



## MODS STEMobile Year 2 Final Report 2024 - 2025

### Executive Summary

---



The Museum of Discovery and Science (MODS) is addressing the critical need for resilience education in Broward County and the educational impact of the COVID slide through an innovative community education delivery model called the *MODS STEMobile* – a mobile immersive museum on wheels. A fleet of five *STEMobiles* impact youth and students in grades prekindergarten through 12, with programs delivered FREE in Broward Title 1 schools, marginalized

communities or to youth attending social service agencies such as Boys & Girls Clubs, YMCAs and low-income early learning centers. Through a partnership in the Broward College UP initiative, program delivery is focused on the 11 lowest income zip codes in Broward County most affected by intergenerational poverty, economic immobility, highest average unemployment and the lowest educational attainment levels. (zip codes: 33309, 33311, 33313, 33314, 33319, 33023, 33020, 33064, 33065, 33069, 33441)

In 2024/25, the *MODS STEMobile* also provided professional development for early learning educators at Jack & Jill Center aligning with Florida Early Learning & Developmental Standards and supports paid workforce development through *MODS STEMobile* training and internship positions for Broward high school students in grades 10-12.

The *MODS STEMobile* transforms students from passive receivers of knowledge to real-world planners, engineers and architects, encouraging curiosity, new ways of thinking and analysis of critical resilience and climate change issues facing their future. The *MODS STEMobile* combines the intentional integration of content with in-depth, project-based design and engineering challenges meaningfully embedded into real-world contexts. Combining design and engineering practices, when young minds are most malleable, establishes lifelong thinking skills that can have a significant impact upon critical resilience issues impacting Broward as a livable community, particularly the impact of climate change on public transportation and the safety of our residents, roads and buildings. The *MODS STEMobile*, in partnership with the Broward MPO and in support of its visionary goals, is providing the innovative education delivery model that will impact Broward students and youth for generations to come.

In July 2023, Broward MPO entered into an agreement with the Museum of Discovery and Science (MODS) to support the *MODS STEMobile* in achieving the objectives, expected outcomes and tasks outlined in the attached Scope of Services.

## Progress

---

### Task 2.1 – Implementation of Student/Youth Education through the *MODS STEMobile*

**Objective:** MODS will implement and evaluate student and youth education and engagement programs regarding resiliency and public transportation delivered through its MODS STEMobile. Student/youth education programs will be delivered by MODS trained STEM educators in partnership with corporations, foundations, social service agencies and Broward County Public Schools (BCPS). MODS STEMobile delivery will occur on a year-round basis, with programs scheduled by the Museum’s Guest Experiences Division and offered as a selection to 40,000 youth through MODS STEMobile programming annually, including FREE programs to students and youth in Broward Title 1 schools, marginalized communities or attending social service agencies such as Boys & Girls Clubs and YMCAs as well as low-income early learning centers.

**Progress:** From August 1, 2024, to July 28, 2025, MODS accomplished the following deliverables:

- Delivered student and youth engagement programs year-round through the *MODS STEMobile* to **60,842** learners in Broward County, a 51% increase over the 40,000 students outlined in our contract. In total, **587 STEMobile** programs were delivered on **230** separate days.
- Delivered **90%** of all programs FREE of charge to youth with unmet needs, focusing on youth in 11 low-income zip codes, identified by Broward College’s UP (Unlimited Potential) program as communities most affected by intergenerational poverty, economic immobility and lowest education attainment levels. Programs were delivered to youth and students in Broward Title 1 schools, marginalized communities or attending social service youth agencies such as Boys & Girls Clubs and YMCAs, as well as Broward low-income early learning centers.
- Integrated *Think Like a Planner* and *Complete Street* content into the delivery of the *STEMobile’s* most frequently requested programs – *Weather the Storm* and *Everglades Adventure* – so that the next generation understands and engages in the process of planning, engineering and design to create a livable community.
- Supported Broward MPO’s commitment to public involvement through the implementation of student and youth engagement programs delivered by the MODS STEMobile.

### Task 3.0 – Evaluation

**Objective:** MODS will survey students/youth to determine knowledge gained and sentiments/behaviors changed.

**Progress:** During each STEMobile visit, surveys were administered by *MODS STEMobile* educators via paper or iPads. Educators observed and evaluated students’ performance. Evaluations were assessed by the Museum’s Director of STEM Learning and STEMobile Educators.

Project results are as follows:

- 90% of young learners indicated a heightened sense of curiosity, persistence, creativity and inventiveness.
- 92% of young learners explored and created objects by using problem solving skills.
- 91% of young learners developed an eagerness for STEAM learning by engaging in meaningful, socially interactive, joyful and iterative experiences.
- 74% of teachers indicated they feel more confident incorporating STEAM-based lessons into their classroom instruction.

Surveys administered to teachers and parents/caregivers at community events and family science nights indicated that:

- The programs and resources were well-received and considered of high quality
- Teachers and parents/caregivers felt more confident exploring STEAM with their children
- “The content taught was very insightful and coordinates to the content we implement in class”

## **Broward MPO & MODS: Partners in Education**

---

As a partner in the *MODS STEMobile*, Broward MPO initiatives and goals were showcased as follows:

- Broward MPO logo permanently affixed on the fleet of *MODS STEMobiles*
- Broward MPO logo in the *MODS Experience Planner and Resource Guide* (distributed to Broward County public and private schools, Miami-Dade County Public Schools and School District of Palm Beach County)
- Broward MPO logo in the *MODS Minute* Weekly E-newsletter (145,900+ per email)
- Broward MPO mentioned in social media posts on Instagram, Facebook, LinkedIn & Twitter (72,300 total followers)
- Broward MPO logo on the *MODS STEMobile* flyer (1,000 distributed annually in community)
- Broward MPO logo on MODS website with 674,000+ unique visitors annually