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2013 AMERICAN COMMUNITY SURVEY RESEARCH AND EVALUATION REPORT
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MEMORANDUM FOR ACS Research and Evaluation Steering Committee

From: James B. Treat (**signed 08/27/2013**)
Chief, American Community Survey Office

Prepared by: Stephanie Baumgardner
American Community Survey Office

Subject: Tracking American Community Survey Mail Response During the
2010 Census

Attached is the final report on Tracking American Community Survey Mail Response During the 2010 Census. This report examines the impact of 2010 Census operations on the American Community Survey (ACS) mail response from January 2010 through July 2010. The impact on mail response and mail form completeness is shown at the national level and by segmentation group.

If you have any questions about this report, please contact Stephanie Baumgardner at (301) 763-5893 or David Raglin at (301) 763-4226.

Attachment

cc:
ACS Research and Evaluation Team

Tracking American Community Survey Mail Response During the 2010 Census

FINAL REPORT

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Table of Contents

I.	Introduction	1
II.	Background.....	1
	A. The American Community Survey (ACS)	1
	B. The Segmentation Groups	2
III.	Methodology.....	3
	A. ACS Mail Response.....	3
	B. Mail Form Completeness	4
IV.	Results.....	4
	A. ACS Mail Response.....	4
	B. Mail Form Completeness	10
V.	Conclusions	16

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Tracking American Community Survey Mail Response During the 2010 Census¹

I. Introduction

The 2010 Census publicity and outreach effort utilized a comprehensive marketing strategy known as The 2010 Census Integrated Communications campaign. This campaign employed many techniques to raise awareness of and encourage participation in the 2010 Census including paid media, public relations, promotions and partnerships. These techniques were tailored to eight major segmentation groups of the U.S. population.

Due to the increased awareness surrounding the 2010 Census activities, response to the American Community Survey (ACS), a continuous survey conducted every month by the Census Bureau, was expected to be affected during early 2010. The 2010 ACS mail check-in rates were compared to the 2009 rates to provide an assessment of the impact that the 2010 Census publicity may have had on public awareness and cooperation and also to provide feedback on changes in the ACS workloads due to the 2010 Census. Mail check-in rates were also examined by each of the eight segmentation groups to determine if some groups benefitted more from the advertising used to promote the 2010 Census. The differences in the 2010 and 2009 rates at the national level as well for each of the segmentation groups show a clear trend during the first half of 2010.

In addition to tracking the 2010 ACS mail response, ACS mail form completeness was also studied as another measure of respondent cooperation. Differences in the completeness of the 2009 and 2010 ACS mail forms were considered at the national level and for each of the eight segmentation groups. As with the ACS mail check-in rates, a common theme can be seen that indicates the willingness of the American public to fully participate in the ACS.

II. Background

A. The American Community Survey (ACS)

The ACS is a continuous survey that collects detailed demographic, social, economic, and housing data that were formerly contained on the Census 'long form'. While the ACS content is

¹ This report is released to inform interested parties of research and to encourage discussion. The views expressed on statistical and technical issues are those of the authors and not necessarily those of the U.S. Census Bureau.

similar to the Census 2000 long form, the design and methodology of the ACS differ greatly. ACS data are collected continuously throughout the year in monthly panels of about 250,000 addresses. Each monthly panel has three phases of data collection; mail, computer assisted telephone interview (CATI), and computer assisted personal interview (CAPI). As Figure 1 shows, the three phases are spread over three months with the mail phase spanning all three months. However, for most panels, about 85 percent of all mail responses are received during the first month. These three phases operate in continuous overlapping cycles so that for any given month there are three panels in the mail phase, one panel in the CATI phase, and one panel in the CAPI phase.

Figure 1 The Three Phases of ACS Data Collection

ACS Sample Panel	Month of Data Collection							
	2009	2010						
	December	January	February	March	April	May	June	July
December 2009	Mail	CATI	CAPI					
January 2010		Mail	CATI	CAPI				
February 2010			Mail	CATI	CAPI			
March 2010				Mail	CATI	CAPI		
April 2010					Mail	CATI	CAPI	
May 2010						Mail	CATI	CAPI
June 2010							Mail	CATI
July 2010								Mail

B. The Segmentation Groups

The 2010 Census Integrated Communications program made use of eight unique segmentation groups to tailor the effort to effectively promote participation of each group in the 2010 Census. These groups were formed at the census tract level based on demographic, socioeconomic, housing, and mail response data from Census 2000 and updated using 2007 and 2008 ACS characteristic and response data. Each group contains housing units with similar characteristics such as housing vacancy, tenure, marital status, education, poverty, and

unemployment level. Messages encouraging participation in the 2010 Census were customized according to research indicating how best to reach each group.

The segmentation groups, ordered by those with the highest to lowest mail return rates in Census 2000, are:

- Advantaged Homeowners
- Average – Homeowner Skewed
- Average – Renter Skewed
- Single, Unattached, Mobiles
- Ethnic Enclave – Homeowner skewed
- Economically Disadvantaged – Homeowner Skewed
- Ethnic Enclave – Renter Skewed
- Economically Disadvantaged – Renter Skewed

For more detailed information about each of these groups and how they were formed, please see the “2010 Census Integrated Communications Campaign Plan: The Success of the Census Is in Our Hands” at http://2010.census.gov/partners/pdf/2010_ICC_Plan_Final_Edited.pdf.

III. Methodology

A. ACS Mail Response

ACS questionnaires are mailed to ACS sample addresses a few days before the first day of the month for each panel. A reminder postcard is mailed a few days later to encourage participation. For non-responding units, a second questionnaire is mailed about three weeks after the first questionnaire was mailed. ACS mail response takes into account responses to either mailing. While ACS mail response has always been tracked, since January 2010, we have tracked ACS mail response in a different manner for this study.

The measure that we used to track ACS mail response is the mail check-in rate. The mail check-in rate is the weighted estimate of the percentage of all sample addresses included in the initial mailing that respond by mail or telephone assistance to either of the ACS mailing(s). Daily mail check-in rates, calculated at the national level and for each segmentation group, were calculated for each panel and compared to the 2009 rates. Weekly reports were produced by panel, comparing the daily patterns of response for these two years. For this analysis these daily rates were summarized by computing the differences in the 2010 and 2009 rates for each panel at 90 days after the initial mail out of the ACS questionnaire. Summaries were produced for the nation and for each segmentation group. Standard errors for each rate at 90 days after the initial mail out and for each difference were calculated using replicate weights.

B. Mail Form Completeness

Like the Census 2000 long form, the ACS questionnaire collects very detailed data on various topics such as the type of fuel used to heat the housing unit, mortgage or rent payment, educational attainment, and income. For each mail form the completeness rate is calculated as the percentage of completed items out of all required items across the entire form. For example, a rate of 90 percent means that 90 percent of the items that should have been completed by the respondent were provided. The ACS includes a follow-up operation to recontact households and try to obtain more complete information. The mail completeness rate is based on the completeness of the mail forms prior to this follow-up operation and is therefore the best measure of the amount of information provided by respondents. Across each ACS panel and segmentation group combination in 2009 and 2010, the average mail form completeness was calculated. Differences in the 2010 and 2009 completeness rates were computed for each ACS panel and segmentation group. Standard errors for each average completeness rate and difference were calculated using replicate weights.

IV. Results

A. ACS Mail Response

Tracking the 2010 ACS mail response relative to the 2009 ACS mail response by sample panel provides an assessment of the impact that the 2010 Census publicity may have had on public awareness and cooperation. It also provides feedback on changes in the ACS workloads due to the 2010 Census. The level of mail response is based on mail check-in rates which are weighted estimates of the percentage of addresses responding by mail or telephone assistance to the ACS mailing(s) relative to the initial mailout. These rates are imperfect measures of public cooperation as they do not adjust for sample addresses that might not have been able to respond such as vacant and nonexistent units.

For each sample panel we summarized the daily check-in rates for all sample addresses that responded by mail or telephone assistance over the three month data collection period (90 days after the initial mail out). Since most mail responses (about 85 percent) are received in the first month, these sample panel summaries are a reasonable proxy for mail responses in a given month. Rates were calculated relative to each sample panel's initial mailout. Differences in the 2010 and 2009 panel summaries were graphed at the national level and for each segmentation group.

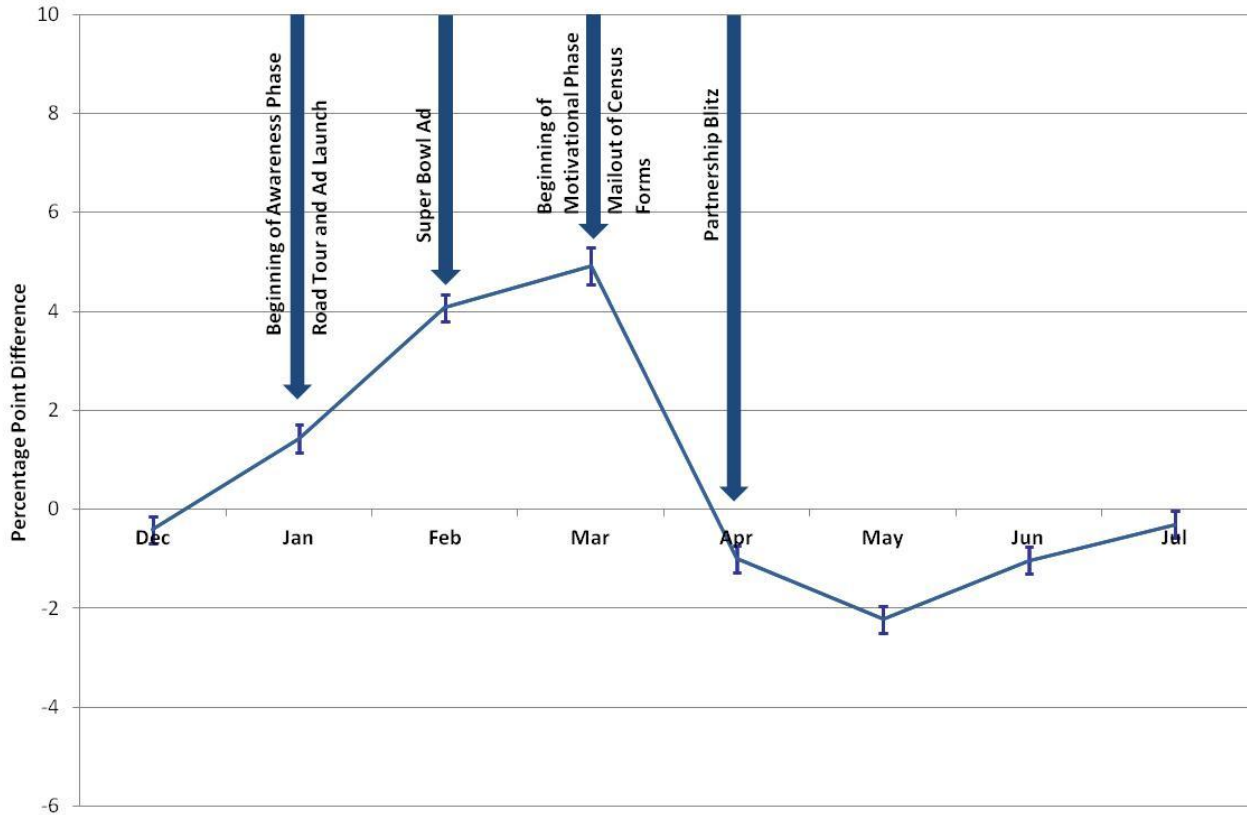
Figure 2 shows the differences in the 2010 and 2009 mail check-in rates (2010 – 2009) by ACS panel at the national level. Positive values indicate an increase in 2010 over 2009. The bar associated with each point of the graph represents the confidence interval surrounding the point estimate. At the national level, each year to year difference from the December through

July panels is statistically significant although the December 2009 and July 2010 rates are not substantially different than the corresponding rates from the previous year.

It is clear from Figure 2 that the publicity surrounding the 2010 Census had a positive effect on the January, February, and March ACS panels. January marked the beginning of the Census 2010 awareness phase with the launch of the road tour early in the month and the launch of advertisements in mid-January. These early outreach efforts resulted in the January 2010 ACS panel having a mail check-in rate that was about 1.4 percentage points higher than the January 2009 rate. The Super Bowl ad in early February and continuing advertisements regarding Census 2010 resulted in the February 2010 ACS panel having a mail check-in rate about 4 percentage points higher than the February 2009 rate. In March, the outreach and publicity surrounding Census 2010 switched from an awareness phase to a motivational phase. Also, in mid-March, the Census 2010 forms were mailed. The March 2010 ACS panel saw the greatest increase in the mail check-in rates when compared to the previous year. It can be surmised that during these months before the mail out of the Census 2010 forms (the March panel ACS forms were mailed at the end of February), respondents receiving the ACS questionnaire may have assumed that it was the Census 2010 form.

Beginning with the April 2010 ACS panel, a decline in the 2010 ACS mail check-in rates as compared to the 2009 rates was observed. During this time a partnership blitz was underway however, most respondents had received and likely returned their Census 2010 form and the decline in the ACS mail check-in rates suggests an unwillingness to also participate in the ACS. The May 2010 ACS panel saw the largest negative difference in the mail check-in rate when compared to the May 2009 rates likely due to the much decreased publicity and outreach efforts surrounding Census 2010 and a continued unwillingness of respondents to participate in the ACS when they may have recently completed their Census 2010 form. The June and July 2010 ACS panels show a rebounding of mail check-in rates approaching 2009 levels suggesting that ACS respondents in those months are not as affected by any negative effect of having just completed the 2010 Census form.

Figure 2. Differences in the 2010 and 2009 Mail Check-in Rates by ACS Panel (National Level)



Since different strategies were used to promote the 2010 Census in each segmentation group, the differences in the 2009 and 2010 mail check-in rates were examined by ACS panel for each of the segmentation groups. For presentation, the segmentation groups are separated into two main groups, homeowner skewed and renter skewed. Table 1 shows this division of the segmentation groups and each group’s percent of the 2010 housing units as determined by the weighted 2010 ACS sample. The 2009 housing units (determined by the weighted 2009 ACS sample) show a similar representation of the segmentation groups. Also, the 2009 mail check-in rate for each group is shown as a reference.

The combined homeowner skewed group comprises about two-thirds of all housing units with the average and advantaged groups having the largest shares of the combined homeowner skewed group. For the combined homeowner skewed group, the 2009 mail check-in rate was about 50 percent with the advantaged group having the highest 2009 mail check-in rate and the ethnic enclave group having the lowest 2009 mail check-in rate. The combined renter skewed group makes up about a quarter of all housing units. The 2009 ACS mail check-in rate for the combined renter skewed group is about 41 percent with the economically disadvantaged and ethnic enclave groups showing a 2009 check-in rate of about 25 percent. Based on the 2009

data, the segmentation groups seem to effectively differentiate between areas with high versus low levels of ACS mail response.

Table 1. Segmentation Groups Summary

Category	Description	Percent of 2010 Housing Units*	2009 ACS Mail Check-in Rate
Homeowner Skewed	Average	32.6	48.8
	Economically Disadvantaged	5.7	31.6
	Ethnic Enclave	2.9	29.2
	Advantaged	25.0	59.3
Combined Homeowner Skewed		66.2	50.2
Renter Skewed	Average	14.5	46.2
	Economically Disadvantaged	2.7	25.2
	Ethnic Enclave	2.2	24.4
	Single/unattached/mobiles	7.1	40.8
Combined Renter Skewed		26.5	40.7
Total ACS Sample			46.7

*As determined by the weighted 2010 ACS sample. The sum of this column will not total 100 as some tracts were not assigned a segmentation group.

Figure 3 shows the differences in the 2010 and 2009 mail check-in rates for the combined homeowner and combined renter groups by ACS panel. The differences for the combined homeowner group differ from zero for all panels except the December panel while the differences for the combined renter group differ from zero for the January through May panels only. The dotted line shows the differences at the national level. For the December, January, and July panels, there were no statistical differences between the combined homeowner and combined renter groups. The combined renter skewed group had differences that were statistically significant when compared to the combined homeowner skewed group for the February through June panels. While the trend for all groups is a higher mail check-in rate for the February and March 2010 panels, the magnitude of that increase is greater for the renter skewed group. In addition, for the April 2010 panel, the mail check-in rate for the renter skewed group is still significantly higher than the 2009 rate while the April 2010 rate for the homeowner skewed group is significantly lower than the 2009 rate. This suggests that the 2010 Census outreach efforts were successful in reaching these renter skewed groups which typically have an ACS mail check-in rate that is about 10 percentage points lower than the homeowner skewed groups. By the May 2010 panel, both groups had mail check-in rates lower than their 2009 rates but the rates did not drop as much for the renter skewed group.

Figure 3. Differences in the 2010 and 2009 Mail Check-in Rates by ACS Panel and Homeowner/Renter Skewed Segmentation Groups

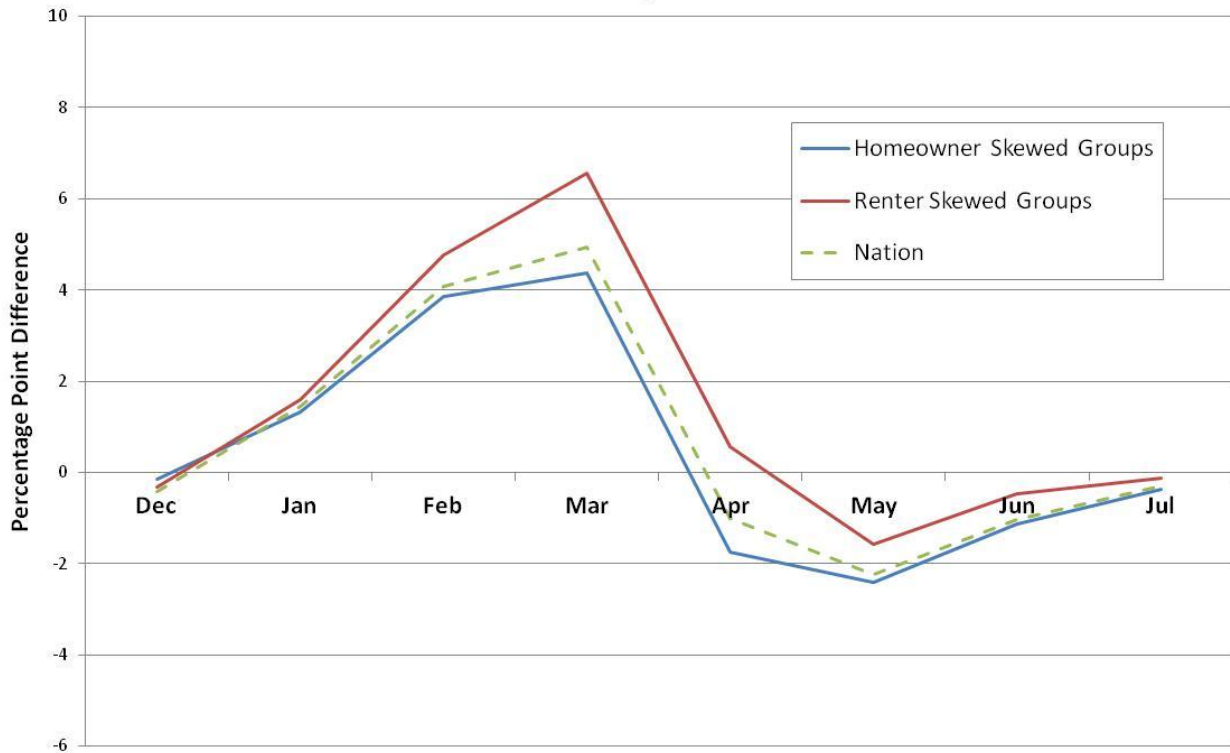


Figure 4 shows the differences in the 2010 and 2009 mail check-in rates for the specific homeowner skewed groups only. Again the dotted line indicates the differences at the national level. The differences for all of the combined homeowner groups differ from zero for the January, February, March, and May panels. All groups except the ethnic enclave homeowners had differences that differed from zero for the April panel while, for the June panel, all groups except the economically disadvantaged homeowners had differences that differed from zero. By the July panel, only the ethnic enclave and advantaged homeowners had differences that differed from zero. Although all of the homeowner groups experienced an increase in mail check-in rates compared to the 2009 rates for the January, February, and March panels, the increases for the economically disadvantaged group is greater than the increases observed for the average and advantaged homeowner groups. While not all of the differences between each of the groups are significant each month, the general trend for the April through July time period is a larger negative difference for the advantaged group as compared to the other groups, an initial positive difference for the ethnic enclave group for the April panel which drops off for the May through July panels, and differences for the average and economically disadvantaged groups that trend similarly.

Figure 4. Differences in the 2010 and 2009 Mail Check-in Rates by ACS panel and Homeowner Skewed Segmentation Groups

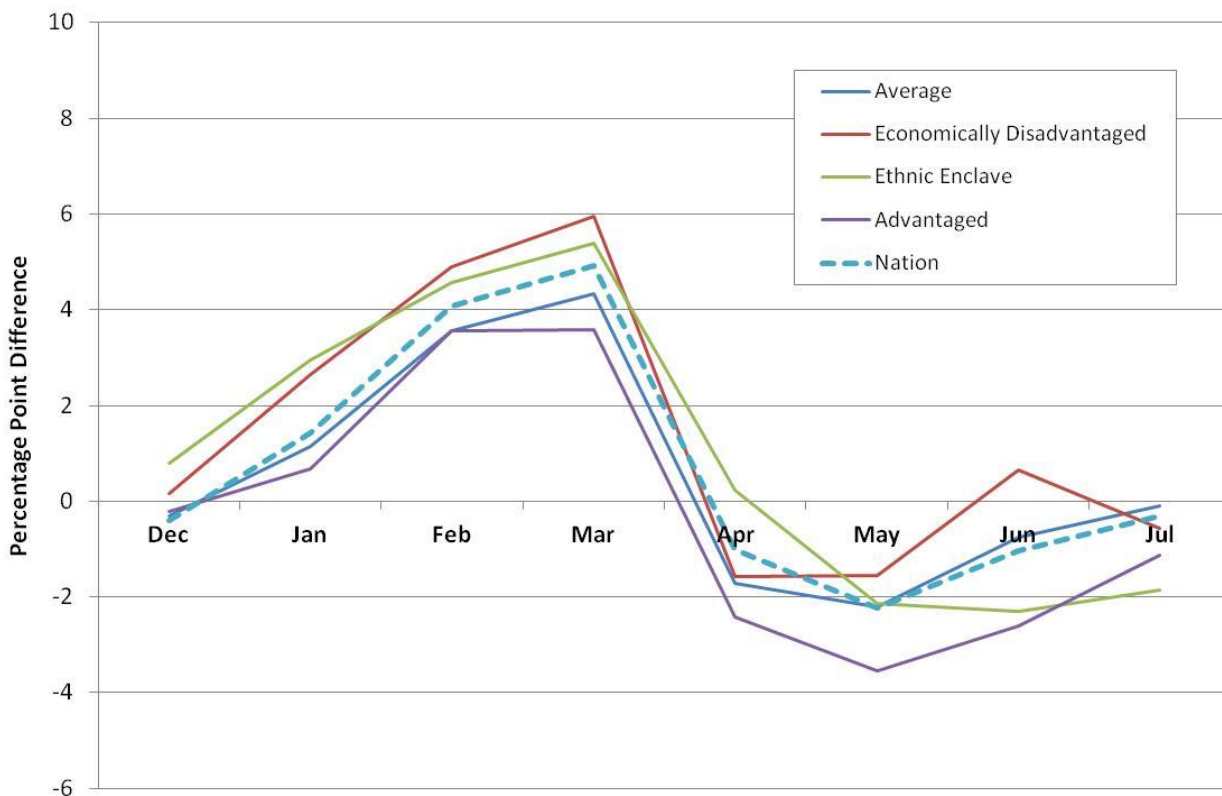
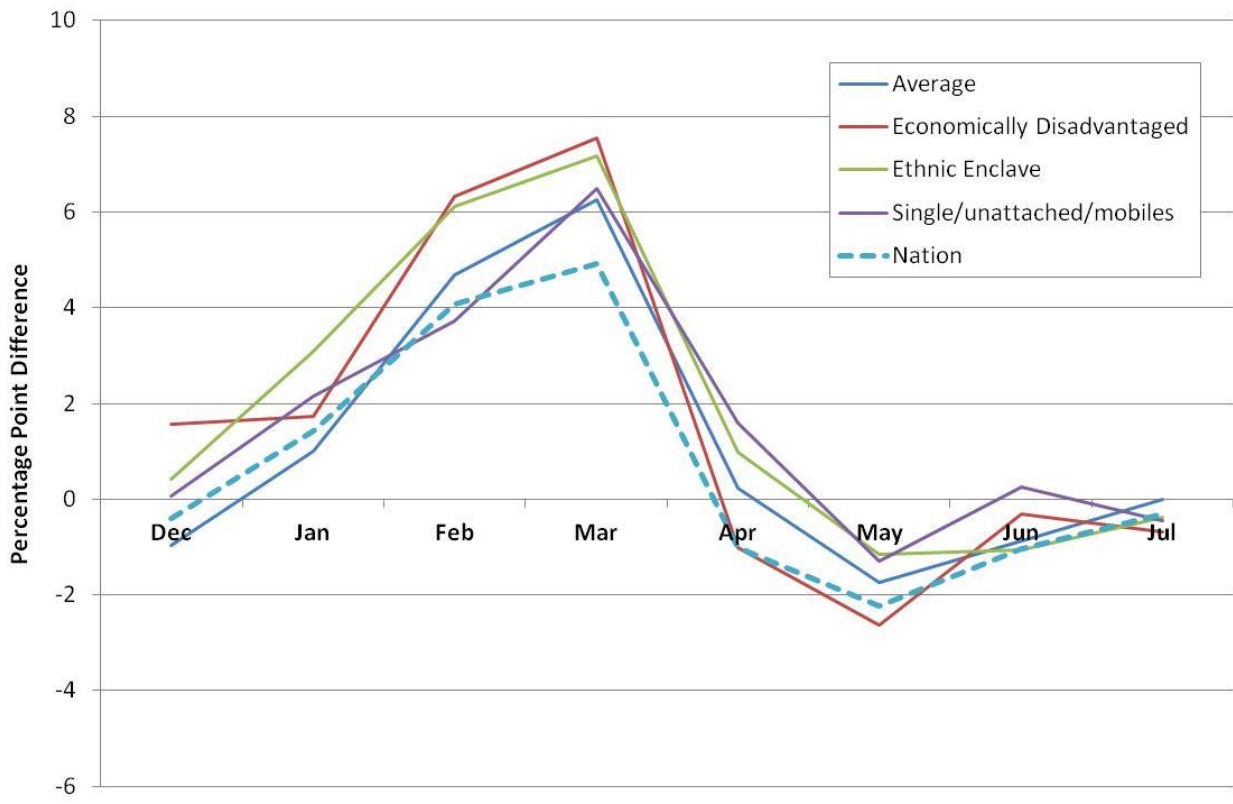


Figure 5 shows the differences in the 2010 and 2009 mail check-in rates for the specific renter skewed groups only with the dotted line indicating the national level. The differences for all of the combined renter groups differ from zero for the January, February, and March panels. Only the single mobile group had a difference that differed from zero for the April panel while, for the May panel, all groups except the ethnic enclave renter had differences that differed from zero. By the June panel, only the average renters had a difference that differed from zero and no groups had a difference that differed from zero for the July panel. While not all of the differences between each of the groups are significant each month, the general trend is that the economically disadvantaged and ethnic enclave groups have larger positive differences for the January-March panels than the average and single mobile groups. For the April-July panels, there is more separation between the differences for the April panel, while the differences for the groups from May through July are generally not different from one another.

Figure 5. Differences in the 2010 and 2009 Mail Check-in Rates by ACS panel and Renter Skewed Segmentation Groups



B. Mail Form Completeness

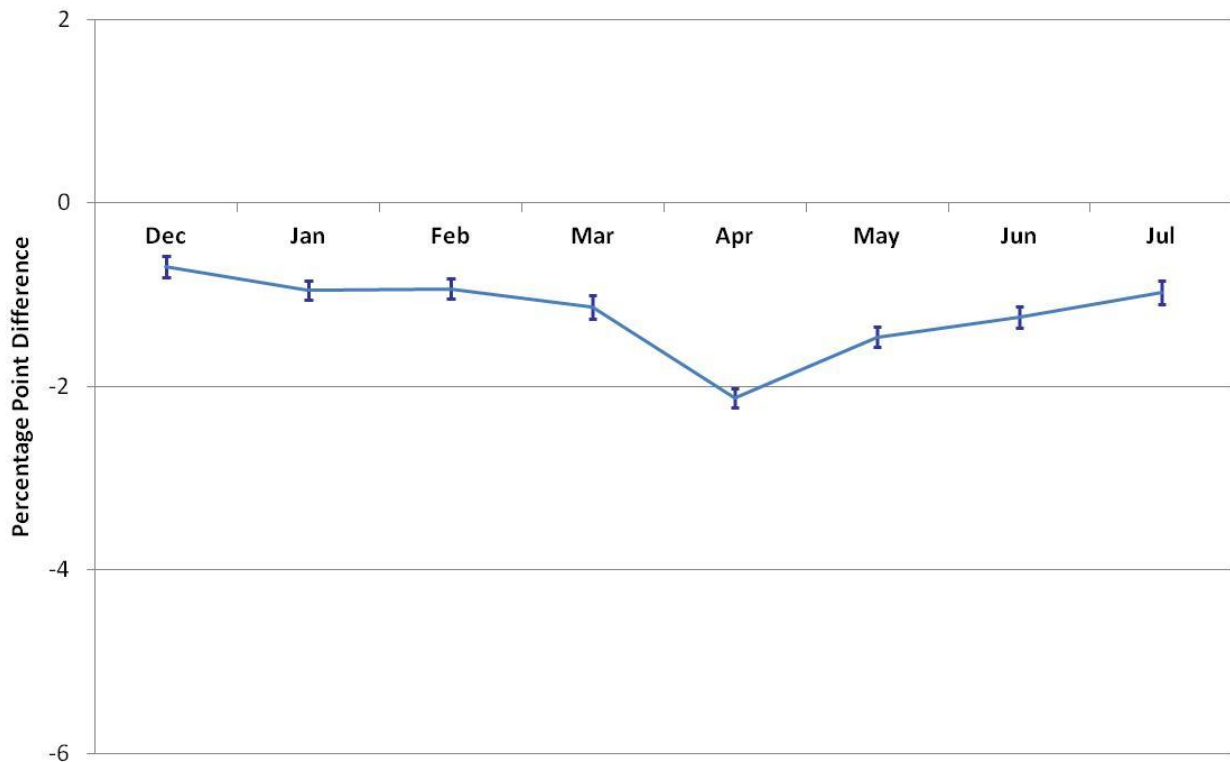
Mail form completeness is another measure of respondent cooperation. For each ACS form returned (and before any follow-up activities to obtain more complete responses), the mail form completeness rate was calculated as the percentage of all required items completed across the entire form. This rate was calculated for each ACS panel and segmentation group combination in 2009 and 2010 and differences between the 2010 and 2009 rates were computed.

Figure 6 shows the differences in the 2010 and 2009 mail form completeness by ACS panel at the national level. The bar associated with each point of the graph represents the confidence interval surrounding the point estimate. For all panels, the 2010 (2009 for December) completeness rate was significantly lower than its' previous years' rate. The lower rates of completeness for December 2009 may imply a general trend of respondents providing less complete data over time more than any effect of the 2010 Census. Compared to previous months, a slight decline in the 2010 completeness rate is evident for the March panel with the April 2010 panel seeing the greatest negative effect on mail form completeness. A slow

rebounding in the completeness rate is seen for the May and June 2010 panels and by the July panel, the completeness rate is approaching the levels experienced by the January and February panels.

When considering these mail form completeness data along with the mail check-in data, the increased mail response for the January, February, and March 2010 panels did not result in a dramatic change in the completeness rate which suggests that the extra responses received were completed in a similar fashion as the other responses. At the national level the mail check-in rate for the April 2010 panel was about 1 percentage point lower than the April 2009 rate and the completeness rate for the April 2010 panel fell about two percentage points below the April 2009 rate. The May 2010 panel experiences the lowest mail check-in rate and a completeness rate that, while not as low as the April 2010 rate, is still lower than the early 2010 completeness rates. This indicates that, for the April and May 2010 panels, fewer households returned their ACS form and those that did return it provided less data. By the June and July panels, both the mail check-in rate and the mail form completeness rate were approaching late 2009/early 2010 levels.

Figure 6. Differences in the 2010 and 2009 Mail Form Completeness by ACS Panel (National Level)



Just as the mail check-in rates were analyzed by segmentation group, the mail completeness rates were also evaluated by segmentation group. To present these results, the segmentation groups are separated into two main groups. The average (homeowners and renters), single mobiles, and advantaged homeowners comprise one group while the economically disadvantaged (homeowners and renters) and ethnic enclave (homeowners and renters) form the second group. Table 2 shows this division of the segmentation groups and each group's percent of the 2010 housing units as determined by the weighted 2010 ACS sample. Also, the 2009 mail form completeness rate for each group is shown as a reference. There is very little variability in the 2009 mail form completeness rates within each of these subgroups. The average, mobiles, advantaged group appears to have completeness rates that are generally five percentage points higher than the economically disadvantaged and ethnic enclave group.

The combined average, mobiles, advantaged group comprises the majority of all housing units with an average 2009 mail form completeness rate of about 92 percent. Of this combined group, the advantaged homeowner group makes up nearly a third of the combined group and has the highest 2009 mail form completeness rate. For all groups in the combined average, mobiles, advantaged group, the 2009 mail form completeness rates are in the 91 to 92 percent range. The combined economically disadvantaged and ethnic enclave group makes up just 14 percent of all housing units and has an average 2009 mail form completeness rate of 86 percent. The 2009 completeness rates for all groups in this combined group are in the 86 to 87 percent range. While the economically disadvantaged renter group has the lowest 2009 mail form completeness rate it is still considered a respectable rate.

Table 2. Segmentation Group Summary

Category	Description	Percent of 2010 Housing Units*	2009 ACS Mail Form Completeness Rate
Average, Single Mobiles, Advantaged	Average Homeowner	32.6	90.8
	Average Renter	14.5	91.4
	Single/unattached/mobiles	7.1	92.0
	Advantaged Homeowner	25.0	92.5
Combined Average, Mobiles, Advantaged		79.2	91.6
Economically Disadvantaged, Ethnic Enclave	Econ. Disadvantaged Homeowner	5.7	86.5
	Econ. Disadvantaged Renter	2.7	85.8
	Ethnic Enclave Homeowner	2.9	86.5
	Ethnic Enclave Renter	2.2	86.8
Combined Econ. Disadvantaged, Ethnic Enclave		13.5	86.4
Total ACS Sample			91.2

*As determined by the weighted 2010 ACS sample. The sum of this column will not total 100 as some tracts were not assigned a segmentation group.

Figure 7 shows the differences in the 2010 and 2009 mail form completeness rates for the combined average, single mobiles, advantaged group and the combined economically disadvantaged and ethnic enclave group by ACS panel. The dotted line shows the differences at

the national level. For both combined groups, the completeness differences differed from zero for all panels meaning that the 2010 rates were lower than the 2009 rates in every month. For the December through February panels there are no statistically significant differences between the two subgroups. Starting with the March panel and continuing through the July panel, the combined economically disadvantaged and ethnic enclave group experienced a larger negative difference than the combined average, single mobile, advantaged group. Considering panel to panel differences, the combined average, single mobile, advantaged group shows a trend in the completeness rate differences that is significantly smaller for each panel after the March panel while the differences for the combined economically disadvantaged and ethnic enclave group are not significantly different for the May, June, and July panels. These data suggest that the economically disadvantaged and ethnic enclave groups were less willing to provide data to the ACS following the 2010 Census and, as of the July panel, had not returned to responding at levels similar to their December 2009 completeness rate.

Figure 7. Differences in the 2010 and 2009 Mail Form Completeness by ACS Panel and Segmentation Group

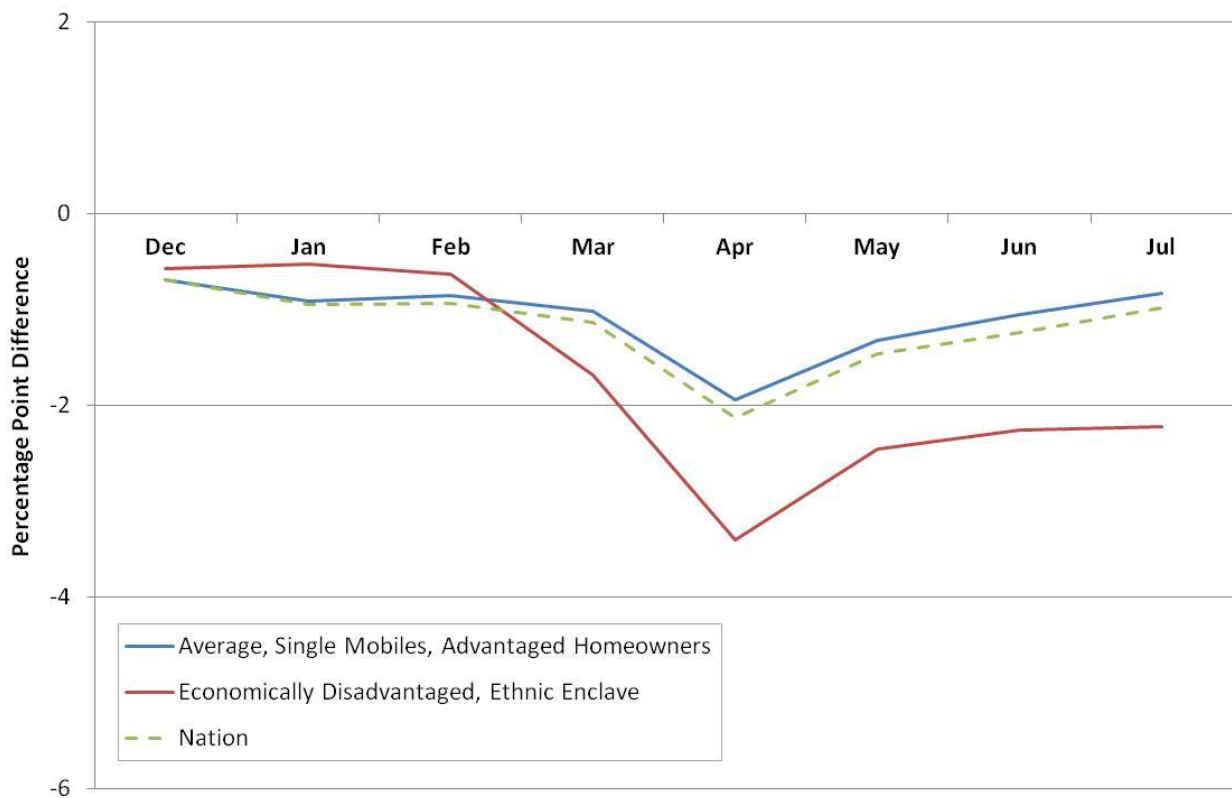


Figure 8 shows the differences in the 2010 and 2009 mail form completeness rates for each of the following groups: average homeowners, average renters, single mobiles, and advantaged homeowners. Again the dotted line indicates the differences at the national level. Differences for each of the groups differed from zero for all panels except for the single mobile group in December. This means that the 2010 forms were less complete than the 2009 forms. For the

December panel, the single mobile group appears to have a completeness rate that was larger than the previous years' rate but the difference is not statistically significant. However, the single mobile group did have a difference that was significantly different than the other groups for the December panel. More variation in the differences among the groups is seen in the March panel where the difference in the average renter group is significantly less than the difference in the average and advantaged homeowner groups. All groups except for the single mobiles have an April difference that is statistically greater than their March difference. In fact, the differences for the single mobiles from the February through July panels are not statistically different from the previous month's difference. For the May panel the advantaged homeowners have a difference that is statistically smaller than the difference for the average homeowner and renter groups. In June there were no statistical differences among the groups but by July, the difference for the single mobiles group was greater than the differences for the average and advantaged homeowner groups. Overall, the single mobiles group does not trend as similarly as the other groups.

Figure 8. Differences in the 2010 and 2009 Mail Form Completeness by ACS Panel and Segmentation Group (Average Homeowners and Renters, Single Mobiles, Advantaged Homeowners Groups)

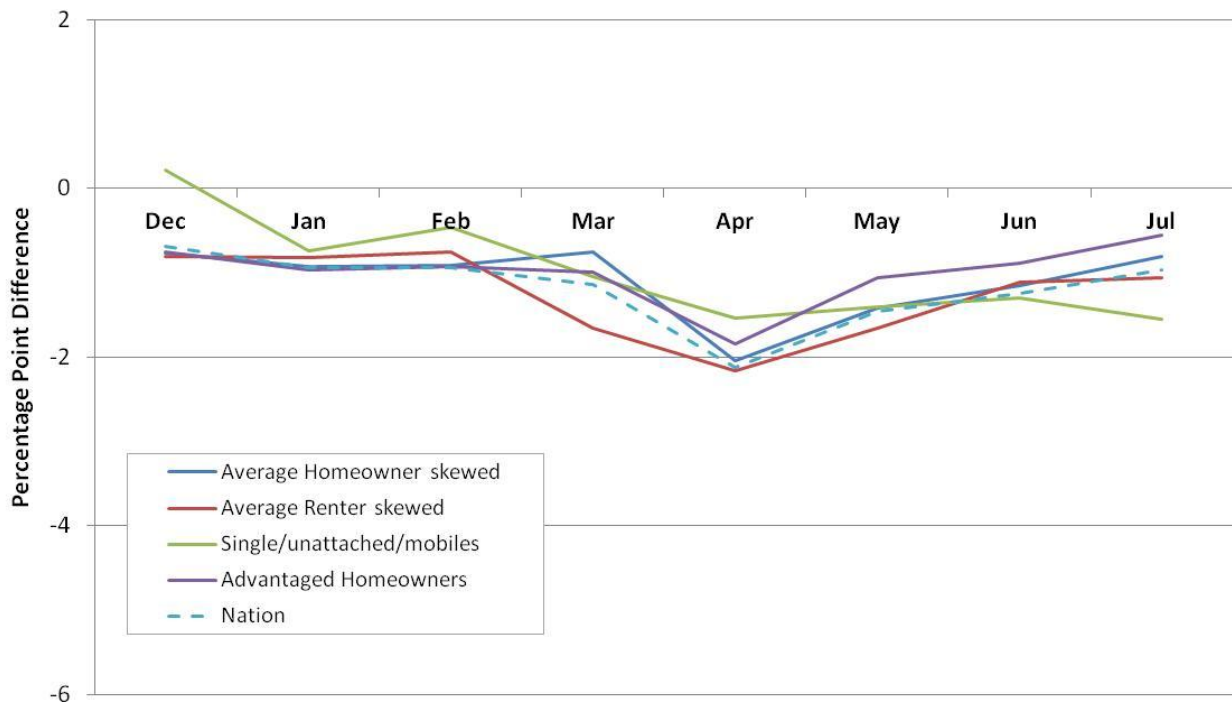
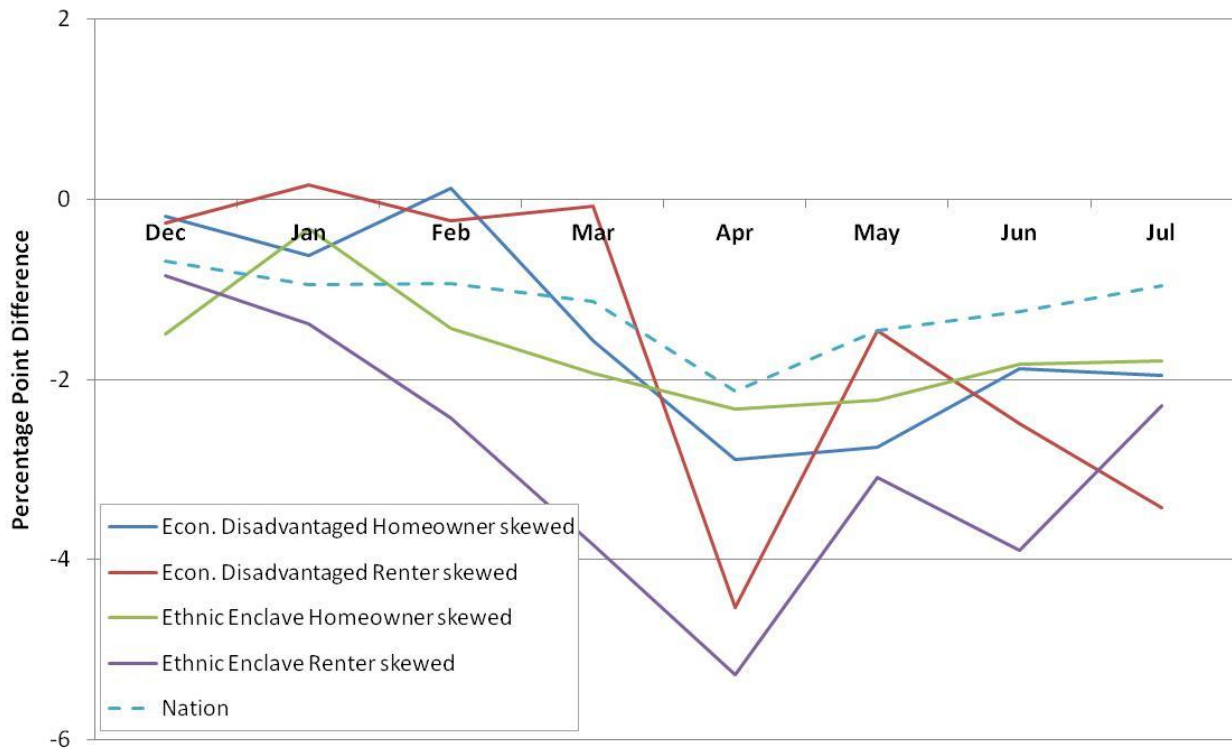


Figure 9 shows the differences in the 2010 and 2009 mail form completeness rates for each of the economically disadvantaged and ethnic enclave homeowner and renter groups with the dotted line indicating the differences at the national level. From January through March, some

of the groups had differences that did not differ from zero, while from April through July, all groups had differences that differed from zero. While a trend in the differences is more difficult to see among these groups, it appears that most groups experience the largest negative difference for the April panel and then rebound somewhat for the May through July panels. Because the population in these groups is small, the standard errors for some of these differences are sizeable and what appear to be large differences between the groups are not statistically significant. For the April panel, the renter groups have statistically greater negative differences than the homeowner groups while the differences among the groups for the May panel are not significantly different. In June, the ethnic enclave renter group had a difference that was statistically greater than both homeowner groups. In July, it was the economically disadvantaged renter group that had a difference that was statistically greater than both homeowner groups. This suggests that the completeness rates for these renter skewed groups are less stable than these homeowner skewed groups.

Figure 9. Differences in the 2010 and 2009 Mail Form Completeness by ACS Panel and Segmentation Group (Economically Disadvantaged and Ethnic Enclave Groups)



V. Conclusions

The publicity and outreach effort surrounding the 2010 Census positively affected the ACS from January through March resulting in higher mail check-in rates. In February and March, the renter skewed segmentation groups saw a larger increase in the mail check-in rates than the homeowner skewed segmentation groups. This is likely due to the Census 2010 advertising that more heavily targeted areas with historically low response rates like the renter skewed areas. The April and May ACS panels appear to be negatively affected by Census 2010 activities with mail check-in rates that were lower than the 2009 rates at the national level. By this time, the publicity surrounding the 2010 Census was on the decline and most respondents had received and likely returned their 2010 Census form so they may have been unwilling to also participate in the ACS. By the June and July 2010 ACS panels, a rebounding of the national mail check-in rates approaching 2009 levels suggests that ACS respondents in those months were not as affected by having completed the 2010 Census form several months earlier. By segmentation groups, the mail check-in rates for the renter skewed groups did not drop below 2009 levels until the May panel and rebounded to pre-2010 levels faster than the homeowner skewed groups. This could be the result of a continued positive effect from the 2010 Census on the renter skewed groups. It could also be due to the renter skewed groups having historically lower check-in rates than the homeowner skewed groups.

The other measure of respondent cooperation that was analyzed in this research was mail form completeness. The ACS did not experience any positive effect on mail form completeness from the 2010 Census publicity and outreach. The increase in mail response for the January through March panels did not result in a dramatic change in the completeness rate which suggests that the extra responses received were completed in a similar fashion as the other responses. Mail form completeness drops to its lowest level for the combined average homeowners and renters, single mobiles, and advantaged homeowners group in April. The combined economically disadvantaged and ethnic enclave group has a mail form completeness rate that is nominally lowest in April but is not significantly lower than the May mail form completeness rate. In general, the average homeowners and renters, single mobiles, and advantaged homeowners have a greater decline and slower rebound than the average homeowners and renters, single mobiles, and advantaged homeowners groups.

Overall, respondent cooperation in the ACS in 2010 as measured by mail check-in rates and mail form completeness benefitted from the 2010 Census publicity and outreach in the months before the Census 2010 forms were mailed in mid-March. This benefit was also extended to the March panel since the ACS forms for that panel were first sent out at the end of February when the awareness of the 2010 Census was likely at its highest. By the April and May panels, a reduction in both mail check-in rates and mail form completeness rates delivered a two-fold blow to the ACS. Fortunately, by the June and July panels, mail check-in rates and mail form completeness rates appear to be rebounding back to pre-2010 levels for most groups.