



Baltimore, Maryland  
Hyatt Regency Inner Harbor



## Site Descriptions July 26, 2016

### The 1881 Institute of Technology

African American high school students need to be equipped to avoid obsolescence in the labor force, as it relates to STEM fields, and The 1881 Research Institute solves this by providing a STEM oriented, collegiate high school where students graduate with mastery at a college sophomore level in an engineering discipline. Students at The 1881 Research Institute work on hands-on projects that directly impact the surrounding community; thus, promoting a sense of obligation to the community in which they live. Lastly, The 1881 Institute of Technology create pathways to STEM jobs and STEM higher education. The Founder and Executive Director, Bahiy Watson, will take us on a virtual journey to New Orleans, Louisiana, to learn more about 1881 Institute of Technology's program offerings, students, and results.

### Baltimore Electrical Joint Apprenticeship & Training Committee Local No. 24

This training center is a two-story facility with twelve classrooms. It trains in state of the art electrical needs for its employers including fiber optics, solar panels, electrical security, air conditioning and heating, and high voltage cable splicing. Each year, there are approximately 350 apprentices enrolled in the program, and half of the apprentices are youth. Apprentice graduates earn 30 academic credits from the CCBC. Apprentices at this center have won awards in the SkillsUSA regional competition. This tour will include hands-on demonstrations from apprentices, including a demonstration of the electric car on-site.

### Digital Harbor Tech Center

The Digital Harbor Foundation Tech Center delivers innovative, youth-focused technology education programs in high-growth pathways ranging from digital fabrication (3D printing) to web development, electronics and coding. These programs aim youth toward career-readiness through both tech-skill and soft-skill development (such as innovation, grit, perseverance).

In 2016 Digital Harbor expects to reach 2000+ students in grades 1-12 from 90 Baltimore-area schools. All youth programs operate on a pay-what-you-can basis to allow all interested youth to attend.

## Fresh Start

The Fresh Start program serves youth and communities in Baltimore City and Washington, DC. Fresh Start is a 40-week job skills training program that serves out-of-school youth, ages 17-19, most of whom are referred by the Maryland Department of Juvenile Services. The program uses carpentry as a medium to teach reading, writing, math, history, and science. Students work in the Foundation's Maritime Institute workshop and the Douglass-Myers Maritime Park boatbuilding workshop, building toolboxes, furniture, and boats. They also receive classroom instruction and one-on-one tutoring. The curriculum is designed to increase self-reliance, teach problem solving and academic skills, and demonstrate how academic skills and knowledge are used in a practical work environment. Fresh Start students increase their math, reading, and writing levels by an average of 1.5 grade levels while in the program. 75-80% of graduates remain employed and/or in school for three years after completion of the program. The Fresh Start program is one example of how Living Classrooms is changing lives by teaching marketable job skills. The U.S. Department of Labor and the National Youth Employment Coalition continue to recognize Living Classrooms' Fresh Start program for "best practices working with at-risk youth" and for embodying a "continuous improvement process."

## International Union of Operating Engineers Local No. 37

This is a new training center, open only about five weeks. Youth apprentices in this program are from underrepresented populations. The center trains apprentices to operate moving equipment including cranes, fork lifts, back hoes, and other heavy equipment for large commercial and federal work projects. The site has three simulators that apprentices use before they get the opportunity to operate the machinery. Apprentices at the facility will do demonstrations of heavy machinery, and visitors will be able to demo the simulators. Visitors will be able to use the simulators. During the tour, visitors will observe a group of apprenticeship instructors from around the country participating in a "train the trainer" course. Visitors will learn how US apprenticeship trainers keep up their skills.

## Plumbers & Steamfitters Local No. 486

This is a large two-story facility with large classrooms and meeting rooms. Youth apprentices at this center are from diverse backgrounds. Apprentices at this training center learn skills for employers in the aerospace, bio-medical and pharmaceutical industries and the military. They work a lot with gas installation. Apprentices will demonstrate their work in their gas lab, orbital welding, and microchip plates. Here, apprentices will demonstrate how their work blends into and supports the other trades.

### *Registered Apprenticeship Sites*

The apprenticeship training centers included in the tours work with the high schools to recruit students as well as other sources, particularly for out-of-school youth. They all have articulation agreements to transfer credits to the Community College of Baltimore (CCBC). The Baltimore Electrical Joint Apprenticeship & Training Committee Local No. 24 and Plumbers & Steamfitters Local No. 486 are members of the U.S. Department of Labor's Registered-Apprenticeship College Consortium (RACC). (<https://www.doleta.gov/oa/racc.cfm>)