The Value of Mobility Data

January 2019
Changing Cities…

• Cities are the economic engines of the global economy
  • ~60% of the global population lives in urban areas, up from 34% in 1960 (and continues to grow)
  • By 2025, there will be at least 40 megacities
• Mobility infrastructure has not kept pace with the demand
• Aggressive growth in vehicle & cellular technologies has unlocked and ushered in new forms of mobility
• Decision makers in cities are drowning in data
  • Connected cars expected to deliver 25GB/hour/car data to the cloud
  • Looking for a needle in a haystack; finding the signal in the noise

21st Century Cities = Rising Population + Constrained Infrastructure + Emerging Technologies
The Power of Data

Data delivers safer, healthier, and livable cities
Data-driven Decisions Enable Smarter Movement Of People And Goods

- Over $300B in congestion cost
- 1 out of 8 deaths due to Pollution
- Over 60M US ride-sharing users in 2018
- 8M AVs expected by 2025
The Power of Data

Cities Cannot Manage What They Can’t Measure
A Platform That Connects Other FSM Products Together Through Data
Our Approach to Smart Cities

Parking: Understand the impact of the changing mobility landscape and identify new sources of revenue

Commute: Analyze travel behavior and identify ways to effect mode shifts

Transit: Forecast the impact of investment decisions on quality of life, economic growth and healthcare costs

Livability: Quantify the impact of introducing new transit modes on revenue, ridership and access etc

Traffic: Predict the impact of construction, events, weather on congestion patterns and safety incidents

Health: Assess community health indicators and patterns of changes

Environment: Quantify levels of pollution of all types

Descriptive
Analyze historical trends to provide insights into the past and present

Predictive
Combine historical data with statistical models and algorithms to understand the future

Prescriptive
Get recommendations on one or more courses of actions based on machine learning

Decision-enabling platform providing data analytics and visualizations for urban planning
Why Partner with Ford?

- **Trusted Partner**
  - 100+ years in business

- **Advanced Data Science & Analytics Capabilities**
  - 900+ Data Science Specialists

- **Robust Vehicle Data and Computational Infrastructure**
  - 700K+ Connected Vehicles

- **Enhanced Data Privacy**
  - Comply with global data privacy standards

- **Comprehensive Mobility Solutions Portfolio**

FORD SMART MOBILITY
Thank you
Appendix
Commuter Trends & Parking Utilization Analysis

Commuter Trends Analysis
• Visualization of origin-destination data
• Analyze labor-shed of a region
• Starting point of peak time traffic pattern analysis
• Identify areas that will benefit from transit options

Vulnerable Populations & Transit
• Transit routes layered on top of demographics
• Understand how the current transit system service areas serve commuters by income level, age groups and vulnerability

Parking Revenue & Weather
• Parking revenue data layered with weather
• Understand how weather impacts parking utilization and revenue
• Identify gaps and make informed investment decisions
Transit Gap Analysis

- Transit routes layered on top of employment and population centers
- Analyze ridership trends by route
- Improve connectivity of all modes of travel

Safety
- Analyze safety and accessibility of transit stops
- Understand how ridership relates to lighting, ADA Accessibility and incident rates at a stop
Livability Tool

- Measure accessibility to services within your city using different modes of transit
- Compare accessibility to key services within the city

Vulnerable Populations & Livability

- Overlay vulnerability categories on a livability heat map to understand how livable the city is for vulnerable populations