

Reach, Frequency, and TRPs

Reach & Frequency are key metrics that are used across advertising formats and media. They allow for an understanding of how effectively a campaign delivers against the target audience. In order to gain a stronger understanding of how Reach, Frequency, and TRPs work together, we must first know how they each work individually. For a brief refresher:

TRPs (Target Rating Points) are a way to express ad exposures as a percentage of the target population.

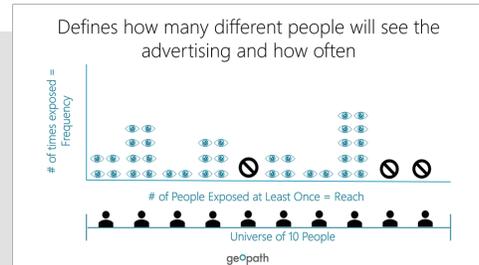
To find TRPs:

$$\text{TRPs} = \frac{\text{Target Impressions}}{\text{Target Population}} \times 100$$

Note: one rating point represents impressions equivalent to 1% of the selected population

Reach measures how many distinct people see an advertisement. It counts each person only once, no matter how many times they see a unit during the reported period. Therefore, total reach can never be more than 100% of the target population.

Frequency measures the average number of times the target audience will see the advertisement in a specific time period.



In this example, only 7 out of these 10 people saw the ad; therefore the reach is 70%. Frequency is the average number of times the ad was seen.

Relating Reach & Frequency to TRPs

TRPs can be calculated as detailed above, but it can also be expressed as a function of Reach and Frequency.

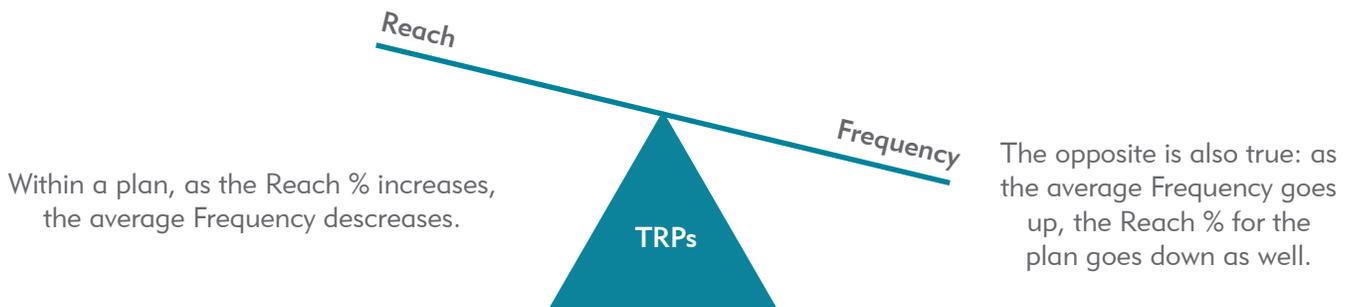
$$\text{TRPs} = \text{Reach} \times \text{Frequency}$$

Therefore, we can express Reach and Frequency this way:

$$\text{Reach} = \frac{\text{TRPs}}{\text{Frequency}}$$

$$\text{Frequency} = \frac{\text{TRPs}}{\text{Reach}}$$

Though the formula is relatively simple, it is important to understand that reach and frequency occur at **different rates** in an **inverse relationship**, when TRPs are constant.



Should I Focus on Reach or Frequency?

While this differs depending on the needs and strategy of the client, a plan should consider both reach and frequency together. Modern marketing theory shows that focusing only on reach without considering frequency is typically not an effective strategy as it is important for a campaign to stay top of mind through frequency, while also reaching as many people as possible.

The Evolution of Geopath's Measurement

In 2019 Geopath updated its methodology, utilizing the most advanced location data inputs that are available today. These new data inputs include passively captured location data from mobile devices that allow an advanced understanding of actual audience exposure frequency across out-of-home inventory.

Observed vs. Self-Reported Frequency

There are a few notable factors that impact Geopath's reach and frequency new methodology.

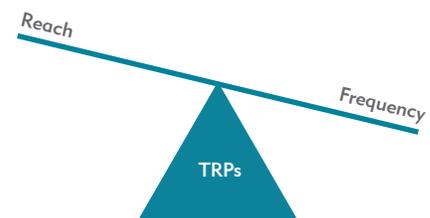
The legacy methodology relied upon a model based on stated results from a travel survey that was conducted in 2008 to measure reach and frequency. Rather than using self-reported travel surveys, Geopath is now able to observe trip behavior utilizing a mobile device panel to calculate the frequency of trips of the same device over the same roadway in the same direction throughout time.

Observed trip frequency in the post-COVID era is lower than observed trip frequency during pre-COVID periods. In the post-COVID era, people are making fewer trips overall, so it is to be expected that trip frequency would also decrease.

Of more impact to the overall methodology was that observed frequency of trips passing out-of-home inventory (pre- and post-COVID) is much lower than frequency benchmarks from legacy self-reported travel surveys.

Why has my Reach Changed?

The shift to the updated observed frequency methodology has shown a lower frequency per unit than previously reported. As noted on the previous page, reach, frequency, and TRPs are interrelated, with reach and frequency having an inverse relationship. **Therefore, the change to a lower frequency per unit results in an increase of reach per unit at the same TRP level.**



A forward-facing industry

Due to the changes in data inputs and methodology, the Reach & Frequency metrics for 2021 and 2020 should not be directly compared. To reiterate, the 2021 measures now take into account observed frequency, as opposed to reported/surveyed frequency in the 2020 data set. Comparing these data sets would be an "apples to oranges" comparison.

As a result of the methodological improvements and more granular data sources, there are significant changes to the Reach and Frequency delivered by individual units and inventory packages. These changes are a result of the improvements to the methodology and do not reflect changes to the actual inventory.