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

Request for Proposal (RFP) GENERAL INSTRUCTIONS (December 9, 2021)

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) 2021 State School Aid Act, Section 99h appropriated \$5,323,200 for the 2021-22 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, and Square One.

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 of 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 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: <u>https://www.michigan.gov/mde/0,4615,7-140-81351_81352_35175---,00.html</u>. 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 spending plan/district accumulative budget.
- 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 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 2020-21 SY because they did not meet the grant requirements last year, will NOT be eligible for funding in the 2021-22 school year.

Each nonpublic school applicant must:

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

In support of legislative intent, all awards will be distributed to districts in a competitive and equitable manner that will maximize the number of teams that will be able to receive funding. Preference will be given to applicants that support under-represented areas by prioritizing:

- High economically disadvantaged populations.
- Districts in a broad geographical distribution.
- Schools that serve a high percentage of low-income families (based on Free and Reduced Lunch count data).
- First time teams participating in Robotics competitions starting with the high school program and working down to kindergarten.
- Districts that establish feeder teams (teams that generate student populations that will potentially move up to high school or middle school programs).

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, etc.) in the State of Michigan will be eligible for an award up to \$1,500 per building, per program 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 Tech Challenge Teams, FIRST LEGO League Teams, FIRST LEGO League Jr. Teams, VEX, VEX IQ, RAD, and Square One's Full Scale IVD, Mini IVD Racing, Autonomous IVD, V2X IVD, and Underwater IVD robotics teams, as well as any other robotics programs that meet the grant requirements. The support awards will be paid out to eligible districts per team. Awards are limitedand will be awarded based on the prioritization of needs that support under- represented areas outlined on page 3. 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:

High School - FIRST		\$0.000
Robotics Competition (FRC)	Rookie (1st year) FRC Team	\$9,000
	2nd Year FRC Team	\$8,000
	3rd Year FRC Team	\$7,000
	4th Year FRC Team	\$6,000
	5th Year or older FRC Team	\$6,000
	Total Number of FRC Coach Stipends	\$1,500
Middle School - FIRST Tech Challenge (FTC)	Total Number of FTC Rookie Teams	\$2,000
	Total Number of FTC Veteran Teams	\$1,000
	Total Number of FTC Coach Stipends	\$1,000
Upper Elementary - FIRST LEGO League-Challenge (FLL-C)	Total Number of FLL-C Rookie Teams	\$1,000
(=)	Total Number of FLL-C Veteran Teams	\$300
	Total Number of FLL-C Coach Stipends	\$500
Kindergarten - Grade 3 FIRST LEGO League-Explore (FLL-E)	Total Number of FLL-E Teams Rookie Teams	\$300
	Total Number of FLL-E Teams Veteran Teams	\$200
	Total Number of FLL-E Coach Stipends	\$300
Pre-K - FIRST LEGO League- Discover (FLL-D)	Total Number of FLL-D Teams (Rookies and Veterans)	\$350
	Total Number of FLL-D Coach Stipends	\$200
RECF Robotics		
High School / Middle School VEX Robotics Competition		¢0.000
(VRC)	Total Number of VRC Rookie Teams	\$2,000
	Total Number of VRC Veteran Teams	\$1,000
	Total Number of VRC HS Coach Stipends	\$1,500
	Total Number of VRC MS Coach Stipends	\$1,000
Middle School / Elementary	Total Number of VEX IQ Rookie Teams	\$1,000
VEX IQ		あしいいい

	Total Number of VEX IQ MS Coach Stipends	\$500
	Total Number of VEX IQ ES Coach Stipends	\$500
High Sobool VEY AL	Total Number of VEX AI Rookie Teams	\$3,500
High School VEX AI	Total Number of VEX AI Veteran Teams	\$3,500
	Total Number of VEX Al Coach Stipends	\$3,500
High School RAD	Total Number of RAD Rookie Teams	\$500
	Total Number of RAD Veteran Teams	\$200
	Total Number of RAD Coach Stipends	\$750
Square One		
High School Autonomous	Total Number of Autonomous Rookie Teams	\$6,000
	Total Number of Autonomous Veteran Teams	\$5,000
	Total Number of Autonomous Coach Stipends	\$1,500
High School Full Scale	Total Number of Full Scale Rookie Teams	\$8,000
	Total Number of Full Scale Veteran Teams	\$6,000
	Total Number of Full Scale Coach Stipends	\$1,500
High School / Middle School		
Mini Racing	Total Number of Mini Racing Rookie Teams	\$5,000
	Total Number of Mini Racing Veteran Teams Total Number of Mini Racing HS Coach Stipends	\$4,000 \$1,500
	Total Number of Mini Racing MS Coach Stipends	\$1,000
High School V2X	Total Number of V2X Rookie Teams	\$1,000
	Total Number of V2X Veteran Teams	\$750
	Total Number of V2X Coach Stipends	\$1,000
High, Middle, Elementary		# 4 000
School Underwater	Total Number of Underwater Notice Teams	\$4,000
	Total Number of Underwater Veteran Teams Total Number of Underwater HS Coach	\$2,500
	Stipends	\$1,000
	Total Number of Underwater MS Coach Stipends	\$1,000
	Total Number of Underwater ES Coach Stipends	\$500

• 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 totalcost 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 = \$375

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, or a combination of programming - shall submit a single district-wide application adding a separate page for each team.

Nonpublic school districts submitting an application are all also required to submit a single district-wide application adding a separate page for each team. Nonpublic schools are also required tosubmit 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 <u>https://www.techplan.org/edtech-initiatives/rdi/first-robotics/</u>.

² The testing window for the state required summative assessments for 2021-22 have beenannounced spanning a window from the week of April 11 to the week of May 27. A link to the M-Step Testing Calendar can be found at: <u>2020-2021 Guide to State Assessments (michigan.gov)</u>. These dates may overlap with required 99h: Competitive Robotics Competition schedules. To receive the advancement award, it is required for students to participate in the Championships. It is suggested that districts and teams work together to ensure student participation in both testing and the advancement events.

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.
 - Business/Nonprofit
 - Higher Education Institute
 - Technical School
 - o 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* November 11, 2021.....Grant RFP is announced via eblast memo November 22, 2021.....<u>Technical Assistance Webinar</u> December 9.2021.....Application is live in NexSys January 6, 2022.....Applications due at 4:30 p.m. in NexSys Held the week after the application closesGrant application review January 17, 2022.....Grant Awards Announced February 20, 2022.....Awards made via SAMS *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 FY2021 of State School Aid, Section 99h must be used in full by September 30, 2022.

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 for February via SAMS. Funding for Advancement Awards will be scheduled for May 2022 at the discretion of the Office of Systems, Evaluation, and Technology in coordination with members of the robotics competition programs.

ADDITIONAL RESOURCES:

The MDE, FIRST in Michigan, RECF, and Square One have worked together to provide supplementary resources for grant applicants. They include but are not limited to a Frequently Asked Questions (FAQ) document, a template spending plan, a template student roster, and State Continuing Education Clock Hours instructions and log. These resources can be found at

<u>https://www.techplan.org/edtech-initiatives/rdi/first-robotics/</u>. For additional information regarding the continuum of FIRST Robotics programming in Michigan, visit <u>http://www.firstinmichigan.org/</u>. For additional information regarding the REC Foundation VEX, VEX IQ, and RAD programming, visit

<u>https://www.roboticseducation.org/</u>. For additional information regarding the Square One programming, visit <u>https://www.squareonenetwork.org/</u>.