



Technical Paper and Observations: DASH Full Year 2024

January 2025

Significant Changes to the Fall 2024 Survey

The document [ARF DASH Wave On Wave Survey Changes 2021-Fall 2024](#) contains a summary of all changes to the DASH survey since the inception of the program in 2021, including the changes to the Fall 2024 questionnaire from Spring 2024, changes from the Fall 2023 survey and so on.

Some of the more significant changes to the Fall 2024 survey are shown below:

- Added a question for employed respondents to indicate industry most recently worked in, with the immediate goal of identifying respondents in media
 - This question was added to address an MRC concern about potential respondent bias
 - In the Fall wave, the 32 respondents who worked in media were put through our standard consistency check algorithm, and two were excluded from intab for excessive viewing
- Added AIMM respondent classification questions
 - Preference for TV language (among Hispanic respondents) - all Spanish, all English, or mix
 - Physical and mental disability – yes/no and nature of disability
 - Sexual orientation – six options plus write-in and “prefer not to answer”
 - Note that the multicultural committee of the ANA (AIMM) has recommended that these questions in DASH be used to generate the attendant universe estimates
- Expanded and refined ecommerce section to capture potential for exposure to the retail media assets of major retailers and enable comparison with other DASH measures on a respondent level
 - Expanded master retailer list to 18 to capture all large retail media networks (RMNs)
 - Added questions on P7D and yesterday shopping in physical stores, where relevant, using an edited version of the master retailer list



- Added a question to capture method of payment used by yesterday shoppers in Walmart stores, to get an initial read on the incidence of cash purchasing
- Added a question on participation in the frequent shopper programs of retailers on our master
- The goals of this new battery were (1) to enable DASH licensees to understand the interplay of TV and RMNs at a respondent level and (2) to expand the ARF's suite of products that inform the performance and duplication of retail media networks with traditional and new media

Significant Changes in Results Since the 2023 Study

A comparison of all common variables in the Full Year 2023 and Full Year 2024 results is contained in the file [YoY_DASH24Fvs23F.xlsx](#), which is available to DASH licensees in the Full Year 2024 release packet.

Unsurprisingly, the most significant changes are the result of:

- additions or deletions of a question from year to year, e.g.,
 - retail stores shopped added as part of retail media networks
 - devices on which apps or social networks used were deleted
- changes in a question structure (as seen in app lists moving from size to alpha order)
- the significant addition of items in a list (as seen in the number of networks added to the FAST battery)

In the YoY comparison file, answers that fit one of these change categories are identified, as are changes that are likely structural.

To assess the overall level of change, we looked at what might be expected with sampling error alone. Two standard errors would be, on average, approximately 2.7 percentage points. We would expect, based on sampling error alone, that 5% of the cases would exceed this level.

The sheet in the YoY file is sorted by the absolute value of the % differences between individual weights. The far-right column, "Variable Check," indicates the nature of the differences. If a cell is highlighted in yellow, the difference seen in the data is likely to be a legitimate difference or the result of sampling error. If a cell is not highlighted, the difference can be explained by a survey change. As you will see in the file, the largest differences are



caused not by real variance or sample variation, but by structural changes to the survey.

Of 6,694 fields examined, 564 had absolute percent differences of more than two standard errors (2.8% or higher). However, 309 of those can be explained by survey differences, leaving only 255 rows (or 3.8% of the sample) with legitimate data differences of 2.8% or higher. Most of these pertain to genre questions, or third, fourth or fifth device questions, where we have seen fluctuation in prior years.

That the incidence of cases with legitimate data differences (3.8%) was lower than the expected 5% is likely explained by the fact that a substantial portion of the sample is repeat respondents, who are part of the longitudinal sample. Therefore, we conclude that the year-over-year difference rate is reasonable and a basic indicator of sample quality.

Sample Characteristics

A detailed description of the Full Year 2024 sample, its demographic characteristics and the study methodology can be found in the [DASH Full Year 2024 Project Methods and Transparency Report](#). Some of the highlights follow:

Study Target Population: General Population Age 18+

Sample Units: 14,513

Completed Units: 10,122

Expected Eligibility Rate: 100%

Observed Eligibility Rate: 100%

Margin of Error: ± 1.31 percentage points (pp)

Design Effect: 1.81

Household Margin of Error: ± 1.39 percentage points (pp)

Household Design Effect: 2.04 percentage points (pp)

Survey Field Period: April 13, 2024 – June 30, 2024; September 3, 2024 – December 19, 2024

Overall Median Duration (minutes): 21

Phone Median Duration (minutes): 42

Web Median Duration (minutes): 21

Face to Face Duration (minutes): 22

The ARF has constructed a standard-error estimator based on a bootstrap methodology. The tool is available to DASH licensees in the Full Year 2024 release.



Sources of Error

Survey research is subject to multiple sources of error, most prominently sampling error and bias due to non-response. As indicated above, our Full Year 2024 had an average margin of error (MOE) of 1.31 for persons estimate. It is customary to use two MOE's for confidence at the 95% level.

Non-response bias is often difficult to measure. However, NORC conducts a significant face-to-face recruitment of initial non-responders to standard solicitations. Approximately 16% (1,624) of the Full Year 2024 sample is made up of these initial non-responders. We have conducted analyses of the differences between initial responders and non-responders. The differences are driven largely by demographics, which may be addressed by weighting.

Non-responders are more likely to be Hispanic or African American and are also more likely to be linear-only viewers. Currently, as part of the weighting project, we are studying the degree to which weighting addresses non-response.

Additional sources of error include respondents' misinterpretation of questions; the wording of questions and cognitive bias, such as telescoping, social desirability and central tendency; and, CATI interviewers' misrepresentation of questions in phone interviews.

Classifying Modes of Reception

Of note, at the request of our technical committee, which is made up of measurement experts from our licensees, we expand the reception question for each television set (Q11) for homes that indicated in Q6 that they had a cable, satellite or telecom television service. The new question offered responses that identified a hardware-based reception or an app-based reception. For example, if in Q6, a respondent indicated "Comcast," "Comcast hardware" and "Comcast app" were offered as possible responses in Q11. In previous waves, only "Comcast" was offered.



Up until the Spring 2024 wave, we calculated reception two ways. The first (household edit) was based on the hardware in the household overall. Among households that said they had a cable, satellite or telco service, we asked:

Do you have a hardware receiver or box (other than a router to connect to the internet) from these services attached to one or more of your TV sets through which you can get live broadcast or cable networks?

The second (set edit) was based on how programs were received on each television:

How do you receive programs on each TV set?

Both methods have consistently shown Pay penetration declining, and BBO penetration rising, at an average rate of 3 p.p. per year. The set edit has consistently shown BBO penetration to be 5 or 6 p.p. higher than the household edit.

Our technical committee posited two related questions:

- Is it time to retire the term "Broadband Only?"
- Can we create one hybrid methodology for classifying modes of reception?

It should be considered that receiving a Pay service by means of its app is both BBO and Pay at the same time. As the industry has agreed to assign homes to Pay that receive programming only through vMVPDs, we agree it is time to retire the concept of BBO and replace it with the concept of "Digital Only," meaning homes that do not receive linear television.

The adoption of Digital Only allowed us to unify the edits by using the hardware question from both the household question (Q6D) and the set question (Q11):

- OTA is assigned first using the same methodology as the 2023 household edit:
 - Households that have an antenna on one or more television sets and do not have reception through an MVPD on any television set are classified as Over the Air (OTA)
 - Households that did not select any service for receiving programming are also classified as OTA



- Pay is then assigned using the more granular set-based question, Q11
 - Where the set-based question is not answered, we default to the household hardware answer in Q6D
 - We have to reference Q11 first because the household question does not distinguish between hardware and app, nor could it. Of note, 9.7% of households have hardware on one set and the app on another.

The unified reception edit for the Spring and Fall waves of 2024 and for Full Year 2024 is as follows:

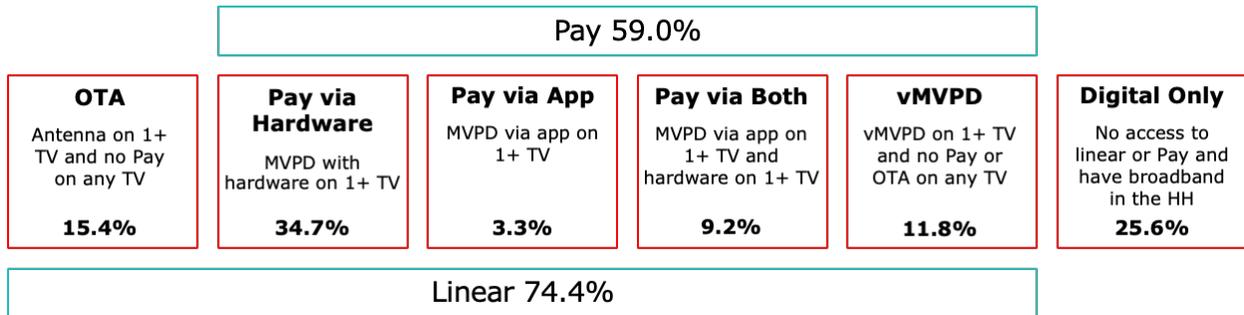
- A respondent household that identifies an MVPD (cable, telco or satellite) and responds yes to either hardware or app for that MVPD on at least one set (Q11) is classified as Pay via Hardware, Pay via App or Pay via Both. This classification applies regardless of whether the respondent has an antenna or vMVPDs on any other set.

If no mode of reception is indicated for any television, a household that answered yes to Q6D (has hardware) is classified as Pay via Hardware, and a household that said no or don't know is classified as Pay via App.

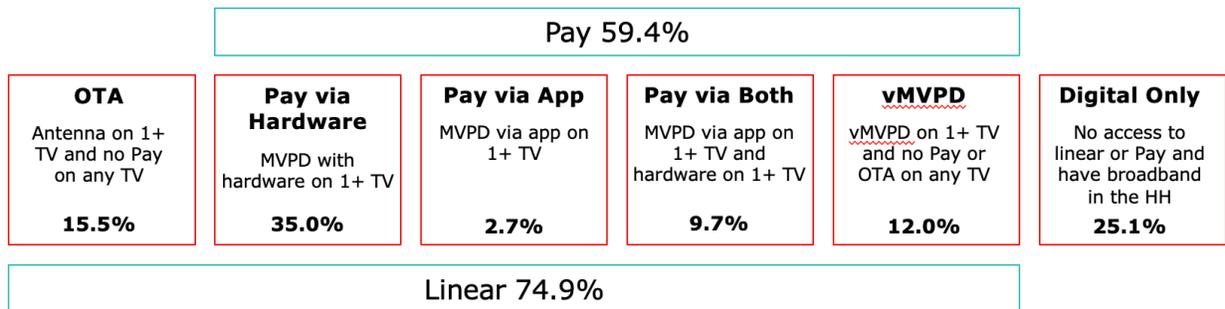
- The remaining households that have an antenna on one or more television sets and do not have reception through an MVPD on any television set are classified as Over the Air (OTA). This classification applies regardless of whether the respondent has a vMVPD on another set. Respondent households that did not select any service for receiving programming (~1% in 2024) are also classified as OTA.
- Households that do not meet the prior criteria but do have access to linear through a vMVPD are categorized as vMVPD and are included in both the Linear and Pay aggregations, as shown in the schema below.
- A respondent household that does not identify reception through an MVPD (Pay via Hardware, Pay via App or Pay via Both) on any set and does not receive linear television through an antenna or a vMVPD on any set, but does have access to the internet, is classified as Digital Only, whether or not the household has access to streaming TV services.



The Spring 2024 Reception Framework



The Full Year 2024 Reception Framework



We are pleased at the stability shown by the new framework from wave to wave.

The frameworks above are accessible through the dashboards under the heading "Reception" within the transform variables. We will continue to report the household variables (Q6a-c) cable, satellite and telcom within the dashboards for tracking and trending purposes.