



PTV GROUP

the mind of movement

SUSTAINABLE MOBILITY IN THE AGE OF BIG DATA

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2nd INTERNATIONAL TRANSPORT FORUM
STATISTICAL MEETING

PARIS, APRIL 2015

THE PROJECT

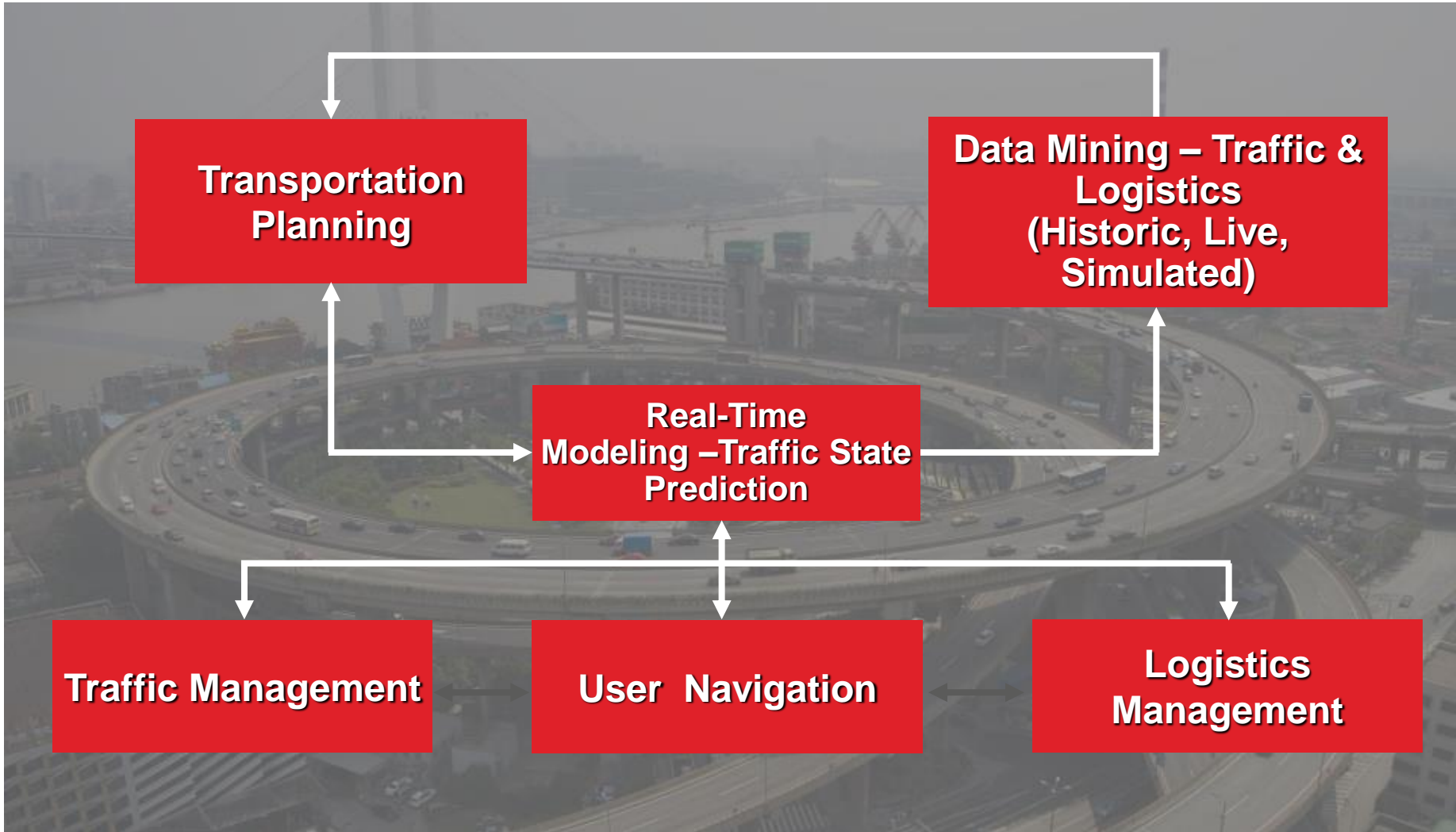


<http://internationaltransportforum.org/cpb/projects/mobility-data.html>

BIG DATA AND TRANSPORT PLANNING AND OPERATIONS

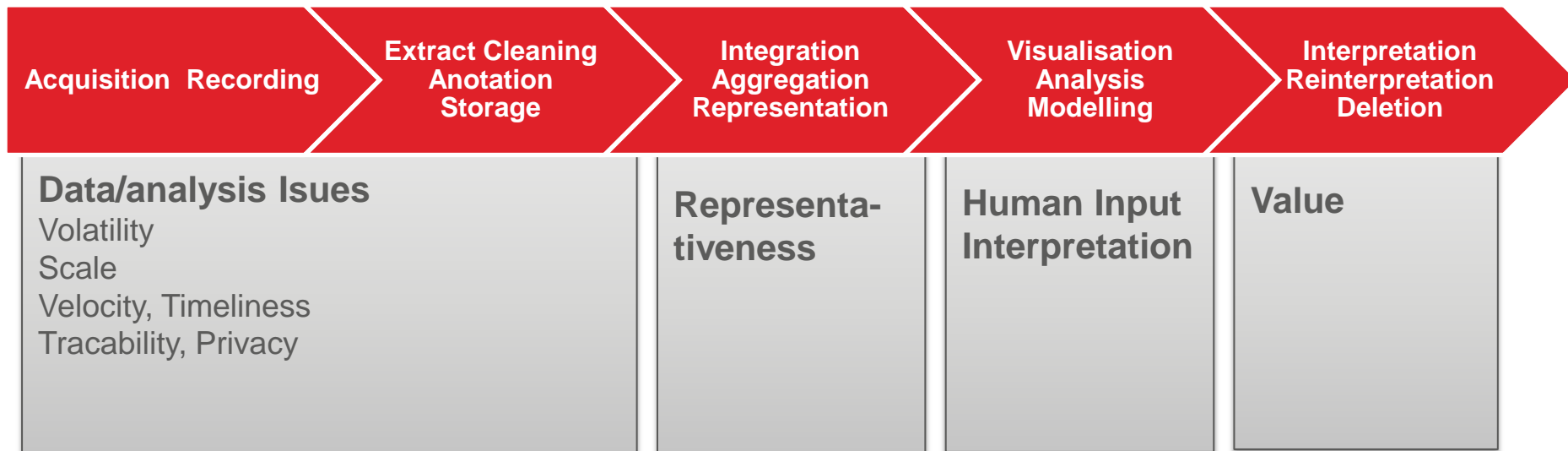
Traffic operations, transport planning and safety are areas where authorities must critically evaluate where and how new, or newly available data and data-related insights, can improve policy and day to day operations.





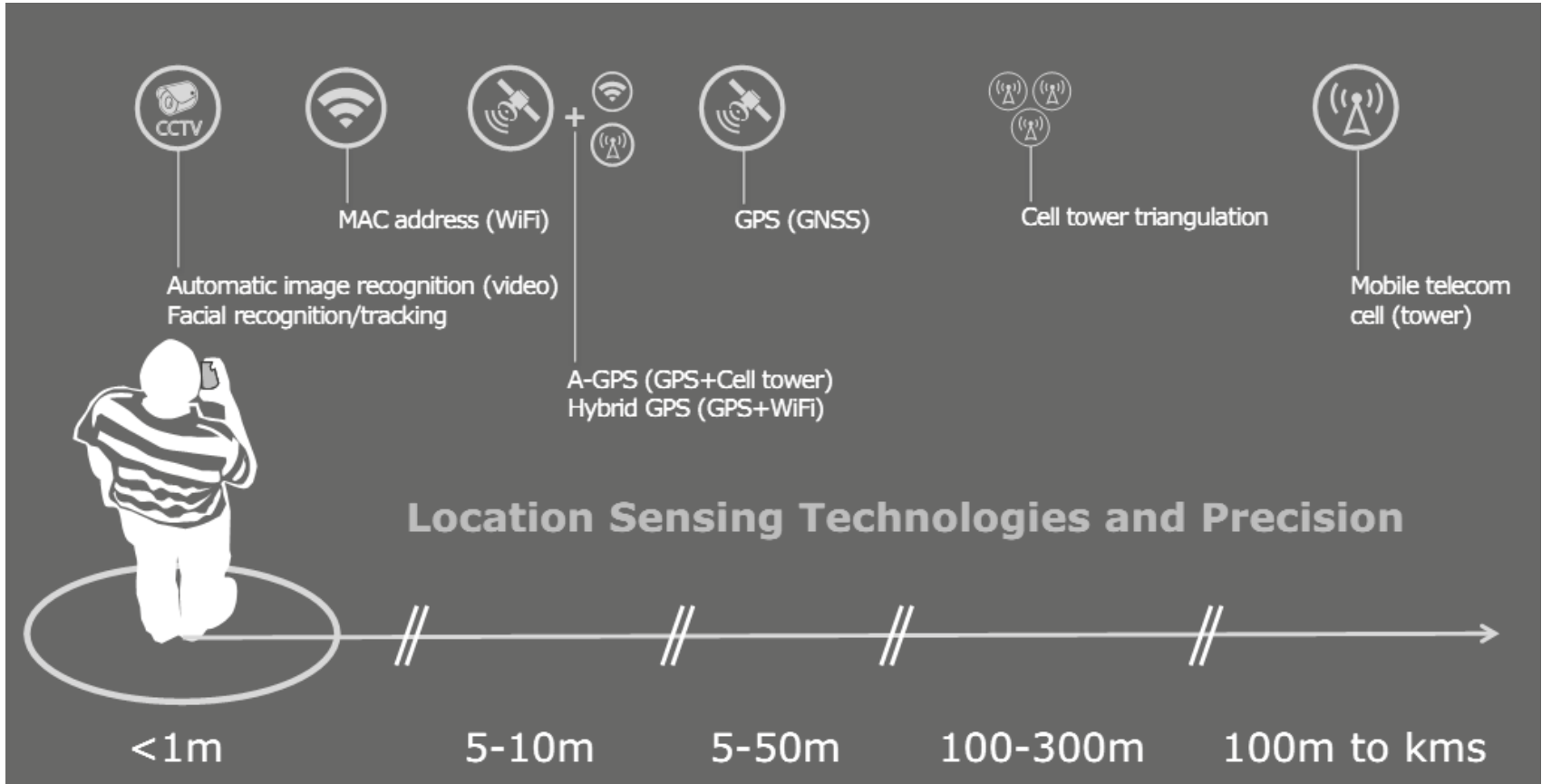
THE DATA PROCESS

Extracting insight from big data is not trivial. The big data pipeline spans from the collection of data, its preparation for storage and analysis, its integration with other sources, modelling, visualisation and analysis to its interpretation, archiving or deletion



Big data has not done away with the need for statistical rigor since big data is not only prone to many of the same errors and biases in smaller datasets, it also creates new ones

DATA FUSION ... NEW INSIGHTS, NEW OPPORTUNITIES AND NEW THREATS

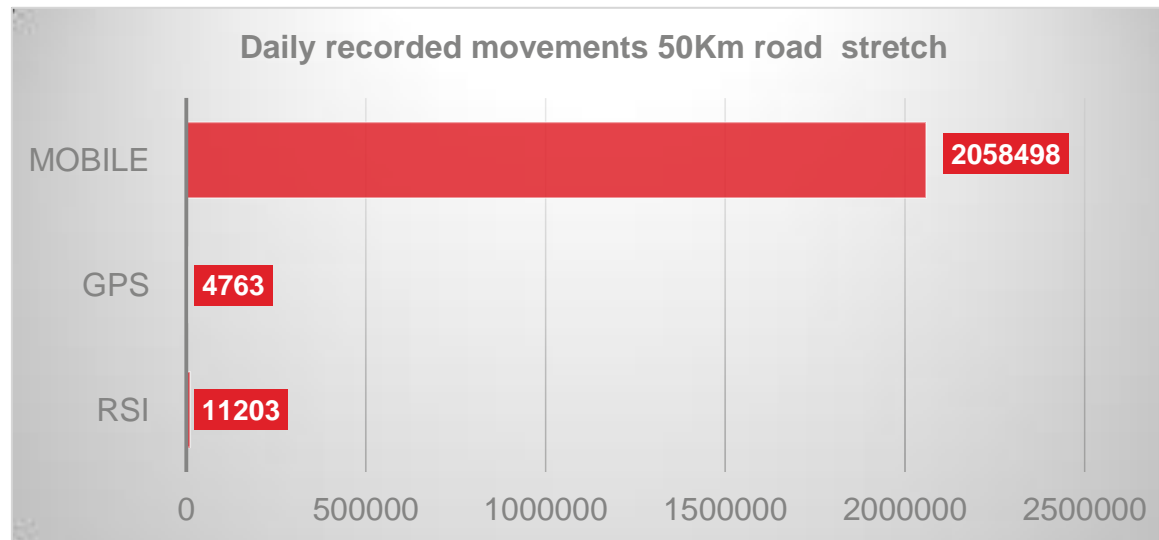




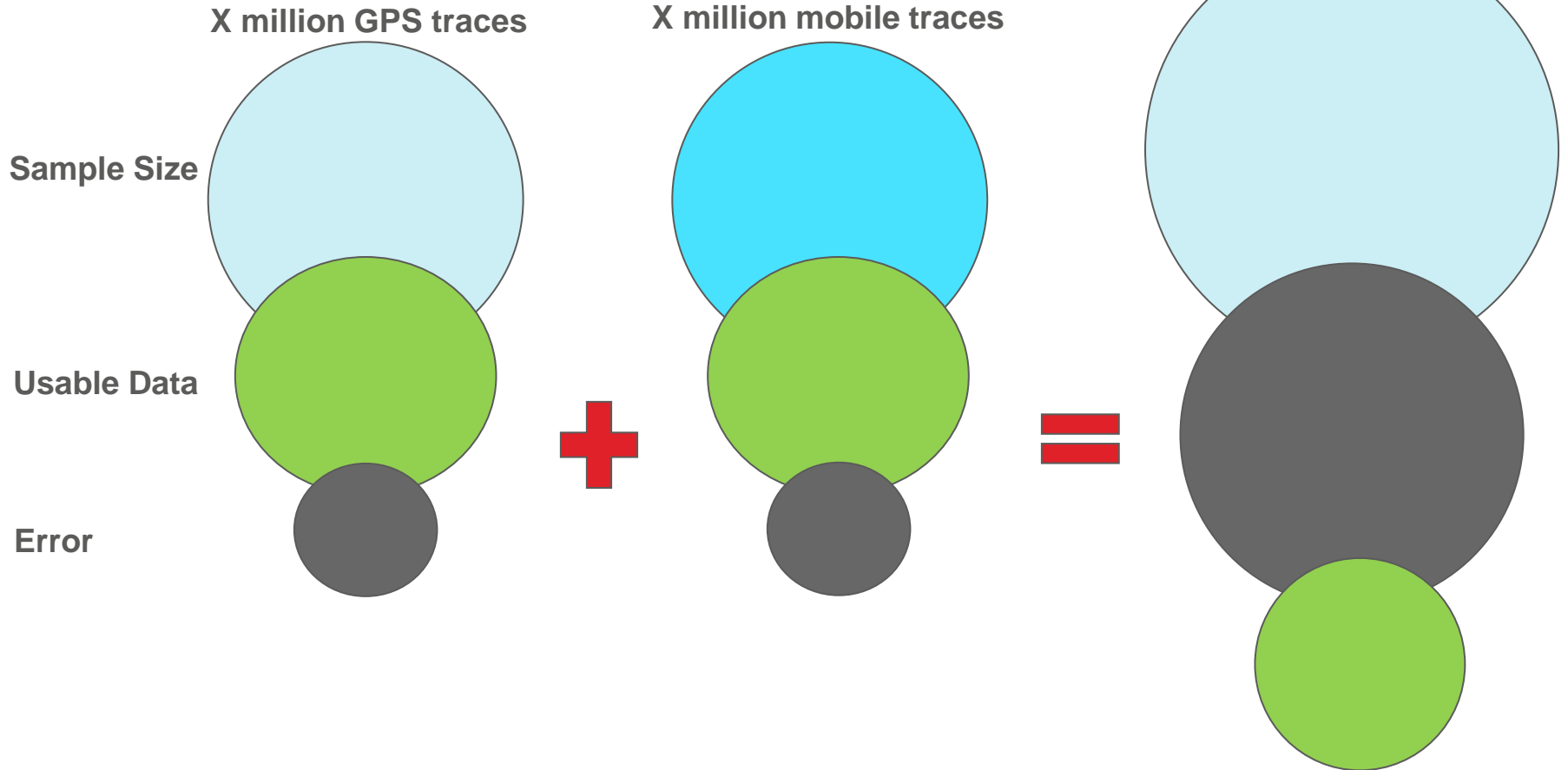
SO WHY DO WE NEED BIG DATA

Minutes from a project evaluation meeting :

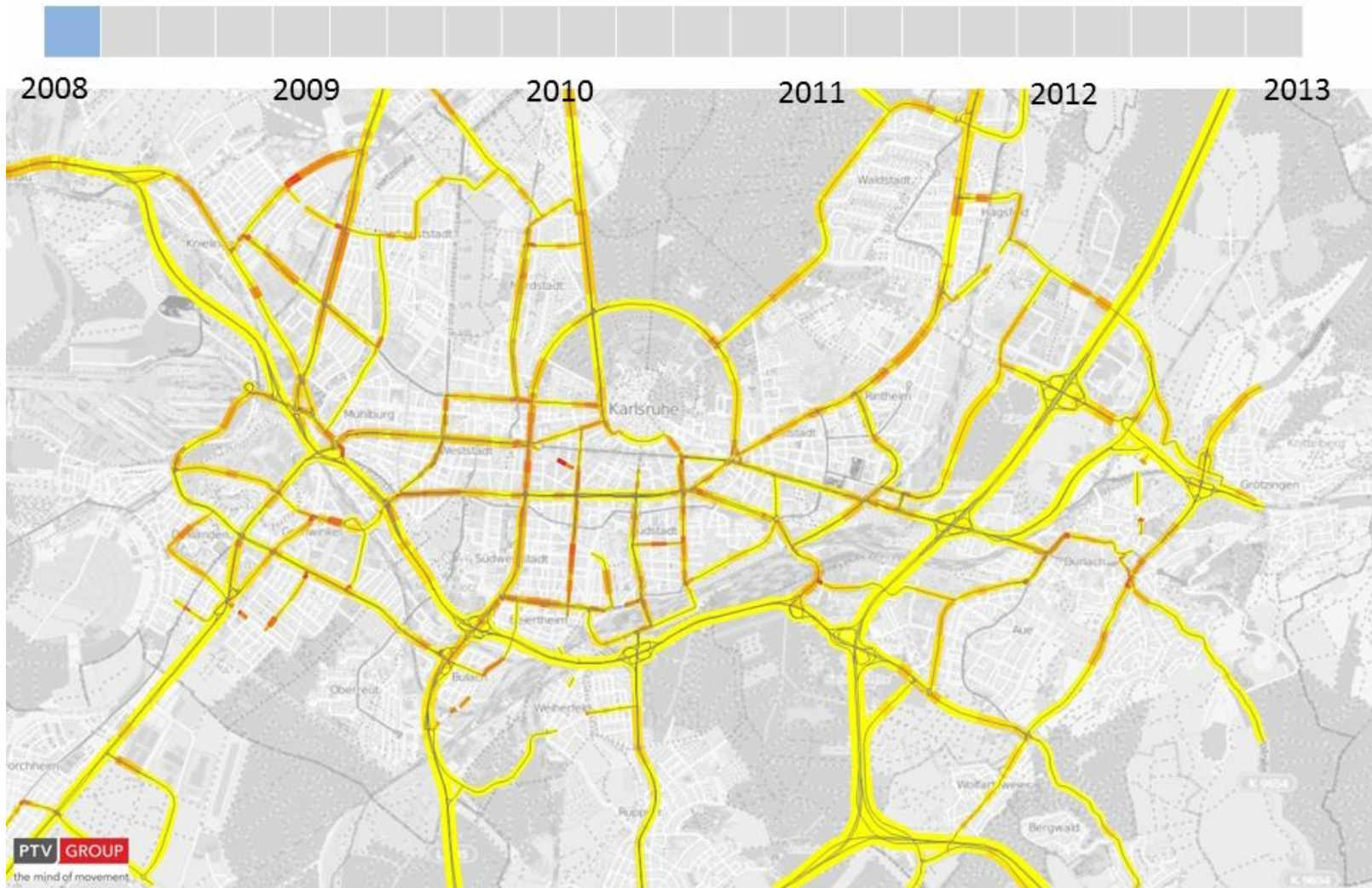
“There are 25,968 observed person movements from the RSI data (12 hour survey). The model has 66,209,592 PA movements (24 hour). A simple calculation shows that 0.04% of the movements in the demand model are observed and 99.96% are synthesised.”



THE BIG DATA ISSUES



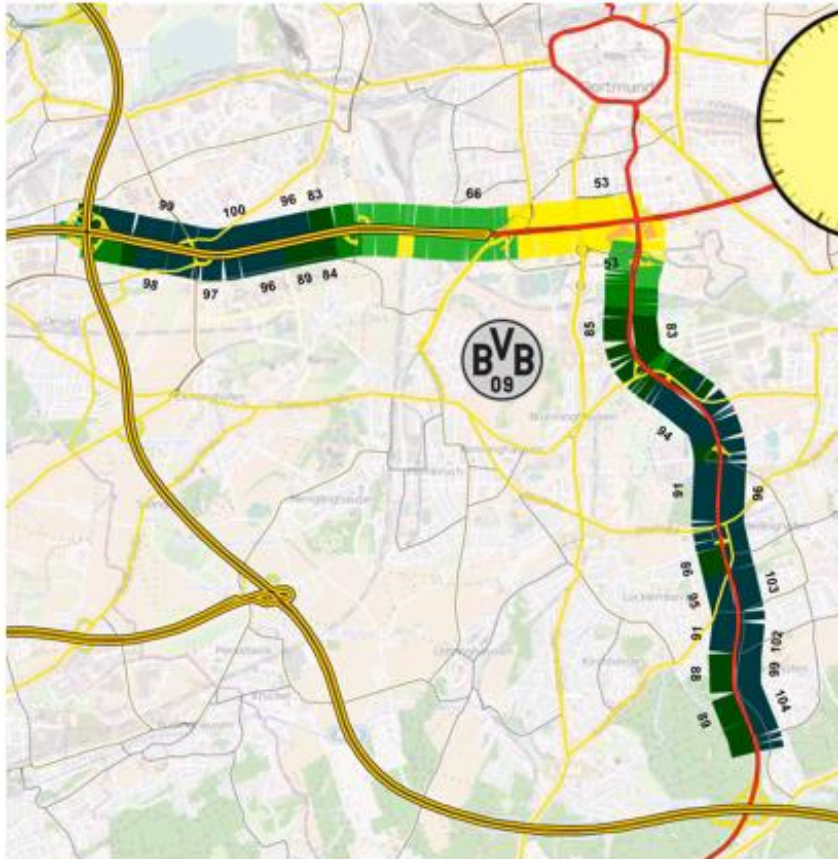
BIG DATA IN TRANSPORT PLANNING



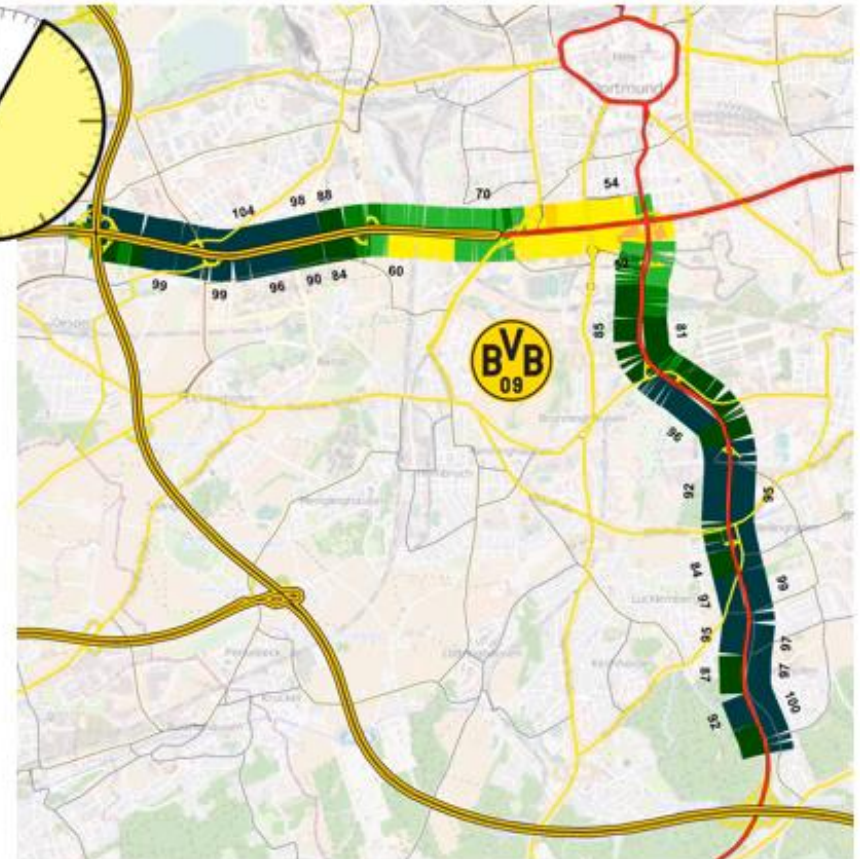
EFFECT OF BORUSSIA DORTMUND HOME MATCHES

MADE WITH VISUM DATA ANALYTICS

POWERED BY

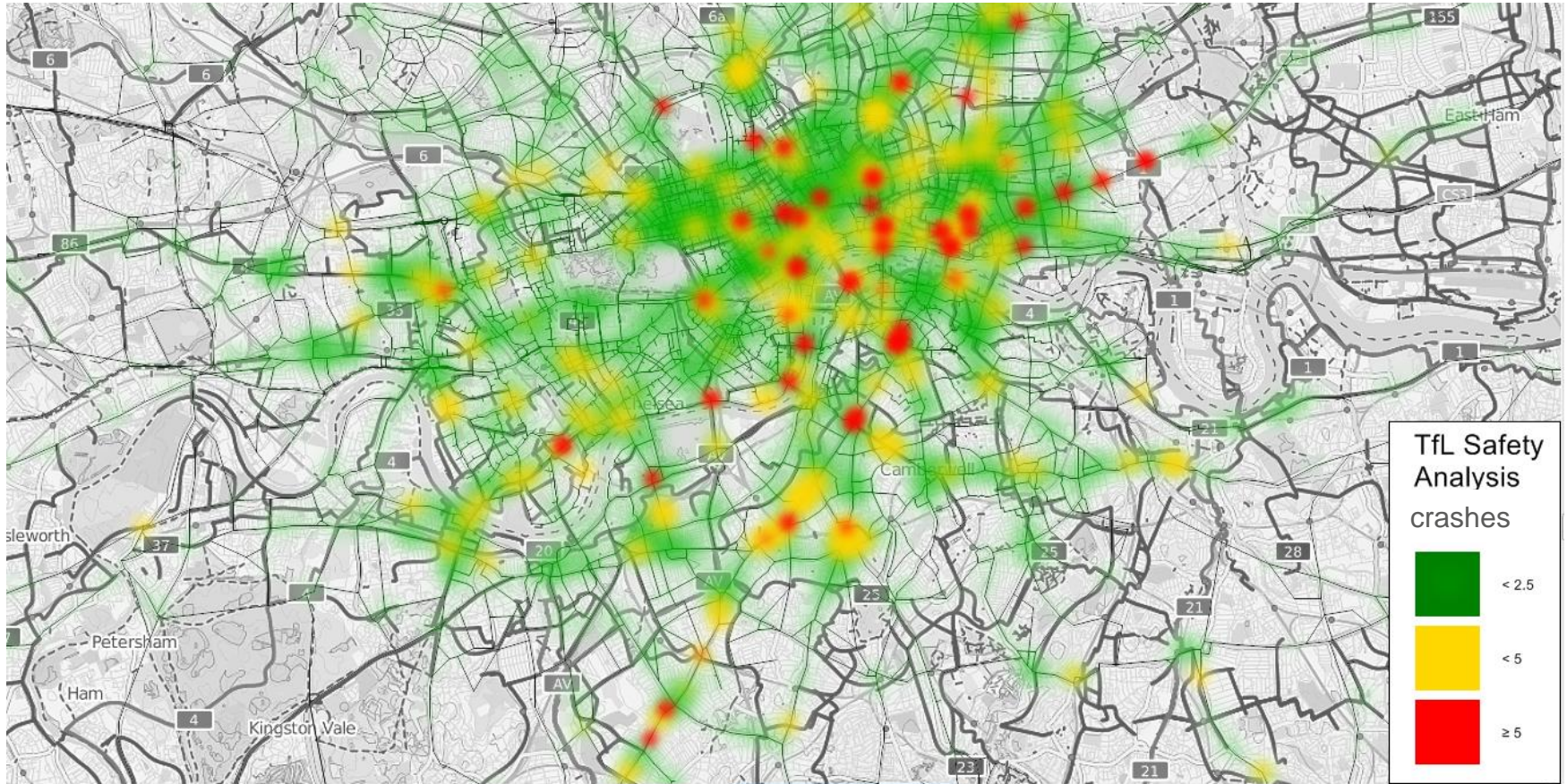


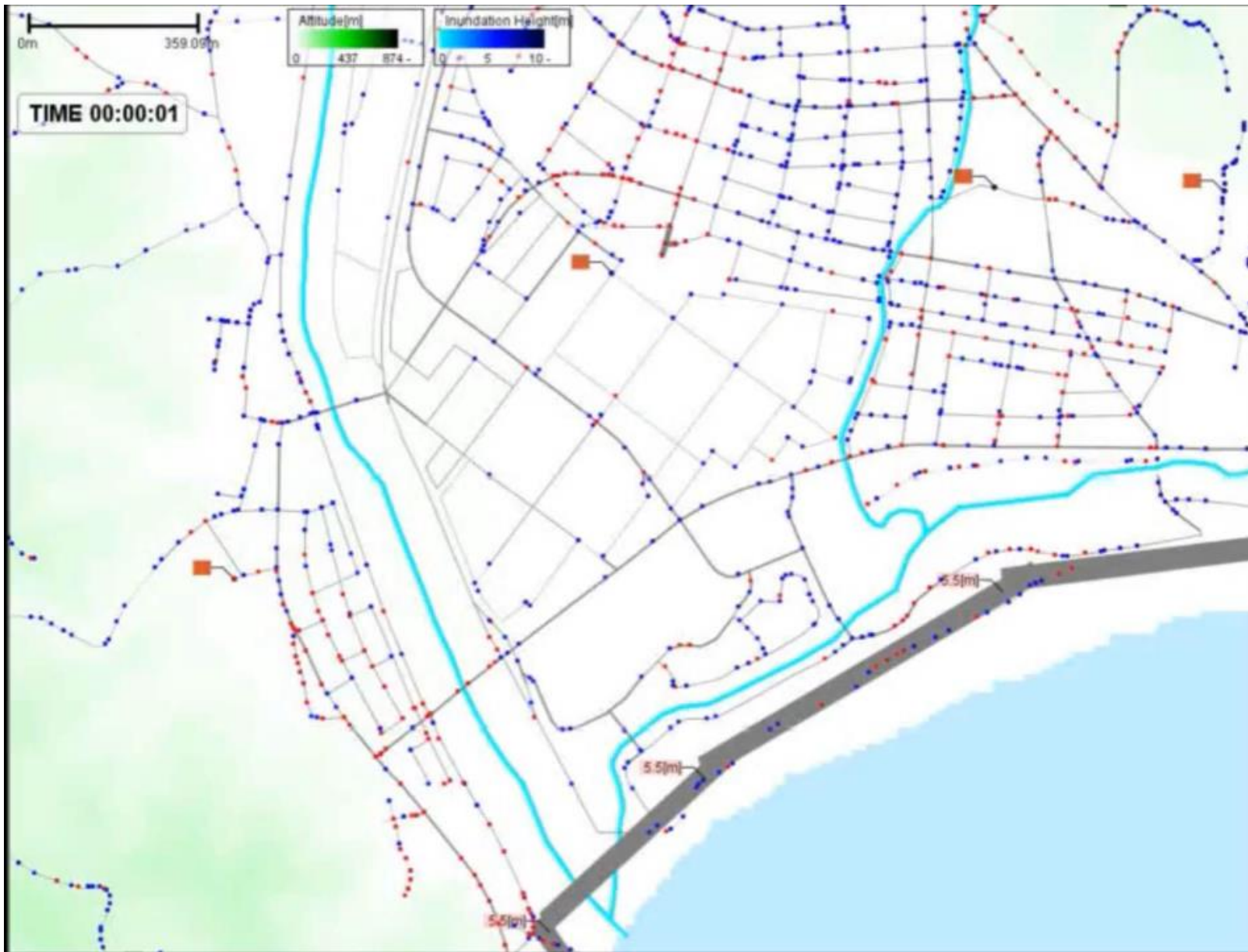
Saturdays without Home Match



Saturdays with Home Match

BIG DATA SAFETY AND TRANSPORT PLANNING







**WE PLAN
AND OPTIMISE
EVERYTHING
THAT MOVES PEOPLE
AND GOODS
WORLDWIDE.**



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