Technical Paper and Observations: DASH Spring Wave 2024

September 2024

Significant Changes to the Spring 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 Spring 2024 questionnaire from Fall 2023 and changes to the Fall 2024 survey now in field.

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

- Added “most watched TV in the household” and total time the set was on, whether watched or not
- Added “most watched TV” by children ages 2-12 and teens ages 13-17
- Added daily media time of use, covering TV, other video, social media, audio, print and websites (0-6+ hours)
- Added guests to co-viewing options
- Revised all options lists, including streaming and FAST services and TV and hardware, to match changes in the ecosystem
- Expanded options for every television set in an MVPD household to establish [service provider] hardware, [service provider] app, or both as the means of reception.

Significant Changes in Results Since the 2023 Study

A comparison of all common variables in the full year 2023 and Spring 2024 results is contained in the file *SP 24_23 comparisons sorted by difference*, which is available to DASH licensees in the Spring Wave 2024 release packet.

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 3.8%[1]. If we assume that the DASH study has the properties of a high-response-rate probability sample, we would expect to see 5% of the 5,265 data comparisons exceed that threshold[2]. The file referenced above shows 4% of data comparisons exceeded the threshold. Of course, that figure comprises effects from all causes, including sampling error and changes in the instrument and the ecosystem. That this figure is lower than the expected 5% is likely explained by the fact that a substantial portion of

[1] A typical full year 5% confidence interval based on 10,000+ respondents is 2.6 percentage points.
[2] We recognize, of course, that many things can drive a change year on year, especially real change, but thought the exercise worthwhile to see if there was a logical level of change overall.

the sample is repeat respondents, who are part of the longitudinal sample. Therefore, we conclude that the error rate is reasonable and a basic indicator of sample quality.

- When reviewing the sorted file containing the absolute value of changes, we eliminated missing values (did not see item, did not see question or refused) to focus on changes to actual responses. Most notably, in 2023, the audio streaming battery was asked only for premium services. The comparison against non-premium was eliminated because the differences were structural.
- We also noted some other large differences reflect missing values in the Spring 2024 or full year 2023 data sets, as many streaming services added or dropped subscription tiers. Thus the observed change in streaming tiers was largely structural.
- Of the 210 values that exceeded the two-standard-error threshold, most fall into two categories:
    - Viewing in a specific daypart to a specific network, service or channel on third, fourth or fifth TVs, where the samples are *de minimis*.
    - Volatility in genres viewed occasionally on broadcast/cable or internet/streaming. Generally, genres watched occasionally went down and genres watched frequently went up. We attribute this effect to the ephemeral nature of viewer behavior.
- Definitions of Pay TV: The industry has moved to a definition of Pay TV that includes homes with a vMVPD (previously in BBO) because those homes have access to signals and networks similar to traditional Pay TV. This move, and our new ability to differentiate between Pay via hardware and Pay via app, have implications we will discuss in the final section of this paper.

Sample Characteristics

A detailed description of the Spring wave 2024 sample, its demographic characteristics and the study methodology can be found in the *DASH Spring 2024 Project Methods and Transparency Report*. Some of the highlights follow:

Study Target Population: General Population Age 18+
Sample Units: 9,211
Completed Units: 5,928
Expected Eligibility Rate: 100%
Observed Eligibility Rate: 100%
Margin of Error: ±1.79 percentage points (pp)
Design Effect: 1.98
Survey Field Period: April 13, 2024 – June 30, 2024
Overall Median Duration (minutes): 21
Phone Median Duration (minutes): 42

Web Median Duration (minutes): 21
Face to Face Duration (minutes): 20

Note: The ARF has constructed a standard error estimator based on a bootstrap methodology. The tool, which will provide an approximate standard error, will be available to DASH licensees in this Spring 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 Spring 2024 wave had an average margin of error for 1.79. 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 non-responders to standard solicitations. Approximately 9% (516) of the Spring 2024 sample is made up of these non-responders. We annually conduct analyses of the differences between initial responders and non-responders. The differences are largely driven 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.

Classifying Modes of Reception

Of note, at the request of our technical committee, 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 response in Q11. In previous waves, only "Comcast" was offered.

In the past, 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 has 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 allows us to unify the edits by using the hardware question from both the household question (Q6D) and the set question (Q11).

The unified reception edit for Spring 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 and Q6D) is classified as a Pay household. This classification applies regardless of whether the respondent has an antenna or vMVPDs on any other set.

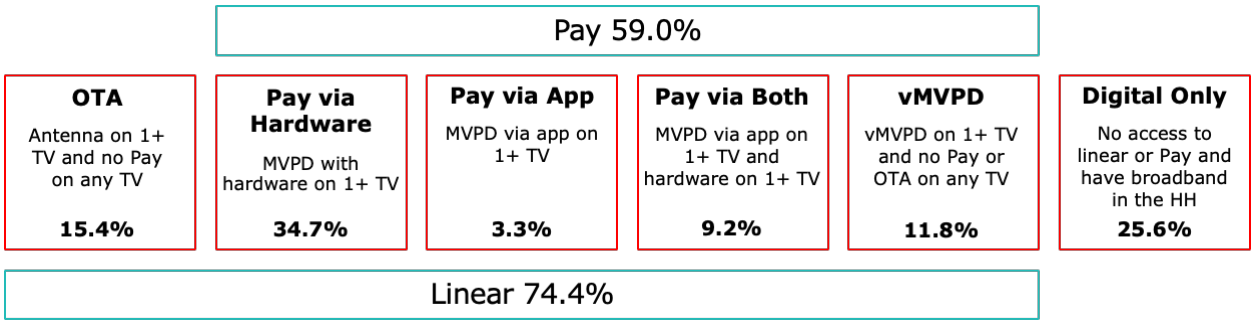
  A Pay household, as calculated above, that answered yes to Q11 (hardware) or Q6D (hardware) is classified as Pay via Hardware, and a Pay household that said yes to Q11 (App) or no or don't know to Q6D (hardware) is classified as Pay via App. A Pay household that qualified in both categories is classified as Pay via Both.

- The remaining households that have an antenna on one or more television sets and do not have reception through an MVPD 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%) are also classified as OTA.

- Households that have access to linear only through vMVPDs are classified as vMVPD and are included in both the Linear and Pay aggregations, as shown in the framework below.

- A 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 vVMPD, 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



This framework is accessible through the dashboards under the heading “Reception” within the transformed variables. We will continue to report the household variables Q6A-C (cable, satellite and telco MVPDs) within the dashboards for tracking and trending purposes. The web dashboard will be updated by mid-October with a deconstruction of the relevant core elements of Pay (via hardware, app or both) into its cable, satellite and telco components.