COVID 19 Census of NASA Grantees Request for a new OMB Control Number Justification – Part A Supporting Statement

1. The Information

This is an emergency request for a new information collection for the Office of STEM Engagement. As part of NASA's continued response and mitigation to COVID 19, awardees in informal discussions are reporting a decrease in number of student participants for internships and fellowships, delay or cancelation of conferences and travel, and delay in the scientific work funded on behalf of NASA due to closure of schools, camps, colleges and universities. NASA is requesting this collection to do a census of all grantees to gather information consistent with both OMB and NASA COVID guidance as well as track COVID-related spending agency-wide.

2. Need for the Collection

The Office of STEM Engagement (OSTEM) is responsible for the management of 4 Congressionally appropriated grant projects. These projects provide support to students, universities and educational institutions including museums and other informal education organizations.

National Space Grant College and Fellowship Program (Space Grant) includes over 850 affiliates from universities, colleges, industry, museums, science centers, and state and local agencies. These affiliates belong to one of 52 consortia in all 50 states, the District of Columbia and the Commonwealth of Puerto Rico. The consortia funds fellowships and scholarships for students pursuing careers in science, mathematics, engineering and technology, or STEM, as well as curriculum enhancement and faculty development. Member colleges and universities also administer pre-college and public service education projects in their states.

Minority University Research and Education Project (MUREP) provides financial assistance via competitive awards to Minority Serving Institutions (MSIs). These institutions recruit and retain underrepresented and underserved students, including women and girls, and persons with disabilities, into science, technology, engineering and mathematics (STEM) fields. MUREP investments enhance the research, academic and technology capabilities of MSIs through multiyear cooperative agreements. This assists NASA in meeting the goal of a diverse workforce through student participation in internships and fellowships at NASA centers and the Jet Propulsion Laboratory (JPL). Awards also assist faculty and students in research and provide STEM engagement related to NASA missions.

Established Program to Stimulate Competitive Research (EPSCoR) develops partnerships with government, higher education, and industry designed to provide seed

funding to develop a long-term, self-sustaining, nationally-competitive capabilities in aerospace and aerospace-related research. Currently, 25 states, the Commonwealth of Puerto Rico, the U.S. Virgin Islands, and Guam participate. Five federal agencies including NASA conduct EPSCoR grants to promote scientific progress in states that have traditionally received lesser amounts of research and development funding.

Next Generation STEM project (NextGen STEM) provides a portfolio of activities, experiences and educational content. By engaging students where they are – schools, afterschool programs, informal educational institutions and their homes – it broadens participation in STEM among underrepresented and underserved populations. NextGen STEM also operates NASA's Museum Alliance, bringing current NASA resources through informal education providers with access to NASA staff and materials. The project offers competitive opportunities to informal educational institutions such as museums and science centers through NASA Teams Engaging Affiliated Museums and Informal Institutions (TEAM II).

3. Information Use

This collection will help inform NASA and its stakeholders about the status and ongoing implementation issues surrounding COVID mitigation for NASA grantees. This information will be used to improve the quality and responsiveness of NASA in responding to grantee issues which impact scientific research that funded by NASA in these grant programs. The information will also inform decisions made about the status of the 4 grant programs and decisions for No Cost Extensions (NCE) and additional time requested by grantees to complete NASA funded work.

4. Respondents

Respondents are current NASA awardees which include museums, higher educational institutions, and state space grant consortia.

5. Information Collection Method

NASA's 4 project managers – along with their staff – will be interviewing grantees with the cleared script and questions and will be manually keying in data into an electronic database. This information will be re-validated monthly to provide a just in time snapshot of awardee obligations and determine grantee issues with current awards. As NASA awards are nationwide, changes in COVID restrictions are changing NASA activities in real-time.

6. Project Schedule

This monthly information will be synthesized and briefed to NASA leadership (to include budget, procurement, and the Administrator's front office). After consultation with OMB, NASA

may provide a summary of this information in an OMB approved document (such as annual reports to Congress for a specific grant program or in a Congressional Justification). This is a census of all NASA OSTEM grantees and all tabulation and analysis will be done with tools available via COTS tools.

7. Duplication

Currently, this information is not collected elsewhere and cannot be otherwise obtained. Most NASA grantees only provide information yearly as part of required reporting associated with the terms and conditions of the award. In addition, some balance and burn rate information is provided monthly to the project managers. However, this information is limited, anecdotal, and uneven across all awardees. Given the challenges with COVID, NASA leadership believe additional information is needed to better understand grantee limitations nationwide across all 4 grant programs.

8. Minimizing Burdens on Small Businesses

The information collection impacts many small grantees – community and tribal colleges and minority serving institutions. Many are currently closed right now or have limited access to their labs, email systems, or data. NASA has determined the least time and burden intensive way to collect this information is for grantees to be interviewed by NASA staff (vs just sending out a link).

9. Consultation Outside of the Agency

This is an emergency request due to ongoing issues for COVID. Given the continued length of stay at home orders, changing restrictions in many causes at the county level, and the general uncertainty across all States, Guam, and Puerto Rico, about how and when establishments will open to pre-pandemic levels, there is no other way to provide a cohesive picture across all the grant programs. Project leads have historically maintained a good working relationship with principal investigators and believe this request will be low burden on respondents.

10. Payment or Gift to Respondents

NASA is not proposing to provide any incentive (monetary or non-monetary) to potential respondents to obtain their information or to encourage respondents to provide the requested information.

11. Justification for Sensitive Questions

NASA is not proposing any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, income, immigration status, or other matters that are commonly considered sensitive.

12. Burden Estimate

This request is for a new information collection. NASA anticipates the information requested will be readily available to the primary investigators and is basing burden and respondent estimates on more than 20 years of experience working with primary investigators for these programs. Project leads will pre-notify participants via email where possible. During the data collection period, non-respondents will be sent email reminders to schedule time with the project leads to go through the script.

Estimation of Respondent Burden

NASA is anticipating doing this survey monthly beginning June and ending October 1st with the close out of this fiscal year. After the June survey, respondents will be asked to validate and refresh the current data set. The total number of principal investigators is 156 with the following breakdown -- Space Grant (60), EPSCoR (28), NextGen STEM (13) and MUREP (55). NASA contractor and federal employee staff will read the script to the principal investigators and then transcribe the information into a database. The agency believes principal investigators will be able to readily access needed data. This burden estimate is subject to variations among respondents due to discrepancies in the level of participation by the principal investigators, record-keeping, institution size, and other variables.

For the June survey the breakdown is as follows.

Number of respondents across all 4 grant programs – 156 Number of responses per respondent – 1 Number of total annual responses – 156 Response time per survey is – 30 minutes Respondent Burden Hours for June collection – 78 hours

For the July through October timeframe, primary investigators will be asked to re-validate the data provided in June and provide any updates. NASA believes this should take no longer than 15 minutes per month.

Number of respondents across all 4 grant programs – 156

Number of responses per respondent - 4

Number of total annual responses - 624

Response time per survey is - 15 minutes

Respondent Burden Hours for July through October collection - 156 hours

Total respondent burden hours over the entire collection cycle is - 234

Labor Costs of Respondent Burden

Estimates of the annualized cost burden to respondents for this collection of information are based on the Department of Labor Bureau of Labor Statistics "May 2018 National Occupational Employment and Wage Estimates, United States" (see

<u>http://www.bls.gov/oes/current/oes_nat.htm#19-0000</u>). NASA principal investigators fall into a variety of job categories – from college professors to museum educators. So, the agency has used the mean hourly wage rate for Life, Physical, and Social Science Occupations (19-0000) of \$37.28.

With a respondent hourly wage of \$37.28 and the total burden hour equaling 234 hours the total labor burden for this collection is \$7269.60. There are no other annualized costs to respondents other than the burden costs associated in question 12 of these materials.

13. Cost to the Federal Government

The estimated annual cost to the government for this survey is \$912,794 over the six-month period. Much of the survey expense is the survey itself which includes the preparation, collection, inspection, verification of the responses, compiling the information and analyzing the data for updates to NASA senior leadership and incorporation into final reports to Congress and OMB.

The direct employee costs were calculated by multiplying estimated aggregate hours spent on the project (26 weeks) by the annual pay of 5 GS-15 Step 10 employees ($170,800 \times .5 =$ $85,400 \times .5 =$ $427,000 \text{ and } 5 \text{ GS} \times 13 \text{ Step } 10 ($133,465 \times .5 =$ $66,732 \times .5 =$ 333,662. The direct employee costs are \$760,662. Indirect or overhead costs associated with the project are calculated as 20 percent of the above at \$152,132.

14. Expiration Date for OMB Approval

NASA is not seeking approval to not display the expiration date of OMB's approval of the information collection.

15. Privacy and Confidentiality.

While grantee number and contact information is collected as part of the interview process, records are not retrieved by personal identifiable information, so no systems of record notice is needed. The information gathered will be handled and managed as part of NASA Records Retention Schedule (NRRS) 5.