

Considering the Nuances of Big Data and Tech in Transportation Planning



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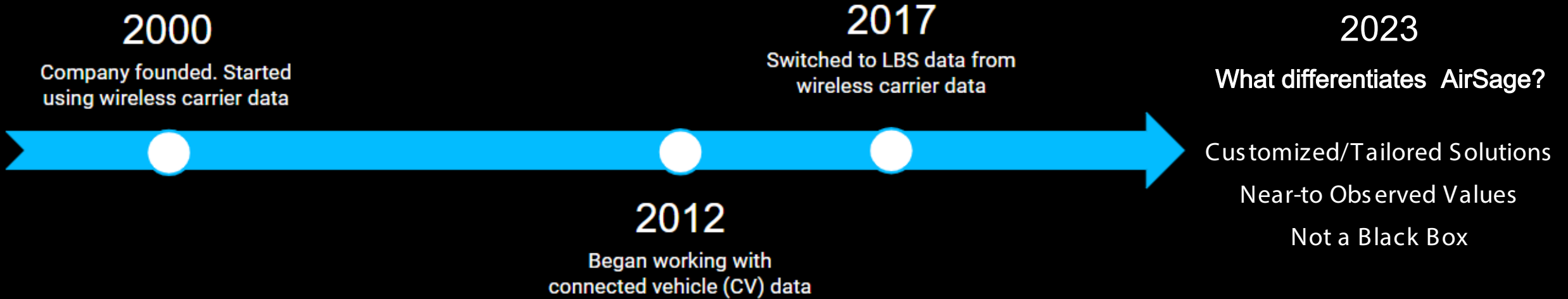


Agenda



- About AirSage
- The Big Data/Bakery Analogy
- Data Sources
- Questions & Considerations

AirSage - The Pioneer of Location Data



The Big Data/Bakery Analogy



Data Providers



Data Sources



Data Products

Data Sources

Data Sources Overview

AirSage's Focus

Vehicle Movement



Manual Counts



Temporary Tech-Enabled Counts



Detectors, Sensors, & Cameras



Connected Vehicle GPS Data

Manual/Active Collection



Automated/Passive Collection

Person Movement



Manual Survey



App-Based Survey



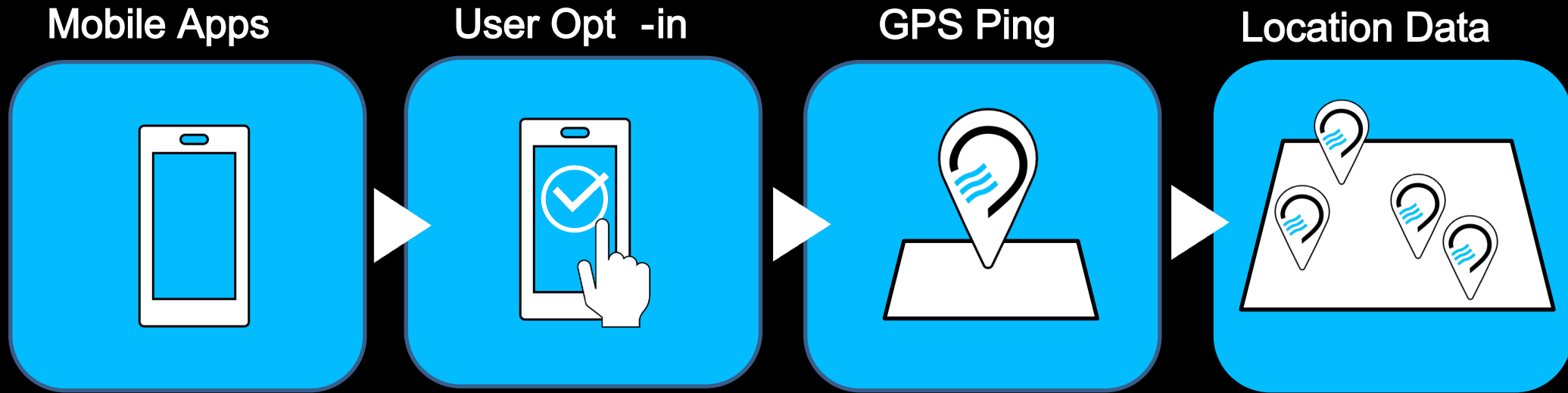
Detectors, Sensors, & Cameras



Mobile Device GPS Data



Data Sources - Mobile Devices



Data Sources – Mobile Devices



Mobile App Ping



5 – 15 M

Wireless Carrier Ping



1000 M

Data Sources - Connected Vehicles

- Sourced from Original Equipment Manufacturers (OEMs), Fleets, and Telematics Service Providers (TSPs)
- GPS coordinates and associated attributes of connected vehicle movement (speed, heading, timestamp)
- Anonymized vehicle IDs to protect personally identifiable information
- Reporting rate between 3 to 15 seconds
- Available in near real-time (NRT) with a latency of <60 seconds in most cases



Data Sources - Connected Vehicles

Raw Waypoint Attributes

- Vehicle ID
- Epoch time
- GPS coordinates (lat/lon)
- Heading
- Speed

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Data Sources - Summary

	Movement Captured	Location Accuracy	Sampling Rate	Full Trip O-D	Full Trip Trajectory	Persistent Identifier
Mobile Device (LBS)	People	High	Variable	Yes	No	Yes
Connected Vehicle (CV)	Vehicles	High	Very High	Yes	Yes	No



Questions & Considerations



Data Products - Questions & Considerations

Pre-Processing

- How is the sample vetted?
- How is the sample cleansed?

Processing

- How are home/work locations and by extension trip purpose determined?
- How is the sample expanded to represent the full population?
- What's your recipe?

Application

- Scope/define your study appropriately
- QA/QC the output - Does this make sense?
- Understand the right data product fit for your project

Why AirSage?

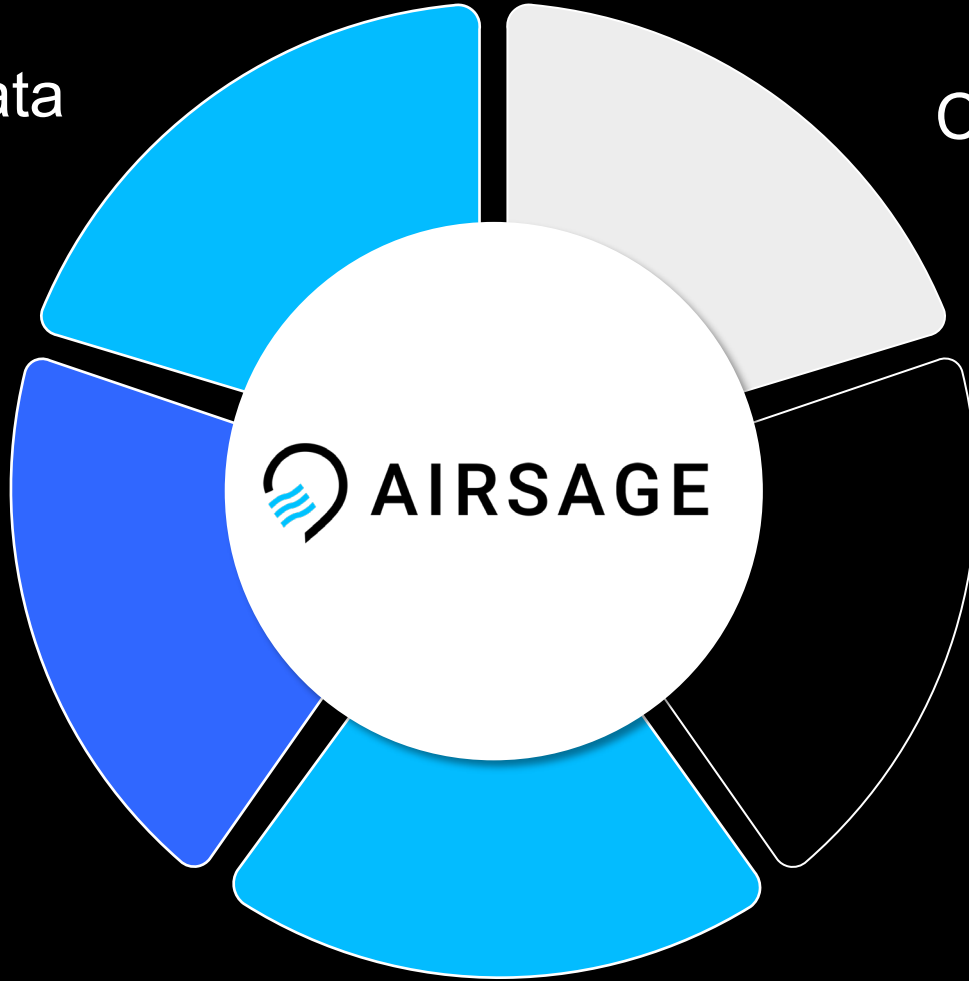
Highest Quality Data

Customized Output

Tailored Solutions

Privacy & Security

20 Years of Experience



**Turn to the most
powerful **Insights**
to Build a
Better **Future****



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Thank you!

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