

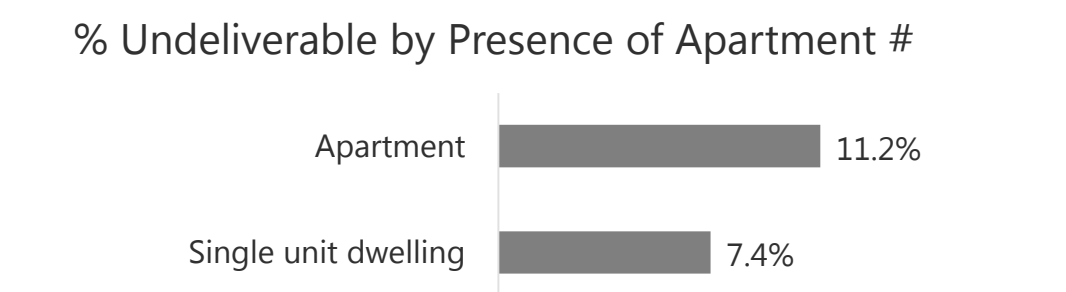
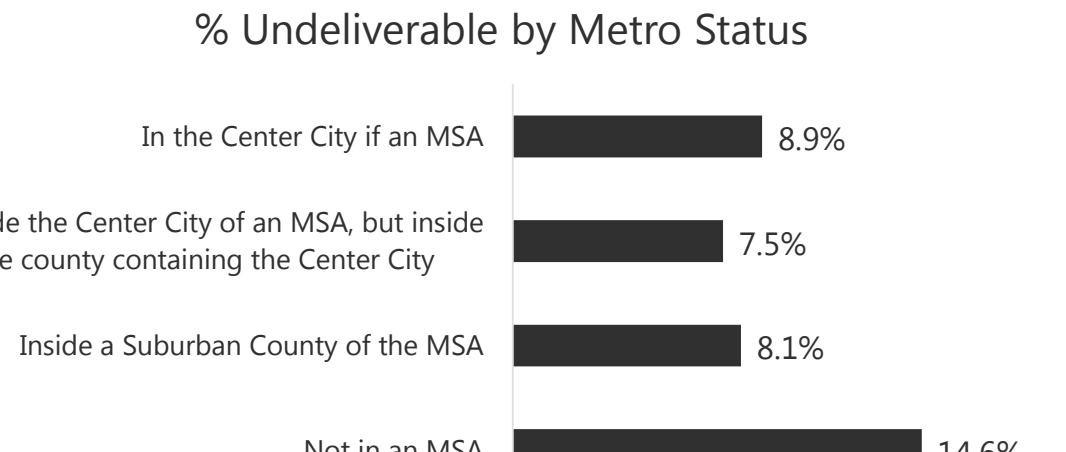
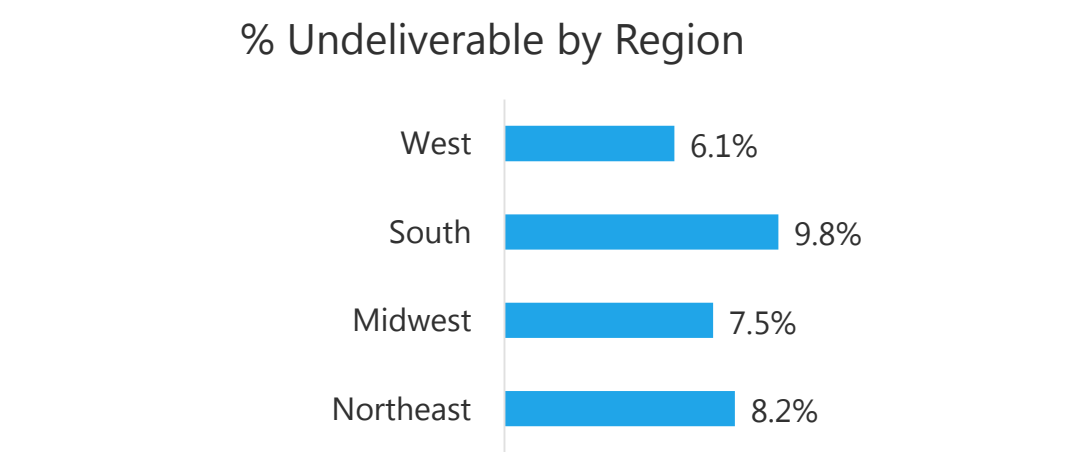
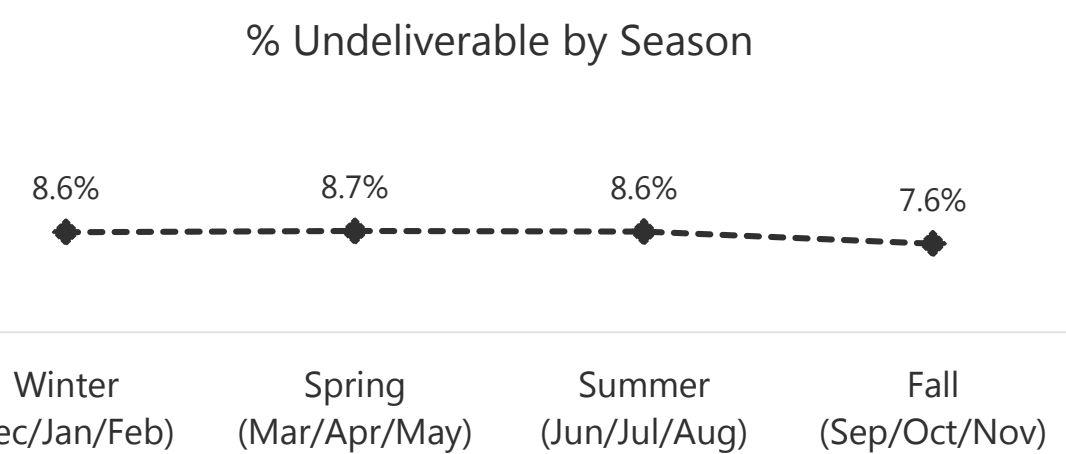
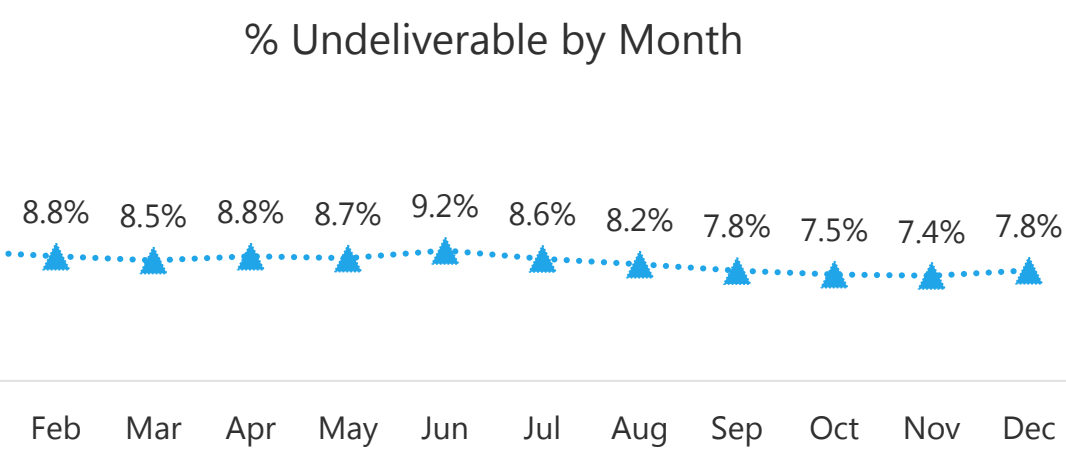
# ABS UNDELIVERABLE RATES VARY BY...



## MONTH & SEASON

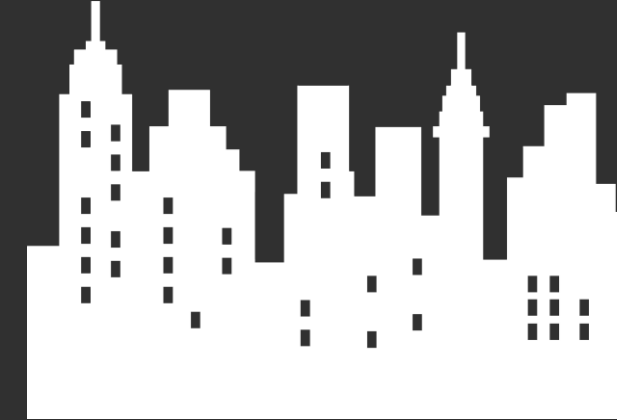
There is small variation based on month and seasonality.

However, with the large volumes of this study, these differences are statistically significant, with Fall months having the lowest undeliverable rates.



## STATE OF RESIDENCE / REGION

There is substantial variation in undeliverable rates by state, with the highest state (AL) having an undeliverable rate more than triple that of the lowest state (MN).



## METRO STATUS

We found significant variation in undeliverable rates by metro status. Addresses in rural areas have the highest rates of undeliverability. Those in metro areas, but outside the center city, have the lowest.



## APARTMENT VS. SINGLE UNIT DWELLINGS

Addresses that contain an apartment or unit number have substantially higher undeliverable rates than do those without an apartment.

### BACKGROUND

Knowing information about variation in undeliverability of ABS survey communications can be helpful to researchers making decisions about yield rates and planning study timeframes.

### METHODS

- The basis of this study is an ABS screener survey sent for sample preparation purposes for use in Nielsen's radio audience measurement services.
- Sample for this study is randomly selected by geography from a residential address-based frame. Sample is selected in U.S. radio market metropolitan areas, and for this analysis, it is limited to metro areas which are measured year-round. Most sample\* is stratified by age and ethnicity to represent the general population. Both Nielsen's PPM and Radio Diary sample are included in this study.
- To answer our research questions about variation in undeliverability, we examined the results of 12 months of study invitations (January 2018 to December 2018).
- During this time period, approximately 2.4 million screener surveys were mailed. 8.3% were returned as undeliverable (n=196,612).

### DISCUSSION

Based on this research, we conclude that variation exists in undeliverable rates by state, region of the country, and whether the home is a single or multi-unit dwelling. There is also smaller variation in undeliverability by month and season mailed.

These data may be particularly helpful in:

- Planning state-specific studies, as there is considerable variation by state;
- Planning when to schedule a large mail survey (Fall might be best); or
- Considering the effort needed to reach rural residents or apartment dwellers (might need to increase sample size slightly to account for greater undeliverability).

While all the data shown here are highly significant due to the very large size of this, the variations of 1 to 4 percentage points may be less impactful for a small-scale study.

For a very large mail study, the variation in rates could have a notable impact on costs. For example, prior knowledge of a 2-percentage point difference in the undeliverability rate would have very serious planning implications. If geography were flexible, moving a large study from the South to the Midwest would provide the same number of completes from a starting sample that was more than 2% smaller, the reduced cost of which could be savings for the study.

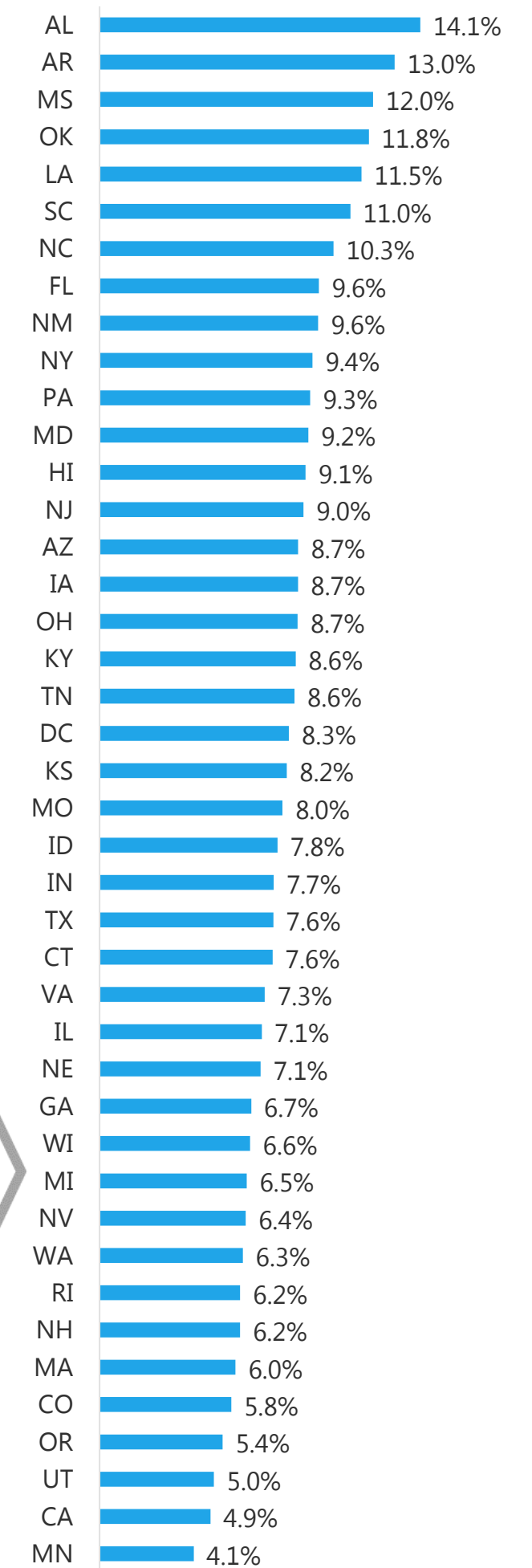
\*PPM Basics are not stratified; they represent their geography.  
\*\*\*Assumptions for large study: Cost per mailing \$10. 100,000 starting sample in South. Same response rate in both regions.

## "Neither Snow Nor Rain Nor Heat Nor Gloom of Night": Examining Geographic and Seasonal Variation in Undeliverability

Jordon Peugh, SSRS | Kate Williams, Nielsen

We are thankful for the support and advice of our colleagues at Nielsen: Robin Gentry, Shaily Patel, and John Weisenstein; and at SSRS: Becki Heckman, Derrick Lacey, Mike Lange, and Jaime Smith.

### % Undeliverable by State\*\*



\*\*Delaware, Vermont, and Wyoming were excluded from this analysis due to very small sample sizes in those three states (less than N=100).

