

INPROVEMENT OF ROAD SAFETY USING GEOSPATIAL OPEN DATA AND COLLABORATIVE USERS INFORMATION



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PROBLEM Why GPS warn about of sanctioning elements, but not about the most vulnerable road users such as cyclists or pedestrians?

SOLVE This project solve the problem of warning to drivers in advance to take precautions when they are approaching a road risk. This notice cannot be sent too close or too far and it is made by icons, text and audio.

GOAL The main goal is to use geospatial information in a collaborative way to improve road safety taken relevant information from vehicles, cyclists andpedestrians.

OPEN DATA USED

Cartographic Open Data from IDEE
(Spatia Data Infrastructure of Spain)
INSPIRE CE Directive – ANEXE I
AEMET, EUMETSAT weather data
DGT data portal

HOW DOES IT WORK?

Apps from cyclists and pedestrians and connected car sent data to the central system. There, it computes the risk level taking into account all traffic environment, weather and user data. The system returns notification with information about distance and type of risk.

RESULTS

As a result of the risk stimations for every vehicle, the system has produced 50.000 notifications. More than 24000 users registered, they are individuals and companies.

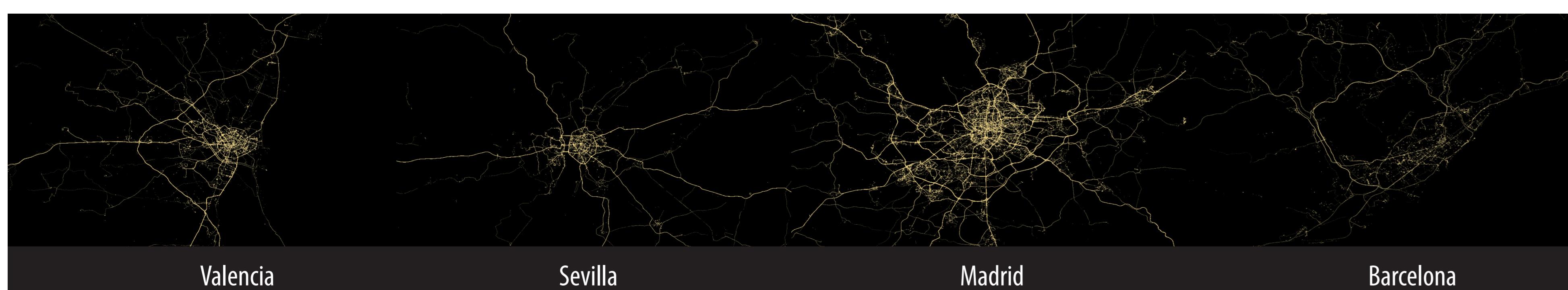
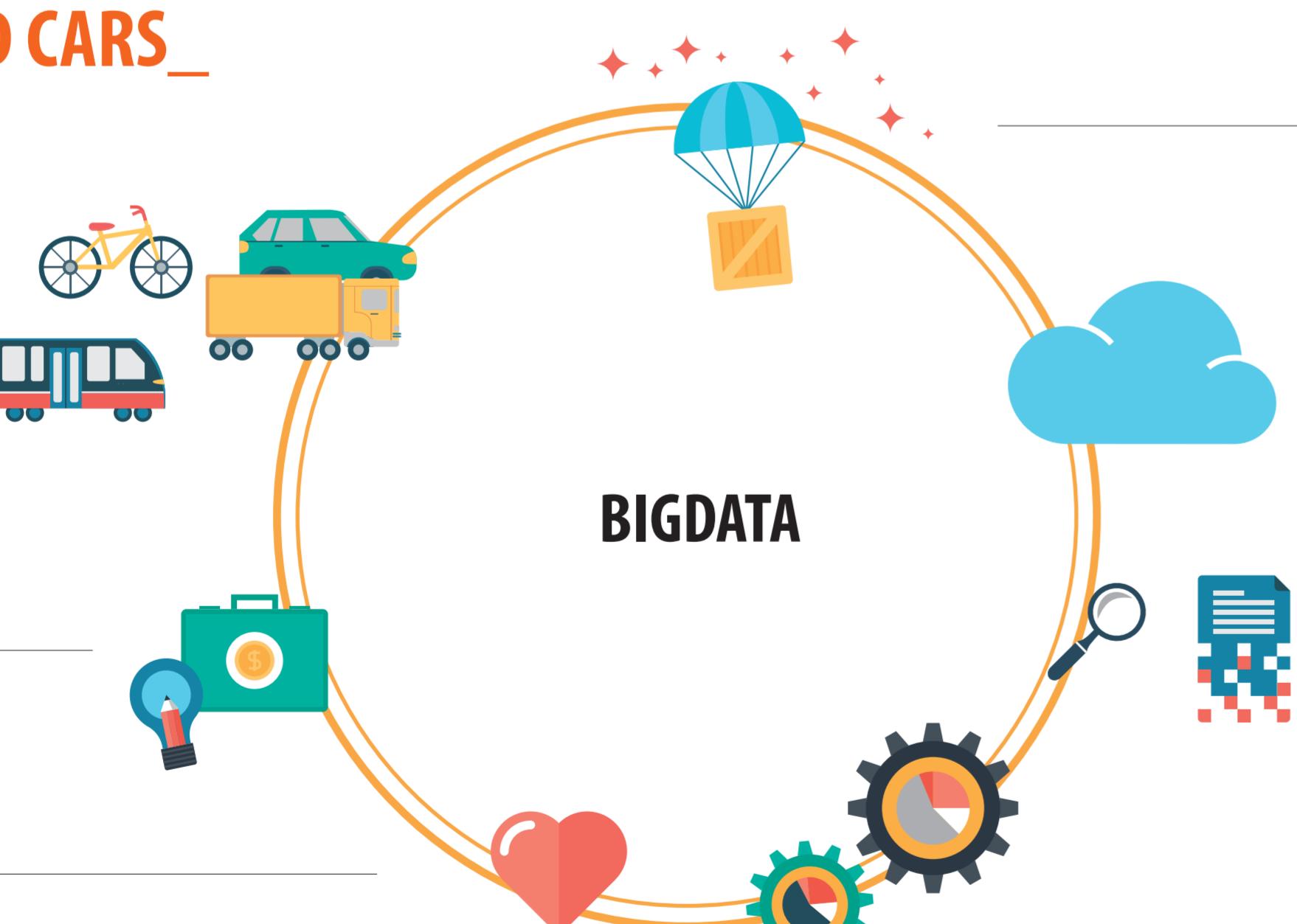
THE FUTURE OF CONNECTED CARS

HARVESTING THE DATA

Phii and Comobity by INSPIDE

TURNING SERVICES INTO BUSINESS

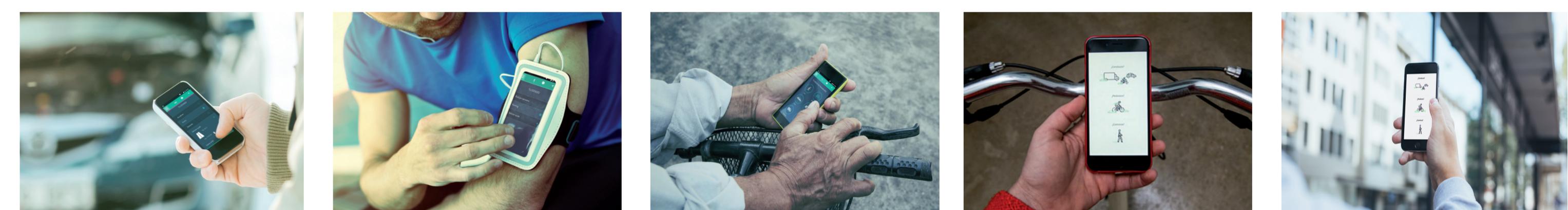
TRANSFORMING INFORMATION INTO DESIRABLES SERVICES



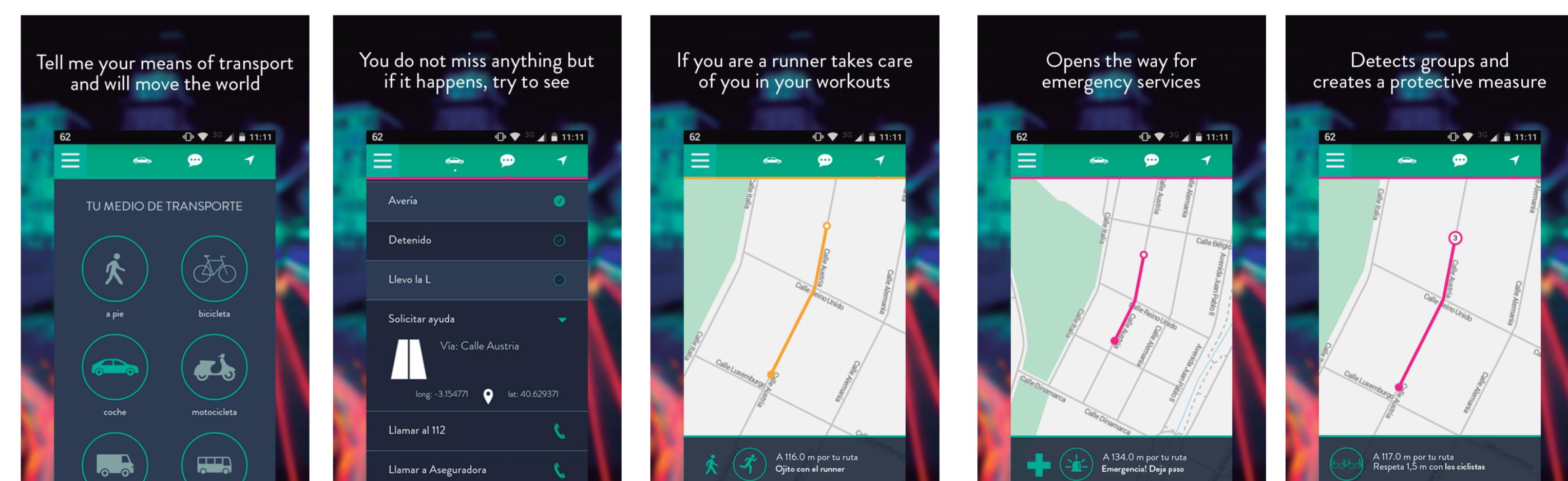
Different kinds of events, users and notifications using Phii and Comobity



Screens notification of events related to road safety in Comobity.



Target users using our Apps in situations where you need road safety.



Screens notification of events related to road safety in Phii.

ALGORITHM CLOUD

High availability # Calculation groups (pedestrians and cyclists) # when users are less than a threshold distance # Secured access # Avoid false positives incidence (speed> 0 km / h) # Avoid false transport (pedestrians and cyclists) # Totaling, nearby users, total number of notifications # DGT connection are services to provide start and end incidents of vehicles # Calculation sense vehicle # Avoid exceeded warning events # Calculating actual distances through the via (GeoFencing) # Generating Historical georeferenced.

ALGORITHM APP

Visual and voice prompts # Notice of a danger distance -text- # Notice / advice on the -text- event # Notice symbolic distance from danger -colour- # Notice of incidents of DGT # Notice of errors (voice, visual and text) # Day / night mode # Accurate indication of when using low beam # Angle display in which the user or event incidence is found # Indication incidence latency (avoid false positives) # Integrated gamification (total, close and no active users notifications) # Notice oncoming vehicle (under development).