

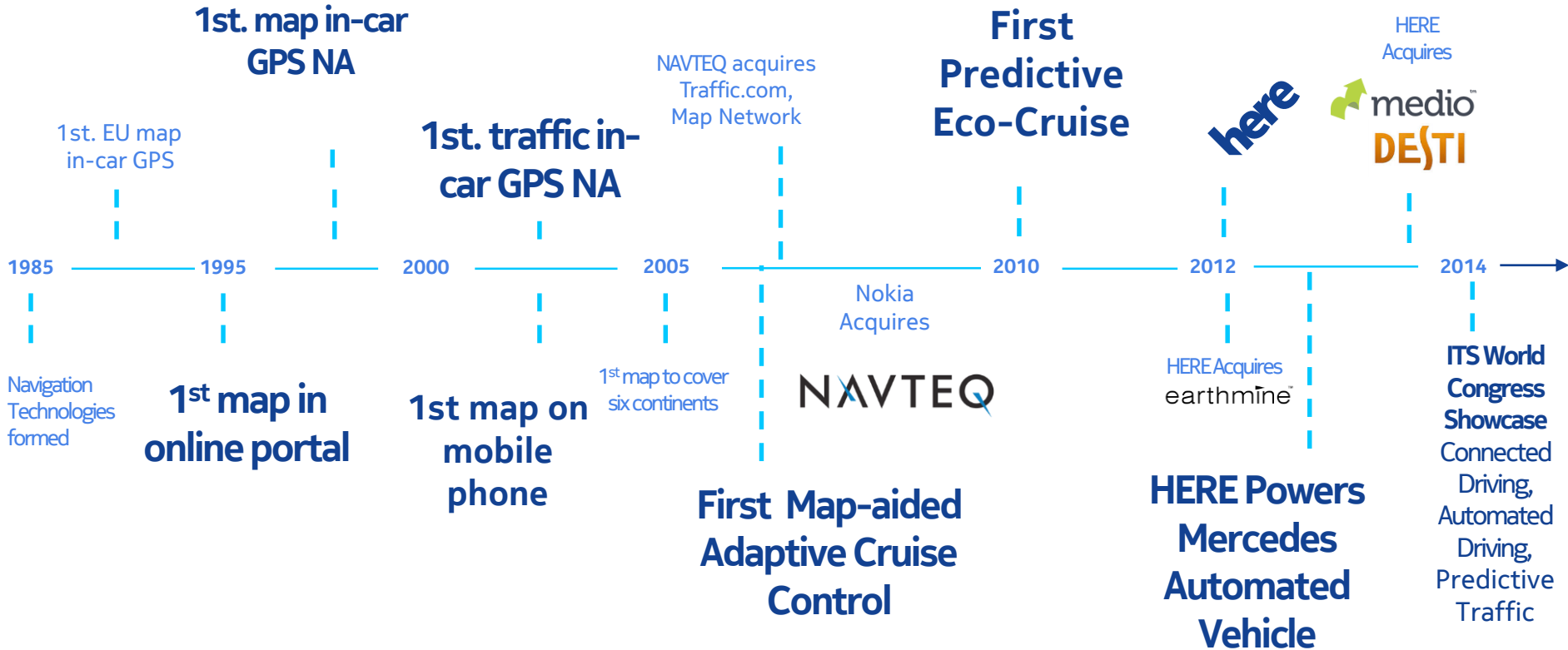
HERE Traffic

Innovations in Big Data Applications and Analytics

Mara Campbell
HERE Traffic and Connected Driving

The word "here" is written in a large, white, lowercase, sans-serif font, tilted diagonally from the bottom-left towards the top-right. It is positioned on the right side of the slide, overlapping the main title area.

HERE's innovation leadership spans three decades



Strong DOT, Fleet, Enterprise & Mobile Consumer Base

Government Transportation Agencies



Fleet Safety, Navigation and Telematics



Enterprise



Mobile/Consumer



Data, data, data

Where does it all come from?

HERE collects real-time probes from a variety of sources

- Connected Cars
- Mobile Devices
- Portable Navigation
- Commercial Fleet
- Sensors

HERE Processed
>650 billion probe points
in real time in 2014



Exponential growth continues

Big Data turned into Useful Information: HERE Traffic



HERE Real Time Traffic

Continuous Dynamic Traffic Information, providing up to the minute data for 44 countries

- Real-time speeds and travel times
- Real-time incidents (accidents, construction)



HERE Advanced Analytics

Traffic Analytics

- A rich dataset of daily historical traffic speed and statistical information
- Sliced and diced on demand

NPMRDS

- Un-modeled research data set

Traffic Patterns

- Typical speeds & travel times by day/time based on historical data



HERE Predictive Traffic

Modeled real-time traffic forecasts for future time slots to help drivers, fleets, and road network operators make better decisions.

- Forecasted speeds and travel times
- 12 hours into the future

Traffic Analytics



- A rich dataset of daily historical traffic speed and statistical information
- Sliced and diced on demand by user preferences
- Includes analytical details

1 Tell your story using a data driven approach

2 Show and prioritize where investment is needed

3 Quantify and measure network performance

Use Case: Before and after analysis

Daily Telegraph
SYDNEY 18C-25C

Weekend clearways along notorious blackspot on Victoria Rd

JIM O'ROURKE TRANSPORT REPORTER THE DAILY TELEGRAPH MARCH 24, 2014 2:35PM

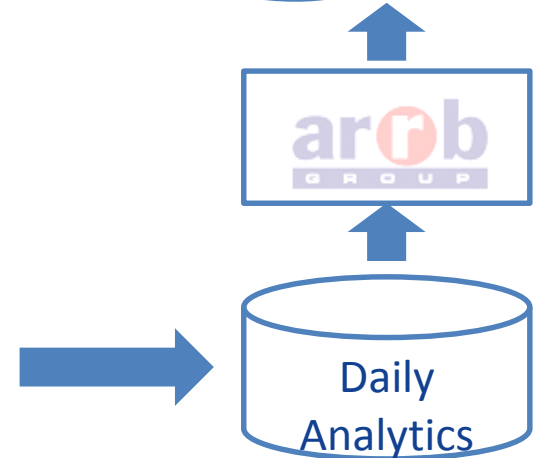


Weekend congestion along the Victoria Road shrank from 7 hours per day to ?? minutes...

Choose exact days of the baseline and treatment periods

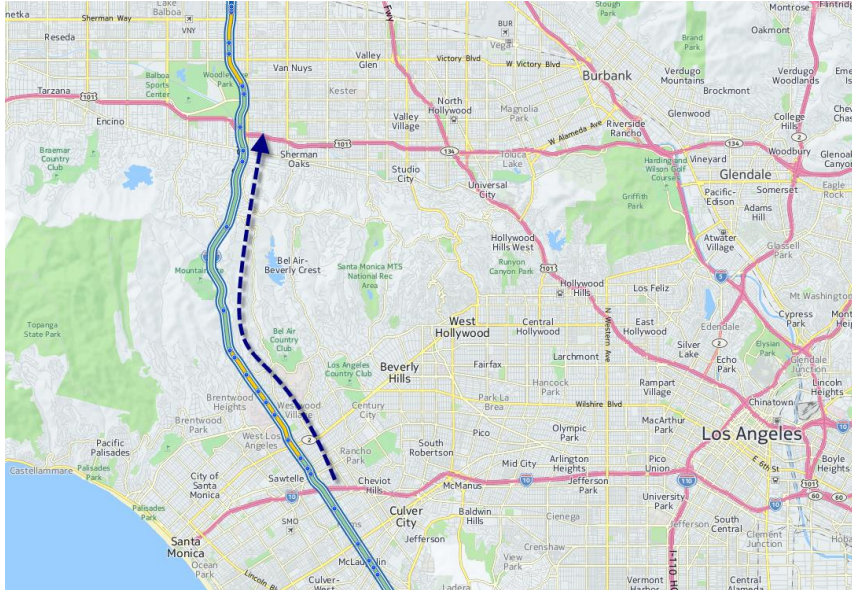
Choose time of day for analysis

Compare weekends to weekdays

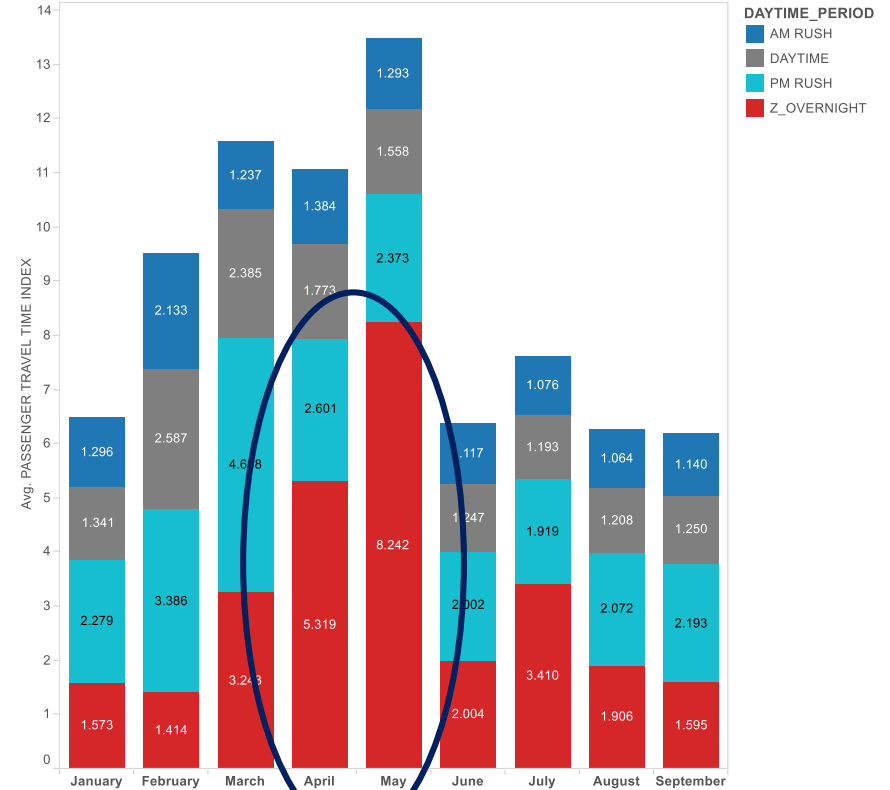


Traffic Analytics

Assess work zone impacts



TRAVEL TIME INDEX - BY PERIOD



Traffic Analytics: Benefits over existing options

More Data: All Roads. More Probes.

Consistency over Time

Granularity: Smallest road segments.

Flexibility: Data constructed by user preferences.

Usability: Manageable and customizable data sets.

Predictive Traffic



Real-Time Predictive Traffic

Smarter, safer and more enjoyable trips using traffic forecasts to help drivers, fleets, and road network operators make better decisions.

- Anticipate speed and travel times
- Plan better routes and arrival times

1

Improves planning and alerting capabilities

2

Anticipate the best routes and reduce the number of re-routes during a journey

3

Improves arrival time estimates for longer routes

Planning and Alerting

Manage expectations

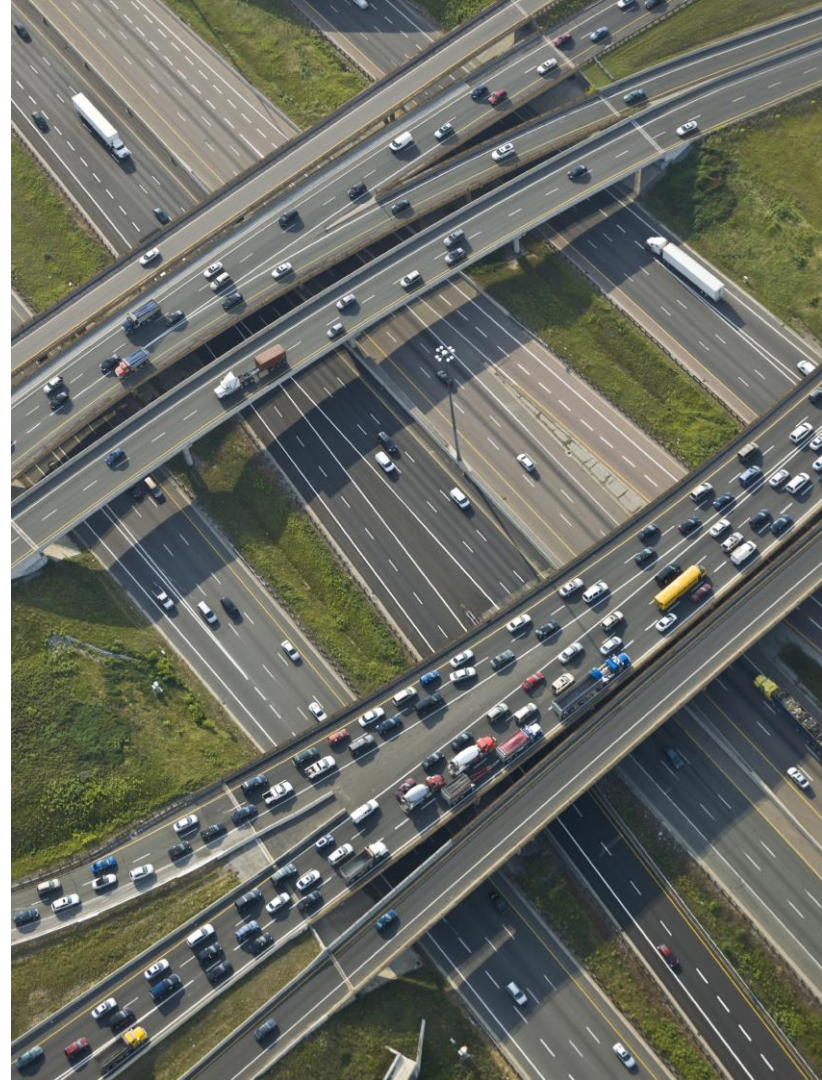
Transportation Agency.
Alert travelers so they know
what to expect and have
alternate choices.



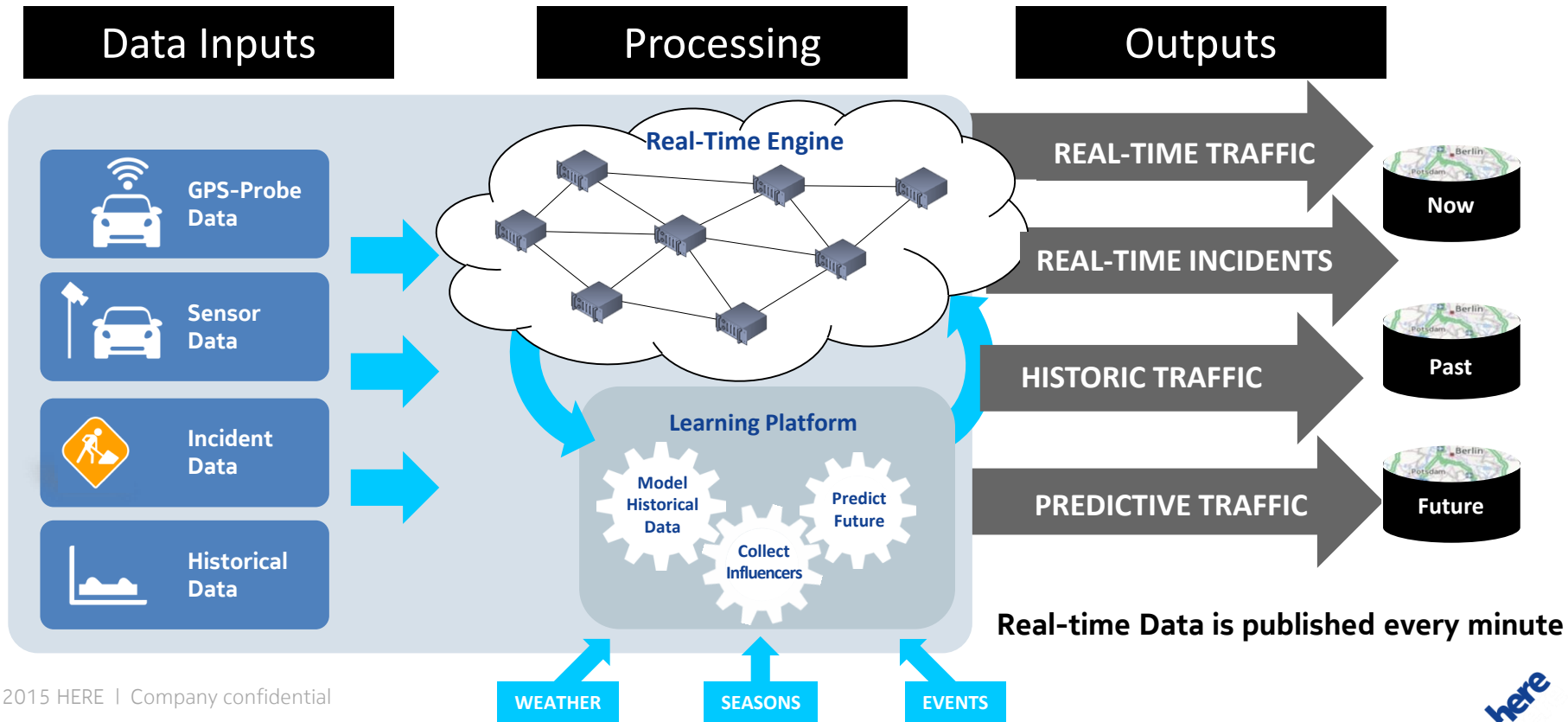
Planning and Alerting Complex journeys

Fleet routing.

Optimize route planning and timing for multi-stop journeys. Know when the truck will arrive.



Real-Time Data Processing Engine



Data enables powerful solutions for transportation management

Automotive and Mobile Navigation

Traveler Information Applications

Performance & Operations Management

Enterprise and Fleet Optimization





here

Thank you!