



EUROPEAN CONFERENCE ON QUALITY IN OFFICIAL STATISTICS 2024 ESTORIL - PORTUGAL



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Hungarian Truck Toll Mileage Index as a business cycle indicator

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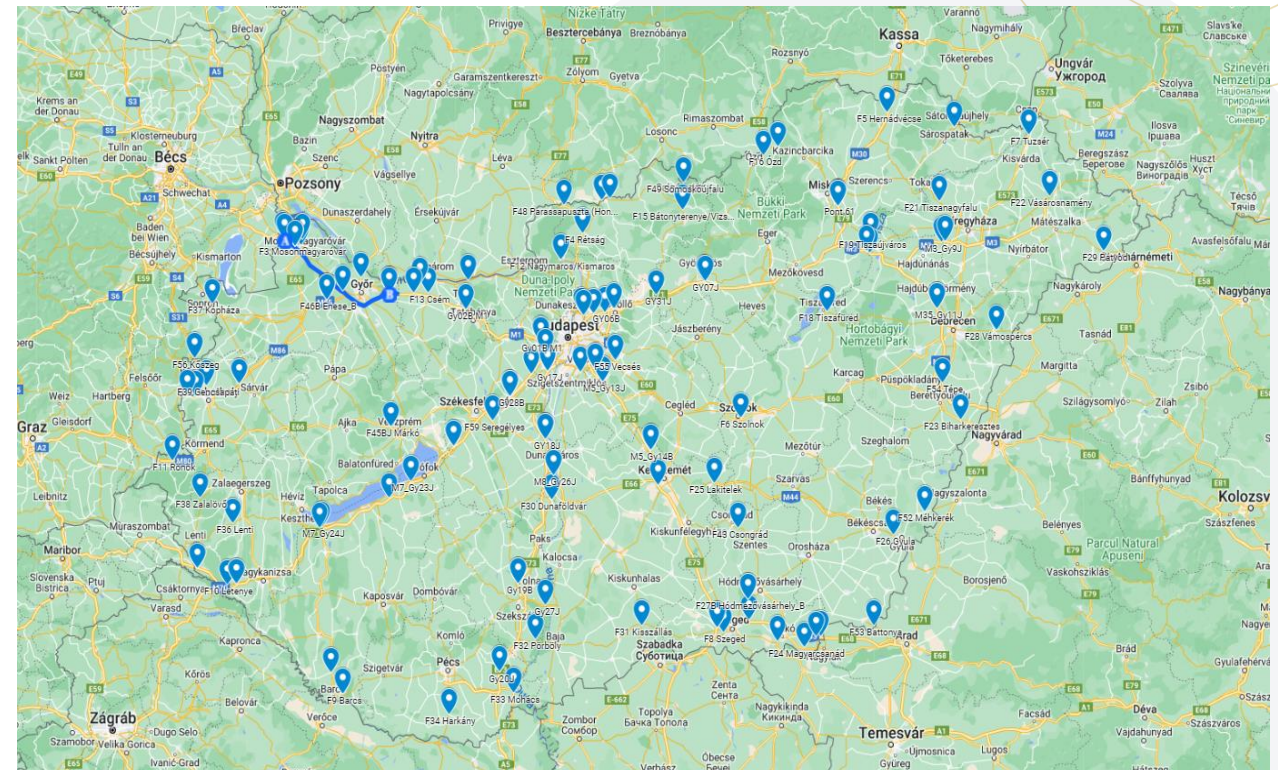
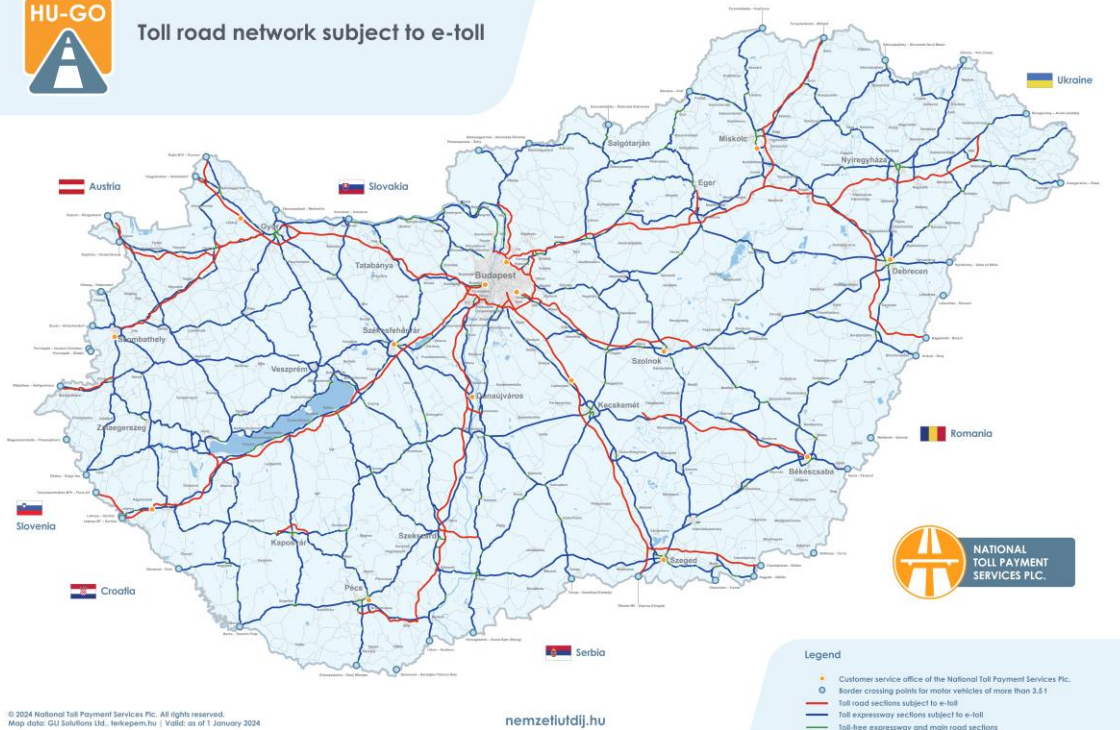


Data sources

Inspection data of National Toll Payment Services Plc.



Toll road network subject to e-toll





Method

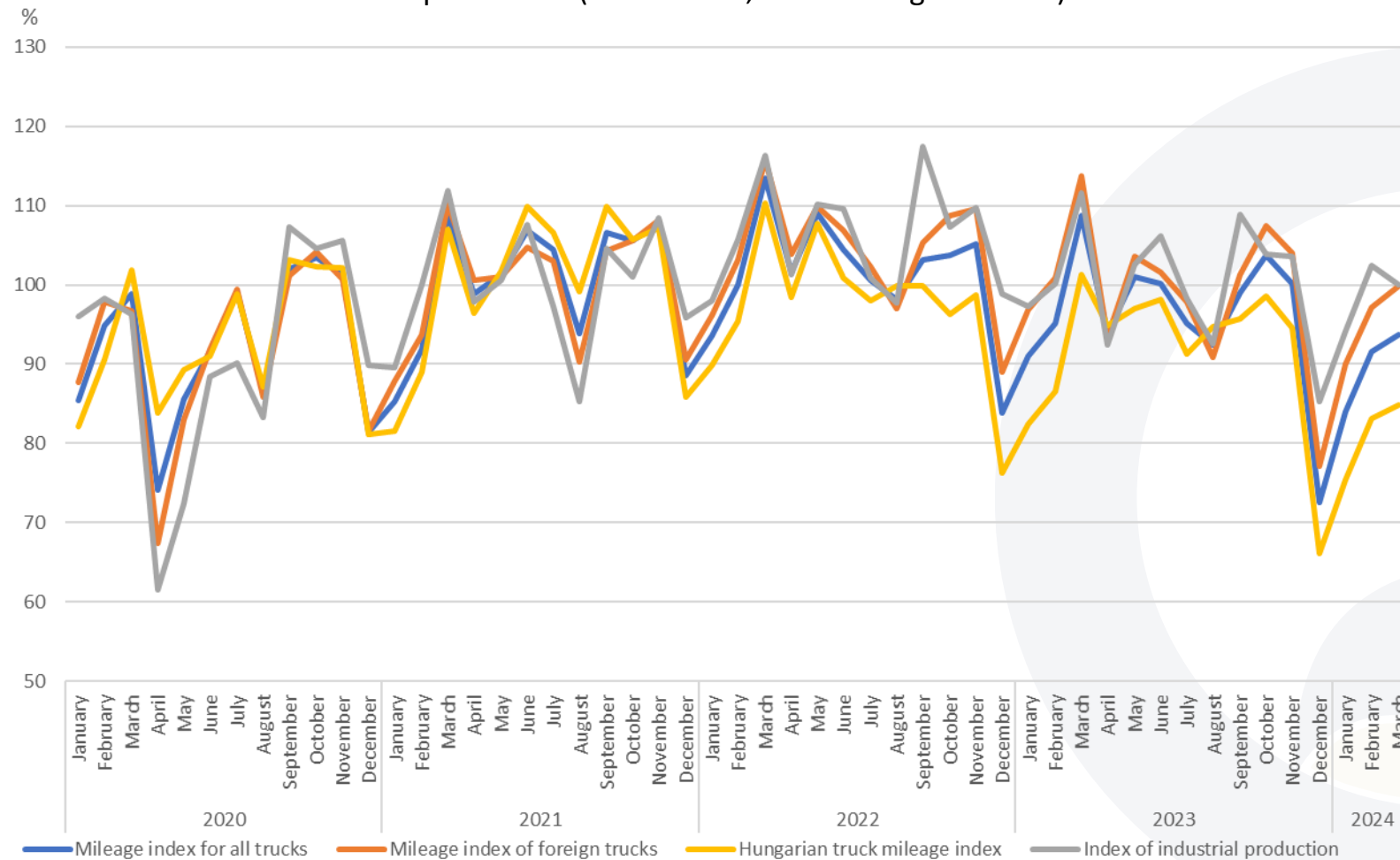
Steps performed during data processing

1. • query of trucks
2. • sorting and indexing of camera data belonging to a given anonymized license plate number
3. • assigning to a given record the code of the next camera recording it in time
4. • creating a matrix containing the distances between all cameras by querying the road distance from Google Maps API
5. • determining the distance between camera pairs defined in point 3 based on the distance matrix in point 4
6. • aggregation of distances for Hungarian, foreign and all trucks
7. • formation of a fixed base row index
8. • seasonal adjustment



Result

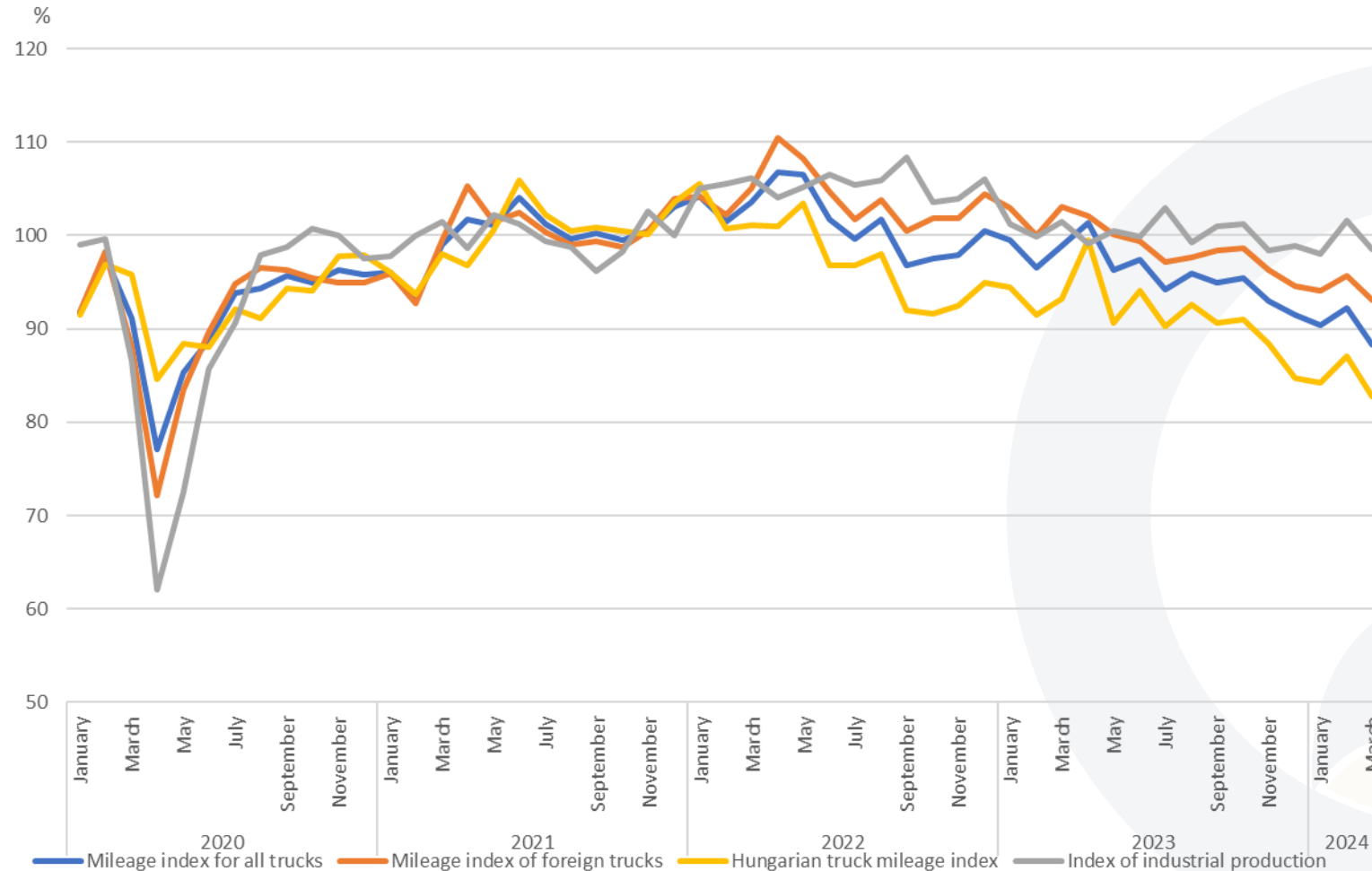
Figure 1: Mileage index of trucks subject to road tolls and the development of industrial production (Raw indices, 2021 average=100.0%)





Result

Figure 2: Mileage index of trucks subject to road tolls and the development of industrial production (Seasonally adjusted data, 2021 average=100.0%)





Result

Table 1: Correlation between truck mileage indices and industrial production index

Truck mileage indices	Industrial production index
Hungarian truck mileage index	0.56
Mileage index of foreign trucks	0.80
Mileage index for all trucks	0.89





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Thank you for attention!



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