Section 1:

The Evolution of Geopath Insights

Section 1
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A Quick Review:
The Evolution of Geopath Insights

The original TAB ratings put OOH on a level playing field with other media channels by allowing the industry to move from "showings" to measures more commonly used in other channels.

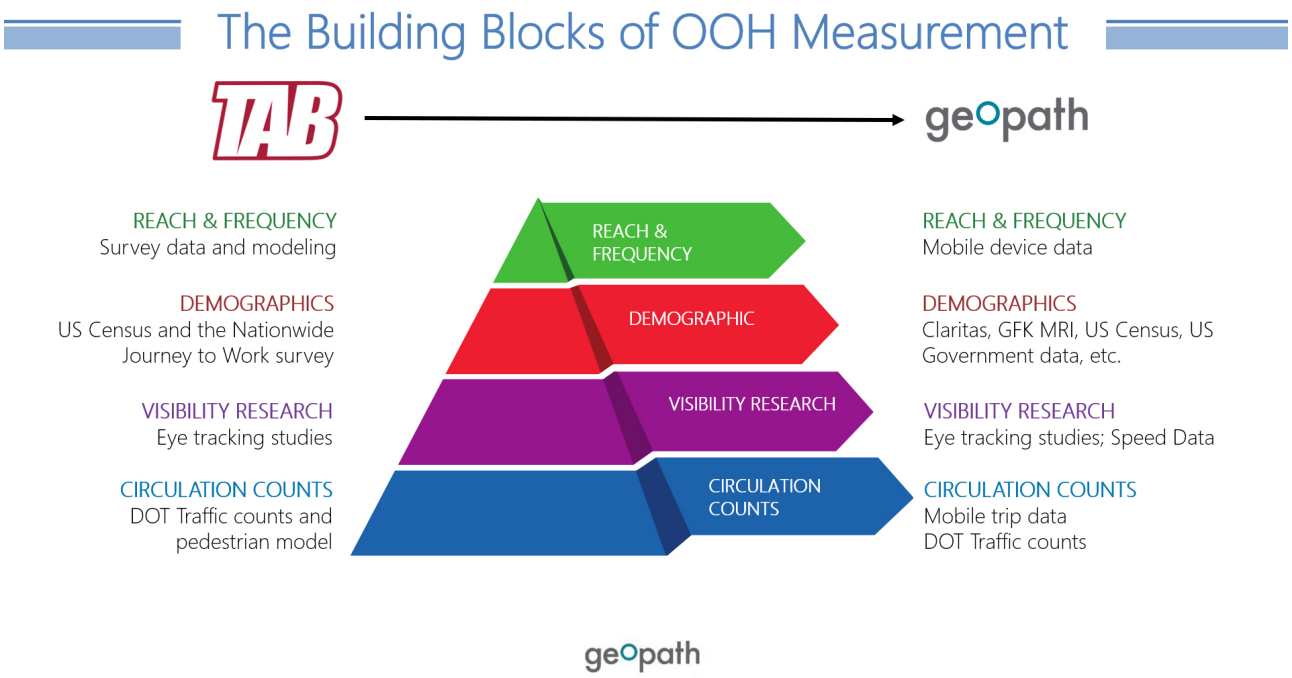
- Weekly Impressions
- TRPs
- Reach
- Frequency

Geopath is now enhancing its measures with greater granularity and precision, including additional audiences, increased geographic options, and more detailed analysis of inventory.

- Audience
- Coverage
- Composition
- Indices

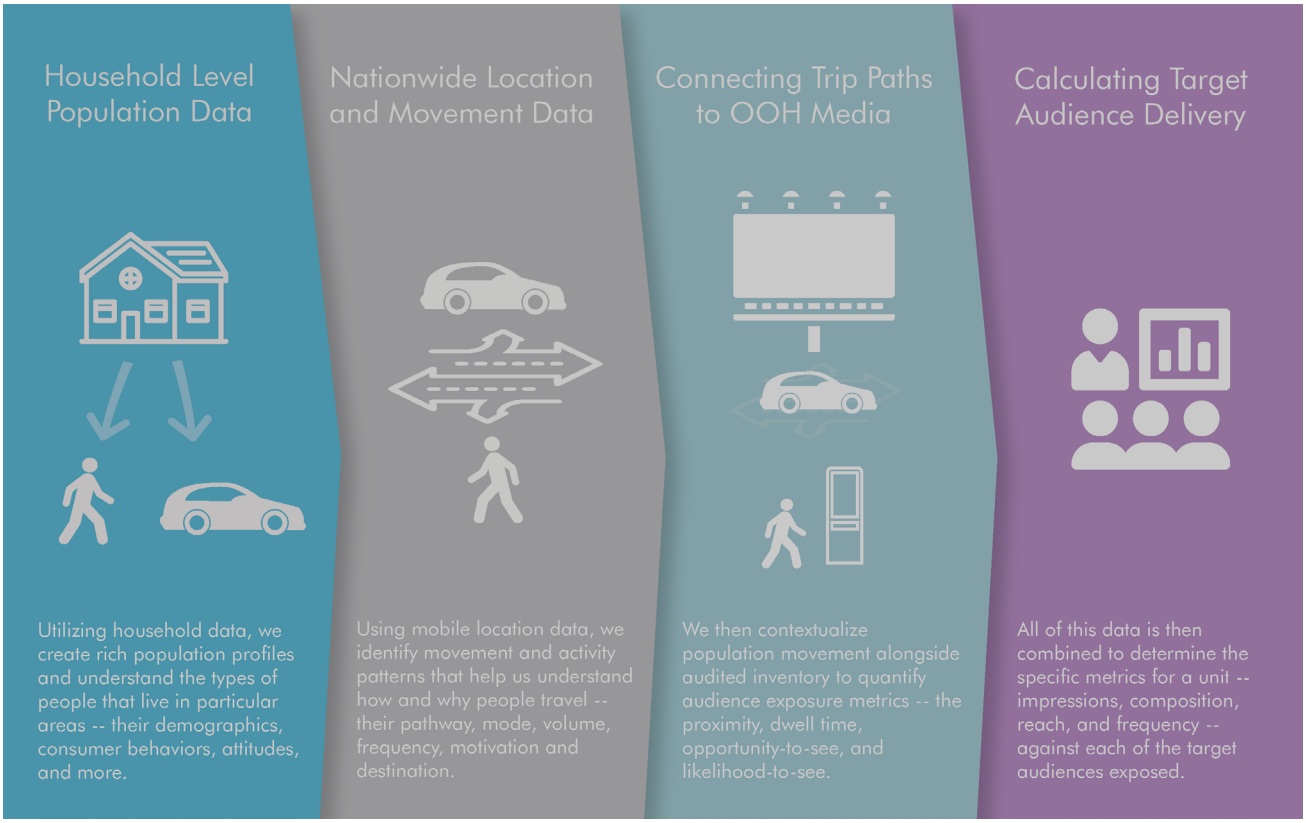
The Building Blocks of OOH Measurement

Geopath Insights is built upon the same core building blocks. The key differences are the data inputs.



Contextualizing Audience and OOH Media

Geopath curates all of this aggregated and anonymized data from across all roadways and places in the US to create a fully contextualized movement matrix of the entire population. Only when the movements of the full population are understood can we fully compare all OOH media locations and understand the audiences viewing the media. The graphic below outlines how Geopath understands audience movement and connects it to OOH media to develop its measures.



Comparing Geopath Insights – Yesterday to Today

Distributive computing and the mobile data available have allowed us to enhance the capabilities available to our members, whether you are accessing our data via our API or the new Geopath Insights Suite (which will ultimately replace our legacy tools). On the next page is a comparison of the legacy capabilities to the enhanced capabilities that will ultimately be available through Geopath.

Measurement Enhancement:
Comparison of Legacy Data to Today

Audited Inventory Database	Legacy Systems/Data	Insights Today
Roadside	Yes	Yes
Transit - Place-Based	Yes	Yes
Transit - Fleet - Scheduled Routes	Yes	Yes
Place-Based	N/A	Yes
Fleet - Dynamic Routes	N/A	Under Development

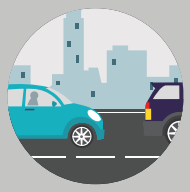
Audience Measurement Data	Legacy Systems/Data	Insights Today
Reporting Precision		
Single Location	Yes	Yes
Inventory Sets	Yes	Yes
Individual Ad-play	N/A	Yes
Geographic Resolution	**4,388**	**40,000+**
National	N/A	Yes
DMA (210)	Yes	Yes
CBSA (942)	Yes	Yes
County (3,236)	Yes	Yes
ZIP Code (32,336)	N/A	Yes
Custom (∞)	N/A	Yes
Temporal Resolution (time scale options)	**1**	**2,016**
Annual (1)	Yes	Yes
Seasonal (4)	N/A	Under Development
Monthly (12)	N/A	Under Development
Day of Week (7)	N/A	Yes
Hour of Day (24)	N/A	Yes
Audience Segments	**500**	**8,000+**
Census Demographics	Yes	Yes
Enhanced Demographics (Housing, Commute, Language)	N/A	Yes
Consumer Behaviors	N/A	Yes
Psychographics	N/A	Yes
Segmentation (PRIZM)	N/A	Yes
Segment Cross-Tabs	No	Under Development

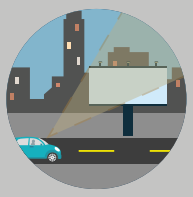
Technology Platforms	Legacy Systems/Data	Insights Today
Forecasting Tools		
Inventory Search	Yes	Yes
Audience Search	N/A	Yes
Market Planning	Yes	Yes
Measurement Tools		
Campaign Delivery	Yes	Yes
Historical Analysis	Yes	Under Development
API	Yes	Yes

How Impressions Have Evolved

While the data we harness from mobile devices and connected cars creates a more robust measurement system, increasing our understanding of the audience viewing inventory, there will be some changes in the impressions delivered by Geopath audited inventory.

Overall, there are seven key components that impact changes to OOH impressions. The following table provides an overview of each component, why it is important to Geopath's measurement, and what has changed.

Component	What Has Changed	Why It Matters
 VEHICULAR TRAFFIC COUNTS	Geopath is no longer solely reliant upon manually collected information from government resources for traffic counts. Mobile technology provides a better estimate of hourly traffic on roadways throughout the week and throughout the year Millions of traffic count locations can now be cross-referenced and aligned with mobile trip data and calculated for every unique road segment in the US by direction.	Traffic counts are the basic building block that allow Geopath to understand overall audience circulation. While a high traffic count may lead to higher impressions, other factors such as illumination, vehicle occupancy, and directionality all play a role.
 PERSONS PER VEHICLE	Mobile data, regional patterns, and trip purpose information now allow for variable occupancy • Every road segment in the country will have a unique vehicular occupancy calculation	Different markets have very different travel and transportation usage patterns. Markets with higher vehicle ownership have fewer people per car. The expected number of people in a vehicle is different depending on the trip purpose. Commuting trips have low occupancy, while shopping and leisure trips have high occupancy. Higher levels of occupancy have a positive impact on impressions as they lead to a higher number of "opportunities-to-see."

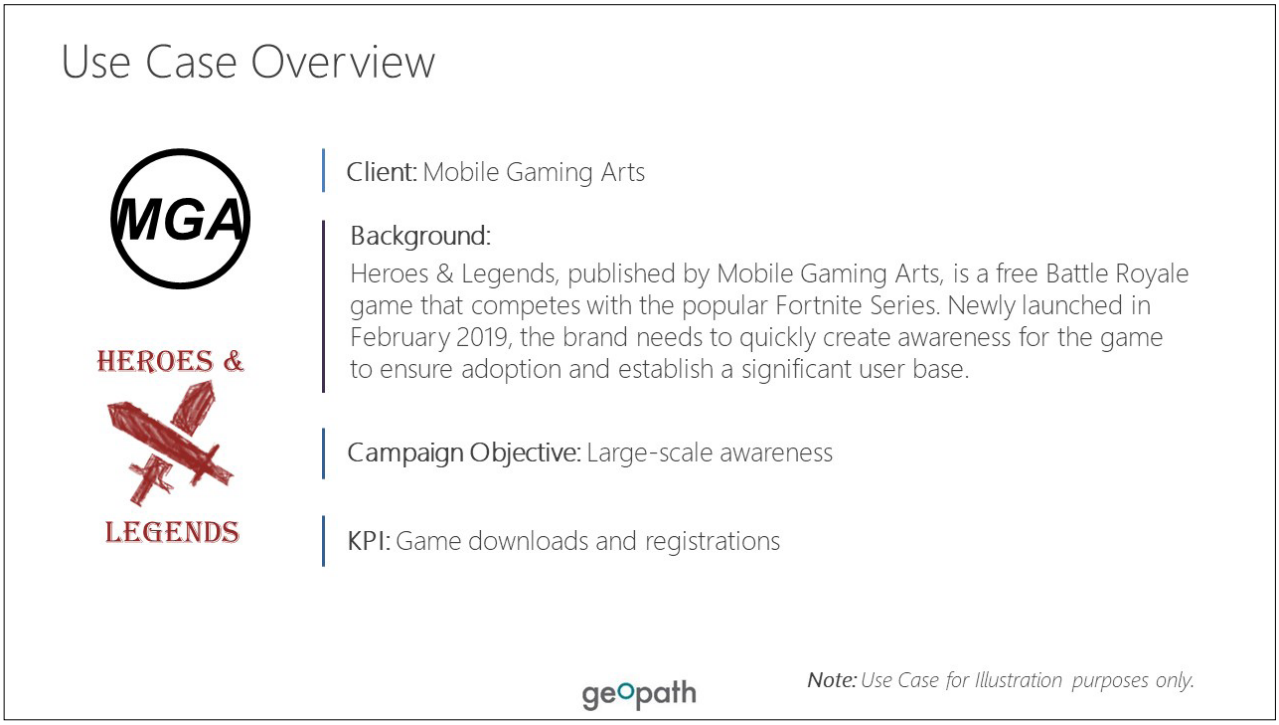
Component	What Has Changed	Why It Matters
 PEDESTRIAN TRAFFIC	Pedestrian pathways now have unique counts, factoring in mobile activity, employment density, business locations, and more. New default walking speed is 3.1 MPH (vs. 3.4 MPH).	Pedestrian traffic can make up the majority of audience in central business districts, commercial, entertainment, and tourism areas. The use of mobile applications for social, fitness, weather, and navigation has created a powerful resource to understand activity on a block by block level.
 ILLUMINATED CIRCULATION	Sunrise and sunset at the inventory location by season, in conjunction with illumination periods, are used to gauge visibility and circulation.	Many OOH assets rely upon ambient light for illumination. These units can only be seen by traffic during daylight hours. It is important to know the location of a unit within a time zone as the sunrise and sunset times can vary up to an hour. Daylight hours may change significantly throughout the year depending on latitude.
 VISIBILITY ADJUSTMENT	Angle to oncoming traffic taken into account, providing infinite permutations vs. LH/RH/ Center, Parallel/Perpendicular. Observed dwell time, degrees off-center (at optimal view), and apparent size (at optimal view) taken into account.	Visibility is dependent on several factors: How large does the media **APPEAR** within the audience's field of view? **WHERE** is the media within the audience's field of view? How much **TIME** does the audience have to see the media? Detailed road network information and inventory attributes enable precise visibility calculations.
 SPEED/ DWELL TIME	Hourly speed data for all US roadways.	Dwell time influences the likelihood of content being seen, as well as the number of spots that a single person has an opportunity to see. The greater the time that an audience dwells near an OOH media location: • the more likely they are to look at the unit • the more opportunities those audiences have to see multiple spots on the same unit Speed data from connected cars and navigation apps is available on more roadways than ever before.
 HOME LOCATION	Mobile device data from across the country for all trip purposes. Home locations aggregated by block group. All geographies accurately reflected in the in/ out of market impressions.	Mobile data enables Geopath to understand the home locations of the audience passing by all OOH media. Comprehensive coverage across the US allows Geopath to quantify out-of-market audiences, such as business travelers or tourists.

A one-page infographic of the above table, as well as additional information on the new methodology, how it has evolved, and its impact to impressions, can be found in the **geekOUT Library** on the Geopath website. We recommend that everyone download the above table for easy reference as it will be helpful in answering questions that may come up from clients in regard to the changes.

For a deeper discussion of the above table, a webinar covering ***How Impressions are Evolving*** is available on the Geopath YouTube Channel.

An Illustrative Use Case

The following use case is provided to help illustrate the new capabilities available through Geopath Insights, and provide context for the standards and protocols outlined in the remaining document. The example looks at how audience and location can impact the inventory selected for an overall plan, and how this has changed.



While multiple DMAs are included in the request, this example will focus on the Atlanta DMA. The same process would hold for the other markets.

Use Case Details

MGA

HEROES & LEGENDS

Media Target: 50 Weekly TRPs in each market

Markets:
- Atlanta
- Chicago
- Los Angeles
- New York
- San Francisco

Target:
- *Primary Target: Gamers that download/use mobile games* [NEW]
- Secondary Target: Early tech adopters/influencers [NEW]
- Alternate: Males, age 18-34 in large metropolitan areas

Formats: Large format bulletins (non-digital)

geopath

Note: *Use Case for Illustration purposes only.*

Previously, an agency or operator responding to a proposal like the one outlined below would only have been able to respond to the demographic target, leaving the primary audience request unanswered.

My Plans
New Cost Set
Plan Maintenance
Options
My Markets
My Settings
Administration
Create Users
Manage Users
Search Users

7 26

Atlanta, GA
Males 18-34

Demographics
Males 18-34

Population: 827,981

Weeks: 1

Cost Set:

Unit # / Transit Package Name	TAB Panel ID	Street Location	Media Type	Plant Name	Weeks	Reach %	Reach	Frequency	TRPs	Plan TRPs	In Market 1 Week Impressions	Total 1 Week Impressions	In Market Plan Impressions
000028	37067	Cobb Pkwy	Bulletins	Clear Channel / Atlanta	1	0.9	7,568	2.7	2.5	2.5	20,702	20,702	20,702
000138	37152	N Druid Hills	Bulletins	Clear Channel / Atlanta	1	0.9	7,798	2.6	2.5	2.5	20,476	20,476	20,476
000140	37154	Northside Dr	Bulletins	Clear Channel / Atlanta	1	1.1	8,959	2.8	3.0	3.0	24,937	24,937	24,937
019422	37417	Buford Hwy	Bulletins	Clear Channel / Atlanta	1	1.0	8,638	2.7	2.9	2.9	23,642	23,642	23,642
056202	38673	Northside Dr	Bulletins	Clear Channel / Atlanta	1	0.7	5,467	2.7	1.8	1.8	14,835	14,835	14,835
009234	39060	Buford Hwy	Bulletins	Clear Channel / Atlanta	1	0.9	7,773	2.6	2.5	2.5	20,337	20,337	20,337
47667	40735	W/S BUFORD HWY 1M N/O CHAMBLEE TUCKER RD RHR F/N	Bulletins	Lamar / Atlanta	1	1.1	8,957	3.0	3.3	3.3	27,108	27,108	27,108
000B538O	42258	Buford Hwy S/O Clairmont Rd W/S	Bulletins	OUTFRONT / Atlanta	1	1.0	8,260	3.0	3.0	3.0	24,461	24,461	24,461
90001	472898	US-76 SS 652' E/O RIVER RD F/W - 2	Bulletins	Lamar / Athens, GA	1	0.1	966	3.0	0.3	0.3	2,883	3,925	2,883
90102	472899	US-129 S ES 1MI S/O SR 82 F/S - 4	Bulletins	Lamar / Athens, GA	1	0.2	1,975	2.6	0.6	0.6	5,165	5,165	5,165
1060	577675	BROAD ST 700 ft W/O MAGNOLIA	Bulletins	Lamar / Athens, GA	1	0.9	7,630	2.5	2.3	2.3	18,870	18,870	18,870
1165	577732	ATL HWY 200 ft E/O TIMOTHY RD NS	Bulletins	Lamar / Athens, GA	1	0.8	6,768	3.0	2.5	2.5	20,487	20,487	20,487
1343	577793	US-129 N 400 ft N/O FLOYD DR ES	Bulletins	Lamar / Athens, GA	1	0.9	7,123	2.8	2.4	2.4	20,222	20,376	20,222
Plan Totals:						14.5	120,421	3.6	52.1	52.1	431,573	433,065	431,573

** % Composition based on Adults*
*** % Composition based on Males*
**** % Composition based on Females*

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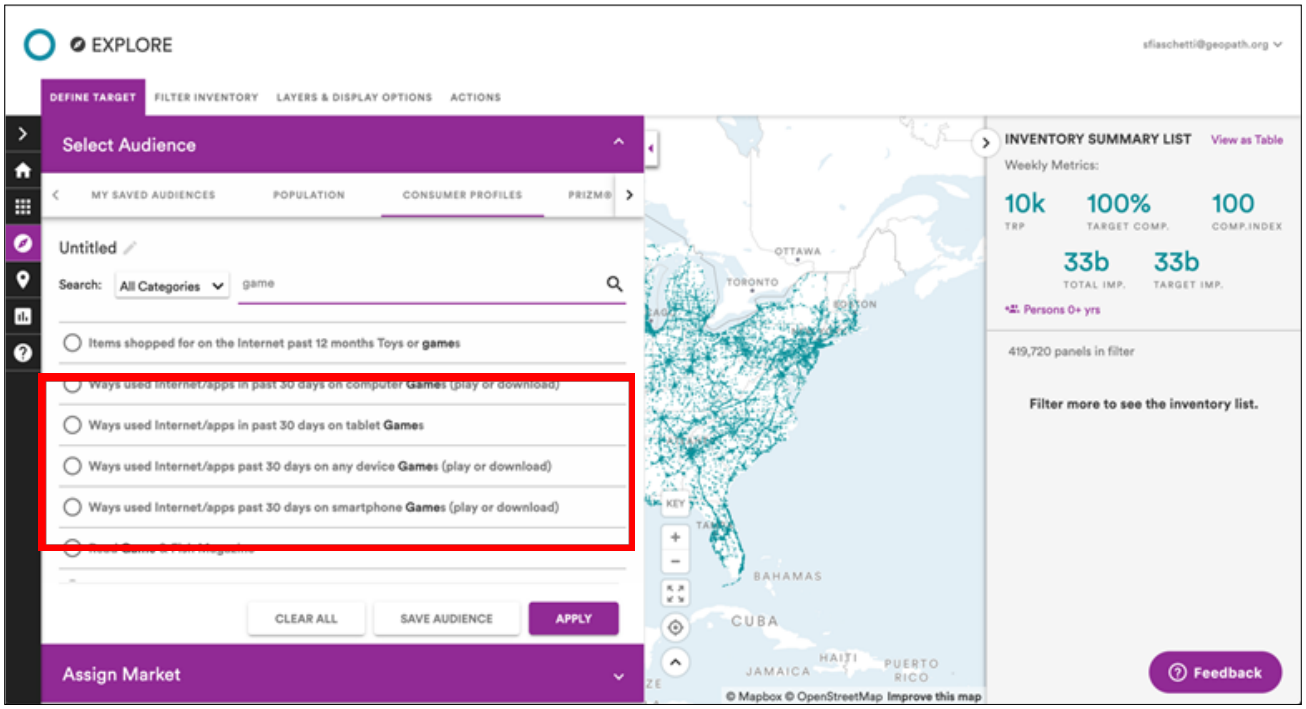
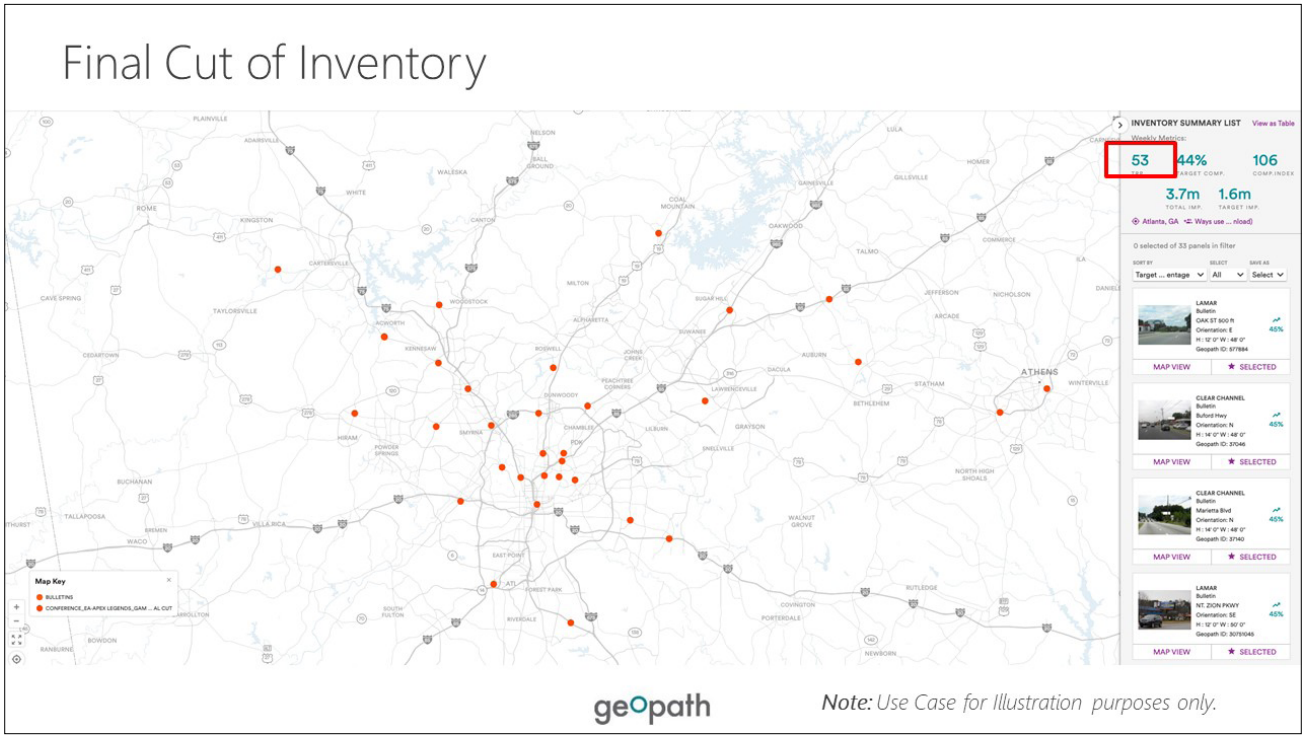
Now, the industry no longer needs to only focus on demographic-based targets. There are more than 8,000 audience targets available in the new Geopath Insights dataset. Given all the available audiences, it is critical that the desired audiences are clearly communicated among all parties involved (agency, operator, and/or advertiser).

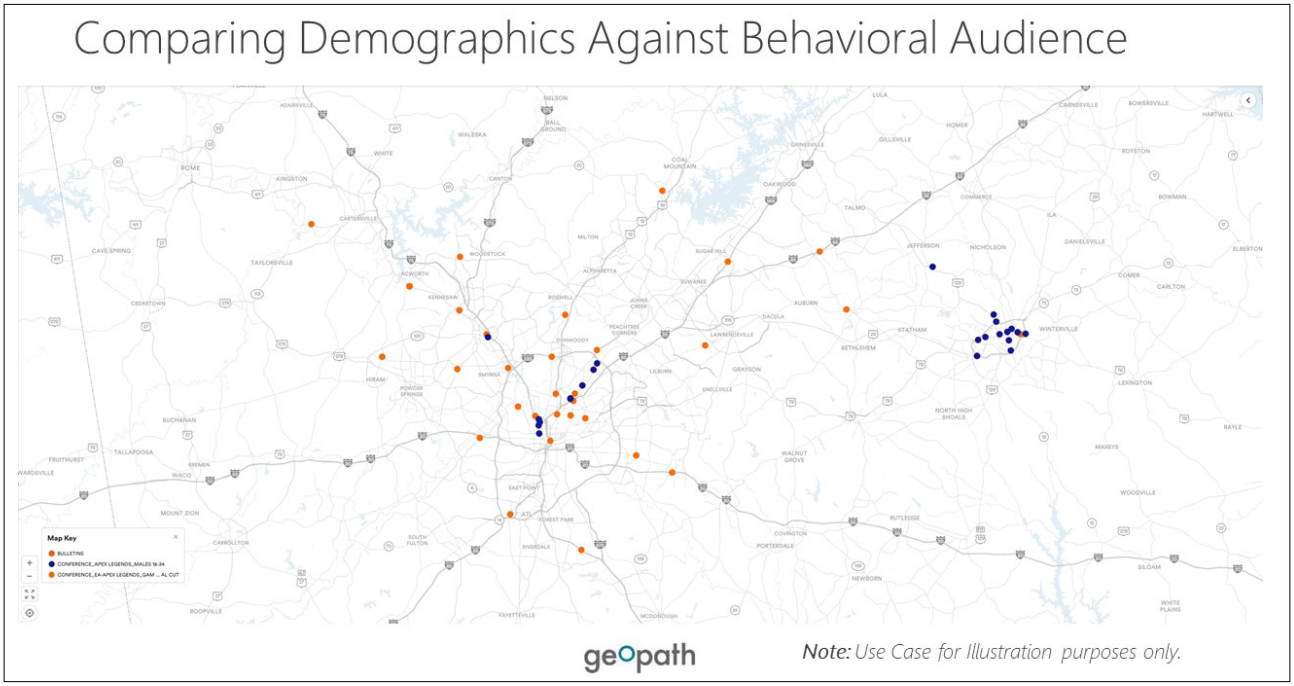


After narrowing down the inventory based on geographic distribution, as well as efficiency at reaching the desired target, the following plan was identified. The plan includes 33 units across multiple operators and slightly exceeds the 50 TRP minimum requested.



So, what does this mean?

As you can see on the maps, the plans are very different geographically (blue dots = traditional demo-based audience / orange dots = behavior target plan). The expanded capabilities available through the new Geopath Insights allow us to fundamentally change the conversation from one based on demographics, to one that includes audience behaviors. Ultimately allowing us to more efficiently meet advertisers' needs.



However, it also means that as an industry we need to be aligned on how we communicate the information needed and establish a set of protocols for how this information will be used. The following document provides a set of guidelines to use as a starting point.

For a deeper discussion of the above use case, as well as other use case examples, you can go to the OOH Office Hours Section of the Geopath website, and/or the Geopath YouTube channel.