
National Endowment for the Arts	16,250	4,266,190	0.004%
Grand Totals	1,150,788,702	20,844,403,577	6%

Source: U.S. Department of Education, White House Initiative on HBCUs.

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Procurement Office and Point of Contact	Description of Procurement	Procurement Planning Information	Incumbent Contractor and Current Contract Number (if available)
Office of Procurement (RAD-30) Peggy Reid (202) 632-3203	<p><i>Procurement for Management Services SIC Code:</i>            "Redesign of the FRA's Performance Management System" - Contract for an outside service having experience in redesigning/establishing results-based performance management systems, preferably for Federal agencies, to assist the FRA in its redesign of performance management. It is anticipated that this service will work closely with an FRA redesign team to develop a powerful performance management tool, preferably automated, that supports and provides the accomplishment of the FRA's mission and goals.</p> <p><i>Estimated Value:</i> \$50,000 to \$199,999  <i>Anticipated Location:</i> Target City for Procurement, XX</p>	<p><i>Sequence Number:</i>  <i>Est. RFP Release:</i> 1/97 <i>Est. Award Date:</i> 1/97  <i>Solicitation Type:</i> To Be Determined  <i>Competition Type:</i> To Be Determined  <i>Set Aside:</i></p>	
Office of Procurement (RAD-30) Linda Delph (202) 632-3225	<p><i>Procurement for Services SIC Code:</i>            "Network Support and PC Maintenance" - Network support, PC maintenance, and small systems development. Present contract has been in place for a 1-year period with 2 optional years. There is an incumbent presently under contract DTFR53-96-C-00002.  <i>Estimated Value:</i> \$1,000,000 to \$1,999,999  <i>Anticipated Location:</i> Target City for Procurement, XX</p>	<p><i>Sequence Number:</i>  <i>Est. RFP Release:</i> 1/97 <i>Est. Award Date:</i> 2/97  <i>Solicitation Type:</i> To Be Determined  <i>Competition Type:</i> To Be Determined  <i>Set Aside:</i></p>	Columbia Services Group DTFR53-96-C-00002
Office of Procurement (RAD-30) Robert Finkelstein (202) 632-3386	<p><i>Procurement for Services SIC Code:</i>            "Programming and Data Entry for Railroad Safety Databases" - Maintenance and enhancement of the computer software for editing and transmitting the safety data to FRA. The three systems are Railroad Inspection System for Personal Computers, Accident/Incident Report Generator and GX. Compilation and maintenance of the databases at facility. Keying and editing data received on paper forms.  <i>Estimated Value:</i> \$2,000,000 to \$2,999,999  <i>Anticipated Location:</i> Target City for Procurement, XX</p>	<p><i>Sequence Number:</i>  <i>Est. RFP Release:</i> 1/97 <i>Est. Award Date:</i> 2/97  <i>Solicitation Type:</i> To Be Determined  <i>Competition Type:</i> To Be Determined  <i>Set Aside:</i></p>	

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Procurement Office and Point of Contact	Description of Procurement	Procurement Planning Information	Incumbent Contractor and Current Contract Number (if available)
Office of Procurement (RAD-30) Magdy El-Sibaie (202) 632-3259	<p><i>Procurement for Services SIC Code:</i>            "Facility for Accelerated Service Testing - Heavy Axle Loads (FAST-Hal)" - This is a new task under an existing contract with the AAR for the "Care, Custody, and Control" of the DOT TTC facilities at Pueblo, CO. This task is part of an Industry/Government/Supplier cooperative program to assess the safety and viability of 39,000 pound wheel loads of equipment with improved freight car trucks. Results of testing under this program will be compared with previous tests of simmlar wheel loads in equipment with conventional freight car trucks.  <i>Estimated Value:</i> \$2,000,000 to \$2,999,999  <i>Anticipated Location:</i> Target City for Procurement, XX</p>	<p><i>Sequence Number:</i>  <i>Est. RFP Release:</i> 1/97 <i>Est. Award Date:</i> 2/97  <i>Solicitation Type:</i> To Be Determined  <i>Competition Type:</i> To Be Determined  <i>Set Aside:</i></p>	AAR DTFR53-93-C-00001
Office of Procurement (RAD-30) Mahmood Fatch/Gunars Spons (202) 632-3261	<p><i>Procurement for Services SIC Code:</i>            "Environmental Audit, Compliance Planning and Remediation at the TTC" - This project involves a number of environment-related activities at the Transportation Technology Center (TTC) at Pueblo, CO...  <i>Estimated Value:</i> \$500,000 to \$999,999  <i>Anticipated Location:</i> Target City for Procurement, XX</p>	<p><i>Sequence Number:</i>  <i>Est. RFP Release:</i> 1/97 <i>Est. Award Date:</i> 1/97  <i>Solicitation Type:</i> To Be Determined  <i>Competition Type:</i> To Be Determined  <i>Set Aside:</i></p>	AAR DTFR53-93-C-00001
Office of Procurement (RAD-30) Gunars Spons (719) 584-0507	<p><i>Procurement for Services SIC Code:</i>            "FRA On-Site Support at TTC Pueblo" - This procurement provides incremental funding for miscellaneous (mainly administrative) support services for FRA's on-site Engineering Manager at the Transportation Technology Center (TTC) in Pueblo, CO. Work is performed under an existing task on FRA 's contract with the Association of American Railroads (AAR) for "Care, Custody, and Control of the TTC." The scope of work includes items such as secretarial support, administrative services, office supplies, and Government vehicle repair.  <i>Estimated Value:</i> \$200,000 to \$499,999  <i>Anticipated Location:</i> Target City for Procurement, XX</p>	<p><i>Sequence Number:</i>  <i>Est. RFP Release:</i> 1/97 <i>Est. Award Date:</i> 1/97  <i>Solicitation Type:</i> To Be Determined  <i>Competition Type:</i> To Be Determined  <i>Set Aside:</i></p>	AAR DTFR53-93-C-00001

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Procurement Office and Point of Contact	Description of Procurement	Procurement Planning Information	Incumbent Contractor and Current Contract Number (if available)
Office of Procurement (RAD-30) Manuel Galdo (202) 632-3255	<p><i>Procurement for Services SIC Code:</i>            "Loss of Shunt Tests" - This procurement supports research to investigate conditions that cause loss of train detection at grade crossings and to recommend options to mitigate the problem. It involves laboratory investigations plus field tests at selected railroad grade-crossing sites and at the Transportation Technology Center (TTC) in Pueblo, CO. Work is performed under an existing task order on FRA's contract with the Association of American Railroads (AAR) for "Care, Custody, and Control of the TTC."  <i>Estimated Value:</i> \$200,000 to \$499,999  <i>Anticipated Location:</i> Target City for Procurement, XX</p>	<p><i>Sequence Number:</i>  <i>Est. RFP Release:</i> 1/97 <i>Est. Award Date:</i> 1/97  <i>Solicitation Type:</i> To Be Determined  <i>Competition Type:</i> To Be Determined  <i>Set Aside:</i></p>	AAR DTFR53-93-C-00001
Office of Procurement (RAD-30) Gerard Deily (202) 632-3251	<p><i>Procurement for Repair Services SIC Code:</i>            "Rehabilitation and Renewal of R&amp;D Facilities at TTC Pueblo" - This procurement provides for rehabilitation and renewal of facilities and equipment at FRA's Transportation Technology Center (TTC) in Pueblo, CO. The program promotes continued viability of the TTC as a world-class railroad research and development facility. Work is performed under an existing task on FRA's contract with the Association of American Railroads (AAR) for "Care, Custody, and Control of the TTC." The objective is the replacement, refurbishment, or upgrade of Government-owned facilities or equipment that have reached or surpassed their useful life or need to be upgraded to present-day standards.  <i>Estimated Value:</i> \$200,000 to \$499,999  <i>Anticipated Location:</i> Target City for Procurement, XX</p>	<p><i>Sequence Number:</i>  <i>Est. RFP Release:</i> 1/97 <i>Est. Award Date:</i> 1/97  <i>Solicitation Type:</i> To Be Determined  <i>Competition Type:</i> To Be Determined  <i>Set Aside:</i></p>	AAR DTFR53-93-C-00001
Office of Procurement (RAD-30) Gerard Deily (202) 632-3251	<p><i>Procurement for Services SIC Code:</i>            "Program Management of FRA programs at TTC Pueblo" - This procurement provides for overall management of FRA programs and associated projects conducted at the Transportation Technology Center (TTC) in Pueblo, CO. Work is performed under an existing task on FRA's contract with the Association of American Railroads (AAR) for "Care, Custody, and Control of the TTC." Specific effort to be performed is accomplished under a Technical Support Directive (TSD) procedure that identifies the program-specific item of work, estimates its cost, and provides authority to proceed.  <i>Estimated Value:</i> \$200,000 to \$499,999  <i>Anticipated Location:</i> Target City for Procurement, XX</p>	<p><i>Sequence Number:</i>  <i>Est. RFP Release:</i> 1/97 <i>Est. Award Date:</i> 1/97  <i>Solicitation Type:</i> To Be Determined  <i>Competition Type:</i> To Be Determined  <i>Set Aside:</i></p>	AAR DTFR53-93-C-00001

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Procurement Office and Point of Contact	Description of Procurement	Procurement Planning Information	Incumbent Contractor and Current Contract Number (if available)
Office of Procurement (RAD-30) Gerard Deily (202) 632-3251	<p><i>Procurement for Services SIC Code:</i>            "Railroad Test Track Upgrade at TTC Pueblo" - This procurement provides incremental funding for rehabilitation and upgrading of the Railroad Test Track (RTT) at the Transportation Test Center (TTC) in Pueblo, CO. This increment will allow completion of the on-going Phase II track improvements necessary for planned testing of Amtrak's new American Flyer trainsets at speeds up to 150mph. Work is performed under an existing task on FRA's contract with the Association of American Railroads (AAR) for "Care, Custody, and Control of the TTC." The Phase II effort principally involves replacing softwood ties on the RTT with concrete ties on approximately 11 miles of track.  <i>Estimated Value:</i> \$5,000,000 to \$9,999,999  <i>Anticipated Location:</i> Target City for Procurement, XX</p>	<p><i>Sequence Number:</i>  <i>Est. RFP Release:</i> 1/97 <i>Est. Award Date:</i> 1/97  <i>Solicitation Type:</i> To Be Determined  <i>Competition Type:</i> To Be Determined  <i>Set Aside:</i></p>	AAR DTFR53-93-C-00001
Office of Procurement (RAD-30) Mahmood Fatch (202) 632-3261	<p><i>Procurement for Services SIC Code:</i>            "Operation, Maintenance, Instrumentation and Analytical (OMI&amp;A) Support for Railroad Safety Research" - This project provides for the operation and maintenance for the FRA's test equipment, and for the instrumentation, analysis and engineering support for a variety of test projects under a task ordering contract. It includes demonstration of advanced track inspection techniques addressing the leading track related train accidents, providing data for use as bases for rational track safety standards and/or the revisions thereof, and providing data including field test support to the FRA's Office of Safety in reviewing waiver petitions from the FRA Track Safety Standards, from operating railroads. It also includes a feasibility study of replacement versus rehabilitation of the FRA's aging Track Research Vehicle (T-6) and related design services.  <i>Estimated Value:</i> \$1,000,000 to \$1,999,999  <i>Anticipated Location:</i> Target City for Procurement, XX</p>	<p><i>Sequence Number:</i>  <i>Est. RFP Release:</i> 1/97 <i>Est. Award Date:</i> 1/97  <i>Solicitation Type:</i> To Be Determined  <i>Competition Type:</i> To Be Determined  <i>Set Aside:</i></p>	FNSCO, Inc. DTFR53-96-C-00001
Office of Procurement (RAD-30) Mahmood Fatch (202) 632-3261	<p><i>Procurement for Services SIC Code:</i>            "Vehicle/Track System (VTS) Program" - The VTS Program is a cooperative research with the Association of American Railroads (AAR) to study derailment causes due to vehicle/track interaction. Its goal is to advance our basic understanding of the track/train system interaction, modeling ability of its behavior, and use as a mechanism for the investigation of unexplained derailment phenomena.  <i>Estimated Value:</i> \$200,000 to \$499,999  <i>Anticipated Location:</i> Target City for Procurement, XX</p>	<p><i>Sequence Number:</i>  <i>Est. RFP Release:</i> 1/97 <i>Est. Award Date:</i> 2/97  <i>Solicitation Type:</i> To Be Determined  <i>Competition Type:</i> To Be Determined  <i>Set Aside:</i></p>	AAR DTFR53-93-C-00058



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Procurement Office and Point of Contact	Description of Procurement	Procurement Planning Information	Incumbent Contractor and Current Contract Number (if available)
Office of Procurement (RAD-30) Magdy El-Sibaie (202) 632-3259	<p><i>Procurement for Services SIC Code:</i>            "Alternative Methods for the Detection of Broken Rails" - This work will explore new technologies for the detection of broken rail with emphasis on locomotive-born devices for improving rail safety in "dark" track territories.  <i>Estimated Value: \$200,000 to \$499,999</i>  <i>Anticipated Location: Target City for Procurement, XX</i></p>	<p><i>Sequence Number</i>  <i>Est RFP Release: 1/97 Est Award Date: 2/97</i>  <i>Solicitation Type: To Be Determined</i>  <i>Competition Type: To Be Determined</i>  <i>Set Aside:</i></p>	
Office of Procurement (RAD-30) Magdy El-Sibaie (202) 632-3259	<p><i>Procurement for Services SIC Code:</i>            "Degradation of Special Trackwork" - To investigate influence of improvements in the geometry, material, and overall design of special trackwork on the reduction of wheel/rail forces and the corresponding improvement in track safety.  <i>Estimated Value: \$200,000 to \$499,999</i>  <i>Anticipated Location: Target City for Procurement, XX</i></p>	<p><i>Sequence Number:</i>  <i>Est RFP Release: 1/97 Est Award Date: 2/97</i>  <i>Solicitation Type: To Be Determined</i>  <i>Competition Type: To Be Determined</i>  <i>Set Aside:</i></p>	
Office of Procurement (RAD-30) Tom Tsai (202) 632-3254	<p><i>Procurement for Services SIC Code:</i>            "Equipment and Component: Passenger Rail Vehicle Safety Model Validation" - To provide funds to the technical support contractor, Foster-Miller (FM), to perform a series of vehicle dynamic testing to validate the code OMINSIM for vehicle simulation and the method of passenger rail vehicle safety evaluation developed under a previous technical task.  <i>Estimated Value: \$1,000,000 to \$1,999,999</i>  <i>Anticipated Location: Target City for Procurement, XX</i></p>	<p><i>Sequence Number:</i>  <i>Est RFP Release: 1/97 Est Award Date: 1/97</i>  <i>Solicitation Type: To Be Determined</i>  <i>Competition Type: To Be Determined</i>  <i>Set Aside:</i></p>	Foster-Miller, Inc D11-RS3-95-C-00047
Office of Procurement (RAD-30) Garold Thomas/Tom Raslear (202) 632-3263	<p><i>Procurement for Services SIC Code:</i>            "Enginemen Stress and Fatigue: Napping Strategies" - Using RALES data from Phase II of Enginemen Stress and Fatigue, and information available from FAA research on napping strategies, determine effectiveness of planned napping in the maintenance of locomotive engineer vigilance. The following two approaches are to be evaluated: (1) napping while the train waits in sidings, and (2) napping while underway, with two qualified engineers in the cab. Task Order under an existing contract.  <i>Estimated Value: \$1,000,000 to \$1,999,999</i>  <i>Anticipated Location: Target City for Procurement, XX</i></p>	<p><i>Sequence Number</i>  <i>Est RFP Release: 1/97 Est Award Date: 1/97</i>  <i>Solicitation Type: To Be Determined</i>  <i>Competition Type: To Be Determined</i>  <i>Set Aside:</i></p>	

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Procurement Office and Point of Contact	Description of Procurement	Procurement Planning Information	Incumbent Contractor and Current Contract Number (if available)
Office of Procurement (RAD-30) Garold Thomas/Tom Raslear (202) 632-3263	<i>Procurement for Services SIC Code:</i> "Enginemen Stress and Fatigue: Vigilance Monitoring" - Using available technology to record eye activity and sleep/wake cycles (actigraphy), predict loss of vigilance in locomotive engineers and allow engineers and dispatchers to be alerted when vigilance is at risk. Task order under an existing contract. <i>Estimated Value:</i> \$500,000 to \$999,999 <i>Anticipated Location:</i> Target City for Procurement, XX	<i>Sequence Number:</i> <i>Est. RFP Release:</i> 1/97 <i>Est. Award Date:</i> 1/97 <i>Solicitation Type:</i> To Be Determined <i>Competition Type:</i> To Be Determined <i>Set Aside:</i>	
Office of Procurement (RAD-30) Garold Thomas/Tom Raslear (202) 632-3263	<i>Procurement for Services SIC Code:</i> "Dispatcher Workload, Stress and Fatigue, Phases I and II" - Phase I will determine available technology to assess workload, stress and fatigue in a minimally obtrusive fashion for train dispatchers. Phase II will evaluate the candidate technologies and recommend the best available for this application. A research design using the technologies will be devised for consideration in an optional Phase III. Task order under an existing contract. <i>Estimated Value:</i> \$200,000 to \$499,999 <i>Anticipated Location:</i> Target City for Procurement, XX	<i>Sequence Number:</i> <i>Est. RFP Release:</i> 1/97 <i>Est. Award Date:</i> 1/97 <i>Solicitation Type:</i> To Be Determined <i>Competition Type:</i> To Be Determined <i>Set Aside:</i>	
Office of Procurement (RAD-30) Garold Thomas/Tom Raslear (202) 632-3263	<i>Procurement for Services SIC Code:</i> "Non-Accident Hazmat Releases" - This project will compare the educational level of employees who handle, load and unload hazmat within a rail environment with the educational level of the training materials used to train those employees. Incremental funding for task order under existing contract. <i>Estimated Value:</i> \$200,000 to \$499,999 <i>Anticipated Location:</i> Target City for Procurement, XX	<i>Sequence Number:</i> <i>Est. RFP Release:</i> 1/97 <i>Est. Award Date:</i> 1/97 <i>Solicitation Type:</i> To Be Determined <i>Competition Type:</i> To Be Determined <i>Set Aside:</i>	
Office of Procurement (RAD-30) Garold Thomas/Tom Raslear (202) 632-3263	<i>Procurement for Services SIC Code:</i> "Yard and Terminal Safety: Phase II" - Based on the initial survey of operating practices in yard and terminal areas, this project will focus on those job categories and conditions which contribute the most to yard and terminal accidents. Task order under existing contract. <i>Estimated Value:</i> \$50,000 to \$199,999 <i>Anticipated Location:</i> Target City for Procurement, XX	<i>Sequence Number:</i> <i>Est. RFP Release:</i> 2/97 <i>Est. Award Date:</i> 3/97 <i>Solicitation Type:</i> To Be Determined <i>Competition Type:</i> To Be Determined <i>Set Aside:</i>	

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Procurement Office and Point of Contact	Description of Procurement	Procurement Planning Information	Incumbent Contractor and Current Contract Number (if available)
Office of Procurement (RAD-30) Jose Pena (202) 632-3257	<i>Procurement for Services SIC Code:</i> "Damage Assessment of Tank Cars, Phase 2, Low Pressure Tank Cars. AAR-TTC, Pueblo, CO" - This project will analyze various types of damages on low pressure or general purpose tank cars, identical to that performed on pressure tank cars. This information will be updated so that it may be used by emergency response personnel responding to various hazmat incidents and accidents. <i>Estimated Value:</i> \$200,000 to \$499,999 <i>Anticipated Location:</i> Target City for Procurement, XX	<i>Sequence Number:</i> <i>Est. RFP Release:</i> 2/97 <i>Est. Award Date:</i> 3/97 <i>Solicitation Type:</i> To Be Determined <i>Competition Type:</i> To Be Determined <i>Set Aside:</i>	
Office of Procurement (RAD-30) Jose Pena (202) 632-3257	<i>Procurement for Services SIC Code:</i> "Tank Car Puncture Model Tests" - This project will validate the puncture resistance model being developed by Foster-Miller and DOT/RSPA/VNTSC. <i>Estimated Value:</i> \$50,000 to \$199,999 <i>Anticipated Location:</i> Target City for Procurement, XX	<i>Sequence Number:</i> <i>Est. RFP Release:</i> 2/97 <i>Est. Award Date:</i> 3/97 <i>Solicitation Type:</i> To Be Determined <i>Competition Type:</i> To Be Determined <i>Set Aside:</i>	
Office of Procurement (RAD-30) Jose Pena (202) 632-3257	<i>Procurement for Services SIC Code:</i> "Acoustic Emission Test Technique Research. Digital AE Waveform, Denver, CO" - This project will study and evaluate certain acoustic emission test techniques for locating, identifying and mapping out tank car defects, visible and not visible to the naked eye. <i>Estimated Value:</i> \$50,000 to \$199,999 <i>Anticipated Location:</i> Target City for Procurement, XX	<i>Sequence Number:</i> <i>Est. RFP Release:</i> 1/97 <i>Est. Award Date:</i> 1/97 <i>Solicitation Type:</i> To Be Determined <i>Competition Type:</i> To Be Determined <i>Set Aside:</i>	
Office of Procurement (RAD-30) Gerard Deily (202) 632-3251	<i>Procurement for Industrial Equipment SIC Code:</i> "High Speed Rail Test Support Equipment" - This procurement provides for the acquisition of test support equipment that will be necessary to ensure that the railroad test track (RTT) at FRA's Transportation Technology Center in Pueblo, CO, can be maintained, during high speed tests of Amtrak's new American Flyer trainsets in 1998 and 1999, to the 150mph standard of performance to be achieved by an on-going construction program for track infrastructure upgrade. In the high speed performance arena track conditions must be measured before and after trainset testing runs and maintained to a high quality standard to counteract any track geometry degradation caused by high-inertia forces that the trainsets impose against the track. Specific items to be acquired or developed from existing systems elements include a track geometry measurement system, track surfacing machinery, and enhanced-capability equipment for detecting rail flaws. <i>Estimated Value:</i> \$500,000 to \$999,999 <i>Anticipated Location:</i> Target City for Procurement, XX	<i>Sequence Number:</i> <i>Est. RFP Release:</i> 1/97 <i>Est. Award Date:</i> 2/97 <i>Solicitation Type:</i> To Be Determined <i>Competition Type:</i> To Be Determined <i>Set Aside:</i>	

U. S. Department of Transportation  
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Procurement Office and Point of Contact	Description of Procurement	Procurement Planning Information	Incumbent Contractor and Current Contract Number (if available)
Office of Procurement (RAD-30) Margie Jones (202) 632-3706	<p><i>Procurement for Services SIC Code:</i>            "Technical Assistance and Analytical Support for the Office of Chief Counsel's ORACLE Enforcement Case System" - The ORACLE Enforcement Case System (ECS) is a microcomputer-based system performing two functions: (1) tracking the status of railroad safety violation reports and of safety penalty cases based on those reports and (2) generating penalty assessment letters and other documents by which penalties are assessed.  <i>Estimated Value:</i> \$50,000 to \$199,999  <i>Anticipated Location:</i> Target City for Procurement, XX</p>	<p><i>Sequence Number:</i>  <i>Est. RFP Release:</i> 1/97 <i>Est. Award Date:</i> 1/97  <i>Solicitation Type:</i> To Be Determined  <i>Competition Type:</i> To Be Determined  <i>Set Aside:</i></p>	
Office of Procurement (RAD-30) Lamar Allen (202) 632-3378	<p><i>Procurement for Services SIC Code:</i>            (1) "FRA Post-Accident Toxicological Testing" - The contractor will provide sound toxicological analysis of samples obtained in connection with FRA's program of post-accident testing as provisioned under 49 CFR Part 219.            (2) "FRA Post-Accident Testing Laboratory Oversight" - The contractor will provide sound oversight and proficiency testing for the FRA Post-Accident Toxicological Testing Program pursuant to 49 CFR part 219 and Part 40.  <i>Estimated Value:</i> \$500,000 to \$999,999  <i>Anticipated Location:</i> Target City for Procurement, XX</p>	<p><i>Sequence Number:</i>  <i>Est. RFP Release:</i> 1/97 <i>Est. Award Date:</i> 1/97  <i>Solicitation Type:</i> To Be Determined  <i>Competition Type:</i> To Be Determined  <i>Set Aside:</i></p>	
Office of Procurement (RAD-30) Marie Savoy (202) 632-3217	<p><i>Procurement for Services SIC Code:</i>            "Video Conferencing" - Further development of VTC system to include integration of a smart board for FRA training efforts.  <i>Estimated Value:</i> \$50,000 to \$199,999  <i>Anticipated Location:</i> Target City for Procurement, XX</p>	<p><i>Sequence Number:</i>  <i>Est. RFP Release:</i> 1/97 <i>Est. Award Date:</i> 1/97  <i>Solicitation Type:</i> To Be Determined  <i>Competition Type:</i> To Be Determined  <i>Set Aside:</i></p>	
Office of Procurement (RAD-30) William O'Sullivan (202) 632-3347	<p><i>Procurement for Services SIC Code:</i>            "Modify General Working Agreement for Operating and Maintaining T-10 (ATIP Contract)" - Contract to operate and maintain FRA's Track Geometry Measuring Vehicle, T-10, in support of the Office of Safety Assurance and Compliance Track Safety Program.  <i>Estimated Value:</i> \$1,000,000 to \$1,999,999  <i>Anticipated Location:</i> Target City for Procurement, XX</p>	<p><i>Sequence Number:</i>  <i>Est. RFP Release:</i> 1/97 <i>Est. Award Date:</i> 1/97  <i>Solicitation Type:</i> To Be Determined  <i>Competition Type:</i> To Be Determined  <i>Set Aside:</i></p>	ENSCO, Inc. DTFR53-94-C-00017

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Procurement Office and Point of Contact	Description of Procurement	Procurement Planning Information	Incumbent Contractor and Current Contract Number (if available)
Office of Procurement (RAD-30) Steve Ditmeyer (202) 632-3247	<i>Procurement for Services SIC Code:</i> "Support for the Development of Office of Research and Development Strategic Plan" - To continue contract with ASTI for them to provide technical writing graphics and plan preparation services. <i>Estimated Value:</i> \$50,000 to \$199,999 <i>Anticipated Location:</i> Target City for Procurement, XX	<i>Sequence Number:</i> <i>Est. RFP Release:</i> 1/97 <i>Est. Award Date:</i> 1/97 <i>Solicitation Type:</i> To Be Determined <i>Competition Type:</i> To Be Determined <i>Set Aside:</i>	
Office of Procurement (RAD-30) Neil Moyer (202) 632-3265	<i>Procurement for Services SIC Code:</i> "Customer Enhancements for States Developing High Speed Ground Transportation" (follow-on work by Commercial Feasibility Study contractors) - For topics dealt with in depth by the Commercial Feasibility Study (CFS) contractors under our Basic Ordering Agreement, this project would transfer the planning technology and data developed for the CFS to the States that need it most. This would entail fuller documentation of the CFS's pioneering methodologies in rail corridor analysis, as well as assembly of detailed data files in a form readily usable by our State customers so that they can apply our results to their own on-going studies. <i>Estimated Value:</i> \$200,000 to \$499,999 <i>Anticipated Location:</i> Target City for Procurement, XX	<i>Sequence Number:</i> <i>Est. RFP Release:</i> 1/97 <i>Est. Award Date:</i> 1/97 <i>Solicitation Type:</i> To Be Determined <i>Competition Type:</i> To Be Determined <i>Set Aside:</i>	
Office of Procurement (RAD-30) Peter Montague (202) 632-3287	<i>Procurement for Services SIC Code:</i> "Northeast Corridor Transportation Plan (Southend); Construction Management Support to New Haven, CT/Boston, MA Electrification Project" - Congress has requested that FRA, with support from Amtrak, State DOTs, freight railroads and commuter authorities, prepare a comprehensive transportation plan for the Washington, DC/NYC segment of the Corridor based on year 2015 projected traffic levels. A significant amount of engineering support is needed to complete this request. FRA is also monitoring construction progress and compliance with our record of decision for the New Haven, CT/Boston, MA Electrification project. The Director, Northeast Corridor Project, located in Glastonbury, CT, is supervising this engineering/environmental compliance effort critical to achieving the Secretarial goal of completing the NE/CIP "within established time frames and ensure that it matches world class standards." <i>Estimated Value:</i> \$500,000 to \$999,999 <i>Anticipated Location:</i> Target City for Procurement, XX	<i>Sequence Number:</i> <i>Est. RFP Release:</i> 1/97 <i>Est. Award Date:</i> 1/97 <i>Solicitation Type:</i> To Be Determined <i>Competition Type:</i> To Be Determined <i>Set Aside:</i>	

U. S. Department of Transportation  
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Procurement Office and Point of Contact	Description of Procurement	Procurement Planning Information	Incumbent Contractor and Current Contract Number (if available)
Office of Procurement (RAD-30) Neil Moyer (202) 632-3265	<i>Procurement for Services SIC Code:</i> "Grade Crossing Monitoring of Driver Behavior" - To continue work under a contract with ASTI to develop a method for evaluating the costs and effectiveness of alternate crossing treatments when introducing high speed passenger rail service in an existing rail corridor. <i>Estimated Value:</i> \$200,000 to \$499,999 <i>Anticipated Location:</i> Target City for Procurement, XX	<i>Sequence Number:</i> <i>Est. RFP Release:</i> 1/97 <i>Est. Award Date:</i> 1/97 <i>Solicitation Type:</i> To Be Determined <i>Competition Type:</i> To Be Determined <i>Set Aside:</i>	

**Historically Black Colleges and Universities Questionnaire**  
**FRA Project on HBCU Participation in**  
**FRA Research and Development Program**

(Read)

The Federal Railroad Administration is interested in expanding the number of Historically Black Colleges and Universities participating in its Research and Development Program. These projects consist of engineering, planning, and policy research efforts. This questionnaire is being administered to selected HBCUs to determine their interest in pursuing research opportunities with FRA and to evaluate the approaches proposed by the Center for Transportation Training, Education, and Research (CTTER). This information will be used by FRA to develop a program for expanding the participation of HBCUs in its research efforts.

1. Does your College/University have a transportation program? \_\_\_ Yes \_\_\_ No
2. If so, which of the modal administrations have you had contracts with?  
FHWA                      FTA                      FAA                      FRA                      USCG                      RSPA  
OST                        MARAD                    NHTSA
3. Which of the administrations have you submitted proposals to?
4. If you have not submitted proposals to FRA have you considered it? \_\_\_ Yes \_\_\_ No
5. Where do you find information on transportation research projects?(Check all that apply)  
\_\_\_ CBD                      \_\_\_ Federal Register                      \_\_\_ Direct Contact                      \_\_\_ Other
6. Do these sources of include information on FRA? \_\_\_ Yes \_\_\_ No
7. Name five items that would be of help in pursuing research opportunities with FRA.  
1. \_\_\_\_\_  
2. \_\_\_\_\_  
3. \_\_\_\_\_  
4. \_\_\_\_\_  
5. \_\_\_\_\_

CTTER is proposing three approaches for FRA to use in increasing participation of HBCUs. On a scale of 1 to 5 with 1 being extremely helpful; 2 being helpful; 3 being somewhat helpful; 4 being not helpful; and 5 being don't know, please rate the following:

1. The development of a mechanism for communicating FRA's needs in research and development area to HBCUs.

- |                      |               |                     |
|----------------------|---------------|---------------------|
| 1. Extremely Helpful | 2. Helpful    | 3. Somewhat Helpful |
| 4. Not Helpful       | 5. Don't know |                     |

2. Identifying sources of technical assistance for HBCUs to use in pursuing contract opportunities.

- |                      |               |                     |
|----------------------|---------------|---------------------|
| 1. Extremely Helpful | 2. Helpful    | 3. Somewhat Helpful |
| 4. Not Helpful       | 5. Don't know |                     |

3. Identifying specific opportunities for HBCUs to pursue.

- |                      |               |                     |
|----------------------|---------------|---------------------|
| 1. Extremely Helpful | 2. Helpful    | 3. Somewhat Helpful |
| 4. Not Helpful       | 5. Don't know |                     |

4. Communicating opportunities to faculty through seminars and workshops.

- |                      |               |                     |
|----------------------|---------------|---------------------|
| 1. Extremely Helpful | 2. Helpful    | 3. Somewhat Helpful |
| 4. Not Helpful       | 5. Don't know |                     |

5. Conduct visits to HBCUs by FRA staff to identify research opportunities.

- |                      |               |                     |
|----------------------|---------------|---------------------|
| 1. Extremely Helpful | 2. Helpful    | 3. Somewhat Helpful |
| 4. Not Helpful       | 5. Don't know |                     |

6. On-site programs for HBCU faculty at FRA research sites.

- |                      |               |                     |
|----------------------|---------------|---------------------|
| 1. Extremely Helpful | 2. Helpful    | 3. Somewhat Helpful |
| 4. Not Helpful       | 5. Don't know |                     |



7. Provide small contract awards (\$50,000) to faculty of HBCUs for small demonstration projects.

- |                      |               |                     |
|----------------------|---------------|---------------------|
| 1. Extremely Helpful | 2. Helpful    | 3. Somewhat Helpful |
| 4. Not Helpful       | 5. Don't know |                     |

8. Establish railroad curriculums at HBCUs

- |                      |               |                     |
|----------------------|---------------|---------------------|
| 1. Extremely Helpful | 2. Helpful    | 3. Somewhat Helpful |
| 4. Not Helpful       | 5. Don't know |                     |

9. Establish year-round intern programs at HBCUs to develop the next generation of railroad professionals.

- |                      |               |                     |
|----------------------|---------------|---------------------|
| 1. Extremely Helpful | 2. Helpful    | 3. Somewhat Helpful |
| 4. Not Helpful       | 5. Don't know |                     |

10. Establish an intern program at FRA for students from HBCUs to interact with FRA staff.

- |                      |               |                     |
|----------------------|---------------|---------------------|
| 1. Extremely Helpful | 2. Helpful    | 3. Somewhat Helpful |
| 4. Not Helpful       | 5. Don't know |                     |

CTTER thanks you for your time in completing this questionnaire.

# Historically Black Colleges

*last updated December 19, 1994*

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## PREDOMINANTLY BLACK COLLEGES AND UNIVERSITIES IN THE UNITED STATES

### ALABAMA

Alabama A&M University  
P.O. Box 284  
Normal, AL 35762  
205/859-7011

Miles College  
P.O. Box 3800  
Birmingham, AL 35208  
205/923-2771

Alabama State University  
P.O. Box 271  
915 South Jackson Street  
Montgomery, AL 36195  
205/293-4100

Oakwood College  
Huntsville, AL 35896  
205/837-1630

### ALABAMA (cont.)

Selma University  
1501 Lapsley Street  
Selma, AL 36701  
205/872-2533

Talladega College  
637 West Battle Street  
Talladega, AL 35160  
205/362-2752

Stillman College  
P.O. Box 1430  
Tuscaloosa, AL 35403  
205/349-4240

Tuskegee Institute  
Carnegie Hall  
Tuskegee, AL 36088  
205/727-8011

### ARKANSAS

Arkansas Baptist College  
1600 High Street  
Little Rock, AR 72202  
501/374-7856

Shorter College  
North Little Rock, AR 72114  
501/374-6305

Philander - Smith College  
812 West 13th Street  
Little Rock, AR 72202  
501/373-6883

University of Arkansas at  
Pine Bluff  
1400 University Drive  
Pine Bluff, AR 71601  
501/541-6500

### DELAWARE

Delaware State College  
1200 North DuPont Highway  
Dover, DE 19901  
302/736-5141

### DISTRICT OF COLUMBIA

Howard University  
2400 Sixth Street NW  
Washington, DC 20059  
202/636-6100

University of the District of Columbia  
Washington, DC 20004

202/727-2270

## FLORIDA

Bethune-Cookman College  
640 Second Avenue  
Dayton Beach, FL 32015  
904/255-1401

Florida A&M University  
Tallahassee, FL 32307  
904/599-3000

Edward Waters College  
1658 Kings Road  
Jacksonville, FL 32209  
904/355-3030

Florida Memorial College  
15800 Northwest 42nd Avenue  
Miami, FL 33054  
305/625-4141

## GEORGIA

Albany State College  
504 College Drive  
Albany, GA 31705  
912/430-4646 (inside Georgia)  
800/222-RAMS (outside Georgia)

Morehouse College  
830 Westview Drive - Southwest  
Atlanta, GA 30314  
404/681-2800

Clark College  
240 James P. Brawley Dr.  
Atlanta, GA 30314  
404/880-8000

Morris Brown College  
643 Martin Luther King,  
Jr. Drive  
Atlanta, GA 30314  
404/525-7831

## GEORGIA (cont.)

Fort Valley State College  
805 State Valley Drive  
Fort Valley, GA 31030  
912/825-6420  
800/322-FVSC (outside Georgia)

Paine College  
1235 15th Street  
Augusta, GA 30910  
404/722-4471

Savannah State College  
Savannah, GA 31404  
912/356-2240

Spelman College  
350 Spelman Lane SW  
Atlanta, GA 30314-4399

## INDIANA

Martin Center College  
2171 Avondale Place  
Box 18567  
Indianapolis, IN 46218  
317/543-3235

## KENTUCKY

Kentucky State University  
East Main Street  
Frankfort, KY 40601  
502/227-6813  
800/633-9415 (inside Kentucky)  
800/325-1716 (outside Kentucky)

Simmons Bible College  
1811 Dumesnil Street  
Louisville, KY 40210  
502/776-1443

## LOUISIANA

Dillard University  
2601 Gentilly Boulevard  
New Orleans, LA 70122  
504/283-8822

Southern University at  
New Orleans  
6400 Press Drive  
New Orleans, LA 70126  
504/282-4401

Grambling State University

Xavier University

Grambling State University  
Grambling, LA 71245  
318/274-6941

Xavier University  
7325 Palmetto Street  
New Orleans, LA 70125  
504/486-7411

Southern University at Baton Rouge  
P.O. Box 9901 - Southern Branch  
Baton Rouge, LA 70813-2020  
504/771-5115

## MARYLAND

Bowie State College  
Jericho Park Road  
Bowie, MD 20715  
301/464-3000

Sojourner - Douglas College  
Baltimore, MD 21205  
301/276-0306

Coppin State College  
2500 West North Avenue  
Baltimore, MD 21216  
301/333-5990

University of Maryland -  
Eastern Shore  
Princess Anne, MD 21853  
301/651-2200

Morgan State University  
Cold Spring Lane & Hillen Road  
Baltimore, MD 21239  
301/444-3000

## MISSISSIPPI

Alcorn State University  
P.O. Box 300  
Lorman, MS 39096  
601/877-6147  
800/222-6790

Prentiss Normal & Indust. Inst.  
Prentiss, MS 39470  
601/792-5175

Jackson State University  
1325 J.R. Lynch Street  
Jackson, MS 39217  
601/968-2121

Rust College  
1 Rust Avenue  
Holly Springs, MS 38365  
601/252-4861

Mississippi Valley State Univ.  
P.O. Box 1177  
Itta Bena, MS 38941  
601/254-9041 (inside Mississippi)  
800/821-2743 (toll-free)

Tougaloo College  
Tougaloo, MS 39147  
601/956-4941

## MISSOURI

Harris - Stowe State  
St. Louis, MO 63103  
314/533-3366

Lincoln University  
820 Chestnut Street  
Jefferson City, MO 65101  
314/751-2325

## NEW YORK

Medgar-Evers College  
of the University of New York  
Brooklyn, NY 1125  
718/735-1750

## NORTH CAROLINA

Barber - Scotia College  
145 Cabarrus Avenue  
Concord, NC 28025  
704/786-5171

Fayetteville State University  
Murchison Road  
Fayetteville, NC 28301  
919/486-1372 (inside NC)  
800/672-6667 (outside NC)

Bennett College  
900 East Washington Street  
Greensboro, NC 27401-3239

Johnson C. Smith University  
900 Beatties Ford Road  
Charlotte, NC 28216-5398

Greensboro, NC 27401-3239  
919/370-8624  
800/338-BENN (toll-free)

Charlotte, NC 28216-5398  
704/378-1000

Elizabeth City State University  
Parkview Drive  
Elizabeth City, NC 27909  
919/335-3205

Livingstone College  
701 West Monroe Street  
Salisbury, NC 28144  
704/633-7960

## NORTH CAROLINA (cont.)

North Carolina A&T University  
1601 East Market Street  
Greensboro, NC 27411  
919/464-3000

Shaw University  
118 East South Street  
Raleigh, NC 27611  
919/755-4920

North Carolina Central University  
P.O. Box 19717  
1902 Fayetteville Street  
Durham, NC 27707  
919/683-6100

Winston - Salem State University  
Wallace Street  
Winston - Salem, NC 27110  
919/750-2070

Saint Augustine's College  
Raleigh, NC 27610-2298  
919/828-4457

## OHIO

Central State University  
Wilberforce, OH 45384  
513/376-6478

Wilberforce University  
Wilberforce, OH 45384  
800/367-8565 (inside Ohio)  
800/367-8568 (outside Ohio)

## OKLAHOMA

Langston University  
Box 728  
Langston, OK 73050  
406/466-2231

## PENNSYLVANIA

Cheyney State College  
Cheyney, PA 19319  
215/399-2275  
800/223-3608 (toll-free)

Lincoln University  
Lincoln Hall  
Lincoln University, PA 19352  
215/932-8300

## SOUTH CAROLINA

Allen University  
Columbia, SC 29204  
803/254-4165

Morris College  
Sumter, SC 29150  
803/775-9371

Benedict College  
Harden & Blanding Streets  
Columbia, SC 29204  
803/256-4220

South Carolina State College  
P.O. Box 1627  
Orangeburg, SC 29117  
803/536-7185

Claflin College  
College Avenue  
Orangeburg, SC 29115  
803/534-2710 (all locations)  
800/922-1276 (inside South Carolina)

Voorhees College  
Denmark, SC 29042  
803/793-3351

## TENNESSEE

Fisk University  
17th Avenue North  
Nashville, TN 37203

LeMoyne - Owen College  
807 Walker Avenue  
Memphis, TN 38126

Nashville, TN 37203  
615/329-8500

Knoxville College  
901 College Street  
Knoxville, TN 37921  
615/524-6500

Lane College  
Lane Avenue  
Jackson, TN 38301  
901/424-4600

Memphis, TN 38126  
901/774-9090

Tennessee State University  
John Merritt Boulevard  
Nashville, TN 37203  
615/320-3420

## TEXAS

Bishop College  
Dallas, TX 75421  
214/372-8000

Houston Tillotson College  
1820 East 8th Street  
Austin, TX 78702  
512/476-7421

Jarvis Christian College  
P.O. Drawer G  
Hawkins, TX 75765  
214/769-2174

Paul - Quinn College  
1020 Elm Avenue  
Waco, TX 76704  
817/753-6415

Prairie View A&M University  
P.O. Box 2580  
Prairie View, TX 77446  
713/857-3311

Southwestern Christian College  
Terrell, TX 75160  
214/563-3341

## TEXAS (cont.)

Texas College  
2404 North Grand Avenue  
Tyler, TX 75703  
214/593-8311

Texas Southern University  
3100 Cleburne  
Houston, TX 77004  
713/527-7173

Wiley College  
711 Rosborough Springs Road  
Marshall, TX 75670  
214/938-8341

## VIRGINIA

Hampton University  
Hampton, VA 23668  
804/727-5358

Norfolk State University  
2401 Corprew Avenue  
Norfolk, VA 23504  
804/683-8396

Saint Paul's College  
406 Windsor Avenue  
Lawrenceville, VA 23868  
804/848-3984

Virginia Seminary & College  
Lynchburg, VA 24501  
804/528-5276

Virginia State University  
Box 468  
Petersburg, VA 23803  
804/520-5000

Virginia Union University  
1500 North Lombardy Street  
Richmond, VA 23220  
804/257-5600

## WEST VIRGINIA

West Virginia State College  
Institute, WV 25112  
304/766-3000

## VIRGIN ISLANDS

University of the Virgin Islands  
St. Thomas, U.S. Virgin Island 00802  
809/776-9200

University of the Virgin Islands  
Kingshill, St. Croix  
U.S. Virgin Island 00851  
809/778-1620

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Preliminary Assessment of Options for Increasing  
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Office of Railroad Development 27-Government  
Policy, Planning & Regulations

SHOULD GOVERN