CHICAGO REGIONAL
HOUSEHOLD TRAVEL INVENTORY

White Paper:
Maximizing Participation

Primary Authors:
Mary Kay Christopher, MKC Associates
Chris Simek, NuStats
Jason Hercules, NuStats

Secondary Author:
Dean Englund, Parson Brinckerhoff

Contact: Stacey Bricka, Research Director
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INTRODUCTION

The Chicago Regional Household Travel Inventory is a comprehensive study of the demographic and travel behavior characteristics of residents in the greater Chicago area. Sponsored by the Chicago Metropolitan Agency for Planning (CMAP) and the Illinois Department of Transportation (IDOT), the study universe is defined as households residing in the Illinois counties of Cook, DuPage, Grundy, Kane, Kendall, Lake, McHenry, and Will. The project has two phases: Design and Data Collection. The design phase took place in the fall of 2006. The full data collection effort will take place in 2007.

The purpose of the design phase of the study was to identify (through research and primary data collection) the most appropriate design and methodological aspects that maximize the quality and validity of the inventory data for modeling purposes. The three main objectives of the design phase were: (1) to validate existing budgetary assumptions regarding data collection efforts anticipated for the full study (and establish new assumptions as necessary), (2) to ensure that the inventory design elements and methods provide for a data set that supports the development of a valid model, and (3) to vet the inventory design recommendations through a series of white papers, supported by both primary and secondary research, using a peer review panel of both topical and regional experts. This document is one of the four white papers developed as part of the study’s design phase.

The purpose of the white papers prepared under this design phase is to address specific issues pertaining to the design of the data inventory and supporting data collection effort. Because the data will be used to both update the current regional travel demand model as well as for developing new models, the actual elements contained in the inventory need to meet the needs of both efforts. These white papers serve to delineate those elements that are critical to both efforts. Ultimately, the cost trade-offs, respondent reactions, white paper recommendations, and input from the expert and local peer review panels will be used by CMAP staff to finalize the actual inventory contents.

Each white paper has a primary author team and a secondary author. The primary author team was responsible for ensuring that the document addressed the necessary elements and provided actionable recommendations for the data collection phase. To facilitate this, the primary authors provided the project manager with a list of key questions or design elements for the pilot test (these are discussed below). The secondary author’s role was as reviewer, with the specific intent being to balance the paper, to ensure that it was well-rounded and practical in approach and recommendations.

The white papers combine secondary research with primary data collection (through the study pilot) in order to make recommendations on key issues that impact inventory design. These issues were identified at the project kick-off meeting1, held Tuesday, May 23, 2006 in Austin, Texas and include: (1) inventory content, (2) sampling considerations, (3) maximizing participation, and (4) efficient data collection. Each of these is discussed in a separate document. This paper, focusing on maximizing participation, addresses the following issues:

• Current Survey Environment – Survey research is battling increasing resistance to the dominant telephone-based survey process. Details that are needed to support modeling are considered intrusive, and privacy concerns abound, particularly those relating to the travel patterns of children. What are the specific concerns of Chicago area residents and how can we maximize participation within this environment?

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1 This kick-off meeting included the project team members as well as members of the project’s expert and peer review panels.
Representative Results – what type of outreach efforts are necessary to ensure results contribute to the development of a valid model? Outreach partners, gatekeeper interviews, non-random samples through community group meetings, etc.

- Special groups: transit, tollway users, minorities, extremes in wealth, social equity, residents of groups quarters/university dorms/assisted living
- Immigrants, many working multiple jobs – how to best reach?
- Instrument design

The team charged with writing this white paper identified the following issues to be studied as part of the pilot effort:

1. **General Outreach Efforts.** What is the most straightforward/efficient approach for getting press releases to ALL newspapers, officials, and community leaders in the area?

2. **Focused Outreach Efforts.** Prior experience has shown that certain population sub-groups (African American, Latino, and youth) require focused outreach efforts in order to garner their participation in these types of studies. In the Chicago area, there are pockets of population subgroups that have shown deep resistance to surveys (even the Census). There is also a rapidly growing Hispanic population, comprised somewhat of recent immigrants, who have deep seated concerns (even fears) about recent immigration law changes. What is the need (in terms of incidence) for focused outreach efforts? If there is a need, what is the most straightforward/efficient approach for communicating the survey and associated benefits to these population subgroups?

3. **Alternative Methods of Communication.** Several survey literature sources suggest publicizing the survey through utility bill inserts or sending home leaflets with school children. Other surveys have developed posters for the bus and rail stations in specific neighborhoods. The research questions on this issue include: (1) are these valid methods for the travel survey? (2) How effective are these methods? For each possible venue of communication, what is the level of effort to reach all utility companies or schools? What are the rules/regulations for inserts? What are the lead times, the number of households reached through this method, and associated printing costs. Is this something to do region-wide or just in specific portions of the region.

These issues are addressed in the following sections of this paper.
The focus of this white paper is on maximizing survey participation among regional residents. To secure acceptable survey participation rates, the study team must implement strategies designed to overcome the barriers that may prevent people from responding to the survey. Richardson, et al points out that people who do not respond to surveys usually possess sociodemographic and travel behavior characteristics that are significantly different from survey respondents. It is therefore extremely important that every effort be made to ensure representative participation in order to obtain a true picture of travel in this region.

Prior to the pilot survey, the research team identified populations that do not typically respond to surveys. These included:

- Minority populations, notably African Americans and Hispanic,
- Foreign language speaking populations, especially Hispanic, and
- Extremes in income - very low and very high income groups.

Additionally, the team believed that non-automobile users deserved special attention to ensure that travel by alternative transportation modes are adequately represented in the inventory.

The study team trusts that efforts to improve survey participation by the above groups will result in a Travel Inventory that better represents regional travel. It is also expected that improving participation rates will decrease the cost per survey.

The remainder of this introductory section will present background demographic information on this eight-county region. This information will set a context for sections two through four.

**DEMOGRAPHICS**

**Race**

The Chicago region is geographically large and demographically diverse. There are eight counties contained in the study area: Cook, DuPage, Grundy, Kane, Kendall, Lake, McHenry and Will. The area encompasses 4,490 square miles and is comprised of a variety of land uses which range from very high density population and employment centers to undeveloped rural areas. Overlaid on this geographic area is a diverse population of 8,184,000 people. Of these, 65.6 percent are white, 19 percent are Black and 15.4 percent are other races. Approximately 17 percent of the population identified themselves as Hispanic. Figure 1 illustrates the allocation of races by county, and Figure 2 demonstrates the location of African American and Hispanic populations by county.

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3 Census 2000 Summary File 1 (SF 1).
As Figure 2 illustrates, Cook County has the highest percentage of minority population. However, there are significant pockets of Hispanics in DuPage, Kane and Lake Counties, and the African American population is growing in Will County.

**Immigration**

Chicago has been an immigration gateway for 150 years and immigrants continue to settle in the Chicago region. New immigrants, however, are less likely to move to traditional gateway neighborhoods in the city of Chicago. New immigrants are moving into the suburbs and, for the first time in history, the suburbs have a larger immigrant population than the city of Chicago. According to “The Metro Chicago Immigration Fact Book”, which reports on only the six county region (Cook, DuPage, Lake, McHenry, Kane and Will), suburban immigrant population grew to 788,000 persons in 2000. This is an increase of 91.9 percent in the last decade. The size of the immigrant population

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will generally impact the number of foreign language speaking survey respondents. Table 1 lists the top ten municipalities for immigrant populations.

<table>
<thead>
<tr>
<th>Municipality</th>
<th>County</th>
<th>Primary Origins</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chicago</td>
<td>Cook</td>
<td>Europe, Mexico, Asia</td>
</tr>
<tr>
<td>Cicero</td>
<td>Cook</td>
<td>Mexico</td>
</tr>
<tr>
<td>Aurora</td>
<td>Cook</td>
<td>Mexico</td>
</tr>
<tr>
<td>Waukegan</td>
<td>Lake</td>
<td>Mexico</td>
</tr>
<tr>
<td>Skokie</td>
<td>Cook</td>
<td>Asia, Europe</td>
</tr>
<tr>
<td>Elgin</td>
<td>Kane</td>
<td>Mexico</td>
</tr>
<tr>
<td>Mount Prospect</td>
<td>Cook</td>
<td>Asia</td>
</tr>
<tr>
<td>Naperville</td>
<td>DuPage</td>
<td>Asia</td>
</tr>
<tr>
<td>Schaumburg</td>
<td>Cook</td>
<td>Asia</td>
</tr>
<tr>
<td>Palatine</td>
<td>Cook</td>
<td>Asia</td>
</tr>
</tbody>
</table>

The ability to speak English “well” or “very well” among all immigrant populations is 75 percent. The ability of Spanish speaking persons to speak English “well” or “very well” is 68.5 percent. Speakers of other foreign languages that can speak English “well” or “very well” include: 83 percent of Indo-Europeans, 82 percent of Asians/Pacific Islanders and 90 percent of all other languages.

**Income**

Income ranges by county are illustrated in Figure 3. The ten income ranges used by the U.S. Census Bureau are been combined into six ranges for readability. DuPage and Lake Counties exhibit the highest percentages of wealth in the region, while Cook County contains the highest percentage of low income households. Less than one percent of the households in Grundy County have household incomes in excess of $200,000 and Grundy County is second to Cook County in the percentage of low income households. McHenry, Kane, Kendall and Will Counties have similar income distribution patterns.

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5 Census 2000 Summary File 3 (SF 3) - Sample Data.
Experience in past surveys indicates that households with extremes in income – either very low or very high incomes – are under-represented. One method to improve the response from these two income groups is to over-sample in high and low income areas.

**Mode to Work**

Similar to the rest of the nation, the predominant mode of travel to work in the region is the automobile. According to Census Transportation Planning Package (CTPP) data, approximately 80 percent of workers either drive alone or carpool to work.\(^6\) Across the eight-county region, this ranges from 75 percent in Cook County to 94 percent in Grundy County. Alternative modes to work, including public transportation, taxi, bicycle and walking, make up 16 percent of regional work travel. Cook County accounts for the highest percentage at 22 percent, followed by DuPage County at 9 percent and Lake County at 8 percent. Within the ten largest MSAs in the country, Chicago ranks second to New York in producing non-traditional mode share. See Table 2.

The relatively high percentage of workers who commute using a non-automobile mode indicates that it is important to include these types of trips in the Travel Inventory.

**TABLE 2: MEANS OF TRANSPORTATION TO WORK (2000)**

<table>
<thead>
<tr>
<th>MSA</th>
<th>Total Workers</th>
<th>% Drove Alone plus Carpool</th>
<th>% Non-Auto modes</th>
<th>% Work at Home</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York</td>
<td>9,319,218</td>
<td>65.7</td>
<td>31.3</td>
<td>3.0</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>6,767,619</td>
<td>87.6</td>
<td>8.8</td>
<td>3.6</td>
</tr>
<tr>
<td>Chicago</td>
<td>4,218,108</td>
<td>81.5</td>
<td>15.6</td>
<td>2.9</td>
</tr>
<tr>
<td>Washington, DC</td>
<td>3,839,052</td>
<td>83.2</td>
<td>13.3</td>
<td>3.5</td>
</tr>
<tr>
<td>San Francisco</td>
<td>3,432,157</td>
<td>81.0</td>
<td>14.9</td>
<td>4.1</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>2,815,405</td>
<td>83.6</td>
<td>13.6</td>
<td>2.8</td>
</tr>
<tr>
<td>Boston</td>
<td>2,898,680</td>
<td>82.7</td>
<td>14.1</td>
<td>3.2</td>
</tr>
<tr>
<td>Detroit</td>
<td>2,482,457</td>
<td>93.5</td>
<td>4.2</td>
<td>2.3</td>
</tr>
<tr>
<td>Dallas</td>
<td>2,527,648</td>
<td>92.8</td>
<td>4.2</td>
<td>3.0</td>
</tr>
<tr>
<td>Houston</td>
<td>2,081,607</td>
<td>91.2</td>
<td>6.2</td>
<td>2.5</td>
</tr>
</tbody>
</table>


The remainder of this paper is divided into three sections. Section three presents a summary of the issues that impact survey participation. This section will discuss barriers to participation, methods to improve participation and characteristics of non-automobile travelers. The August 2006 outreach effort and pilot survey results are reviewed in section four. Both the outreach meetings and pilot survey results identify strategies to increase survey participation. Finally, section five recommends actions to be implemented with the final Travel Inventory survey.

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This section will discuss issues that impact survey participation and the relationship of these issues to the hard to reach populations analyzed in this paper. There are many reasons why people do not participate in surveys. Some of the reasons that are addressed in this paper are listed below:

- Apathy,
- Language barriers/literacy,
- Fear, and
- Special populations (transit users).

**Apathy**

Apathy, indifference or a lack of interest in the subject area is a common problem for survey professionals and is very difficult to overcome. Fortunately, for this survey effort, transportation issues in this region are generally important for most people. With few exceptions everyone uses the transportation system and has an opinion on its adequacy. This is reflected in the pilot survey results showing the prevalent reason people cited for participating in the survey was a general concern for transportation. This general concern for transportation should be included in the survey materials as a reason why people should participate in the survey.

**Language Barriers/Literacy**

People who speak a foreign language exclusively or who speak and understand English only marginally have obvious communication problems. This is also true for illiterate or marginally illiterate populations. Special effort is required to include these groups in the survey results database. Illiterate or marginally illiterate populations benefit from the use of a telephone survey. Interviewers can walk people through the questions and the need to read the survey materials is lessened. An obvious way to overcome the language barrier is to provide survey materials in multiple languages. Areas where non-English speaking populations live can be identified using census data, and survey materials can be prepared specifically for those areas.

In the Chicago region, Spanish is the second most common language after English. Fifteen percent of the region’s population over five years of age speaks Spanish at home. Thirty-one percent of this population speaks English “poorly” or “not at all”. This represents only five percent of the region’s total population, which raises the question as to why the survey should be translated for such a relatively small number. The answer is twofold. First, Hispanics are a highly organized group and are a very politically active one. It is a certainty that if the survey was distributed in English only, the Hispanic community would publicly denounce the survey effort. This would severely limit participation from the Hispanic community. In fact this happened with the 1990 CATS Household Travel Survey and a college professor actively lobbied the Hispanic population to disregard the survey. Second, it is probable that there are a number of undocumented Spanish speaking immigrants in the Chicago area that are not included in the census. It is reasonable to expect that the percentage of Spanish speaking people in the Chicago area is higher than reported in the census.
FEAR

Fear will also prevent people from participating in surveys. In some cases this fear stems from apprehension about providing private information to strangers. This is a very real concern for travel surveys where respondents are asked for specific times and locations, not only about their own travel but also that of their children. Other sources of fear relate to fear of government and authority. Anyone can be anxious about providing information to “officials”, but immigrants can be especially susceptible to this type of fear. Undocumented immigrants will likely have even greater fears than documented immigrants. These types of fears were voiced during the outreach meetings conducted in August. Several ideas for overcoming these fears were suggested at the meetings and these suggestions are detailed in the recommendations section of this paper.

SPECIAL POPULATIONS

Transit customers and users of non-traditional forms of transportation, (hereinafter referred to collectively as transit users), are a relatively small group of travelers. However, the use of alternative forms of transportation is an important element for planning a future transportation system. If it is a goal of the region to encourage use of alternative modes such as transit, bicycle, and walking, the characteristics of these relatively small market segments must be researched.

Transit is frequently under-reported in travel surveys. This is likely due to the fact that non-automobile travel modes account for a relatively small percentage of travel, especially in the suburbs. The odds of recruiting these individuals are relatively small. Another issue that reduces their participation is that many transit users are also automobile users. Transit may be the mode of choice on only one or two days per week with the automobile in use during the rest of the week. The designated travel day will determine if the respondent is counted as a transit user or as an automobile driver. It is also possible that respondents will report an automobile trip instead of the actual transit trip because they believe auto-related information is more important or valuable to the researcher.

The pilot survey results indicate that approximately 80% of the Chicago respondents use transit at least once per week. The two suburban locations, Downers Grove and Woodstock, exhibited the opposite tendency – approximately 20% of the respondents in these suburbs use transit at least once per week. Therefore, it will be a greater challenge to include suburban transit users in the survey than City of Chicago residents.

It is notable that market research conducted by the Chicago Transit Authority (CTA)\textsuperscript{7} and Pace\textsuperscript{8}, the suburban bus agency, indicates that transit customers tend to have lower incomes and represent a greater percentage of minorities than is exhibited in the general population. Transit users and low income and minority populations are typically under-represented in household travel surveys.

\textsuperscript{7} CTA Travel Behavior and Attitudes Survey 2000.
\textsuperscript{8} Pace 2006 Market Analysis.
Survey professionals have been dealing with barriers to survey participation for some time. Methods to increase participation have been developed and are generally included as standard elements in all surveys. Listed below are some common survey elements that can improve participation rates.

- Incentives
- Survey advocate to endorse the effort
- A clear cover letter
- Fact sheet/Brochure
- Memory jogger
- Simple instrument design
- Inclusion of a comments section
- Follow-up routines/reminder cards
- Special postage
- Well-trained interviewers
- Provision of a toll free number
- Website to provide more information and legitimize the effort
- Flexible response methods for respondents

It is expected that the Travel Inventory will incorporate a majority, if not all, of these measures.
This analysis section will review the results of the outreach effort conducted in August, 2006, as well as pertinent results from the pilot survey.

**Outreach Effort**

One method to maximize survey participation is to educate the public and garner public support through outreach efforts. In pursuit of this theory, and to gather information on three distinct population sub-groups, four community meetings were conducted on August 23 and 24, 2006. Each meeting targeted a unique demographic group known to have under-reported in similar travel and activity surveys conducted in other regions. Those demographic groups included African Americans, predominantly Spanish speaking Hispanics, predominantly English speaking Hispanics and Youth. Table 3 below provides some key details regarding the community meetings.

<table>
<thead>
<tr>
<th>Meeting Date</th>
<th>Meeting Venue</th>
<th>Meeting Time</th>
<th>Audience</th>
<th>Number of Attendees</th>
</tr>
</thead>
<tbody>
<tr>
<td>23-Aug-06</td>
<td>Bickerdike Redevelopment Corp</td>
<td>8 – 10AM</td>
<td>Spanish Speaking Latinos</td>
<td>11</td>
</tr>
<tr>
<td>23-Aug-06</td>
<td>Southwest Youth Collaborative</td>
<td>6 - 8PM</td>
<td>Youth</td>
<td>31</td>
</tr>
<tr>
<td>24-Aug-06</td>
<td>Trinity United Church</td>
<td>8 - 10AM</td>
<td>African Americans</td>
<td>13</td>
</tr>
<tr>
<td>24-Aug-06</td>
<td>Family Focus</td>
<td>6 - 8PM</td>
<td>English Speaking Latinos</td>
<td>15</td>
</tr>
</tbody>
</table>

NuStats research and experience in other regions of the US suggested that the most successful outreach efforts have been those led by community leaders, either directly or through their written support (i.e., quotes for study materials). In discussion with Chicago Metropolitan Agency for Planning (CMAP) staff, the best approach for this effort was identified as a series of community group meetings, where community leaders are presented with the background information about the study, the problem at hand (lack of participation among constituents), and their input solicited as to how to maximize participation among their constituents. Given the existing networks in the region, it was also determined that the meetings should be facilitated in partnership with community groups (a partnership that mirrors the public outreach process for general planning purposes in the region). As a result, CMAP staff contacted three community groups to host these meetings, coordinate logistics in terms of meeting location and food, and to directly invite community group leaders to attend. All attendees were offered transit passes worth $40 in appreciation of their time and input at the meetings.

At these meetings, the project team (consisting of NuStats, MKC Associates, and CMAP staff along with the appropriate community group partner) provided a brief introduction to the study, and distributed sample packets of respondent materials including the advance letters, brochures and travel logs. Participants were asked to read and examine the documents and comment on them, specifically replying to a series of targeted questions designed to elicit details necessary for the planned public outreach effort and the meeting goals. The participants were also asked to complete the travel logs as if the previous day was their assigned travel day. The purpose was to help them understand the task that would be requested from their constituents. They were then queried on their perceived ease/difficulty in completing this task. Finally, the participants were asked for their input on how to
market the survey, explain the benefits, and identify methods to convey this to their friends and families.

At the conclusion of the community meetings it was clear that while there were many common issues raised by each demographic group, each group had specific concerns unique to their sub-population. Those unique concerns are addressed here.

**Latinos**

Perhaps no other group had such an intimate sense of community as Latinos, particularly predominately Spanish-speaking Hispanics. From the onset of the meeting, at which time Latinos were asked to identify what motivated them in their daily lives, to the discussion of the materials, to the conclusion of the meeting, references to the importance of community and family were ever present. Given the current politics surrounding immigration, meeting participants communicated the need for assurance of complete confidentiality with reported data and the necessity for anonymity with survey participation. The materials should clearly and immediately bring these key points to light. It is also paramount to identify the connection between survey participation and increased community well being. In short, market the survey as a means that the individual can contribute to the whole. Meeting participants made it very clear that, given the current political state; it was very likely that Hispanics would grossly under report. To increase Latino participation, both Spanish and English speaking Hispanics recommended holding “community survey days” where Hispanic community leaders recruited other Hispanics to attend group sessions (much like the community meetings upon which this report is based) learn about the survey, and complete the survey on site. Many of the participants also volunteered their time and effort in setting up these events.

As a result of the community meetings, conducting this research effort using non-traditional, non-probability survey methods for the Latino community may be a viable alternative – more so than any other demographic.

**African Americans**

The community meeting held at Trinity United Church of Christ painted a picture of an African American community characterized by strong ties to family, and, simultaneously, a very independent and civic-minded group. Meeting participants indicated that a key factor in determining the success of the survey would be survey endorsement by civic organizations and civic leaders in the African American community. Of all groups with which meetings were held, African Americans had the greatest understanding of what was being requested of them and how to properly complete the travel logs. Meeting participants stated it was vitally important that the survey materials highlight the fact that the last time the survey was conducted, African Americans were under-represented, and that this is their chance to make sure this does not happen again.

**Youth**

The Youth meeting revealed a sub-section of the general population that is very eager to participate and genuinely concerned that their voices are not being heard, not because their opinions are unimportant, but because most overlook the impact they have on the transportation system. This highly mobile group was able to comprehend all survey materials and accurately assess what was being requested of them via survey participation. The meeting discussion revealed that many of the core transportation issues faced by the Youth are the same core issues faced by all other facets of society. However, in many instances, lack of or limited access to a personal vehicle exaggerates the
 affect of these issues on Youth. Key to assuring Youth participation will be the explanation of how the planning process works, and how the data requested today will result in improved transportation infrastructure in the future, with an emphasis on the importance of Youth participation.

Incentive Suggestions

At each meeting, attendees were asked for their ideas regarding what types of incentives would be effective. If it is decided to incorporate incentives in the 2007 survey effort, it may be helpful to know what types of incentives were suggested during the outreach meetings. The following incentive suggestions were received at the outreach meetings:

- Cash
- Transit cards
- Gas cards
- Gift cards
- Raffle for a large prize
- Blockbuster card
- Sports tickets

PILOT SURVEY RESULTS

The pilot survey results provide information useful for the implementation of the Travel Inventory. Information on the following issue areas is available: Cell phones, Screening Devices, Notification Methods, and Publicity Methods. A discussion of each issue follows.

Cell phones

Twenty-three percent of households reported zero cell phones in the home. The remaining 77% of the households own between one to five cell phones. This data supports the growing concern over the impact cell phone ownership may have on survey response. However, the pilot survey also indicated that all households had at least one landline phone line. The majority of respondents reported having only one phone line (87%), but one respondent reported five phone lines and another claimed six lines.

Screening Devices

The pilot survey asked households about the use of answering machines, caller ID, and call blocking/privacy manager to screen calls. A majority of households (90%) have answering machines, but only 34% of the households use the machines to “always” or “most times” screen calls. This relatively low percentage would appear favorable to survey participation. However, it is likely that a portion of these households also utilize caller ID. Approximately half of the households purchase caller ID, and approximately 59% of those respondents use caller ID to screen calls “most times” or “always”. Call blocking or privacy manager devices are used by only 12% of the households and a majority of those households (55%) “never” use the service or use it “not much”. This may reflect the relative newness of this technology.
Notification Methods

Respondents were asked what motivated them to participate in the survey. Of the 126 respondents who provided an answer, the majority (43%) cited a general concern about transportation. The recruitment phone call and the advance letter accounted for 13% and 10% respectively. Other comments comprised 34% of the responses and included the letter and the phone call together, the personality of the interviewer, a desire to help, curiosity and guilt.

Publicity Methods – Respondents to the pilot survey offered suggestions regarding the best methods to use when publicizing the survey. A total of 142 suggestions on publicity methods were provided. This number includes multiple suggestions by the same respondent. The greatest response was for newspaper notification followed by direct mail. The following table lists the suggested methods.

<table>
<thead>
<tr>
<th>Method</th>
<th>Number of Suggestions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newspaper</td>
<td>46</td>
</tr>
<tr>
<td>Direct Mail</td>
<td>34</td>
</tr>
<tr>
<td>Phone Call</td>
<td>20</td>
</tr>
<tr>
<td>TV</td>
<td>14</td>
</tr>
<tr>
<td>Other</td>
<td>12</td>
</tr>
<tr>
<td>Internet/Email</td>
<td>7</td>
</tr>
<tr>
<td>Radio</td>
<td>5</td>
</tr>
<tr>
<td>Community Groups</td>
<td>4</td>
</tr>
</tbody>
</table>

The pilot survey results also highlight the difficulty of including low income and minority populations in the survey. The following table presents a comparison of census data and survey data for the three areas included in the pilot. Table 5: Pilot Results

<table>
<thead>
<tr>
<th>Variables</th>
<th>Chicago</th>
<th>Downers Grove</th>
<th>Woodstock</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Survey Census</td>
<td>Δ</td>
<td>Survey Census</td>
<td>Δ</td>
</tr>
<tr>
<td>Income</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; $25k</td>
<td>15.0% 31.5%</td>
<td>-16.5%</td>
<td>6.3% 14.7%</td>
<td>-8.4%</td>
</tr>
<tr>
<td>$25k-$50k</td>
<td>35.0% 28.6%</td>
<td>6.2%</td>
<td>22.9% 22.2%</td>
<td>0.7%</td>
</tr>
<tr>
<td>$50k-$75k</td>
<td>27.5% 17.9%</td>
<td>9.6%</td>
<td>12.5% 20.1%</td>
<td>-7.6%</td>
</tr>
<tr>
<td>$75k+</td>
<td>22.5% 21.7%</td>
<td>0.8%</td>
<td>58.3% 43.1%</td>
<td>15.3%</td>
</tr>
<tr>
<td>Household Ethnicity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White Only</td>
<td>89.8% 62.1%</td>
<td>27.8%</td>
<td>98.4% 94.1%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Black</td>
<td>10.2% 16.6%</td>
<td>-6.5%</td>
<td>1.6% 2.1%</td>
<td>-0.5%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0.0% 21.3%</td>
<td>-21.3%</td>
<td>0.0% 3.8%</td>
<td>-3.8%</td>
</tr>
</tbody>
</table>

Source: Ron Each

The table shows that households with incomes of less than $25,000 per year along with African Americans and Hispanics were under-represented in the pilot survey. Low income populations were represented at 17.5 percent less than the census for all three areas. Black/African Americans and Hispanics were under-represented by 8.1 percent and 15.4 percent respectively.
RECOMMENDATIONS

The recommendations that follow are based on the results of the community meetings and pilot survey. Note that much of the recommendations to improve participation involve non-random sampling methods. It is hoped that a process to legitimately include these types of methods into the database will be devised. Overcoming the poor participation rates of hard to reach populations will depend on such a process - for this survey and for future surveys. The following recommendations are grouped into three subject areas: Community Meetings, Survey Materials, and Advertising.

COMMUNITY MEETINGS

Surveys collected non-randomly at community meetings or through other means will be included in the Travel Inventory only if a valid process for incorporating the surveys has been developed. The feasibility of non-random collection methods will be reviewed by the Sampling White Paper team.

The outreach meetings conducted prior to the pilot survey indicated that community meetings may be a viable method of increasing survey participation, especially for the Hispanic population. Hispanics would especially benefit from such meetings because this population is more likely to have a language difficulty and is more likely to exhibit low response rates due to fear of government and authority. Community meetings are non-threatening and provide the meeting organizers with the opportunity to explain why seemingly intrusive questions are important. In the Chicago region, where ethnicity is a political tool, an additional benefit of conducting community meetings is the political good will that would be garnered by reaching out to minority populations. If political good will is a goal, then the African American population should also participate in community meetings.

To effectively improve the response rates of hard to reach populations, a relatively large number of surveys must be received through community meetings. During the pre-pilot meetings attendance ranged from 11 to 31 attendees. A good sized group would be between 15 and 20 people. An estimate of the number of meetings that may be required is dependent upon the number of surveys desired and meeting attendance. Out of 15,000 completed surveys, a representative number of Hispanic surveys would be 2,580 (17.2%). Should Hispanics be under-represented by one-quarter of that number, approximately 32 meetings would be needed. This assumes a total of 645 surveys collected at meetings with an average attendance of 20 people per meeting. If the meetings attract an average of only 12 attendees, then the number of meetings needed rises to over 50 meetings.

Community meetings, if pursued, should be conducted by the outreach partners identified in the pre-pilot effort. Community meetings should be scheduled throughout the survey period to increase the impact of the outreach effort and therefore increase participation. CMAP staff should participate in these meetings to provide background and answer questions. NuStats staff should provide training to the outreach partners and CMAP staff with a focus on questions that are likely to surface when participants are filling out the survey.

At the August outreach meetings the Hispanic outreach partners and attendees willingly agreed to publicize the survey and act as ambassadors to promote participation in the survey. If community meetings are not conducted, these partners should still be contacted to request that these organizations act as ambassadors for the survey effort. The ambassador role would include promotion of the survey at regular community meetings and provision of a confirmation phone line to reassure survey recipients that the survey is legitimate. If a phone line is provided, it is likely that the outreach
partner will also be asked questions about how to fill out the survey. CMAP and NuStats must decide if they are comfortable with the outreach partners’ administrative staff answering such questions. Additional training for the administrative staff will likely be required. NuStats must be convinced that the people answering the phone are qualified to answer any questions that may arise.

The benefit associated with these meetings is an increase in the number of surveys received. This benefit must be weighed against the cost of conducting these meetings. If the outreach partners agree to conduct the meetings and/or act as ambassadors without compensation, then the benefits obviously outweigh the costs. However, if compensation is required, the costs can easily outweigh the benefit. Basic costs for community meetings include the staff costs associated with planning the event and facilitating the meetings, room rental and refreshments. The August meetings also provided a transit incentive for attendees. These four meetings cost approximately $11,100 or approximately $160 per attendee. The cost for each attendee equates to the cost of collecting one survey, which is fairly high. It should be noted that the costs charged by the individual outreach partners varied considerably.

As an alternative to community meetings, additional surveys may be obtained by recruiting for participants through print media. (This approach is discussed further in the Advertising section at the end of this paper.) Hard to reach populations could be contacted through newspapers, radio spots and community organizations and encouraged to contact NuStats to participate in the survey. This would also be a viable method to include more transit users in the survey. Suburban transit users will be a particularly difficult population to reach. Notices on Pace buses, in Metra’s On the Bi-Level newspaper and in Metra’s ticket-by-mail envelopes could ask transit users to contact NuStats to participate in the survey.

**Survey Materials**

The community meetings provided an opportunity to elicit comments on improvements to the survey materials. A major improvement suggested by participants was to produce information packets targeted to specific communities. As a result of the meeting participants’ strong belief in this action, this research team recommends the tailoring of materials to two populations: African American and Hispanic.

Following is a summary of suggestions that were repeated more than once at the meetings and should be considered in the final design of the survey materials. These suggestions are grouped into three categories: General Improvements for all populations, Suggestions to tailor the materials for the African American Community and Suggestions to tailor the materials for the Hispanic Community. The responsibility for incorporating these suggestions in the final survey rests with NuStats upon approval by CMAP.

**General Improvements**

In general, the participants thought that the letter was too long and that the brochure did a better job of communicating the information. In addition, participants felt that the CMAP and NuStats logos were not recognizable and therefore did not contribute to communicating that the survey effort was legitimate. The need for a “hook” to grab people’s attention and get them to participate was mentioned several times. Suggestions for “hooks” included the following statements: “You have been invited to participate”, “Your community needs you to participate” or “You have been selected to represent your community”. Listed below are suggestions for the envelope, brochure, and letter. Comments are also provided for the travel log but these are provided for information purposes only.
The travel log was confusing to some participants but many were able to complete the log without assistance.

**Envelope**
- The envelope should not be addressed to “Resident”. One participant suggested addressing the packet to “Transportation Customer”.
- There was no clear advice on envelope design. For every suggestion offered, there was a negative reaction. The conclusion is the envelope must look professional from a credible source, and not appear as a sales pitch.

**Brochure**
- The pictures should show a diverse population.
- Use better paper and more color.
- Expand the section “Why is my participation so important?” Based on the pilot results that refer to the respondents’ general concern for transportation, highlight their contribution to the “public good” by participating in the survey.

**Letter**
- Shorten the cover letter. The letter should include confidentiality statements, the reasons why this effort is important, and how the results will benefit the participant.
- Strengthen the confidentiality statement. One participant suggested adding a statement that names would not be used in the final database.
- The letter should refer readers to the brochure for more information.
- In advance mailings ask participants when would be the best time to call.

**Travel Log**
- An explanation for the 3 a.m. start time was requested several times.
- Several participants did not know how to answer the question, “Did you get out of your vehicle?” Many stated, “I’m driving, why would I get out of the car before I get to where I’m going?”
- The List 1 and List 2 codes were not seen by participants and a variety of suggestions were offered to improve the effectiveness of the lists. These suggestions included the use of color or including the lists as options/checkboxes in the column.
- The example pages should be better identified as examples and should look more like the travel log.

**Suggestions for African American Community**

Figure 4 illustrates concentrations of African Americans in the eight county region by census tract. The map geography is census tract and shows African American populations in excess of the regional average (19 percent). The map is an example of one method to identify targeted community areas. Modifications using a lower level of geography and/or a higher percentage of African American
population could narrow the target areas. Use of the region’s Traffic Analysis Zones (TAZ) as the level of geography may provide the best compatibility with the final Travel Inventory.

- The cover letter and brochure should include endorsements of the survey from local civic organizations and community leaders.

- The cover letter and brochure should include a reminder that as a community group, they are under-represented in these types of surveys. Their response is necessary to ensure that their community is heard.

**Figure 4: Concentration of African American Population**

![Map of African American Population Concentration](image)

**Figure 5 illustrates concentrations of Hispanics in the eight county region by census tract. This map is produced in the same fashion as figure 3 and can be modified in the same way to narrow the target areas.**

- The cover letter and brochure should include endorsements of the survey from local civic organizations and community leaders.
- The cover letter and brochure should include a reminder that as a community group, they are under-represented in these types of surveys. Their response is necessary to ensure that their community is heard.

- Cover letters sent to Hispanic residences should be translated into Spanish and copied onto the back of the English cover letter.

- Confidentiality cannot be overly stressed in the Spanish version of the survey materials. Consider stating that legal status is unimportant and a social security number is not required.

- A Spanish translation of the brochure should be included as well as the English version.

- The Spanish language cover letter should note that the contact person cited in the letter is bi-lingual. Of course, this means that the bi-lingual contact person must always be available.

- If outreach partners can be properly trained, include the telephone numbers of community organizations who have agreed to act as ambassadors of the survey.

**FIGURE 5: CONCENTRATION OF HISPANIC POPULATION**
ADVERTISING

Advertisement is recommended through two methods – press releases and transit notices. Advertisement is recommended even though it is recognized that this may be a very “scatter-shot” approach. This is because a relatively small percent of the regional population will be contacted to participate in the survey. The likelihood is small that someone reading the notification will ever be contacted to participate in the survey or that they remember the notification when contacted by NuStats. However, the notifications can also solicit volunteer participation from hard to reach populations by inviting them to call NuStats for a survey or to obtain a survey through an outreach partner. This may increase participation rates from targeted populations. The feasibility of non-random collection methods will be reviewed by the Sampling White Paper team.

Press Releases

It is recommended that press releases target specific population groups and that they be released in three waves between January and October. Three waves will increase the chance that the release will be “picked up” by the target media. It is recommended that CMAP take responsibility for producing and distributing the press releases. CMAP should be well poised to help orchestrate this activity through their well established public participation planning process. NuStats can provide examples from other regions, if they are available, and they can review the proposed press release before distribution.

The target population groups include foreign language speaking populations, African Americans, and Youth. Press releases should be prepared for the following media:

- community-focused newspapers,
- foreign language newspapers,
- foreign language radio stations,
- African American-focused radio stations,
- On the Bi-Level (Metra newspaper),
- college newspapers,
- college radio stations, and
- college email systems,

These press releases should be prepared individually for each target population. The release should notify the population that the survey effort is underway and why it is important that representatives from all communities participate. The press release should include references for more information, such as the website address and/or the outreach partner telephone number, if appropriate.

Should the collection of non-random surveys be deemed appropriate, the press releases should focus on soliciting participation from selected population groups.

Transit Notices

Transit users, particularly suburban transit users, will be very difficult to include in the Travel Inventory due to their relatively small numbers. Transit users were under-represented in the 1990 CATS Household Travel Survey. To improve the participation rates of transit users it is
recommended that Pace and CTA be contacted to request the posting of notices in their vehicles. It is recommended that CMAP take responsibility for contacting the transit agencies and for providing appropriate language for the notices.

Notices in Pace and CTA vehicles will not only help to notify transit users but will also reach other typically hard to reach populations such as those with low incomes, minority populations, and youth - those aged 18 to 24. Should the collection of non-random surveys be deemed feasible, the notices should focus on soliciting participation from transit customers.

CTA has guidelines for posting notices on their vehicles and will do so only as part of a cross-promotion with CMAP. This cross-promotion would require CMAP to include CTA in some of their promotional activities such as website links or inclusion of CTA information in newsletters. The value of such promotions must equal the value of CTA’s ad space.

Metra does not post notices in their vehicles. Metra uses their newspaper *On the Bi-Level* to communicate with their customers. Preliminary conversations with Metra indicated that a notice in their newspaper may be possible if the notice is requesting the participation of Metra riders to fill out non-random surveys. Inserts can be included in Metra’s 25,000 ticket-by-mail envelopes, but Metra sells this space and charges for each insert.

Apart from the Metra ticket-by-mail inserts, the cost of these advertising recommendations is confined to CMAP labor costs of producing press releases and communicating with the media outlets and transit agencies. This is not an insignificant cost as many media contacts are needed and multiple versions of the press releases are required. However, these are in-house and not out of pocket costs.

The study team believes that incorporation of the above recommendations will improve survey participation by African Americans, Hispanics, low income households and users of non-automobile travel modes.