

# Travel behaviour among employees in Oslo municipality

## Status for 2023 and changes since 2018

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- Half of the employees in Oslo municipality used public transport for their last commute to work. This is a slight decrease in public transport usage since 2018. More people are now cycling to work, while the percentage of people driving remains the same.
- The emissions from work commutes are significantly lower now than before, primarily due to the increased electrification of the vehicle fleet. Half of the car-based work commutes are done by electric cars. Additionally, the increased use of remote work has reduced the number of work commutes.
- Implemented measures to promote climate-friendly commutes have also had a positive effect on employees' commuting behaviour. However, the effect is small because few workplaces have implemented such measures, and few have implemented parking restrictions.
- There is potential for reduced car usage, particularly because many employees have the option to park their cars for free at, or near, their workplace.

The purpose of this project has been to map the travel behaviour of Oslo municipality's employees on work and service trips. The project is based on a similar project carried out by the Institute of Transport Economics (TØI) in 2018. Since 2018, Oslo municipality has been working on measures to facilitate climate-friendly work trips. At the same time, the coronavirus pandemic has influenced the way we travel. The purpose of the project is to obtain updated information on the travel behaviour of Oslo municipality's employees and to investigate how the work on climate-friendly work trips and the coronavirus pandemic have affected the employees' travel behaviour. The results are based on a travel survey among the municipality's employees, conducted in March 2023. 12,000 of Oslo municipality's 54,000 employees have responded to the survey. The project was carried out by the Institute of Transport Economics (TØI), commissioned by the Climate Agency in Oslo municipality.

### Half of the employees use public transport to commute to work

A large percentage of the municipality's employees use public transport to and from work. At the same time, just over a quarter drive their own car. The number of people driving their own car is the same in 2023 as in 2018. Compared to 2018, use of public transport has decreased slightly, while cycling has increased accordingly. About half of the cyclists use e-bikes.

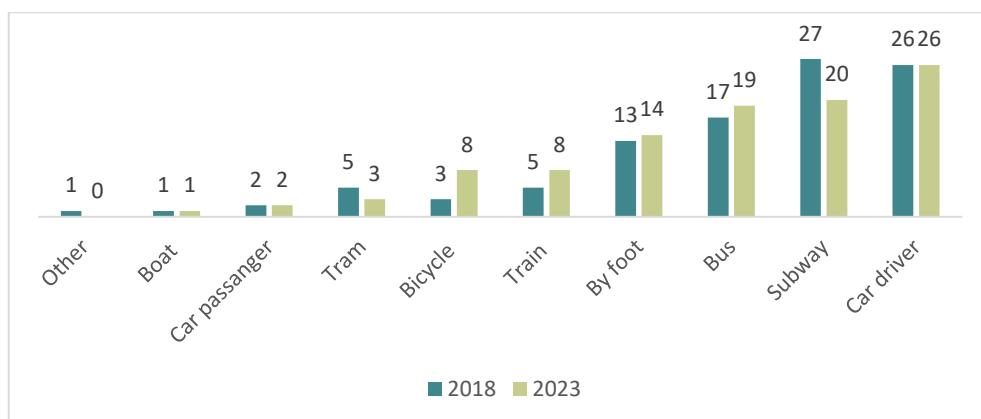


Figure S.1: Main mode of transportation on the last work trip, percentage.

### Increased electrification contributes to reduced emissions

Although the share of car usage for work trips is the same in 2023 as in 2018, the proportion of electric cars has increased dramatically. In 2023, half of the car users drove an electric car, compared to 15% in 2018. Increased electrification has therefore contributed to a significant reduction in emissions from work trips among employees of Oslo municipality. At the same time, increased electrification also means that car usage has not decreased since 2018. Both our own and other results show that the likelihood of driving a car is higher among those who have an electric car than among those who have a fossil fuel-based car.

### More cycling in summer than in winter

The travel survey was conducted in March. The results show that the use of cars and public transport is higher in winter than in summer, while significantly more people cycle to work in summer. At the same time, the results show that the increase in cycling primarily results from increased winter cycling.

## Factors influencing the mode of transport for the work trip

There are many reasons why employees travel to and from work the way they do. Below are some key factors influencing the choice of mode of transport for work trips.

### Parking conditions at the workplace affect car use

Access to parking spaces for cars for employees in Oslo municipality is good, with half having access to parking space provided by their employer, where many can park for free. Additionally, 26 percent have access to parking elsewhere near their workplace. The availability of parking is better at workplaces in the outer city than in the inner city.

Access to parking has a significant impact on the choice of transport mode for commuting. Among employees with access to free parking space by, or near, their workplace, and who have a driver's license and a car, over half drive to work. Car use decreases significantly when parking is subject to a fee.

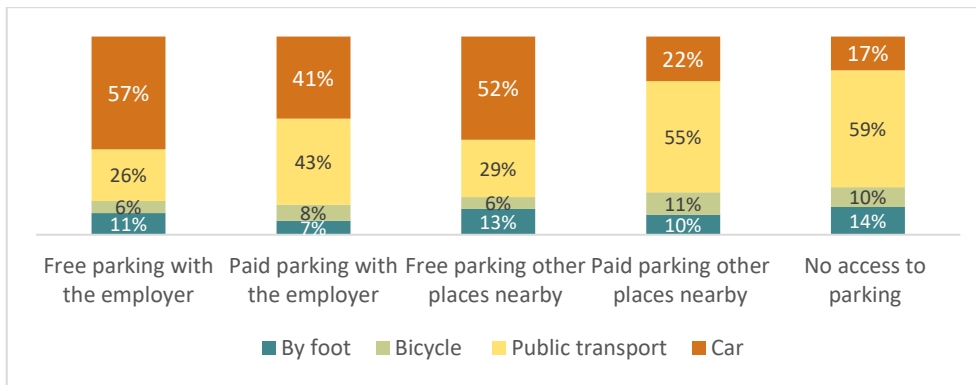


Figure S.2: Relationship between access to parking at the workplace and mode of transportation, among those with a driver's license and access to a car.

### More public transportation use among those who live near a public transportation service

Most workplaces in the municipality have good access to public transportation, with slightly better access in the inner city than in the outer city, but the differences are not very significant. About 70 percent of those who work in the downtown and inner-city areas have a public transportation stop within 500 meters of their workplace. Among workplaces in the outer city, the percentage with a stop within 500 meters is somewhat lower, and lowest in the outer west, where only 45 percent have a stop within 500 meters.

Access to public transportation affects the choice of transportation mode for commuting. There is more car use among employees who live far away from a public transportation stop than among those who live near one.

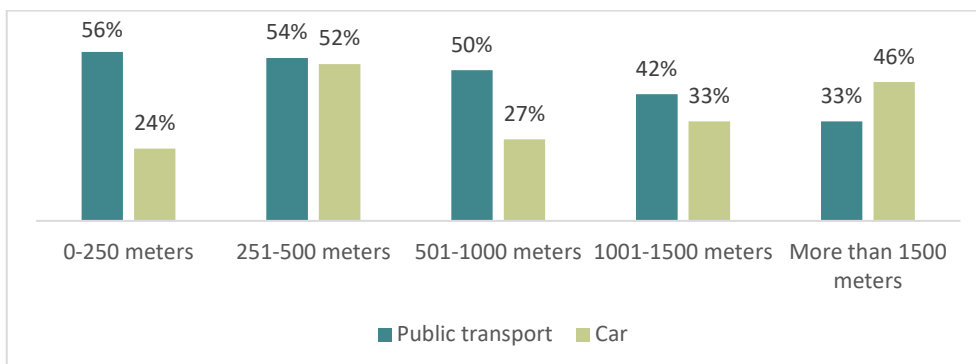


Figure S.3: Distance to nearest public transport stop from the workplace and the share of employees using public transport and cars for commuting

### Location influences how people travel to work

Where one lives and works affects how one travels to work. There is more car use among employees who live in outer Oslo and outside Oslo, than among those who live in the inner city. The location of the workplace also affects the choice of transportation to work: Employees who work in the city center and inner city use more public transportation, while employees at workplaces in the outer city are more likely to drive a car. Those who live and work in the same zone walk to work more often than those who work in a different zone than where they live.

The type of work one has also affects how one travels to work. The use of a car is more common among employees with operational tasks than among employees in offices, schools

and kindergartens, and in healthcare professions. However, there are relatively few employees in Oslo municipality with operational tasks (four percent).

### Having errands related to the commute increases car use

About half of the employees in Oslo municipality have an errand on the way to or from work. Shopping and dropping off or picking up children from kindergartens or school are the most common errands. Those who have errands related to the commute use cars to work to a slightly greater extent than those who do not have errands. At the same time, many people carry out errands even though they do not use a car. Therefore, car use is not a necessity to be able to perform errands on the way.

### Higher car usage on business trips than on commuting

We have also studied the business trips of the employees in Oslo municipality. About half of the employees make business trips, but most travel relatively infrequently. The volume of business trips has not decreased significantly since 2018. This is due, among other things, to the fact that patient visits or customer meetings are often undertaken. These are business trips that are difficult to replace with digital communication.

About half used public transport on their last business trip, and 34 percent used a car. Car usage is somewhat more common on business trips among those who make many business trips, while public transport is more commonly used among those who make few business trips. If we look at all completed business trips in a month as a whole, the car usage is thus higher, and the public transport usage lower, than what we find on the last business trip.

Car usage is higher on business trips than on commuting, but the use of electric cars is more widespread. On business trips, over 60 percent of car trips are made with electric cars. About two-thirds of those who use a car on business trips use their own car, while one-third use a company car. The percentage of electric cars is significantly higher for company cars than for private cars. However, among those who use their own car on business trips, the use of electric cars has increased the most.

### More work from home and fewer public transportation trips due to the pandemic

Almost half of the employees in Oslo municipality have the option of working from home, and about one third are working from home at least one day a month. This is a significant increase from 2018. Over 30 percent of those with office tasks are working from home at least one day a week.

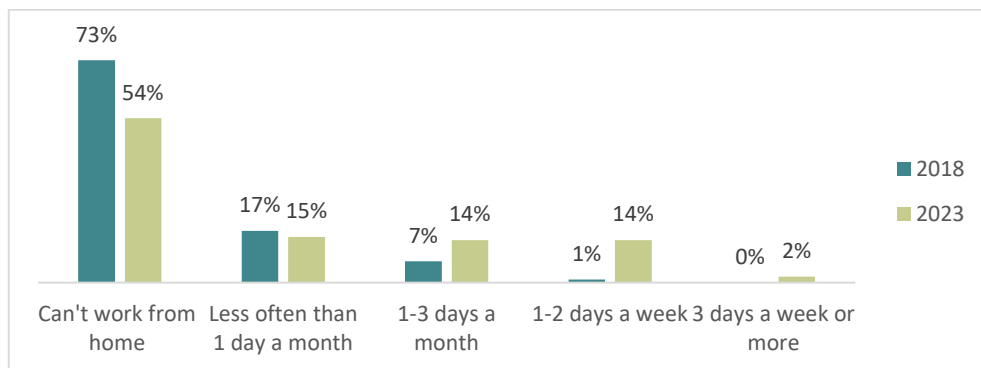
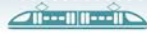


Figure S.4: The number of full days working from home in 2018 and 2023.



The increase in the number of employees working from home has reduced the extent of work-related travel by about seven percent. Those who use public transport (especially trains and subways) to work, are working from home to a greater extent than those using a car. The increase in the number of employees working from home has reduced the number of transport kilometers from cars by about five percent.

During the pandemic, people were encouraged to avoid traveling by public transport, and many replaced their use of public transport with more individual modes of transportation. Some have continued with this even after the pandemic. About one in ten state that they have changed their mode of transport on their work commute as a result of the pandemic, with most stating that they travel less by public transport and walk or cycle more. Much of the explanation for the observed decline in the use of public transport on the last work trip is thus likely an effect of changed travel behaviour as a result of the pandemic.

The pandemic has also contributed to an increased use of digital meetings. In 2018, eight out of ten employees never had digital meetings, and only seven percent had digital meetings at least once a month. In 2023, more than half of the employees in Oslo municipality have digital meetings at least once a month, and only two out of ten never have digital meetings. The use of digital meetings is greatest among employees with office tasks, where over half have digital meetings at least once a week. However, digital meetings do not seem to have replaced the extent of service trips to any significant extent. The digital meetings can, for example, be internal work meetings that were previously held physically at work but are now held digitally or as hybrid meetings as a result of an increase in the number of employees working from home.

### **Measures for climate-friendly work trips contribute to increased cycling, but the effect is small**

Some workplaces in Oslo have received funding to implement various measures to make it easier and more convenient to choose sustainable modes of transportation, such as cycling, public transport, and walking. Most of the measures involve bicycle parking, changing room facilities, bike workshops, e-bike charging stations, and similar amenities. In addition, some workplaces have introduced charging stations for electric cars, but none of the measures involve parking restrictions.

We have compared changes in travel behaviour among employees at workplaces that have received funding with those that have not received such funding. Employees at workplaces that have received funding from the scheme have shifted their travel behaviour towards more sustainable options, primarily by increasing their use of bicycles. However, the differences are small, and relatively few workplaces have received funding from the scheme. Therefore, the impact on the total modal distribution of transportation among employees in Oslo is limited.