

# Technological applications in data collection. Application to private transportation planning in small and medium-sized cities.

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## Abstract

Certainly, any planning process involves the collection of supply and demand data. In the case of passenger transport planning, the process is particularly complicated, since human behaviour modelling, a particularly complicated activity, must be included in the planning process.

In the case of PRIVATE TRANSPORTATION SUPPLY, data on infrastructure, vehicles and management systems must be collected. The information related to vehicles is administrative data. The difficulty lies in the collection of information related to the supply of infrastructure and vehicle management systems. The mathematical processing of images corresponding to the visible spectrum, pattern recognition or the inertial response of a monitored vehicle are some of the tools that, when conveniently applied, provide information about the number of lanes, lane width, horizontal and vertical signalling, additional management elements, pavement quality and other characteristics.

In terms of PRIVATE TRANSPORT DEMAND, data must be collected on the number of vehicles making certain movements at a junction, the number of vehicles crossing a section of road, the trajectory of a vehicle along the road under consideration, occupancy degree of vehicle and other relevant data depending on the object of the study. The processing of images corresponding to the visible range of the spectrum together with the pattern recognition technique are some of the tools that, conveniently used, provide information about the trajectory followed by a vehicle or the volume of vehicles, discerning by typologies that perform a movement or cross a section.

## References

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