Supporting Statement A for OMB 0596-0237 Urban Forest Engagement in Atlanta, GA

Note: This is a request for OMB to renew the previously approved information collection OMB 0596-0237, Environmental Justice and the Urban Forest in Atlanta, GA, which will expire February 28, 2022. This revision concentrates on data related to urban forest patches in the City of Atlanta. In this iteration, which still addresses environmental justice, we focus on resident engagement with efforts to reclaim neighborhood level urban forest patches and potential constraints to that engagement, particularly involuntary transiency (i.e., frequent household moving).

A. Justification

 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.

This renewal builds on the existing information collection effort by examining constraints to environmental decision making and engagement, specifically engagement with urban forest patches. An urban forest patch is a collection or stand of trees on public or privately owned spaces in cities or incorporated areas. This information collection focuses on patches on public spaces. Engagement is defined as residents' interest in and awareness of urban forest patches and resident participation in decisions about how the patches should be preserved, maintained, or repurposed. Engagement is analogous to "civic ecology" and "civic environmental stewardship" (Romolini et al., 2016; Murphy-Dunning, 2009; Ernstson, 2013). Populations of interest are nearby residents, i.e., those who live in neighborhoods and communities proximal to specific forest patches. Describing efforts to reforest Detroit, Salminen Witt et al. (2018, p.213) observe: "urban nature's social-ecological benefits do not accrue on their own...whether community gardens, or greenways, a wildflower meadow or a grassy field...[any of these] must be recognized, valued, experienced, and attended to by people who live nearby" (emphasis added). Successful civic environmental stewardship presupposes a dedicated and semi-permanent cadre of stewards in situ to advocate for and shepherd projects.

The proposed information collection also gathers data on social factors influencing and or constraining resident engagement with the patches. We are especially interested in neighborhood transiency as a potential constraint. Neighborhood transiency is defined as frequent, *involuntary* moving of people in and out of neighborhoods (Desmond and Kimbro, 2015; Shelton, 2018). Involuntary transiency is a seemingly obvious but understudied factor influencing low-wealth, urban, African American, environmental civic engagement but one that has a wide range of negative consequences (Desmond and Kimbro, 2015).

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We will also collect data on the social context of neighborhoods with collective efficacy and social cohesion scales (Sampson, Raudenbush, & Earls 1997; Sampson & Raudenbush,1999; Burdette, Wadden, and Whitaker, 2006). Collective efficacy has to do with informal social controls people weld in their neighborhoods, and social cohesion refers to trust people have in their neighbors and their relationships with these neighbors. The collective efficacy and social cohesion data provide information on the broader context from which people make decisions about engaging with urban forest patches. Thus, if neighborhood transiency rates are higher than average in communities near the patches, or people feel like ineffectual agents in their communities, it is unlikely that they would demonstrate a high degree of awareness, concern, and engagement with nearby forest patches.

Prior door-to-door data collection in south Atlanta neighborhoods revealed the presence of forest patches on vacant properties. However, there is little to no data on how residents perceive of these spaces or how residents might contribute to decision processes about the outcome of these spaces. This is an important question given the sites are likely providing important ecological services in terms of stormwater mitigation and improved air quality.

Many contextual factors constrain people's ability to engage in local-level environmental decision making, i.e., the *procedural* component of environmental justice. The data collected via this effort will provide important input on factors that might facilitate or constrain that engagement and will inform the Forest Service's efforts to address mandates articulated in the 2021 Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad* and the 1994 Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*.

Section 219 of Executive Order 14008 states:

Agencies shall make achieving environmental justice part of their missions by developing programs, policies, and activities [including research] to address the disproportionately high and adverse human health, environmental, climate-related and other cumulative impacts on disadvantaged communities, as well as the accompanying economic challenges of such impacts.

Section 3-302 of Executive Order 12898 specifies research activities:

To the extent permitted by existing law, including the Privacy Act, as amended (5 U.S.C. section 552a), each Federal agency, whenever practicable and appropriate, shall collect, maintain, and analyze information assessing and comparing environmental and human health risks borne by populations identified by race, national origin, or income. To the extent practical and appropriate, Federal agencies shall use this information to determine whether their programs, policies, and activities have disproportionately high and adverse human health or environmental effects on minority populations and low-income populations.

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The following statutes are also relevant to this request for information collection:

- 1. National Environmental Policy Act of 1969 (PL 91-190): This act is the nation's basic charter for protection of the environment. Section 102(2) (A) directs federal agencies to "utilize a systematic, interdisciplinary approach which will ensure the integrated use of the natural and social sciences...in decision making which may have an impact on man's environment." The proposed study provides an integrated approach to assessing residents' relationship to the urban forest.
- 2. <u>Civil Rights Act of 1964 (PL 88-352)</u>: The Civil Rights Act of 1964 was enacted as a result of this country's de jure and de facto laws which resulted in unequal access to federally funded programs and institutions. Title six of the act explicitly states that "no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance."
- 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.
 - a. What information will be collected reported or recorded? (If there are pieces of information that are especially burdensome in the collection, a specific explanation should be provided.)

The survey contains questions about perceptions and engagement (i.e., activities to restore, preserve, maintain) the city's urban forest patches. This includes information on constraints to such engagement and people's perceptions of collective efficacy and social cohesion.

b. From whom will the information be collected? If there are different respondent categories (e.g., loan applicant versus a bank versus an appraiser), each should be described along with the type of collection activity that applies.

Information will be collected from residents of both owned and rental properties in Atlanta, GA.

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c. What will this information be used for - provide ALL uses?

Information collected will serve multiple purposes. The first is to generate data that will be used to inform our efforts to strengthen communities, states: "as America's urban areas continue to grow, access to the natural environment and nature-based activities is becoming increasingly important to a community's overall health and well-being. Access to natural areas is particularly beneficial for youth, especially in many urban areas, where opportunities for outdoor play in natural settings may be limited" (Forest Service Strategic Plan, 2015-2020).

Forest Service also strives to connect people to the outdoors, noting the high concentration of the American population in cities and the need to provide these populations with venues for engaging with nature, both in cities and in nearby urban-proximate national forests. To help achieve this objective, the agency will: "support local urban and community forestry initiatives that reach people living, working, and visiting our country's urban areas" (Forest Service Strategic Plan, 2015-2020). This data collection will help to provide information on how residents in Atlanta engage with one of these key urban natural resources, the city's urban forest patches.

Secondly, this information collection addresses the city of Atlanta's efforts to integrate sustainability into city planning. With a better understanding of not only the biophysical benefits of the city's trees (i.e., ecosystem services such as pollution removal and energy savings), but also data on how engaged people are with the resource across the city, city planners will be better able to enhance places in the city with fewer trees and emphasize those areas that have more abundant green spaces (City of Atlanta Department of Watershed Management, 2017).

The City of Atlanta has focused <u>its attention on sustainability and urban green space initiatives</u> that are intended to reduce greenhouse gas emissions while improving quality of life at the local, neighborhood level. While these initiatives are being embraced in more affluent communities in the city, it is not clear how they are being received in lower socioeconomic and minority neighborhoods. Resident engagement with sustainability initiatives, however, is crucial to their success (Ban et al., 2013). This information collection, with its emphasis on care, concern, and advocacy for the urban forest, will provide information on how residents across the city participate in creating the city's urban forest and, importantly, how urban blight may constrain those efforts.

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Finally, both basic and applied research will be generated to address two research problem areas assigned to Research Work Unit on Integrating Human and Natural Resources of the Southern Research Station: assess human influences on ecosystems that affect human-derived benefits from those ecosystems; and evaluate the complex relationships between different social groups and natural resource use and engagement along the urban to rural continuum.

A great deal of research has been conducted on community engagement with urban forests in the Forest Service's Northern Region and in the Pacific Northwest. For instance, Research conducted in Chicago neighborhoods suggests that city trees have beneficial effects on the social well-being of poor residents contending daily with inner-city blight and volatility. Findings suggest that even minimal contact with nature in urban settings contributes significantly to well-being indicators like stress and mental fatigue reduction, mood enhancement, self-discipline for young girls, and even crime reduction (Kuo, Sullivan, Coley, and Brunson, 1998). However, relatively little research examines these questions in the South, despite the fact that the South is the fastest growing region in the country in both urban and rural places and contains considerable racial and ethnic diversity.

d. How will the information be collected (e.g., forms, non-forms, electronically, face-to-face, over the phone, over the Internet)? Does the respondent have multiple options for providing the information? If so, what are they?

The survey will be left at the household for the appropriate household member to complete. The person receiving the survey will be told that completed surveys will be retrieved later that day or by a specific time the next day. Responses will be recorded by the survey administrator using electronic devices. Again, blight data will be recorded by survey administrators after surveys are retrieved.

e. How frequently will the information be collected?

The survey will be conducted one time per address/respondent. We will ask that the person in the home who is 18 years old or old and who last had a birthday to respond to the survey. If the adult who last had a birthday is not home, we will ask that the adult to respond who last had a birthday and is currently home.

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After this survey is complete, that household will be noted as complete in our sampling database, which ensures that any given respondent responds only once to the survey. We wish to administer the survey in the spring through fall months when leaves are on trees to help people recollect and take notice of trees. We will collect this information in the first year of the approval. We do not plan to collect data in the remainder of approved years unless social distancing mandates related to COVID-19 require that any door-to-door survey administration be paused or halted.

f. Will the information be shared with any other organizations inside or outside USDA or the government?

Data will be shared with Phillip Rodbell, the Forest Service's National Program Lead for Urban Forest Research, with Region 8 Urban and Community Forestry Program, with Morehouse College in Atlanta, GA, and the City of Atlanta's Office of Resiliency.

g. If this is an ongoing collection, how have the collection requirements changed over time?

Experience administering surveys in the City of Atlanta revealed the importance of understanding the broader community context; that is, understanding the major challenges impacting communities—and then seeing how a given study fits into that context. For this reason, we modified this collection to begin with one question about the community's greatest needs. To increase understanding of community context, we then present the collective efficacy and social cohesion scales (items 2-15). As stated in the Justification section, item 2c, we will also assess collective efficacy and social cohesion, as conceptualized and described by Sampson, Raudenbush, & Earls (1997); Sampson & Raudenbush (1999); and Burdette, Wadden, and Whitaker (2006). Collective efficacy has to do with the social context and relations of a given place. Scale items assess the degree to which people feel good about and comfortable with doing things in their neighborhood and the extent to which people feel that they have some form of influence or informal control over occurrences in the neighborhood. These scales have been used numerous times by a wide variety of researchers, so their reliability and validity are well-founded.

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.

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Survey administrators will introduce themselves to the person who answers the door of a given residence. The administrator will explain the survey purpose and ask that the appropriate household member complete the survey. If the householder agrees to complete the survey, a paper copy of the survey and an envelope will be left at the doorstep. The administrator will explain that he or she will return later that same day or at an appointed time the next day to retrieve the completed survey. This method is employed because it helps to alleviate the burden of an immediate response by the appropriate person in the household. There are a variety of reasons why an immediate response may not be convenient for the respondent. If the respondent prefers, the survey may be administered immediately.

3. 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.

We used two principal means of identifying duplicate information. First, we conducted a review of the Office of Management and Budget website to determine whether any projects related to urban forest patches had been submitted to the Office of Management and Budget (: https://www.reginfo.gov/public/do/PRASearch). We searched across federal departments and within the USDA. We found two current projects (ours—0596-0237) and 0596-0243. The latter (Non-Timber Forest Products) is a generic package related to the collection of non-timber forest products and is set to expire 30 November 2021.

The second way that we sought information about what projects related to our topic was to work closely with Dr. Kenli Kim, National Program Lead for Social Science Research with the US Forest Service. Dr. Kim has extensive knowledge of research being conducted by other social scientists across all regions of the agency. All OMB applications are reviewed by her before being forwarded to the Department of Agriculture for review. Dr. Kim has advised that there are no current efforts that duplicate or are similar to the research proposed in this information collection.

Dr. Nancy Sonti, with the Northern Research Station in Baltimore Field Station, conducts research on the socio-ecological functions of urban forest patches and has published on the same (Nancy Falxa Sonti fs.fed.us). A recent publication (urbanforestpatchSonti) examines resident perceptions of forest patches in Baltimore, MD. That study was approved by the University of Maryland Institutional Review Board (IRB) (Project 924948-1) and involved qualitative data collection of (1) resident "perceptions and interactions with local urban nature in general, including any environmental stewardship activities; (2) their perceptions and interactions with the forest patch specifically,

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including their awareness of any management activities; (3) demographic information,

including age, ethnicity, employment status, level of education completed, and homeownership" (Sonti, 2020, p.828). Although related, this data collection centered on middle-class neighborhoods, whereas our project is centered in low-wealth and predominantly African American areas of Atlanta (although data collection could take place in other parts of the city). Also, a main focus of our project is constraints to civic environmental stewardship of urban forest patches, particularly involuntary neighborhood transiency. The Sonti study will be reviewed as a part of the literature review and background for our study.

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

No small businesses or other small entities will be involved with the study.

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 the information proposed herein is not collected, this will limit the Forest Service's efforts to contribute to the Administration's priority of advancing environmental justice and improving conditions in disadvantaged communities. The agency will also be less able to contribute to the preservation and restoration of urban tree cover outlined in the agency's current strategic plan. One of the Means and Strategies for carrying out the Forest Service's Strategic Goal to "Sustain Our Nation's Forests and Grasslands" is to: Promote development based on long-term planning and strategic conservation that meets community needs, is sensitive to the environment, and preserves and restores forested landscapes and urban tree cover.

Also, the agency's Strategic Objective F is: Connect people to the outdoors. It states: "More than 80 percent of Americans live in urban areas, and they have many opportunities to enjoy the outdoors on local open space and nearby national forests. Urban Americans benefit from the 100 million acres of urban forests, including urban parks, neighborhoods with shade trees, landscaped boulevards, public gardens, and more. Again, however, very little is known about the distribution of ecosystem services associated with the Atlanta's urban forest or how engagement with the city's trees may be promoted by residents or how concern for the resource fits within the myriad of demands with which residents contend on a routine basis.

7. Explain any special circumstances that would cause an information collection to be conducted in a manner:

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- 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 secret, 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.

There are no special circumstances. The collection of information is conducted in a manner consistent with the guidelines in 5 CFR 1320.6.

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. Specifically address comments received on cost and hour burden.

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The 60-day Federal Register Notice requesting comments was published on September 14, 2021, available here:

<u>Federal Register :: Information Collection: Urban Forest Engagement in Atlanta,</u>
GA

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2021-19766

The comment period ends November 15, 2021. No comments have been received.

Describe efforts to consult with persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and record keeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported.

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 proposed study has been reviewed and commented on by non-Forest Service researchers representing municipal agencies and human geography—Atlanta Housing (Authority). All comments and recommendations were taken into consideration and incorporated into the survey as appropriate. The following table lists individuals who have been consulted on various aspects of the study.

Efforts to consult with persons outside the agency	
Contact	Information Received
Program Director, Land and	Policy Alignment and Timeliness
Revenue	Investigators' focus on disadvantaged
Livelihoods Knowledge	communities' efficacy and ability to cultivate
Exchange Network.	and tend to urban forest areas clearly aligns
	with stated objectives in the cited executive
	orders and statutes. In their concept of
	"neighborhood transiency," investigators have

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identified an important factor in lower-income urban communities that may inhibit these communities' ability to draw benefits from local urban forestry initiatives. Though the impetus for the relevant executive orders and statutes may have been to prevent harmful negative effects of environmental changes on lower-income and minority communities, this research focuses on the different, yet no less important possibility that beneficial sustainability programs might not be feasible for those disadvantaged communities because the latter may lack the economic stability and the historic ties to environmental social networks that have typically been crucial to successful environmental justice initiatives. Furthermore, the project is especially timely due to the rapid expansion of developed property in the studied metropolitan area (Atlanta, GA). If these urban forestry initiatives are not implemented in these disadvantaged communities with the greatest possible attention to local culture and economic factors, their misapplication could easily result in increased economic vulnerability for the very communities they purport to serve.

Quality of Research Instruments

Methods outlined by investigators for distribution and collection of survey data are ethical and poignant. Questions included in the survey are especially well-designed—emphasizing the understanding of a neighborhood's efficacy and ability to sustain urban forest and other communal spaces, rather than those of the individual completing the survey.

Assistant Professor FOREST RESOURCES & CONSERVATION 342 Newins-Ziegler Hall, PO Box 110410 Gainesville, FL 32611-0410 352.846.0926 After reviewing the proposed data collection plan and proposal for this study, I believe that the outlined methods are appropriate, well thought out for the study. The purpose of the study is to assess how Atlanta's residents engage with urban forests on public lands including perceptions and constraints. The data collection method is very appropriate for the study. The method includes stratified random

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Associate Professor Natural Resource Policy & Human Dimensions, Dept. of Forestry, Wildlife, & Fisheries University of Tennessee /Institute of Agriculture 427 Plant Biotech Bldg / Knoxville, TN 37996 865.974.8771	sampling of Atlanta residents and self- administered voluntary surveys. While a survey method will be implemented, it will be voluntary, and participants will have the option to take the survey with the researcher present or return the completed survey at a later time. Based on my review of the scope of the study, I believe this is an appropriately designed study on a topic of high interest to promote community-based conservation practices in urban landscapes. As we see greater needs among communities across the country to garner local support in efficient utilization of remaining open spaces and forest patches to continue provision of ecosystem services and help sustain quality of life, the study topic is timely and thematically relevant to support new public policies at local and regional level. I found the study approach rooted in sound theory in social science and analytical approach rigorous. I do support your effort to continue this study and will be happy to assist in any way I can.
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9. Explain any decision to provide any payment or gift to respondents, other than re-enumeration of contractors or grantees.

No payments will be made to respondents for participation in the survey.

10. Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy.

The questionnaire will clearly state that the information is voluntary and that all the information collected will be reported but responses are anonymous. Personal information such as names or specific addresses will not be associated with any given response.

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11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior or 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.

There are no questions of a sensitive nature on the survey regarding sexual behavior or attitudes, religious beliefs, or other matters that are commonly considered sensitive or private. We do ask respondents to indicate their educational attainment by selecting an educational range. Respondents do, of course, have the option to decline responding to any question posed.

- 12. Provide estimates of the hour burden of the collection of information. Indicate the number of respondents, frequency of response, annual hour burden, and an explanation of how the burden was estimated.
 - Indicate the number of respondents, frequency of response, annual hour burden, and an explanation of how the burden was estimated. If this request for approval covers more than one form, provide separate hour burden.
 - a) Description of the collection activity
 - b) Corresponding form number (if applicable)
 - c) Number of respondents
 - d) Number of responses annually per respondent,
 - e) Total annual responses (columns c x d)
 - f) Estimated hours per response
 - g) Total annual burden hours (columns e x f)

For the purposes of estimating and budgeting for the burden for this information collection, we projected the following informed reasonable estimate of the total number of participants and burden hours (See accompanying Excel Table. "Atlanta Urban Forest Burden Hour and Annualized Cost").

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The desired sample size (SS) is 112. Assuming a response rate of 53 percent, we estimate contacting 231 potential respondents. The survey will be administered in City of Atlanta neighborhoods where four forest patches have been identified, ranging in size from 9.28 to 36.42 acres. Our focus is on publicly managed/owned forest patches. Publicly owned forest patches on city owned property and rights of way are randomly distributed across the city.

The total number of household contacts to be made is estimated to be 231. Statement B describes efforts to improve response rates using proportionate, census guided (PCG) systematic random sampling; however, we will assume a conservative rate (53 percent) based on our recent, prior experience in the same city with a similar population (Johnson Gaither et al., 2020). Given these estimates, the total burden hours are estimated at 26 hours for respondents and 1.67 hours for non-respondents, for a total of roughly 28 burden hours (rounded).

Please see attached table "Atlanta Urban Forest Burden Hour and Annualized Cost" for annual rates and more details. The total annual burden to respondents is based on our estimate of 132 responses to the survey, each full response taking roughly 12 minutes or 0.2 hours to complete (26 hours annually) and 1 minute or (0.016) for non-responses (1.67 hours annually). The 132 responses include 20 pre-test surveys, which be administered to adults in the Urban Food Forest at Browns Mill neighborhood of southeast Atlanta (friendsofbrownsmillfoodforestpark.org/). This neighborhood is proximal to each of the forest patches in southeast Atlanta. These pretesters will be identified via contacts with the "Friends of the Browns Mill Food Forest," which is a community-based group that supports the Urban Food Forest at Browns Mill. The time estimated for response to the current iteration of the survey is based on administration of the survey in 2015 and 2016. Response time was typically 10 minutes or less. With the addition of the collective efficacy and social cohesion scales, we estimate an additional two minutes of response time. The per-response burden estimate for completing the survey is based on an average adult (18 or older) reading the given collection activities.

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We estimate the total dollar value of the burden hours, for both respondents and non-respondents, for this collection to be \$438. We arrived at this figure by multiplying the total estimated burden hours (28 hours) by mean hourly wage rate for "Interviewers, Except Eligibility and Loan" (occupational code 43-4111) for the Atlanta-Sandy Springs-Marietta metropolitan area--\$15.60. The hourly wage rate was obtained from the Bureau of Labor Statistics at https://www.bls.gov/oes/current/oes_12060.htm#43-0000.

Record keeping burden should be addressed separately and should include columns for:

- a) Description of record keeping activity:
- b) Number of record keepers:
- c) Annual hours per record keeper:
- d) Total annual record keeping hours (columns b x c):

There are no record-keeping requirements placed upon the respondents.

Provide estimates of annualized cost to respondents for the hour burdens for collections of information, identifying and using appropriate wage rate categories.

Please see Table 1 above and the answer to question 12.

13. Provide estimates of 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 shown in items 12 and 14). The cost estimates should be split into two components: (a) a total capital and start-up cost component annualized over its expected useful life; and (b) a total operation and maintenance and purchase of services component.

There are no capital operation and maintenance costs.

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14. Provide estimates of annualized cost to the Federal government. Provide a description of the method used to estimate cost and any other expense that would not have been incurred without this collection of information.

The response to this question covers the actual costs the agency will incur as a result of implementing the information collection. The estimate should cover the entire life cycle of the collection and include costs, if applicable, for:

Employee labor and materials for developing, printing, storing forms

20 hours x \$ 70.42= **\$1,408**

This cost relates to work time for a GS-4-15 Research Social Scientist to modify the questionnaire and format contact information sheets that will be left with the respondent. The \$70.42 is the employee's hourly wage rate.

- Employee labor to statistically analyze data

GS-4-15 160 hours x \$70.42= **\$11,267**

This cost includes daily salaries for a GS-4-15 to review relevant literature and analyze data

- Employee labor and materials for developing computer systems, screens, or reports to support the collection

8 hours x \$70.42= **\$563**.

This cost relates to work time for a GS-4-15 Research Social Scientist to modify the collection instrument and develop an input form on Survey Monkey that will store responses that can be downloaded to a spreadsheet.

- Employee costs related to submission of OMB application

Roughly 80 hours of work time for a GS-4-15 Research Social scientist to develop and respond to comments on this information collection request: $(80 \text{ hours } \times \$70.42 = \$5,634)$.

- Employee travel costs

Cost for Forest Service employee to travel to Atlanta, GA from Athens, GA to assist with data collection. 24 day trips are estimated at 160 miles round trip for a total of 3,840 miles @\$0.17 per mile = **\$653**.

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 Cost of contractor services or other reimbursements to individuals or organizations assisting in the collection of information

Two University of Georgia students will be paid to administer the survey in tandem with a Forest Service researcher. We expect to contact 231 potential respondents over a period of 12 weekends, or 24 days total. Surveyors will work for 8 hours each day. Survey administrators will be compensated at the mean hourly wage rate for "Interviewers, Except Eligibility and Loan" (occupational code 43-4111) for the Atlanta-Sandy Springs-Marietta metropolitan area. The hourly wage rate was obtained from the Bureau of Labor Statistics at https://www.bls.gov/oes/current/oes_12060.htm#43-0000. This rate is \$15.60:

8 hrs./day x 24 days = 192 hrs. per surveyor 192 hrs. x \$15.60/hr.= \$2,995 per surveyor $$2,995 \times 2 \text{ surveyors} = $5,990$

Transportation for the student surveyors will be provided by the USDA Forest Service. The 8 hours of daily work includes roughly two-hour travel time to and from Atlanta and four hours of survey administration.

 Cost for unit scientists to report development research papers describing the conceptual basis, methodology, and findings of the larger environmental equity study.

GS-4-15 360 hrs. x \$70.42**=\$25,351**

Total Cost to Government: \$50,866. Total cost on attached spread sheet.

15. Explain the reasons for any program changes or adjustments reported in items 13 or 14 of OMB form 83-I.

This is a renewal of a previously approved collection resulting in a program change (reduction) of 21.55 number of burden hours. We also changed the sampling strategy to a proportionate, census guided (PCG) systematic random sampling, which we anticipate will help increase the response rate. See explanation in Supporting Statement B.

16. For collections of information whose results are planned to be published, outline plans for tabulation and publication.

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All responses will be entered into a Microsoft Excel spreadsheet. Data transfer will be verified for accuracy by project personnel. Analysis of responses will include summary and descriptive statistics, as well as means difference tests, confirmatory factor analysis, analysis of variance, and multivariate regression.

As discussed in the Justification section, data from the broader information collection will be used to assess constraints residents face in responding to a particular for of Atlanta's urban forest, forest patches. Data on the broader social context of this participation is also be collected.

Again, our intention is to examine people's responses to the forest patches with questions related to their awareness of the resource and constraints, particularly transiency, to engaging civically with the areas. These data will be examined alongside data on collective efficacy and social cohesion. To contextualize the collective efficacy and social cohesion findings, we will refer to extant publications that measured these constructs. These measures will also be compared across our study neighborhoods. The implication of transiency and other constraints on resident engagement with particular forest patches will be presented in manuscripts. Descriptive statistics will be tabulated in terms of means where Likert scales are used (collective efficacy and social cohesion scales) and proportions for frequencies where dichotomous or ordinal measures are used. The relationship between constraints and items measuring engagement will be measured with Pearson's or Spearman's correlations and logistic regression.

We plan to submit manuscripts to journals such as Landscape and Urban Planning, Urban Forestry & Urban Greening, and Geoforum.

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 valid OMB control number and expiration date will be displayed on all information collection instruments.

18. Explain each exception to the certification statement, "Certification Requirement for Paperwork Reduction Act."

The Agency is able to certify compliance with 5 CFR 1320.

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