

OMB Control #0693-0033
Expiration Date: 07/31/2022
NIST Generic Clearance for Program Evaluation Data Collections

Software Copyright Impact Survey

FOUR STANDARD SURVEY QUESTIONS

1. Explain who will be surveyed and why the group is appropriate to survey.

The Technology Partnership Office (TPO) of the National Institute of Standards and Technology (NIST) will conduct this information collection.

Federal laboratories are primarily operated by federal employees (Government-Owned-Government-Operated laboratories, GOGOs). GOGOs are currently prohibited by U.S. regulations (Title 17, Section 105, of the United States Code) from seeking copyright protection for software developed by federal employees. This prohibition does not extend to federal laboratories operated by employees of government contractors (Government-Owned-Contractor-Operated laboratories, GOCOs).

One of the President's Management Agenda (PMA) items is to modernize federal government practices by maximizing the transfer of federal investments in science and technology to the private sector to encourage technology commercialization. In support of the PMA, NIST's *Return on Investment (ROI) Initiative* identified the prohibition of copyright protection on software developed by federal employees as a constraint on this goal.

This information collection will enable NIST to:

- characterize the categories of custom developed software affected should the software copyright prohibition be eliminated; and
- conduct a cost-benefit analysis of allowing copyright protection of Federally developed software.

The intent of the survey is to collect information about quantities, revenues, and costs of various categories of custom-developed software¹ from approximately 400 technology transfer managers in laboratories of thirteen Federal agencies (USDA, DoD, HHS, DOI, DOE, DOC, DHS, NSF, EPA, NASA, DOT, VA, and DOL). The survey will include both GOGO and GOCO laboratories and will cover two time periods. The date ranges will encompass 2015-2019 (historical data) and 2020-2024 (projected data).

2. Explain how the survey was developed including consultation with interested parties,

¹ Custom-developed computer software is defined as computer programs, modules, plugins, scripts, middleware, and application programming interface operations (APIs)

pre-testing, and responses to suggestions for improvement.

TPO worked closely with consultants who conducted similar impact assessments for NIST. TPO contacted Federal agency points of contact (POCs), with responsibility for managing and transferring custom-developed software, to understand how software was categorized and accounted for within Federal agencies. On the basis of these communications, and with a prior understanding of benefit and cost categories required to estimate a time series of net benefits, draft survey questions were further iterated and improved until a consensus was reached that the collection instrument would be appropriate for the experienced technology transfer managers described above.

3. Explain how the survey will be conducted, how customers will be sampled if fewer than all customers will be surveyed, expected response rate, and actions your agency plans to take to improve the response rate.

The electronic platform used will enable NIST to receive responses in a fillable / fileable format.

The Federal Laboratory Consortium² (FLC) provided email addresses for points of contacts (POCs) for approximately 400 technology transfer managers located in the laboratories of thirteen Federal agencies. Technology transfer managers will be invited individually, requesting their participation in the survey. The survey itself will not collect the participant's name or other PII and will not be maintained in a Privacy Act System of Records. Therefore, Privacy Act Statement and SORN are not applicable for this information collection. A URL link will be provided to participants. Below is a sample of the email invitation sent, to include the signature of a TPO official.

The Technology Partnership Office (TPO) of the National Institute of Standards and Technology (NIST) is conducting an economic assessment of eliminating the prohibition on seeking copyright protection for software developed by Federal employees engaged in government work. The survey and analysis are being conducted by David Leech and Dr. John Scott on NIST's behalf.

NIST's Return on Investment (ROI) Initiative identified the prohibition as a constraint on technology commercialization. The goal of this survey is to quantify the net benefits of eliminating that constraint with the goal of increasing the transfer of federal investments in science and technology to the private sector. Please take the time to respond.

Neither NIST nor any government agency will receive the raw survey data. All survey data will be interpreted and reported ONLY in aggregated form, as averages and ranges. No individual person, laboratory, or agency will be discernable.

The survey will take approximately 30 minutes to complete. To begin, click on the <https://www.research.net/r/NIST_Copyright_survey> link below. We hope to have your completed response not later than March 6, 2020.

Thank you in advance for your support,

² The FLC was organized in 1974 and formally chartered by the Federal Technology Transfer Act of 1986 to promote and strengthen technology transfer nationwide.

Public burden is calculated to be 400 respondents * 30 minutes = 200 burden hours.

We anticipate a 50 percent response rate. It appears that the Federal technology transfer community generally believes that changing current regulations on software development would be a positive step and would be supportive of NIST's request for information to quantify its impact.

Although it is believed NIST will receive a 50 percent response rate, efforts will still be made to improve these numbers. The platform being utilized for the information collection monitors the number of responses received. A "reminder email" notification will be sent to POC's that have not responded by the target date described in the initial email invitation. Experience indicates that this process *does* improve participation for the collection. The platform also indicates the degree of completion for each survey response, therefore, if respondents submit incomplete responses, they will be encouraged to complete their responses by the target date described.

An example of the reminder notification follows:

"If you have responded completely to the NIST-supported Software Copyright Impact Survey sent to you (date), thank you. If not, please do so on or before (respond by date). Your full response is very important to the success of our analysis of the net benefits of eliminating the prohibition on copyright protection for software developed by Federal employees. Thank you in advance for your support. We look forward to sharing the results of our analysis with you."

4. Describe how the results of the survey will be analyzed and used to generalize the results to the entire customer population.

The study being undertaken is a case study, and not a statistical analysis aimed at generating formal large sample statistical population estimates. This has been the standard practice for NIST economic impact assessments.³

The survey intends to acquire time series data from Federal agencies regarding the costs of producing, as well as revenues received from licensing custom-developed software. Responses received will acquire information about various kinds of software developed, including intellectual property that it protects, as well as conditions of software release(s) by various agencies. Responses received will be used to create time series of the costs and benefits (and return-on-investment metrics) for eliminating restrictions on software copyright protection, including an understanding for the distribution of net benefits across the kinds of software historically developed and released by various agencies.

Some survey questions were designed to indicate the relative importance of the respondent's

³ See Gregory Tasse, *Methods for Assessing the Economics Impacts of Government R&D*, NIST Planning Report 03-01, National Institute for Standards and Technology, 2003; and Albert Link and John Scott, *The Theory and Practice of Public-Sector R&D Economic Impact Analysis*, NIST Planning Report 11-1, National Institute for Standards and Technology, 2012.

estimates within an agency with respect to forms of intellectual property protection and forms of software released. If the response rate is not as high as anticipated, scaling the estimates of costs and benefits for the thirteen Federal agencies covered by the survey will be based on ranges of estimates provided by those who *do* respond. Estimates provided by respondents, will be scaled to agency-wide estimates on the basis of the respondent's assessment the laboratory or facility's relative importance to the parent agency. If we obtain less than one complete response from each of thirteen agencies, estimates for non-responsive agencies will be made on the basis of estimates of the relative size of agencies' technology transfer staffs, including the relative number of software developers employed by Federal agencies available from the Office of Personnel Management (OPM).