



CENTER FOR INFRASTRUCTURE ENGINEERING STUDIES

**National Society of Black Engineers National Conference; National
Society of Black Engineers Pre-College Initiative; MEP/SHPE Kansas
City High School Recruitment Program; MEP Seven Week Summer
Enrichment Program for Pre-college Freshmen**

By

Marcus Huggans

University Transportation Center Program at

The University of Missouri-Rolla

**UTC
ETT138**

Disclaimer

The contents of this report reflect the views of the author(s), who are responsible for the facts and the accuracy of information presented herein. This document is disseminated under the sponsorship of the Department of Transportation, University Transportation Centers Program and the Center for Infrastructure Engineering Studies UTC program at the University of Missouri - Rolla, in the interest of information exchange. The U.S. Government and Center for Infrastructure Engineering Studies assumes no liability for the contents or use thereof.

Technical Report Documentation Page

1. Report No. UTC ETT138	2. Government Accession No.	3. Recipient's Catalog No.
4. Title and Subtitle National Society of Black Engineers National Conference; National Society of Black Engineers Pre-College Initiative; MEP/SHPE Kansas City High School Recruitment Program; MEP Seven Week Summer Enrichment Program for Pre-college Freshmen	5. Report Date June 2005	6. Performing Organization Code
	7. Author/s Marcus Huggans	8. Performing Organization Report No. 00001404
9. Performing Organization Name and Address Center for Infrastructure Engineering Studies/UTC program University of Missouri - Rolla 223 Engineering Research Lab Rolla, MO 65409	10. Work Unit No. (TRAIIS)	11. Contract or Grant No. DTRS98-G-0021
	12. Sponsoring Organization Name and Address U.S. Department of Transportation Research and Special Programs Administration 400 7th Street, SW Washington, DC 20590-0001	13. Type of Report and Period Covered Final
15. Supplementary Notes		
16. Abstract <p>1) National Society of Black Engineers (NSBE) National Convention – March, 2005 - Three MEP staff members will participate in the Career and Graduate School fair during the convention. With over 12,000 students attending the event each year it is an excellent opportunity to recruit minority students at both the undergraduate and graduate levels. The goal is designed to increase the awareness, participation, and excitement surrounding graduate school and the pursuit of higher education. Through the careful integration of planned events, students and professionals can learn about higher education opportunities and resources. Several new activities have been incorporated into the agenda that are designed to promote higher education, increase student participation, and emphasize academic and technical excellence.</p> <p>2) UMR/NSBE PCI Weekend – February 2005 - The National Society of Black Engineers (NSBE) is the largest student-run, non-profit organization in the country. Its objective is to promote the recruitment, retention, and successful graduation of African-Americans in engineering, science and technology. NSBE serves as a vehicle to promote unity through programs that encourage academic excellence, perennial growth, and professional development. One of the objectives of the UMR-NSBE chapter is to encourage high school students to pursue careers in engineering, science, and technology and to consider UMR as a choice for their college home. The UMR NSBE chapter will host its annual Pre-College Initiative (PCI) weekend. Approximately 60 students are expected to attend each year. Students will participate in a series of workshops, hands-on activities, admissions seminar, and a civil engineering design project.</p> <p>3) MEP/SHPE Kansas City High School Hispanic Recruitment Program - The Kansas City High School Hispanic Recruitment Program is a collective effort of MEP* & SHPE*, to support and increment the recruitment of Hispanic High School Senior/Junior/Sophomore students with a desire to pursue a B.S. degree in engineering, mathematics, or science at UMR. The K.C. Recruitment Program consists of two main stages:</p> <p>4) MEP Seven Week Summer Enrichment Program - The objectives of the seven week pre-engineering summer program are:</p> <ul style="list-style-type: none"> To bolster and strengthen the pre-college preparation in mathematics, science, and English composition of minority students who have potential for engineering careers and to encourage them to enter such careers. 		

- To provide opportunities for program participants to learn more about the career opportunities in engineering and science and technology.
- To help make an adjustment to the rural and university environment.
- To assist selected students through the baccalaureate degree with tutorial, scholarship, employment opportunities, and counseling help as needed.

This program is required of all the Minority Engineering Program scholarship recipients. For seven weeks beginning in June and ending in July each year the MEP scholars take classes in Mathematics (at the appropriately determined level), English and chemistry. While most of the classes are not for credit, the benefits are tremendous. Not only do the students have an academic head start when the fall semester begins, but they also become a team. Rigorous study prepares them for a demanding engineering curriculum, and they experience life in a dorm away from friends and family. Along with academics, scholars learn about career opportunities that await them once they earn their degree. Special seminars are hosted by industry representatives and engineering department chairs that focus on career and educational opportunities for minority students. The proven track record of this program on the UMR campus has sparked a similar program for minority freshman engineering students. Next year we will support 36 students at \$4,000 each for a total of \$144,000. Our goal is 18 female and 18 male students.

17. Key Words minority	18. Distribution Statement No restrictions. This document is available to the public through the National Technical Information Service, Springfield, Virginia 22161.		
19. Security Classification (of this report) <p style="text-align: center;">unclassified</p>	20. Security Classification (of this page) <p style="text-align: center;">unclassified</p>	21. No. Of Pages	22. Price

UTC Report 2005

National Society of Black Engineers National Conference 11 Students 2 Staff

March 23 -27, 2005

Two MEP staff members and 11 students attended the national convention in Boston MA, for minority students recruitment for both undergraduate and graduate students. MEP provided information at both the career and graduate fairs. There were over 10, 000 attendees at the conference.

MEP Summer Enrichment Program for Pre-college Freshmen 36 Students

July 5 -29, 2005

Hit the Ground Running (HGR) provides an excellent opportunity for students to get the scoop on coursework expectations, campus life, and community involvement at UMR.



HGR has been demonstrated to be an extremely beneficial summer learning experience. Students have the opportunity to get a head start on learning “stuff” from a new perspective. They will also have the opportunity to define and implement constructive strategies for their success at UMR prior to the beginning of the Fall Semester.

Students will participate in writing, chemistry and mathematics classroom lectures taught by a team of UMR’s outstanding educators. Because of their experiences in teaching excellence the lecturers for these courses will place students on a level of academic understanding that is beyond previous experiences. Students will be introduced to writing, chemistry and math principles and their application to current-day issues. They will discover how they may participate immediately in technical discovery through discussions on research and problem solving. Each course will emphasize strategies for achieving course learning objectives.

MEP/ NSBE Pre-College Initiative 63 Students

February 24 -27, 2005



The National Society of Black Engineers (NSBE) is the largest student-run, non-profit organization in the country. Its objective is to promote the recruitment, retention, and successful graduation of African-Americans in engineering and the science related fields.

NSBE serves as a vehicle to promote unity through programs that encourage academic excellence, perennial growth, and professional development.

One of the objectives of the UMR-NSBE chapter is to encourage high school students to pursue careers in engineering and to consider UMR as a choice for their college home. In

the past, UMR-NSBE members have visited high schools and junior colleges from Kansas City, Missouri to St. Louis, Missouri to discuss the assets of a career in engineering.

Thursday, February 24 through Sunday, February 27 of 2005, the UMR-NSBE chapter is planning to host its annual Pre-College Initiative (PCI) weekend. This year we hosted 63 students. As such, priority was given towards high school juniors and seniors. UMR-NSBE is planed a series of workshops and activities for students to participate in during the PCI weekend. The students participated in civil engineering design project, as well as attend an admissions seminar. The students will also tour the campus and spend a portion of the day interacting with UMR administrators and students. Lodging and transportation was provided for all participating students.

MEP/SHPE Kansas City High School Recruitment Program 58

UMR's "Si Se Puede" Hispanic Recruitment Program is designed to help Hispanic students achieve their goals and be successful. This program will help students explore career options and will give them an inside look to what the college experience is really like. The "Si Se Puede" program will also give you access to UMR & MEP scholarships that are designed to help increase the number of undergraduate minority students enrolled in one of the Engineering, Science, or Technology programs that UMR offers.

- *November 12-14, 2004 Si Se Puede 40 students*
- *June 7-8, 2005 League of United Latin American Citizens (LULAC) 18 Students*

