Teralytics – Intelligence for Smarter Transportation

Real-time Mobility Data on a Massive Scale
Teralytics provides unprecedented insights into human journeys

**Who We Are**
We are a technology company that unlocks extraordinary insights on human behavior.

**What We Do**
We analyze billions of signals from the most accurate indicator of people’s movement – their cellphones.

**How We Help**
Through helping you understand how people travel, we can build better, smarter cities together.
How can Teralytics help City & Transport Planners?

**Plan**

**Estimate & Forecast Mobility Demand**

Surveys are quickly outdated, biased and costly. Short term changes in behavior are impossible to capture with surveys.

**Plan**

**Improve Resilience of Transport Network**

Changes to the transport network need to be made without impacting the ease of access for lower income and minority groups. Measuring this is difficult and costly.

**Market Intelligence**

**Compete Effectively with New Mobility Services**

Ridesharing companies are disrupting how mobility is being consumed. Competitive dynamics with these services need to be understood in order to compete effectively.
Teralytics Mobility Analytics Platform

Capturing Mobile Network Data within Telco Data Center

Advanced Mobility Analytics Optimized for Telco Data

Deep Insights into Human Mobility

Product Suites

Planning
“Where to invest in infrastructure?”

Operations
“How to improve routes, schedules and repairs?”

Market Intelligence
“How do we compete effectively with new mobility services?”

Deep Insights into Human Mobility

Trip Volume

Mode of Transport

Travel Time

Demographics

Trip

Routes

Historic

Real-Time

Predictive

Tourism Planning

Public Transport

Schools

Component Services

Historic Real-Time Predictive
What Other Location Data Providers See

What others see

- Somewhere in NY at 7AM
- Somewhere in Miami at 2PM

What Teralytics sees

- Leaves home in Brooklyn at 6:30AM
- Drives to JFK
- Lands in Miami at 11AM (second time visiting this year)
- Takes off at 8:45AM
- Lands in Miami at 11AM (second time visiting this year)
- Arrives at JFK 7:20AM (third time at this airport this year)
- Picks up Hertz rental at 11:20AM
- Checks into hotel at 12:30PM
- Has lunch in downtown Miami at 1:30PM
- Sees Beyonce at the concert hall at 8PM

+ Only when app is in use
+ Small, biased sample
+ Limited to a few apps
+ Unclear data governance

+ Large, representative sample
+ Across all Mode of Transport
+ All anonymous, no PII
+ 150 Location Points / Day
Teralytics Solutions for City & Transport Planners

- **Mobility Demand Planning**: Precise mobility demand (OD) data with travel times, commercial vs non-commercial traffic and income levels.
- **Impact Assessment**: Insights into ride sharing services for effective regulation.
- **Shared Mobility Intelligence**: Insights into ride sharing services for effective regulation.

**Estimate & Forecast Mobility Demand**

**Improve Resilience of Network**

**Compete with New Mobility Services**
Save Money on Travel Demand Surveys and Receive Higher Quality Data

Mobility Demand Planning
Prioritize Infrastructure Investments

Insights into mobility behavior across the city and country. Optimize long term planning. Understand impact of changes to different demographics.

Routes
Mode of Transport
Income Levels & Demographics
Commercial vs. Non-Commercial
Identify routes along which many people have same commuting times and destinations. Qualify with additional attributes such as multimodal transport usage.

- Which areas do groups of people commute every day?
- Optimize Route Placement Based on Demand
- Quality further by Multi-Modal Trips / First-/last Mile
- Understand major locations such as airports
Improve Resilience of Transport Network

Impact Assessment

Insights into mobility behavior across the city and country during crises, e.g. during natural catastrophes. Inform improved resiliency plans.

Understand impact of disruptions
Identify weak links in your network
Inform improvements in response plans
Measure policy effectiveness
Manage Changes Brought by New Mobility Services

Market Intelligence

Shared Mobility Intelligence

Insights into impact of new mobility services to your own mobility offering. Inform effective strategies how to regulate or compete with these new services.

TNC vs Subway vs Others Modes

Income Levels & Demographics

Understand Relative Market Share
Teralytics Key Differentiators – Best in Class Data

**Large Population Sample**

Access to 25% of the population, allowing to measure absolute mobility volumes, not just relative changes.

**Frequent Population Sample**

150 data points per person per day allows to understand a persons journey end-to-end without gaps.

**Always-on Population Sample**

Data collected passively in the background. Independent whether person is using a phone or not.

**Unbiased Population Sample**

All major mobile phone carriers have sufficient market share among all demographic, ethnic, income and age groups, allowing to make decisions benefiting mobility needs of all.

**Stable Population Sample**

People rarely change phone contracts, resulting in a stable sample that stays comparable over time. Also allows to capture changes in individual behavior over time.
Teralytics Key Differentiators

**Extrapolation to full Population**
Understand movement of not just a subset of population but the total population, thanks to statistically reliable extrapolation based on a large population sample.

**Mode of Transport Detection and Routes**
Understand the **mode of transport and route** of each trip to help identify improvement potential across the transport network.

**Overlay of Web/App Data**
Understand the impact of **ride sharing and mobility services** across the city, state and entire country.

**Real-time Processing & Insights**
Data updated **every 24 hours**, covering every day in the year.

**Clear Data Privacy Governance**
All analysis has been approved by telecom carrier data privacy teams. All data analysis happens behind telecom carriers firewalls. Only aggregated, anonymous data leaves data center.
Thank You – Questions