Evaluation of the TravAlert Electronic Messaging System

Data Collection for Evaluation of Education, Communication, and Training (ECT) Activities for the Division of Global Migration and Quarantine

Generic Information Collection Request
OMB No. 0920-0932
Expiration Date 05/07/2015

January 28, 2013
Statement A

Program Official/Project Officer
Amy McMillen
OMB Specialist
Office of the Director
National Center for Emerging and Zoonotic Infectious Diseases
1600 Clifton Road, NE, MS C12
Atlanta, Georgia 30333
Phone: 404-639-1045
Fax Number: 404-639-7090
Email: AUH1@cdc.gov

TABLE OF CONTENTS

Statement A. Justification

1. Circumstances Making the Collection of Information Necessary

The purpose of this data collection is to evaluate the implementation of the TravAlert electronic public health messaging system and the public comprehension of these messages. The results will be used to determine if the public health messages displayed on monitors in airports by the Centers for Disease Control and Prevention (CDC) are effective in reaching the priority population, are understandable, and are effective in influencing the priority population's behavior. The proposed information collection will be obtained through intercept interviews with arriving travelers at international airport.

CDC requests the proposed data collection be conducted using the Generic Information Collection mechanism of The Data Collection for Evaluation of Education, Communication, and Training (ECT) Activities for DGMQ, OMB 0920-0932 (expiring 5/07/2015). The respondent universe for this data collection aligns with that approved under OMB 0920-0932.

The information collection for which approval is sought is in accordance with DGMQ's mission to reduce morbidity and mortality among immigrants, refugees, travelers, expatriates, and other globally mobile populations, and to prevent the introduction, transmission, or spread of communicable diseases from foreign countries into the United States. This mission is supported by delegated legal authorities. CDC is authorized to collect these data under the Public Health Service Act (42 U.S.C. 241), Section 301 (Attachment 1A).

Section 361 of the Public Health Service (PHS) Act (42 U.S.C. 264)(Attachment 1B) authorizes the Secretary of Health and Human Services (HHS) to make and enforce regulations necessary to prevent the introduction, transmission, or spread of communicable diseases from foreign countries or possessions into the United States and from one state or possession into any other state or possession. These regulations are codified in 42 Code of Federal Regulations (CFR) Parts 70 and 71 (Attachment 1C and 1D).

Imported measles cases are of great concern as some US subpopulations may not be adequately immunized against the disease. If the virus was re-introduced into the United States, these subpopulations would be at risk of a measles outbreak as evidenced in recent rises in the incidence of measles cases. The increase of global travel poses a higher risk of individuals acquiring and spreading infectious disease. Educating arriving international travelers to recognize the signs and symptoms of measles is imperative in helping to prevent the spread and transmission of the disease. Additional education concerning steps to take if one develops signs and symptoms of measles should also be provided.

Travelers can be exposed to measles in a variety of travel settings including: traveling to locations outside of the United States, and while being in close proximity to large groups of people in airports or on airplanes. While some forms of measles were eliminated from the US in 2000, between January and July 2011, the number of reported measles cases in the US was the highest reported since 1996. The majority of these cases were among those who had not been vaccinated for measles and had traveled outside of the US [1]. Since many travelers are likely to travel again in the future, this population also proves to be an essential audience for messaging on preventive measures such as vaccination [2].

CDC's Division of Global Migration and Quarantine (DGMQ) Quarantine and Border Health Services Branch (QBHSB) provides health messaging to arriving international travelers at US Ports of Entry (POE) in order to help prevent the transmission of communicable diseases.

Public health messaging to arriving international travelers has traditionally been provided through posters placed at POE and paper Travel Health Alert Notices (T-HANs) distributed directly to travelers. The use of printed messaging is slow and expensive and cannot be easily adapted as situations evolve. Distribution of T-HANs also proves labor intensive and cannot be effectively accomplished by CDC staff alone. Distributing T-HANs requires collaboration with federal partners such as Customs and Border Protection (CBP) whose officers are present at all POE and interact with all arriving travelers.

Recently, CDC began piloting a new method of delivering these health messages electronically. Electronic messages are easier to produce, cost less than prior methods and allow a level of flexibility that was not previously feasible with printed messaging. During the 2011 measles outbreak, electronic messages were displayed on CBP-owned monitors in federal inspection service (FIS) areas (e.g., passport control, baggage claim) of airport arrival terminals. The text-only messages reminded travelers to monitor themselves for signs and symptoms of measles and of the importance of vaccination. These messages were displayed as part of a rotating cycle of CBP and airport messages.

TravAlert is a pilot program designed to allow CDC to display public health messages at POE, maximizing the likelihood that travelers will view them. CDC-owned TravAlert monitors display health messages that contain pictograms to reach travelers who may have lower literacy levels or who speak languages other than English. Dedicated public health messaging allows arriving travelers to view the message for longer periods of time as they pass through the FIS.

1.1 Privacy Impact Assessment

Overview of the Data Collection System

CDC will use intercept interviews to collect data from international travelers arriving at US airports. Respondents will complete the interview in a single session.

CDC will employ a contractor to collect the data. The contractor will use a screening tool (Attachment 3) in order to ensure appropriate recruitment. A tally sheet (Attachment 4) will also be provided to track:

- the numbers of travelers approached for an interview,
- the date, time, and location in the FIS where each traveler was approached,
- if the traveler was eligible to participate,
- the reason for ineligibility (if applicable), and
- if consent was obtained to conduct the interview.

This information will allow for calculation of the response rate, as well as data to inform planning for future evaluations.

Table 1.1: Participant Selection Criteria

Participant Selection Criteria	
Age	All participants will be at least 18 years of age.
Location	All participants will be international travelers arriving at US airports
Destination	International travelers with immediate connections to other international destinations will be excluded.
Language	All participants will need to be able to understand and speak English.
Gender	No gender criteria.
Education	No education criteria.
Employment	No employment criteria.
Race	No criteria regarding race.

Participants will be recruited and contacted by interviewers. The interviewers will be given a Participant Information Sheet (see Attachment 5) to provide to participants. If the traveler consents, the interview will be conducted in the baggage claim area or other area of the FIS after passport processing. The combined time for the consent process and interview with each traveler

is expected to last five minutes. Interviews will consist of approximately 15 questions (see Attachment 6).

Upon conclusion of data collection, the interviewer will enter and validate the data from the interviews in a spreadsheet. A brief report summarizing the data collection methods after completion of the interviews will be provided to CDC. This report will contain information about the number of travelers approached to participate in the interview, the number of travelers eligible to participate, and a calculation of the response rate based on those eligible to participate.

All data collected in this request will be uploaded and stored in a password-protected SharePoint site. The contractor will provide CDC the original paper copies of the interview guide, which will be stored in a locked file cabinet. Both electronic and paper data will be retained for three years, after which the records will be destroyed by deleting, burning or shredding per the official records management schedule.

Description of Information to be Collected

No individually identifying information will be collected. There are three data collection tools (Attachments 3, 4, and 6). The Screening Tool and Interview Guide (Attachments 3 and 6) include five to 15 total forced choice, semi-structured, and open-ended response questions. The interview guide is organized into four sections:

a. **Demographics**-respondents will be asked in what country they live, the country/countries traveled to or from, the duration of their trip in the US, the main purpose of their trip, and their age.
b. **Environment**-respondents will be asked about methods they prefer to receive health information while traveling. Respondents will be asked if, in the current airport, they saw any electronic monitors or screens with health or disease information and where else they could be placed in the airport in order to get their attention. For those respondents who indicate they did see the TravAlert Electronic Messaging System, respondents will be asked where they were seen.
c. **Message Testing-**respondents will be asked about the message that was displayed on the electronic monitor(s). The questions are designed to determine if the participant saw the measles message displayed on the TravAlert electronic monitor(s) and to determine if any or all three of the measles messages were seen.
d. **Behavior**-respondents will be asked questions about 1) what they would do if they thought they had the measles; 2) if they have been vaccinated against measles and; 3) how likely they are to obtain a measles vaccine in the future if they have not been vaccinated.

2. Purpose and Use of the Information Collection

The proposed evaluation of TravAlert will provide CDC with important information about the effectiveness of the placement of the TravAlert electronic messaging systems. Understanding the number of travelers arriving in the US each year, the low rates of pre-travel health screening, and the number of individuals potentially not vaccinated for various communicable diseases, it is essential to evaluate and determine the effectiveness of a new electronic messaging system to help mitigate the spread of infectious disease.
The proposed evaluation will focus on identifying if international travelers:

- have seen the TravAlert messages on the monitors
- can recall the content of the messages on the monitors
- are able to correctly interpret the messages on the monitors
- report intentions to follow the recommendations in the messages.

Changes in the behavior of travelers through TravAlert health messaging include: receiving a measles vaccination, not traveling with a fever and rash, and contacting a doctor if fever and rash occur shortly after travel. These changes in behavior will result in the reduction in morbidity and mortality caused by measles. CDC hopes that this will also decrease the introduction, transmission, and spread of communicable diseases within the US.

The overarching goal is to evaluate:

- the placement of the monitors in airports to determine if the messages are effective in reaching the target population,
- if the TravAlert measles messages are understandable, and
- if the priority population intends to follow the messages they see.

The target populations are considered at risk for measles and other communicable diseases. Evaluation of a new method for communicating health information to international travelers is important and helps to fulfill the mission under authorizing law of DGMQ. If additional funding allows, this type of evaluation can be replicated to gather additional data or to test other messaging.

Privacy Impact Assessment Information

Overview of Data Collection System

CDC requests that an interview-based data collection serve as the method for this evaluation. Data collection will be conducted in-person. Data will be collected on a form that captures both quantitative and qualitative responses.

Items of Information to be Collected

No individually identifiable information will be collected. During the screening process, potential respondents' will not be asked to provide their name, phone number, or other personally identifiable information. CDC and its subsidiaries will never have access to respondents' names or other identifying information.

Numerous audience variables will be assessed during this evaluation including, but are not limited to, knowledge, attitudes, beliefs, behavioral intentions, practices, behaviors, and information needs and sources. Insights gained from evaluation research will assist in the development, refinement, implementation, and evaluation of communication, education, and training activities.

No sensitive information is being collected. The proposed data collection will have little or no effect on the respondents' privacy.

3. Use of Improved Information Technology and Burden Reduction

Intercept interviews must be conducted in the airport FIS environment so that the information is collected directly after being exposed to TravAlert messaging. Travelers will not have access to internet, computers or other technological tools, thus a paper-based system is ideal for this project. The use of information technology is not cost effective and would not reduce the burden to respondents in this information collection. All responses will be collected in person through interviews conducted by interviewers. Administering the data collection in person will reduce the likelihood of confusion and misunderstanding on the part of the respondents and the interviewer. The interview guide was designed to collect the minimum information necessary for the purposes of this project. This information request is in compliance with the Government Paperwork Elimination Act (GPEA), Public Law 105-277, title XVII.

4. Efforts to Identify Duplication and Use of Similar Information

CDC conducted a literature review in April 2012 to identify similar information. The review indicated that the use of T-HANs to convey important health information to international travelers during a public health emergency presented a number of barriers (e.g., logistical, legal). Results of the literature review concluded that an evaluation of an electronic messaging system, TravAlert, would be necessary in order to determine its effectiveness prior to expansion of the system at other airports [3, 4]. No evaluations of TravAlert or similar electronic message systems used to communicate health information in airports have been conducted previously.

5. Impact on Small Businesses or Other Small Entities

No small businesses will be involved in this data collection.

6. Consequences of Collecting the Information Less Frequently

There are no legal obstacles to reduce the burden. If this information is not collected, CDC's ability to effectively communicate messages to mobile populations who may be at increased public health risk will be compromised because the effectiveness of the new electronic messaging system, TravAlert, will be unknown. CDC will not have information to enhance or change the system to improve its impact. In addition, if the evaluation is not conducted, data will unavailable to inform plans to expand the system which will make it difficult to determine the best allocation of resources.

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

This request fully complies with the regulation 5 CFR 1320.5.

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

a. This data collection is being conducted using the Generic Information Collection mechanism of The Data Collection for Evaluation of Education, Communication, and Training (ECT) Activities for DGMQ– OMB No. 0920-0932. A 60-day Federal Register Notice (Attachment 2) was published in the Federal Register on August 10, 2011, Vol. 76, No. 154; pp. 49487-88. The 30-day FRN was published on December 7, 2011 (76 FR 76415). One non-substantive comment was received, and CDC's responded to the comment.
b. The following two people outside of CDC were consulted to obtain their views on availability of data, frequency of collection, clarity of instructions and record keeping, disclosure, or reporting format, and on the data elements to be recorded, disclosed, or reported:

   CDC consulted the Oak Ridge Institute for Science and Education (ORISE) to evaluation the need for clear, culturally and linguistically appropriate information for travelers on infectious diseases in 2012. ORISE recognized the need to gather information from travelers to help determine if the methods for disseminating these communication materials were reaching the target population. They provided information on data collection methods, frequency of collection, data elements to be recorded, disclosed, or reported, clarity of instructions, and data storage.

Individuals	Contact Information
Ben Wilburn	Communications Specialist, Oak Ridge Institute for Science and Education Phone: 865-574-7753 Email: ben.wilburn@orise.orau.gov Expertise area: health communication. Date consulted: October 2012 – July 2013 Consulted about: views on availability of data; data collection methods; frequency of collection; data elements to be recorded, disclosed, or reported; clarity of instructions; data storage.
Julie Crumly	Senior Evaluation Specialist, Oak Ridge Institute for Science and Education Phone: 865-576-8889 Email: julie.crumly@orise.orau.gov Expertise area: evaluation Date consulted: October 2012 – July 2013 Consulted about: views on availability of data; data collection methods; data elements to be recorded, disclosed, or reported; clarity of instructions; reporting format.

9. Explanation of Any Payment or Gift to Respondents

A token of appreciation for interviewee's time worth up to $10 may be distributed at the discretion of the contractor conducting the interviews. Tokens may include items such as tissues, adult and childhood immunization schedules, CDC informational cards and health magnets, lip balm, hand sanitizer, and a small first aid kit.

The Need for Incentives

International travelers who have just arrived from another country, such as those in this evaluation, are considered to be a "hard-to-reach" population, as they may be fatigued from their trip or be in a hurry to leave the airport. Immigrant, refugee, and highly mobile populations have been labeled hard to reach subpopulations for surveys by the American Statistical Association [5]. Several studies conducted by Martinez-Ebers found that incentives correlate with responses to questions such as those that will be asked in this evaluation [6].

Empirical evidence suggests that motivation is increased when an incentive is present for research. Incorporating modest incentives to aid in recruitment for evaluation is standard practice among commercial market researchers. The most important aspect of an incentive plan may be its potential to increase responsiveness of targeted respondents and to reduce response

bias. In the National Adult Literacy Survey by Berlin and colleagues [7], a $20 incentive resulted in not only higher response rates from the sample cohort, but also lower costs per completed case than the comparison group. Importantly, the incentives provided higher response rates from adults with lower-than-average levels of education and basic literacy skills. US residents born outside of the US have higher rates of poverty and lower levels of formal education than US residents born in the US. US resident travelers who visit friends and relatives abroad are largely born outside of the US and children of people born outside of the US. People who visit friends and relatives make up over 40% of all US resident travelers abroad. [8]

Findings from the National Survey of Family Growth (a study in which childbearing and family planning patterns are collected from young women) demonstrated that incentives not only had positive effects on response rates, but they also increased the accuracy of reporting [9]. Incentives are necessary for testing in order to ensure that those who are willing to participate are as representative as possible of the wider public. Failure to provide a basic incentive is likely to bias samples in the direction of well-educated individuals who are generally predisposed to be helpful.

According to a research study and report sponsored by the Federal Transit Administration, incentives are often offered to travelers for participation in transit surveys. One-quarter of the transit agency surveys used in the study included some type of incentive, ranging from a free transit pass, to a free pen, to being entered in a lottery or drawing. [10]

10. Assurance of Confidentiality Provided to Respondents

CDC will follow procedures for assuring and maintaining the security of the collected data during all stages of data collection. All data collected in this request will be uploaded and stored in a password-protected SharePoint site. The contractor will provide CDC the original paper copies of the interview guides, which will be stored in a locked file cabinet. Both electronic and paper data will be retained for three years, after which the records will be destroyed by deleting, burning or shredding per the official records management schedule.

All information provided by respondents will be treated in a secure manner and will not be disclosed unless otherwise compelled by law. Respondents will be informed prior to participation that their responses will be treated in a secure manner.

10.1. Privacy Impact Assessment Information

1. Whether individuals are informed that providing the information is voluntary or mandatory:

Individuals responding to this request are doing so voluntarily. Respondents will be advised of the nature of the information collection activity, the length of time it will require, and that participation is voluntary.

2. Opportunities to consent, if any, to sharing and submission of information:

Respondents will be assured that no penalties will occur if they wish not to respond to the information collection as a whole or to any specific questions. These procedures conform to ethical practices for collecting data from human participants.

3. How the information will be secured:

Data will be maintained in password protected files at CDC's and/or CDC's contractors' offices. It will be accessible only to staff directly involved in the project. Any files and hard copies of data collected during the interviews will be destroyed after three years in accordance with the official records management schedule and will not be disclosed, unless otherwise compelled by law.

4. Whether a system of records is being created under the Privacy Act:

No system of records is being created under the Privacy Act. This information collection request has been reviewed by the National Center for Emerging and Zoonotic Infectious Diseases (NCEZID), and determined that the Privacy Act does not apply. Individuals responding to this request will not provide any personal identifying information. No individually identifiable information is being collected.

IRB Approval
It has been determined that the proposed data collection is not considered to be research involving human subjects (Attachment 9).

11. Justification for Sensitive Questions

There are no sensitive questions within the Evaluation Interview Guides (Attachment 6)

12. Estimates of Annualized Burden Hours and Costs

A. The information collection requires the use of screening documents to determine eligibility to participate. CDC anticipates that 50% of those screened will proceed to the Interview

(Attachment 6). Thus, 600 travelers will need to be approached in order to obtain 300 completed interviews.

It is estimated that each respondent will take 1 minute to complete the screening process, which results in 10 total respondent hours. It is estimated that the burden for each respondent interview will be five minutes, for a total of 25 respondent burden hours per interview. A total of 35 burden hours is estimated for this information collection with 600 respondents.

The estimated burden hours to respondents is summarized in Table 12.a below and is based on 300 respondents participating in a five minute interview and 600 people screened with the 1-minute screener.

Table 12.a: Estimated Annualized Burden Hours

Respondents	Form Name	No. of Respondents	No. of Responses per Respondent	Average Burden per Response (in hours)	Total Burden (in hours)
Traveler	Screener	600	1	1/60	10
Traveler	Interview Guide	300	1	5/60	25
Total		600			35

B. Estimates for the average hourly wage for respondents are based on the Department of Labor (DOL) National Compensation Survey estimate for the general public's mean hourly wages [11], http://www.bls.gov/oes/current/oes_nat.htm#00-0000]. Based on DOL data, an average hourly wage of $22 is estimated for all 600 respondents. Table 12.b shows estimated burden and cost information.

Table 12.b: Estimated Annualized Burden Costs

Estimated Annualized Burden Costs				
Respondents	**Form Name**	**Total Burden Hours**	**Hourly Wage Rate**	**Total Respondent Costs**
Traveler	Participant Screener	10	$22	$220
Traveler	Interview Guide	25	$22	$550
TOTAL:		**35**		**$770**

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

There will be no costs to the respondents other than their time to participate in the interview.

14. Annualized Cost to the Government

The estimated average annual cost to the federal government for the proposed information collection activities is $80,376. This figure encompasses 30% FTE of one GS-13 employee, 1% of four GS-13 employees, 2.5% of one GS-14 employee and information collection contract costs. The average hourly rates were obtained from the Office of Personnel Management's website (http://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/2013/general-schedule/) using Washington, DC as an example location. The hourly rate for a GS-13-3 in Washington DC is $46 per hour, which is about $94,969 per year. The hourly rate for a GS-14-3 in Washington DC is $54 per hour, which is about $112,224 per year. Actual salaries may vary by the location and step for each participating employee. The contractual cost for an information collection (e.g. the development of a screener and instrument, participant recruitment, facility rental (when applicable), transcriptions, and final reports) is estimated at $65,000.

Table 14: Estimated Annualized Cost to the Government

Estimated Annualized Cost to the Federal Government		
Annualized Cost to the Government	**No. of Hours per Year**	**Average Annualized Cost**
1 Health Education Specialist, GS 13-3 ($94,969[1]) at 30% time	624	$28,704
4 Public Health Advisors, GS 13-3 ($94,969[1]) at 1%	84	$3,864
1 Public Health Advisor, GS 14-3 ($112,224[1]) at 2.5%	52	$2,808
Inter-agency Agreement through the Department of Energy for contractor. Includes contractual costs for information collection (e.g., data collection and report on findings)	N/A	$65,000
TOTAL		**$100,376**

[1] General Schedule for the locality pay area of Washington, DC

15. Explanation for Program Changes or Adjustments

This is a new data collection.

16. Plans for Tabulation and Publication and Project Time Schedule

The results of the evaluation will be provided in a report will include findings and any potential recommendations for improving the system and messages. CDC will publish its findings.

Project Time Schedule
See table below for project timeline:

Table 16.1: Project Time Schedule

Project Time Schedule	
Activity	**Time Schedule**
Recruitment of respondents	1-3 months
Data collection	1-3 months
Receipt of raw data file	30 days from close of data collection at last airport
Analyses	1-2 months after receipt of raw data file
Report Recommendations	1-2 months after analyses
Total:	5-11 months

CDC will begin this information collection as soon as OMB approval is obtained.

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

The display of the OMB expiration date is not inappropriate. No exemption is requested.

18. Exceptions to Certification for Paperwork Reduction Act Submissions

There are no exceptions to the certification.

List of Attachments

Attachment 1A - Public Health Service Act (42 U.S.C. 241), Section 301
Attachment 1B - Public Health Service Act (42 U.S.C. 264), Section 361
Attachment 1C - 42 CFR part 70
Attachment 1D - 42 CFR part 71
Attachment 2: 60-day Federal Register Notice
Attachment 3: TravAlert Evaluation Recruitment and Screening Tool
Attachment 4: TravAlert Evaluation Tally Sheet
Attachment 5: TravAlert Participant Information Sheet
Attachment 6: TravAlert Evaluation Interview Guide
Attachment 7: TravAlert Messages
Attachment 8: TravAlert Evaluation Protocol
Attachment 9: IRB Non-research Determination

References

[1] H. McLean, "Measles - U.S., January-May 20, 2011. May 27, 2011," *Morbidity and Mortality Weekly Report,* vol. 60, no. 20, pp. 666-668, 2011.

[2] P. LaRocque, S. Rao, A. Tsibris, T. Lawton, A. Barry , N. Marano, G. Brunette, E. Yanni and E. T. Ryan, "Pre-travel health advice-seeking behavior among US international travelers departing from Boston Logan International Airport," Journal of Travel medicine, vol. 17, no. 6, pp. 387-391, 2010.

[3] M. U. Selent, A. McWhorter, V. Beau De Rochars, R. Myers, D. W. Hunter, C. M. Brown, N. J. Cohen, N. A. Molinari, K. Warwar, D. Robbins, K. W. Heiman, A. E. Newton, A. Schmitz, M. J. Oraze and N. Marano, "Travel Health Alert Notices and Haiti Cholera outbreak, Florida, U.S.A, 2011," Emerging Infectious Diseases, vol. 17, no. 11, pp. 2169-2171, 2011.

[4] A. Berro, O. Grady-Erickson, L. Smith, A. McWhorter, K. Holton and D. W. Hunter, "TravAlert: A CDC electronic public health messaging system coming soon to the airport near you," in Public Health Preparedness Summit, Anaheim, CA, 2012.

[5] American Statistical Association, "Hard-to-Reach Subpopulations," in International Conference on Methods forSurveying and Enumerating Hard-to-Reach Populations, New Orleans, 2012.

[6] V. Martinez-Ebers, "Using Monetary incentives with Hard-to-Reach Populations in Panel Surveys," International Journal of Public Opinion Research, vol. 9, no. 1, pp. 77-86, 1997.

[7] M. Berlin, L. Mohadjer, J. Waksberg, A. Kolstad, I. Kirsch, D. Rock and K. Yamamoto, "An experiment in monetary incentives," in American Statistical Association Section on Survey Research Methods, Alexandria (VA), 1992.

[8] S. Y. Angell and M. S. Cetron, "Health Disparities among Travelers Visiting Friends and Relatives Abroad," Annals of Internal Medicine, vol. 142, no. 1, pp. 67-72, Jan 2005.

[9] W. D. Mosher, "Design and operation of the 1995 National Survey of Family Growth," Family Planning Perspectives:30(1)., vol. 30, no. 1, pp. 43-46, 1998.

[10] B. Schaller, "TCRP Synthesis 63: On-Board and Intercept: A Synthesis of Transit Practice," Schaller Consulting, Washington, D.C., 2005.

[11] Bureau of Labor Statistics, "May 2012 National Occupational Employment and Wage Estimates," United States Department of Labor, Washington, DC, 2012.