

**Community Transformation Grants: Evaluation of Nutrition, Physical Activity, and
Obesity-related Television Media Campaigns**

New

Supporting Statement

Part A—Justification

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ABSTRACT

The Centers for Disease Control and Prevention (CDC) requests a one-year Office of Management and Budget approval to conduct a Web-based survey of adults in the United States. This survey will be fielded for purposes of evaluating nutrition, physical activity, and obesity (NPAO)-related television media campaigns conducted as part of CDC's Community Transformation Grants (CTG) Program. It will consist of one cross-sectional survey administered to respondents in areas where CTG awardees are conducting media campaigns and in two comparison populations. Information will be collected about individuals' awareness and recall of the campaign; reactions to and perceptions of current and potential campaign messages; NPAO-related knowledge, attitudes, and beliefs; support for NPAO-related policy/environmental change; intentions to change NPAO-related behaviors; NPAO-related behaviors; and sociodemographic characteristics. Data from this survey will be used to examine the statistical relationships between exposure and receptivity to the campaign messages and outcome variables of interest.

A. JUSTIFICATION

A.1 Circumstances Making the Collection of Information Necessary

This is a new Information Collection Request (ICR). Office of Management and Budget (OMB) approval is being requested for one year of data collection through a Web-based survey of adults in the United States to evaluate the impact of nutrition, physical activity, and obesity (NPAO)-related media campaigns conducted as part of the Centers for Disease Control and Prevention's (CDC's) Community Transformation Grants (CTG) Program. CDC's authorization to conduct this survey is provided by the Public Health Service Act (Attachment 1a).

In 2009, Title VIII of the American Recovery and Reinvestment Act (ARRA), Public Law 111-5 (Attachment 1b), provided \$650 million to carry out evidence-based prevention and wellness strategies. The Department of Health and Human Services (HHS) developed an initiative in response to ARRA, Communities Putting Prevention to Work (CPPW) that is helping to reorient the U.S. health care system from primarily treating disease to promoting population health and well-being. In 2010, the Affordable Care Act (ACA, Attachment 1c) continued this reorientation by creating a new Prevention and Public Health Fund (Attachment 1d) designed to expand and sustain the necessary infrastructure to prevent chronic disease, detect it early, and manage conditions before they become severe. This funding was used to develop the Community Transformation Grants (CTG) Program requiring awardees to support evidence-based interventions to reduce the prevalence and burden of chronic diseases. This ICR seeks approval to conduct an evaluation of education efforts to promote healthy eating and increase physical activity conducted via media channels by CTG awardees.

Through CPPW, CDC provided funding to 51 awardees nationwide to implement evidence-based prevention and wellness strategies to increase physical activity, improve nutrition, and reduce tobacco use and exposure to secondhand smoke. A key focus of CPPW is to promote community-wide interventions across five evidence-based MAPPS strategies (Media, Access, Point of decision information, Price, and Social support services). CPPW awardees were charged with using multiple MAPPS strategies to implement specific high-priority interventions. These efforts were designed to improve behaviors related to CPPW targets of physical activity, nutrition, and tobacco use and ultimately to reduce morbidity and mortality associated with multiple chronic disease outcomes.

In fiscal year 2011, funding of \$102.6 million was authorized to the CTG Program (CDC-RFA-DP11-1103PPHF11) to fund 61 cooperative agreements with state and local governmental agencies, tribes and territories, state or local nonprofit organizations, and national networks of community-based organizations. The purpose of this funding is to implement, evaluate, and disseminate evidence-based community preventive health activities to reduce chronic disease rates, prevent the development of secondary conditions, address health disparities, and develop a stronger evidence base for effective prevention programming. Section 4201 of the ACA specifies that an evaluation of CTG is to be conducted "to measure changes in the prevalence of chronic disease risk factors among community members participating in preventive health activities" (Attachment 1e). The ACA further specifies that measures for the following core outcomes must be collected and assessed over time:

- i. changes in weight;
- ii. changes in proper nutrition;
- iii. changes in physical activity;
- iv. changes in tobacco use prevalence;
- v. changes in emotional well-being and overall mental health; and
- vi. other factors using community-specific data from the Behavioral Risk Factor Surveillance Survey; and
- vii. other factors as determined by the Secretary.

Twenty-six awardees are focused on capacity-building efforts, and 35 awardees are working to implement sustainable, broad, evidence- and practice-based changes to improve public health (see Attachment 3, CTG Strategic Directions). A list of CTG awardees is provided in Attachment 4.

In implementing ACA mandates, CDC designed a multicomponent national evaluation of CTG that includes this Evaluation of Nutrition, Physical Activity, and Obesity-related Television Media Campaigns described within this ICR.

Rationale and Evaluation Questions

Three CTG awardees have implemented or are planning to implement community-driven, mass-media campaigns addressing NPAO. These campaigns include messaging about the importance of regular physical activity, fruit and vegetable consumption, and avoidance of sugar-sweetened beverages in adults and children, and focus on raising awareness about obesity prevalence and associated health outcomes. Primary objectives of the campaigns are to increase public awareness of these messages, shift attitudes and beliefs toward healthy behavior change, and increase public support for proven policies and programs to prevent obesity. The campaigns' primary audiences are adults aged 18 and older.

Although there is growing evidence of the impact of tobacco control media campaigns on tobacco use, less is known about the effectiveness of media campaigns targeting NPAO-related outcomes.¹ CTG offers a unique opportunity to begin to establish an evidence base for obesity prevention communication efforts operating within the broader context of community-level policy, systems, and environmental change efforts. The goal of the proposed information collection is to evaluate the extent to which NPAO-related media campaigns impact specific cognitive and behavioral outcomes that are targeted by the campaigns. Data from this information collection will be used to assess potential associations between the extent of exposure to media campaigns and specific outcomes of interest. Below are the three evaluation questions that guide this study.

1. To what extent do levels of NPAO-related knowledge, attitudes, beliefs, behavioral intentions, and behaviors vary between individuals who were exposed to ANY degree NPAO-related media campaign and those who were **not** exposed to any NPAO-related media campaign?
2. To what extent do levels of support for obesity prevention policies and programs vary between individuals who were exposed to ANY NPAO-related media campaign and those who were **not** exposed to any NPAO-related media campaign?

3. To what extent do respondents perceive specific NPAO-related messages to be effective?

However, three important factors limit CDC's ability to conclude that CTG-related differences in media exposure are strictly responsible for the differences in outcomes observed. First, although the sampling frame used in this study is sufficiently large and varied, it is not fully representative of each of the areas. Second, CDC acknowledges that there is heterogeneity of media campaign approaches and dosage across intervention areas in CTG. Finally, it is not possible to control the differences in "experimental" treatment with respect to media exposure in each area; even though CTG programs may not exist in those areas, other locally supported obesity-related media (or non-media) campaigns may exist in those area.

Privacy Impact Assessment

CDC proposes to conduct a Web-based survey among adults aged 18 years and older. The items of information to be collected focus on the following areas: audience awareness and recall of the campaign; reactions to and perceptions of campaign messages; NPAO-related knowledge, attitudes, and beliefs; support for NPAO-related policy/environmental change; intentions to change NPAO-related behaviors; NPAO-related behaviors; and sociodemographic characteristics. Data collected are regarded as being no greater than minimally sensitive, and no information in identifiable form is being collected. Therefore, the data collection will have little or no effect on the respondent's privacy. Nevertheless, safeguards will be put in place to ensure that all collected data remain protected.

Overview of the Information Collection

This study is designed to measure awareness of and exposure to obesity prevention television media campaigns and the impact of these efforts on key cognitive and behavioral outcomes targeted by the campaigns. This study will rely on self-administered Web-based surveys. The screening and consent process is outlined in Attachments 5a/5b and the survey is included as Attachments 6a/6b. This study will be conducted using the Research Now (RN) General Population panel, a large online panel of the U.S. population (Attachment 7). Specifically, we will conduct one cross-sectional survey among adults drawn from three populations:

1. Intervention population - Adults residing in selected CTG awardee areas where CTG-sponsored obesity prevention television media campaigns have been or are being delivered (intervention awardee areas).
2. Comparison 1 population - Adults residing in CTG awardee areas where no CTG- or CPPW-sponsored obesity prevention television media campaigns have been or are being delivered (media-control awardee areas).
3. Comparison 2 population - Adults residing in areas not covered by either CTG or CPPW (program-control awardee areas).

We plan to begin fielding the survey in June 2013. Survey items will include measures of awareness and recall of the campaigns; reactions to and perceptions of campaign messages; NPAO-related knowledge, attitudes, and beliefs; support for NPAO-related policy/environmental change; intentions to change NPAO-related behaviors; NPAO-related behaviors; and sociodemographic characteristics. These item domains and rationale for including items in the survey are described more thoroughly below.

This data collection effort will enable us to assess potential associations between CTG media campaign exposure and key cognitive and behavioral outcomes. By including two comparison populations— 1) CTG awardee areas with no CTG nor CPPW media campaigns and 2) a national sample excluding CTG and CPPW awardee areas—we will be able to generate hypotheses regarding differences in outcomes of interest as a function of campaign exposure while accounting for potential confounding influences of other CTG-related nonmedia efforts. Further, disaggregating specific NPAO media campaigns will enable a more thorough examination of the potential impact of each media campaign on key outcomes targeted by the campaigns.

To account for differences among the three populations sampled for this evaluation, we will use propensity scoring, a statistical technique used in the evaluation of other media campaigns^{2,3} that offers a means of creating equal intervention and comparison groups. It is used in nonrandomized observational studies to estimate the probability that a person will belong to a particular group. Propensity scores will be developed to reduce the effects of confounding in estimating intervention effects by accounting for differences in measured baseline characteristics among the three sampled populations (CTG media intervention population, and the two comparison populations). CDC recognizes the limitations of this approach for eliminating differences among groups with respect to unmeasured characteristics such as exposure to non-CTG supported obesity-related media (or non-media) campaigns in the comparison populations. This unmeasured potential confounding would be expected to result in a smaller effect of the CTG media intervention than what would be observed with a strict control group for comparison. Thus, sensitivity analysis techniques will be used to draw conclusions about likely bounds for the magnitude of the effect that could be attributed to campaign activities, based on a range of plausible assumptions about the direction and strength of unmeasured confounding.

To address Evaluation Questions 1 and 2, we will generate an aggregate measure of NPAO media exposure that is defined as exposure to any NPAO media campaign. For Evaluation Question 1, we intend to examine differences in means or prevalence estimates for NPAO-related knowledge, attitudes, beliefs, behavioral intentions, and behaviors among individuals in the “exposed” group (Intervention population, intervention awardee areas) and (a) individuals in CTG awardee areas where no CTG- or CPPW-sponsored obesity prevention television media campaigns have been or are being delivered (Comparison 1 population, media-control awardee areas), and (b) individuals residing in areas not covered by either CTG or CPPW (Comparison 2 population, program-control awardee areas).

Our approach for addressing Evaluation Question 2 follows that of Evaluation Question 1, but with support for obesity prevention policies and programs as the primary outcome measure. For Evaluation Question 2, we will examine differences in levels of support for obesity prevention policies among individuals in the “exposed” group (intervention awardee areas) and (a) individuals in CTG awardee areas where no CTG- or CPPW-sponsored obesity prevention television media campaigns have been or are being delivered (media-control awardee areas), and (b) individuals residing in areas not covered by either CTG or CPPW (program-control awardee areas).

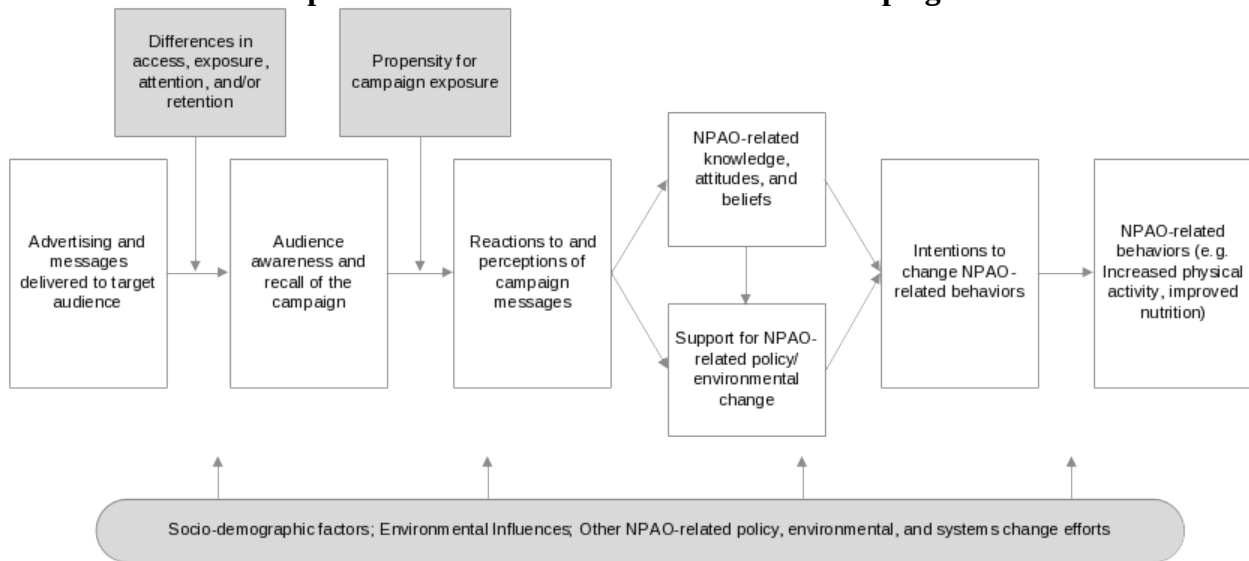
To address Evaluation Question 3, we will assess the extent to which respondents are receptive to the campaign messages and perceive them to be effective. As described below, the survey

instrument includes several validated measures of ad receptivity and perceived effectiveness that have been used to evaluate the effectiveness of other public health campaign messages.

Items of Information to be Collected

The survey will include measures of audience awareness and recall of their relevant campaign messages; reactions to and perceptions of campaign messages; NPAO-related knowledge, attitudes, and beliefs; support for NPAO-related policy/environmental change; intentions to change NPAO-related behaviors; NPAO-related behaviors; and sociodemographic characteristics. Below, we provide an overview of and rationale for including each of these domains in the survey. Exhibit A.1.1 illustrates each domain and its hypothesized position in the pathway between media exposure and outcomes. Exhibit A.1.2 lists each key outcome, its operational definition, associated survey measures, and corresponding Evaluation Question. Attachment 6a provides the questionnaire with a brief description of the rationale and source for each survey item. Each item is linked to a specific construct outlined in the conceptual model and items are mainly drawn from prior, validated, survey instruments and surveillance systems such as the state-based Behavioral Risk Factor Surveillance System (BRFSS).

Exhibit A.1.1 Conceptual Model of NPAO-related Media Campaign Effects



Audience Awareness and Recall of Campaigns. This study will rely on self-administered Web-based surveys using RN’s General Population panel (see Attachment 7 for details about the panel). The use of the RN online panel for our survey provides distinct advantages over using telephone tracking surveys to measure local media campaign awareness. First, it would be extremely challenging to measure accurately and comprehensively self-reported awareness of all of a campaign’s advertising via telephone surveys because this method lacks the capability of visual cues to prompt recognition. Furthermore, to measure confirmed awareness specifically, telephone surveys must rely on crude interviewer descriptions of the ads to cue participants’ recognition. Online surveys allow us to show any television campaign advertisement directly to survey participants. Because respondents are not forced to rely strictly on memory recall of the ads, this facilitates a more accurate measurement of both ad recognition and cognitive receptivity to the ads. After viewing the materials, participants will be asked a series of questions to assess how frequently they have seen the materials. These individual self-reported awareness measures

are typically strongly correlated with exogenous measures of campaign reach (e.g., gross rating points¹). Assessing audience awareness and recall of local media campaigns will provide a key measure of campaign exposure to address Evaluation Questions 1 and 2.

Reactions to and Perceptions of Campaign Messages. Health communication researchers have argued that the mere presence of ads does not guarantee that target audiences have engaged with the messages in any meaningful way.⁴ Messages must not only be viewed and remembered but also attended to, understood, and perceived as persuasive. For example, the “elaboration likelihood model” notes that for a message to be persuasive it must be fully attended to by the viewer and the message content must be cognitively processed. Thus, attitudinal changes are, to a certain extent, a function of the level of cognitive processing or “elaboration” that occurs in response to a campaign message. As a result, a wide body of research in the health communication literature has emerged to establish measures of “ad receptivity,” and this research has demonstrated that ad receptivity measures predict changes in attitudes about the topic.^{7,8} In applying this to our evaluation of NPAO-targeted media campaigns, the proposed survey will include multiple measures of receptivity to specific campaign media materials. These measures will gauge the perceived persuasiveness of campaign messages, perceptions of the salience of campaign messages, and other general impressions about the campaign. These measures will enable us to assess key proximal cognitive outcomes that are vital to addressing Evaluation Question 3.

Knowledge, Attitudes, and Beliefs about NPAO, and Intentions to Change NPAO-related Behaviors. A challenge with evaluating media campaigns is the substantial lag-time between media exposure and subsequent changes in behaviors and long-term outcomes such as reductions in obesity and chronic disease prevalence. Demonstrating changes in NPAO-related behaviors may take several years. Therefore, in addition to examining campaign impact on behavior, it is also important to assess antecedents of behavior such as knowledge, attitudes, beliefs, and intentions.⁹ Our selection of survey items in these domains has been guided by a set of related theories of health behavior change, including social cognitive theory,¹⁰ the theory of reasoned action,¹¹ the health belief model,¹² and the socioecological model.¹³ These theoretical underpinnings provide a “roadmap” to guide selection of relevant measures of the antecedent cognitive and social indicators that affect NPAO-related behavior and the necessary processes that must occur prior to changes in such behavior. Measures of knowledge, attitudes, and beliefs about NPAO, and intentions to change NPAO-related behaviors, will serve as key outcomes that are necessary to address Evaluation Question 1.

Support for NPAO-related Policy/Environmental Change. Increased support for policy and environmental efforts to promote physical activity and healthy eating/drinking is a key objective of the local campaigns. Therefore, we have included survey items to measure support for proven policies and programs to prevent obesity, and to examine potential associations between media exposure and policy support. These measures will serve as key outcomes necessary to address Evaluation Question 2.

1 Media buy data for traditional television advertising are usually expressed in terms of gross rating points (GRPs). GRPs measure the intensity of advertisements over a designated time period and provide a metric of relative dose by media channel for each media market or community in which relevant media activities are implemented.

NPAO-related Behaviors. The survey includes several items to assess NPAO-related behaviors, including fruit, vegetable, and healthy beverage consumption; physical activity; and consumption of unhealthy foods and beverages. These behaviors are associated with obesity and represent an important target for the media campaigns and other CTG efforts. These items are mainly drawn from existing, validated, survey instruments and surveillance systems such as the state-based BRFSS, the International Physical Activity Questionnaire, PACE Questionnaire, and the CKG! Healthy Living Awareness Survey. These items will serve as key outcomes necessary to address Evaluation Question 1.

Sociodemographic Characteristics. The survey includes several demographic measures taken from HHS data standards for the collection of race, ethnicity, sex, primary language, and disability status for self-reported data collected through population-based health surveys.¹⁴ Data standards were developed in accordance with Section 4302 of the ACA (Attachment 1f). In addition, the survey includes measures of sociodemographic and physical characteristics that may be associated with key outcomes and will need to be accounted for in analyses. These measures will enable us to examine differences in exposure and outcomes among population sub-groups and account for differences in sociodemographic characteristics in analyses relevant to Evaluation Questions 1, 2, and 3.

Exhibit A.1.2 CTG Media Study Key Outcomes

Evaluation Question	Outcome Indicator	Operational Definition	Measure(s) (survey item numbers)
1	Meets CDC Physical Activity Guidelines for adult aerobic physical activity	150 minutes of weekly moderate-intensity aerobic activity, 75 minutes of vigorous-intensity aerobic activity, or an equivalent mix of both (categorical—dichotomous)	Measure constructed from A1, A2, A3, and A4
1	Fruit and vegetable consumption	Consumes five or more daily servings of fruit and vegetables (categorical—dichotomous)	A7
1	Sugar-sweetened beverage consumption	Average weekly consumption of soda or sugar-sweetened fruit drinks (continuous)	Measure constructed from A11 and A12
1	Intention to increase physical activity	No intention to increase physical activity; intends to within next 6 months; intends to in next 30 days (categorical—trichotomous)	A14
1	Intention to increase consumption of fruits and vegetables	No intention to increase consumption; intends to within next 6 months; intends to in next 30 days (categorical—trichotomous)	A15
1	Intention to reduce consumption of sugar-sweetened beverages	No intention to reduce consumption; intends to within next 6 months; intends to in next 30 days (categorical—trichotomous)	A16

1	Healthy eating attitudes	Level of agreement with statement “It is important for me to eat healthy foods” (ordinal five-point scale)	B5
1	Attitudes about consuming sugar-sweetened beverages	Level of agreement with statement “It is important for me to avoid non-diet sugar-sweetened drinks (for example, Coke, Kool-Aid, Snapple, Gatorade)” (ordinal five-point scale)	B7
1	Physical activity attitudes	Reported level of agreement with statement “It is important for me to be active and do things like walk, bike and play” (ordinal five-point scale)	B9
2	Support for policies to increase availability of healthy foods and drinks	Reported level of likelihood of supporting “policies or other efforts in your community that make it easier for people in your community to get healthy foods and drinks” (ordinal five-point scale)	A20
2	Support for policies to promote physical activity	Reported level of likelihood of supporting “policies or other efforts in your community that make it easier for people in your community to be active and do things like walk, bike, and play” (ordinal five point scale)	A21
3	Evaluative receptivity to ads	Reported level of agreement with following statements: “this ad is worth remembering,” “this ad grabbed my attention,” “this ad is powerful,” “this ad is informative,” “this ad is convincing,” and “this ad is ridiculous” (30-point index constructed from six five-point ordinal scales)	Measure constructed from C13_1 – C13_6
3	Perceived effectiveness of ads in promoting healthy eating	Reported degree to which the ad made respondent want to “take action to eat healthy foods” (ordinal five point scale)	C16
3	Perceived effectiveness of ads in promoting avoidance of sugar-sweetened beverages	Reported degree to which the ad made respondent want to “take action to avoid sugar-sweetened soft drinks or fruit drinks” (ordinal five-point scale)	C18
3	Perceived effectiveness of ads at promoting physical activity	Reported degree to which the ad made respondent want to “take action to be active and do things like walk, bike, and play” (ordinal five point scale)	C19

Identification of Website(s) and Website Content Directed at Children Under 13 Years of Age

Respondents will be adults aged 18 years and older. There is no contact directed at children under 13 years of age.

A.2 Purposes and Use of Information Collection

The information obtained from the proposed data collection activities will be used to inform CDC, policymakers, prevention practitioners, researchers, CTG awardees, and the general U.S. population about the extent of adults' exposure to campaign messages and the extent to which exposure to these messages is associated with changes in outcomes targeted by the campaign. Although not exhaustive, the list below illustrates a range of purposes and uses for the proposed information collection:

- Understand the potential influence of media campaigns on attitudes, knowledge, beliefs, and behaviors around active lifestyles, healthy eating/drinking, and obesity.
- Inform CDC, policymakers, and other stakeholders on the potential impact of CTG obesity prevention media campaigns.
- Inform the development of health communication efforts undertaken by CDC including upcoming campaigns that while intended for different audiences can benefit from knowledge of the approaches used for this study.
- Inform future programs that may be designed for similar purposes.

A.3 Use of Improved Information Technology and Burden Reduction

This study will rely on self-administered Web-based surveys. The primary Web panel we are using for this study is RN's General Population panel (see Attachment 7 for details about the panel).

Use of this panel and the basic approach of online surveys provide a number of methodological advantages including increased accuracy in measurement of key variables of interest, attractive sample characteristics, and reduced burden on study participants. This approach also yields significant cost efficiencies compared to other modes of data collection such as telephone surveys. These advantages include but are not limited to the following:

- Increased privacy (compared to telephone interviewing) reduces vulnerability to socially desirable survey responses, particularly on potentially sensitive subjects such as diet and physical activity behaviors. Surveys are self-administered in a private setting and respondents do not speak to human interviewers as they would with telephone surveys.
- Flexible and timely data collection. Because RN does not involve human interviewers and all ensuing requirements for interviewer training and quality control, it is easier and less expensive to launch surveys very quickly.
- Significant cost savings over traditional telephone surveys (reduction of costs associated with human interviewers and interviewer training).
- Allows for inclusion of any campaign media material including video streaming of campaign ads and presentation of print materials all within the survey. This significantly enhances the ability to accurately measure awareness of and exposure to campaign ads. By comparison, telephone surveys do not allow for direct exposure to campaign messages and stimuli, preventing more accurate measurement of individual awareness and recall of campaign ads. It has been demonstrated that the use of visual cues to prompt ad recognition (which is only possible with Web-based or in person

surveys) is a superior method for measuring encoded ad exposure compared to telephone surveys that must rely on verbal cues from human interviewers to prompt ad recognition.⁴

- RN uses an unbiased general topic recruitment protocol that is free of self-selection biases related to preexisting interests in specific research topics.
- Panel members are sent survey invitations linked through a personalized e-mail message (instead of by phone or postal mail). This contact method permits surveys to be fielded quickly and economically. In addition, this approach reduces the burden placed on respondents because e-mail notification is less intrusive than telephone calls and allows research subjects to participate in research when it is convenient for them.

A.4 Efforts to Identify Duplication and Use of Similar Information

The media campaigns implemented through the CTG Program are new. To date, there has been no in-depth evaluation of these campaigns and no existing data sources that contain measures on awareness of and exposure to the campaigns. This proposed information collection therefore does not duplicate previous efforts. In designing the proposed data collection activities, we have taken several steps to ensure that this effort does not duplicate ongoing efforts and that no existing data sets would address the proposed study questions. We have carefully reviewed existing data sets to determine whether any of them are sufficiently similar or could be modified to address CDC's need for information on the effectiveness of the campaigns with respect to influencing key campaign outcomes of interest. We investigated the possibility of using existing data, such as the state-based BRFSS or HealthStyles, to examine our research questions. However, no other existing data source will include the necessary in-depth survey questions on awareness of individual ads and other campaign materials, and no other source contains all of the necessary outcome variables specific to campaign messages.

A.5 Impact on Small Businesses or Other Small Entities

Respondents in this study will be members of the general public, not business entities. No impact on small businesses or other small entities is anticipated.

A.6 Consequences of Collecting the Information Less Frequently

The cross-sectional, post-test only design of this effort minimizes the burden to respondents by requiring data collection at only one point in time. It would be impossible to conduct the data collection less frequently. Without this data collection, CDC would not be able to determine the frequency of campaign exposure nor evaluate the influence of campaigns on attitudes, knowledge, beliefs, and behaviors around active lifestyles, healthy eating/drinking, and obesity. We believe that the proposed cross-sectional survey will provide sufficient data to evaluate the campaigns effectively and efficiently.

A.7 Special Circumstances Relating to the Guidelines of 5 CFR 1320.5

There are no special circumstances that require data collection to be conducted in a manner inconsistent with 5 CFR 1320.5 (d)(2). The message testing activities fully comply with the guidelines in 5 CFR 1320.5.

A.8 Comments in Response to the Federal Register Notice and Efforts to Consult Outside the Agency

A.8.a Federal Register Notice

A 60-day Federal Register Notice was published in the *Federal Register* on June 6, 2012 (see Attachment 2a). CDC received and acknowledged one nonsubstantive public comment (see Attachment 2b).

A.8.b Consultation

The CTG online media survey protocol was designed in collaboration with CDC staff and contractors from RTI International. The following individuals from CDC have been consulted on the design of the campaign evaluation plan, questionnaire development, or intra-agency coordination of information collection efforts:

Name	Organization	Contact Information
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The following individuals from RTI International have been consulted on the design of the campaign evaluation plan and questionnaire development:

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A.9 Explanations of Any Payment or Gift to Respondents

The study respondents will be drawn from a panel maintained by RN. RN provides its Internet panel members with a gift as part of their continuous participation in the Internet panel. Panel members earn an RN gift for the time they spend answering market research surveys. The appropriate gift that panel members receive for participation is based on the approximate length of the survey. Members can redeem their earned gifts for a variety of valuable rewards that are of interest to them. Some examples of gift partners include Pizza Hut, Best Buy, JC Penney's, Macy's, American Airlines, Hertz, Target, iTunes, and various publication companies for magazine subscriptions, among others. The value of the gifts provided for participation in this project is \$5.00. There is no additional payment or gift associated with participation in the study proposed here.

Numerous empirical studies have shown that gifts can significantly increase response rates.^{15,16} The use of modest gifts is expected to enhance survey response rates without biasing responses. We also believe that the gifts will result in higher data validity as participants will become more engaged in the survey process. This will also enhance overall response to the survey. It is crucial that the survey be completed soon after launch of the media campaign to minimize recall bias. The use of gifts will also help ensure that data collection is completed in a timely manner. The estimated total cost of gifts is \$34,875 (\$5 X 6,975 respondents).

A.10 Assurance of Confidentiality Provided to Respondents

All procedures have been developed in accordance with federal, state, and local guidelines, to ensure that the rights of participants are protected and data are appropriately safeguarded. The RTI Institutional Review Board (IRB) reviewed and approved all instruments, informed consent materials, and data collection and management procedures. The e-mail notification and reminders provided to respondents are included as Attachment 8. RTI's IRB approval notice is included as Attachment 9.

Privacy Act Determination

This submission has been reviewed by CDC's National Center for Chronic Disease Prevention and Health Promotion and CDC's Information Collection Review Office, which have determined that the Privacy Act does not apply. Although identifiable information about respondents will be used to facilitate initial contact and follow-up, the identifying information is maintained in a secure, preexisting records system owned by RN. The response data transmitted from RN to RTI International, the data analysis contractor, will be de-identified prior to transmission and analysis.

Safeguards

Information will be safeguarded using procedures to prevent unauthorized access to respondent data, and by preventing the public disclosure of the responses of individual participants. The contractors will only share data or information with CDC in an aggregated form or format, which does not permit CDC to identify individual respondents.

Neither RN nor RTI will share personal information regarding panel members with any third party. Identifying information will not be included in the data files delivered to the agency. CDC and RTI will receive data for analysis in aggregate form. Although RN retains contact information on participants for honoraria purposes, individually identifiable information is not shared with anyone, including CDC and RTI; it is stored separately from the survey data file and is not linked in any way to participant responses.

RTI maintains restricted access to all data preparation areas (i.e., receipt and coding). All data files on multi-user systems will be under the control of a database manager, with access limited to project staff on a "need-to-know" basis only. RN takes the following security measures to ensure separation between respondents' identity and their survey data.

- The survey instrument has no personally identifying information (PII) on it. No respondent name, address, e-mail address, phone number, or any other kind of PII appears on the survey. The only way a survey is identified is with a digital identification number.
- Although the invitation method, whether e-mail, mail, or direct mail, will inherently have PII included, this will not be combined with survey responses, so the responses from the survey are not linked to the PII.
- Screener data shall be considered part of the survey data. RN will provide the results of the screener questions for all panelists, regardless of whether they qualify for the study. However, RN will not retain responses to screening questions for those who are deemed ineligible for any other purpose outside the scope of this project.
- RN will retain study records for the duration of the study. Upon final delivery of data files to RTI and completion of the project, RN will destroy all study records including data files upon request. RN will not be able to supply or access this information for any reason, even at the request of RTI, once destroyed.
- Data coming directly from the survey engine are stored in a proprietary database. Although these data are not encrypted, once inside the firewall, they are stored in a relational database protected by several layers of intrusion detection and access control. Data files delivered to RTI by RN will be sent via encrypted files.

Consent

All respondents will be assured that the information they provide will be maintained in a secure manner and will be used only for the purpose of this research. Please refer to the assurances and study descriptions included in the Screener and Consent Process (Attachment 5). Respondents will be assured that their answers will not be shared with family members and that their names will not be reported with responses provided. Respondents will be told that the information obtained from all of the surveys will be combined into a summary report so that details of individual questionnaires cannot be linked to a specific participant.

Nature of Participation

Respondents will participate on a voluntary basis. The voluntary nature of the information collection is described in the introductory section of the Screener and Consent Process (Attachment 5) and the initial contact e-mail (Attachment 8).

A.11 Justification for Sensitive Questions

The majority of questions asked will not be of a sensitive nature. There will be no requests for a respondent's Social Security number. Questions about messages concerning lifestyle (e.g., messages about NPAO, current NPAO-related behaviors) and some demographic information, such as race, ethnicity, and income, could be considered sensitive, but not highly sensitive. To address any concerns about inadvertent disclosure of sensitive information, respondents will be fully informed of the applicable privacy safeguards. The informed consent protocol (see Attachment 5) will apprise respondents that these topics will be covered during the survey. This study includes a number of procedures and methodological characteristics that will minimize potential negative reactions to these types of questions, including the following:

- Respondents will be informed that they need not answer any question that makes them feel uncomfortable or that they simply do not wish to answer.
- Web-based surveys are entirely self-administered and maximize respondent privacy without the need to verbalize responses.
- Participants will be provided with a specific toll-free phone number (linking directly to the RTI IRB Office) to call in case there is a question or concern about the sensitive issue.

Finally, as with all information collected, these data will be presented with all identifiers removed.

A.12 Estimated Annualized Burden Hours and Cost to Respondents

A.12.a Estimated Annualized Burden Hours

Information will be collected through Web-based surveys involving adults aged 18 and older. Information will be collected once beginning in June 2013, following campaign implementation in the intervention sites. The Web-based self-administered surveys are designed to maximize ease of response (at home on personal computers) and thus decrease respondent burden.

The target number of complete surveys is 6,975, comprising 2,325 complete surveys in intervention awardee areas (Intervention Population), 2,325 complete surveys in Comparison 1

Population (CTG awardee areas that do not include a media campaign), and 2,325 complete surveys in Comparison 2 Population (excluding CTG/CPPW awardee areas). CDC estimates that 19,500 respondents must be contacted for screening and consent to yield the target number of completed surveys. The same data collection instruments will be used for all respondents. Attachment 5a provides the complete list of questions and advisements for the screening and consent process, and Attachment 5b provides representative screen shots of the Web-based instrument. The estimated burden per response for screening and consent is three minutes. Attachment 6a provides the complete list of questions for the main information collection, annotated with notes about each question’s rationale and source. Attachment 6b provides representative screen shots of the Web-based instrument. The estimated burden per response for the survey is 30 minutes.

The total estimated burden hours are 4,463. Exhibit A.12.1 provides details about how this estimate was calculated.

Exhibit A.12.1 Estimated Annualized Burden Hours

Type of Respondent	Form Name	Number of Respondents	Number of Responses per Respondent	Average Burden per Response (in Hours)	Total Burden (in Hours)
Adults, ages 18+ in the U.S.	Welcome to the Health and Media Survey	19,500	1	3/60	975
	Health and Media Survey	6,975	1	30/60	3,488
Total					4,463

A.12.b Estimated Annualized Burden Costs

Respondents participate on a voluntary basis and, therefore, are subject to no direct costs other than time to participate. There are also no startup or maintenance costs. RTI has conducted many surveys of similar length with RN and other online panel providers. We have examined diagnostic data from each of these prior surveys and estimate that data collection for this study will take approximately 30 minutes per respondent. According to the U.S. Department of Labor Bureau of Labor Statistics, as of April 2011 the national median hourly wage is \$16.27.17. Thus, assuming a median hourly wage of \$16.27, the estimated one-year annualized cost to participants will be \$72,613. The estimated value of respondents’ time for participating in the information collection is summarized in Exhibit A.12.2.

Exhibit A.12.2 Estimated One-Year Annualized Cost

Type of Respondent	Form Name	Number of Respondents	Total Burden Hours	Hourly Wage Rate	Total Cost
Adults, ages 18+ in the U.S.	Welcome to the Health and Media Survey	19,500	975	\$16.27	\$15,863
	Health and Media Survey	6,975	3,488	\$16.27	\$56,750

Type of Respondent	Form Name	Number of Respondents	Total Burden Hours	Hourly Wage Rate	Total Cost
Total					\$72,613

A.13 Estimate of Other Total Annual Cost Burden to Respondents or Record Keepers

None.

A.14 Estimates of Annualized Cost to the Federal Government

This information collection is funded through a contract with RTI International. The total estimated costs to the federal government attributable to this data collection are \$542,100 (see Exhibit A.14.1). There are additional contract-funded activities occurring before and after this data collection that include project planning and data analysis. Other activities outside this data collection include coordination with CDC, CTG and CPPW awardees, and media contractors; evaluation plan development; instrument development; reporting; RTI IRB and progress reporting; and project management. The annual cost to the federal government is estimated to be \$542,100. Four CDC health communications specialists are responsible for overseeing the content of this information collection, overall project management, and coordination with other CDC activities.

Exhibit A.14.1 Itemized Cost to the Federal Government

CDC Staff Member	Annual Salary	% Allocation (Annualized)	Cost
GS-14	\$115,000	5%	\$5,750
GS-14	\$115,000	5%	\$5,750
GS-14	\$115,000	5%	\$5,750
GS-13	\$97,000	5%	\$4,850
GS-9	\$57,000	25%	\$14,250
GS-14	\$115,000	5%	\$5,750
		Subtotal, CDC Personnel	\$42,100
Contractual Costs for Data Collection and Management (RTI)		Subtotal, Contractual Costs	\$500,000
		Total	\$542,100

A.15 Explanation for Program Changes or Adjustments

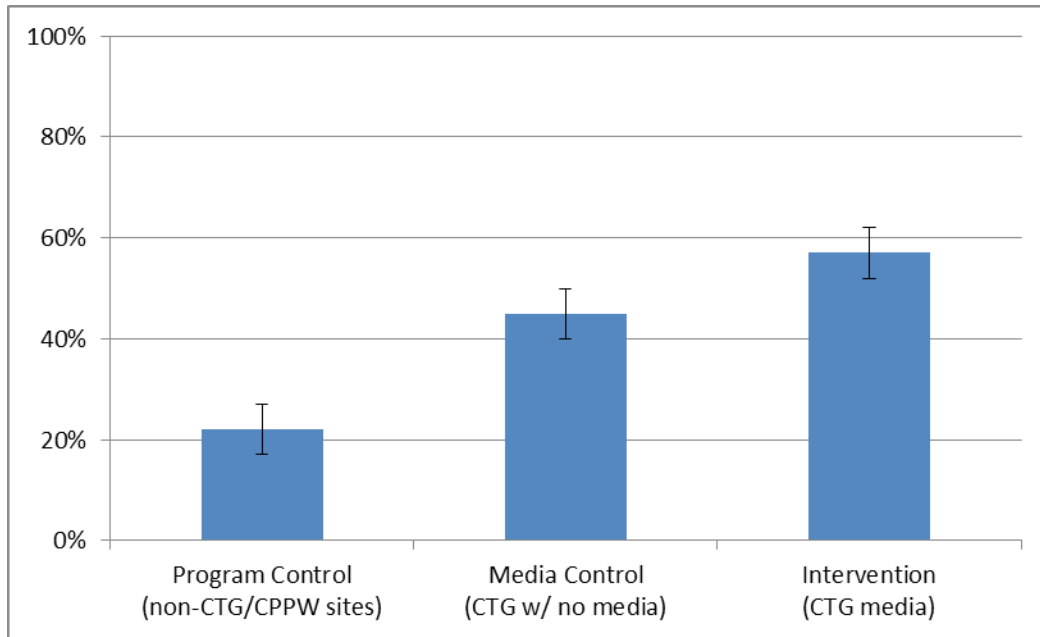
This is a new ICR. There are no changes relative to a previous approval period.

A.16 Plans for Tabulation and Publication and Project Time Schedule

Data from this information collection will be used to examine statistical associations between exposure to the campaign and specific outcomes of interest. This will be accomplished with the use of multivariate models that estimate measures of each relevant outcome as a function of exposure to the campaign, controlling for individual characteristics and other CTG efforts that may confound the relationship between campaign exposure and differences in outcomes. The primary outcomes of interest are reactions to and perceptions of campaign messages; NPAO-related knowledge, attitudes, and beliefs; support for NPAO-related policy/environmental change; intentions to change NPAO-related behaviors; and NPAO-related behaviors.

First, we will present descriptive statistics summarizing means, variability, and prevalence estimates for key outcome measures, by intervention status. These may be presented in a series of bar charts, as per Exhibit A.16.1 below. Similar figures will present each of the outcomes listed in Exhibit A.16.1 that are associated with Evaluation Questions 1 and 2, by intervention status. All analyses in this section will include chi-square tests of independence to detect significant associations between intervention status and key outcome measures.

Exhibit A.16.1 Percentage of Respondents Who Engage in 150 Minutes of Moderate-Intensity Aerobic Activity, 75 Minutes of Vigorous-Intensity Aerobic Activity, or an Equivalent Mix of Both per Week, by Intervention Status



Next, we will estimate a series of multivariable logistic regression models assessing potential associations between campaign exposure and key cognitive and behavioral outcomes. Analyses will examine selected outcomes as a function of campaign exposure, controlling for individual characteristics and other CTG efforts that may confound the relationship between campaign exposure and differences in outcomes. In Exhibit A.16.2, we provide an example of how results from analyses of Evaluation Question 1 would be presented. In addition to examining the impact

of aggregate exposure to any NPAO media campaign on key outcomes, we will repeat these analyses to assess differences in outcomes between each individual media campaign and the two comparison groups.

Exhibit A.16.2 Odds Ratios and Confidence Intervals for Association Between Campaign Exposure^a and Key Attitudinal and Behavioral Outcomes

Dependent Variable	Media Control OR (CI)	Intervention OR (CI)
Engages in 150 minutes of moderate-intensity aerobic activity, 75 minutes of vigorous-intensity aerobic activity, or an equivalent mix of both per week	--	--
Consumes five or more servings of fruit and vegetables daily	--	--
Intends to increase physical activity within next six months	--	--
Intends to increase physical activity in next 30 days	--	--
Intends to increase consumption of fruits and vegetables within next six months	--	--
Intends to increase consumption of fruits and vegetables in next 30 days	--	--
Intends to reduce consumption of sugar-sweetened beverages within next six months	--	--
Intends to reduce consumption of sugar-sweetened beverages in next 30 days	--	--
Agrees or strongly agrees with statement “It is important for me to eat healthy foods”	--	--
Agrees or strongly agrees with statement “It is important for me to avoid non-diet sugar-sweetened drinks (For example, Coke, Kool-Aid, Snapple, Gatorade).”	--	--
Agrees or strongly agrees with statement “It is important for me to be active and do things like walk, bike and play.”	--	--
Consumed soda or sugar-sweetened fruit drinks in past week	--	--

^aReferent = Program Control

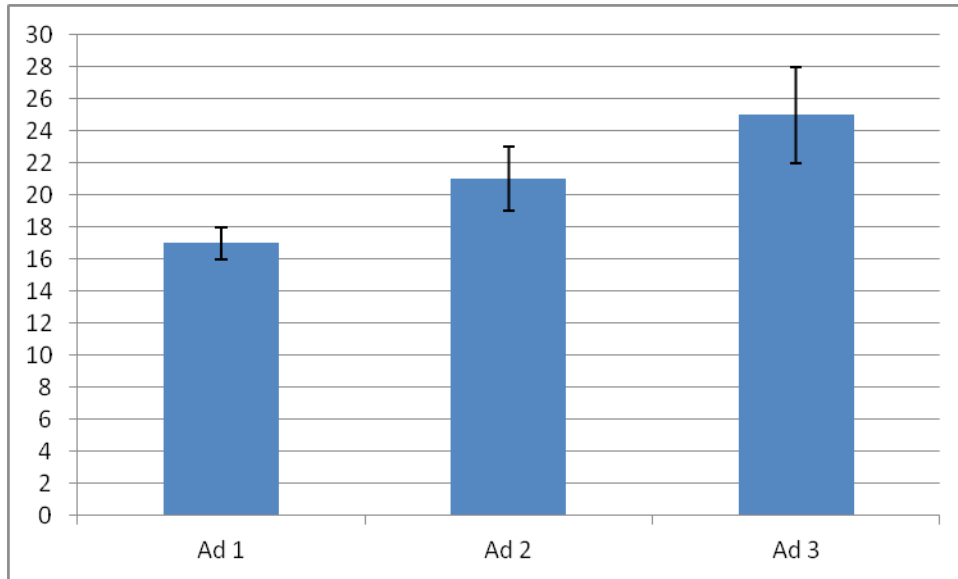
OR = odds ratio; 95% CI = 95% confidence interval

***p* < 0.05; **p* < 0.10

For Evaluation Question 3, we will provide descriptive statistics about respondents’ self-reported receptivity to and perceived effectiveness of NPAO-related advertisements. We will assess evaluative receptivity to campaign ads with a series of items asking respondents to report their level of agreement with a series of statements indicative of respondents’ receptivity to an ad. Respondent scores on these six items will be combined into a 30-point index variable, with a

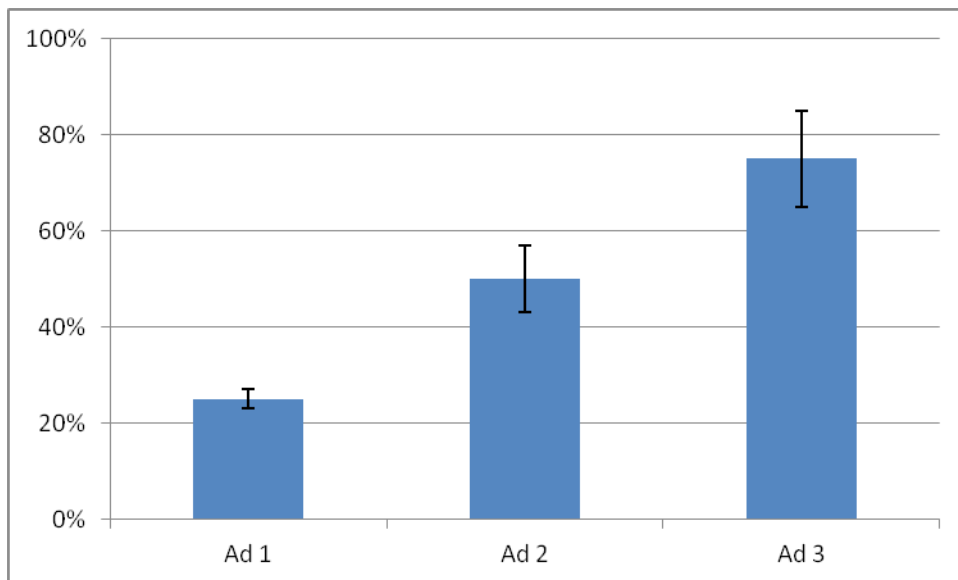
higher score indicating greater evaluative receptivity to a particular ad. Exhibit A.16.3 provides an example of how analyses for this section would be presented.

Exhibit A.16.3 Mean Evaluative Receptivity Scores, by Ad



To assess perceived effectiveness of ads, we will use a series of survey items that ask respondents to rate how much each ad makes them want to perform various NPAO-related healthy behaviors on a five-point scale. Exhibit A.16.4 provides an example of how analyses for this section would be presented.

Exhibit A.16.4 Percentage of Respondents Reporting That an Ad Made Them Want to “Take Action to Eat Healthy Foods,” by Ad



The reporting and dissemination mechanism will consist of a comprehensive evaluation report summarizing findings from this information collection. The report will be completed within eight weeks of the conclusion of information collection. CDC will explore additional opportunities to

present findings from the information collection through publications in peer-reviewed journals, conference presentations, and other dissemination strategies.

Data collection is anticipated to be conducted April through June 2013 (see Exhibit A.16.5).

Exhibit A.16.5 Project Schedule

Project Activity	Date
Data collection	June 7 – August 30, 2013
Preparation of analytic data file	Two to four weeks after completion of data collection (approximately September 15, 2013)
Data analysis	September 15 – November 30, 2013
Report writing and dissemination	December, 2013

A.17 Reason(s) Display of OMB Expiration Date is Inappropriate

Not applicable. All data collection instruments will display the expiration date for OMB approval of the information collection.

A.18 Exceptions to the Certification Statement

Not applicable. No exceptions to the certification statement are being sought.

A.19. References

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