

## SUPPORTING STATEMENT

U.S. Department of Commerce

National Institute of Standards and Technology

National Construction Safety Team Investigative Study of the June 24, 2021 Champlain Towers South Condominium Collapse in Surfside, FL

OMB Control No. 0693-XXXX

### SUPPORTING STATEMENT PART A

#### Abstract

NIST is conducting a full technical investigation of the collapse of the Champlain Towers South Condominium in Surfside, FL that occurred on June 24, 2021, under the authority of the National Construction Safety Team (NCST) Act, which is authorized by Congress. As part of this work, NIST seeks to interview eyewitnesses, first responders, engineers, vendors, contractors, maintenance staff, construction workers, residents, condominium owners, government officials, and others who can describe experiences with the building before and/or during the collapse, describe knowledge of the building prior to the collapse (e.g., construction, maintenance), and generally, provide any additional information that may help explain the technical cause of the building failure. The ultimate goal of the NIST investigation is to determine the technical cause of the collapse and, if appropriate, to recommend changes to building codes, standards and practices, or other actions to improve the structural safety of buildings. There are millions of high-rise condominium units in Florida alone, many of them aging structures near the coast. While a NIST investigation is intended to identify the cause of the Champlain Towers South Condominium collapse, it could also uncover potential issues in other similar buildings nearby and throughout the nation.

#### Justification

**1. Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information.**

The information NIST seeks to collect is considered perishable data.<sup>1</sup> Additionally, NIST seeks to minimize recall bias in the information collection by minimizing the timeframe to collection.

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<sup>1</sup> Perishable data is information whose value can decrease substantially during a specified time. A significant decrease in value occurs when the operational circumstances change to the extent that the information is no longer useful. Source: CNSSI 4009-2015; [https://csrc.nist.gov/glossary/term/perishable\\_data](https://csrc.nist.gov/glossary/term/perishable_data)

The National Institute of Standards and Technology (NIST) has the responsibility to investigate cases of serious failures of the built environment (buildings and infrastructure) under the National Construction Safety Team Act, signed into law in 2002. Therefore, the information collection is being requested as part of the National Construction Safety Team (NCST) Investigation of the Champlain Towers South Condominium in Surfside, FL that occurred on June 24, 2021. The National Construction Safety Team Act (Act), 15 U.S.C. 7301 et seq., authorizes the Director of the National Institute of Standards and Technology (NIST) to establish investigative teams (Teams) to assess building performance and emergency response and evacuation procedures in the wake of any building failure that has resulted in substantial loss of life or that posed significant potential of substantial loss of life. The purpose of investigations by Teams is to improve the safety and structural integrity of buildings in the United States. As stated in the statute a Team will (1) establish the likely technical cause or causes of the building failure; (2) evaluate the technical aspects of evacuation and emergency response procedures; (3) recommend, as necessary specific improvements to building standards, codes, and practices based on the findings made pursuant to (1) and (2); and (4) recommend any research and other appropriate actions needed to improve the structural safety of buildings, and improve evacuation and emergency response procedures, based on the findings of the investigation.

**2. Indicate how, by whom, and for what purpose the information is to be used. Except for a new collection, indicate the actual use the agency has made of the information received from the current collection.**

The information collected will be used for the National Construction Safety Team (NCST) Investigation of the Champlain Towers South Condominium in Surfside, FL. The interview information will provide an essential supplement to the engineering assessment of physical evidence. The NIST National Construction Safety Team will use the interviews to aid investigators' evaluation of various factors including the pre-conditions of the building and the timeline of the collapse.

**3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses, and the basis for the decision for adopting this means of collection. Also describe any consideration of using information technology to reduce burden.**

NIST will audio record the interviews when consent from respondents is obtained. This will minimize the need for field team interviewers to take extensive notes during the interview. Tablets may be used by the field team to support the interviewing protocols.

**4. Describe efforts to identify duplication. Show specifically why any similar information already available cannot be used or modified for use for the purposes described in Item 2 above.**

NIST is coordinating with other federal agencies and local authorities to minimize the public burden. To the extent practicable, NIST will align interview efforts with local authorities. However, it is of great importance that NIST maintains neutrality of the investigation. At this time, no other federal agency is planning to conduct interviews.

**5. If the collection of information impacts small businesses or other small entities, describe any methods used to minimize burden.**

NIST does not anticipate impacts to small businesses or other small entities.

**6. Describe the consequence to Federal program or policy activities if the collection is not conducted or is conducted less frequently, as well as any technical or legal obstacles to reducing burden.**

If this collection is not conducted, NIST will be missing critical information for its investigation of a large building collapse in the U.S. associated with substantial loss of life. The purpose of an NCST investigation is to help prevent future deaths and injuries across the U.S. by recommending actions that can influence codes, standards, and practices. Lessons learned from Surfside, FL regarding the likely causes of the building failure can be useful not only to better understand the impacts from this particular event, but also can also be relevant for other buildings in the U.S. and abroad. For example, lessons learned by NIST's NCST investigation of the Joplin, M.O. tornado in 2006 have been applied to help inform building code changes and led to the practice of standardizing siren emergency communications across the U.S.

**7. Explain any special circumstances that would cause an information collection to be conducted in a manner: requiring respondents to report information to the agency more often than quarterly; requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it; requiring respondents to submit more than an original and two copies of any document; requiring respondents to retain records, other than health, medical, government contract; grant-in-aid, or tax records, for more than three years; in connection with a statistical survey, that is not designed to produce valid and reliable results that can be generalized to the universe of study; requiring the use of a statistical data classification that has not been reviewed and approved by OMB; that includes a pledge of confidentiality that is not supported by authority established in statute or regulation, that is not supported by disclosure and data security policies that are consistent with the pledge, or which unnecessarily impedes sharing of data with other agencies for compatible confidential use; or requiring respondents to submit proprietary trade secrets, or other confidential information unless the agency can demonstrate that it has instituted procedures to protect the information's confidentiality to the extent permitted by law.**

Not applicable

**8. If applicable, provide a copy and identify the date and page number of publication in the Federal Register of the agency's notice, required by 5 CFR 1320.8(d), soliciting comments on the information collection prior to submission to OMB. Summarize public comments received in response to that notice and describe actions taken by the agency in response to these comments. Consultation with representatives of those from whom information is to be obtained or those who must compile records should occur at least once every 3 years - even if the collection of information activity is the same as in prior periods. There may be circumstances that may preclude consultation in a specific situation. These circumstances should be explained.**

The requirement of an FRN (in context to Paperwork Reduction Act) for this information collection was waived due to the emergency event and required federal response.

A Federal Register Notice announcing establishment of a National Construction Safety Team to study the collapse of the Champlain Towers South Condominium in Surfside, FL will be published on July 7, 2021

**9. Explain any decision to provide any payment or gift to respondents, other than remuneration of contractors or grantees.**

Not applicable There will be no payments or gifts associated with this information collection.

**10. Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy. If the collection requires a systems of records notice (SORN) or privacy impact assessment (PIA), those should be cited and described here.**

Information will likely be saved in a Privacy Act System of Records in which information may be retrieved by a personal identifier. The below Privacy Act Statement will be read to the participant prior to answering interview questions. Applicable SORNs are noted on the Privacy Act Statement.

### **Privacy Act Statement**

**Authority:** The National Institute of Standards and Technology Act, as amended, 15 U.S.C. 271 et seq. (which includes Title 15 U.S.C. 272) and section 12 of the Stevenson-Wydler Technology Innovation Act of 1980, as amended, 15 U.S.C. 3710a.

National Construction Safety Team (NCST) Act (Public Law 107-231)

**Purpose:** NIST is conducting a full technical investigation of the collapse of the Champlain Towers South Condominium in Surfside, FL that occurred on June 24, 2021, under the authority of the National Construction Safety Team (NCST) Act, which is authorized by Congress. As part of this work, NIST seeks to interview eyewitnesses, first responders, engineers, vendors, contractors, maintenance staff, construction workers, residents, condominium owners, government officials, and others who can describe experiences with the building before and/or

during the collapse, describe knowledge of the building prior to the collapse (e.g., construction, maintenance), and generally, provide any additional information that may help explain the technical cause of the building failure.

**Routine Uses:** NIST will use this information to conduct investigations and research to determine the technical cause of the collapse and, if appropriate, to recommend changes to building codes, standards and practices, or other actions to improve the structural safety of buildings. Disclosure of this information is also subject to all the published routine uses as identified in the Privacy Act System of Records Notice NIST-6: Participants in Experiments, Studies, and Surveys.

**Disclosure:** When you agree to participate in an interview, you are indicating your voluntary consent for NIST to use the information you provide for the purpose stated.

**11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private. This justification should include the reasons why the agency considers the questions necessary, the specific uses to be made of the information, the explanation to be given to persons from whom the information is requested, and any steps to be taken to obtain their consent.**

NIST will not be asking questions of a sensitive nature as outlined above, however, NIST recognizes that some questions may be perceived as emotionally sensitive given the nature of the disaster.

**12. Provide estimates of the hour burden of the collection of information.**

NIST expects approximately 880 respondents \* 90 minutes = 1320 hours.

NIST has identified 11 categories of respondents of most interest for the interviews; however, NIST may not seek to represent these categories equally in sampling, depending on the needs of the investigation.

**13. Provide an estimate for the total annual cost burden to respondents or record keepers resulting from the collection of information. (Do not include the cost of any hour burden already reflected on the burden worksheet).**

There will be no cost associated with the respondent or record keepers.

**14. Provide estimates of annualized costs to the Federal government. Also, provide a description of the method used to estimate cost, which should include quantification of hours, operational expenses (such as equipment, overhead, printing, and support staff), and any other expense that would not have been incurred without this collection of information. Agencies may also aggregate cost estimates from Items 12, 13, and 14 in a single table.**

Annualized cost estimate: \$570,650

Using an existing NCST investigation project that most closely matches this information collection and the needed expertise, annual values for NIST labor and other objects were combined with the one time, fixed price contract award for data collection and transcription services were used to determine an estimate for the total cost across the investigation time period of 4 years. The estimated values take into account NIST overhead rates. This cost was then divided by 4 to arrive at the annual cost.

**15. Explain the reasons for any program changes or adjustments reported on the burden worksheet.**

This is a new information collection.

**16. For collections of information whose results will be published, outline plans for tabulation and publication. Address any complex analytical techniques that will be used. Provide the time schedule for the entire project, including beginning and ending dates of the collection of information, completion of report, publication dates, and other actions.**

The results of the qualitative analysis of the interview data may be included as part of the final reporting required by the National Construction Safety Team Act. The objective of the interview is to gather first-hand accounts and observations associated with the Champlain Towers buildings both before the collapse, during, and after. This approach will identify unknown information, evaluate technical hypotheses, and explore accounts and behaviors of importance to the collapse. Qualitative coding of the interviews will be used to support understanding of the building failure including any initial vulnerabilities, pre-existing conditions, and complicating events. Response accuracy and response latency<sup>2</sup> of respondents' memories of events are being considered. NIST will address these issues in two ways. First, multiple participants who would have experienced similar situations will be used to corroborate as much of the information as possible. Thus, information that cannot be reconciled with other evidence may be discounted. Second, NIST will use investigative approaches that are expected to increase the accuracy of the

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<sup>2</sup> Response latency is defined as the time in seconds that elapses between the delivery of the noncontingent electrical stimulus (end of the stimulus) and the animal's response on the wheel. Source: Neurobiology of Addiction, 2006; <https://www.sciencedirect.com/topics/psychology/response-latency>

data collected.<sup>3</sup> In a review of research, Pezdek and Taylor<sup>4</sup> concluded that people retain fairly accurate memories of directly experienced events. They hypothesized that participation in events leads to coherent well-structured narrative memories. NIST will make every effort to only ask about directly experienced events and to use methods that will support recall of events in a manner compatible with naturally occurring internal representations.

The key timeline for the investigation is as follows (please note: this is a best estimate at the current time): July 2021-July 2025. The team expects to conduct interviews within first 6 months (with estimated completion by January 2022). NIST will provide regular briefings (at least annual if not biannual) to the National Construction Safety Team Advisory Committee, which is an official FACA.

**17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons that display would be inappropriate.**

The OMB Control number and expiration date will be present on the information collection.

**18. Explain each exception to the topics of the certification statement identified in “Certification or Paperwork Reduction Act Submissions.”**

Not applicable. There are no exceptions associated with this information collection.

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<sup>3</sup> Zmud, J. (2005), Technical Documentation for Survey Administration: Questionnaires, Interviews, and Focus Groups. Federal Building and Fire Safety Investigation of the World Trade Center Disaster (NIST NCSTAR 1-7B), National Construction Safety Team Act Reports (NIST NCSTAR), National Institute of Standards and Technology, Gaithersburg, MD.

<sup>4</sup> Pesdek, K. and Taylor, J. 2002. *Memory for traumatic events in children and adults*. In Eisen, M.L., Quas, J.A., and Goodman, G.S. (Eds). *Memory and Suggestibility in the Forensic Interview*. Mahwah, New Jersey: Lawrence Erlbaum.