MICHIGAN DEPARTMENT OF EDUCATION (MDE) Office of Systems, Evaluation, and Technology Section 99h: Competitive Robotics Competition Grant

Request for Proposal (RFP) GENERAL INSTRUCTIONS September 22, 2022

(Updated 10/17/2022)

DISCLAIMER:

THE FOLLOWING COMPETITIVE GRANT IS ANNOUNCED, AND AWARD IS CONTINGENT ON THE AVAILABILITY OF FUNDS. GRANT APPLICATIONS WILL BE COLLECTED USING NEXSYS. FUNDS WILL BE MADE AVAILABLE THROUGH THE STATE AID MANAGEMENT SYSTEM (SAMS) FOR PUBLIC SCHOOLS AND SIGMA FOR NON-PUBLIC SCHOOLS.

INTRODUCTION:

The fiscal year (FY) 2022 State School Aid Act, Section 99h appropriated \$5,223,200 for the 2022-23 school year for competitive grants to districts that provide pupils in grades K-12 with expanded opportunities to improve mathematics, science, and technology skills by participating in events hosted by science and technology development program known as FIRST (For Inspiration and Recognition of Science and Technology) or other competitive robotics programs, including those hosted by the Robotics Education and Competition (REC) Foundation known as VEX, VEX IQ, and RAD, Square One, and MATE.

PURPOSE OF THE GRANT:

The intent of the grant is to increase the number of pupils demonstrating proficiency in science and mathematics on the state assessments and to increase the number of pupils who are college-and career-ready upon high school graduation. The competitive Robotics Competition Grant support Michigan's Top 10 Strategic Education Plan's mission of supporting learning and learners by addressing all the guiding principles by offering districts the autonomy to choose the comprehensive robotics program that best meets the needs of their students, family, and community.

The 99h: Competitive Robotics Competition Grant programming engages students in well-rounded learning experiences in Science, Technology, Engineering, and Mathematics (STEM), language, business, culture, and creativity, as well as providing access to personalized learning technologies that support and enhance those learning experiences. The 99h: Competitive Robotics Competition Grant provides coaches and mentors with opportunities to receive additional professional development and access to State Continuing Education Clock-Hours (SCECH). The Grant Program provides funding to districts with high-risk factors to ensure access to equitable resources. Finally, the 99h: Competitive Robotics Competition Grant Program requires the establishment of partnerships between teams and job providers, community colleges, and higher education to assure a prepared and quality future workforce.

ELIGIBLE APPLICANTS:

All individual local education agencies (LEAs), public school academies (PSAs), and intermediate school districts (ISDs) that enroll students in grades K-12 that provide pupils with expanded opportunities to improve mathematics, science and technology skills by participating in robotics competition events are eligible.

Registered nonpublic schools are eligible applicants for current year's funding. To register with the MDE, visit: https://www.michigan.gov/mde/0,4615,7-140-81351----,00.html. Nonpublic schools must be registered with the MDE prior to the application deadline.

GRANT REQUIREMENTS:

The grant requirements upon which applicants will be selected and are required to meet are:

Defined in Statue:

To be eligible for a grant, a district will demonstrate that it has:

- Established a partnership for the purpose of the Robotics competition program with at least one sponsor, business entity, higher education institution, or technical school.
- Submitted a district accumulative budget via the NexSys application.
- Agreed to pay at least 25 percent of the cost of the Robotics competition program.

Proposed by Staff:

Each applicant must:

- Be registered for the current season with the Robotics competition program provider of their choosing.
- Have a current Robotics competition program team number and coach in place for the current season.
- Participate in a minimum of one Robotics competition event in Michigan during the current season or the qualifying number of events for advancement per the guidelines of the Robotics competition program.
- Be willing to offer elective high school credits for students who have successfully logged 60 hours, provided the team attends the minimum number of competitions.
- Be willing to participate in a digital badging program established by the Robotics competitive program.

Note:

- Teams that do not meet the grant requirements, such as participating in the requisite number of competitions for their program, may be subject to defunding of grant by the MDE.
- Teams that have carried over funding from the 2021-22 school year who did not meet the grant requirements last year, will NOT be eligible for funding in the 2022-23 school year.

Each nonpublic school applicant must:

- Be registered with the MDE and meet all state reporting requirements for nonpublic schools.
- Must meet the same requirements as districts and intermediate school districts.

In support of legislative intent, the department shall prorate the total funding allocated under this section equally among all qualified applicants.

TOTAL FUNDS AVAILABLE:

\$4,723,200 for Public Schools

\$600,000 for Non-Public Schools

ROBOTICS COMPETITION PROGRAMMING GRANT STRUCTURE:

The Section 99h: Competitive Robotics Competition Grant funds are designated dollars that must be used solely for the eligible and registered teams that apply and receive them for the purposes outlined below.

a) Coaching Stipend Award

Districts, non-public schools, or intermediate districts with registered Robotics Competition teams (FIRST, REC, Square One, and MATE) in the State of Michigan will be eligible for an award up to a maximum of \$1,500 per building for coaching stipend(s).

b) Support Awards (Event Registrations, Materials, Travel Costs, Other)

The MDE will make support awards available to Robotics Competition Teams, including, FIRST Robotics Competition Teams, FIRST Tech Challenge Teams, FIRST LEGO League Challenge Teams, FIRST LEGO League Explore Teams, and FIRST LEGO League Discover Teams, VEX, VEX IQ, RAD, Square One's Full Scale IVD, Mini IVDRacing, Autonomous IVD, V2X IVD, Underwater IVD robotics teams, and MATE. The support awards will be paid out to eligible districts per team. Awards are limited and will be awarded based on a prorated amount per qualified applicant - represented areas as outlined above.

Actual award amounts may be adjusted based on availability of funding. A district can choose to submit a support award budget line item for less than the grant program structure outlined below. The payment structure is tentatively outlined as follows:

| Team Type | Support Award | Coaching Stipend |
|---------------------------------------|------------------|---------------------|
| FIRST Robotics - Rookie | \$9,000 | \$1,500 |
| FIRST Robotics - Veteran | \$6,000 | \$1,500 |
| FIRST Tech Challenge - Rookie | \$1,500 | \$1,000 |
| FIRST Tech Challenge - Veteran | \$1,500 | \$1,000 |
| FIRST LEGO League-Challenge - Rookie | \$1,000 | \$500 |
| FIRST LEGO League-Challenge - Veteran | \$500 | \$500 |
| FIRST LEGO League-Explore - Rookie | \$500 | \$500 |
| FIRST LEGO League-Explore - Veteran | \$250 | \$500 |
| FIRST LEGO League-Discover - Veteran | \$300 | \$500 |
| FIRST LEGO League-Discover - Rookie | \$500 | \$500 |
| Square One HS Autonomous - Rookie | \$6,000 | \$1,500 |
| Square One HS Autonomous - Veteran | \$5,000 | \$1,500 |
| Square One HS Full Scale - Rookie | \$8,000 | \$1,500 |
| Square One HS Full Scale - Veteran | \$6,000 | \$1,500 |
| Square One HS Mini Racing - Rookie | \$5,000 | \$1,500 |
| Square One HS Mini Racing - Veteran | \$4,000 | \$1,500 |
| Square One MS Mini Racing – Rookie | \$5,000 | \$1,000 |
| Square One MS Mini Racing – Veteran | \$4,000 | \$1,000 |
| Square One HS/MS V2X - Rookie | \$1,000 | \$1,000 |
| Square One HS/MS V2X - Veteran | \$750 | \$1,000 |
| Square One ES V2X - Rookie | \$1,000 | \$500 |
| Square One ES V2X - Veteran | \$750 | \$500 |
| Square One HS/MS Underwater - Rookie | \$4,000 | \$1,000 |
| Square One HS/MS Underwater - Veteran | \$2,500 | \$1,000 |
| Square One ES Underwater – Rookie | \$4,000 | \$500 |
| Square One ES Underwater – Veteran | \$2,500 | \$500 |
| MATE ROV SCOUT | \$1,000 | \$1,000 |
| MATE ROV NAVIGATOR | \$2,300 | \$1,500 |
| MATE ROV RANGER | \$4,500 | \$1,500 |
| MATE ROV PIONEER/EXPLORER | \$6,500 | \$1,500 |
| VIQC-ES - Rookie | \$1,100 | \$500 |
| VIQC-ES - Veteran | \$400 | \$500 |
| VIQC-MS - Rookie | \$1,100 | \$1,000 |
| VIQC-MS - Veteran | \$400 | \$1,000 |

| VRC-MS - Rookie | \$2,200 | \$1,000 |
|------------------|---------|---------|
| VRC-MS - Veteran | \$1,000 | \$1,000 |
| VRC-HS - Rookie | \$2,200 | \$1,500 |
| VRC-HS - Veteran | \$1,000 | \$1,500 |
| ADC-MS | \$600 | \$1,000 |
| ADC-HS | \$600 | \$1,000 |

• Other robotics program funding allocation will be determined based on district request and a program provider cost analysis.

c) Advancement Awards ²

Advancement awards to teams that compete and advance to the next level of competition will be awarded in equal amounts per team. All advancement awards are contingent upon available funding.

Note: All grant recipients must provide a 25% local in-kind or cash match for the total cost of the robotics competition program award. Possible in-kind contributions include items such as: providing a room to build; transportation to and from events; donation of food, supplies, and materials; payment of coaches' FICA and social security, if they are employed by the school district or additional cash payment to coach (see calculation below); etc.

***MDE Stipend Award + 25% Match = Total Stipend Amount ***
Contracted Coach Example: \$1,500 stipend + \$375 match = \$1,875

District Employee/Coach Example: \$1,500 stipend paid to coach = \$1,500 and \$375 paid into FICA = \$1,875

GRANT APPLICATIONS:

Grant applications will be made available via NexSys and monitored by the Educational Technology Unit staff within the Office of Systems, Evaluation, and Technology. Public (ISDs, LEAs, and PSAs) districts submitting an application for more than one team in the district - whether for multiple FTC teams, FRC teams, FLL teams, FLL Jr. teams, VEX, VEX IQ, RAD, Square One teams, MATE teams, or a combination of programming - shall submit a single district-wide application adding a separate page for each team.

Nonpublic school districts applying are also required to submit a single district-wide application adding a separate page for each team. Nonpublic schools are also required to submit a page that provides the MDE with their SIGMA vendor and address code.

Step-by-step instructions for completing the NexSys application can be found at : Competitive 99h: Robotics Competition Grant - Grants - EdTech Initiatives - TechPlan.org

Application Requirements:

- Team name and full permanent team number. Teams with a temporary team number at the time of application should enter the full temporary number.
- Name and contact information (email address and phone number) of team coach.
- Agree to contribute a match of at least 25 percent of the total robotics program award. The required match may be in the form of cash or the fair market value of in-kind donations from any of the following sources, including but not limited to the school district, other grants, and donations from corporate partnerships or individuals.
- Name and classification of one sponsor per robotics team. The same sponsor can be assigned to multiple teams.
 - o Business/Nonprofit
 - Higher Education Institute
 - Technical School
 - Individual
- District-wide cumulative spending plan. The spending plan in NexSys will be a formal budget summary and budget detail.

ASSURANCE OF ACCURACY:

An assurance must be submitted stating that all information provided within is true and accurate. If, during the implementation of any funded project, the MDE establishes that inaccurate or false information was provided in the application, the grant may be rescinded.

PROCESS FOR THE GRANT COMPETITION:

| Key Dates* | | |
|--|--|--|
| September 22, 2022 | Grant RFP is announced via eblast memo | |
| September 29, 2022 | Technical Assistance Webinar | |
| October 1, 2022 | Application is live in NexSys | |
| October 31, 2022 | Applications due at 12:00 p.m. in NexSys | |
| Held for six weeks following the application | close dateGrant application review | |
| January 1, 2023 | Grant Awards Announced | |
| February 2023 | Awards made via SAMS and SIGMA | |
| *All dates subject to change at the discretion of the MDE. | | |

REJECTION OF PROPOSALS:

The MDE reserves the right to reject any applications received as a result of this grant program announcement.

REVIEW PROCESS, CRITERIA, AND REVIEWERS:

The MDE utilizes a review panel when scoring its competitive grants. For this grant program, review teams will be composed of people from within and outside the MDE as needed, with expertise in the multiple robotics competition programs. The MDE staff will supervise the review process. An administrative review will be conducted by MDE prior to funding and at the end of the season to ensure all teams meet the grant requirements.

LENGTH OF AWARD:

All funds awarded as part of FY2022 of State School Aid, Section 99h must be used in full by September 30, 2023.

INDIRECT CHARGES:

State law does not allow indirect charges on State School Aid funds.

PAYMENT SCHEDULE:

Payments for the Coaching Stipend Awards and Support Awards are anticipated to be scheduled to be awarded in full in February via SAMS. Funding for Advancement Awards will be scheduled for June 2023 at the discretion of the Office of Systems, Evaluation, and Technology in coordination with members of the robotics competition program providers.

ADDITIONAL RESOURCES:

The MDE, FIRST in Michigan, RECF, Square One, and MATE have worked together to provide supplementary resources for grant applicants. They include but are not limited to a Frequently Asked Questions (FAQ) document, recording of the technical assistance webinar, step-by-step instructions, and State Continuing Education Clock Hours instructions and log. These resources can be found at Competitive 99h: Robotics Competition Grant - Grants - EdTech Initiatives - TechPlan.org. For additional information regarding the continuum of FIRST Robotics programming in Michigan, visit http://www.firstinmichigan.org/. For additional information regarding the REC Foundation VEX, VEX IQ, and RAD programming, visit https://www.roboticseducation.org/. For additional information regarding the Square One programming, visit https://www.squareonenetwork.org/. for additional information regarding MATE, visit MATE ROV Competition Website.