

## Summary

# The Norwegian national travel survey 2018/19 – key results

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*This report adds to a series of seven preceding reports on key results from the Norwegian national travel surveys (RVU). Close to 90.000 persons from 13 years on are interviewed in RVU 2018-2019. New data collection methods have contributed to reduction in number of trips by capturing a higher share of non-travelers, and with under-reporting of short trips within the more complex travel patterns. In general, the access to transport resources in the 2018/19 population is similar compared to RVU 2013/14, yet with an increasing share of electric cars and bikes appearing in the vehicle fleet. More than half of the daily trips are carried out by car drivers. A stable growth in public transport share since 1992 continues – from 2013/14 to 2018/19 mainly due to increase in public transport use on the relatively short trip distances in the largest cities.*

## RVU 2018/19 – a two-year excerpt from a continuous national travel survey

This report, based on the national travel survey in 2018 and 2019 (RVU 2018/19), covers the last two-year period of the continuous travel survey RVU 2016-2019, adding to a series of seven previously conducted one-year surveys and key figure reports (1985, 1992, 1998, 2001, 2005, 2009, and 2013/14).

During 2018-2019, 88.548 persons from 13 years on were interviewed about their access to transport resources, and asked to fill in a one-day travel diary, which rendered a total of 263.602 trip registrations. In order to obtain key figures for the population's average daily travel during a one-year period, all data from 2018 and 2019 were merged into a combined material and given a joint sample weight.

The total data material obtained in RVU 2018/19 is larger than in the previous surveys. The increase is concentrated to enlarged supplementary regional samples in the most populated urban areas. The regions outside the larger urban areas are more scarcely represented by a national base sample.

The survey material on daily trips covers personal travel of all types, including the short everyday trips by foot, as well as the less frequent longer journeys. The purpose of the national travel surveys is to obtain information on people's travel activity and travel patterns. Among the main topics to be revealed by the surveys are:

- the scope of travel
- the purpose of travel
- how people travel
- how travel activity varies among different groups in the population, and between different geographical areas of residence

For these purposes, a large data foundation is required. This applies to both sample size, as well as the complexity of the information itself. Challenges have emerged over the years due to declining response rates and the increasing variations in geographical

representativity (figure S.1). The total data material obtained in RVU 2018/19 is larger than in the previous surveys. The increase is concentrated to enlarged supplementary regional samples in the most populated urban areas. The regions outside the larger urban areas are more scarcely represented by a national base sample. The merging of all data from 2018 and 2019 was conducted primarily for the purpose of obtaining a data foundation sufficient for producing representative national key statistics.

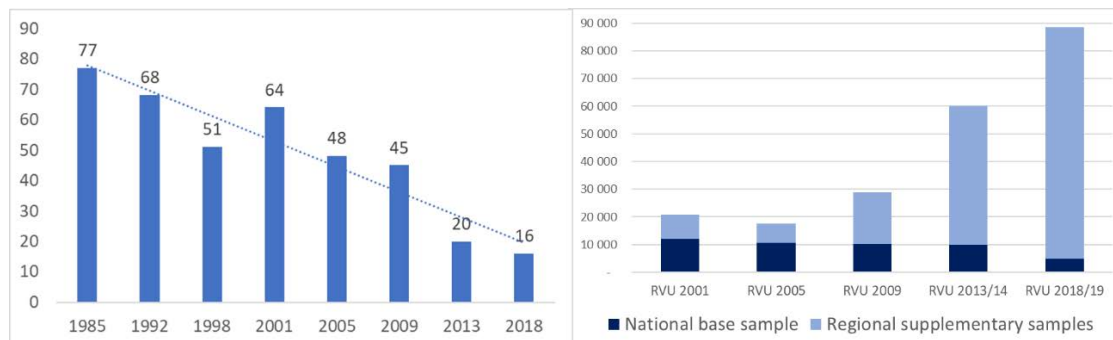


Figure S.1: Developments over the years of national travel surveying in Norway. Diagram to the left: Response rates 1985-2018. Diagram to the right: Sample sizes (number of interviews) and geographical coverage 2001-2018/19.

With the onset of the continuous survey in 2016, a respondent operated web questionnaire was introduced. 45 percent of the respondents chose the web option in 2018-2019. The remaining respondents were interviewed by telephone.

## Under-reporting of short stops in complex trip chains has caused reduced trip volume and longer trip distances

The average number of daily trips in RVU 2018/19 is 12 percent lower compared to RVU 2013/14. This is probably not a result of real changes in the population's travel activity, but more likely due to new data collection methods capturing a larger share of non-travelers, and with under-reporting of shorter trips within the more complex travel patterns. The latter appears as a reduction in number of trips on travel purposes which are often carried out as short stops on the way to the next destination. This has resulted in a loss of trip registrations on shopping trips and on those accompanying and picking up children and others. We find minimal or no reduction in trips to/from places of work and leisure activities, which more often may be considered as final destinations.

The under-reporting of short errands within the longer travel chains has contributed to higher estimates on average trip lengths based on the remaining trip registrations. The average daily trip in RVU 2018/19 is 15,6 km and lasts 25 minutes (2013/14: 14,1 km, 23 minutes). An additional loss of school trips is caused by a seasonal skewness in the youth sample (age 13-19 years) in RVU 2018/19.

The total average travel distance and duration per person per day in RVU 2018/19 is 43,2 km and 71 minutes. This is a reduction from RVU 2013/14 due to a higher share of non-travelers in RVU 2018/19. For those who reported travel activity, the daily travel length and time estimates resemble the 2013/14 results.

The longest daily trip distance and time measures apply to these groups:

- Men
- Age group 45-66 years
- High income households
- Employed persons with long working hours

Trip lengths are shortest for the residents in the largest cities.

There are minor changes in transport mode distribution compared to previous surveys. More than half of the daily trips are carried out by car drivers. A slightly lower share of car drivers together with an increase in travel distances can be associated with some under-reporting of short errands in complex trip chains, where car is a prevalent mode of transport. One fifth of the daily trips are taken on by foot, five percent by bike, and 11 percent on public transport.

The average trip length increased between RVU 2013/14 and RVU 2018/19 on all transport modes, except for public transport. Since 1992 the public transport's share has shown a steady growth, from 2013/14 to 2018/19 mainly connected to increased use of public transport modes in the larger cities where the travel distances are shorter.

The highest growth had the residents in Oslo, resulting in 30 percent of the trips made by use of public transport in RVU 2018/19. Half of these trips are on tram or underground, and more than one third by bus. Among the cities, Bergen's residents have the second highest share of public transport. When adding the areas surrounding the city municipalities, the significance of train appears more clearly, especially in the Oslo and Stavanger regions. The highest importance of train (46 percent of the public transport trips) is found among residents in Buskerudbyen (the Drammen and Kongsberg region). Train is a public transport mode with distance range also past the most local trips. Thus, the train figures presented for the urban regions, are likely to be composed of local trips inside the regions together with travel to/from other areas.

The regional samples are defined by the respondents' place of residence, whereas the trip statistics cover all their travel activities, both internal in the region, as well as travel taking place outside the borders of the region.

The national car driver share is 53 percent. These groups have higher shares (from ca 57 percent):

- Men
- Age group 35-66 years
- Households with children
- Employed persons working full time or more, especially in managerial positions
- Mid and higher income groups
- Residents in municipalities surrounding Bergen, Trondheim and Stavanger
- Residents in the urban regions Nedre Glomma (Fredrikstad/Sarpsborg) and Grenland (Skien/Porsgrunn), where the car shares are in line with the national average outside of the largest urban areas
- Households with two cars or more
- Those having the best possibility to use the household car(s)
- Residents in areas with mid or low access to public transport

The care share for those having the longest education is somewhat lower than the average. Car driving rate increases by trip distance.

The national public transport share is 11 percent. The following groups have higher shares (from ca 15 percent):

- Young people, especially under the age of 18
- Single households without children
- Part time employees
- The lowest income groups
- Citizens in Oslo, followed by Bergen, and residents in the county surrounding Oslo
- Persons having no driving license and/or limited car access
- Persons with very good access to public transport

The national share of walking (the total trip distance) is 20 percent. The following groups have higher shares (from ca 23 percent):

- Young people, especially under the age of 18
- Single households
- Non-employed persons
- The lowest income groups
- Citizens in the largest cities
- Persons having no driving license and/or limited access to car
- Persons with very good access to public transport (which is mostly related to the largest cities)

The national bike share is 5 percent. These groups have higher shares (from ca 7 percent):

- Age group 13-17 years
- The lowest income groups (high representation of teenagers)
- Citizens in Trondheim and Stavanger
- Among the urban regions, the Kristiansand region has a relatively high bike share together with the Trondheim and Stavanger regions
- Persons with no driving license and/or limited car access

## Stable access to transport resources

A population share of 57 percent reports very good or good access to public transport in RVU 2018/19, similar as in RVU 2013/14. The best access to public transport is in RVU defined as less than one km distance between the home address and the public transport stop serviced by at least four departures per hour.

This measure is considered somewhat uncertain due to a low response rate and an over-representation of public transport users on these questions. The best access to public transport is reported by the residents in the largest cities, with Oslo on top, followed by Stavanger, Trondheim, Bergen and Tromsø. For areas surrounding the cities, the highest levels of public transport access are reported in the Oslo and Stavanger regions.

The possession of driving licenses and cars in the RVU 2018/19 population resembles the RVU 2009, i.e. slightly lower than in RVU 2013/14. 85 percent of the households have

access to car. 43 percent of all households have one car, 33 percent two cars, and nine percent have three cars or more. 67 percent of the population in RVU 2018/19 has both driving license and possibility to use a car for the whole day of travel.

The average number of cars per household is 1,4. In RVU 2013/14 there were still few signs of electric and hybrid cars. In RVU 2018/19, the majority (84 percent) of the cars are still powered by petrol or diesel. Yet, the increasing shares of electric and hybrid cars are appearing more clearly in the households' car fleet, constituting nine and six percent, respectively. Most electric cars are found in households with two or more cars, among the highest income categories, and in the largest city areas, especially in Oslo and in the Bergen region.

Car availability is associated with income. Even if a decline in difference is observed, men still have higher car access than women. Transport mode use differs significantly by the availability of car, parking space and public transport. Most of the car households (96 percent) can use a parking space close to home. For 94 percent of the one-car households the parking space is found less than 50 meters from the residence (98 percent if the maximum distance is 100 meters). Residents in the largest cities have lower availability to parking spaces close to home, especially in Oslo. Nevertheless, the share of parking availability close to home is relatively high (85 percent) also in Oslo.

80 percent of the commuters who travelled by car to/from work have access to car park made available by the employer. Of these, 72 percent reported that a parking space was easy to find and free of charge.

The availability of bikes and MC/mopeds are slightly lower than in RVU 2013/14. 72 percent have access to a bike, in most cases (91 percent) one type of bike. 69 percent of the population have traditional bikes, while electric bikes are held by seven percent. Thus, most electric bikes are available to persons who also have a traditional bike. This is also the case for the users of city bikes. MC/moped is available to nine percent of the population in RVU 2018/19.