

OAAA OOH Impression Measurement Guidelines

This document serves as the precursor to the **Out of Home Advertising: Measurement and Analytics Guide for Agencies and Advertisers** (published March 2020)

Objective: To facilitate accurate third-party measurement of OOH media including support for timely audience measurement; marketing mix modeling, multi-touch attribution, and programmatic trading of the channel.

Outcome Goal: To move toward an impressions-based measurement system that provides forecasted and reconciled-as-delivered daily impressions by frame; allows for transparency into how impressions are measured; and ensures that the measures are comparable to and consistent with other channels, in order to support OOH's role as a core part of a digital and data-led media mix.

Recommendation: The OAAA Data and Analytics Committee is recommending that the OOH industry embrace as our currency the core metric of Opportunity to See, as defined below. The proposed OTS measure relies upon transparent “view sheds” to illustrate how inventory size, placement, viewing angles and other traditional OOH attributes impact audiences. This definition falls in line with how other ad media impressions are calculated and reported. This recommendation of Opportunity to See as the core currency metric does not preclude the OOH industry or individual organization from choosing to further qualify the core audience data with additional factors; rather, it is simply to align around Opportunity to See as the most comparable currency metric.



In addition, the recommendation is to immediately move to providing both a predictive audience model as well as a measure of observed audience exposures at the frame level.

All measurement data should be accessible via API to ensure ability to integrate into agency, marketer and media owners' business systems and omnichannel media platforms.

These measurement solutions must also be built to be as "future proof" as possible, given the rapid changes in access to mobile location data supply and data privacy regulations.

The OAAA Data & Analytics committee is recommending as a next step to work with the MRC, ANA, ARF and other related groups representing multiple aspects of the OOH ecosystem to evaluate these guidelines and begin developing a roadmap for cross-group coordination and accredited impression measurement.

OOH Impression Measurement & Reporting Minimum Requirements:

- Daily frame-level forecasting to allow time-based campaign planning with precision.
- Observed daily delivery at frame level to facilitate post campaign reporting, third-party attribution measurement and optimization.
- Clear published documentation to support the curation of viewsheds and the definition of the line of sight that determines an OOH frame's OTS.
- Reach and Frequency measures at both a frame level and for full media plans across all OOH product types (e.g., roadside, transit, place-based, etc.).
- Transparent data sources or mix of data sources powering measurement validated by ground truth data sets, while ensuring sustainability of data supply given uncertainties around data privacy policies and regulations.
- Ensures all participating data and technology partners maintain a rigorous and transparent focus on compliance with all applicable data privacy regulations, now and in the future.
- Impression counts made accessible and accepted for use within omni-channel planning & buying platforms, mixed-media and multi-touch attribution models (MTA), with a particular focus on ensuring functionality with the requirements of digital-native and programmatic buyers.
- Transparent published methodologies, viewsheds and source data.
- Must provide some level of compatibility to combine different forms of OOH media methodology (ie. fleet/ mobile billboards, roadside, place-based, etc.) for comprehensive planning.

Data Vetting, Access and Delivery

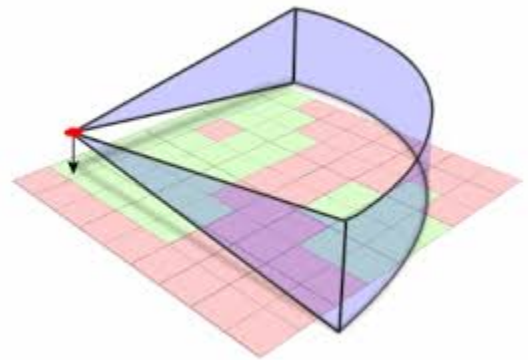
- Data and data products to be developed and published through a transparent, agreed-upon cadence of reviews, feedback, alignment and updates prior to actual release.
- Impression measures should be provided on frames that have gone through an Inventory Audit process (validation of frame attributes), and the Inventory process can be managed by the platform providing the measures or by another platform that provides audits. The Inventory Audit process should be documented.
- Service-Level Agreement: Documented system uptime/ reliability standards & monitoring schedules required.
- Documented structure of data set(s) and structure of testing environment(s) for (but not limited to) the following:
 - Ability to test structure of data sets for correlation of taxonomies and definitions
 - Ability to see sample code and expected outputs based on test cases
 - Ability to enter staging environments for test coordination of core data set delivery and external data matching
 - Ability to integrate to production environments/applicable business systems (dependent on the receiving business/entity) for data set(s) being utilized
 - Ability to continually test new metrics being delivered against methodologies through transparent documentation of processes (based on policies of provider as possible)
 - Continual dev/stage/prod structure of releases with appropriate notification and review process, as well as sunset and versioning introduction schema and documentation
- Users of this data should be able to ingest these impression counts in such a form as to be able to be:
 1. Used in their own media-mix models
 2. Combined with publishers' & users' own supplied custom audience segmentations and inventory / package /product offerings (such as home location integration, device graph integration, or like kind information.)
 3. Available, not only for initial planning, but able to be used for publishing, reporting/accounting/POP and within attribution solutions post campaign.
 4. Compatible with identity resolution systems for planning & attribution.

Appendix:

Frame: Represents the physical display (printed or digital) for which Impression measures are provided. For clarity, an OOH site/display may have multiple frames with different orientations (and corresponding viewsheds) e.g.: A Billboard Site may have 2 frames - one facing northbound traffic and the second facing southbound traffic.

Opportunity to See (OTS): Media is purchased on an Opportunity-To-See (OTS) basis, which defines viewable impressions. This means marketers are buying the potential to reach consumers in the media in which their advertisement is placed. OTS impressions are measures of media exposure (e.g. magazine readership or the TV program exposures). OTS for OOH measurement applies to audiences passing through a viewshed of an OOH media location. OTS is a refinement to the OOH circulation to produce an audience impression.

Viewshed: The geographical area that is visible from a location, necessary to determine OTS. It includes all surrounding points that are in line-of-sight with that location and excludes points that are beyond the horizon or obstructed by terrain and other features (e.g., buildings, trees, tunnels, etc). A viewshed takes into account fixed characteristics such as the size, distance from the audience and position to the audience of an OOH media ad.



A viewshed also provides OOH buyers and sellers with a visible guide to inform how the OTS is determined based on frame level attributes and road or audience path assignments.

Likelihood to See (LTS): The portion of the OTS (Opportunity to See) audience who are likely to see an ad, which is based on variable and conditional factors that can impact the probability of an audience to see an ad. LTS in OOH measurement takes into account further refinement with factors such as consumer behavior in proximity of the ad, visibility or eye tracking studies or technology, the speed of traffic on the road, time based event and environmental factors (such as weather triggers) that cause real-time changes in audience composition.

To further elaborate on the OOH attributes factored into OTS and LTS, following are specific examples of attributes to be applied:

- Fixed Attributes that must Impact OTS:
 - Location of frame (intersection to vehicular & pedestrian reads)
 - Proximity of frame (distance) to read
 - Orientation to read (facing)
 - Size of frame – (screen size needs to matter)
 - Loop (# of spots) and Spot length - specifically if Digital
 - Dwell time
 - Sunrise/Sunset for illumination or Artificial Illumination for frames on 24hrs
- Variable Attributes that can Impact LTS based on specific campaign goals:
 - Eye Tracking
 - Dynamic or variable factors to specific OTS attributes such as weather, or other variable time based conditions.
 - Media content types (there might be research that suggests the content on the frame might influence the noticeability factor) e.g.: ads delivered on dynamic conditions or advertising + content combinations where the content is contextual to the environment (e.g.: train schedules)

How OOH impressions should facilitate all aspects depicted below within the life cycle of a media plan:

