

COVID-19 impacts on intercity mobility

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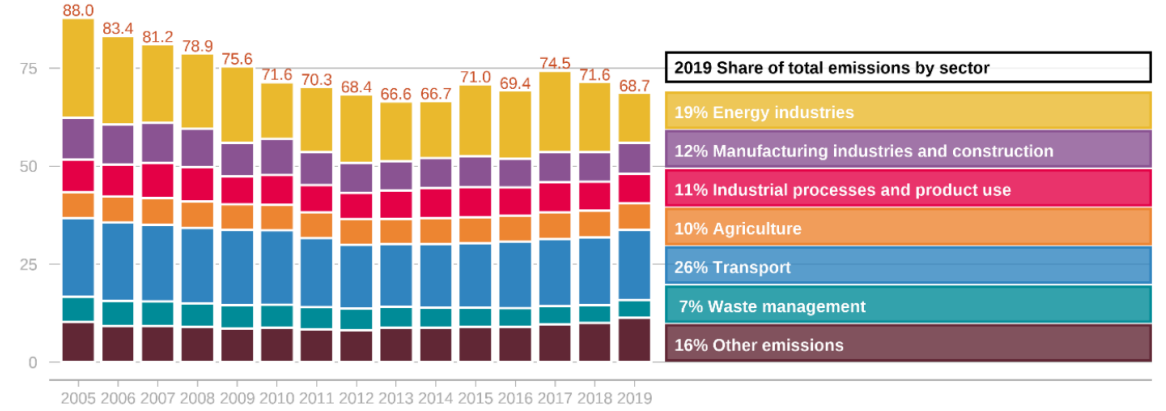
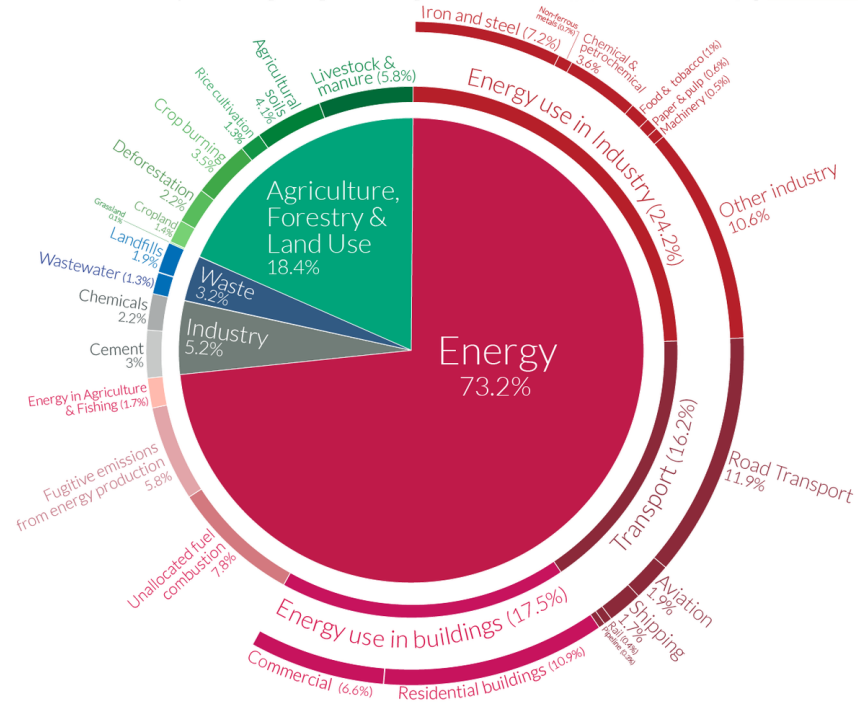


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Global greenhouse gas emissions by sector



This is shown for the year 2016 – global greenhouse gas emissions were 49.4 billion tonnes CO₂eq.



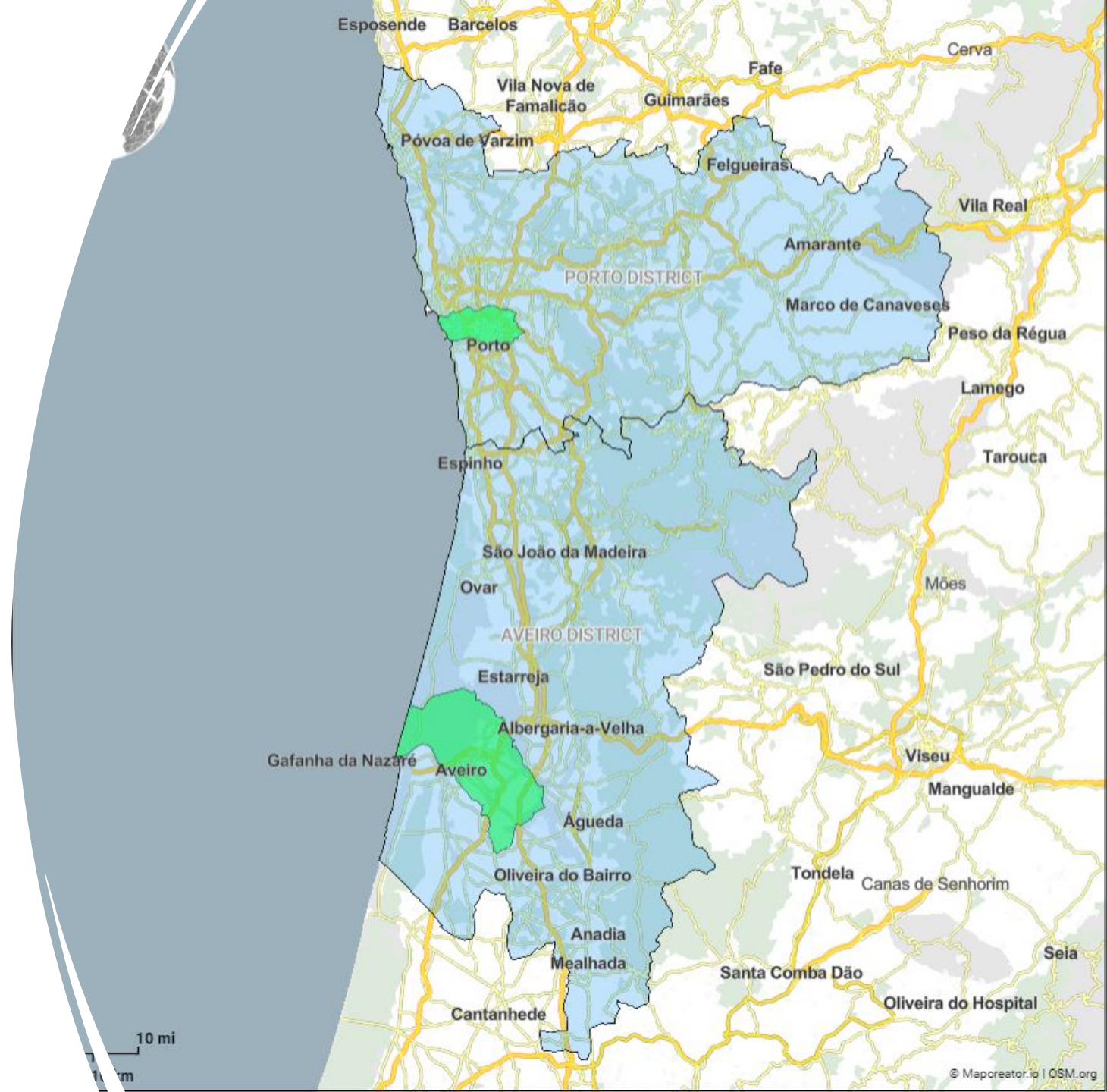
OurWorldinData.org – Research and data to make progress against the world's largest problems.
 Source: Climate Watch, the World Resources Institute (2020). Licensed under CC-BY by the author Hannah Ritchie (2020).

Background



Case Study

Interurban Corridor
(Aveiro – Porto)



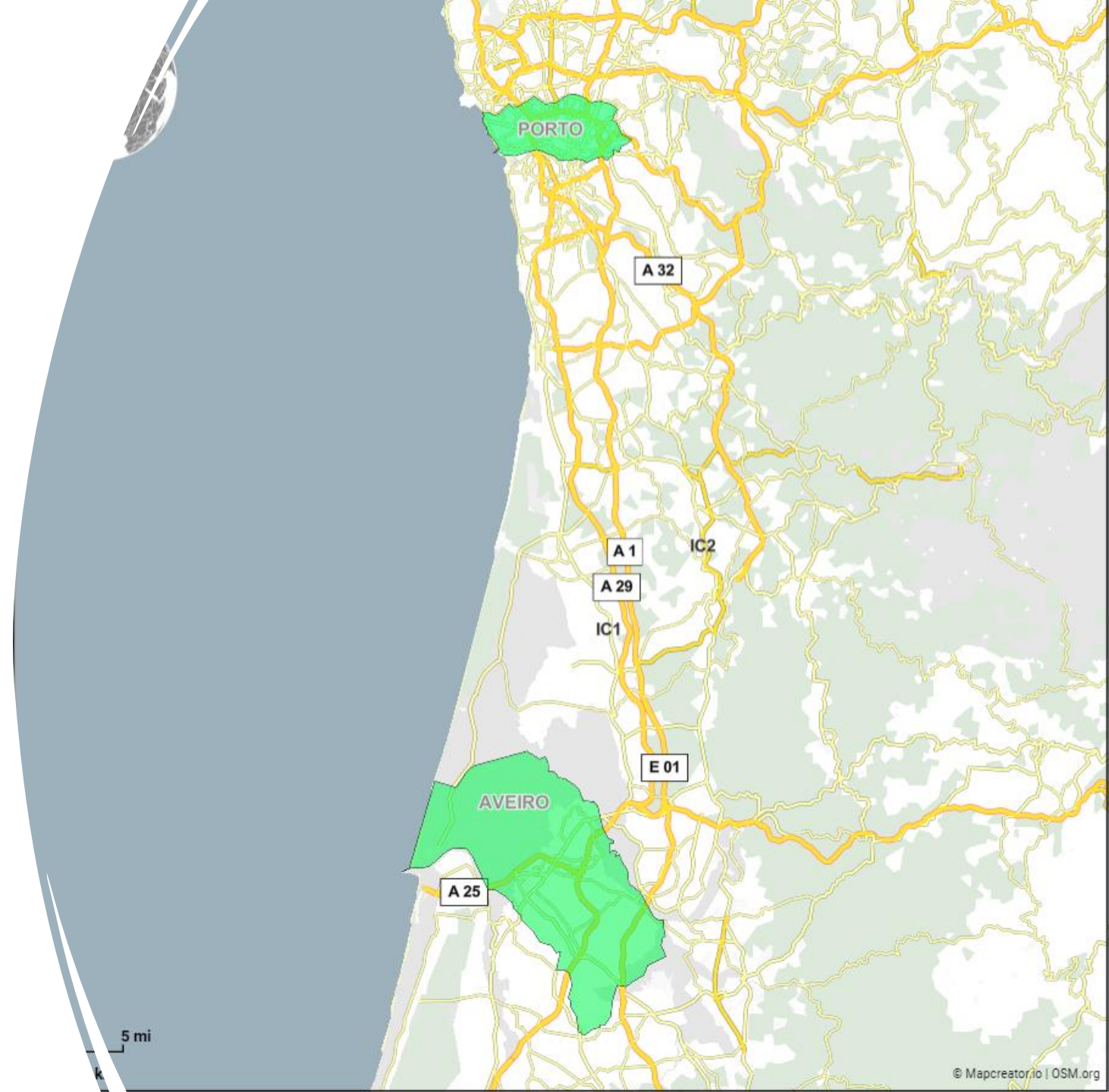
Case Study

3 Highways:

- A 1
- A 29
- A 32

2 Complementary Itineraries:

- IC 1
- IC 2





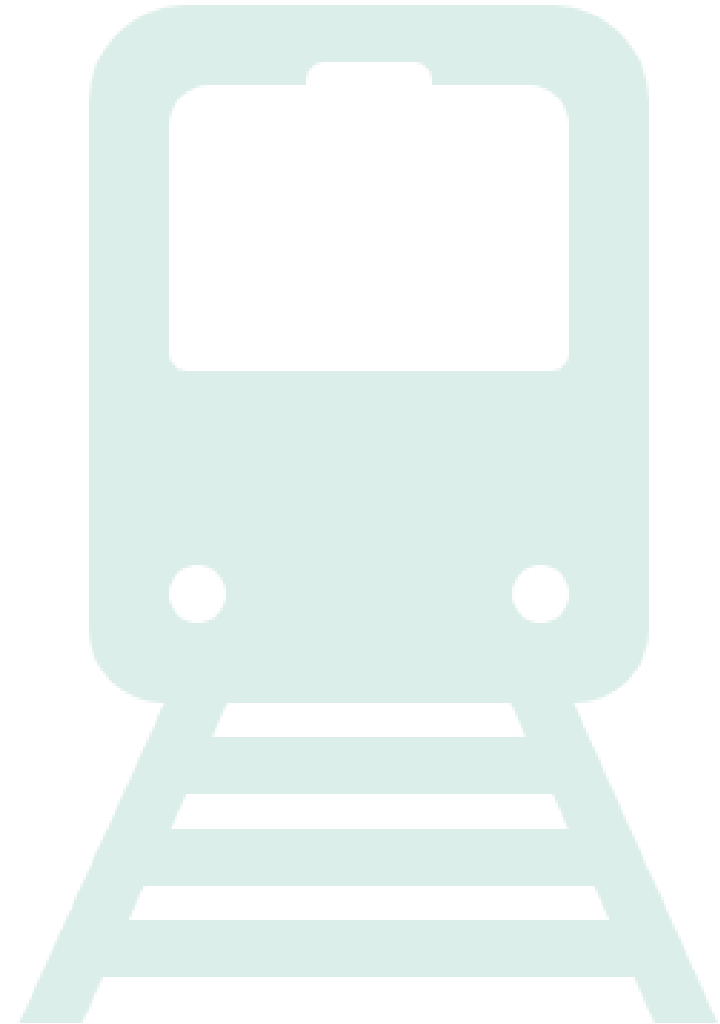
COMBOIOS DE PORTUGAL



Case Study

Train Aveiro - Porto (business day)

- 48 results
- Price: 3,55 € – 20,80 €
- Travel time: 0h47 – 1h23

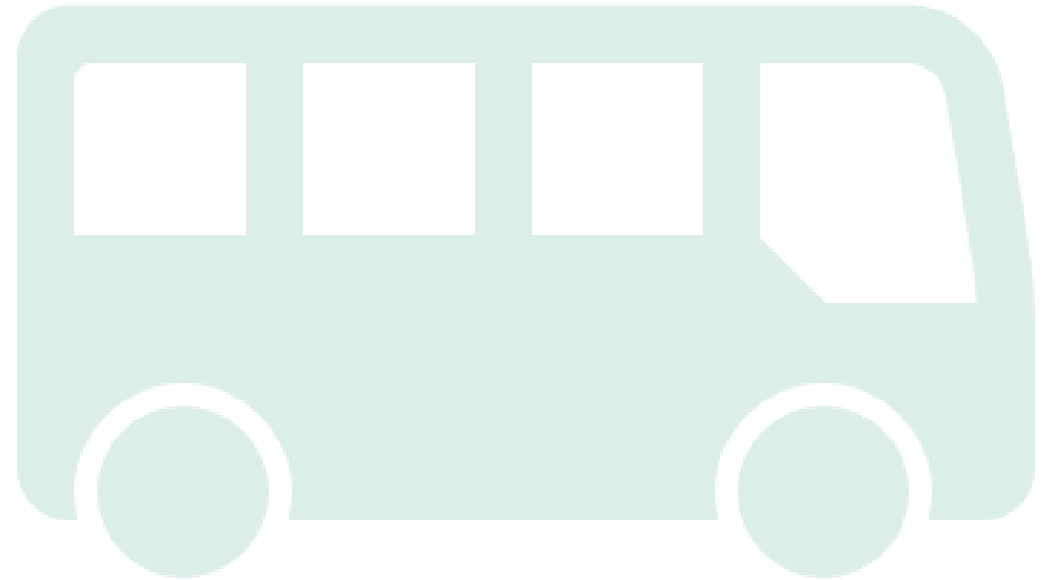




Case Study

Bus Aveiro - Porto (business day)

- 18 results
- Price: 3€ – 18€
- Travel time: 0h55 – 1h55



Case study

Metropolitan Area of Porto

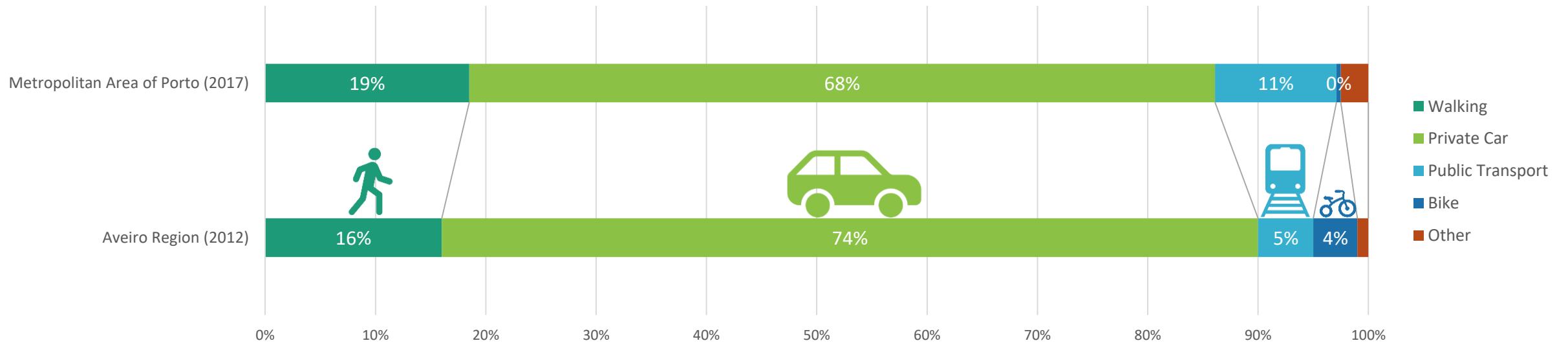
- 852,5 habitants/km²
- 3,4 M trips/day (2017)

Aveiro Region

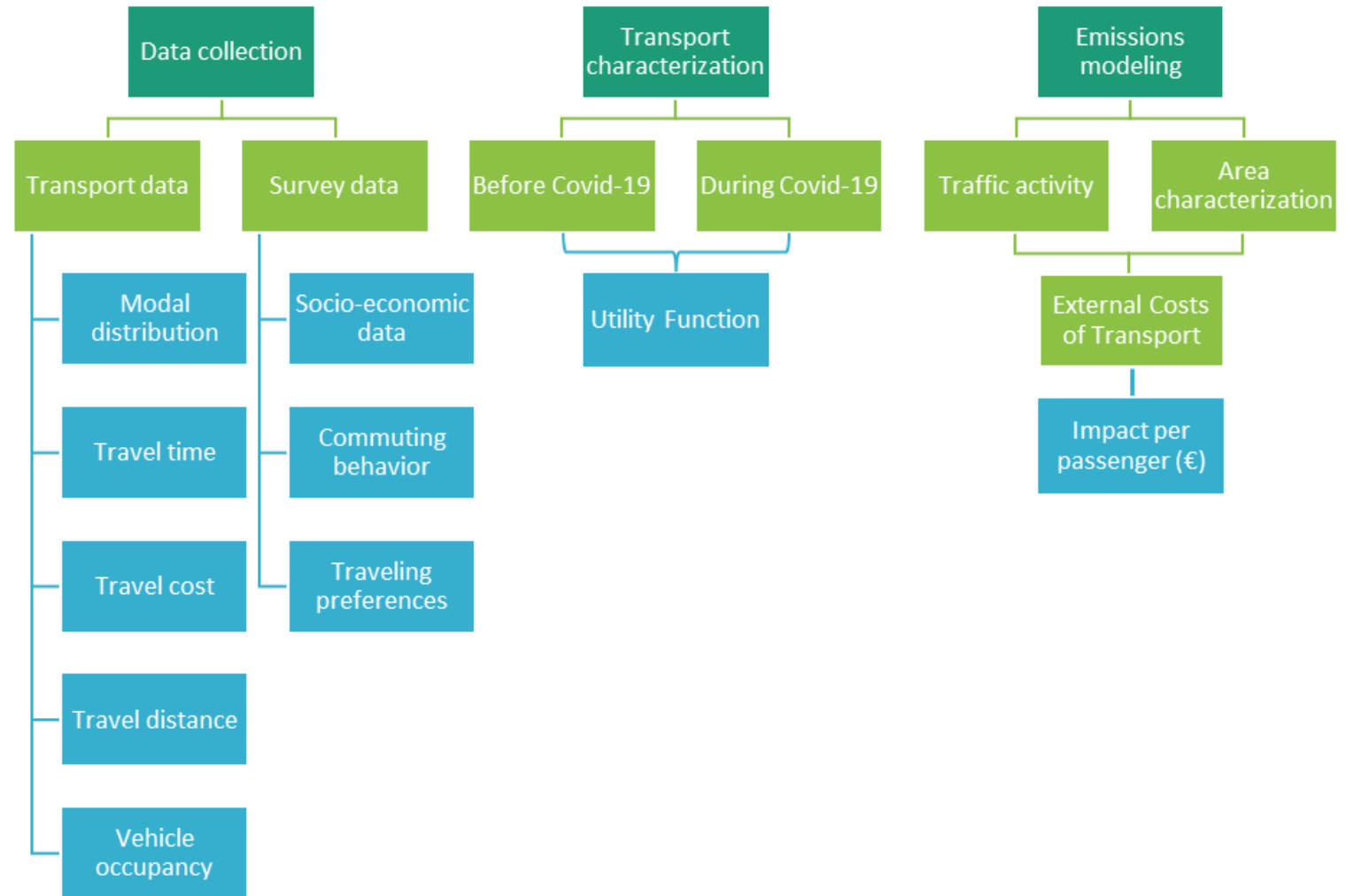
- 218,4 habitants/km²
- 0.712 M trips/day (2012)

Case study

Modal distribution



Methodology



Methodology Mobility Survey

- Socio-demographic characteristics
- Primary travel frequency and itinerary
- Transport mode choices



Methodology - Mobility Survey

Travel purpose

Trips frequency

Distance travelled

Chosen mode

Changes in commuting behaviour

Feeling of safety/comfort using each mode

Results

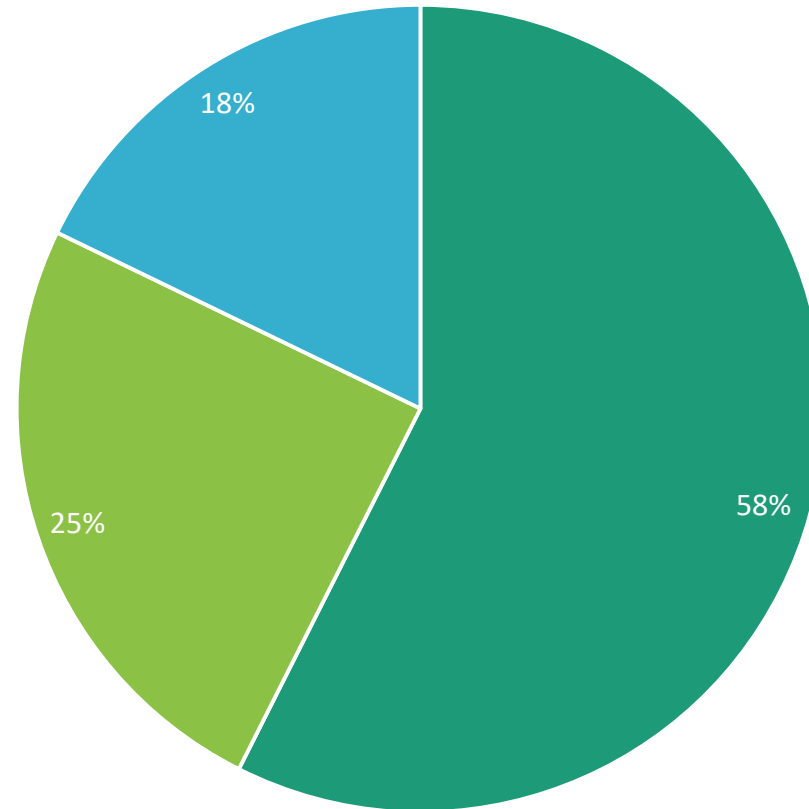
171 participants

Item	Category	Frequency	Percentage (%)
Age	18-30	130	76
	31-50	26	15
	>50	15	9
Gender	Male	54	32
	Female	117	68
	Other	0	0
Occupation	Student	109	64
	Employee	35	20
	Student worker	14	8
	Self-employed	6	4
	Researcher	4	2
	Retired	2	1
	Unemployed	1	1
Monthly Income (Euros)	0 – 400	104	61
	401 – 680	5	3
	681 – 1100	25	15
	1101 – 1500	16	9
	1501 – 2000	9	5
	2001 – 3000	9	5
	3000+	3	2
Vehicle ownership	Yes	91	53
	No	80	47



Results

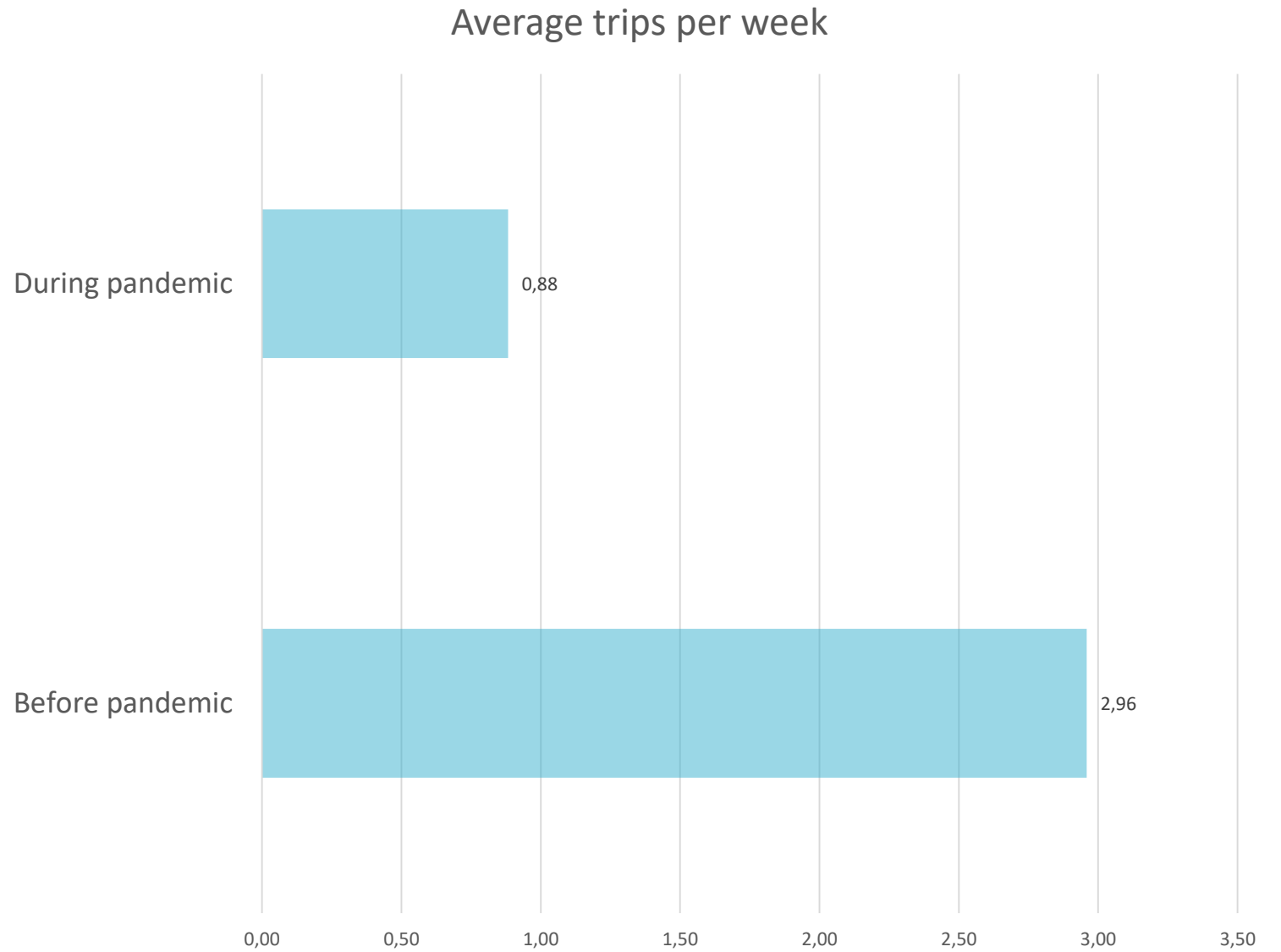
Travel purpose



■ Studying ■ Work ■ Leisure/ shopping/ family



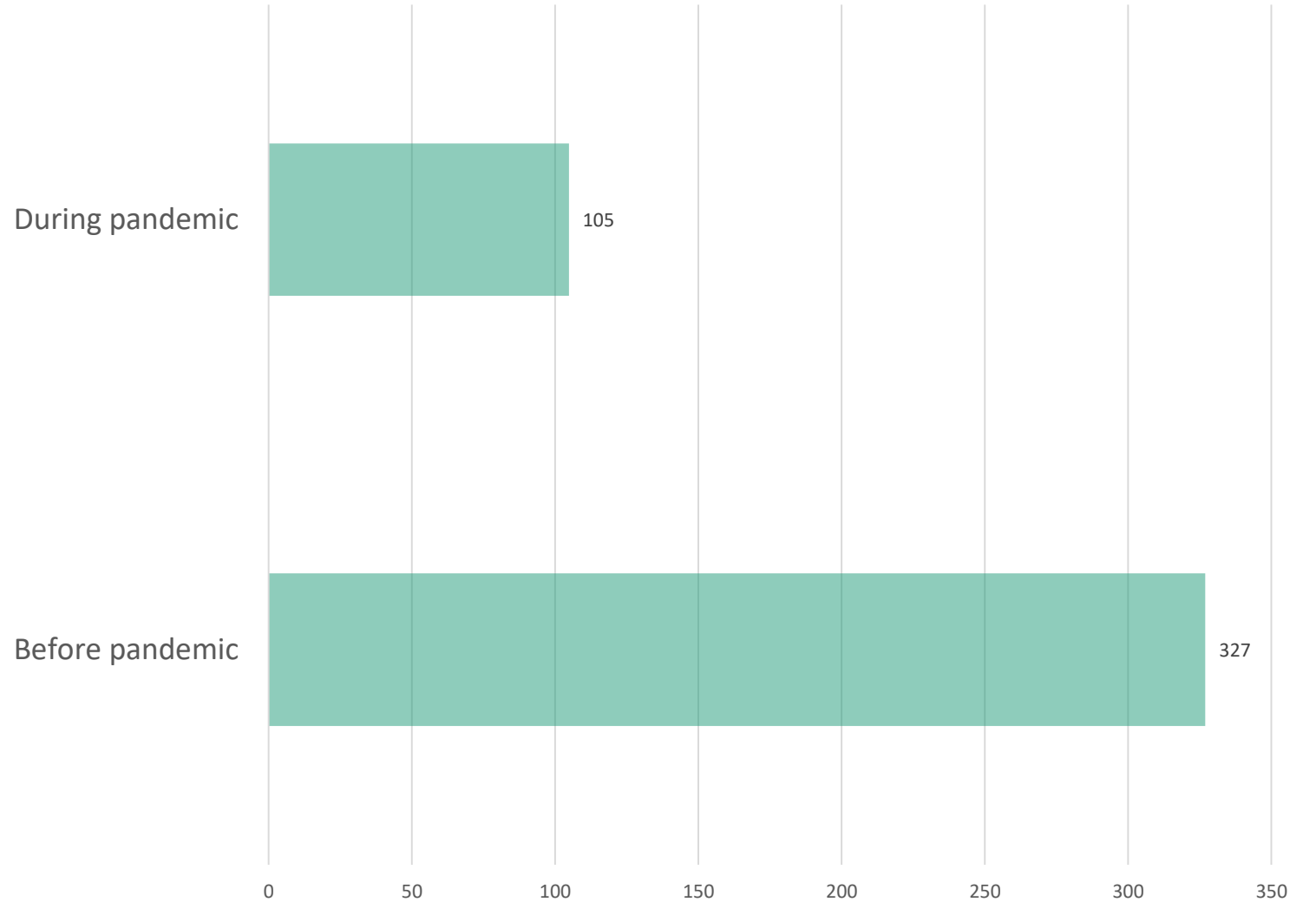
Results





Results

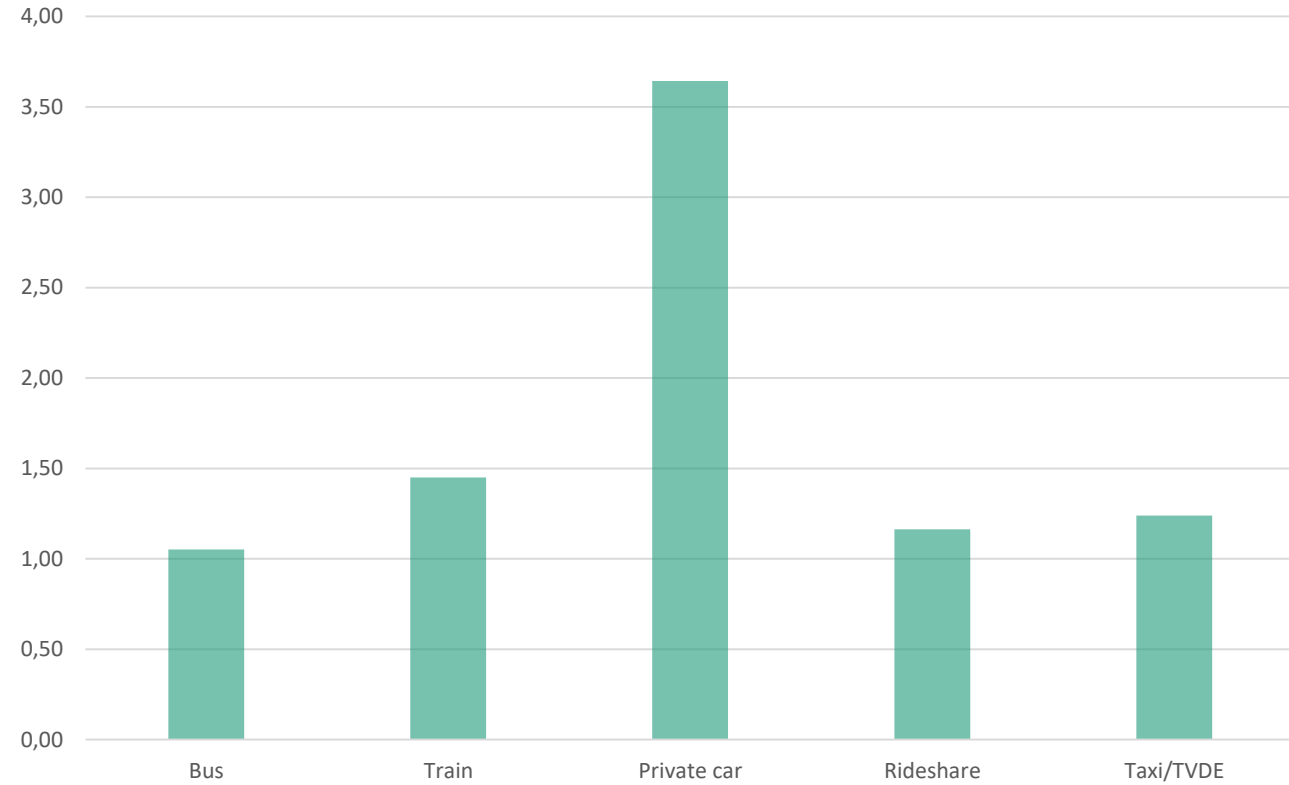
Average distance travelled per week (km)





Results

Feeling of safety using each transport mode





Results

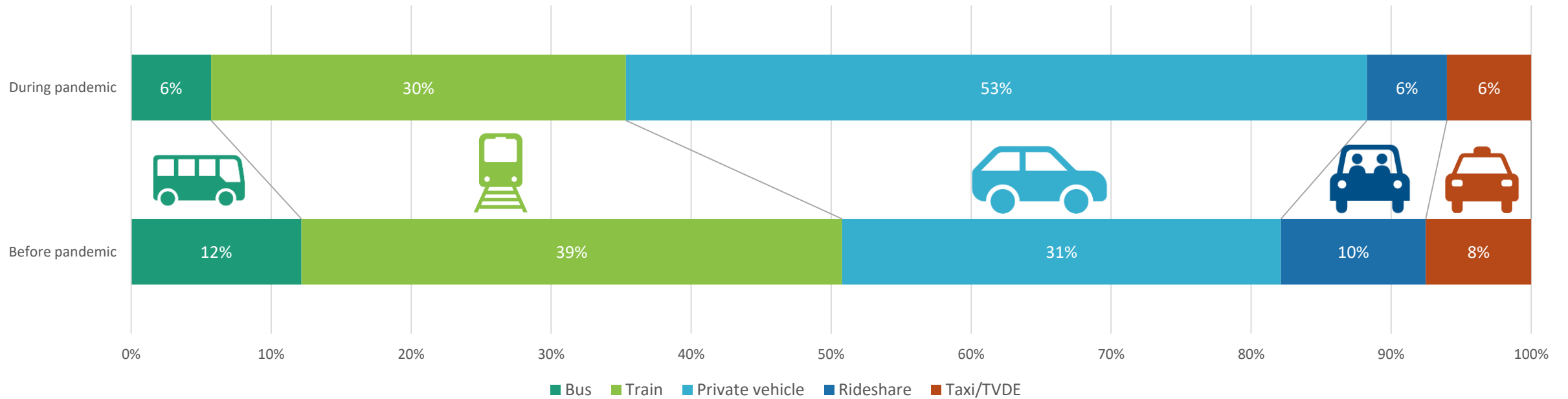
Reasons for changes in commuting behaviour



Results

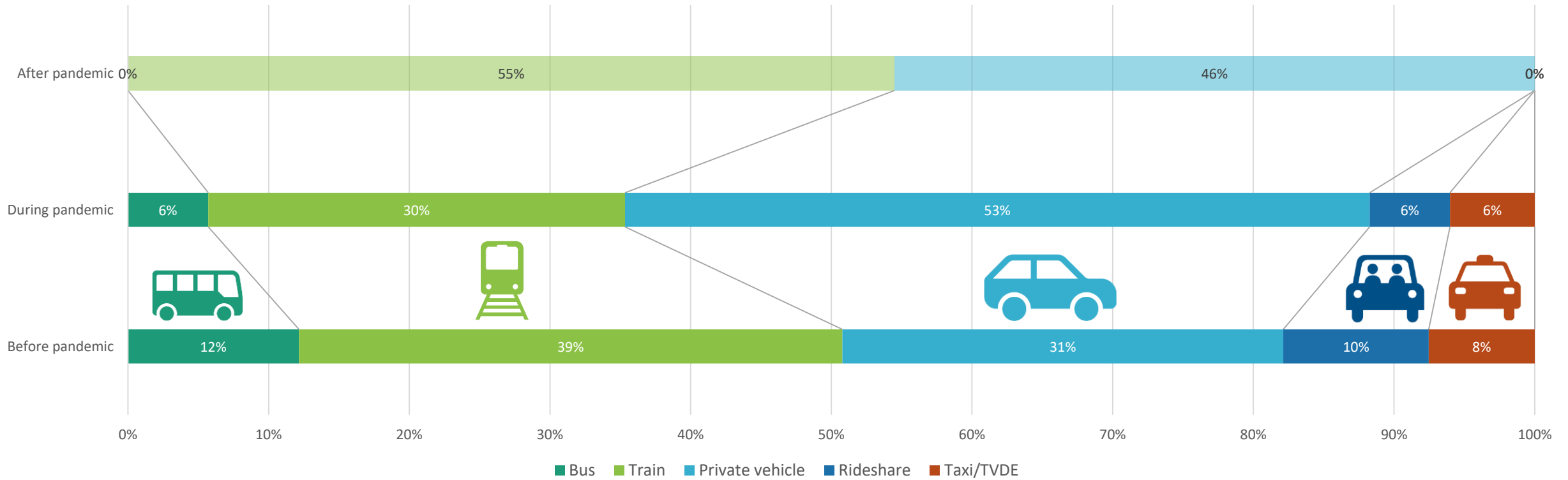


Modal distribution



Results

Modal distribution





Conclusions

- Significant reduction in the number of leisure and business trips
- Teleworking/studying are the main factors for the reduction in the number of trips
- Widespread fear of using shared transport
- Amongst public transport modes, the train was considered the safest
- Trend of recovery in the use of public transport (but still below pre-pandemic levels)

