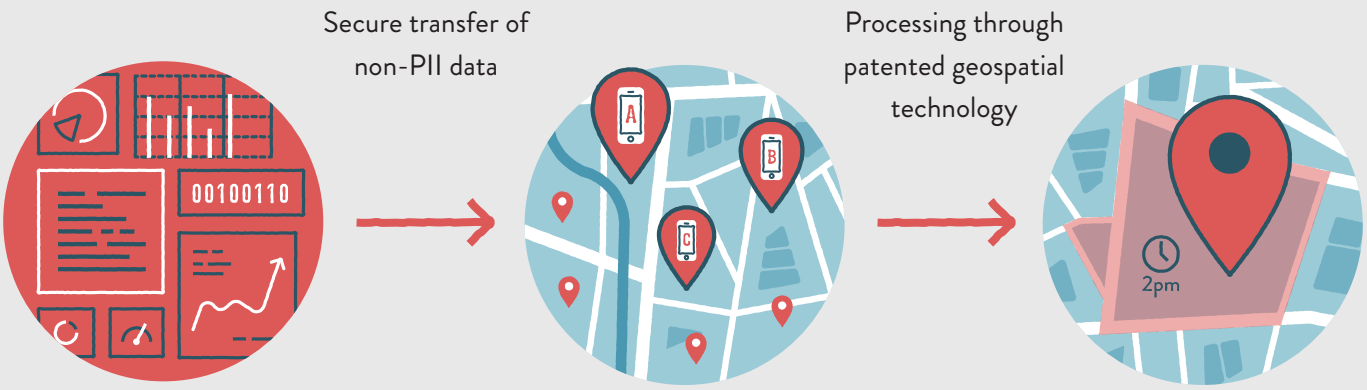
APPROACH TO LOCATION-BASED AUDIENCES



Geotemporal Data

Geotemporal data refers to data with a georeference (lat/long) and timestamp. Vistar Media sources geotemporal data from AirSage, a third party aggregator of mobile carrier data from Sprint and Verizon. This massive dataset contains 15-billion data points per day covering 100MM mobile devices nationwide. Device location is derived through cell tower triangulation. Any time a consumer connects to the cellular network, by making a phone call, sending a text, or using the internet, an activity point is recorded including a device's carrier ID, lat/long, and timestamp. Carrier IDs are hashed and refreshed monthly, ensuring consumer privacy. Carrier IDs are distinct from mobile identifiers used for advertising.

Marketing Solutions

Vistar uses this wealth of data on consumers' location behavior to help advertisers answer marketing and business questions. For example, suppose an advertiser wants to know where upscale gym-goers live, work, and spend time in NYC. To answer this question, Vistar would define an audience based on real-world behavioral indicators such as visits to Equinox gym over a specified date range. Once an audience is defined, Vistar analyzes all location points observed for devices in that audience, applying statistical models to identify where and when the audience can be found in high density. The output of this analysis is a collection of affinity polygons with temporal attributes – in other words, custom day-parted geofences – that can be used to reach audiences with media in the places they are most likely to be found throughout the day.

Audience Creation

Step 1: Locate point of interest, identify devices in proximity over date/time range

Step 2: Analyze all location points for audience devices over date/time range

Step 3: Statistically model density of target audience at any given location and time over date/time range

Step 4: Slice areas with highest population density to create affinity polygons for media targeting

Media Activation

To activate location-based audience targeting for digital out-of-home advertising, Vistar uses affinity polygons to identify out-of-home inventory on the Vistar platform best situated to reach target audiences.

To activate location-based audience targeting for mobile advertising, Vistar uses affinity polygons as a targeting parameter on mobile exchanges. Vistar bids on any request that contains a lat/long falling within an affinity polygon. An affinity polygon may also reflect a specific time or day-part. Location-based audience targeting uses historical device behavior from mobile carrier data to identify geographic and temporal parameters for buying media on mobile exchanges.

A note on location data quality control for mobile buyers: Vistar has a patent-pending approach for filtering out inaccurate lat/longs passed through mobile bid requests. In addition, to ensure precision, Vistar only bids on lat/longs with nine decimal points. For more information please contact platform@vistarmedia.com.