

# State-Of-the-Art

April 2021

**”User retention tendency of bus routes based on user behavior transition in an area with low mode share of public transport”**

In [1] they use smart card data ”to obtain the odds ratio of usage of a specific bus route”.

**”Forecasting Public Transportation Capacity Utilisation Considering External Factors”**

They used external factors such as weather and public holidays.

**”What shapes local public transportation in Europe? Economics, mobility, institutions, and geography”**

Background variables

- GDP: Gross domestic product per capita
- DENS: Urban population density
- PRICE: Average price charged to urban transport users
- OCOST: Average operating cost of one public transport place-km
- FLEET: The fleet of vehicles available for public transport purposes
- PUBSPEED: Average speed of public transport vehicles in operation
- PRIVATE TIME: Average time spent by private vehicle trip
- MOTOR: Motorization constructed as the number of private vehicles per thousand population
- PARKING: The number of parking spaces per thousand jobs in the central business district
- Dcapital: A dummy variable taking value one if the city is a political capital and zero otherwise

## References

- [1] P.-H. Hung, K. Doi, and H. Inoi, “User retention tendency of bus routes based on user behavior transition in an area with low mode share of public transport,” *IATSS Research*, vol. 44, no. 2, pp. 111–124, 2020.