

Third Time's a Charm?

Systematic Analysis of the Effect of Sending a Third Questionnaire on Response Rates for Mail Surveys

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The problem

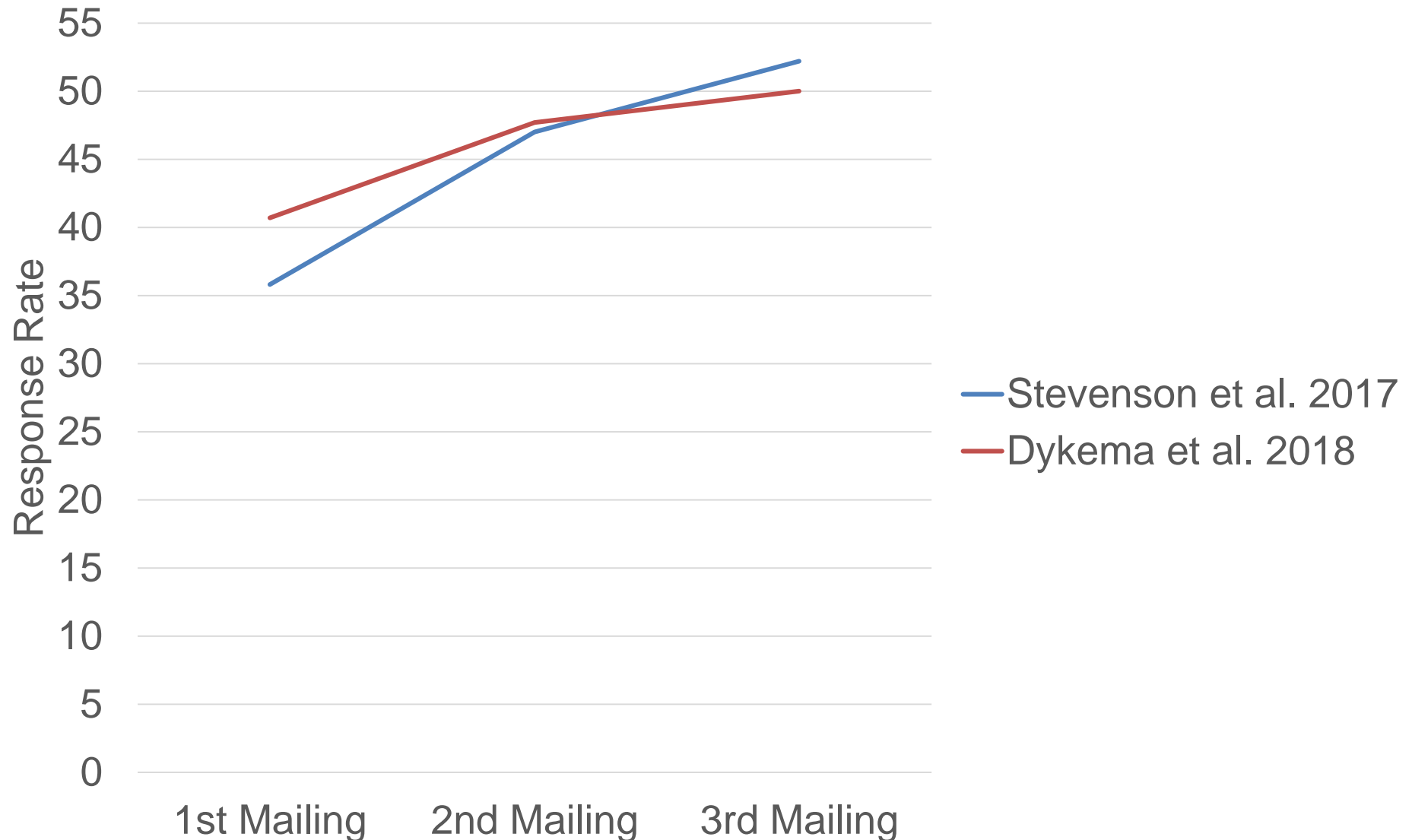
- We are doing a lot of mail surveys
- Recently seeing so little coming from our last mailings

Want to give our clients good advice

- Clients:
 - Want to implement their studies based on best practices
 - Want to describe their methods using industry standards
- Response rates to mail surveys declining
 - Proportion of sample requiring 3rd mailing has increased
 - Cost of 3rd mailing has increased
- We decided it was time to take a systematic look...

Impetus for re-evaluation ... How did we get here?

- Observation that 3rd mailing is not yielding much



Outline

- Where are we now and how did we get here
 - Mail survey methods
 - Response rates
 - Why we care about response rates
- Methods for our review
- Results
- Modeling of field costs
- Discussion

- **Where are we now and how did we get here**
 - Mail survey methods
 - Response rates
 - Why we care

Current climate for survey data collection via mail surveys

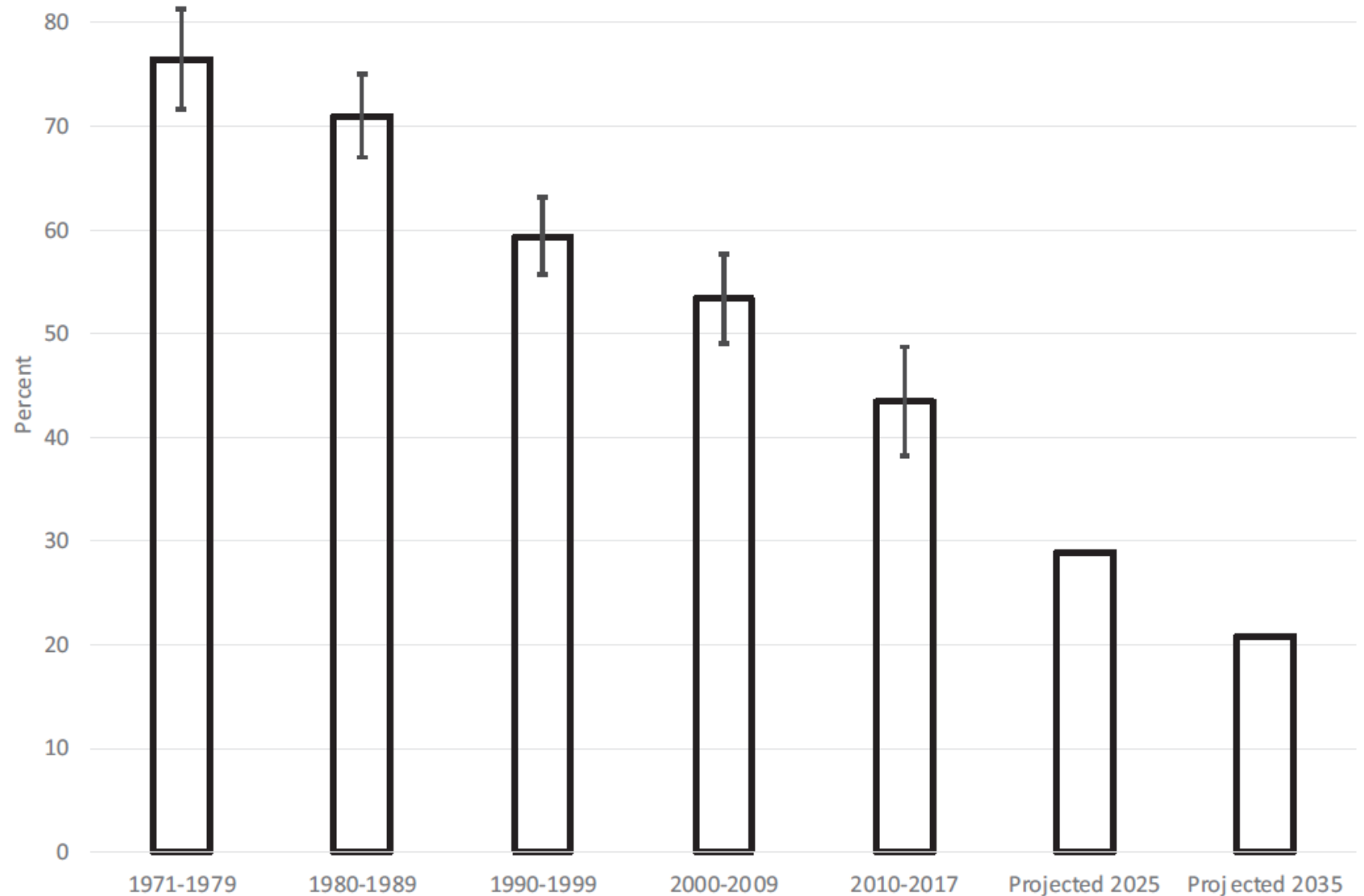
- Have been and continue to be one of the “go to” methods (Stedman et al. 2019)
- Increasingly used to collect data from general population (Stern et al. 2014)
- Response rates to mail surveys overall declining

Best practices for conducting mail surveys ... the past

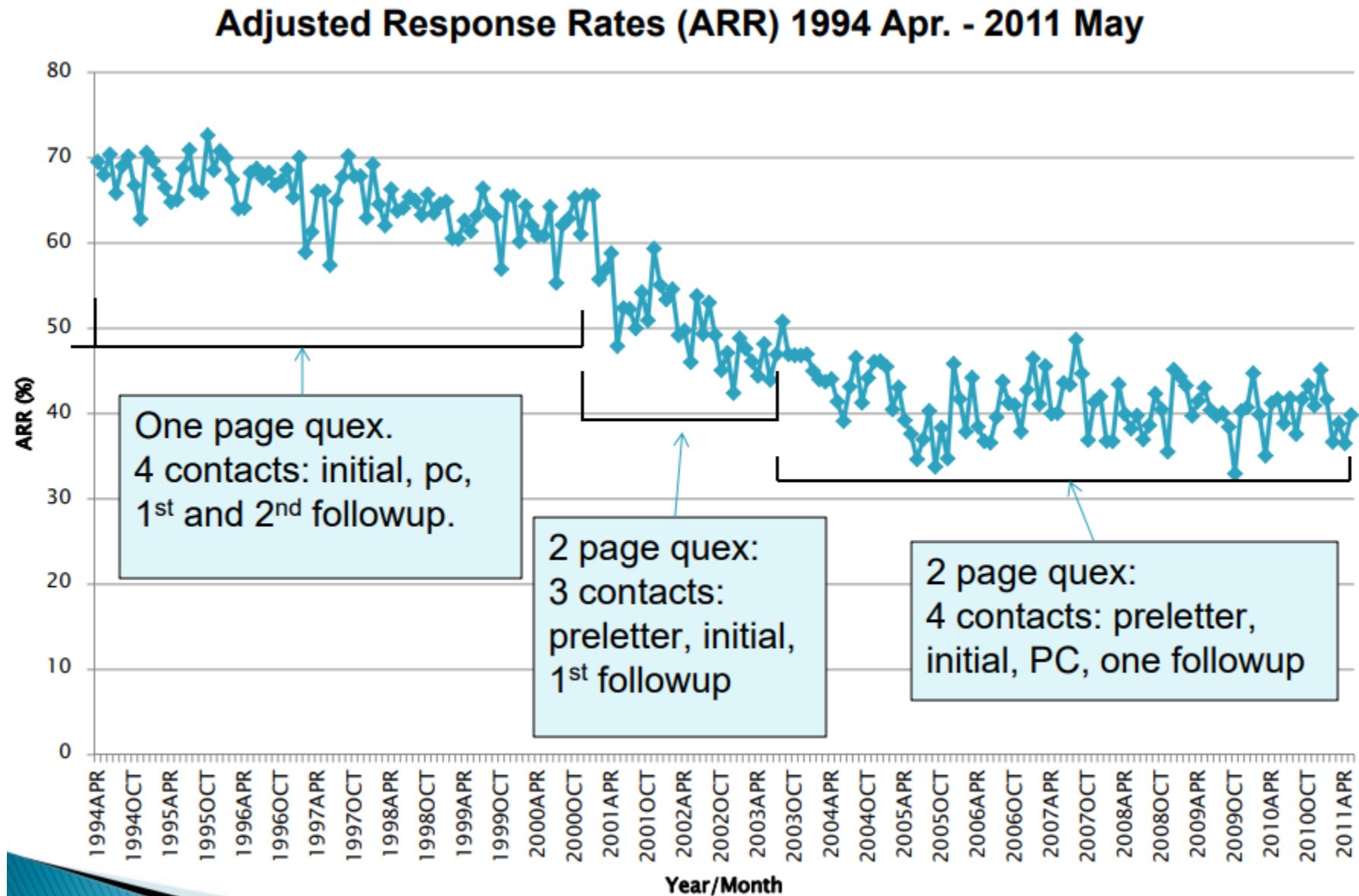
- Codified in “Mail and Telephone Surveys: The Total Design Method” (Dillman 1978)
- 4-contact strategy
 - 1st contact (1st full mailing)
 - Questionnaire and cover letter
 - 2nd contact
 - Postcard
 - 3rd contact (2nd full mailing)
 - Questionnaire and cover letter
 - **4th contact (3rd full mailing)**
 - **Questionnaire and cover letter**
 - Sent by certified mail
- Later editions encouraged a 5-contact strategy with pre-notification

Average response rate per decade from 1970s to 2010s (Stedman et al. 2019)

- “No one disputes that mail survey response rates are declining”
- Analysis
 - 191 studies
 - Data collected by same center
 - Used 4-contact strategy
- Results
 - 77% in 1970s
 - 43% in 2010s
 - 21% by 2030s



More trends in mail survey response rates (Lesser et al. 2012)



Reminder - Why do we care about response rates anyway?

- Confer face validity to the data collection effort
- Client-centered needs
- Journal requirements
- Analysis and data quality
 - Smaller sample sizes increase sampling variance
 - Smaller sample size mean less “n” for analysis
 - Lower response rates increase the RISK for nonresponse bias

Best practices for conducting mail surveys ... the present

- “Internet, Phone, Mail, and Mixed-Mode Surveys: The Tailored Design Method” (Dillman, Smyth and Christian 2014)
- “using multiple carefully designed contacts that are strategically timed is more important than using this exact system of contacts”
- Emphasis on
 - Tailoring to population, topic, contact attempt, study design
 - Personalization
 - Use of incentives
- Still recommend
 - Sending a 3rd questionnaire when budget allows
 - Using an alternative delivery method for 3rd mailing

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Methods

- Selected mail studies conducted by the UWSC: 2014-2018
- Inclusion criteria
 - Mail only design without a web or other data collection component
 - Three full mailings that include a paper instrument
- Exclusion criteria
 - Studies part of a longitudinal study design
- Overall
 - N = 22 studies
 - N = 38,547 sample members

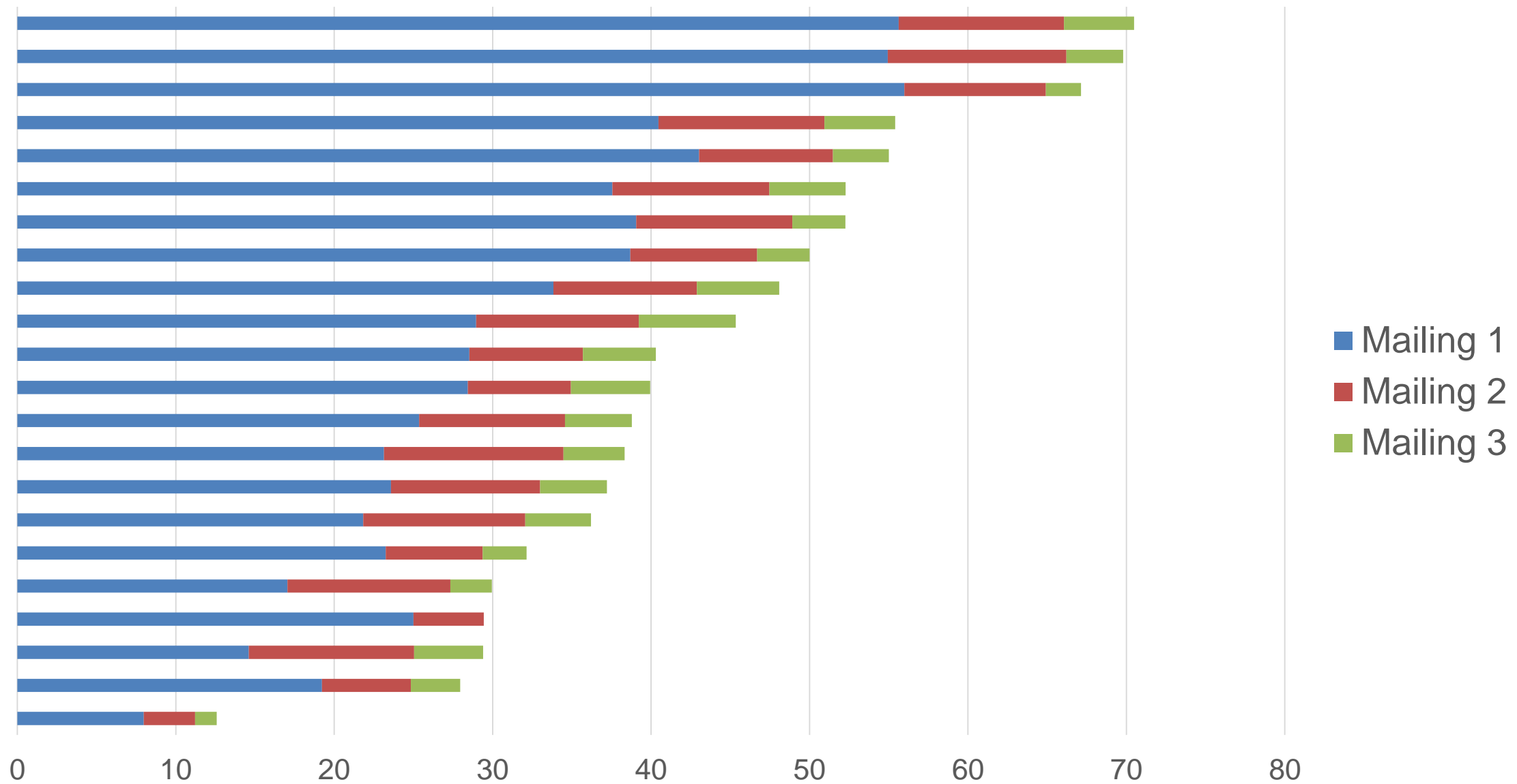
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- **Results**

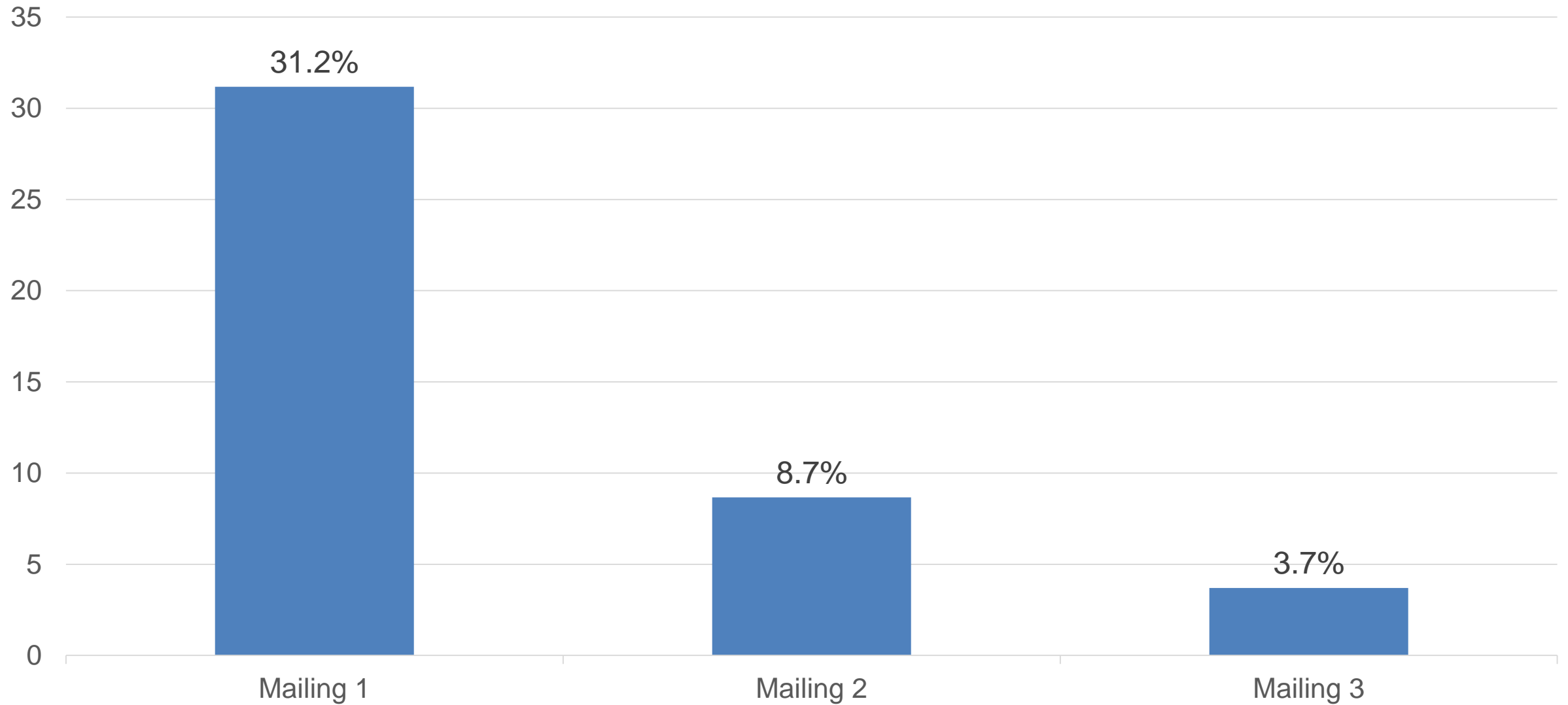
Results

- Response rates by mailing
- Percentage of completes by mailing
- Did last full mailing behave differently by study type:
 - Incentive amount
 - Sample type
 - Length of instrument

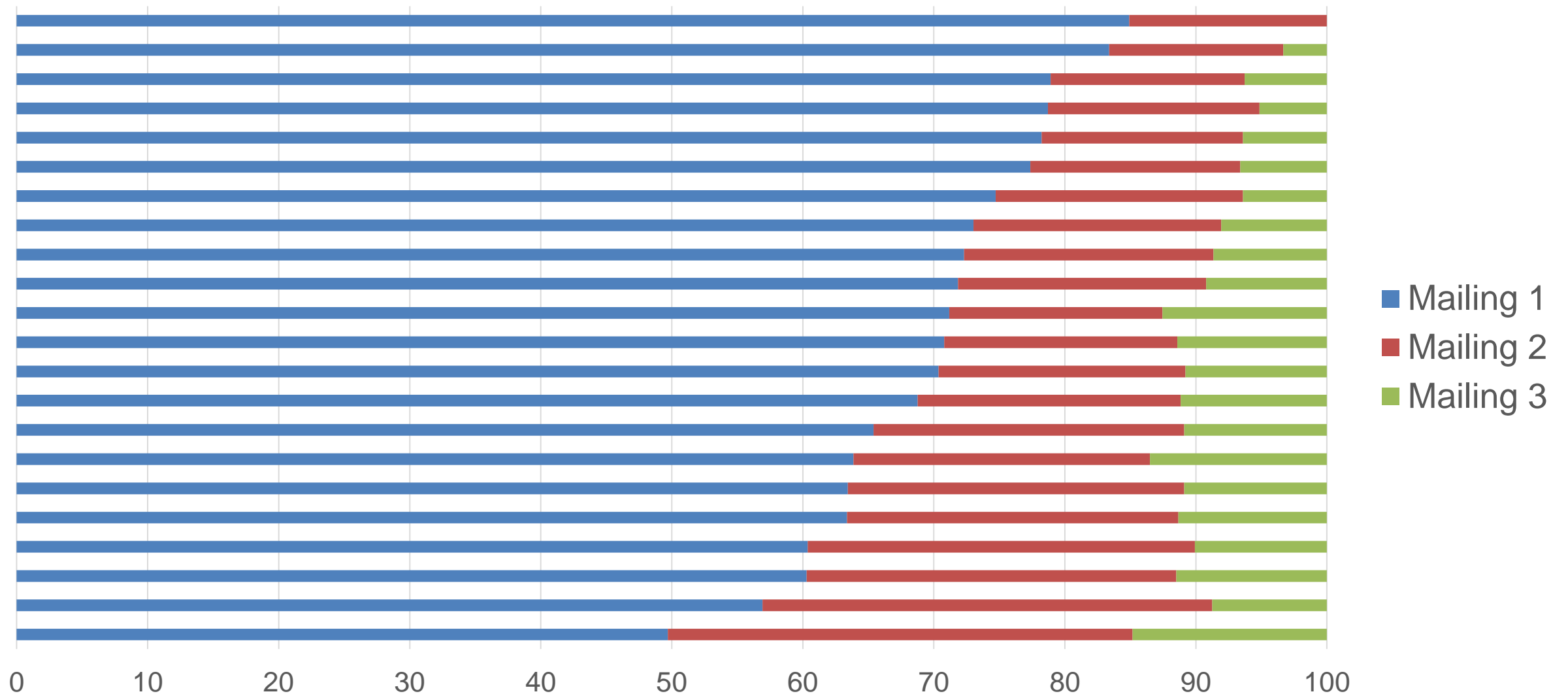
Response rate after three full mailings by study



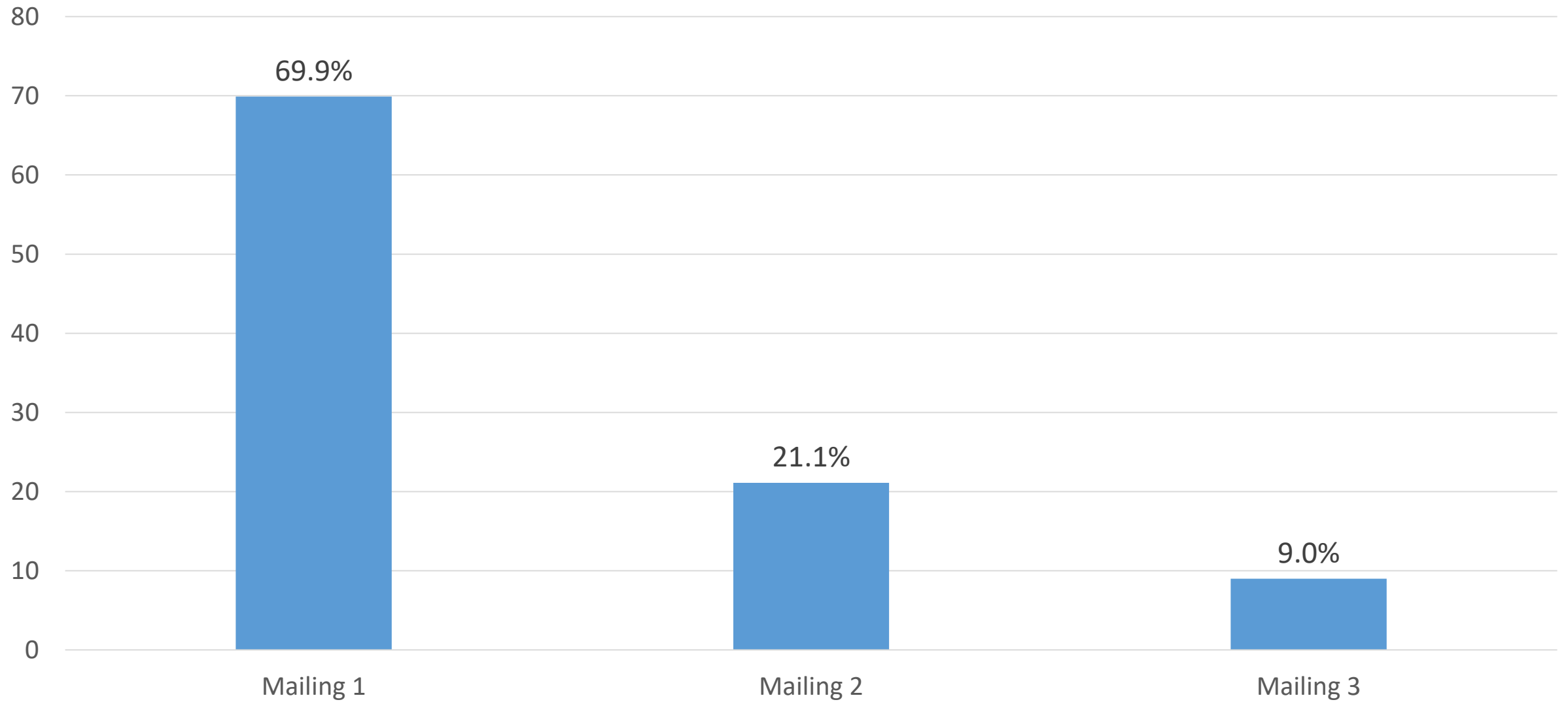
Average response rate increase after each full mailing



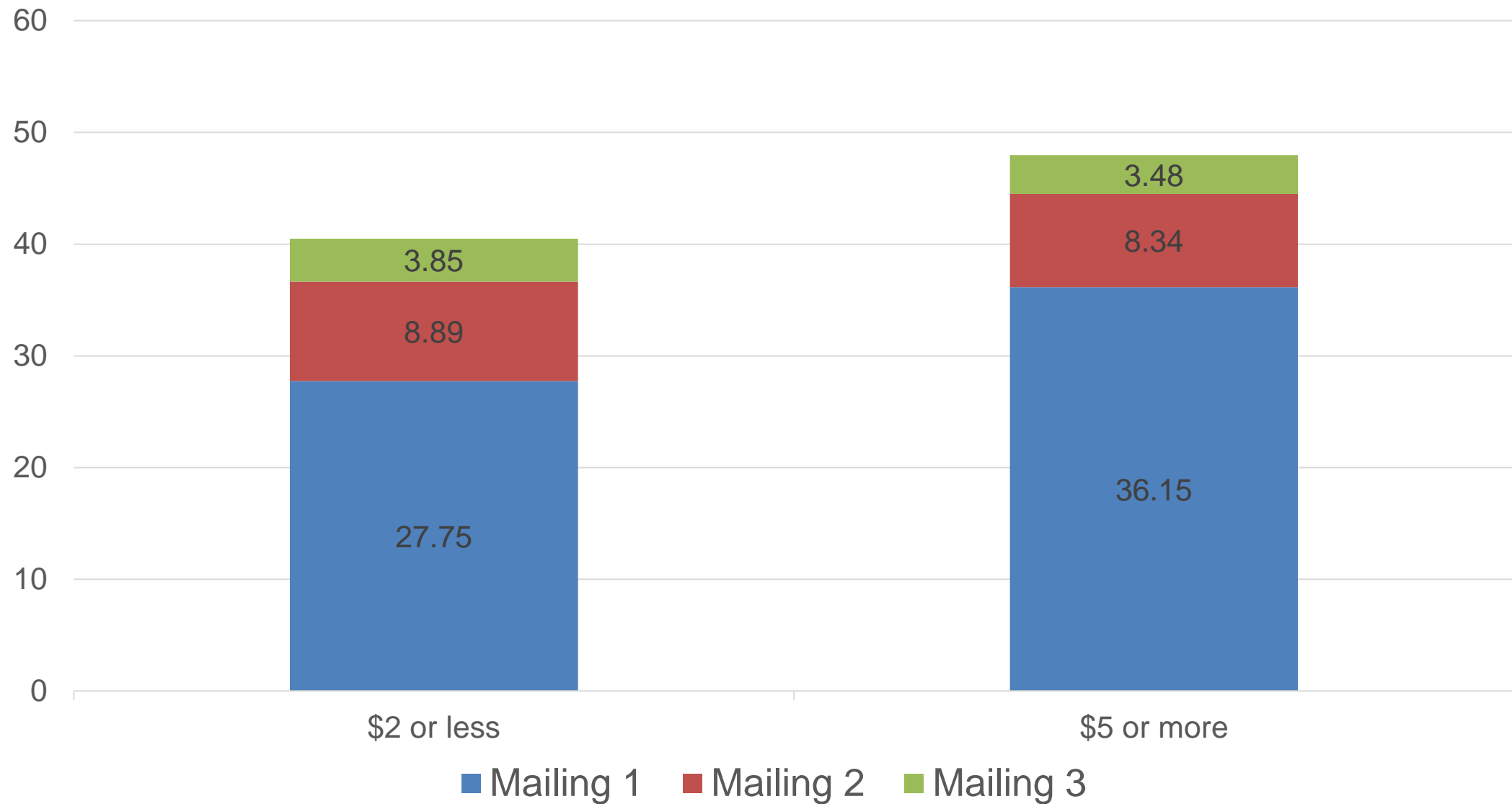
Percent distribution of overall completes by study



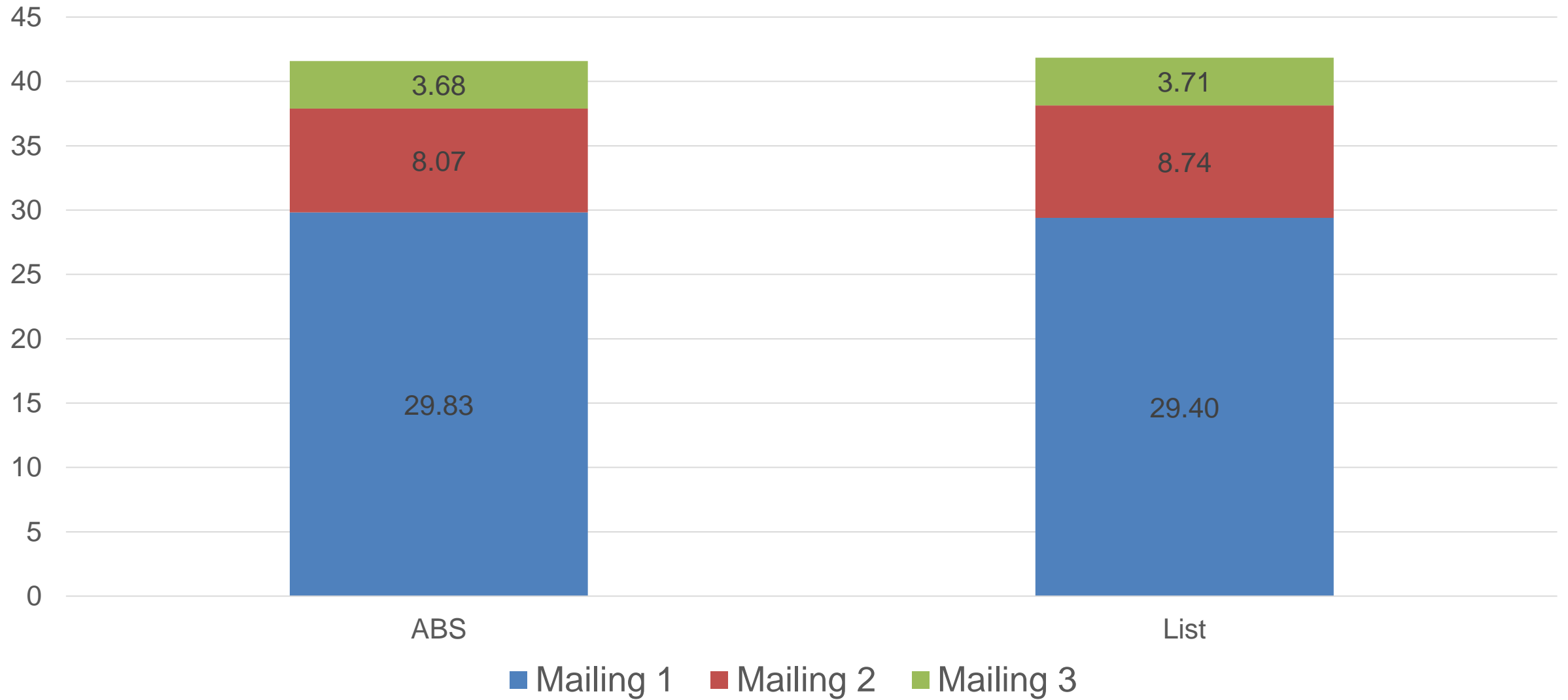
Average distribution of completes by each mailing



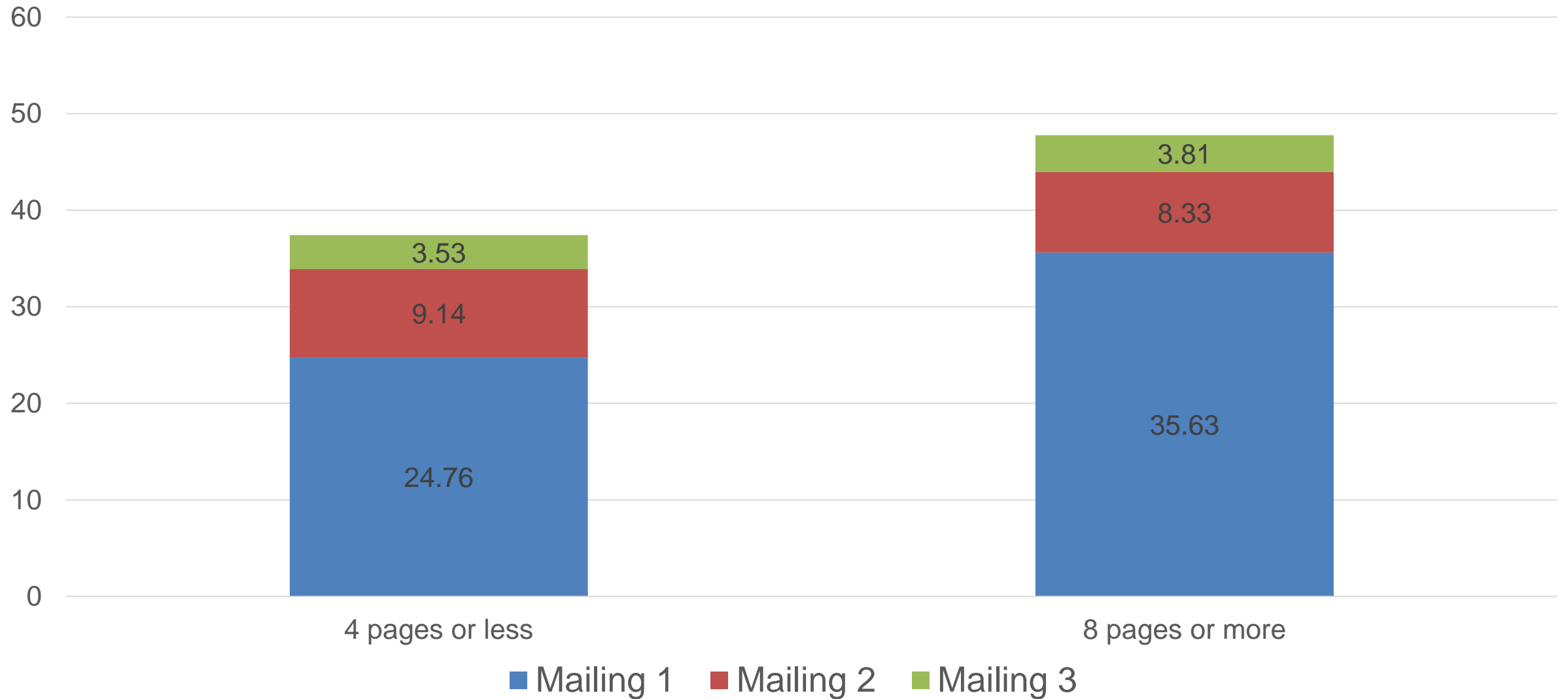
Average response rate by incentive



Average response rate by sample type



Average response rate by booklet length



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- **Modeling of field costs**

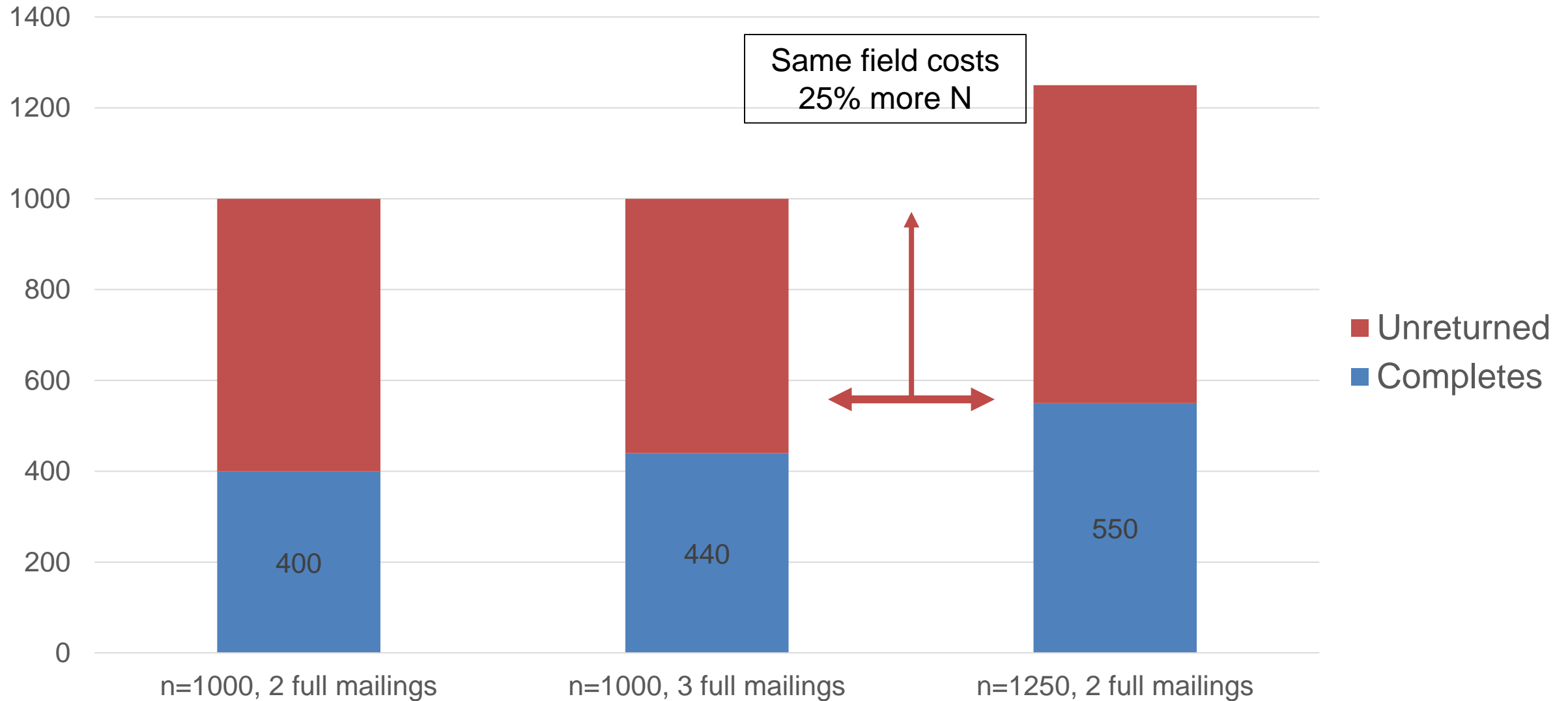
Field cost modeling

- Modeled and examined both cost and yield
 - Not actual costs – just **simulations**
 - Cost of mailings – printing, postage & stuffing
- Started with a short survey – 4 pages
- Evaluated costs
- Then:
 - How did picture change if response rates were lower or higher
 - With longer survey
 - Surveys with no incentives

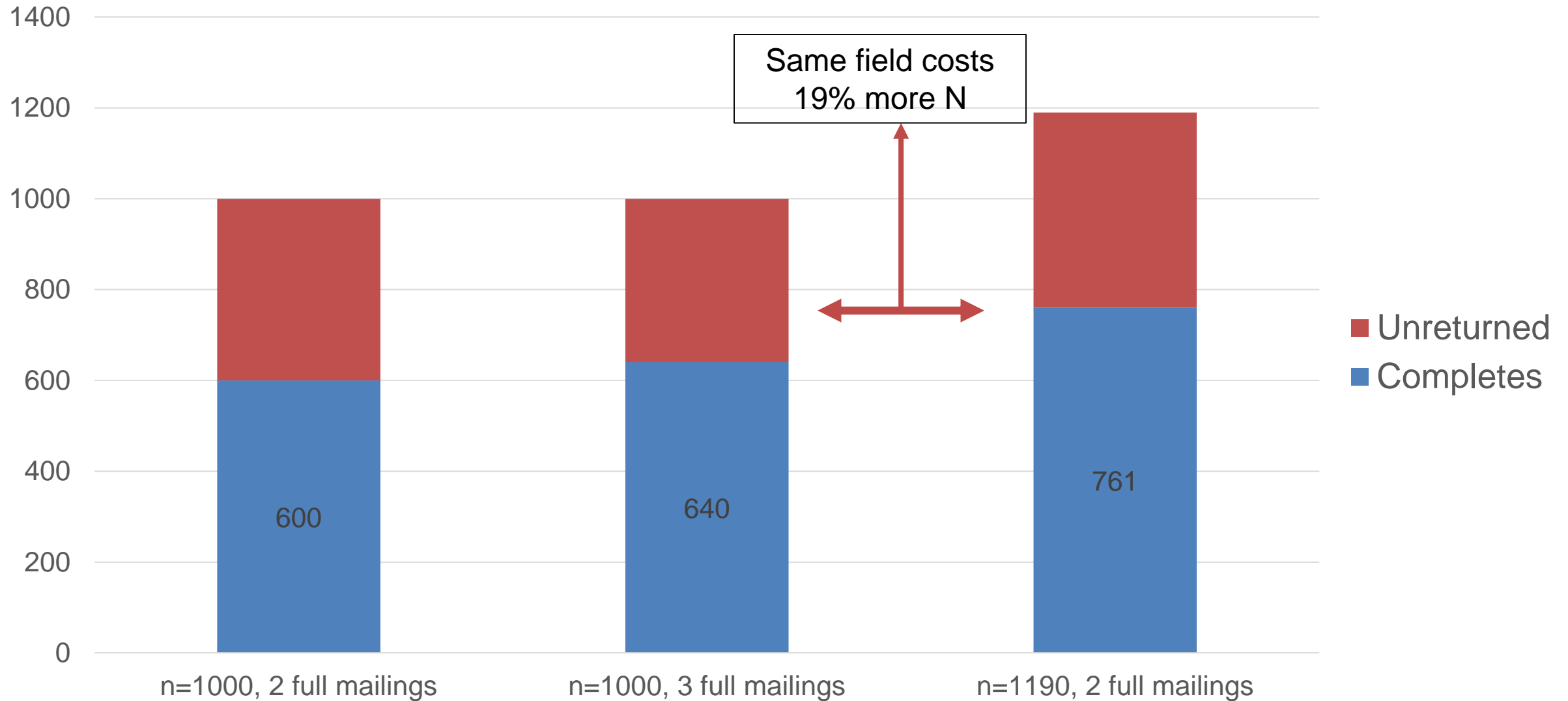
Field cost modeling

- For each of these:
- Evaluated fielded and achieved N (completes)
 - 3 contact survey
 - 4 contact survey
 - Same costs as 4 contact survey – but increase N and only 3 contacts: Full, postcard, full
- Determine: what could we get for N, if we give up ~4% increase.

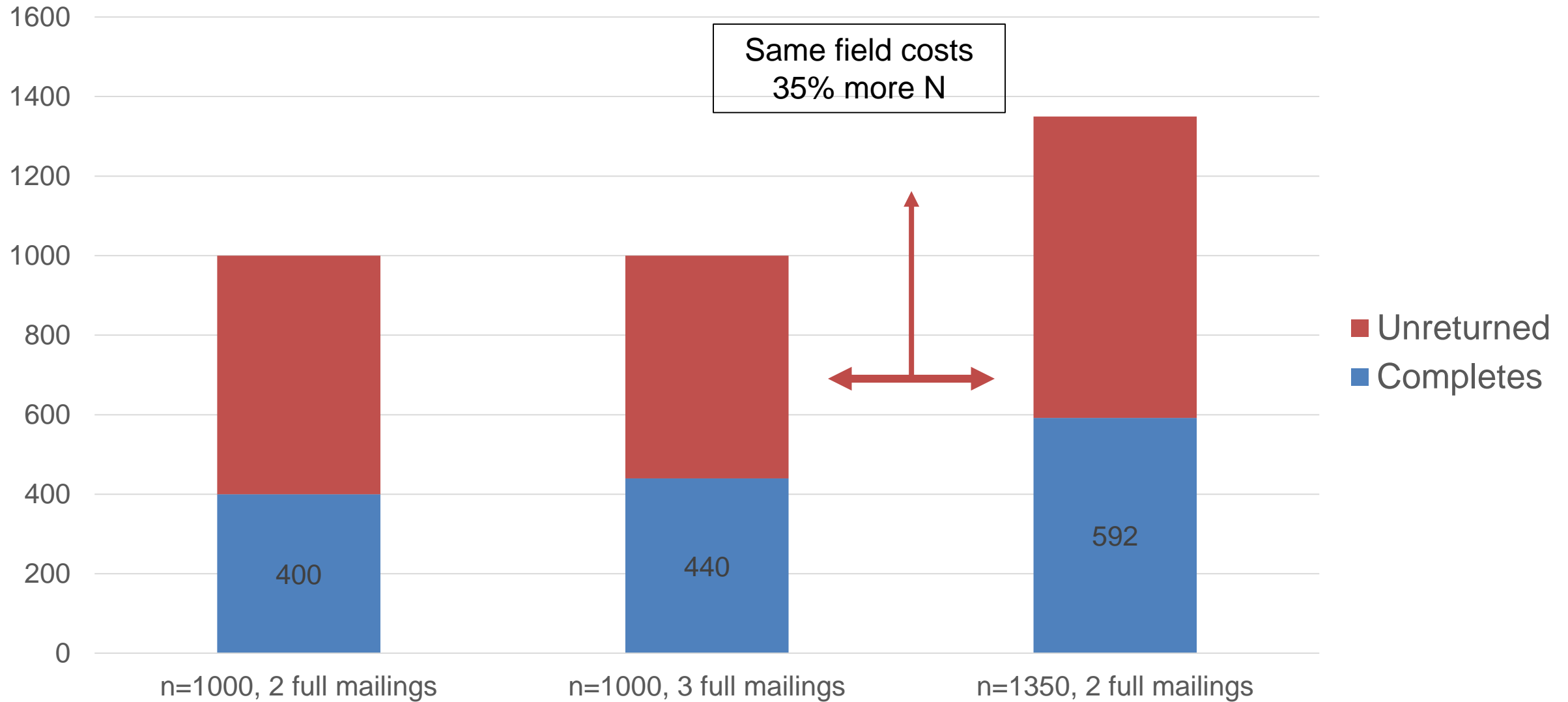
4 pages, \$2 preincentive, low response rate survey outcome



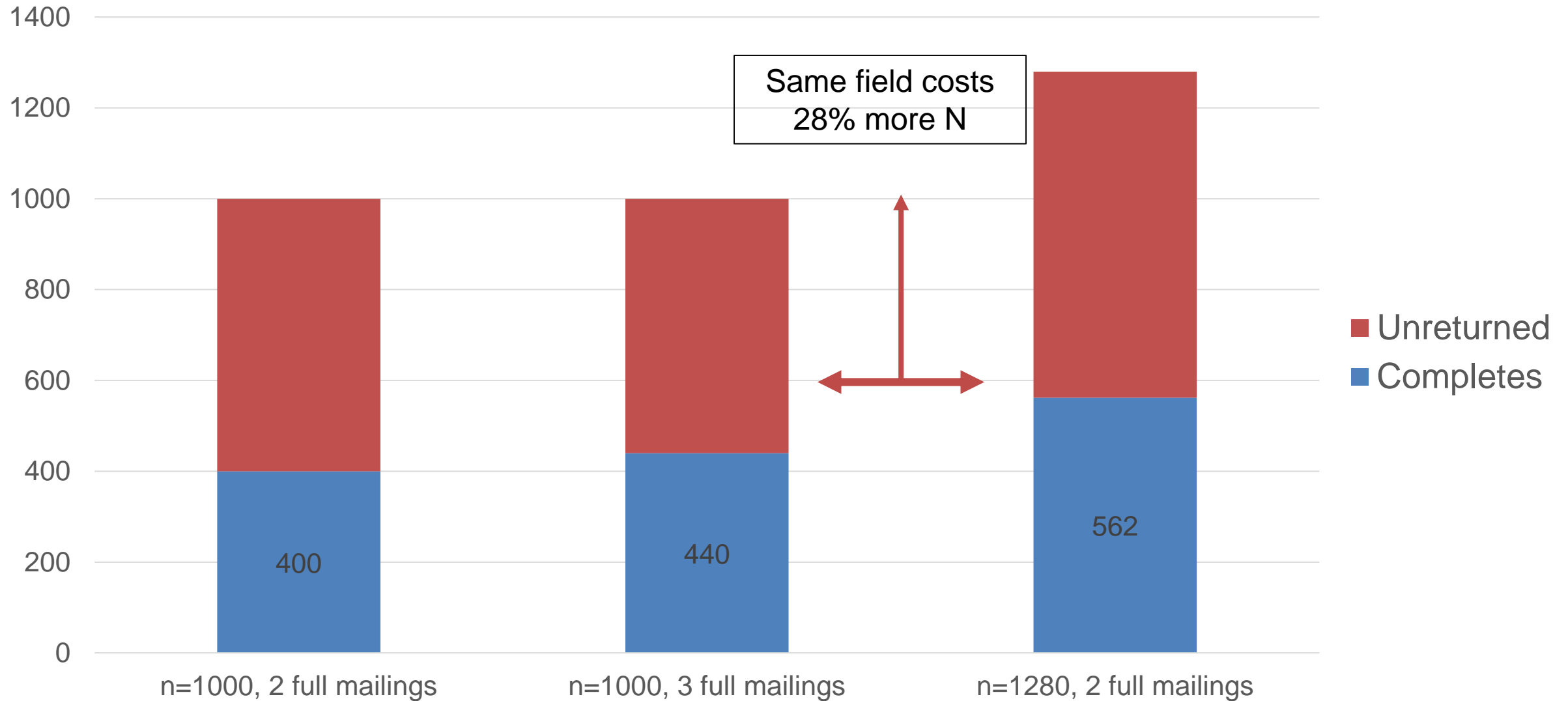
4 pages, \$2 preincentive, high response rate survey outcome



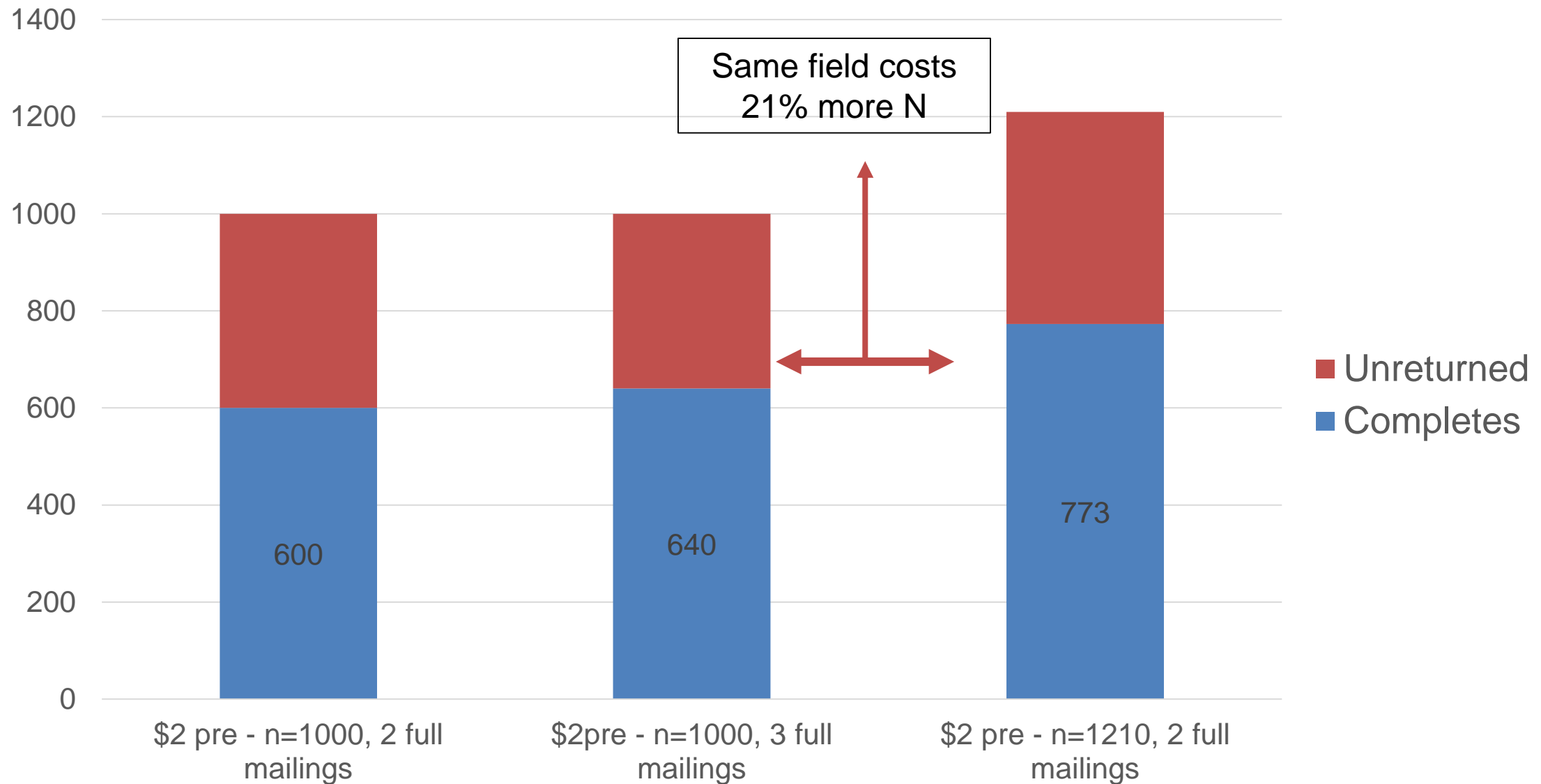
4 pages, \$0 preincentive, low response rate survey outcome



12 pages, \$2 preincentive, low response rate survey outcome



12 pages, \$2 preincentive, high response rate survey outcome



Cost modeling summary

- For a ~4% increase in N, we were:
 - Increasing costs **17-29%**
 - Could have instead, been increasing yield **19-35%** -> **Instead of 4%**
(not include DE costs)
- Effects even more prominent when:
 - Expect response rates to be low (Hmmm)
 - Surveys are longer and costs are higher
 - Incentives are not being used (Hmmm)

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Discussion – More research

- These are only response rate, need to look more closely at non-response, examining:
 - Composition of respondents
 - Answers to key survey items
- We want to look at and experiment with other designs:
 - Are there other things we could/should be doing with that 3rd full mailing?
 - \$5 Pre, but only 2 full mailings
 - \$2 Pre, \$5 sequential pre, but only two full mailings
- What will web-push w/mail follow-up bring?

Hope will be part of our discussion

- Questions - What are your shops doing vis a vis:
 - What do you think – is ~4% bump enough? (10% of completes?)
 - Mail surveys # of contacts & full mailings
 - Differentiation of mailings, especially 3rd full
 - What else are you trying?
 - Anybody else using sequential preincentives?

Thank you!

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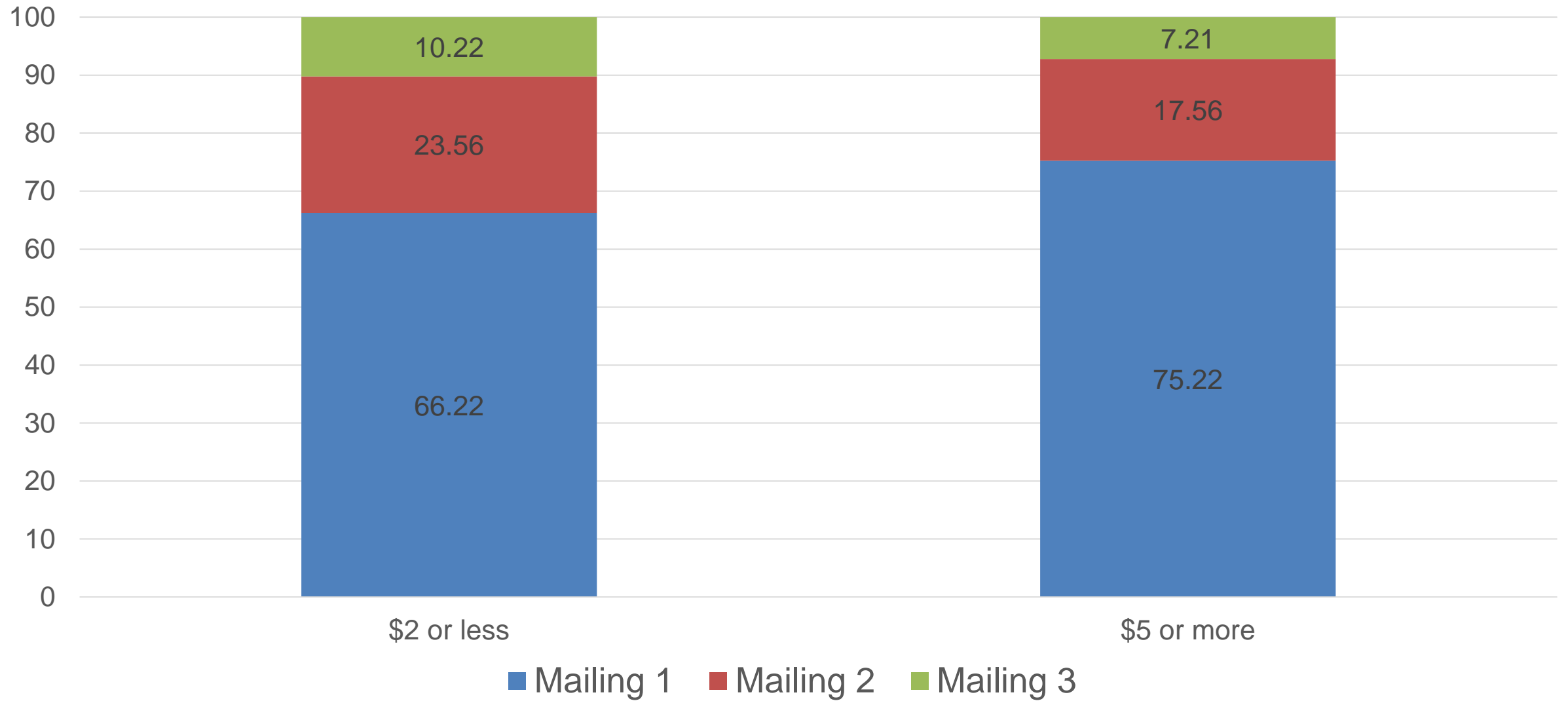
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SLIDES TO DELETE – PROBABLY 😊



Percent distribution of overall completes by incentive



Percent distribution of overall completes by booklet size

