

Big Data for a better future

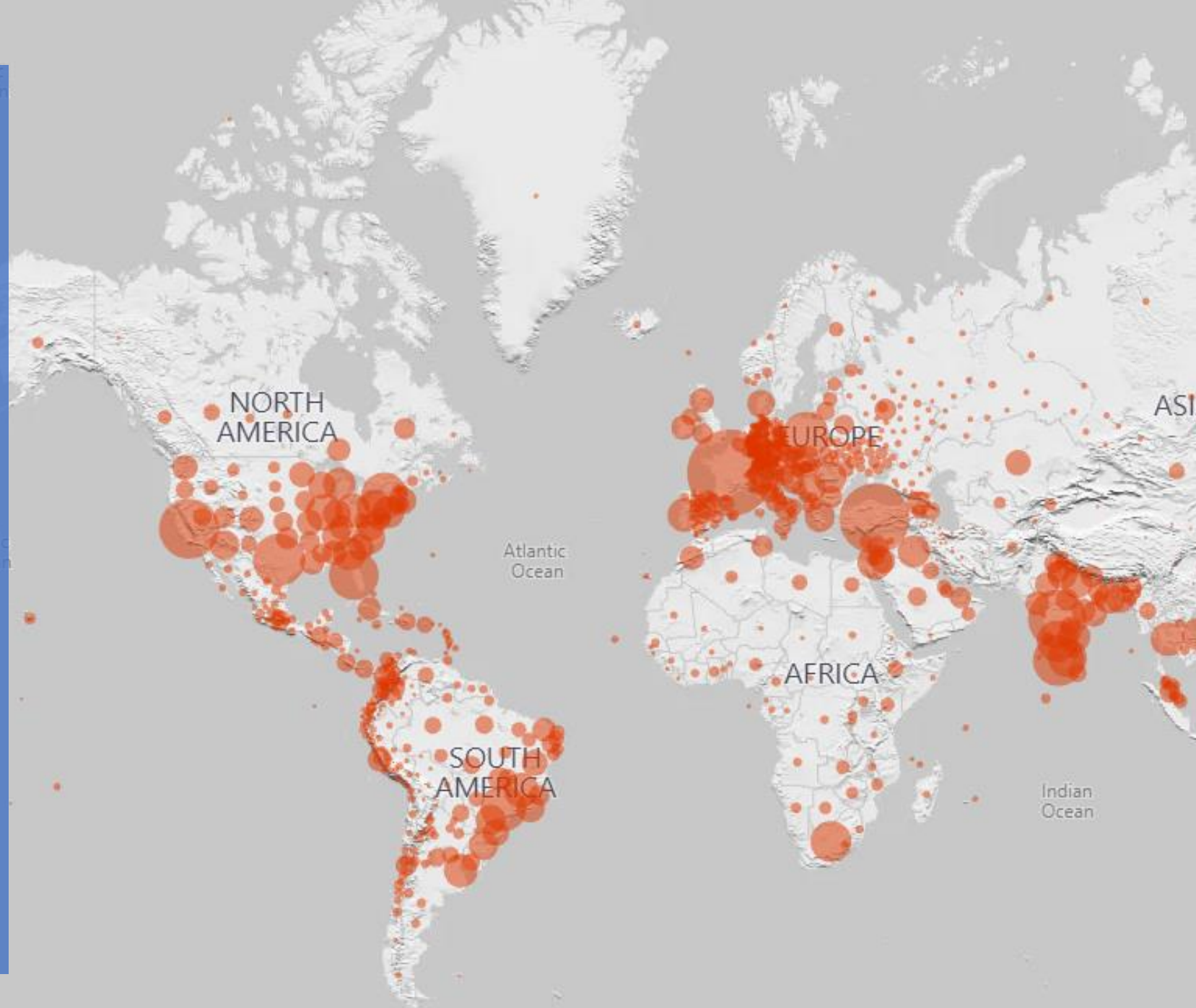
Telcos Role in the COVID-19 Pandemic

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The COVID-19 pandemic is the first event in decades that produces first-order negative impacts in public health and economies at global scale





National and local governments started to implement policies of **social distancing and lockdown** and needed **data-driven insights** to evaluate and measure the impact of the decisions implemented

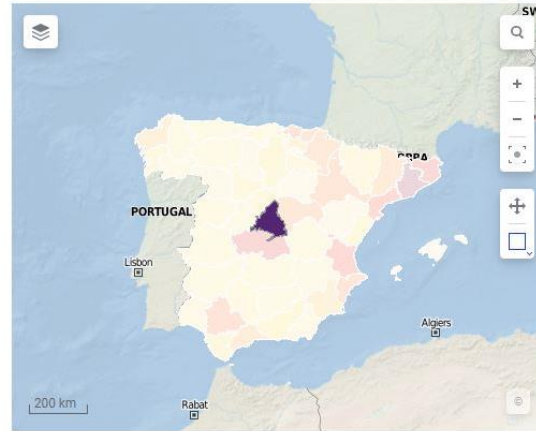
Telefonica has supported those decision-making processes by providing high-frequency and low-latency mobility insights for governments along our footprint





We built a tool to **monitor national mobility in real time** allowing us to analyze, study and compare several parameters between territories

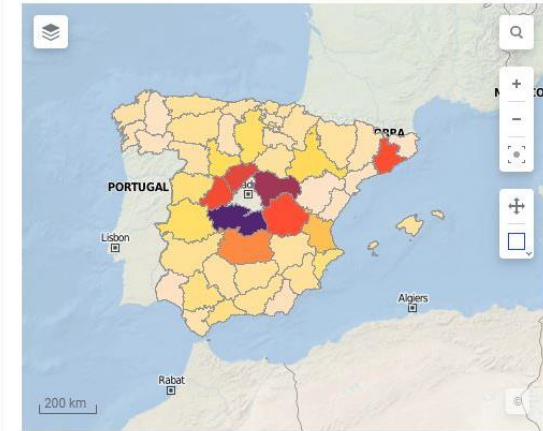
Seleccione la provincia de origen



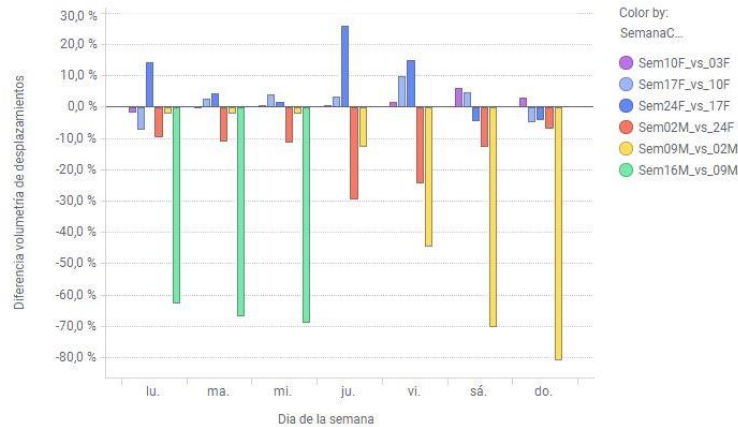
Promedio de viajeros salientes de Madrid

Destino	Promedio de viajeros salientes
Toledo	37941,32
Guadalajara	22885,40
Segovia	9057,94
Ávila	5728,81
Barcelona	4166,23
Cuenca	3958,89
Ciudad Real	3402,11
Valencia/Val...	2885,81
Zaragoza	2654,19
Valladolid	2601,34
Cáceres	2348,21
Burgos	2324,89
Salamanca	1898,19
Alicante/Ala...	1826,57
Sevilla	1688,36
Málaga	1600,87
Badajoz	1300,38

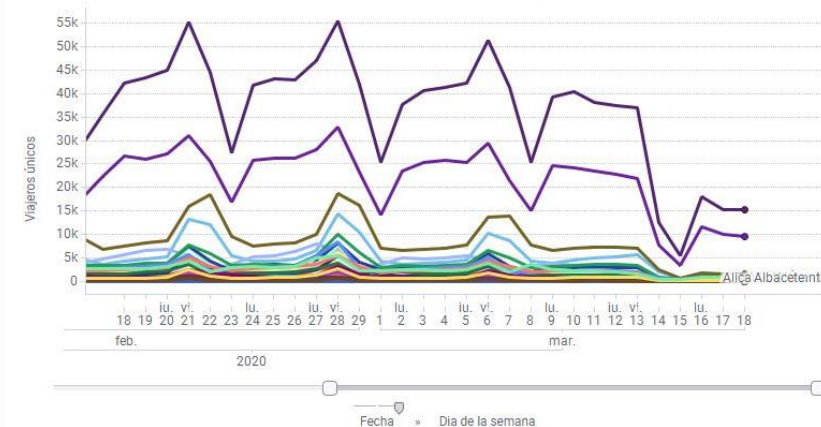
Provincias destino de viajeros procedentes de Madrid



Comparativa semanal de desplazamientos salientes de Madrid



Evolución temporal de viajeros salientes de Madrid hacia otras provincias



Filtros

Seleccione los criterios de filtrado para los registros de desplazamientos:

Fechas de los desplazamientos

9/3/2020 18/4/2020

Comunidad Autónoma de Origen

Type to search in list

- (All) 19 values
- Andalucía
- Aragón
- Canarias
- Cantabria
- Castilla y León
- Castilla-La Mancha

Provincia Origen

Type to search in list

- (All) 52 values
- Albacete
- Alicante/Alacant
- Almería
- Araba/Álava
- Asturias
- Ávila

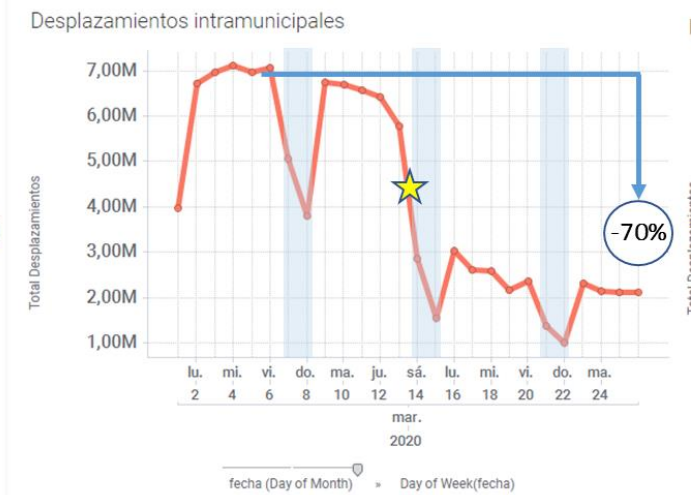
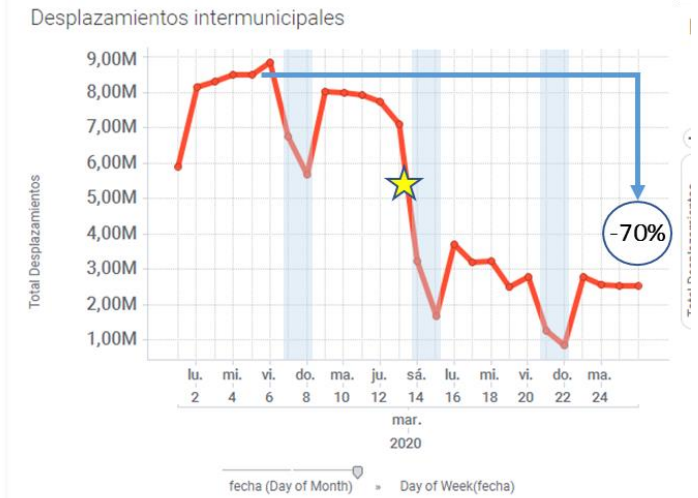
Comunidad Autónoma destino

Type to search in list

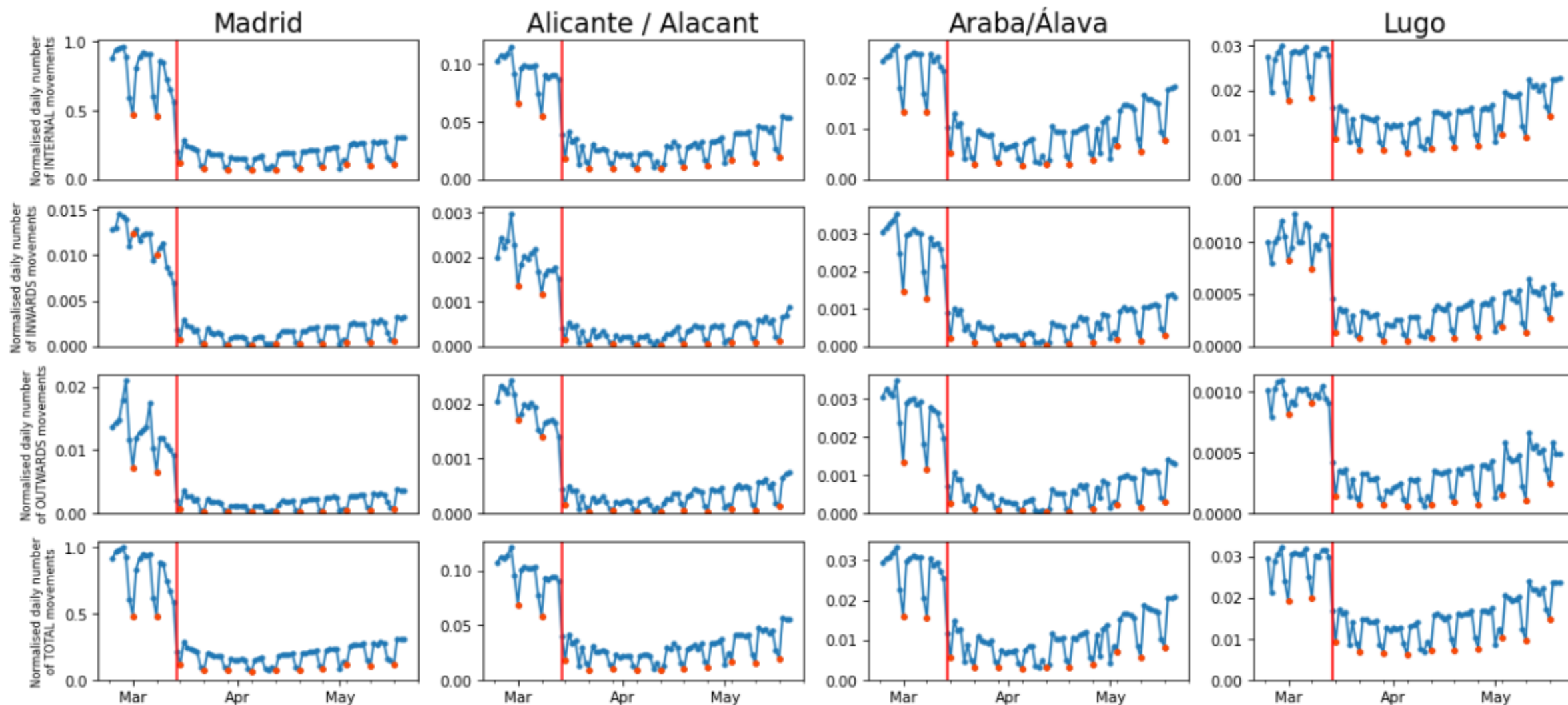
- (All) 19 values
- Andalucía
- Aragón
- Canarias



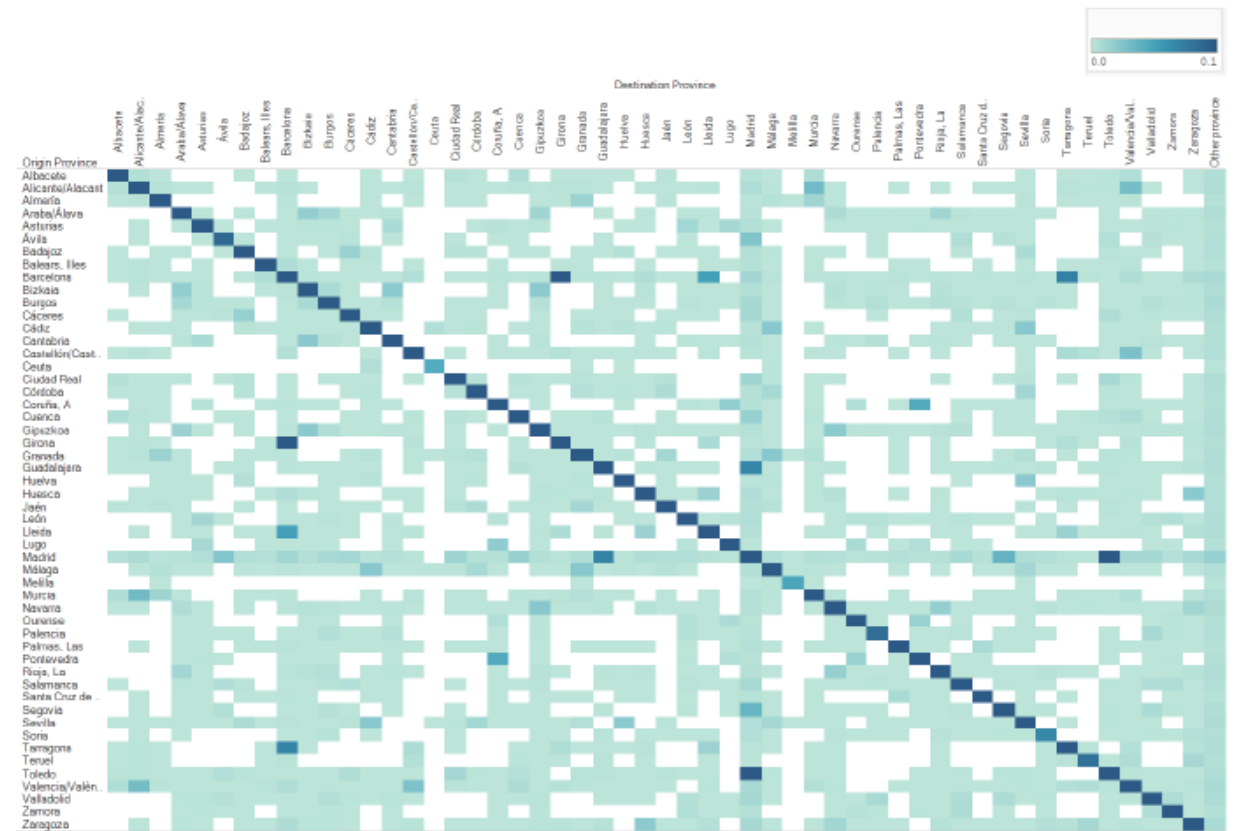
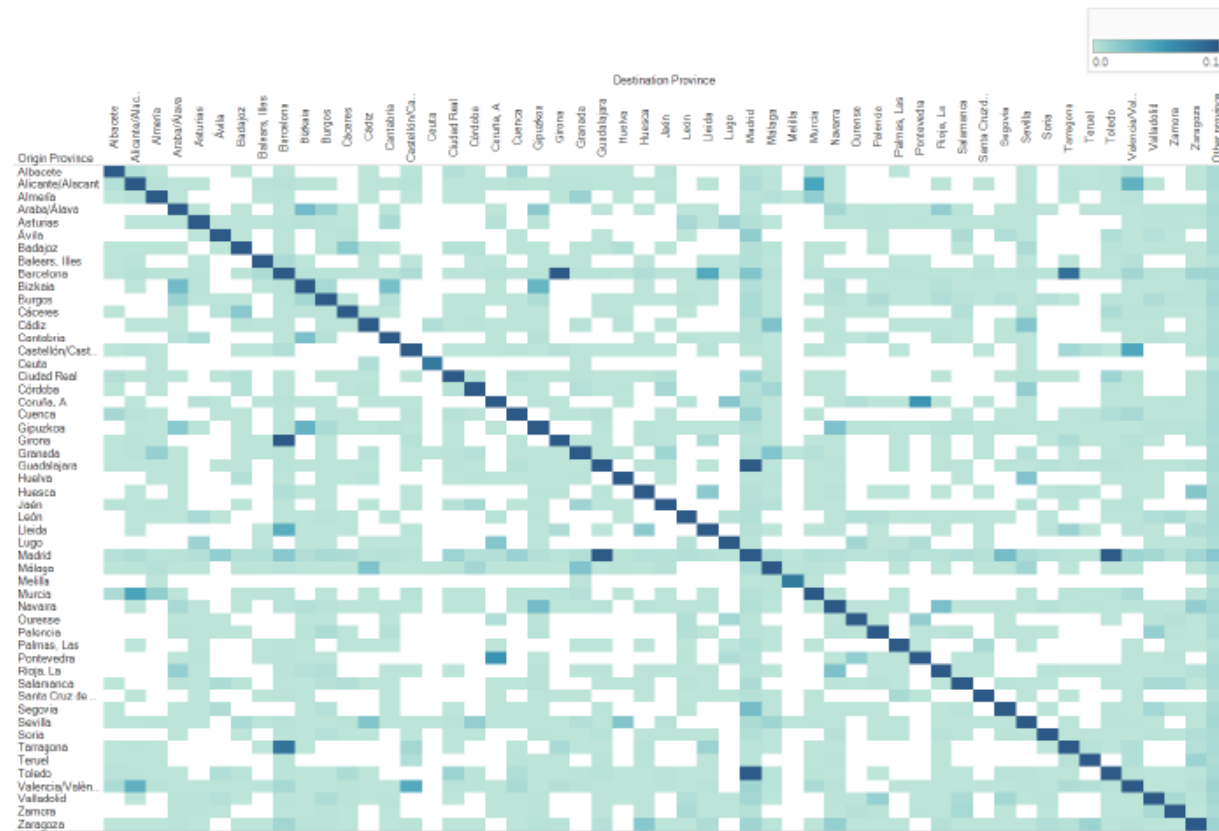
We used **aggregated and anonymized data** to analyze the evolution of mobility prior and after the first lockdown in Spain



We normalised mobility indicators at NUTS3 level so that data can be comparable between territories

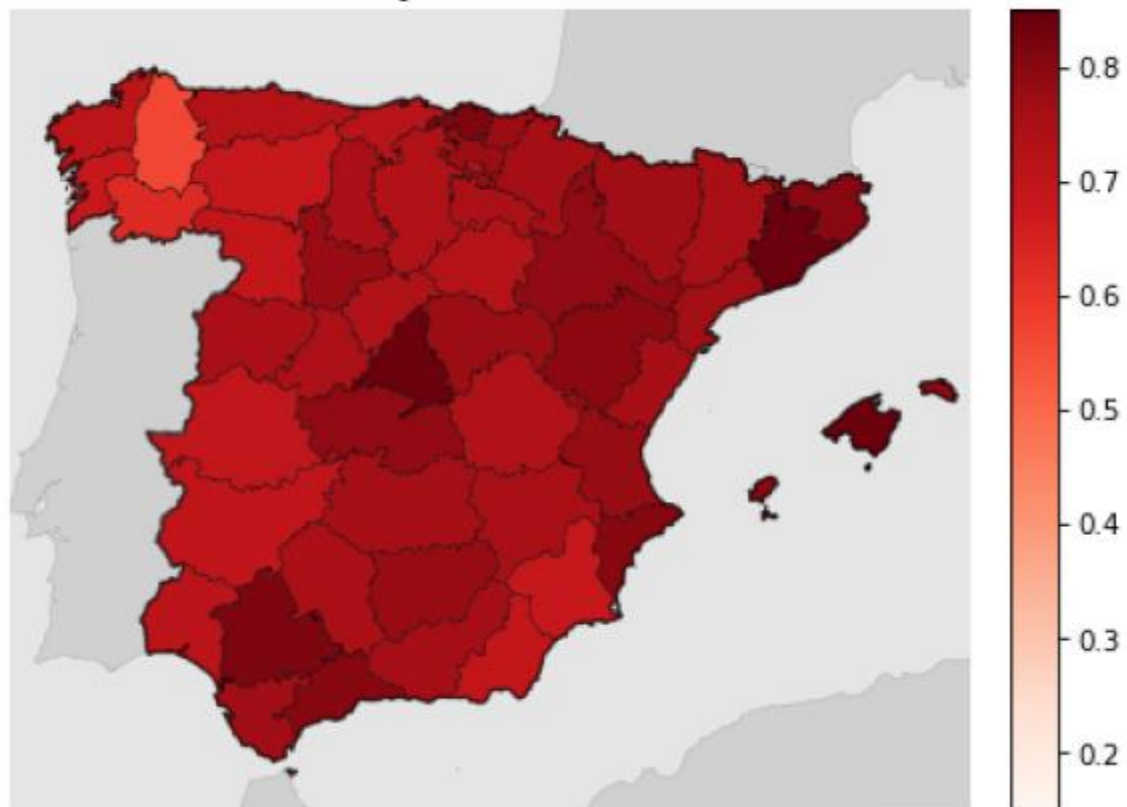


We developed connectivity matrices to understand movements between different territories

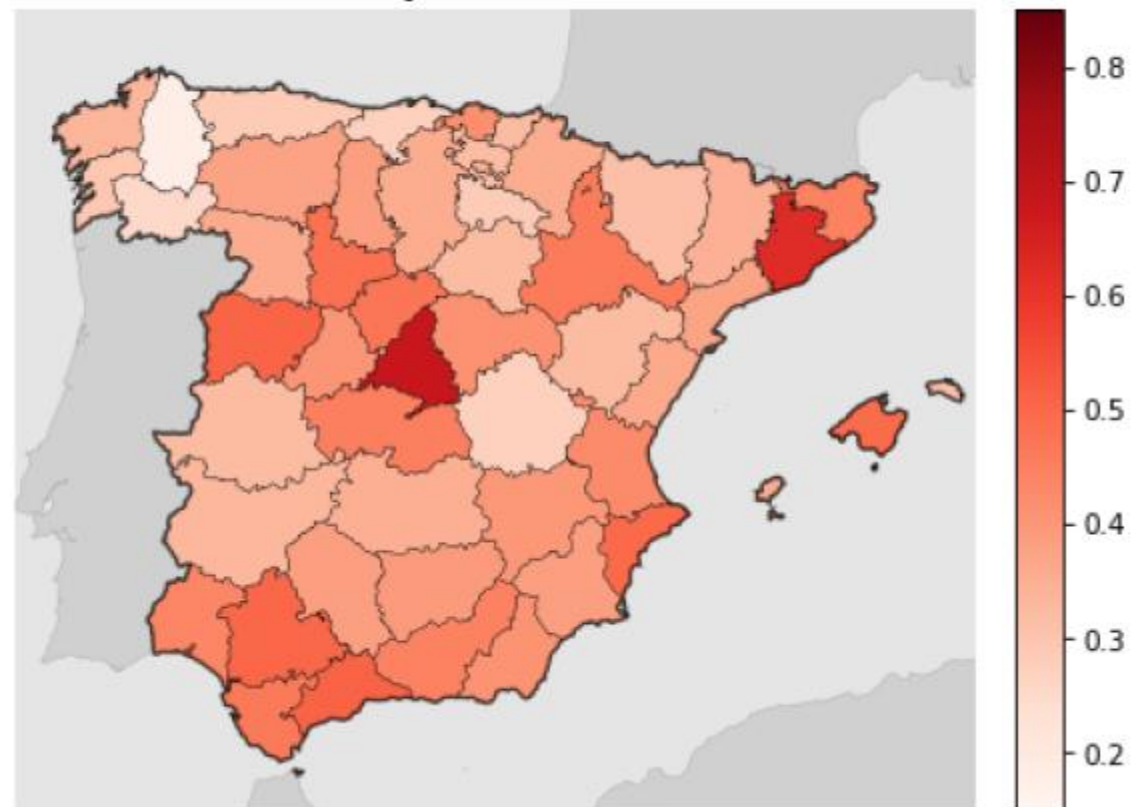


We mapped the reduction of mobility by territories and time periods

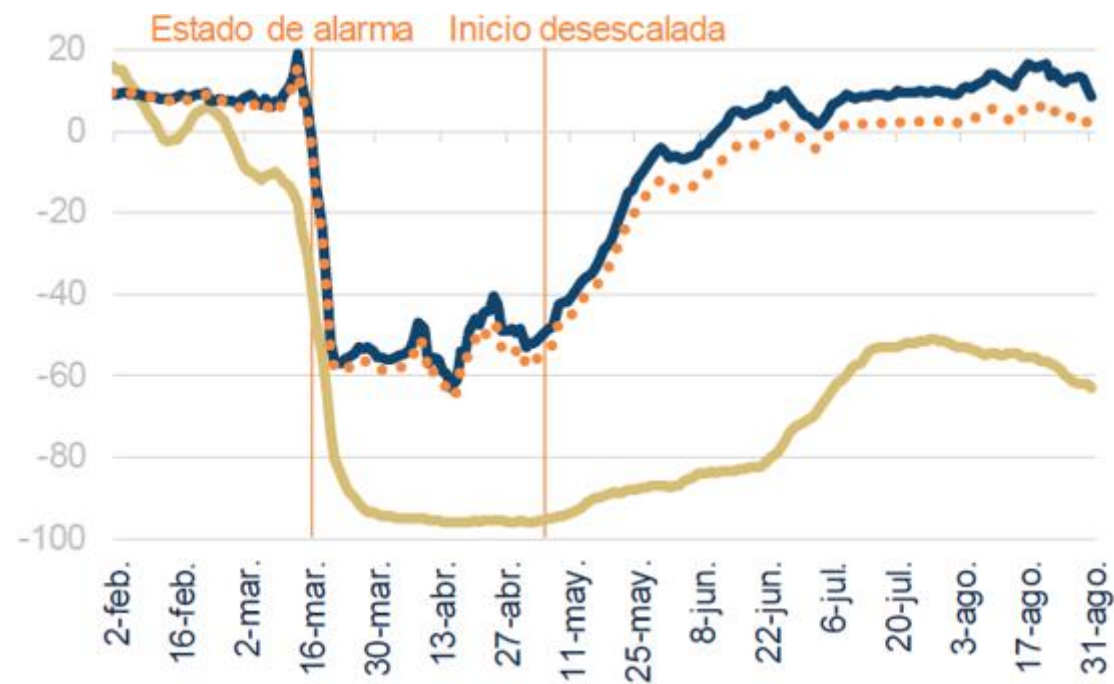
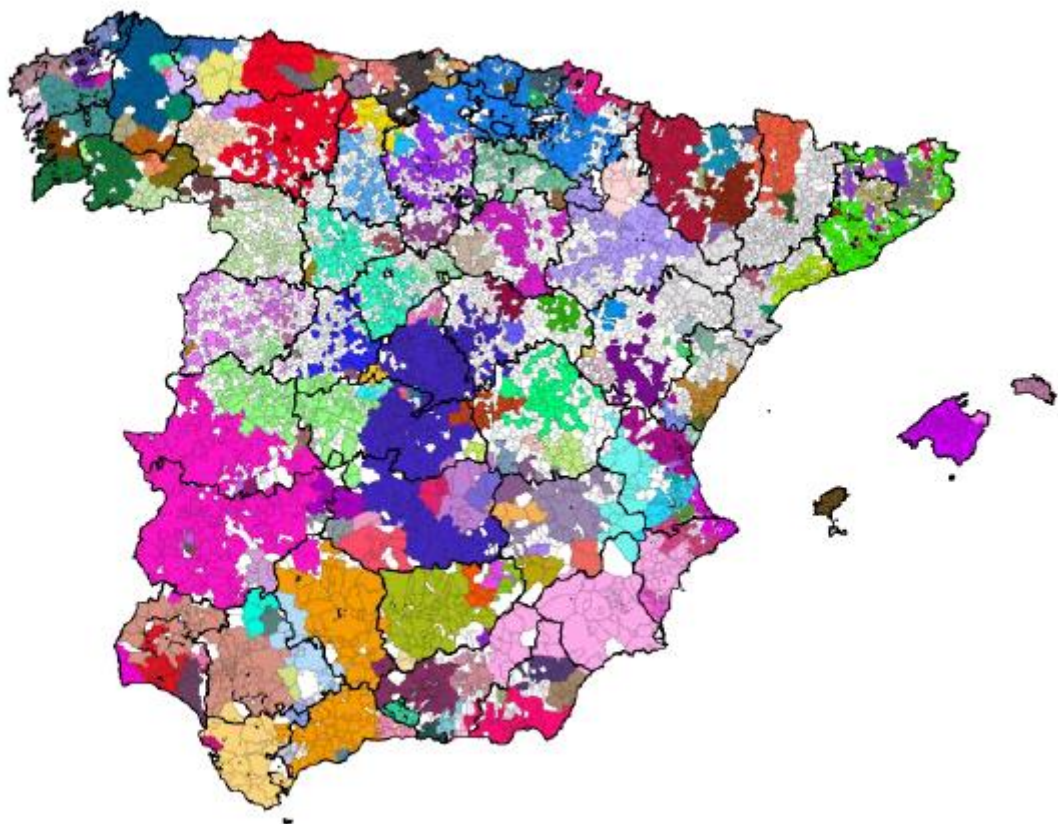
Reduction in mobility between 2020-02-26 and 2020-04-01



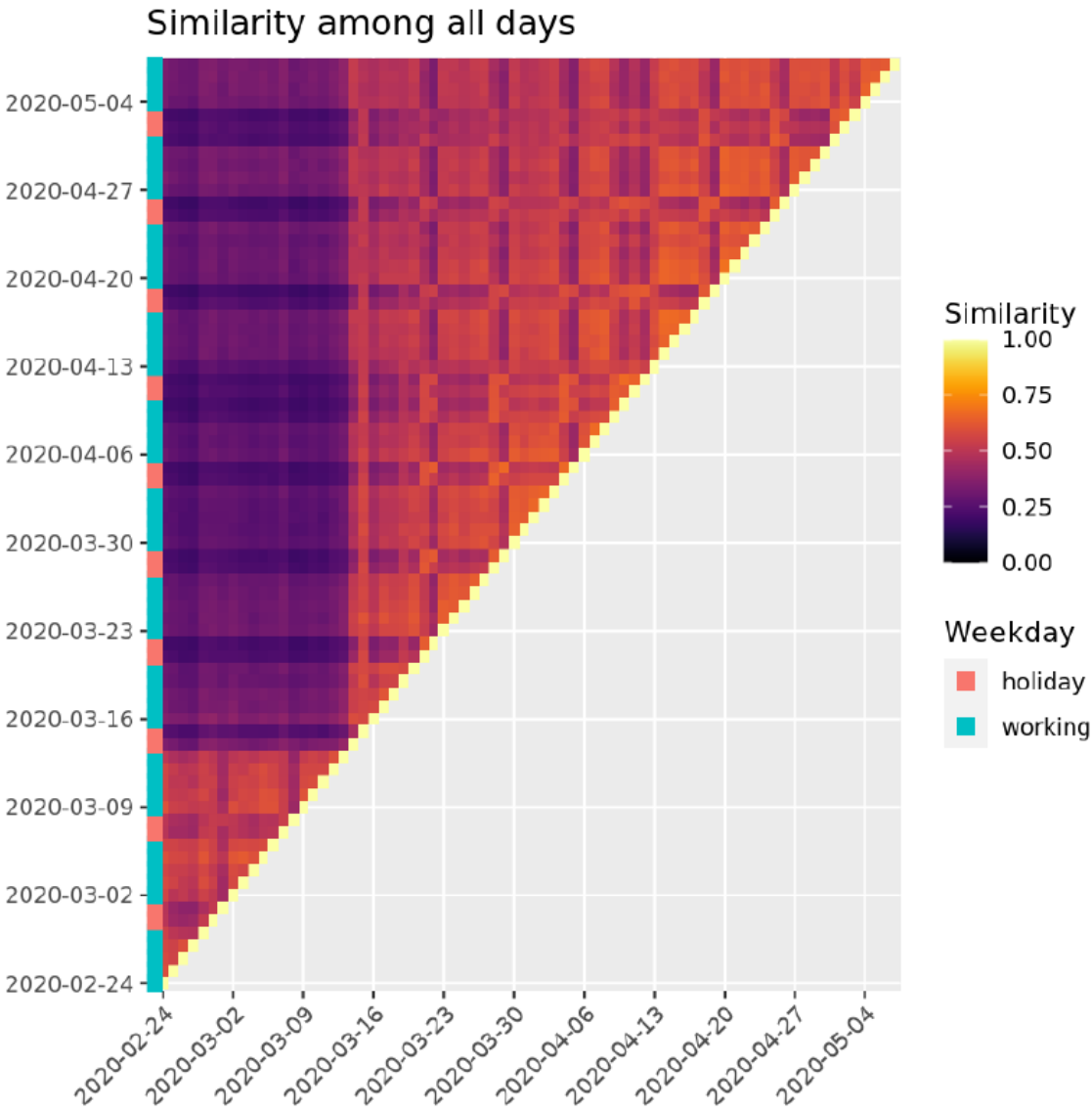
Reduction in mobility between 2020-02-26 and 2020-05-20



We were able to estimate socio-economic costs & evidence by **Mobility Functional Areas** and analyze the **average weekly spending with credit card**



We studied the similarity between Mobility Functional áreas determining that there was no major differences before and after lockdown.



An aerial photograph of a dense urban area, likely Hong Kong, showing a mix of high-rise commercial buildings and older residential structures. A large, semi-transparent blue circle is superimposed over the image, framing the central text and three side boxes.

We relate the success of this project to several shared factors

Privacy
by
Design

Commitment of
Telefonica with the
society

Digitization of
Telco
networks

But there is more to be done in the future

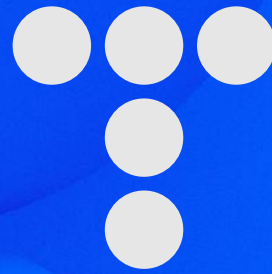
Unchain the full
potential of Telco
Data

Foster
Public – Private
Collaboration

Design fair and
sustainable
business models

The background is a solid blue color with several overlapping circles of varying sizes and shades of blue, creating a layered, abstract effect.

Many thanks
for your attendance



Tech