

Summary:

Travel survey among employees in the CIENS-institutes before and after relocation to Forskningsparken

In October 2006, eight research institutes (the CIENS-institutes) were relocated from different locations in Oslo to the same building in the research centre called Forskningsparken. Forskningsparken is located at Blindern, about four kilometres from the city centre of Oslo. Travel surveys were carried out before and after the relocation (in September 2006 and September 2007). This was done in order to contribute with new data about the connections between location of working places and travel behaviour, and in order to clarify if the relocation caused substantial inconvenience connected to the affected employees' travels to work. Parallel to the follow-up study, a travel survey among employees located at Forskningsparken, but not working in any of the CIENS-institutes, was carried out. This group was included because they have other parking conditions than employees in the CIENS-institutes, and in order to constitute a control group.

The three travel surveys were carried out at the internet. Questions concerning how the employees usually travel to work, how they travelled this day, vital background information and questions about how they experienced the new travel to work route were included, as were questions concerning attitudes towards transport policy and transport means.

The situation discussed here is interesting because companies moved from locations with different characteristics regarding public transport services, parking access and location in the city structure, to a situation with equal conditions. In general, the public transport services were improved and the parking access reduced. According to the theory in the field, this should cause reduced car use among employees, which it did. The car share on work travels among CIENS-employees was reduced from 36 % to 20 %. The public transport share increased from 30 to 39 % and the bike share from 24 to 29 %. 6 % walked to and from work in both situations. Among others working at Forskningsparken in 2007, the car share was 34 %, the public transport share 36 %, the bicycle share 19 %, while 7 % were walking.

The modal split of the various CIENS-institutes became more equal after the relocation to the same building. Analyses carried out in order to discuss what caused the changes, based on analyses of changes in the different research institutes showed that changes in all three conditions; location in the urban structure, public transport services and parking access, contributed to the reduction of the car share. It was concluded that the combination of all three

changes explained why the reduction was so large (the car share was reduced by almost 50 %).

A comparison of the modal split among employees in the CIENS-institutes with other similar travel surveys showed that the car share among CIENS-employees was substantially lower than expected in companies located this far from the city centre. The “city centre” like conditions; good public transport services, poor parking facilities and a huge number of people living in walking and biking distances, were seen as an explanation for this.

The surveys showed that employees in the CIENS-institutes were more content with their new work travel than they expected to be before the relocation (reduced parking access was seen as negative by many). More employees reported that the work travel had become better than before than reported that it had become worse than before. We also found that those who walked (or could walk is maybe better) were most content with their work travel, followed by the ones bicycling, using public transport and at last the ones driving their car.

The parking standards of Oslo are supposed to ensure two objectives, which may be conflicting: 1) Secure that there is enough parking for employees and customers in order to avoid unreasonable burdens on surrounding local streets and neighbourhoods caused by parking, and 2) Contribute to reducing the number of employees that go to work by car. Point 2) is ascribed as more important, among others through the introduction of maximum parking norms. In CIENS, minimum standards were applied. We have tried to analyse whether the low parking accessibility have affected the modal split among CIENS-employees, and if it has resulted in unreasonable burdens on the nearby neighbourhoods.

Three sets of data covering three different situations were used in these analyses. These were the situation in the CIENS-institutes before the relocation, the situation in the CIENS-institutes after the relocation and the situation for other employees working at Forskningsparken (they have better parking access than people working for the CIENS-institutes).

Before the relocation, most of the CIENS-institutes had unlimited access to free parking for their employees. The exceptions were the TØI, which offered limited parking access and a claimed fee of 25 NOK per day, and NINA, which offered a limited number of free parking spaces. The comparison of parking facilities and modal split in the situation before the relocation led to no clear conclusions. The companies with lowest and third lowest car share (met.no and NIBR), offered unlimited and free parking. The same did the company with the highest car share, NIVA. TØI, with restricted parking space and a parking fee, had the second highest car share.

A comparison of the situation before and after the relocation, where the parking access and the car share were reduced simultaneously, pull in the direction that parking access do matter. This is strengthened when the car share among CIENS-employees with low parking access and 20 % car share are compared with other employees in the same building with better parking access and 34 % car share.

The next question is whether the parking restrictions results in unreasonable burdens on the nearby neighbourhoods caused by CIENS-employees parking in the nearby streets. The share of car driving CIENS-employees parking in local

streets increased from 3 % before relocation to 61 % after. The parking restrictions thus increase the pressure on nearby local streets. At the same time, the local traffic is reduced, compared to what it could have been without parking restrictions.

We have calculated that 58 cars belonging to car-driving CIENS-employees were parked in neighbourhood streets. Whether this is to be seen as an ‘unreasonable burden’ is debatable, and depends among others on whether employees in other companies park in the same streets (as they do here). It also depends on if one finds that parking in public streets should be exclusively for residents in the neighbourhood. If that is the case, this would have large implications for the regulation of street parking in the city in general.

Another interesting question is what characterises the users of different transport modes, or in other words what are important conditions causing different travel behaviour on travels to work.

We found clear differences in travel behaviour among CIENS-employees living at different residential locations. Those living in Oslo inner west (30 % of the trips to work by people living here is done by foot) and in Oslo outer west are walking most. These are the people living closest to Forskningsparken. Those using bike the most, are the ones that live in Oslo inner east (57 % bike), Oslo inner west and Oslo outer north. This also seems logical, in relation to travel lengths. Those using public transport the most, are the ones that live outside of Oslo and Akershus (74 % public transport share) and others living in the outer parts of Oslo and Akershus. The exceptions are the ones that live in Oslo outer north (which bike a lot) and the ones that live in Akershus west and Oslo outer west. The two latter groups drive by car to work to a much higher degree than other CIENS-employees (47 % car share among those living in Oslo outer west). The connections between residential location and choice of transport mode is thus as expected. Those having short distances between home and work walk and bike more than others, while the ones that travel the longest distances choose public transport.

Why the ones that live in Akershus west and Oslo outer west choose car to a much higher degree than the others, is an interesting question. A possible explanation is the combination of public transport standards and the congestion situation on the roads. The public transport services from the western part of the city to Forskningsparken do to a high degree go via the city centre and not directly to Forskningsparken. The urban structure is more spread out in the west, which results in longer walking distances to high standard public transport services. Those living west of Forskningsparken are also less hampered by congestion, since they don’t have to drive through the city in order to reach Forskningsparken. In total, these conditions affect the travel time differences between the private car and public transport in favour of the car.

CIENS-employees that delivered or picked up children to/from school or kindergarten at the day of the survey reported a higher car use (25%) than the average (20 %). When travel behaviour and age were compared, we found that the oldest age groups use car more than the others. The youngest and the oldest groups use public transport more than the other, while the middle group use bike more than others. Men use bike more frequently than women, while women use public transport more frequently than men.

Car ownership is a problematic variable. It is often argued that there are strong connections between car ownership and the use of car – those that have a car choose to use it on travels of that reason. At the other hand, one could argue that the ones that need the car most buy cars, which means that variables like qualities of the transport systems and location of working place and home, decide car ownership and the use of the car. In the 2007 surveys, we found that 67 % of the CIENS-employees and 56 % of others with working place at Forskningsparken, which had travelled by other modes than car this day, reported that they had a car at home which they could have used this day (nobody else used it). We found, as expected, a strong connection between car ownership and car use. The more cars in the household, the higher car share on work travels.

We have thus found that there are co-variation between modal choice and several of the variables we analysed. Attitudes do probably play a role, but based on our findings we will claim that the residential location in relation to the location of the working place, together with the qualities of the transport systems (especially car and public transport) play the major role in the modal choice on travels to work. Thus, we have found nothing new, but confirmed that this also works for work travels to working places located in the outer parts of the inner city, as long as ‘city centre like’ conditions (good public transport services, low parking accessibility) are established, and not only for city centres.