Report 8: Alternative Foot-traffic Data Companies

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1 Overview

We have compiled an overview of 15 companies in addition to Safegraph and Veraset that offer location data based services. These companies collect location data through working with phone app companies that host their location-tracking SDKs. Locations are collected with varying degrees of accuracy from GPS, Wi-fi, beacons, and cell towers. The consumer base for these companies are largely retail marketing with Fortune 500 companies. We have put together a table that contains information about the data that each of these companies collects. We have also included brief summaries about these companies that have released reports on either mobility or location visits changes in response to COVID-19. Companies offering free raw datasets for research groups are denoted in the table with a *. Portions of the table have been left blank where the information is unclear or not provided on the company website or on AWS marketplace.

company name	scope	places (mil)	devices (mil)	first party only	aggregation	other notes
Safegraph/Veraset*	U.S.	5.3	10	yes	raw data available	free access for research; also has data for Canada
Cuebiq*	U.S.	-	17 - 20	yes	raw data available	free access for research; more than 96% of raw data has 5+ Decimals on latitude-longitude, within 30 ft accuracy
NinthDecimal	U.S.	-	200	yes	by places (visit counts)	95 million monthly unique users, 8 billion pings a day across the U.S., 87% of device users
X-mode*	U.S.	-	200	yes	raw data available	150+ pings per daily user, see users on average 15+ days out of the month; sees 10% users in Canada, Mexico, Brazil, Colombia, Japan, Australia, Sin- gapore, U.K., Spain, Italy, France
Reveal Mobile	U.S.	12	about 20	-	raw data available	free access to aggregated location visits
Unacast*	U.S.	5	127	yes	raw data available	free access for research
InMarket	U.S.	-	50	yes	by places (visit counts)	-
Factual	U.S.	21.5	-	yes	-	also has 130 mil places and 500 mil devices across 52 countries
Gimbal	U.S.	4.9	150	yes	by places (visit counts)	300 location events per day, per device
GroundTruth	U.S.	100	120	yes	by places (visit counts)	96.2% accuracy on visit counts, third party validated. 1 billion monthly users across 21 countries
PlaceIQ		-	-	-	by places (visit counts)	does not include many public services locations ie schools
Skyhook Wireless	-	20	-	-	visit counts to 100x100 meter tiles for every hour	-
Inrix	88+ coun- tries	-	-	-	-	mainly focused on location data for road traffic and parking
Foursquare*	190+ coun- tries	105	500	yes	raw data available	free access for research; 13 million have set for always on, 14 billion pings per month in US
Tamoco*	180 coun- tries	200	150	yes	raw data available	free access for research; 1.2 billion sensors in known locations
Near	44 coun- tries	-	1600	yes	by places (visit counts); unclear as to if raw data is also available	5 billion pings a day

2 Additional Information

2.1 Safegraph and Veraset

Veraset started in 2016 as a business unit of SafeGraph and officially became an independent company in the summer of 2019. All the data that Safegraph uses for things such as their social distancing metrics are Veraset data. Veraset sells two kinds of data: "Movement" data which is points of where and when; "Visits" data which is Movement data combined with location polygons.

2.2 Cuebiq

Cuebiq sells visits data and analytics for marketing uses. Research teams at MIT, Oxford, and Northeastern are using their data for modeling COVID-19. Cuebiq is releasing Shelter In Place and Mobility / Flow stats: Shelter In Place: shows percentages of people in four categories:

- "at home" (; 330 ft from "home")
- less than 1 mi
- less than 10 mi
- more than 10 mi.; determined 330 ft threshold because they found bi-modal distribution for people for traveling distances from "home" and 330 ft was the dip between the two peaks.

"Cuebiq Mobility Index": they take the log base 10 of a rectangle that contains all the locations a user goes and finds the distance between the far corners of the rectangle

2.3 NinthDecimal

NinthDecimal sells visits data and analytics for marketing uses. They are providing aggregated visit counts to different types of locations (ie. grocery stores, movie theaters, airports) for major cities across the US. They are also providing percentages for three categories:

- Stay at home: devices that haven't visited a commercial venue in a week
- Essential only: devices that visited at least one essential business in a week
- Going out: devices that visited at least one non-essential business in a week

2.4 X-mode

X-mode sells raw data and analytics for marketing uses. They claim to have "Exclusive Publisher Relationships" that "Reduces overlap of buying the same data set 2-3x over." They are measuring changes in social distancing by looking at how many people were traveling at speeds between 3 and 10 mph. They have released percentage changes for visits to different types of locations (ie. grocery stores, theaters, chain restaurants, gyms) for the U.S. as a whole.

2.5 Reveal Mobile

Reveal Mobile sells raw data and analytics for marketing uses. They have opened free access to a platform where you can search for a location and look percentage changes for foot traffic, visit counts, and percentage of people living in a 5 mile radius.

(https://visit.revealmobile.com/free/limited/report/2318560708024862096)

2.6 Unacast

Unacast sells raw data and analytics (incl. catchment area, nearby foot traffic, and capture rate) for marketing uses. They offer a service where they use polygons that you send them instead of their own. They have released a social distancing scoreboard for the 50 states in the U.S. based on distance travelled, nonessential visits, and encounter rate (two devices within 50 meters of each other in 60 min or less).

Research teams at University of Chicago, University College London, and Michigan State University are using their data for modeling COVID-19.

2.7 InMarket

InMarket sells visits data and analytics for marketing uses. They are releasing reports about changes in visit counts and purchase data to chain stores and large industries across the US.

2.8 Factual

Merged with Foursquare in early April. They have released aggregated percentage changes in foot traffic to different type of places (ie grocery stores) across 50 states in the U.S.

2.9 Gimbal

Gimbal sells visits data and analytics for marketing uses. They have released one report on changes in visits to different types of places (ie grocery stores, restaurants, gas stations) across 50 states in the U.S.

2.10 GroundTruth

Groundtruth sells visits data and analysics, location tracking software, and a weather-targeted marketing service. Groundtruth has released a Daily Foot Traffic Tracker has density of foot traffic at 29 different location types (ie. parks and beaches, medical centers, banks) in the U.S. that can be filtered by state and zipcode.

2.11 PlaceIQ

PlaceIQ sells visits data and analytics for marketing uses, and works with Google Marketing. It recently acquired Freckle IoT, a business specializing in location data and foot traffic measurement from Freckle, LTD. Every week PlaceIQ posts a "PlaceIQ Social Distance Tracker" report that contains foot traffic and visit counts for different types of places for a variety of levels of aggregation that varies depending on the week.

2.12 Skyhook Wireless

Skyhook sells location tracking software and visits analytics. They have a dashboard up that shows a mobility index by county. The mobility index is determined by movement across $100~\mathrm{m}~\mathrm{x}~100~\mathrm{m}$ tiles.

2.13 Inrix

Inrix's data is primarily focused on road traffic and parking locations, but they do also sell visits data and analytics. They have released one report on freight trends on the national, regional, and state levels.

2.14 Foursquare

Foursquare sells visits data and analytics, places, and location tracking software. They are releasing aggregated visit counts per day to different types of places including schools, spiritual centers and outdoors recreation, by state.

2.15 Tamoco

Tamoco sells visits data and analytics, places, and privacy management software.

2.16 Near

Near sells visits data and analytics. They have released one report on density, mobility across zipcodes, and visits by week for different type of places (ie. grocery stores, public transportation, places of worship) in 9 major cities across the globe.