



Using Third Party Data to Contact Respondents

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Goals

Three research questions:

1. How can we identify or develop alternative contact frames that can be associated with an address?
2. What is the coverage of the alternative contact frames over different demographic and geographic characteristics?
3. How do you rank the contact information included on the frame?



Formation of the Contact Frame

- Data purchased from five commercial vendors
 - 2010-2014
 - 37 Total Files
- Two subsets of contact frame
 - Linked phone/address pair
 - Linked e-mail/address pair



Contact Frame Coverage Phone Numbers

Overall, from the 2010 – 2014 third party files, we obtained:

	#	universe	%
Contact Frame: MAFIDs with 1+ phone numbers	128.9 M	-	-
Only 2010 Census housing unit addresses with 1+ phone numbers	112.8 M	131.7 M	86%
Only 2010 Census housing unit addresses with 1+ phone numbers who did not self respond	35.4 M	49.8 M	71%

For matched 2010 Census addresses:

- 3.8 phones/address
- 1.6 addresses/phone



Contact Frame Coverage Phone Numbers (cont.)

In the 2010 Census, 91% of housing units provided a well formed phone number

- Comparing our contact frame with only 2010 vintage files to the respondent reported phones from the 2010 Census:
 - For those housing units reporting a well formed phone, the contact frame contained that phone at that address over 42% of the time
 - Over 47% for occupied housing units
 - Almost 56% for non-proxy housing units



Contact Frame Coverage Phone Numbers (cont.)

Contact frame match rates varied by:

- Response mode
 - Self responders to the 2010 Census 57%
 - Nonresponse followup housing units (NRFU) 14%
- Householder characteristics
 - Race - High for white alone 53%, low for some other race alone 25%
 - Age - High for 80-84 years old 74%, low for 20-24 years old 6%
 - Origin – Higher for non-Hispanic 52%, lower for Hispanic 30%
- Household characteristics
 - Rural 44%, Urban 43%
 - Owners 62%, Renters 21%

Contact Frame Coverage

Email Addresses

Overall, from the 2010 – 2014 third party files, we obtained:

	#	universe	%
MAFIDs with 1+ email addresses	84.3 M	-	-
Only 2010 Census housing unit addresses with 1+ email addresses	75.9 M	131.7 M	58%
Only 2010 Census housing unit addresses with 1+ email addresses who did not self respond	21.9 M	49.8 M	43%

For matched 2010 Census addresses:

- 2.9 emails/address
- 1.3 addresses/email



Enabling Applications

- Use in house auto dialer to conduct phone service checks
- Determine cell phone/landline status
- Rank phone numbers within and across addresses



Types of Uses

Decennial Census/Demographic Surveys

- Contact Strategies
 - Automated Voice Invitation (AVI)
 - E-mail reminder
 - Call by field interviewer to set up appointments
- Interviewing
 - Computer Assisted Telephone Interviews (CATI)
 - Call by field interviewers to conduct phone interviews

Uses – Providing Phone Numbers

- Census Tests
 - 2013 Census Test & 2014 Census Test
- Surveys
 - American Community Survey (ACS)
 - American Housing Survey (AHS)
 - National Survey of College Graduates (NSCG)
 - Current Population Survey (CPS)

Uses – Providing E-mail Addresses

- Census test
 - 2014 Census Test
- Survey
 - National Survey of College Graduates (NSCG)

Uses – Providing Street Addresses

- Providing street addresses linked to sample phone numbers
 - Telephone Point of Purchase Survey (TPOPS)



Outcomes – Calling Phone Numbers

- 2013 National Census Contact Test
 - Completion rate of 26% for national sample
- 2013 Census Test (Philadelphia, PA)
 - Completion rate of 4.4% for non self responders from 2010 Census
- 2014 Census Test (Montgomery County, MD & DC)
 - Completion rate of 5.2% for non self responders

Outcomes – Leaving Phone Messages

- 2013 National Census Contact Test
 - Auto dialer used to conduct phone service check
 - 35% of landlines removed from CATI call lists
- 2013 Census Test (Philadelphia, PA)
 - Auto dialer used to conduct phone service check
 - 28% of landlines removed from CATI call lists
- 2014 Census Test (Montgomery County, MD & DC)
 - Auto dialer used to leave prerecorded messages
 - Treatment panels with reminder phone calls did not lead to increased self response (Internet/paper/TQA)



Outcomes – Email Address Coverage

Results of validation for the 2012 NCT and the 2013 NCCT

	2012 NCT	2013 NCCT
Response mode	Internet	Telephone
Response rate	38%	26%
% of respondents who provided 1+ email addresses	92%	25%
% of addresses where 1+ respondent provided emails were found on the contact frame at that address	10%	16%



Outcomes – Sending Emails

- 2014 Census Test
 - Site test in MD/DC
 - Emails replaced one or both reminder postcards
 - Treatment panels with reminder email(s) led to decreased self response (internet/paper/TQA)
 - Up to three emails sent per address
 - 70% of emails bounced back
 - Only 12% of addresses had an opened email



Policy Issues

- Legal issues – CAN-SPAM, TCPA, etc...
 - Government is not a person, so it is legal for the government to call, text, autodial ...
... but should we choose to do it?
 - Considerations: Respondent burden, inaccuracy of contact information, and increased potential for phishing
- Authority to use/reuse contact information
 - Language used when collecting phone and e-mail during Census/surveys
 - Contractual language with data providers

Next Steps

Update and Improve the Contact Frame

Evaluate new uses



Next Steps – Update and Improve the Contact Frame

- Identify and obtain new sources for the frame
 - Respondent provided contact info from surveys
 - New commercial, federal, and/or state data sources
 - Build customer contact database?
- Improve modeling approach to rank phone and emails
 - Include additional variables to drive our models
 - Include additional truth deck data



Next Steps – Evaluate new uses

- Autodial cell phones to leave reminder messages (2015 Census test in Savannah, GA)
- Use email as a supplement, not replacement, for mail pieces (2015 National Census Test in the fall)
- Text reminder messages (2016)
- Conduct small scale testing to improve messaging
 - Using emails and text messages

Thanks!

Questions?

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