

Heart Zones for safer school travel: Insights from a nation-wide study in Norway

European Traffic Education Seminar 2024

Vibeke Milch Uhlving vmi@toi.no



Heart Zone



Car free/car restricted zone around the school



Traffic safety measure



Active mobility → health and environment



Influence “traffic culture” within a specific geographical area



Road Marking



Drop zones



Heart zone art



Signage



Opening ceremony

Nation-wide study

- Synthesize research findings from previous evaluations and research on similar measures
- Map experiences and best practices for implementing the initiative (municipalities and schools)
- Investigate effects of Heart Zones on traffic safety (traffic culture), as well as car use and active mobility.



Kunnskapsgrunnlag om virkninger av Hjertesone

Vibeke Milch Uhlving, Vibeke Nenseth, Ingunn Opheim Ellis,
Lars Even Egner, Tor-Olav Nævestad

2014/2024

Data Collection

January 2023



Survey to all
Norwegian
municipalities
(n=356)

March- April 2023



Survey to
representatives at
all Norwegian
elementary
schools
(n=2266)

May-September 2023



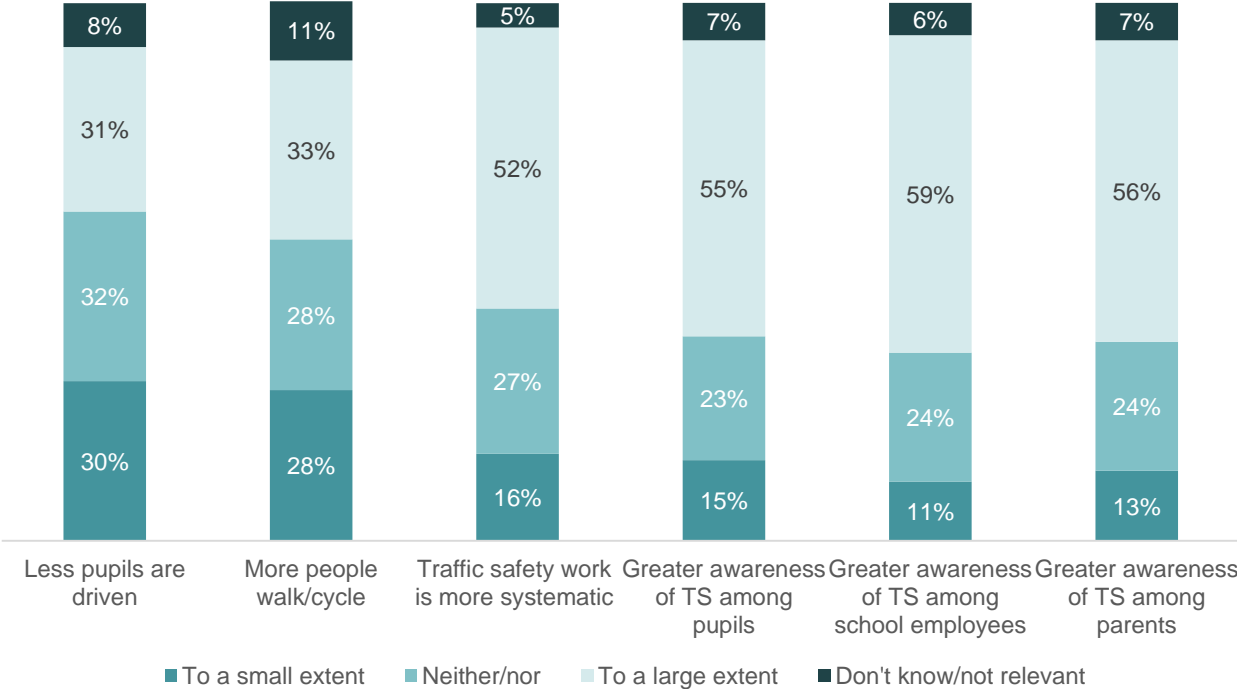
Survey to parents and
pupils at Heart Zone
Schools and Schools
planning to implement
Heart Zone (n=4196)

Response distribution

Response	Has Heart Zone	Planning to implement	Sum
Number og School responses	138	73	211
Number of Schools with parent responses	65	40	105
Number of parent responses	1554	2642	4196

What effects have schools experienced as a result of introducing Heart Zone?

- Increased awareness of traffic safety is the most important perceived effect of the Heart Zone.
- 52% of the schools report the Heart Zone has contributed to more systematic traffic safety work.



Which measures do schools find to be especially effective?

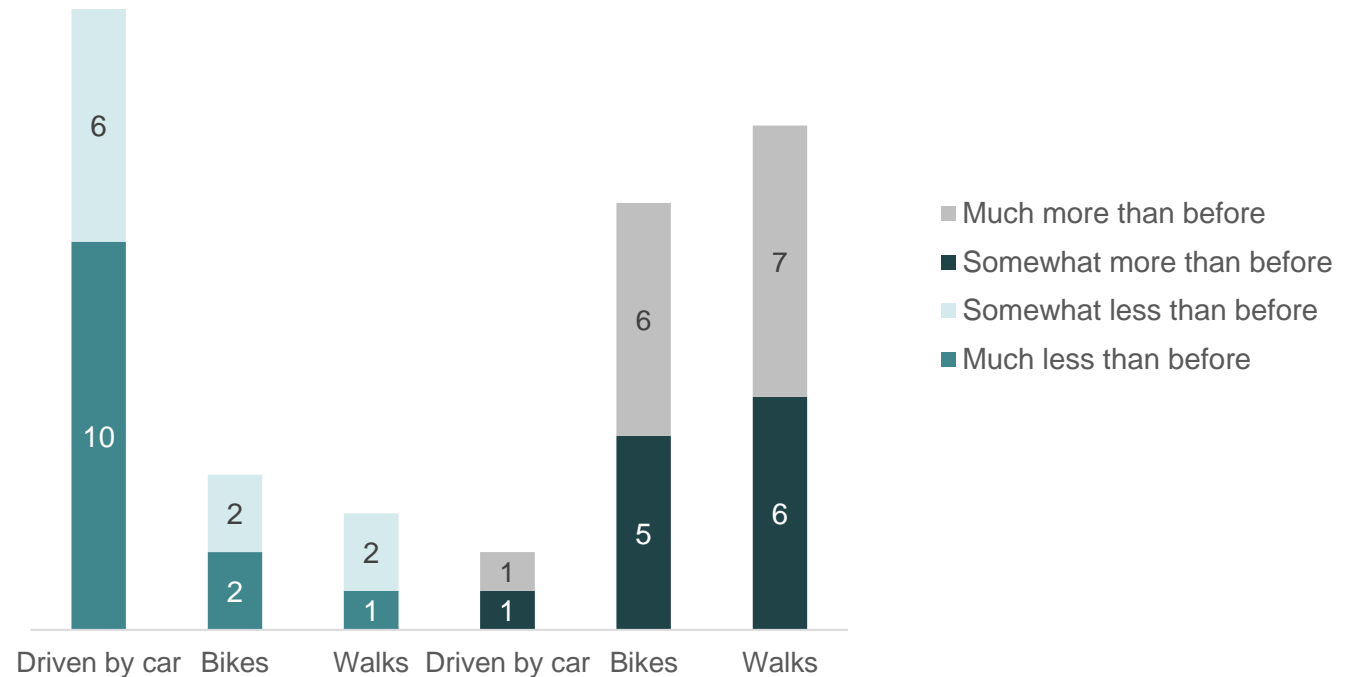
- Attitude-influencing measures that create engagement and awareness:
 - Walking/cycling competitions, reflex day
 - Visible guards at the heart zone during drop-off/pick-up
- Physical measures:
 - Establishment of a drop-off zone
 - Barrier / no entry, changed driving pattern
- Information at PTA-meetings



Photo: Sweindund

Have parents and pupils changed their mode of travel as a result of the Heart Zone?

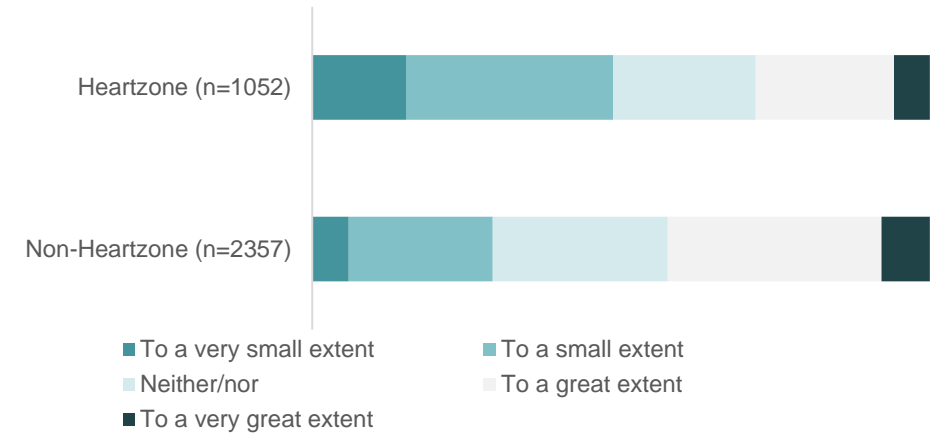
- Most travel as they did before
- However, 16% say they drive their children by car less.
- 14% report that children walk more.
- 10% say that children bike more.
- Corresponds well with previous studies



Are there differences in traffic culture for drop-off/pick-up between Heart Zone schools and schools that have not implemented the measure?

- Traffic culture measured as descriptive norms - statements about what are common ways of dropping off/picking up students among other guardians.
- Significant differences in the distribution of responses for Heart Zone schools and non-Heart Zone schools
- Indicates that the Heart Zone scheme affects traffic culture

Most parents deliver/pick up their kids with car (n=3399)



Most parents walk or cycle to school with the smallest children (n=3141)

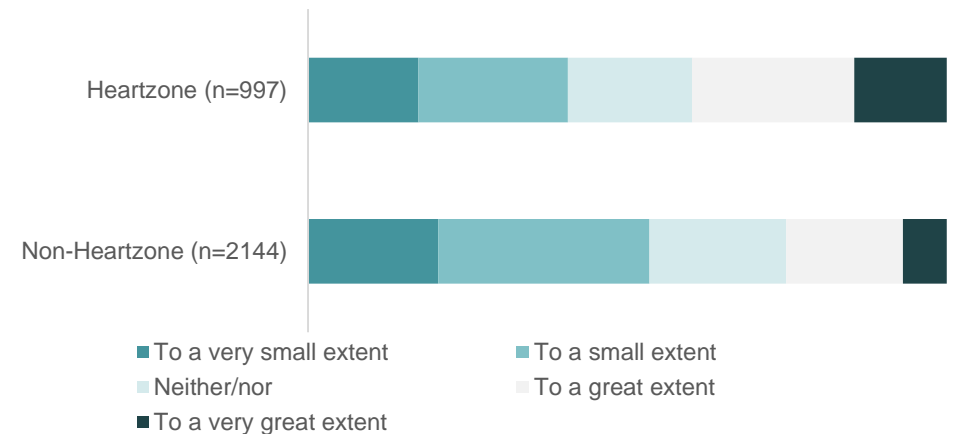




Photo: Shutterstock

Key factors

- Attitude-influencing work is important for creating a good culture
 - Focus on Heart Zone recommendations
 - Encouraging walking/biking
 - Sanctions when recommendations are not followed
- Parental and school leadership engagement appear to be key
- Infrastructure and traffic conditions are determining factors
 - Schools with heavy through-traffic make it more difficult to establish a unified culture
 - At schools where conditions are less favorable, greater measures are required
 - The school and the municipality can jointly explore long-term solutions, or alternatively use other areas

Conclusion

- Heart Zone helps raise awareness about traffic safety
- Directs and strengthens school-based traffic safety work
- Indications that Heart Zone affects the behavior of parents and students
- Need for more robust studies – development over time

