Messaging to America:
Results from the Census Barriers, Attitudes and Motivators Survey (CBAMS)

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Abstract[1]
For only the second time in history, the U.S. Census Bureau will make use of paid advertising as part of a multi-million dollar communication campaign designed to increase awareness and participation in the 2010 Census. This social marketing campaign is responsible for developing persuasive ads and messages targeted to all segments of the U.S. population, including those populations least inclined to participate. To understand potential barriers and motivators to Census participation, the advertising agency hired to carry out the paid campaign commissioned a sample survey in July-August of 2008 (the Census Barriers Attitudes and Motivators Survey or CBAMS). In this paper, we describe the CBAMS analyses carried out to inform the campaign messaging. This includes a cluster analysis that yielded five distinct attitudinal segments or messaging "mindsets". Each segment contains a unique set of insights, strategies, tactics and messages necessary to move it toward Census participation. We profile these segments in detail comparing and contrasting each.

Key Words: Decennial Census, audience segmentation, campaign messaging

1. Background

Every decade, the Census Bureau faces the enormous challenge of finding and enumerating every man, woman, and child residing within the United States. The next decennial count will occur in April 2010 and will include a massive social marketing campaign to alert and inform the population that the Census is coming. To be fully successful, however, the campaign must go beyond raising awareness and must promote a call-to-action -- completion and mailback of a Census form (or providing answers in person to a Census enumerator). But designing a communications campaign to reach as complex and diverse a population as the US population is not easy. Most campaigns concentrate on relatively homogenous users or prospect groups within a population such as at-risk populations. The Census campaign will require carefully researched messages that speak to *all* types of subgroups with varying degrees of Census awareness, familiarity, trust and predisposition to participate in a collective social endeavor such as the Census. The campaign must also find a way to channel the appropriate messages to the right population "where they live", so to speak.

To address these challenges, the contractor hired to develop the 2010 communications campaign (Draft FCB-NY), commissioned a household survey of US residents in the summer of 2008. The survey was known as the Census Barriers Attitudes and Motivators Survey or CBAMS. Previous

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to the CBAMS, the Census Bureau developed an audience segmentation that classified each Census tract into one of eight clusters. These clusters were based on Census 2000 behavioral data regarding propensity to mail back a Census form as well as housing and person indicators to profile the characteristics within a cluster. This segmentation yielded the following eight clusters: Advantaged Homeowners, All Around Average (I and II), Single Unattached Mobiles, Economically Disadvantaged (I and II) and Ethnic Enclaves (I and II)[2]. This segmentation became the framework for the communication plan and provided insight into the size, location, and underlying characteristics behind the easy and hard-to-count segments. In short, the segmentation informed the campaign what the target populations look like and, to some extent, where they are located. However, it did not provide much needed insight as to *why* a segment might not participate in the Census. The CBAMS was conducted to fill this gap by uncovering the barriers and motivators affecting Census participation.

During the course of this paper we attempt to address the following research questions:
1. What are the different mindsets regarding the decennial Census?
2. What are the profiles of the different mindsets?
3. What messages might motivate the mindsets?
4. What are some insights and tactics for reaching each mindset?

2. CBAMS methodology

In July-August 2008, Macro International conducted the CBAMS under contract to DFCB-NY. The CBAMS was a multi-mode survey that included both random digit dial (RDD) telephone interviews and personal visit interviews. The target population was all residents of the US with a special emphasis on hard to count (HTC) populations. To reach various levels of HTC populations, the survey sample was stratified into 8 strata. These strata were defined as: high density Spanish-speaking tracts, high density Asian-language speaking tracts, American Indian Reservations, rural high poverty tracts, cell phone users, and high, medium and low HTC tracts located within big, mid and small market areas (or designated market areas known as DMAs). The RDD interviews were conducted among the big, mid, and small market strata while personal visit interviews were conducted on reservations, in rural poverty tracts and areas with high linguistic isolation. For the cell phone strata, Macro randomly generated telephone numbers from known cell phone exchanges.

In-person interviews were conducted in English, Spanish, Chinese and Korean. Telephone interviews were conducted in English and Spanish. For the RDD sample that could be matched to an address, Macro mailed pre-notice letters alerting residents they were in-sample for the survey. Prenotice letters were also sent to all addresses in the personal visit sample. Personal visit interviews received a non-conditional honorarium of $10. Cell phone respondents were offered reimbursement in the form of $10 Amazon.com gift certificates. Landline RDD respondents did not receive any incentive for participating. The survey instrument measured constructs such as Census knowledge, attitudes and awareness; self-reported propensity to participate in the Census; ranking of potential Census messages; barriers and motivators to participation; and consumption of mass and social media[3]. The survey took approximately 25-30 minutes to administer.

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[2] For a detailed methodology of the audience segmentation see Bates and Mulry, 2007.

[3] The CBAMS instrument drew upon previous Census Bureau surveys measuring Census awareness, knowledge and attitudes. For example, the 1980 Knowledge Attitudes and Practices Survey, the 1990 Outreach Evaluation Survey, and the 2000 Partnership Marketing and Program Evaluation Survey.

Macro collected 4,064 completed interviews including 2,701 landline telephone interviews, 300 cell phone interviews, and 1,063 in-person interviews. The combined response rate was 37.9% (In-person 59.4%; landline 31.3% and cell phone 22.4%).[4] Sampling variances for CBAMS were calculated using Taylor series linearization to adjust for the complex sample design. For a more detailed description of the methodology, questionnaire, sample design and weighting approach see the CBAMS Methods Report (Macro, 2008).

3. Developing the mindsets

The primary objective of the CBAMS was to understand and classify the different mindsets of the U.S. population as they pertain to participation in the 2010 Census. The survey strove to uncover the barriers and motivators underlying different mindsets in order to design a messaging campaign that can break down barriers while leveraging motivators. We began analyses by conducting an attitudinal segmentation based on a variety of questions regarding level of Census awareness, familiarity, beliefs, attitudes, and knowledge and intent to participate in the Census (see Table 1 for specific items). Q-factor analysis[5] was used to group together CBAMS respondents with similar responses to the knowledge, attitude, intent, and belief items.

Table 1 – Item Used in Q-Factor Analysis to Form Mindset Segments

Measure	
unaided	Have you ever heard of the Census of the United States?
aided	The Census is the count of all the people who live in the United States. Have you ever heard of that before?
knowledge	Count of correct responses to C4 series (facts about the Census)
B3	How likely are you to recommend participating in the Census to a family member or friend?
B5	Thinking about the Census overall, how important do you feel it is for you to participate in the Census?
C2	Overall, how would you describe your general feelings about the Census?
C3	In general, how familiar are you with the way Census data impacts you and your community?
D1	As far as you know, does the law require you to answer the Census questions?
D2	As far as you know, is the Census Bureau required by law to keep information confidential?
intent	If the Census were held today, how likely are you to participate?
c4dk	Count of "don't know" responses to C4 series (facts about the Census)
c4ref	Count of refused responses to C4 series (facts about the Census)
e1a	The Census is an invasion of privacy.
e1b	It is important for everyone to be counted in the Census.
e1c	The Census Bureau would never let another government agency see my answers to the Census.
e1d	People's answers to the Census cannot be used against them.

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[4] Response rate calculated using AAPOR RR3 (AAPOR, 2008).

[5] Macro International and DFCB-NY performed the Q-factor analyses of the CBAMS data. A more detailed description of the methodology, criteria, and assumptions of the analysis may be found on pp. 3-7 of "Census Barriers Attitudes and Motivators Survey: Report of Results"- Macro International (2009).

Measure	
e1e	Taking part in the Census shows I am proud of who I am.
e1f	Filling out the Census form will let the government know what my community needs.
e1g	I just don't see that it matters much if I personally fill out the Census form or not.
e1h	It is a civic responsibility to fill out the Census form.
e1i	The Census Bureau's promise of confidentiality can be trusted.
e1j	I am concerned that the information I provide will be misused.
e1k	I prefer to stay out of sight and not be counted.
e1l	The government already has my personal information, like my tax returns, so I don't need to fill out a Census form.
e1m	I'll never see results from the Census in my neighborhood.
e1n	It takes too long to fill out the Census information, I don't have time.
e1o	I don't like to fill out paper forms or use the mail because I prefer to do everything online.
e1p	The Census is only for people who speak English.
e1q	Computer "hackers" could obtain Census information about you if they really tried.
eneutral	Count of "no opinion" responses to E series questions
Edk	Count of "don't know" responses to E series questions
Eref	Count of refused responses to E series questions

One important exclusion from the Q-factor analysis was a subgroup of respondents who responded "no" earlier in the survey to both an unaided (*Have you ever heard of the Census of the U.S?*) and aided Census question (*The Census is the count of all people who live in the U.S. Have you ever heard of that before?*). This group became their own unique mindset because they were skipped over most of the knowledge, attitude and intent items used to form the mindsets. This residual group are referred to as the Unacquainted mindset because of their complete unfamiliarity/unawareness of the Census. While this subgroup was skipped over portions of the survey, they answered other sections about potential drivers of Census participation, ranking of Census messages, and information sources they might use to learn more about the Census. This segment represented 7% of the CBAMS respondents.

Of the remaining respondents with some level of Census awareness, the initial Q-factor segmentation resulted in a 3 segment solution. Sizes of the 3 segments varied with a large proportion of respondents (67%) classified into 1 segment, a second segment contained 19% and a third segment contained 6%[6]. While the analyses could have ended at this point, the research team decided to perform a subcluster analysis of those respondents assigned to the largest group (Segment 1). The purpose was to explore whether mindset nuances existed within this large segment that could help further differentiate and refine the campaign messaging. To aid this differentiation, the subcluster analysis included items from the original run but also added items on the motivational potential of certain messages and ranked importance of certain public/government services (see Table 2).

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[6] All percents presented are weighted percents.

Table 2 – Items Added to Q-Factor Subcluster Analysis

F1	**We would like to know the degree to which these facts would affect your likelihood to participate in 2010 Census. Does knowing each of the following make you more likely to participate, less likely to participate, or wouldn't affect your participation? The first one is…**
F1a	Census counts decide a community share of $300 billion in federal funds for schools and other programs.
F1b	The Census determines the number of representative in Congress each state gets.
F1c	The law requires everyone to participate in the Census.
F1d	Filling out the Census provides opportunity to help people in your local community get certain benefits such as healthcare, school programs, day care and job training
F1e	Information from the Census helps the government plan for the future improvements to schools, roads, fire and police stations
F1f	If you don't fill out your Census form, your family and local community might not get their fair share of benefits.
F1g	To see what changes have taken place in the size, location and characteristics of the people in the US
F1h	The Census 2010 doesn't ask for sensitive information, it only asks a few questions such as name, sex, age, date of birth, how people are related, race and origin.
F1i	The Census is more accurate if everyone participates.
F1j	U.S. Census employees are subject to jail term, a fine, or both for disclosing personal information.
F1k	Mailing your Census form early helps the government save millions of taxpayer dollars that would otherwise go toward following up with you if you don't mail it back.

As a result of the secondary analysis, Segment 1 was reclassified into two separate segments – members of the two groups were similar with regard to Census favorability and intent to participate, yet were found to differ in terms of Census knowledge and perceived importance of specific government programs and services. The two groups were also found to differ significantly in terms of socio-economic and demographic characteristics. Broken out, these two segments accounted for 41% and 27% of the CBAMS respondents. The final distribution of all five segments (with qualitative labels) is found in Table 3.

Table 3: Final Distribution of Segments

		Weighted
Segment	Total	4,064
		100%
	Unacquainted	297
		7.3%
	Head Nodders	1,651
		40.6%
	Leading Edge	1,076
		26.5%
	Cynical Fifth	779
		19.2%
	Insulated	261
		6.4%

4. Profiling the segments

Based on the survey data, the research team set out to profile each segment according to different Census mindsets. We examined a variety of data items including socioeconomic indicators, demographics, level of community ties, attitudes toward the Census, knowledge of Census uses, and reactions to potential campaign messages. Taken together this information suggests a comprehensive strategy for how best to communicate with each segment. For purposes of labeling, the five segments are referred to as the Leading Edge, Head Nodders, Insulated, Cynical Fifth and Unacquainted. Names were selected based on profiling results described below. Because respondents classified into the Unacquainted segment were skipped over sections of the questionnaire related to Census attitudes, knowledge and intent to participate, profiling data for this segment is missing in some tables.

We first analyzed a lengthy battery of agree/disagree Likert scale opinion questions around the Census (see table 4). Since these items were also used to create 4 of the 5 segments, we expected to see different opinions emerge between them (the Unacquainted Segment is excluded from this analysis). To more readily summarize the data, we performed a principal components factor analysis.   After several iterations and rotations, we decided upon a three factor solution representing three uncorrelated constructs loosely translated as (1) Census Skepticism (2) Collective Opportunity/Civic Duty and (3) Census Confidentiality. Four of the data items in the series were not found to load high on any of the three factors and were excluded when creating indices for the three factors.[7] See Table 4 for factor loadings.

Table 4: Beliefs about the Census: Factor Loadings

	Skepticism	Duty	Confidentiaity
a. The Census is an invasion of privacy.	0.68	-0.14	-0.16
b. It is important for everyone to be counted in the Census.	-0.34	0.65	0.1
c. The Census Bureau would never let another government agency see my answers to the Census.	0.09	0.18	0.73
d. People's answers to the Census cannot be used against them.	-0.14	0.16	0.64
e. Taking part in the Census shows I am proud of who I am.	-0.01	0.68	0.25
f. Filling out the Census form will let the government know what my community needs.	-0.11	0.61	0.23

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[7] The excluded items include: *I'll never see results from the Census in my neighborhood; I don't like to fill out paper forms or use the mail because I prefer to do everything online; The Census is only for people who speak English; Computer "hackers" could obtain Census information about you if they really tried.* For more information about the factor analysis see pp. 30-31 of "Census Barriers Attitudes and Motivators Survey: Report of Results".

g. I just don't see that it matters much if I personally fill out the Census form or not.	0.67	-0.25	-0.04
h. It is a civic responsibility to fill out the Census form.	-0.39	0.6	0.05
i. The Census Bureau's promise of confidentiality can be trusted.	-0.24	0.26	0.66
j. I am concerned that the information I provide will be misused.	0.57	0.12	-0.48
k. I prefer to stay out of sight and not be counted.	0.62	-0.31	-0.03
l. The government already has my personal information, like my tax returns, so I don't need to fill out a Census form.	0.71	-0.11	-0.13
n. It takes too long to fill out the Census information, I don't have time.	0.64	-0.11	0

Using the factor loadings as a guide, we summed similar items to build three indices and produce mean scores from each segment (see Table 5).[8]

Table 5. Census Attitude Index Means: Skepticism, Collective Opportunity/Civic Duty and Belief in Confidentiality by Segment
(standard errors in parenthesis) [9]

	Leading Edge	*Head Nodders*	*Insulated*	*Cynical Fifth*
Skepticism (N)	**2.3** (.04) 1061	**2.4** (0.6) 1560	**2.6** (.10) 388	**3.5** (.09) 715
Collect. Oppor./ Civic Duty (N)	**3.6** (.03) 1061	**3.7** (.03) 1560	**3.3** (.09) 388	**2.6** (.09) 715
Belief in Confidentiality (N)	**3.1** (.05) 1061	**3.0** (0.5) 1560	**2.2** (.11) 388	**1.9** (.10) 715
Don't Know/No Opinion (N)	**.43** (.04) 1061	**.48** (.04) 1560	**1.5** (.18) 388	**.83** (.10) 715

Table 5 reveals some of the reasons for labeling the Cynical Fifth segment as such. This segment exhibits significantly higher agreement with statements indicating negative opinions about the Census compared to the other three. This group was far above the others in terms both the Skepticism factor (score=3.5) and was significantly lower than the other segments regarding trust in Census's confidentiality (score=1.9). This segment was also least inclined to regard the Census as a positive collective opportunity or civic responsibility (mean = 2.6). On the other hand, both the Leading Edge and Head Nodders *are* inclined to trust the Census Bureau's promise to keep Census data confidential and also view the Census as an important societal activity and civic

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[8] All scales range from 0-5.
[9] Standard errors were calculated using SURVEYMEANS procedure in SAS to account for the complex sample design. Errors are calculated using the Taylor Series method (SAS STAT Users Guide Version 8 pg. 3183, 1999).

duty. This suggests that campaign messages targeted towards these two mindsets need not focus on confidentiality assurances but instead could reinforce the importance of personal commitment and duty to participate. The Insulated segment scored fairly low on the Skepticism factor but were more aligned with the Cynical Fifth when it comes to believing whether Census data will be kept confidential without fear of retribution. Consequently, it would seem wise to emphasize confidentiality themes when crafting messages for these two mindsets with the caveat that *any* message may be a hard sell to the Cynical Fifth because of their generally high mistrust of government.

Another noteworthy insight is a significantly higher score among the Insulated on the No Opinion/Don't Know[10] index for the attitude questions. Respondents in this segment were more likely than the other three to indicate they neither agreed nor disagreed with attitude statements about the Census (or in some cases answered "don't know" with greater frequency). While this group is not entirely unaware of the Census, this segment admits to not having strong opinions one way or the other – in other words, the Census is not completely off the radar screen but the topic remains much less salient for this group compared to others.

We next profiled the segments according to Census knowledge. Again, we used a sequence of questions to create a summary index (items found in Table 6). Each question had a yes/no format whereby "yes" was the correct answer for some items while "no" was correct for others. To arrive at the 0-10 index we simply summed the number of correct answers. In addition to analyzing the mean "correct" answers we also looked for other patterns, specifically the tendency to answer "yes" even in cases where the correct answer is "no". We also looked for the tendency to answer don't know. The former provides some insight as to whether a segment "doesn't know what it doesn't know" that is, has a tendency toward agreement bias perhaps to appear more knowledgeable about Census than they really are. The latter simply gauges admitted lack of knowledge about the nature of Census uses and purposes.

Table 6 – Census Knowledge Items

C4	**People have different ideas about what the Census is used for. I am going to read some of them to you. As I read each one, please tell me by indicating yes or no whether you think that the Census is used for that purpose. Is the Census used …**
C4a	To decide how much money communities will get from the government?
C4b	To decide how many representatives each state will have in Congress?
C4c	To see what changes have taken place in the size, location and characteristics of the people in the U.S.?
C4d	To determine property taxes?
C4e	To help the police and FBI keep track of people who break the law?
C4f	To help businesses and governments plan for the future?
C4g	To locate people living in the country illegally?
C4h	To determine income tax rates?
C4i	To count both citizens and non-citizens?
C4j	To determine the rate of unemployment?

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[10] Don't Know and No Opinion were not offered aloud as response categories to respondents.

Table 7. – Census Knowledge Index Means by Segment

	Leading Edge	Head Nodders	Insulated	Cynical Fifth
"Correct" Answer Index	**8.2** (.07)	**5.9** (.07)	**3.4** (.12)	**6.9** (.12)
(N)	1061	1560	388	715
"Don't Know" Index	**0.3** (.02)	**0.7** (.03)	**5.3** (.17)	**0.5** (.05)
(N)	1061	1560	388	715
"Agreement" Bias Index	**1.1** (.06)	**2.7** (.08)	**1.5** (.12)	**1.9** (.10)
(N)	1061	1560	388	715

Table 7 presents the three index means by cluster. Some immediate differences are noticeable that lend helpful insight into the mindsets. (Since the Unacquainted were skipped over the Census knowledge questions, they are excluded from Table 7). For example, the Leading Edge scored much higher than the other segments insofar as correctly answering about Census data uses (and non-uses). On average this group got over 8 of the 10 questions correct. No too far behind was the Cynical Fifth who answered approximately 7 out of 10 questions correctly. This is an interesting finding. Although this segment remains suspicious and skeptical about the Census in general (as evidenced by the attitude scores) the group is also very knowledgeable about the Census. Perhaps the communication campaign can leverage that knowledge to help overcome some of the cynicism barriers noted earlier. Perhaps not surprising is that the Insulated scored lowest in terms of Census knowledge (means score=3.4). In fact, this group was more inclined to indicate they "didn't know" the answers, further cementing their place as a mindset far removed from familiarity (mean score=5.3). As we delve deeper into the profiles, it becomes more and more apparent that basic education must play a big part when communicating with this segment. For example, we found the Insulated least inclined to know that door-to-door enumerators are used to count households who fail to mail back a form. A little bit about the Census basics could go a long way to informing and motivating this mindset – for example that Census forms will arrive in the mail in mid-March.

Finally, the "agreement bias" index provides support for the Head Nodders label. This segment was most likely to agree with Census use statements, even in cases where the purported use was false. One could extrapolate from this behavior and hypothesize this segment is more inclined to believe media messages they are exposed to and less likely to question the validity or substance of the message. On the surface, this would seem to be a positive predisposition from a messaging/communications standpoint. On the other hand, if this segment is apt to simply believe any message they receive about the Census, this would also encompass negative media that may surface as a result of news coverage, blogs, social networks, or other media outside the paid advertising realm. In this case, the most effective strategy for this segment may be a large and constant barrage of positive paid media to keep the scales tipped in favor of positive messages.

The final construct used to profile the segments was intent to participate in the Census. The exact wording was: *If the Census were held today, how likely are you to participate? By participate we mean fill out and mail back a Census form.* Admittedly, this measure is a flawed indicator at best in terms of predicting actual behavior in Census 2010. In fact, an evaluation of the 2000 Census communication campaign found a very weak correlation between self-reported participation by mail (as measured in a survey) and actual mailback behavior (as measured by Census operational data see Wolter, et. al 2002). To try and improve this measure for CBAMS, a new question was asked – *How likely are you to recommend participating in the Census to a family member or*

friend? While this measure also has obvious weaknesses, we hoped it might somewhat lesson the social desirability bias and provide a closer indicator of self response propensity. Alternatively, it may also be construed as a measure of Census "advocacy", that is, how inclined a respondent would be to advocate on behalf of the Census by word of mouth and social networks. Because the CBAMS was conducted well before Census 2010, no measures are available to validate either item – we can only use them as a proxies to further profile each segment's self-reported intent.

Table 8. – Intent to Participate in Census - Mean Scores by Segment[11]

	Leading Edge	*Head Nodders*	*Insulated*	*Cynical Fifth*
Self Intent to Participate (N)	**4.7** (.04) 1060	**4.5** (.05) 1555	**4.2** (.08) 379	**3.6** (.07) 706
Intent to Tell Others (N)	**4.5** (.04) 1052	**4.3** (.04) 1546	**3.8** (.11) 378	**2.8** (.07) 694

Table 8 presents both mean scores regarding self-intent to participate (or tell others) by segment. With the exception of the Cynical Fifth, all segments professed a high likelihood to participate in the Census. The Leading Edge expressed the highest intent to participate and also reported highest inclination to tell others. Head Nodders also expressed a high likelihood and in fact, appeared just as likely to tell others as to participate themselves[12]. However, given their tendency toward agreement bias, we interpret these reports with caution.

The Cynical Fifth kept true to their moniker with the lowest self-reported intent score and also the lowest likelihood to encourage others. However, even this segment had a mean score somewhere between "might or might not" and "probably will" participate. Given this segment's high skepticism, concerns about confidentiality, and low belief that the Census is a civic obligation, the lower intent scores compared to other segments is not unexpected but certainly could have been lower. This segment emerges as a challenging group to communicate with in 2010 – their knowledge of Census is high yet they are negatively predisposed and less inclined to participate.

On average, the Insulated mindset hover around "probably will" participate in the Census but are less inclined to encourage others – perhaps an artifact of their low level of Census knowledge and familiarity with how it might impact themselves and others. It is wise to reiterate, however, that these intent questions are just that -- purely hypothetical measures of one's *stated intention.* While they offer some insight into how predisposed or not a segment may be to participate, true *behavior* may, in fact, be very different.

Another important construct to explore is the degree to which members of each segment are involved and/or connected to their communities and neighborhoods. This is a crucial factor in several respects. First, it provides a clue about the role community-based organizations might play in reaching certain segments (as opposed to paid advertising). Second, if a segment tends to have strong ties within the community, then Census messages may be most effective when communicating wider community benefits (as opposed to person-centric benefits). To explore

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[11] Both measured along 5 point scales 1 – Definitely not 2 – Probably not 3 – might or might not 4 – Probably will 5 – Definitely will.

[12] Mean scores for self intent and intent to tell others were not significantly different at .05 level.

these concepts, we analyzed two sets of items: (1) degree of neighborhood attachment and (2) level of civic participation. Previous research has indicated that level of civic participation is also positively correlated with likelihood to return a Census form (Bates and Buckley, 2000). On the other hand, while neighborhood attachment is a measure used routinely to study topics like neighborhood and community satisfaction (see DHHS, 2006; Gilderbloom, Brazley and Pan, 2005), it was included for the first time in a survey studying Census knowledge, attitudes and practices.

Based on these items we created two indices (items not shown). One reflects civic participation based on the level of involvement in community groups and voter frequency while the second measures attachment toward one's neighborhood as well as length of time lived there. Table 9 presents means from the two indices broken out by segment.

Table 9. Civic Participation[13] and Neighborhood Attachment Index Means by Segment
(standard errors in parenthesis)

	Leading Edge	Head Nodders	Insulated	Unacquainted	Cynical Fifth
Civic Participation	**4.3** (.11)	**3.7** (.09)	**3.4** (.26)	**1.9** (.24)	**3.4** (.13)
(N)	1060	1550	381	335	709
Neighborhood Attachment	**12.9** (.14)	**12.4** (.17)	**13.1** (.26)	**10.9** (.35)	**12.2** (.19)
(N)	1042	1527	367	320	677

The means in Table 9 suggest varying levels of civic involvement across some of the segments. By far, the Leading Edge scored the highest mean index for membership and participation in the likes of community groups, churches, and voting (mean=4.3). Since this segment is actively involved in the community, members should be pursued to partner with the Census and help advertise and raise awareness among fellow community members. Second in line is the Head Nodders (mean=3.7) and at the other end of the spectrum is the Unacquainted with a mean score of only 1.9. This suggests that even messages spread through grassroots organizations may fail to penetrate the Unacquainted mindset. Instead, the Census will need to motivate them through the likes of direct mail Spanish-language questionnaires, questionnaire assistance centers and personal visit enumerators who speak their language. While not as community-minded as some segments, both the Insulated and Cynical Fifth reported a fair level of involvement indicating that partnership-based facilities could work as an avenue to deliver Census messages.

Neighborhood attachment was less differentiated across segments with all five reporting high attachment. This is not surprising given that this measure is based purely on opinion and not behavior. While the Insulated had the highest absolute neighborhood attachment score, this segment's score was not significantly different from the Leading Edge, Head Nodders, or Cynical Fifth. Only the Unacquainted deviated significantly on this measure with a tendency to self-report a slightly lower neighborhood attachment score compared to the others. Given the Unacquainted segment's low community involvement and lower neighborhood attachment scores, the campaign should consider crafting messages that communicate Census benefits aimed at the individual as opposed to community or neighborhood-level benefits.

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[13] The Neighborhood Attachment Index consisted of summing responses to items I1a, I1b, I1c and I2. Scores ranged from 0-12. The Civic Participation Index was formed using items H1a, H1b, H1c, H1d, H1e and H2. The index took number of civic groups , frequency of participation in those groups, and voter frequency into account. Scores ranged from 0-18.

The final mindset profile involves sociodemographic characteristics including race/ethnicity, acculturation, sex, age, marital status, number in household, presence of children, education, income and rent/ownership (data not shown). Although in many respects they have similar dispositions toward the Census, the Leading Edge and Head Nodders differed markedly in their income and education profiles. The Leading Edge exhibited higher incomes, education, and ownership and also tended to skew more male. The Unacquainted segment stands out in several respects. This group reflects the largest percentage of Hispanics and also stands out in terms of percent foreign born and percent who speak Spanish at home. The group also skews young, male, low income, renters, and non-married with less than high school education – many of the attributes associated with hard to count populations (Bruce, Robinson and Sanders, 2001). The Insulated share one characteristic of the Unacquainted – having a significant percentage of Hispanics (albeit somewhat smaller and with fewer foreign born). Unlike the Unacquainted however, the Insulated skew heavily female and much older – they also have a smaller percentage of children living in the household. Interestingly, the Cynical Fifth closely resemble the total population demographic characteristics of the CBAMS. This suggests the Cynical mindset comes from of a fairly representative cross-section of the US and is not dominated by a few race/ethnic groups or a single socioeconomic class.

5. Messaging Motivators

In addition to establishing the attitudinal and demographic orientation of the mindsets, the CBAMS also asked respondents to rate a series of potential messages in terms of whether hearing that message would increase their likelihood to participate. We examined the percent of respondents, by mindset, that indicated a certain message would increase their likelihood to participate.[14]

We found that in most cases, at least half of respondents reported that hearing a particular message would increase their likelihood to participate (the few exceptions were primarily among the Unacquainted).   However, both the Unacquainted and Cynical Fifth had noticeably lower percentages for all messages. This again emphasizes the challenge the communication campaign faces with these two mindsets. The benefits messages (F1d and F1e in Table 2) resonated most among the Unacquainted, Head Nodders, Leading Edge and Insulated while the Cynical Fifth appeared most moved by the "Census is more accurate if everyone participates" message (F1i). The Unacquainted and Cynical Fifth reported being least motivated by the message that Census data are used to track changes over time while the other three mindsets were least moved knowing that the Census doesn't ask for sensitive information. Of course, these self-reports must be considered with some skepticism as previous research has shown disconnects between reported behavior and actual behavior.

7. Summary

The CBAMS provides crucial data to inform the goal of creating a social marketing campaign capable of motivating every segment of the U.S. population. We discovered five distinct mindsets and insights into each:

The Leading Edge
The Leading Edge segment comprises just over one-quarter of the population. Members of this mindset are connected with their community with a high degree of civic involvement. This

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[14] For exact wording of messages refer to Table 2. Percentages by mindset not shown. Contact the authors for data.

segment tends to be affluent with high home ownership and a long tenure at their current residence. Members of this segment are typically white and between the ages of 35 and 54. This segments demonstrates high awareness and high degree of knowledge and understanding of the Census. The segment is positively predisposed towards the Census and views the Census as a benefit to the community rather than themselves personally. The Leading Edge tends to believe that the Census is confidential. This mindset aligns most closely with the Advantaged Homeowner and All Around Average I clusters from the Census audience segmentation. Based on these data, we draw the following creative insights for this mindset:

CORE CHARACTERISTIC: Committed.

ATTITUDE/BARRIERS: The Leading Edge understands and values the Census and believes participation is crucial. They will respond to news, up-to-date information, and messages that will create conversations. They can become advocates orchestrating trusted conversations for the Census. There are no apparent barriers.

CHALLENGE: Keep positive momentum going and, given that this group probably will not be mailed a replacement form, encourage them to mail the form back early.

MOTIVATOR: The Census is my tool to continue to help shape the community at large.

POTENTIAL MESSAGES: Fair share of $300 billion federal funds; Representation in Congress; Early mailing saves taxpayer dollars.

COMMUNICATION STRATEGY: Turn individuals most likely to respond into advocates through targeted activism programs.

The Head Nodders
The Head Nodders are the largest population segment. They are demographically diverse with average incomes and educational attainment**.** They include a slightly higher percentage of females. The Head Nodders demonstrate high awareness of the Census and believe they are knowledgeable about the Census. However, they lack a good understanding of the purpose and intent of the Census. This mindset maintains high positive predisposition towards the Census and view it as having a positive community and individual benefits. They consider Census participation to be a responsibility and they are proud to be counted. They believe the Census is confidential and do not have great concerns that the Census is an invasion of privacy. This mindsets resides mostly in the All Around Average I and Advantaged Homeowner clusters.

CORE CHARACTERISTIC: Impressionable

ATTITUDE/BARRIERS: Head Nodders tend to believe anything and everything about the Census, respond to what they are told, and what they perceive is right (even though it may be incorrect). They express their intention to participate in the Census but are unreliable since negative media/messages might sway them in the other direction.

CHALLENGE: Constantly move them in the right direction since they are quick to get on (and off) the bandwagon depending upon their current sense of what is best. Shore them up to safeguard against any negative publicity.

POTENTIAL MESSAGES: If you don't fill it out, you might not get your fair share; Share of $300 billion; early mailing saves taxpayer dollars.

COMMUNICATION STRATEGY: Overcome distractions with reminder frequency.

The Insulated
The insulated is a smaller segment. They have lower educational attainment and lower incomes. This segment is racially and ethnically diverse with high percentages of Hispanic and black. Many members of this segment do not speak English at home. This segment has a lower percentage of children in the home. The insulated are aware of the Census but admittedly "don't know" when asked about the purpose and intent. They have long tenures in their neighborhoods, yet question the impact of the Census since they don't feel they've seen the results in their neighborhoods. They are most interested in individual benefits of the Census rather than

community benefits. The Insulated can be found in the All Around Average I, Economically Disadvantaged I and Ethnic Enclave II clusters.

CORE CHARACTERISTIC: Indifferent.

ATTITUDE/BARRIER: They are unfamiliar with Census and while they may be open to it, they are focused more on the day-to-day — on their own daily needs and the needs of their long-term neighbors. Since they tend to have lived in their neighborhoods a long time and have never really seen the impact of Census on their community, they are skeptical of it.

CHALLENGE: Personalize the Census for them by making the impact of Census more relevant to their daily lives and reassuring them that it is safe.

MOTIVATOR: Census is a tool that can help make life better for me (and my neighbors).

POTENTIAL MESSAGES: Healthcare; community centers; day-care for children; care for elderly.

COMMUNICATION STRATEGY: Overcome lack of familiarity through educational programs.

The Unacquainted

The unacquainted are also a small segment. This segment is completely unaware of the Census, even after a brief description of the Census. They also report a low likelihood to participate in the Census. This mindset is comprised of a large percentage of minorities including Hispanics, Asians, American Indians and Blacks. Over 40 percent of the segment is foreign born and many speak a language other than English at home. This segment is bimodal in terms of age, with many younger members and many older members but fewer in the middle age groups. Many of the Unacquainted are not married and tend to be renters. Household sizes tend to be larger with a higher percentage having children in the home than in other mindsets. This segment has lower educational attainment and income levels. The Unacquainted have a low level of civic engagement and do not tend to be community oriented. This mindset is located most in the Ethnic Enclave II, All Around Average and Economically Disadvantaged clusters.

CORE CHARACTERISTIC: Peripheral.

ATTITUDE/BARRIER: Totally unaware of the Census, they are often linguistically isolated and uninvolved in their community. No awareness combined with no knowledge means they have no real reason to participate.

CHALLENGE: The Census will need to reach out to them with efforts that will embrace them as part of the count – give them a sense of being part of the population and process. They will need reassurance from "trusted sources" that it is safe and easy to participate.

MOTIVATOR: The Census is *your tool* to make a difference – everyone is important, including you.

POTENTIAL SUPPORT: Bilingual questionnaire, language guides, information centers, Census-takers from your community during non-response follow-up. Reaching this segment via the Census in Schools campaign may also be an effective strategy.

Cynical Fifth

The Cynical Fifth population segment closely resembles the general population with respect to race, gender, age, educational attainment, and income. The Cynical Fifth claims unfamiliarity with the Census, but in reality they demonstrate a relatively high level of knowledge about the intent and purpose. They are more negative toward the Census with most believing that they will never see results in their neighborhood. They maintain high skepticism and do not trust the Census, yet recognize that the Census is better if everybody is counted. They are concerned that the information collected is an invasion of privacy and that what they provide will be misused. This mindset shows up primarily in the All Around Average and Advantaged Homeowner clusters.

CORE CHARACTERISTIC: Resistant.
ATTITUDE/BARRIER: They believe the Census is misused, not used, or is redundant (since the government already has that information through the IRS, etc.). They are suspicious, jaded, anti-institution, and uncommitted to Census.
CHALLENGE: To inspire them to think beyond themselves. You can't rationalize with them, or confront their beliefs head on.
MOTIVATOR: Census is a tool that I can use to help make a better future for the common good and for future generations.
POTENTIAL SUPPORT: Human interest stories.

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