FISCAL YEAR: 2014

NATIONAL SUMMER TRANSPORTATION INSTITUTE PROGRAM

ANNUAL REPORT

TRANSMITTAL SHEET

HOST SITE: MORGAN STATE UNIVERSITY ADDRESS: 1700 EAST COLDSPRING LANE BALTIMORE, MARYLAND 21251

CONTACT REPRESENTATIVES

HOST SITE

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2014 SUMMER TRANSPORTATION INSTITUTE FINAL REPORT



Prepared for STATE OF MARYLAND DEPARTMENT of TRANSPORTATION

In cooperation with

THE U.S. DEPARTMENT
OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION

Morgan State University

2014 SUMMER TRANSPORTATION INSTITUTE

FINAL REPORT

Prepared for the

Maryland Department of Transportation

In cooperation with

U.S. Department of Transportation
Federal Highway Administration
and
Connected Vehicle/Infrastructure UTC at
Virginia Polytechnic Institute and State University

September 2014

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Section I PROGRAM ADMINISTRATION

Host Site: Morgan State University

Address: 1700 East Cold Spring Lane, Baltimore, Maryland 21251

Project Director: Z. Andrew Farkas, Ph.D.

Length of Program: 4 Weeks

Type of Program: Nonresidential

Grade Levels: 10th, 11th, 12th grades

Number of Students Per Grade: 10th (11), 11th (7), 12th (2)

Number of Applications Received: 36

Number of Student Applications Accepted :20

Number Students to Complete the Program: 20

ABSTRACT

The Summer Transportation Institute (STI), hosted by Morgan State University's National Transportation Center (NTC), serves to attract high school students to participate in a STEM summer program. STI aims to address the nation's need for a diverse pool of transportation professionals capable of developing long-term solutions to complicated intermodal transportation issues.

In order to meet this goal, STI increases pre-college students' awareness of transportation careers. The program also helps to enhance the students' academic skills so they can be successful in careers in the transportation industry. Twenty-two students from diverse backgrounds participated in the nonresidential program at Morgan State University from July 9-August 2, 2014.

The four-week program provided a multidisciplinary academic curriculum, which included guest speaker presentations, computer laboratories, research, and field trips. The students had an opportunity to drive a car simulator. The students learned about all modes of transportation and gained leadership skills while working on team-building projects. Field trips included the Smart Road in Blacksburg, Virginia, Maryland Transit Administration, and Maryland Boat Pilots Association. In addition, the participants learned about college preparation and career planning.

COMMITTEE, PARTNERS, AND STAFF

Intermodal Advisory Committee

The Intermodal Advisory Committee (IAC) is made up of representatives from industry, academia, and government to assist with the development of a well-balanced curriculum, planning activities, and field trips. Members of the 2014 IAC are listed in the chart below.

NATIONAL SUMMER TRANSPORTATION INSTITUTE PROGRAM — ANNUAL REPORT							
SECTION 1: INTER-MO	DAL ADVISORY COMMITTEE (IAC)						
State: Maryland							
Fiscal Year: 2014	Host Site: MORGAN STATE UNIVERSITY						
Name:	Dr. Moges Ayele						
Title:	Senior Liaison for Higher Education						
Organization:	Federal Highway Administration						
Name:	Nelson Costellanos						
Title:	Division Administrator						
Organization:	Federal Highway Administration						
Name:	Dr. Eugene DeLoatch						
Title:	Dean, School of Engineering						
Organization	Morgan State University						
Name:	Dr. Z. Andrew Farkas						
Title:	Director, National Transportation Center						
Organization	Morgan State University						
Name:	Gregory Murrill						
Title:	Division Administrator-Maryland						
Organization:	Federal Highway Administration						
Name:	Valencia D. Baker						
Title:	Coordinator Education Programs, National Transportation Center						
Organization:	Morgan State University						

Partners/Sponsors

Morgan State University's Department of Transportation and Urban Infrastructure Studies gave STI participants access to its driving simulator. Other partners provided speakers, videos, and chaperones for field trip activities. Program and sponsors are listed below. The committee was given a list of planned of activities for the 2014 STI and the committee members provided feedback.

NATIONAL SUMMER TRANSPORTATION INSTITUTE PROGRAM — ANNUAL REPORT

SECTION 1: PARTNERS/SPONSORS

State: MARYLAND	
Fiscal Year: 2014	Host Site: MORGAN STATE UNIVERSITY
Name:	Dr. Anthony Saka
Title:	Chairperson
Organization:	Dept. of Transportation and Urban Infrastructure Studies
Role/Contribution:	Speaker
Name:	Louise Flamer
Title:	Coordinator
Organization:	Morgan State University Center for Continuing and Professional Studies
Role/Contribution:	STI curriculum review
Name:	Tranell Griffin
Title:	Manager, Maryland Transportation Initiatives
Organization:	Maryland Transit Administration
Role/Contribution:	Provided commuter passes for STI students
Name:	Hope Williams
Title:	Special Assistant
Organization:	U.S. Rep. Elijah Cummings' district office
Role/Contribution:	Facilitated tours and speakers
Name:	Katrina Y. Jones
Title:	Outreach Coordinator
Organization:	Maryland Port Administration
Role/Contribution:	Speaker and facilitated tour of the Maryland port operations

NATIONAL SUMMER TRANSPORTATION INSTITUTE PROGRAM — ANNUAL REPORT

SECTION 1 (CONT):	Partners/Sponsors
Name:	Dr. Monique Head
Title:	Associate Professor
Organization:	Morgan State University, Department of Civil Engineering Transportation Department
Role/Contribution:	Speaker and facilitated tour of the Center for the Built Environment Infrastructure Building
Name:	Dr. Frederick Wilson
Title:	Associate Professor/Research
Organization:	Morgan State University
Role/Contribution:	Speaker and member of STI selection committee
Name:	Robert Ferguson
Title:	Superintendent Traffic Division
Organization:	Baltimore City Transportation Department
Role/Contribution:	Speaker and facilitated a tour of the Baltimore City Traffic Management Center
Name:	Mary Buettner
Title:	Redline Community Liaison
Organization:	Maryland Transit Administration
Role/Contribution:	Speaker and facilitated trips to conduct surveys of modern traffic roundabouts
	76 1 26 11
Name:	Kevin Mullin
Title:	Vice President
Organization:	Flannigan and Associates ,Inc
Role/Contribution:	Speaker and donated gifts to participants, assisted with selection of participants

Program Faculty and Staff

STI has a full-time staff, which includes the program coordinator, two teachers, and two counselors. The teachers were responsible for facilitating all classroom activities and projects, and they also ensured that the participants completed surveys and evaluations. Counselors were responsible for assembling project materials, chaperoning lunch and recreation activities, and preparing computer laboratories and audio and video equipment. Counselors also were responsible for taking pictures of STI activities and preparing travel vehicles. Program faculty and staff are listed in the chart below.

State: MARYLAND	
Fiscal Year: 2014	
Name:	Name: Dr. Z. Andrew Farkas
Position Title:	Director, National Transportation Center
Affiliation:	Morgan State University School of Engineering
Name:	Valencia D. Baker
Position Title:	Coordinator Education Programs, National Transportation Center
Affiliation:	Morgan State University
Name:	Name: Dawn Ray
Position Title:	Program Instructor
Affiliation:	Baltimore City Public School System
Name:	Name: Karl Brown
Position Title:	Program Instructor
Affiliation:	Baltimore County Public School System
Name:	Name: Tevin Bethea
Position Title:	Counselor
Affiliation:	Student, Morgan State University
Name:	Cornitra Sampson
Position Title:	Counselor
Affiliation:	Student, Stevenson University

PROGRAM OBJECTIVES

The objectives of the Morgan State University STI program are as follows:

- 1. Introduce students to careers and opportunities available in the transportation industry.
- 2. Demonstrate to participants the real-life problems that are resolved by transportation professionals.
- 3. Increase students awareness of the preparation required for a career in the transportation industry.
- 4. Enhance student awareness of the current and future need for conscientious and innovative transportation professionals.
- 5. Introduce students to local, state, and federal agencies that oversee transportation systems.
- 6. Introduce students to ground-breaking developments in the transportation industry.
- 7. Provide students with college enrollment information.

Accomplishment of the objectives was measured based on three indicators:

- 1. students responses to the pre/post survey questionnaires
- 2. student responses on program evaluations
- 3. evaluation of the implementation of curriculum topics

The results of the surveys and program evaluations are included in the Appendices A and B.

STUDENT SELECTION PROCESS

Thirty-five applications for the STI program were reviewed on May 21, 2014. From 35 applications, the committee selected 20 students. The selected students were sent an award notification, health surveys, and additional forms. Ten students were placed on the waiting list. Five students who were not selected did not meet the criteria or submitted incomplete applications.

MARKETING PROCESS

The marketing campaign for STI began in January 2014. Brochures and applications were sent to high school counselors, principals, and mathematics and science department heads. In addition, announcements were sent to public libraries. Information about STI was placed on the Morgan State University (MSU) website. IAC members, partners and sponsors of the STI, churches, and STI alumni received application packets to distribute. Presentations were also conducted at area high schools. Application packets were also sent to Indian and Hispanic community centers.

DEMOGRAPHIC SUMMARY REPORT

FY 2014 National Summer Transportation Institute

STATE:	MARYLAND	Project Director:	Dr. Z. Andrew Farkas
Host Site	Morgan State University	Program Dates:	June 27, 2014-July 25, 2014
		Program Length	4 Weeks

Select Grade Le	evel	Applicant Data					
High School	X			Number of Applicati	ons Received	35	
Middle School		Number of Participants Selected 2					
Select Program	Classification	Number of Participants that Completed the Program 2					
Residential		Geographic Representation					
Non- Residential	X	Number of Cities:	Number of Counties:		Congressional I Numbers: 1, 2,3		

	Race /Ethnicity					Gende	r	Disability Grade level								
	African American	Caucasian	Hispanic American	Native American	Asian American	Pacific American	Other	Male	Female	Targeted Disabilities	7	8	9	10	11	12
Number of Participants	18			2				8	12	1				11	7	2

Schools Represented

Name/City/State	Name/City/State			
Western School of Technology ,Baltimore County ,MD	Institute of Notre Dame High School/Baltimore ,MD			
National Foundation Academy/Baltimore , MD	Parkville High School, Baltimore, MD			
Baltimore City College High School/Baltimore , MD	Mergenthaler High School, Baltimore,MD			
Solders Point Technical High School/Baltimore County, MD	New Town High School, Baltimore County, MD			
Perry Hall High School/Baltimore County, MD	Northwood Appold Community Academy, Baltimore, MD			
Baltimore Lutheran/Baltimore, MD	Edmondson Westside High School, Baltimore,MD			
Polytechnic Institute High School/Baltimore, MD	City Neighbors High School, Baltimore,MD			
Randallstown High School/Baltimore, MD	Loch Raven High School, Baltimore County, MD			

SECTION II PROGRAM CURRICULUM

Academic Program

The topics covered in the 2014 STI curriculum included transportation safety, transportation history, aviation, marine and rail transportation. The students did SAT preparation and journal writing activities. Developing team-building and leadership skills were an integral part of the students' experiences. The curriculum was further enhanced by presentations from industry and academia professionals, and field trips. Weekly activity schedules can be found in Appendix E.

Aviation Awareness

STI students visited the Smithsonian Institution's Air and Space Museum, where they were introduced to the history of aviation and space flight. The trip prepared the students for a visit to Goddard Space Flight Center. The visit to Goddard was enhanced by the engineering staff. After their visits, the students worked in teams to construct a model rocket. The students used information and terminology that they learned from the trips while presenting their rocket designs to the class.

Transportation Career Research

The students worked in four-member teams to research transportation careers. Each group selected a career, wrote a report, and prepared a PowerPoint presentation. The presentation included information gleaned from guest speakers and field trips. Each team member was given an opportunity to speak during their group's presentations. Careers selected by the teams included air traffic controller, structural engineer, boat pilots, and transportation planner.

Transportation and Urban Infrastructure

Dr. Anthony Saka, chair of Morgan's Department of Transportation and Urban Infrastructure Studies, introduced the students to the transportation systems undergraduate program. He discussed the basic concepts of transportation systems and key transportation issues, including planning, engineering, management, and logistics. Dr. Saka also discussed educational opportunities available at MSU. As a follow-up to Dr. Saka's presentation, the students researched transportation infrastructure in urban environments.

Car /Driving Simulator

Dr. Mansoureh Jeihani, an assistant professor at MSU gave the participants a demonstration of how to use the transportation department's car simulator. The students had an opportunity to drive the simulator and they were given a survey at the end of the driving session to gauge their impressions of the simulator and transportation careers.

Bridge Challenge

The students were taught bridge designing. They viewed a YouTube video presentation about bridge construction and design. One of the guest speakers was a structural engineer and she

guided the students in constructing model bridges. She spoke to the students about the hazards associated with improper bridge design and construction. The speaker showed the students a video of bridges that had collapsed across the country and she discussed the reasons for the collapse of each bridge.

Solar Cars

The solar cars project included a discussion about a variety of energy sources and their impact on the environment. The use of solar energy as an alternative to fossil fuel was the focus of the discussion with the students. The student teams conducted research on alternative fuel sources and the pros and cons on the environment. Three of the four teams agreed that solar energy may be a possible solution to the energy and pollution crisis. The other team did not want to commit to any one source of energy without additional research. The research activity culminated with the students constructing solar car models.

Field Trips

Field trips complemented the classroom and laboratory activities. The students had an opportunity to visit transportation-related sites and to speak with transportation professionals about their careers. Some of the field trips that the students took are listed below.

Mass Transit Administration

The Maryland Transit Administration (MTA) staff introduced the students to mass transit career opportunities. The students toured the administrative offices, including the control room where MTA staff route and schedules transit vehicles. They saw a demonstration of the routing system and the GPS technology used to navigate transit vehicles. Security professionals and light rail and subway engineers spoke about the preparation and training required for their careers. The students also rode the light rail and the subway systems.

The Association of Maryland Boat Pilots

The Maryland pilots took the students on a tour of the Port of Baltimore. They talked to the students about their history, training, and role in protecting the Chesapeake Bay. During the discussion, they explained the parts of the boat and how they use GPS to navigate the boat. There was discussion about safety factors that influence the work that pilots do on the Bay. Students were given an opportunity to wear water safety vests and to steer the boat under the captain's supervision.

Baltimore City Traffic Management Center

Members of the Baltimore Metropolitan Council's Regional Transportation Board met with the students at the Baltimore City Traffic Management Center. The board members discussed their mission and provided students with information about regional transportation planning and policy making for the Baltimore region.

Board members discussed current transportation studies, and long-range transportation plans for the Baltimore metropolitan area. The students had an opportunity to hear about plans for bike trails and bicycle safety. Presenters spoke to the students about policies and legislation that affect transportation funding and project development.

GE Aviation

STI students toured GE Aviation, a leading producer of large and small jet engines for commercial and military aircraft. Students were able to speak with project engineers about GE's history and various aspect of building an airplane engine.

Enhancement Program

The enhancement program was developed to prepare students for college and to familiarize them with the abundance of resources available to them to prepare for a career in transportation. Preparation began with regular Scholastic Aptitude Test (SAT) practice tests. The instructors taught the students skills for successfully completing the SAT. The lessons were supplemented with an SAT preparation manual. Each student was able to take practice test using a computer disc that accompanied the SAT manual.

A trip to the Central Branch of the Enoch Pratt Free Library enhanced the students' ability to conduct research, the resources available to them for completing school assignments. Six of the students received library cards during the visit.

Sports and Recreation Program

Students enhanced their ability to work in teams and develop good sportsmanship. The counselors engaged the students in a variety of activities in the gymnasium and the university's game room. The students actively participated in volleyball, basketball, tennis, swimming, and table games. In addition, the students went to the game room and played ping pong, electronic games, pool, and air hockey.

EVALUATIONS

Evaluations were used to gauge whether the students found the program activities and instructors to be engaging, and to elicit suggestions and comments to improve the STI program. Graphs that illustrate the results of the program evaluations can be found in Appendix A.

PRE/POST STI SURVEYS

In addition to completing the program evaluation forms, STI participants also completed preprogram and post-program surveys. The pre-survey was conducted to determine what the participants expected from STI. The post-survey was provided to ascertain whether the participants' expectations were met. The results of both surveys can be found in Appendix B.

ORIENTATION

An orientation session was held on June 18, 2014, for the students and their parents. Staff provided the attendees with an overview of the STI program, including rules, regulations, requirements, and expectations.

CLOSING AWARDS PROGRAM

On July 25, 2014 STI's closing awards banquet was held. The 102 attendees included participants and their families, university and transportation officials, and STI staff. The keynote speaker was Robert Smith, Administrator for the Maryland Transit Administration. He challenged the participants to continue their education, enroll in a post-secondary program, and pursue a career in transportation.

Two students gave oral presentations about their four weeks in the program. All STI participants received a certificate acknowledging successful completion of the 2014 STI program. Four students who exhibited outstanding leadership were recognized and given one of the following awards:

- Federal Highway Administration Award
- State Highway Administration Award
- STI Director's Award for Excellence
- STI Instructors' Award

SECTION III: PRELIMINARY FINANCIAL REPORT

The STI received a total budget of \$39,110.00 of that amount, \$38,327.70 has been expended. This year the cost for daily commuter passes were included in the budget. There was a total of \$782.30 remaining in the line item for travel. In the past, gas prices increased over the duration of the STI program, however; this year the amount of gas required for the two 12 passenger vehicles was less than anticipated. In addition to purchasing less gas, we did not pay MARC train fares for the participants to the Smithsonian Air and Space Museum in Washington, DC. It was more cost effective to use the two vehicles for the trip. Morgan State University's National Transportation Center provided an in-kind contribution of \$9,229.

State:	Maryland	Budget						
		Categories	Approved	Expended	Unexpended			
Host Site:	Morgan State University	Personnel	\$14,040.00	\$14,040.00	-			
Fiscal Year:	2014	Fring1e Benefits	\$1264.00	\$1,264.00	-			
		Recruitment	\$300.00	\$306.90	-\$6.90			
		Contractual Services	\$300.00	\$268.00	\$32.00			
		Food	\$2000.00	\$2000.00	\$0.00			
		Travel	\$10,000.00	\$9243.05	\$756.95			
		Supplies	\$2535.00	\$.2534.75	\$.25			
		Room & Board	-	-	_			
		Stipends	\$5000.00	\$5000.00	\$0.00			
		Direct Cost	\$35,439.00	\$34,656.70	\$782.30			
		Indirect Cost	\$5,671.00	\$5,671.00				
		Totals	\$39,110.00	\$38,327.70	\$782.30			

SECTION IV: <u>RECOMMENDATIONS</u>

The 2014 STI program at Morgan State University provided 20 students with an opportunity to learn about current transportation technology, careers, college preparation, and career planning. The students' responses on program evaluations and surveys indicate that students had a positive learning experience and that they enjoyed the curriculum and related activities. Sixteen students indicated that they are interested in pursing a career in the transportation industry.

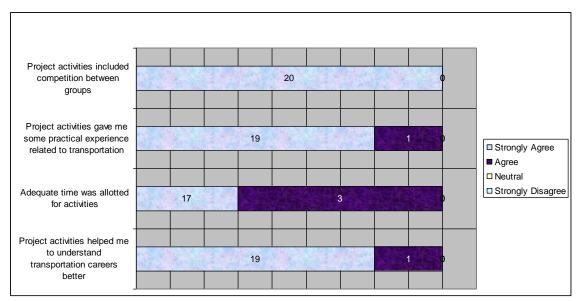
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-	Staff	
-	Speakers	
-	Field Trips	
-	Sports and Recreation	
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APPENDIX A

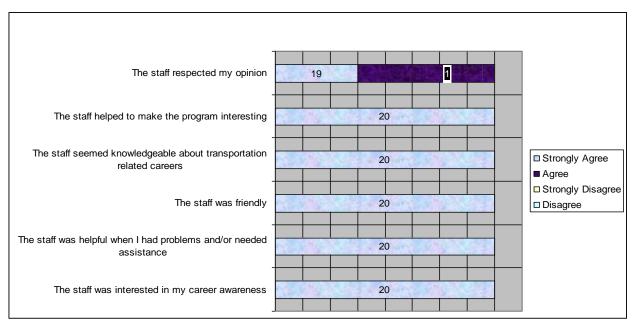
SUMMARY OF PROGRAM EVALUATIONS

Chart 1: Classroom Activities Evaluations



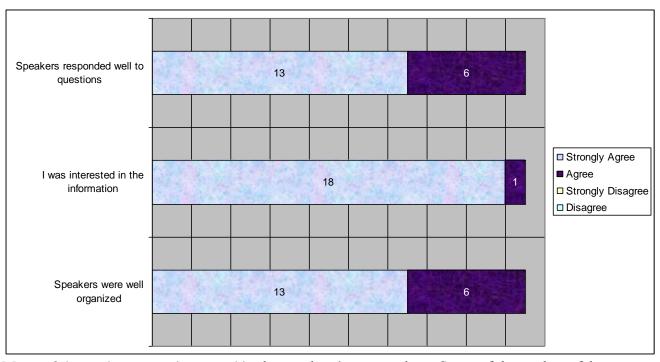
The students mostly agreed that classroom activities were adequate and effective in helping them to understand transportation careers.

Chart 2: Staff Evaluations



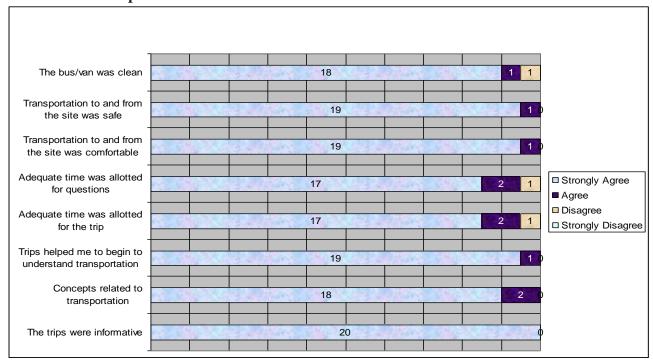
Students agreed that staff were helpful and knowledgeable about transportation.

Chart 3: Speakers Evaluations



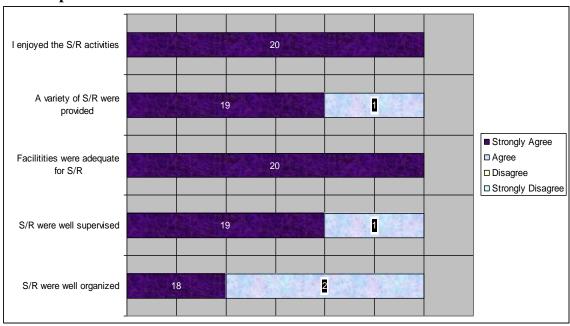
Many of the students were interested in the speakers' presentations. Some of the students felt that a few of the speakers did they respond well to their questions.

Chart 4: Field Trips Evaluations



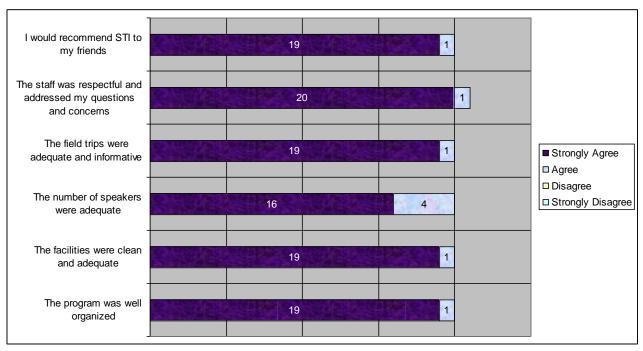
The students enjoyed the trips and felt like they contributed to their understanding of transportation and transportation careers

Chart 5: Sports and Recreation Evaluations



The students were pleased with sports and recreation activities. They did however; complain about the lack of air conditioning in the old gymnasium.

Chart 6: Over-All Program Evaluations



The majority of students felt that they would recommend the STI to their friends.

APPENDIX B

PRE/POST SURVEY CHARTS

Chart 1: Information regarding how the twenty participants learned about the STI program is illustrated.

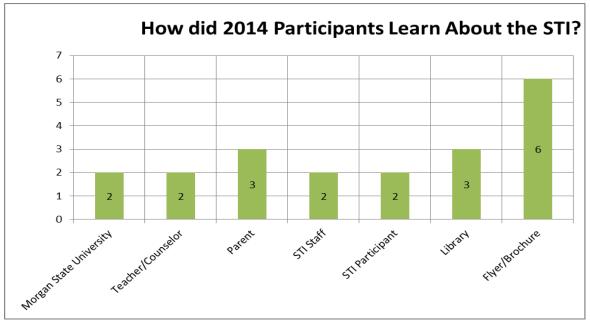


Chart 2: At the beginning of the program, the participants were asked their expectations of the STI program. The participants' responses are provided below.

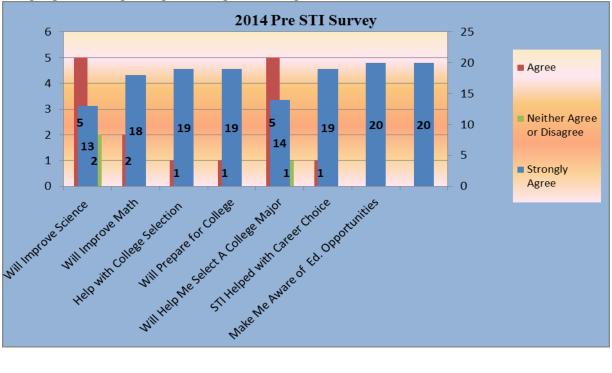
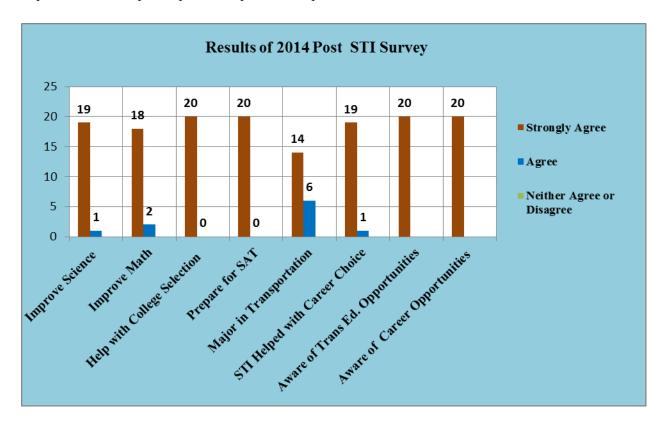


Chart 3: At the end of the program, the participants were asked if the program met their expectations. The participants' responses are provided below.



APPENDIX C

STI Weekly Activity Schedules

Morgan State University National Transportation Center Summer Transportation Institute Activity Schedule 2014

Sister Check In	June 27(Frida	nv)				
9:00-9:30 Staff/Student Introduction 9:30-10:00 Introduction - STI Rules and Guidelines 10:00-11:00 Campus Tour 11:00-12:45 T-Shirts , Bear ID Cards 12:00-12:30 LUNCH 1:00-2:00 Teaming/Team Leader 2:30-3:30 Gymnasium 3:45-4:20 Careers in Transportation Research /Syllabus 4:20-4:00 Journal Entry / Oral Reflections Dismissal: 4:30 June 30 (Monday) 8:30-8:45 Check- In 8:30-8:45 Check- In 1:00-2:00 TRIP: GE Aviation 1:00-2:00 Trip and Team Research Discussion 3:30-4:00 Journal Entry/Oral Reflection Dismissal: 4:30 July 1 (Tuesday) 8:30-9:00 Check- In 9:00-9:30 PSAT/SAT Prep/Drill 10:00-4:00 TRIP: Smithsonian Museum of American History: America on the Move Exhibit 10:00-4:00 TRIP: Smithsonian Museum of American History: America on the Move Exhibit 10:00-10:00 PSAT/SAT Prep/Drill 10:00-11:00 PSAT/SAT Prep/Drill 10:00-11:00 PSAT/SAT Prep/Drill 10:00-11:00 PSAT/SAT Prep/Drill 10:00-11:00 PSAT/SAT Prep/Drill 10:00-11:01 Enhancement Activity: The 6 Most Important Decisions You will Make Decision 1: SCHOOL 11:00-11:45 Computer Research: Careers in Transportation Safety 11:00-2:30 LUNCH 11:00-2:30 Recreation 12:30-4:15 Computer Research : Careers in Transportation Safety 12:00-1:20 LUNCH 17:01:45 Check- In 17:01:45 Check- In 17:01:45 TRIP: Maryland Transit Administration 10:00-2:00 Lunch 11:00-2:00 Lunch 11:00-2:00 TRIP: Maryland Transit Administration 10:00-2:00 Lunch 10:00-2:00 TRIP: Maryland Transit Administration 10:00-2:00 Lunch 10:00-2:00 Lunch						
9:30-10:00						
10:00-11:00						
11:00-12:45						
12:00-12:30		1				
1:00 - 2:00						
2:30-3:30 Gymnasium						
3:45-4:20						
4:20 - 4:00 Journal Entry / Oral Reflections Dismissal: 4:30						
Signar S						
S:30 -8:45		•				
S:45-10:00						
10:00 - 1:00						
1:00 - 2:00						
2:00 - 3:30						
3:30 - 4:00 Journal Entry/Oral Reflection Dismissal: 4:30						
3:30 - 4:00 Journal Entry/Oral Reflection Dismissal: 4:30						
Si30 -9:00 Check- In						
8:30 -9:00 Check- In 9:00-9:30 PSAT/SAT Prep/Drill 10:00-4:00 TRIP: Smithsonian Museum of American History: America on the Move Exhibit 4:20-4:30 Journal Entry/Oral Reflection JULY 2 (Wednesday) 8:30 -9:00 Check- In 9:00 -10:00 PSAT/SAT Prep/Drill Enhancement Activity: The 6 Most Important Decisions You will Make Decision 1: SCHOOL 11:00-11:45 Computer Research: Careers in Transportation Safety 12:00-12:30 LUNCH 1:00-2:30 Recreation 2:30-4:15 Computer Research: Careers in Transportation Safety 4:15-4:30 Journal Entry/Oral Reflection Dismissal: 4:30 uly 3 (Thursday) 8:30 -8:45 Check- In 9:30-1:00 TRIP: Maryland Transit Administration 1:00-2:00 Lunch 7 cam Computer Research: Water Related Careers in Transportation						
9:00-9:30 PSAT/SAT Prep/Drill 10:00-4:00 TRIP: Smithsonian Museum of American History: America on the Move Exhibit 4:20-4:30 Journal Entry/Oral Reflection Dismissal: 4:30 JULY 2 (Wednesday) 8:30 -9:00 Check- In 9:00 -10:00 PSAT/SAT Prep/Drill Enhancement Activity: The 6 Most Important Decisions You will Make Decision 1: SCHOOL 11:00-11:45 Computer Research: Careers in Transportation Safety 1:00-2:30 Recreation 2:30-4:15 Computer Research: Careers in Transportation Safety 4:15-4:30 Journal Entry/Oral Reflection Dismissal: 4:30 uly 3 (Thursday) 8:30 -8:45 Check- In 9:30-1:00 TRIP: Maryland Transit Administration 1:00-2:00 Lunch 2:30-4:15 Team Computer Research: Water Related Careers in Transportation	• •	•				
10:00-4:00						
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2:30-4:15 Team Computer Research: Water Related Careers in Transportation	9:30-1:00	7-1:00 TRIP: Maryland Transit Administration				
	1:00-2:00					
4:15-4:30 Journal Entry/Oral Reflection Dismissal 4:30	2:30-4:15					
	4:15-4:30	Journal Entry/Oral Reflection Dismissal 4:30				

Morgan State University National Transportation Center Summer Transportation Institute Activity Schedule 2014

JULY 7 (Mo	onday)		
8:30 -8:45	Check- In		
9:30-1:00	TRIP: Baltimore City Traffic Management Center		
1:00-2:00	Lunch	g	
2:30-4:15		Related Careers in Transportation	
4:15-4:30	Journal Entry/Oral Reflection	Dismissal 4:30	
JULY 8 (Tu	·		
8:30 - 8:45	Check- In		
8:45- 9:45	PSAT/SAT Prep/Drill		
10:00 -1:00	TRIP: Maryland Boat Pilots Association		
1:00-2:00	LUNCH		
2:30-3:30	Recreation		
3:30- 4:20	Team Computer Research: Water	Related Careers in Transportation	
4:20 -4:30	Journal Entry/Oral Reflection	Dismissal 4:30	
JULY 9 (Wednesday)			
8:30 - 8:45	Check- In		
8:45 - 9:30	PSAT/SAT Prep/Drill		
9:30 -1:00	TRIP: Goddard Space Flight Cen	ter	
1:00 -2:00	LUNCH		
2:00- 3:15	Team Presentations: Transportation	on Systems, Safety and Security	
3:30 - 4:15			
	Decision 2: FRIENDS		
4:15 - 4:30	Journal Entry/Oral Reflection	Dismissal 4:30	
JULY 10 (T	• • • • • • • • • • • • • • • • • • • •		
8:30 – 8:45	Check- In		
8:45- 10:00	PSAT/SAT Prep/Drill		
10:00 -11:00	-	Related Careers in Transportation	
12:00-12:30	LUNCH		
1:00-2:00	Bridge Theory and Construction		
2:00-4:00	Bridge Building/Questions		
4:20-4:30	Journal Entry/Oral Reflection	Dismissal 4:30	
JULY 11 (F)	• 7		
8:30 - 8:45	Check- In		
8:45 -11:00	The state of the s		
	12:00-2:00 TRIP: Maryland Port Authority		
3:00-4:15 Enhancement Activity: The 6 Most Important Decisions You will Ever Make			
4.20 4.20	Decision 3: PARENTS Lovemal Entry/Oral Reflection	Diamicael 4:20	
4:20 - 4:30	Journal Entry/Oral Reflection	Dismissal 4:30	

Morgan State University National Transportation Center Summer Transportation Institute Activity Schedule 2014

July 14 (Mon	July 14 (Monday)				
8:30 - 8:45	Check- In				
9:00- 10:00	PSAT/SAT Prep/Drill				
10:00-11:15	Team Presentations - Careers in Water	· Related Transportation			
11:15-12:00	Speaker: Tranell Griffin (Maryland Trans				
12:00-1:00	LUNCH	,			
1:00-3:00	Team Computer Research: Careers in	Land and Rail			
Transportation	-				
3:00- 4:15	Solar Car Construction				
4:15-4:30	Journal Entry/Oral Reflection	Dismissal 4:30			
JULY 15 (Tu	esday)				
8:30 - 9:00	Check- In				
9:00 -10:00	PSAT/SAT Prep/Drill				
10:00-11:30	Solar Car Construction (cont.')				
11:30-12:00	Rail Transportation (Video)/Discussion				
12:00-1:00	LUNCH				
1:00-2:00	Recreation				
2:00-3:30	Team Computer Research: Careers in I	and and Rail Transportation			
3:30-4:15					
	Decision 4: DATING				
4:15-4:30	Journal Entry/Oral Reflection	Dismissal 4:30			
JULY 16 (We	ednesday)				
8:30 - 8:45	Check- In				
9:00- 4:00	TRIP: Full Moon Farm (Horse Power vs	s. Engine Power)			
4:10 - 4:30	Journal Entry/Oral Reflection	Dismissal 4:30			
JULY 17(Thu	, , , , , , , , , , , , , , , , , , ,				
8:30 - 9:00	Check- In				
9:00 -10:00	PSAT/SAT Prep/Drill				
10:00-11:15	Land and Rail Careers in Transportation I				
11:15-12:00	Enhancement Activity: The 6 Most Important De	cisions You will Ever Make			
	Decision 5: ADDICTIONS				
1:00-2:00	Recreation				
2:00-3:15	Team Presentations – Careers in Land as	nd Rail Transportation			
3:15-4:10	Rocket Power and Construction				
4:10 - 4:30	Journal Entry/Oral Reflection	Dismissal 4:30			
JULY 18 (Fri					
8:30 – 8:45	Check- In				
8:45 - 9:30	PSAT/SAT Prep/Drill	.			
9:30-10:30	SPEAKER: State Highway Administration	on Engineer			
10:30-11:15	Rocket Construction				
11:15-3:30	LUNCH/ Harbor Exploration Cruise	D: 1 120			
4:10-4:10	Journal Entry/Oral Reflection	Dismissal 4:30			

Morgan State University National Transportation Center Summer Transportation Institute Activity Schedule 2014

JULY 21 (Mo	onday)				
8:30 – 8:45	Check- In				
8:45- 9:30	PSAT/SAT Prep/Drill				
9:30-11:00	SPEAKER: Princeton Review-Preparing for	or College			
11:00 – 12:00	Team Computer Research: Air Transportat				
12:00-1:00	LUNCH	ion careers			
1:00 - 3:30	TRIP: Enoch Pratt Central Library- Resour	ces and Research			
4:10 - 4:30	Journal Entry/Oral Reflection	Dismissal 4:30			
JULY 22 (Tue	•				
830 - 8:45	Check- In				
9:00 - 3:30	TRIP: GE Aviation				
3:30 -4:10	Team Presentation/Preparation Discussion				
4;10 - 4:30	Journal Entry Dismissal	4:30			
JULY 23 (We	ednesday)				
8:30 - 8:45	Check- In				
9:00 - 9:30	PSAT/SAT Prep/Drill				
9:30 -10:30	Team Presentation/Preparation Discussion				
10:30-11:30	SPEAKER: Dr. Anthony Saka, "Education Opportunitie	es in Transportation"			
11:30-12:00	Team Presentations Careers in Air Transportation				
12:00-1:00	LUNCH				
1:00-3:00	Stagger STI Participants into the car Simulat	or (2 groups of 10)			
1:00-2:00	Team Presentations Careers in Air Transportation				
2:00- 3:30	Enhancement Activity: The 6 Most Important Decisions You will Ever Make				
	Decision 6: SELF- WORTH				
3:30-4:10	Car Simulator Discussion				
4:25 - 4:30	Journal Entry/Oral Reflection	Dismissal 4:30			
JULY 24 (Th					
8:30 - 9:00	Check- In				
9:00-10:30	PSAT/SAT/ MOCK TEST				
10:30-11:30	SPEAKER: Sharon Epps, Civil Engineer, State Highwa	y Administration			
11:30-12:00	Project Completion (Rockets, Cars, Bridges)				
12:00-1:00	LUNCH				
1:00-2:00	Recreation				
2:00-3:00	Rocket Launch and Retrieval				
3:00-4:00	Bridge Competition and Awards				
4:10-4:30	Journal Entry/Oral Reflection	Dismissal 4:30			
	July 25 (Friday)				
8:30 - 8:45	Check- In				
9:00-10:30	Project Completion (Rockets, Cars, Bridges)				
10:30-11:00	Inventory and Closing				
12:00-1:00	LUNCH	Dismissal 1:00			
6:00-8:00	Awards and Closing Banquet				

APPENDIX D

2014 STI Photographs





STI Orientation for participants and their parents.



Morgan State University Campus Tour



Students researching careers in transportation







STI students constructing rockets



Students visiting the Smithsonian Air and Space Museum



Students listen to an engineer from the Baltimore City Traffic Management Center.



Students go behind the scenes at the Maryland Transit Administration (MTA)



STI participants listen to a presenter at the MTA



Touring the MTA



Students on the Chesapeake Bay with a pilot from the Association of Maryland Boat Pilots



Preparing to board the boat after having water safety training

Students engaged in lessons about distracted driving.



Students test their skills on a car simulator



Some of the members of the STI Advisory Board have a panel discussion with the STI participants.



Students on a tour of Maryland Port activities.

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