



Museums for America

Sample Application MA-251517-OMS-22
Project Category: Lifelong Learning

DoSeum

Amount awarded by IMLS:	\$250,000
Amount of cost share:	\$667,684

The DoSeum will complete the fabrication of an exhibition designed to equip children with the skills needed to address the future. The project builds on an earlier IMLS grant that generated community input to support the exhibition design, which targets children ages 4-11 and economically disadvantaged students. The museum will host one final community conversation to solicit feedback, using exhibit prototypes and multimedia elements. The museum will work with contractors to fabricate the exhibition and provide training to staff prior to its opening. Formative and summative evaluation will guide the project, allowing for revisions as needed. The exhibition is intended to travel for five years visiting three sites per year, extending its impact to a potential of 15 additional communities.

Attached are the following components excerpted from the original application.

- Narrative
- Schedule of Completion

When preparing an application for the next deadline, be sure to follow the instructions in the current Notice of Funding Opportunity for the grant program and project category to which you are applying.

Project Justification: Need, problem, or challenge we will address:Planning Phase (already funded)

People of all ages wonder about what the future may hold. We imagine, worry, and predict individually and collectively. Futurists such as Peter Bishop and Elizabeth Merritt describe the possible, potential, and preferable future, all of which exist within the “cone of possibility.”ⁱ (See Endnotes) Children need to acquire and master the skills necessary to respond to all of these future potentials. A young learner’s adaptability is essential to success throughout the learning continuum, in and out of the classroom environment.

Today’s children must turn many challenges into opportunities. These may include uncertain futures, climate change, racial justice, and global pandemics. Since the onset of the COVID-19 pandemic in early 2020, the future suddenly shifted. The impact of the COVID-19 pandemic on K-12 student learning has been significant, leaving students on average five months behind in mathematics and four months behind in reading by the end of the school year. The pandemic widened preexisting opportunity and achievement gaps, hitting historically disadvantaged students hardest.ⁱⁱ Mental health has also come to the surface as a major challenge for children to address, roughly 80 percent of parents in a recent national survey had some level of concern about their child’s mental health or social and emotional health and development since the pandemic began.ⁱⁱⁱ Children and their families have needed to be adaptable, flexible, and resilient.

Locally, in San Antonio the largest independent school district (SAISD) released data in October 2021 showing only half of SAISD students tested at the national average or above their grade levels in reading, a near-ten percent drop from the previous school year’s results. For math, only 38% of SAISD students met or exceeded the national average for their grade level, a drop of 11% from the previous school year.^{iv}

Research has shown that play behavior enhances the adaptability of a child to a stressful condition and promotes cognitive, social, emotional, and psychomotor functionality, thereby strengthening the basis for future health.^v We will need creative and innovative thinkers to take on the issues of this century including learning loss due to global pandemics, mental health issues, climate change, racial justice, and DEAI^{vi} efforts.

We believe 21st century learning skills, future-thinking skills, and STEM leadership skills can provide children with the toolbox necessary to approach these challenges. In 2021 we received funding (\$95,737 IMLS MFA grant provided funds with \$96,488 cost share) to support the Planning Phase of the community-based redevelopment of our 2018 highly successful temporary exhibition, *Dream Tomorrow Today* (see 2018 DTT Overview). With a target audience of 4 to 11-year-olds, guests are invited to imagine their desired future and develop the skills necessary to achieve this future. Our community-based approach is focusing on underserved students in San Antonio. Our exhibition will provide a space for children to develop key skills in order to address this uncertainty. Twenty-first century learning skills, future-thinking skills, and STEM leadership skills can provide children with the toolbox necessary to approach the future.

Fabrication and Display Phase (current request)

We request \$250,000 from IMLS for the fabrication of *Dream Tomorrow Today 2.0*. with a cost share of \$662,235. The fabrication phase of the project will turn this invested dream into a reality. With this additional support, The DoSeum may build the envisioned exhibition to a standard of experiential design, quality, and interactivity.

There is a strong request from the community for an exhibition similar to *Dream Tomorrow Today*. While on display in 2018, the exhibition garnered much attention in the local press^{vii} and quickly became a favorite of our guests. It received a net promoter score of 81.6. Of 103 guests surveyed, 53.4% rated their experience as Superior and 39.8% rated it as Excellent (See *Dream Tomorrow Today* Evaluation – June 2, 2018 – January 6, 2019). Since closing the exhibition, our guests have continued to request a return of the exhibit in surveys and conversations with staff, without our prompting. The original version of *Dream Tomorrow Today* was always conceived of as a temporary exhibition on display during San Antonio’s Tricentennial Celebration of 2018. It was not built to last beyond the six-month display period. We now have a chance to create a more lasting version of this popular exhibition.

Traveling Exhibit

The DoSeum intends to travel our future-focused exhibit after its run at The DoSeum to children's museums, general/topic museums, and science centers. We believe there is strong interest from the museum field for this exhibition. *Dream Tomorrow Today* was the topic of four accepted sessions at ASTC 2018, Ecsite 2019, AAM 2019, and ASTC 2019. It was included in several industry publications.^{viii} Consistently attracting admissions is crucial for solvency of museums. Hundreds of museums in North America turn to traveling exhibitions to offer something new and attract these admissions.^{ix}

When implemented, the exhibition will be adaptable to 3,000 - 5,000 sq ft, considered the "sweet spot" for exhibition size. Over 300 museums can accommodate this size.^x A 2019 survey by the Traveling Exhibit Network asked hosting museums what topics were of interest. One hundred eighty-two topics fell into seven broad themes. In order of popularity the themes were science, art, social, history, technology, nature, and pop culture. Within the science and art subjects, STEAM was in the top three specific topics.^{xi} However, 34% of current traveling exhibitions are on STEM subjects.^{xii}

The DoSeum believes its exhibition will fill a need for traveling exhibit STEAM content. A key element of the development of *Dream Tomorrow Today 2.0* will be enabling guests to develop a STEM identity. STEM Identity is when someone thinks about themselves as a science learner, as someone who knows about, uses, and wants to contribute to science.^{xiii} We define the evidence of development of STEM Identity as: displaying curiosity (measured through sustained engagement and asking questions), practicing investigation (measured through making evidence-based conclusions; expressing observations, measuring, quantifying, sorting, and/or communicating results) and verbalizing or expressing desires towards STEM (measuring through engaging in pretend play as a scientist, expressing a specific and authentic ambition, and visualizing a plan for the future). We will run evaluation throughout the Planning Phase to assess to the success of this goal.

Finally, The DoSeum has an education and mission credibility that will assist in the marketing of the traveling exhibition. The Museum Practice finds that museums are often found as trusted educational and informational sources over commercial firms touring exhibitions.^{xiv} Since its opening in 2015, The DoSeum has developed and designed renovations to its permanent exhibitions Force Course (formerly Powerball Hall), Innovation Station, and Spy Academy. The success of this development and design has led The DoSeum to create DoSeum Design Studios in which it creates interactive, educationally-based spaces for external clients such as Methodist Children's Hospital, San Antonio International Airport, and the McNay Art Museum.^{xv}

Target Group and Beneficiaries:

General Public

The fabrication and display of *Dream Tomorrow Today 2.0* will first and foremost benefit the children and families who visit the exhibition. Excluding the impact of the pandemic on 2020, we welcome around 400,000 guests a year with an average of 48% of guests visiting the special exhibit. By visiting the exhibition, guests will imagine their desired future and build the skills necessary to achieve that future. This exhibition will aid in the process of the development of a STEM Identity in children. We will conduct formative and summative evaluation to ensure that these goals are met.

Leading up to the exhibition, the general public will also benefit in our final Community Conversation. In this event, guests will engage with exhibit and multimedia prototypes and offer their feedback. We anticipate an audience of 50-100 attendees. Events such as these assists in the community feeling that they are part of the process at The DoSeum and that their voice continues to inform our exhibitions and programs. This event will be the final one of a series of three Community Conversations that will have taken place during the Planning Phase (already funded). We will have involved our general public and economically disadvantaged families from the very beginning of the exhibition planning all the way through to final prototyping.

Economically Disadvantaged Families

As with all of our exhibits, we will continue to offer to recipients of the EBT, SNAP, or WIC reduced admissions (\$3 pp) through the ACM and IMLS Museums for All program. As of October, 25,120 guests have used the Museums for All program in 2021. In 2022 we have a goal of 18% of guests will use Museums for All, which is 41,547 guests. We anticipate the continuation of this goal for 2023. We plan on marketing to this audience by increasing awareness of the program. This will be done in part with a grass-roots approach— identifying and working with local council districts, school districts, and community organizations to get the word out. A portion of our paid media budget will be set aside to push MFA via social – targeting opportunity zip codes and household income in both Spanish and English – for San Antonio and surrounding counties.

We will also continue to target economically disadvantaged families for attendance to our final Community Conversation. We will invite families through The DoSeum’s network, our Outreach network (which focuses on underserved communities), and our local partner networks. Our local partners for the Planning Phase are Intercultural Development Research Association (IDRA) and 1st-Gen Scholars. IDRA is an independent, private nonprofit organization dedicated to assuring educational opportunity for every child. Each year, IDRA works hand-in-hand with thousands of educators, community members and families.^{xvi} Similarly, 1st-Gen Scholars has a mission to provide P12 Students with early access into STEM/Tech, College and Career Pathways, while also increasing P12 STEM Teacher Retention and Diversity in schools.^{xvii} As with all previous ones, bus transportation, food and drink, and child care for siblings will be provided at the Community Conversation.

Additional Communities

Dream Tomorrow Today 2.0 will travel to other host museums, whose communities will benefit from the exhibition. To ensure that the exhibition is responsive to a diverse selection of communities we will involve four potential host museums in our Planning and Fabrication phases. We intend for the exhibition to travel for 5 years, visiting three museums or science centers per year, with a total of 16 communities served (including San Antonio). We estimate an average of 10,000 – 20,000 visitors per month for the size of exhibitions we are proposing.^{xviii} This totals up to 320,000 visitors to the exhibition.

We plan to provide a template for engaging the community in the process leading up to the exhibition as well as resources to conduct community outreach. The template may include a guidebook to establishing good partnerships (such as example MOUs and job descriptions), a run of show for a Community Conversation, and space within the traveling exhibition to bring in local elements.

How will your project address the goals of the MFA program?

With a focus on lifelong learning, inclusion, and community engagement, this project aligns well with the goals of the Museums for America program. *Dream Tomorrow Today 2.0* aligns best with Goal 1 and Objective 1.1. The exhibition will empower people of all ages and backgrounds through its focus on engaging underserved populations during the Planning Phase and the opening of the exhibition through our use of the Museums for All program. As with all of our exhibitions, *Dream Tomorrow Today 2.0* will be experiential and highly interactive in its presentation and delivery of learning goals. It will be cross-disciplinary by focusing on the development of STEM identity in its audience through experiential art and multimedia. We request this current round of funding to support this exhibition to its fruition so that it may become an exhibition visited by hundreds of thousands of visitors.

Project Work Plan

For all phases, The DoSeum staff will plan, implement, and manage the project (see Budget Justification and Resumes) Meredith Doby, Vice President of Exhibits will serve as a Project Director. The core DoSeum staff groups will include Ms. Doby, Orlando Graves-Bolaños, Director of Gallery Facilitation and Experiences, Chris Navarro, Director of School and Community Programs, and Dr. Richard Kissel, Vice President of Education, and a to be named Exhibits Technical Manager. Additional DoSeum staff will include Exhibit Technicians, the Vice President of Marketing, and part time Experience Engineers who will staff the exhibition.

Preparation for Traveling (during Planning Phase, outside of this grant period)

What: During the Planning Phase we will host three “Gate Meetings” at various stages of the process (See Project Model Planning Phase). This is an opportunity for all constituents to review our progress so far and provide any feedback. We will include our Traveling Exhibit Partners (Jeff Wyatt and Flying Fish), Fabrication Partners (Kubik Maltbie), and Potential Host Museums (Mayborn Museum, Space Center Houston, New York Hall of Science, and Henry Ford Museum of American Innovation) in each of these Gate Meetings.

Who:

- Jeffrey Wyatt (see Letter of Commitment and Resume) is Principal at The Museum Practice. He consults with museums and exhibition companies around the world interested in creating and touring traveling exhibitions. He has 25 years’ experience in the production of touring and permanent attractions. Wyatt will consult with The DoSeum to create our first traveling exhibition.
- Flying Fish (see Letter of Commitment and Flying Fish Company Profile) designs, builds, and manages touring exhibitions. They currently have 4 locations, 70 exhibition locations to date, 7 exhibitions currently on tour, and 24 partnerships to date. Flying Fish will consult with The DoSeum to create The DoSeum’s first traveling exhibition. Upon completion, they will manage the sales, tour, and operations of *Dream Tomorrow Today 2.0*.
- Kubik Maltbie (see Letter of Commitment, Resume, kubik maltbie Overview and World Class Museums, Environments, and Exhibits) has been producing extraordinary experiences for museums throughout North America and internationally since 1961. Their experience ranges from traveling exhibits and single gallery installations to complete museums and includes a variety of subject matter: children’s museums, science centers, natural history museums, and traditional history museums. Kubik Maltbie will be the fabricator of *Dream Tomorrow Today 2.0*.
- In order to ensure that the exhibition is attractive to a wide range of museums, we will include a staff member from potential host museums in our Gate Meetings so that they may offer input as we develop and design the exhibition. The following museums have agreed to be potential hosts and participate in our Gate Meetings (see Letters of Commitment): The Mayborn Museum, a natural science and cultural history museum; Space Center Houston, a leading science and space exploration learning center, the New York Hall of Science, a center for interactive science serving a half million students, teachers, and families each year; and the Henry Ford Museum of American Innovation, a museum that provides unique educational experiences based on authentic objects, stories, and lives from America’s traditions of ingenuity, resourcefulness, and innovation.

Resources: The majority of this work is already supported by an IMLS MFA Grant received in 2021. Consulting fees will be paid to Jeff Wyatt and Flying Fish by The DoSeum, not requested of IMLS.

Mitigation of Risks:

The Planning Phase is taking place from September 2021 to November 2022. At the time of writing, this has not been completed. The DoSeum is applying for fabrication funds in advance of this completion in order to continue the pace of the project and to not lose momentum. The receipt of Fabrication Funds will allow us to move smoothly from the Planning Phase into the Fabrication Phase in 2022, instead of waiting between grant submission (November 2022) and grant receipt (August 2023). There is a risk in the fact that the Planning Phase has not yet been completed. This risk is mitigated by a strong core project team and working with an experienced project manager during the Planning Phase, Jaclyn Pyatt (see Resumes). We have evaluated the original version of *Dream Tomorrow Today* and found success (see *Dream Tomorrow Today Evaluation – June 2, 2018 – January 6, 2019*), we feel confident we can repeat this success with an exhibition design rooted in community development and evaluation.

This exhibition will be the first traveling exhibition that The DoSeum has developed and designed. There is a risk in pursuing a new business opportunity. We are mitigating this risk by working with highly experienced and trusted traveling exhibit partners and fabrication partners. Jeff Wyatt worked with The DoSeum on the original *Dream Tomorrow Today* exhibition so there is a previously established trusted relationship. We rented an exhibition from Flying Fish in 2021 and spoke with two references to vouch for their capabilities as a traveling exhibit agency.

Fabrication

What: At the end of the Planning Phase we will have an exhibition plan rooted in evaluation and community involvement. With this, we will move into the Fabrication Phase. Kubik Maltbie will have been kept abreast of the designs and will ensure that the designs will work within the established budget. Together we will select any necessary

additional contractors including multimedia partners. During this phase, we will host one final Community Conversation with exhibit prototypes and multimedia elements. We will also conduct two fabrication shop visits. We will adjust the exhibition design and fabrication as needed based on information on gained during prototyping and the shop visits.

Who:

- Kubik Maltbie (see above)
- Identified Multimedia Partners. Since 2014, The DoSeum has worked with a wide range of talented multimedia partners. Projects have included projection mapping, virtual reality, augmented reality, touch screens, green screens, and physical / digital interactives. For this project, we will utilize our knowledge of the industry and ensure we work with the multimedia experts who best fit the exhibition need.
- We will continue work with the project manager, exhibit designer, evaluator, and graphic designer identified in the previously funded Planning Phase.
- Families within the network of The DoSeum and Planning Phase partners will be invited to participate in the testing of prototypes during a final Community Conversation.

Resources: We estimate the exhibition to cost \$800,000 for exhibit fabrication (see Kubik Maltbie Fabrication Estimate). The exhibition will work for a 3,000 sq. ft. to 5,000 sq. ft. space. We will use an average of 4,000 sq. ft. The museum exhibition design industry standard is to use a cost per square foot analysis. This will be a \$200 per sq. ft. exhibition. In 2011 Mark Walhimer estimates children's museums to have a cost per square foot of \$150-\$350.^{xix} Adjusting for inflation this is \$183-\$427 using the CPI Inflation Calculator. The original 2018 *Dream Tomorrow Today* cost \$173 per sq. ft. Traveling exhibitions typically cost more than in-place temporary exhibitions. On average the indoor permanent exhibits at The DoSeum cost \$316 per sq. ft. for exhibit fabrication. Kubik Maltbie has confirmed the estimate of \$200 per sq. ft. with years of data fabricating museum exhibitions. Kubik Maltbie's range for children's museum exhibits is \$200 - \$500 with an average cost per square foot for of \$277. However, most of these projects are Design/Bid/Build unlike this project will be Design/Build. The Design/Build process allows for the fabricator to keep costs lower by influencing the Design Process throughout.^{xx} Flying Fish Exhibits has also confirmed this cost per square foot.

Outside of the requested funds from IMLS, The DoSeum will need to contribute \$550,000 towards fabrication, with an additional amount for resources such as consultants, travel, and supplies and materials, estimated to a total of \$660,744 for this Phase (see Master Three Year Budget). The complete exhibition budget will be supported by Capital Funds from The DoSeum as well as private funders. In 2018 we funded the *Dream Tomorrow Today* fabrication budget of \$519,400. We received \$155,000 of funding from the USAA Foundation, The Greehey Family Foundation, and the Joan and Herb Kelleher Charitable Foundation. The remaining amount was pulled from our Capital Funds. We intend to discuss this new opportunity with these donors and new ones. This model has worked for several DoSeum exhibition projects. In 2018, the Semmes Foundation supported the renovation of our Spy Academy for \$500,000 and in 2015 Zachry supported Innovation Station for \$200,000. If we are unable to secure private funding for the exhibition, we still have the full amount earmarked and put on reserve in our Capital Funds.

Mitigation of Risks: There could be a risk of an inability to fabricate the exhibition to the allocated budget or to the standard of necessary durability. Kubik Maltbie was one of three fabricators who built The DoSeum's permanent exhibits in 2015. The DoSeum has been working with them since 2013. This relationship and the Design/Build approach will mitigate this risk. Maltbie has created several traveling exhibits including the highly interactive *Beyond Rubik's Cube*, which the DoSeum hosted and found very successful. An additional risk mitigation are two planned shop visits to Kubik Maltbie's shop in New Jersey as well as the development of prototypes. We will hold a final Community Conversation so that our guests may test the actual multimedia and exhibit furniture prototypes. With trusted and experienced partners, we feel capable and prepared to embark on this project for The DoSeum.

Installation, Training, and Opening

What: We will install the exhibition in May 2023. We will train our staff and Chief Science Officers with IDRA to facilitate in the exhibition based on the work done during the Planning Phase. The exhibition has an anticipated opening of May 27, 2023 and will be open at The DoSeum until September 4, 2023. The Summer season is our busiest season. We expect to welcome 80,000 – 100,000 guests based on previous summer exhibitions.

Who/Resources:

- Our Fabrication Partner, Kubik Maltbie will oversee the installation.
- Our floor staff, Experience Engineers will facilitate the exhibition while it is open. We typically have 1-2 Experience Engineers per traveling exhibition.
- Chief Science Officers (CSO) are students in grades 6-12 elected by their peers to be liaisons for STEM in their schools and communities. They learn leadership skills to implement on-campus projects and advocate for student voice in STEM. CSOs will be involved in the Planning Phase of the exhibition and we intend to hire them to staff the exhibition while open.

Mitigation of Risks: There is a risk of a smaller than expected attendance due to the COVID-19 pandemic. As of November 2021, children ages 5-11 are currently receiving a vaccine. We anticipate that continued vaccination numbers will help to diminish this risk and the risk will continue to decrease further out in the future.

Evaluation: Formative and Summative & Remediation

What: This is how we will track progress towards our intended results. We will perform formative and summative evaluation on the performance of *Dream Tomorrow Today 2.0* (DTT 2.0). Formative evaluation will take place in July. We will use this information to make any necessary revisions to the exhibits, graphics, or facilitation. Summative evaluation will occur at the conclusion of the exhibition in September. With this information we will perform any necessary remediation on the exhibition.

Formative evaluation will consist of the following tasks: 1) a review of the logic model developed in 2021 to ensure that the established outcomes still align well with the exhibit components and/or revising outcomes to reflect any changes that may have occurred during the Planning Phase; and 2) selecting the most appropriate data collection methods to gather evidence for the achievement of intended outcomes, i.e., observations of how visitors/families use exhibit components, face-to-face interviews with adults to understand how they are interpreting exhibit instructions, concepts, and messages, and/or a card sort activity for children who often benefit from having a visual reminder to express their ideas. A card sort consists of a stack of laminated photos of exhibit components that are offered to a child in a fan and invited to “pick a card, any card.” The child is then asked whether they are familiar with the exhibit component shown in the picture, did they play there, and what you think the component is about. Responses are recorded and analyzed for misconceptions and issues with the physical use or perception of the purpose of the exhibit components. Blue Scarf will conduct (or train DoSeum staff and volunteers to assist with) all data collection, data entry, organization and analysis, providing the DTT 2.0 team with a Quick Response Memo consisting of preliminary findings and recommendations within 7-10 days of data collection.

Summative evaluation will focus on how and to what extent the intended exhibit outcomes have been achieved. Data collection methods may include: 1) Personal Meaning Mapping (PMM), a well-established methodology designed to quantifiably measure how an experience, such as visiting an exhibition, uniquely affects each individual’s conceptual and attitudinal understanding of specific content. PMM yields reliable quantitative results from a qualitative method of data collection, which considers unique, personal constructions of knowledge and experiences. It facilitates the identification of individuals’ prior knowledge, concepts, attitudes and vocabulary (baseline) about a particular subject, such as design, and provides a mechanism for meaningfully assessing and comparing the relative and unique impact of a single exhibition experience across many different people; 2) face-to-face interviews; 3) onsite surveys; or 4) a combination of PMM, face-to-face interviews and onsite surveys including questions related to the Positive Selves framework (Stake and Mares, 2005; Markus, 1986). Suggested sample size: 30-50 depending on method selected. Blue Scarf will conduct all data collection, data entry, organization and analysis, and provide the DTT 2.0 team with a written report of findings by or before October 31, 2023. In addition to this, we will track the number of guests who visit the exhibition, the percentage of guests who came for the exhibition, the percentage of DoSeum guests who visited the exhibition, and dwell time for at least 50 guests.

Who/Resources:

- Blue Scarf Consulting Blue Scarf Consulting LLC (see Resume), is a woman-run evaluation service launched in 2010 by Cheryl Kessler, Principal/Lead Evaluator. Cheryl holds a BA in Anthropology from the University of California, Davis (2000) and a Master of Arts in Museum Studies from the John F. Kennedy University, Berkeley, CA (2002). She has led all phases of program and exhibit evaluation for clients across the country. Cheryl has

served at the Board and Committee level for the Visitor Studies Association (VSA) and has presented her work at the Association of Children’s Museums Interactivity meetings and at other industry professional organizations.

- Our Experience Engineer staff and or DoSeum volunteers will conduct the internal data collection on whether guests came for the exhibition and dwell time.
- Kubik Maltbie and any multimedia contractors will perform the remediation necessary.

Mitigation of Risks: There is a risk in the exhibition not delivering on the intended outcomes. This will be mitigated by continuing evaluation and adjustments made through evaluation during the Planning Phase, Formative and Summative evaluation.

Traveling Exhibition

What: Starting in the Spring of 2024 this exhibition will begin to tour to other museums with the intention of maintaining a 5-year tour with three venues per year, visiting each venue for 3 months.

Who: Traveling Exhibit Partner (see above) and Potential Hosts (see above)

Resources: Crates and shipping apparatus will need to be built. We will store the exhibition from the close in September to the opening date of the first stop on the tour. We will pay Flying Fish for their work for management and operations as well as a percentage of the rental fees received from each venue (outside of grant period).

Mitigation of Risks: We will be investing significant capital into the creation of this exhibition. However, working with a model created by Jeff Wyatt, we estimate we will return our investment after 9 venues, or three years if the exhibition is fully booked each year. This is confirmed by a model developed by Flying Fish. There is a risk that the exhibition may not be marketable to other museums. We are mitigating this by involving four potential hosts in the planning process (see Preparation for Traveling) and building interest before the launch. We are new to the creation of traveling exhibit. We have mitigated this risk by working with highly experienced traveling exhibit professionals including Jeff Wyatt and Flying Fish, as well as a fabricator who has built traveling exhibits, Kubik Maltbie.

Project Results

- A constructed exhibition informed by community input, evaluation, and experienced professionals that is durable, interactive, travel-ready, and future focused.
- An attractive and marketable traveling exhibition that will be able to booked at three venues per year, visiting an estimated 320,000 visitors and influencing 16 total communities over the course of five years.
- Audiences will begin to shift current attitude and behaviors towards the future. They will be able to approach the future with resilience and innovation through the use of 21st Century learning skills, future-thinking skills, and STEM leadership. This will greatly benefit society as we work to develop a new generation of thinkers capable of meeting the challenges of tomorrow.
- Audiences will see themselves with a STEM identity. They will begin to see how they can develop the skills needed to achieve their desired future. According to data^{xxi} released in 2021 by the Bureau of Labor Statistics, employment in STEM occupations is expected to grow at a higher rate (10.5% growth) than all other occupations combined (7.5% growth) between 2020 and 2030. Additionally, in 2020^{xxii} the median annual wage in STEM careers (\$89,780) was double the median annual wage for non-STEM careers (\$40,020). Youth who have developed a STEM Identity will be prepared for these future careers.
- A model for community involvement and first-time traveling exhibit development that will be shared with the museum field. This will be achieved through the creation of materials to be shared with future hosts as well as proposed sessions at industry conferences.

Products and sustaining benefits: Through the support of the requested IMLS funds and our matching dollars, we will have an exhibition that will continue to tour after the grant period. We will have evaluative data conducted on the subject and exhibition to be shared out to the broader museum field. The results of our involvement of fabricators and traveling exhibit professionals will inform our work moving forward. We hope to create new traveling exhibitions that will continue to positively impact communities in the future based on the thorough research and work conducted through this grant.

Schedule of Completion

