

Public Agency Education and Training Initiatives at the Federal Level: FHWA's Programs with Minority Institutions

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I appreciate this opportunity to share with you information on FHWA's programs with historically black colleges and universities (HBCUs) and other minority institutions of higher education, including Hispanic-serving institutions (HSIs) and Native American-serving institutions. Later in my presentation I will focus on a particularly effective and well-received program—the national Summer Transportation Institute. This program is high on the list of programs that FHWA supports because it is geared toward the enhancement and enrichment of our youth to support development of the next generation of transportation professionals.

First, I will provide an overview of the FHWA program for HBCUs and other minority institutions of higher education. Since the program began in 1982, we have developed a number of initiatives that range from partnering with minority institutions to providing fellowships, grants, and contract opportunities for them, their faculty, and their students. In return, the minority institutions have been an excellent resource for FHWA in the areas of research, training, and technical assistance. The minority institutions, for example, have been involved in research in areas such as highway safety and the environment, in training a number of transportation professionals, and in providing support and advice to disadvantaged business enterprises (DBEs).

FHWA is continually striving to ensure that these institutions participate in all aspects of our agency programs and projects, which has helped FHWA to achieve its goal of enhancing minority involvement. In fact, the national Summer Transportation Institute was developed as a result of the partnership consisting of FHWA,

the South Carolina Department of Transportation, and South Carolina State University. The institute program is an investment in our future. The objectives of the program are to motivate students to consider careers in the transportation industry and to provide them with math, science, and technological enrichment to enable them to pursue such a career.

The concept of the institute was first developed by the partnership in 1992, and in 1993 the first institute was established at South Carolina State University, with an enrollment of 20 students. The success of the program enabled it to gain the support of the Greenville Urban League, and by 1994 it had expanded to include 40 students. In 1995, as a result of continued success and the demand to expose and introduce more students to careers in transportation, the program was expanded to six HBCUs and 140 students were enrolled. In 1996, the program expanded to 13 institutes in 12 states, with 375 students enrolled. In 1997, I am proud to announce that the program included 16 institutes in 14 states, with 490 students participating.

The Summer Transportation Institute program has enjoyed, and continues to enjoy, top-level commitment from fellow government officials. As you heard from Acting FHWA Administrator Gloria Jeff earlier in the conference, she has a personal commitment to ensure that youth are exposed to careers in transportation. From the perspective of the U.S. Department of Transportation, this program certainly supports and is linked with the Garrett A. Morgan Technology and Transportation Futures program. If you take it to another level of national commitment, the program definitely supports President Clinton's initiative

to ensure that our youth are prepared for careers of the future. The program also has top-level commitments from officials of state departments of transportation. This is shown by the fact that all of the institutes have a department of transportation as a strongly committed partner. There is also a strong commitment on the part of college and university presidents and faculty, private industry, and Urban League affiliates.

Recruitment for the students is done statewide; applications are distributed to high school guidance counselors. The students are selected on the basis of their expressed interest in the areas of engineering, science, transportation, or technology. Their course work should include a heavy concentration of math and science courses, and they should have at least a 3.0 grade point average, as well as three letters of recommendation in support of their application.

Students participate in a 4-week program that includes classroom and laboratory instruction, as well as activities that expose them to all modes of transportation—land, water, and air. They also receive course work in self-worth and interpersonal relationships among students and other faculty members, as well as in communication skills.

What do the students accomplish during these 4 weeks of training and introduction to transportation careers? They design and build solar cars, bridges, gliders, and rockets. They participate in field trips to state and private transportation sites. They complete coursework in areas such as transportation systems, problem-solving, the design process, intermodalism, the environment, time management, and construction.

The six HBCUs that participated in the program in 1995 were South Carolina State University, Albany State University, Kentucky State College, North Carolina A&T University, Virginia State University, and Jackson State University. In 1996, when the program was expanded to include 13 HBCUs and 1 HSI, the following schools were added to the list: Alabama A&M University, the University of Arkansas at Pine Bluff, Benedict College, City College of New York (an HSI), Florida A&M University, Southern University, and Tennessee State University. In 1997, the program expanded to 16 with the addition of three more HBCUs: Morgan State University, Delaware State, and Clark Atlanta University. Since 1993, the program has been attended by just over 1,000 students.

As the Summer Transportation Institute program has grown, so too has the need to ensure that there is continuity in the program and that the quality of the program is maintained. To address this need, South Carolina State University was designated in 1995 as the National Resource Center, responsible for providing support services in curriculum development and in training and workshops to the other participating universities. The

program has been successful in strengthening the relationship among FHWA, state DOTs, and HBCUs and other minority institutions of higher education.

What are we looking at for the future of the program? There are plans to expand the Summer Transportation Institute to include a mentoring component. This addition will require aggressive marketing to prospective partners, more private industry involvement, and broader participation by all modes from within the transportation agencies involved with the program. Efforts are also under way to secure multiyear funding for the program. The program already has achieved the goal (set by then FHWA Administrator Rodney Slater) of reaching 500 students nationally. Secretary of Transportation Rodney Slater has now set a goal of expanding the program to 2,000 students by the year 2000. On the basis of the program's growth since it began in 1993, there is confidence that his goal can be achieved.

I want to close by noting that one of the main reasons the program has achieved such a high level of success is because it attracts some of the most intelligent, motivated, and energetic students. I have had the pleasure of attending a number of the Summer Transportation Institute graduation ceremonies and have participated in the programs. It is gratifying to see so many energetic, eager, and bright high school students ready to take on 4 weeks of training, be introduced to transportation, and then, it is hoped, set out to make their mark in the transportation world. As transportation professionals and as educators, our challenge is to harness that energy, maintain that level of interest and enthusiasm, and ensure that they do pursue a career in transportation.

SUMMARY OF DIALOGUE WITH AUDIENCE

Question

At what grade do you take them into the program?

Response

Students are 9th and 10th graders.

Question

Are the students provided with any stipend?

Response

No, students do not receive personal stipends. They are hosted on the university campus, and the funding

FHWA provides goes to the university to provide housing and cover the cost of faculty and staff to teach the curriculum.

Question

Have you done any follow-up to see how many of the students who go through the program actually go into the transportation industry?

Response

That is one of the pieces being added to the program. We are finding that the first groups of students are just entering college or are in the first 2 years of college. Preliminary indications are that not only are they going to college, but that they also are majoring in fields related to transportation. The tracking component is just getting under way and will be an important factor in determining whether this investment is yielding transportation professionals.

Question

Do you have any idea of what the cost per student is?

Response

On average, the cost is about \$1,500 per student.

Question

Doesn't the program appear to be geared primarily toward civil engineering? Those of us in the logistics and business sector would also like to have a chance to begin identifying and developing talent at this level, so if there is any expansion of the program I would suggest that these areas also be incorporated.

Response

The program is really not directed just toward civil engineering. It is directed at all majors and fields required by a DOT, including economics, civil engineering, bureau of weights, and so on. I would also like to point out that although it is an HBCU program, it is a truly diverse program. The racial and ethnic mix of students participating in the most recent institute was 46 percent African American, 16 percent Hispanic, 13 percent white, and 25 percent in the Other category.