

Investigation of the effects following an increased parking fee in the central parts of Örebro

Session 4E. Managing the curb, improving parking

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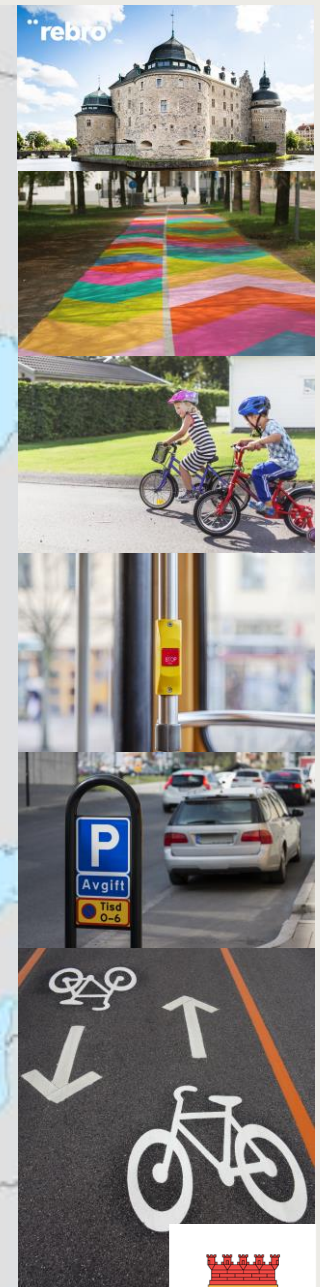
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ÖREBRO

Örebro

- Sixth largest city in Sweden
- Population of 157 000 (2022)
- University with about 16 000 students
- Logistical centre, both road and rail



The city of Örebro

Current modal split: 25 % bike and 50 % car

Bike friendly + car friendly = car

Target (2020): 40 % car and 33 % cycle

Increased parking fees in Örebro city during 2021.

To reach the desired effect they must give the right signal to both commuters and residents.

Investigations provide valuable information which enabled unique and site specific analyses of the parking situation and the effects of the increased parking fees.



Increased parking fees

Zone 1

Previously 10-25 SEK/hour

New fee 10 SEK/hour and 40 SEK/hour after two hours

Zone 2

Previously 2-5 SEK/hour

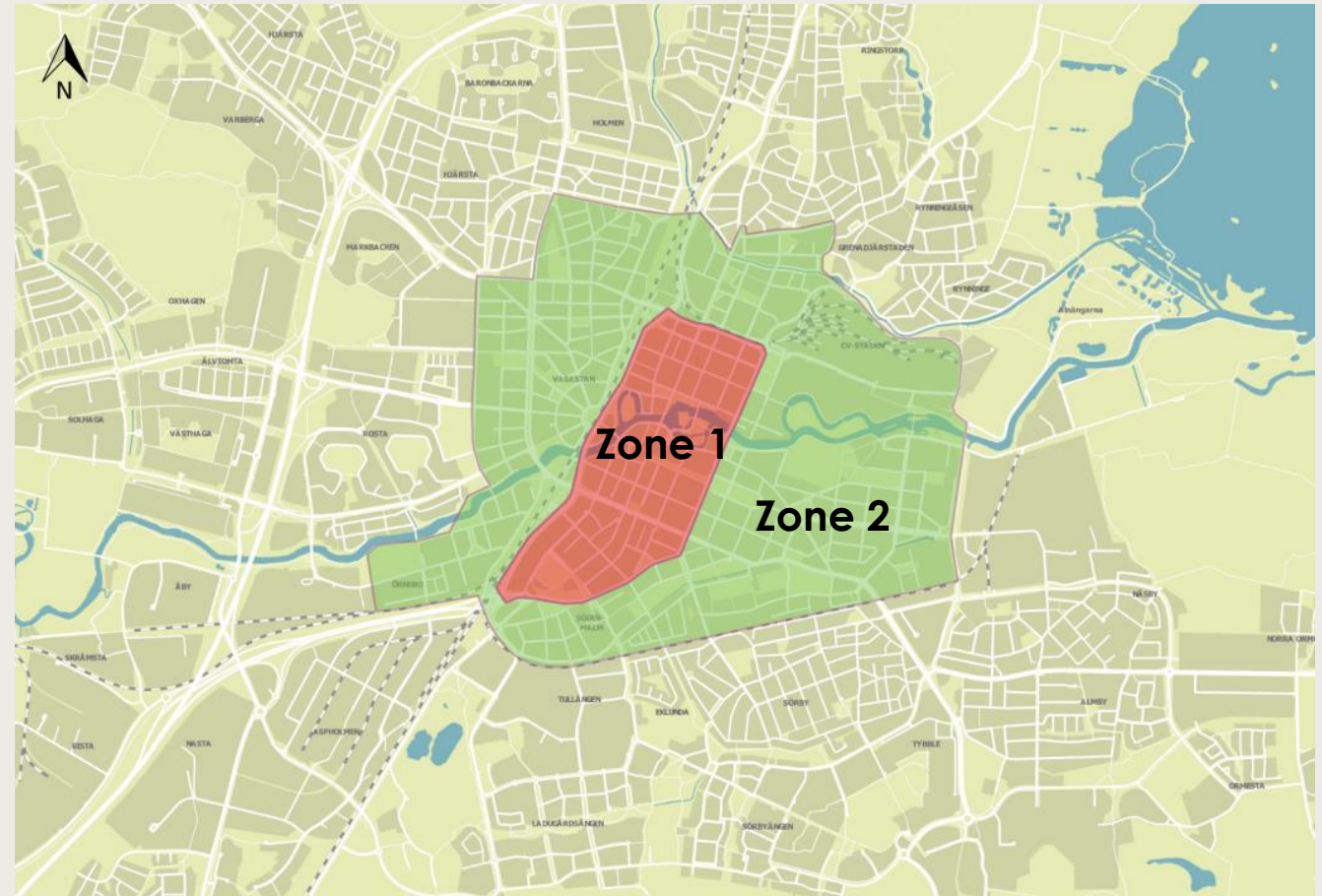
New fee 10 SEK/hour

Residential parking 420 SEK/month
(1/5 of the cost compared to the hourly rate)

Outside zone 2 – “zone 3”

No change – still free of charge

(10 SEK is approx. 1 Euro)



Investigation method

Why?

Without thorough investigation and evaluation, the effect of the parking fees remain unknown.

The results indicate how the parking fees should be altered regards to zone boundaries, fee levels and residential parking.

How?

Investigation regarding occupancy rate of parking and the origin of the cars (by registration plate) before and after the parking fee adjustment.

Manual counting of the cars, by bike or car during evenings and the following mornings.

Not an innovative method, but the fact that it has been conducted is innovative. Investigation during the pandemic – but results before and after are comparable

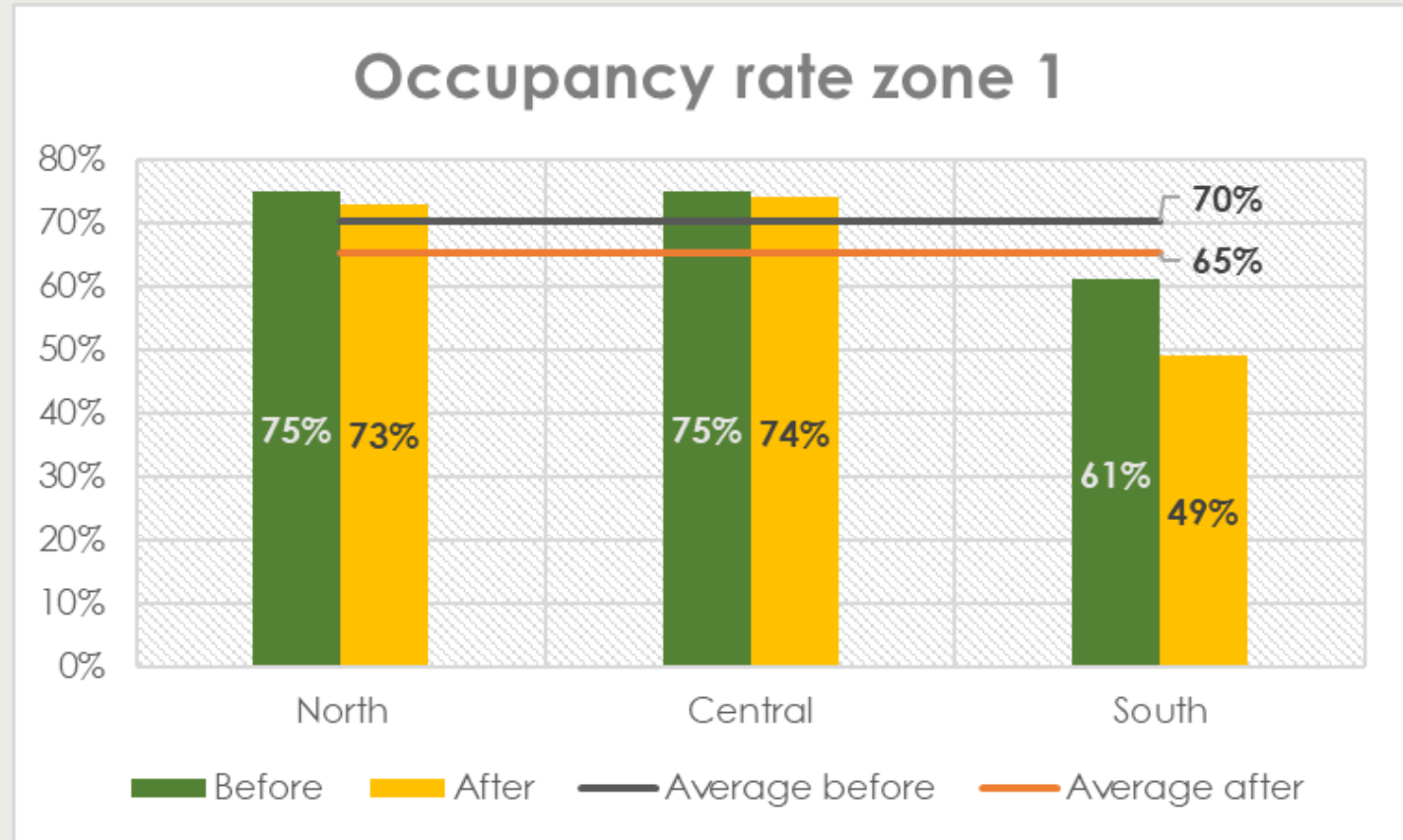
Results – zone 1

Slightly decreased average occupancy rate.

However – site specific differences.

- Larger decrease in the south parts due to a higher difference between parking fees.

The limit at 80 % occupancy rate to avoid search traffic is not exceeded on average – but on some specific streets.

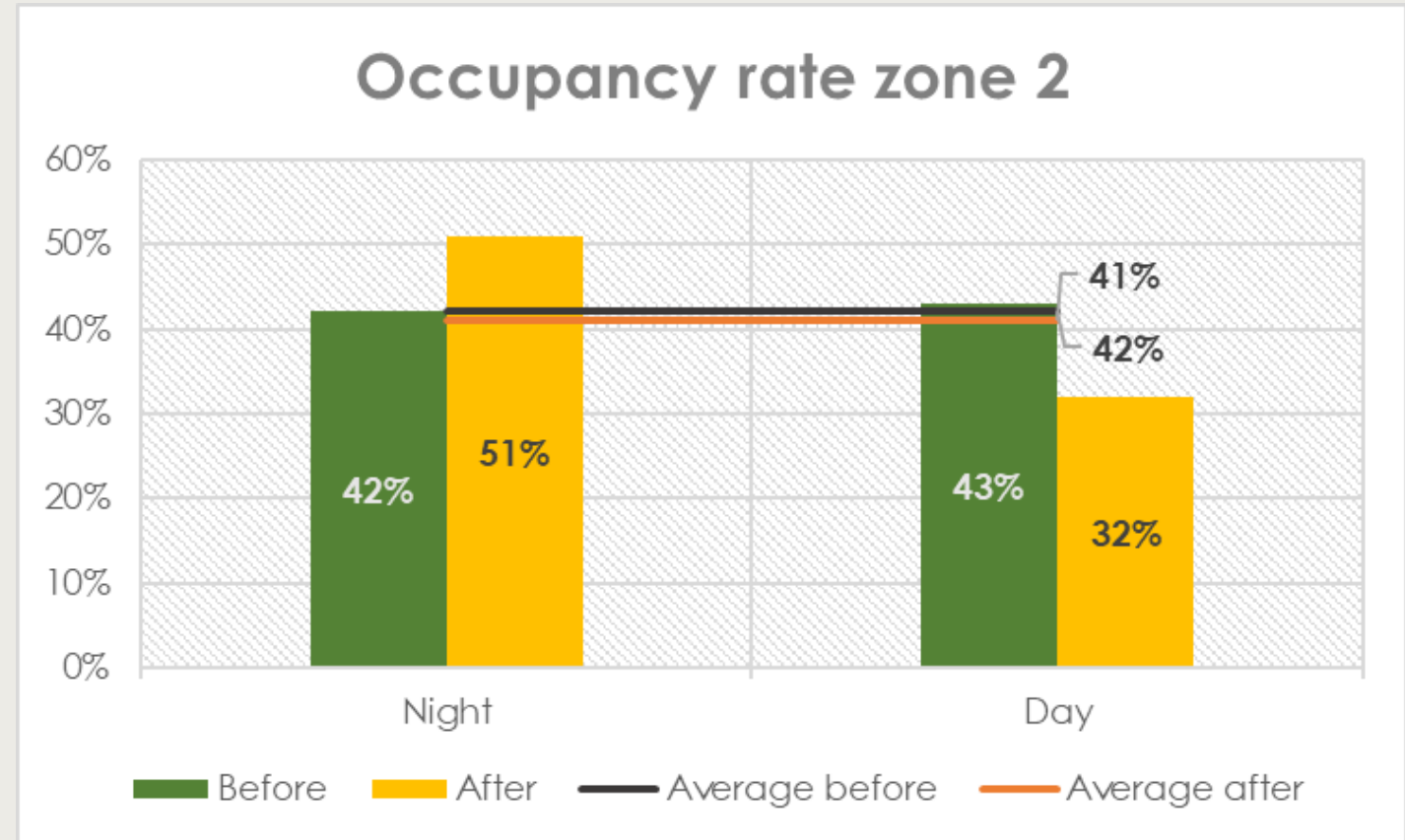


Results – zone 2

No change in the average occupancy rate, although substantial increase of parking fees, but:

Occupancy rate during night time has increased (42 % to 51 %)

- No parking fees during the night
- Analysing the cars registration plates indicates that residents occupy public parking spaces during the night – a result from the residential parking

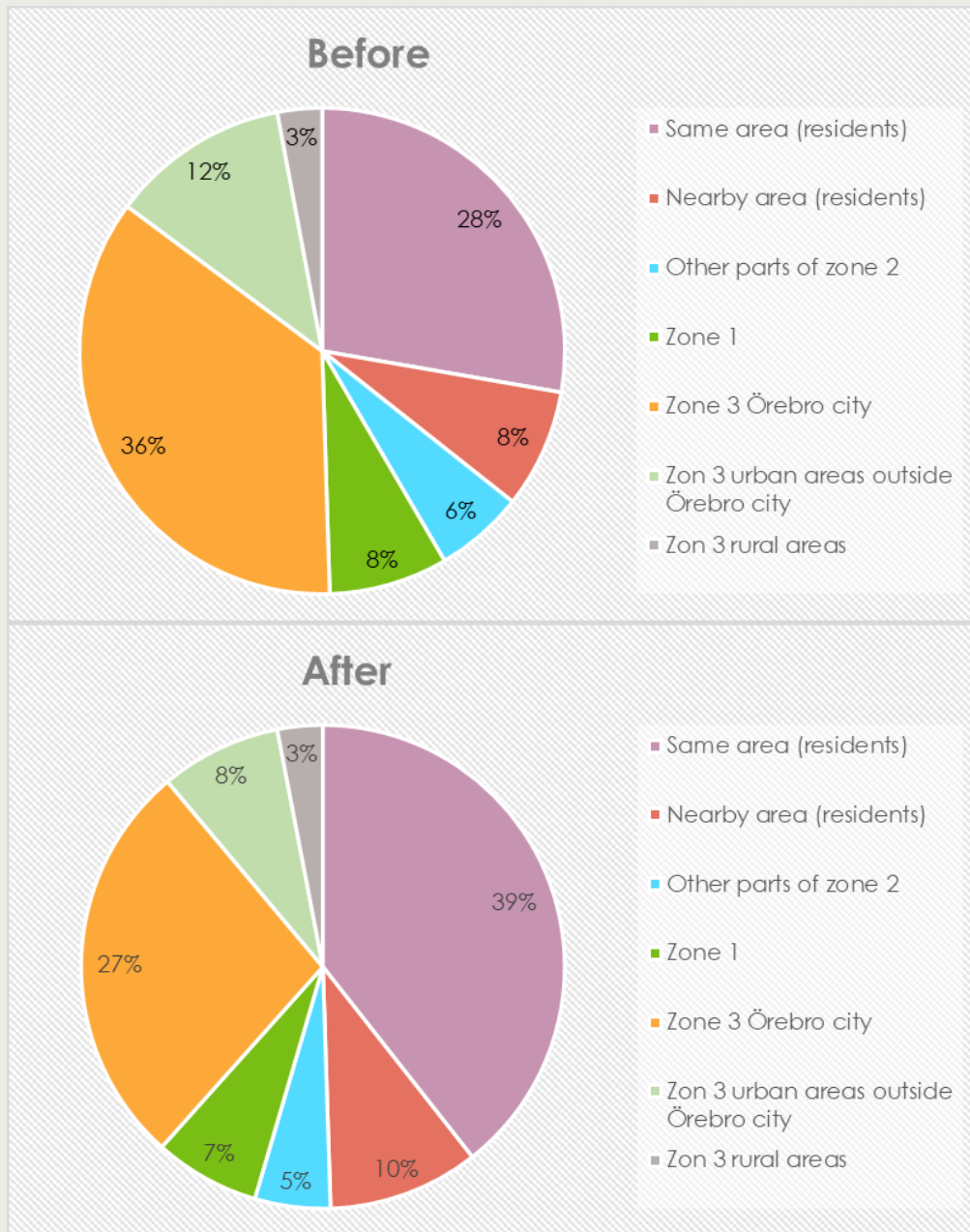


Results – zone 2

Occupancy rate during daytime has decreased (43 % to 32 %)

- Likely an effect of the increased parking fees.
- Analysing the cars registration plates shows that a large share of the cars have travelled less than 7 km.
- This category (orange) has decreased – but only marginally, despite large increase in cost.

Origin of parked cars based on their registration plates



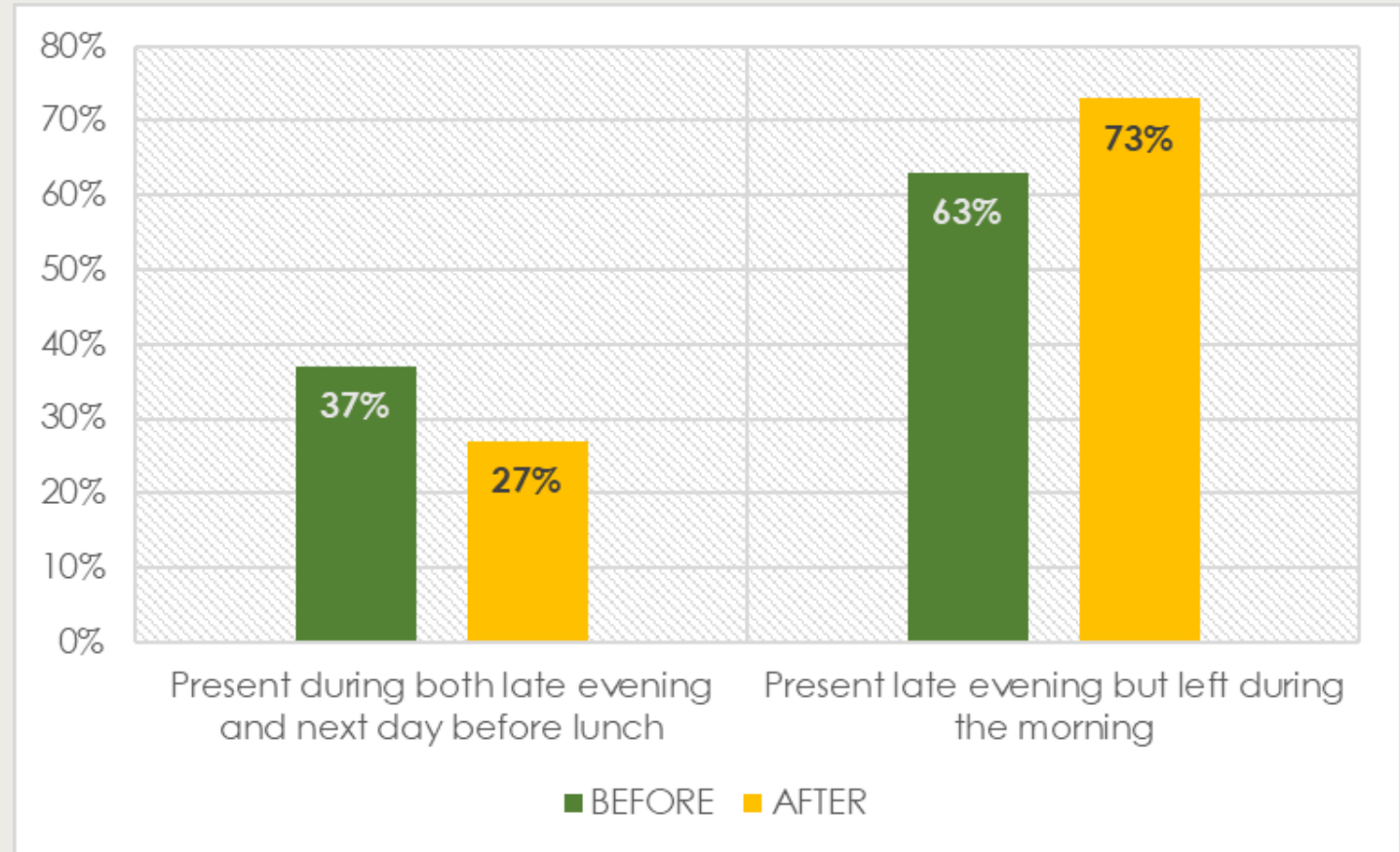
Results – residential parking in zone 2

Residential parking – remove the need for residents to move their vehicles in the morning.

Results shows an increased share of those who park during the night and that moves the car in the morning (63 % to 73 %).

The habit to drive to work remains, at least at the current (low) cost of the residential parking.

(Parking is free of charge night-time and during weekends)

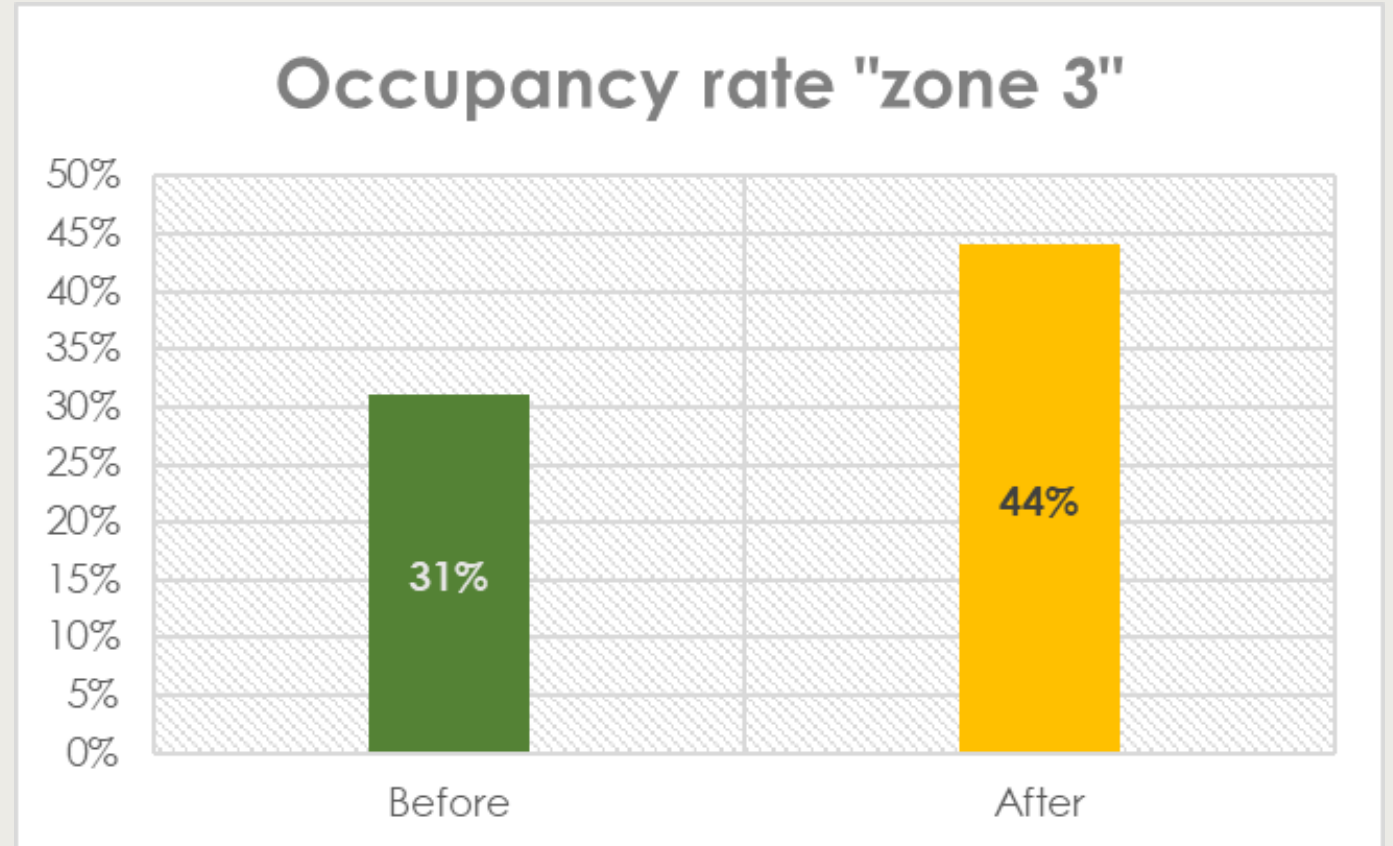


Results – “zone 3” (free of charge)

Increased occupancy rate (31 % to 44 %) in the area just outside of zone 2.

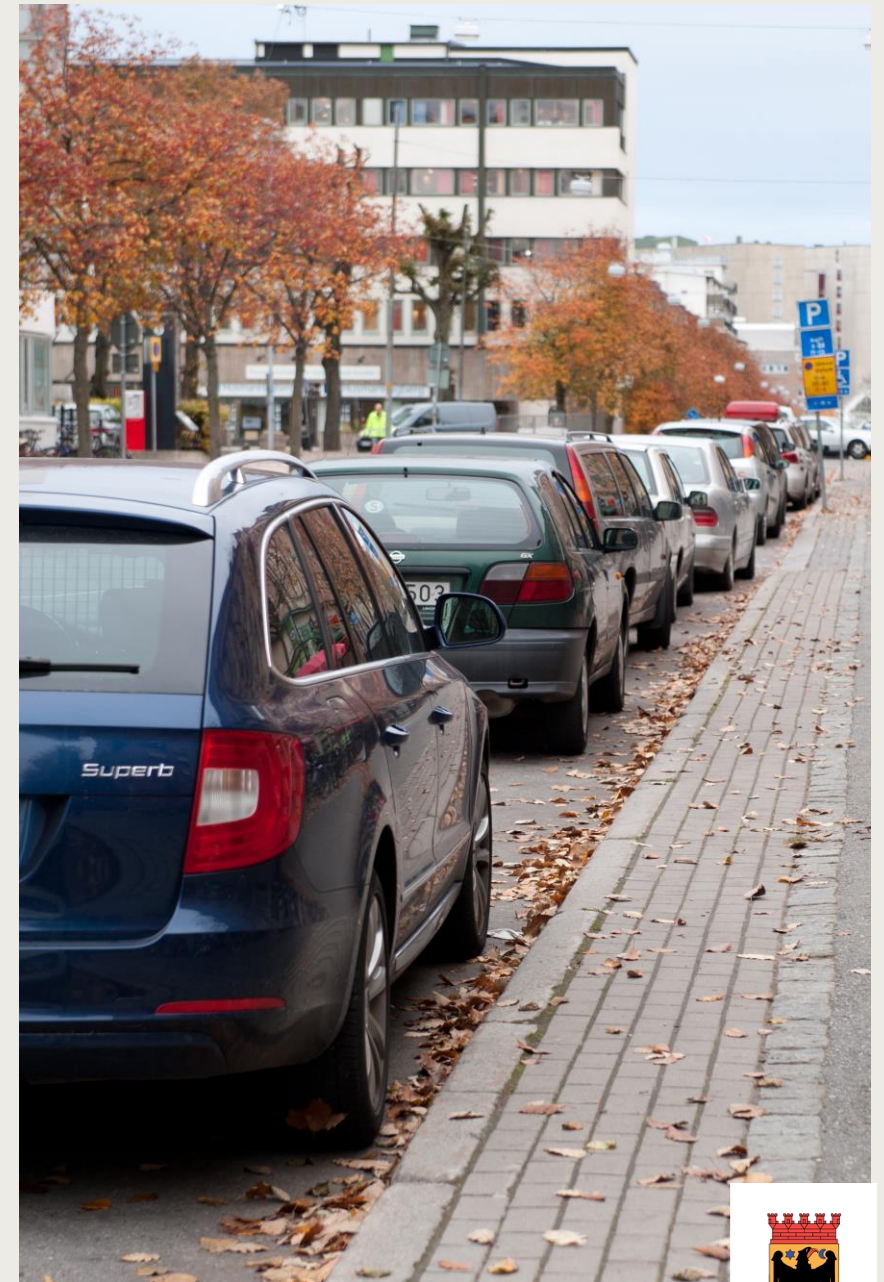
People previously parked in zone 2 now parks outside the zone to avoid the higher fees.

Analysing the cars registration plates shows a large share from neighbouring cities with good public transport connections. Further adjustments have the potential to increase use of public transport.



Conclusion

- The occupancy rate in the most central parts are still high and further adjustments of the fees are necessary, including time limitations.
- The increased parking fees in zone 2 has decreased the occupancy rate during the day, but the occupancy rate in “zone 3” has increased.
- Residential parking allows residents to occupy public parking at a subsidized cost – decreases the use of private parking facilities.



Conclusion and lessons learned

Adjustments of parking fees in one part of the city give consequences in another part

- Higher parking fees in the central parts results in higher occupancy rate in the outer parts as people change their behaviour in order to avoid parking fees. This shows the importance of considering the entire system when enforcing changes.
- The parking fees on the public parking must correlate with parking fees in private parking facilities.

Residential parking has currently a fee that is too low and subsidized (1/5 of the parking fee). The fee must be increased to reduce the number of private cars in the city and increase the sustainable travel modes.





Thank you for your attention

For further information contact
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