



INCLUSION Project

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Innovation Pilot Lab Rhein-Sieg:
implementation and results - Final version

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Abstract	The final report describes in detail the procedure in the Pilot Lab Rhein-Sieg within the EU-funded project INCLUSION. Thus, the development of the measures implemented on site is documented, but also derived and evaluated in terms of content. Special emphasis was placed in the Pilot Lab on questioning residents about their mobility needs in order to create a good basis for the measures implemented. This serves the aim of ensuring the most effective transferability of the concept and/or measures to other regions. The approach has been agreed and developed with the other partners of the project and is closely linked to the evaluations carried out in WP5 and the business models developed in WP6.		
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1 Introduction

“Why do so many parents bring and pick up their children to or from all sorts of destinations in their everyday lives by car, even though there are other ways to travel?”

This question, posed in the introduction to the interim report on Deliverable 4.2, was and remains the central approach for the measures implemented in the Pilot lab Rhein-Sieg within the INCLUSION project. Of course, it was necessary to try to determine the reasons for the numerous uses of the car despite alternatives on the one hand, and to find ways to steer this behaviour in a different, more multimodal direction on the other.

It became apparent during the project work that the question posed in the introduction must be supplemented: “How can we avoid children and young people becoming dependent from their parents because of bringing and picking up them and not being sufficiently strengthened and empowered to carry out their mobility in a self-determined way?”

If children and adolescents are (or have to be) brought by car to participate in social events, sports clubs, visits to friends, etc., in addition to the ecologically negative consequences, this of course also means a relationship of dependence which, if the parents cannot or do not want to bring them, also excludes them from participation in the above-mentioned social life. This too is a form of poverty that must be counteracted. At the same time, the independent mobility of children and young people is not promoted, but blocked, with negative consequences in the medium and long term.

In addition to the structural analysis of the Pilot lab area, great importance was attached to two extensive surveys of residents, a before and an after survey, in order to establish a comprehensive data basis.

The previous survey in autumn 2018 served to determine the actual state of affairs before the implementation of possible local measures and also formed the starting point for the measures to be implemented. Based on the results of the previous survey, the measures were developed and finally implemented in the pilot lab area Hennef Im Siegbogen.

The subsequent survey at the end of February, beginning of March 2020 also served two purposes: to determine whether mobility behaviour in Hennef Im Siegbogen had changed after implementation of the measures derived from the results of the first survey and, if so, in what way. In addition, questions were posed with direct reference to the implemented measures, especially with regard to awareness and benefits from the point of view of the residents, in order to insert a control tool that would help to better calculate the expected costs of the measures, but especially of their communication, even if the procedure is adapted for other regions.

In terms of content, the usual everyday journeys of residents and their children play a major role in both surveys, especially the journeys beyond those to work or school. The evaluation of the results

with regard to mobility behaviour is presented in numerous illustrations and the results are interpreted.¹

In the following chapters, the structure of the pilot lab area Hennef Im Siegbogen will be briefly presented and the integration into higher-level systems such as the Verkehrsverbund Rhein-Sie (VRS) as a public transport association with a uniform tariff and coordinated timetables in Hennef and beyond.

Subsequently, the measures implemented in the Pilot lab Hennef Im Siegbogen are described in detail. This includes the rationale for the development of the measures, their local implementation, timing, obstacles, actors involved and experiences made during the design phase. Further attention is also paid to the expected interrelationship between the four measures, because it is precisely here that it is hoped that the measures will reinforce and support each other and that the measures as a whole will be more than just four individual measures.

In the following two chapters, stakeholder influences are briefly described, followed by a classification of the measures under regulatory, financial and institutional aspects.

In chapter 7, the results of the activities in the pilot lab area Hennef Im Siegbogen are presented and explained in detail, interpreted and classified with the help of comparative figures, the data of which are based on the two surveys of residents conducted within the INCLUSION project. This chapter is supplemented by the link to the INCLUSIVITY goals of the INCLUSION project and the examination of which goals have been achieved accordingly. Furthermore, this chapter contains explanations of the experiences and conclusions that can be drawn from the project results, the lessons learnt.

The following chapter describes the positive effects of the project measures and takes a closer look at the transferability of the measures and the project design. A short outlook on the future development is also given, both for the time after the project in the pilot lab area and for possible similar projects whose implementation is stimulated by the INCLUSION project.

Finally, a summary of the project report is given. Here the questions are taken up again and answered, classified and evaluated according to the project results.

¹ A complete presentation of all essential survey results can be found in the annex III of this report.

2 Recap of the Pilot Lab characteristics

2.1 Brief description of the pilot area

The Pilot Lab area Hennef Im Siegbogen is embedded in a rural environment and lies in indirect proximity to the city of Hennef. The village Im Siegbogen, which has a self-contained structure, provides excellent conditions for the transferability of the results to other rural communities in the vicinity of small towns.

The municipality of Hennef is located between Bergisches Land and Westerwald at the beginning of the Sieg estuary valley, about 30 km as the crow flies southeast of Cologne and 14 km as the crow flies east-northeast of Bonn. The highest point of the city area is reached at 285 m above sea level at the edge of the district Eichholz, the lowest at 60 m above sea level at the Sieg at the district Stoßdorf.

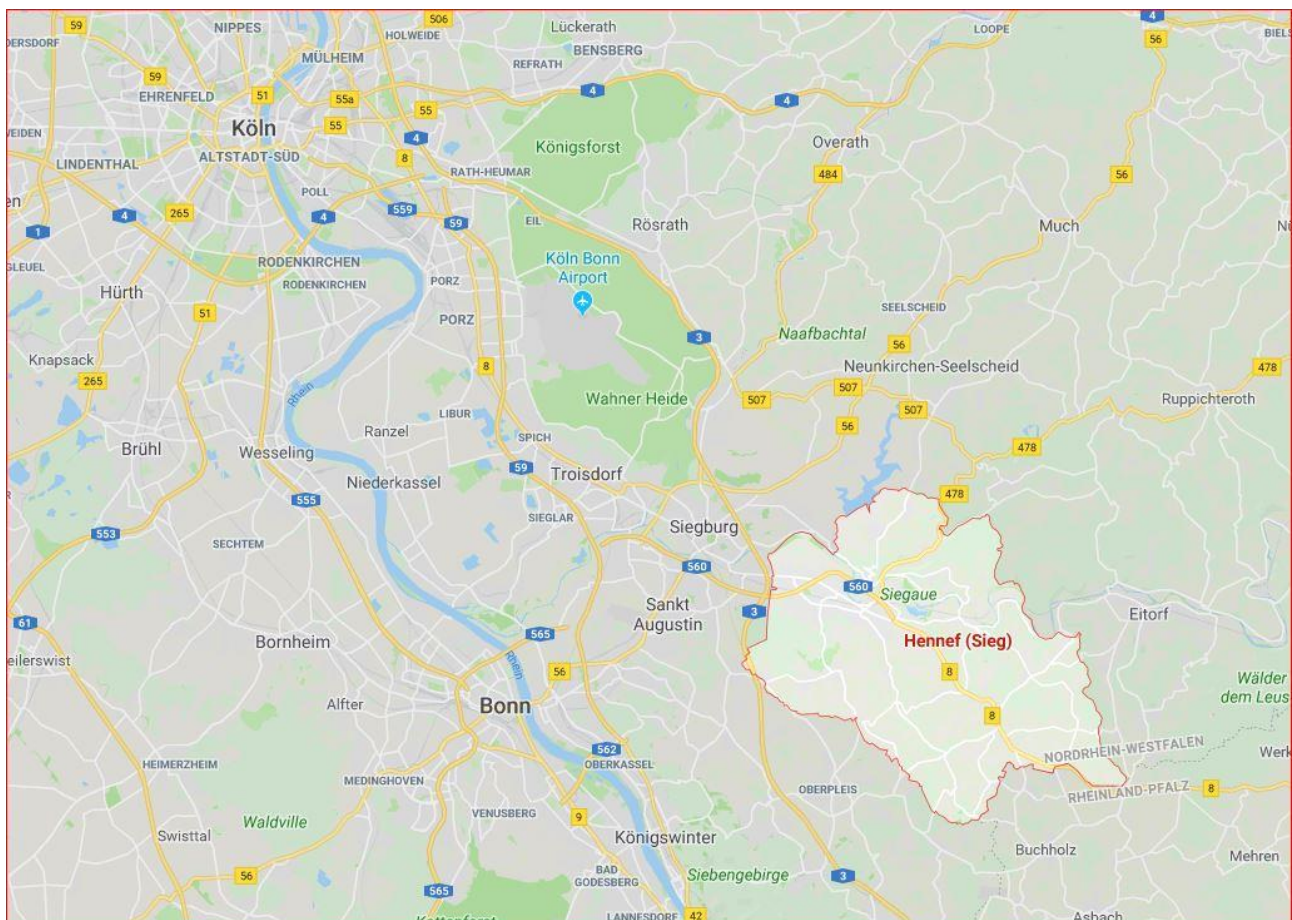


Figure 1 - Map of Hennef and the Rhine region

Source: Google maps, own editing

In the west Siegburg and Sankt Augustin border on the city area, in the north the municipalities Neunkirchen-Seelscheid and Ruppichteroth, in the east the municipality Eitorf, in the southeast the municipality Asbach in Rhineland-Palatinate and in the south Königswinter. The area of the city is about 105 square kilometres. Hennef consists of the centre as well as other partly widely scattered villages. The railway line separates the districts Geistingen and Warth on one side and Hennef on the other. Several level crossings and a bridge cross the railway line. Between the crossing possibilities for cars, however, there is sometimes a kilometre of road (see figure 1).

Hennef is a town in the Rhein-Sieg district and the fourth largest town in the district with around 48,000 inhabitants living in an area of 105 qm² which means the population density is 447 inhabitants/qm². However, the inhabitants live only partly in the main town, but are spread over a total of more than 100 smaller villages. Hennef therefore also has the somewhat poetic nickname "City of 100 Villages".

As the nickname proves, the majority of the Rhein-Sieg district is characterised by rural structures. It is important to note that in a highly densely populated region such as the Rhineland, which has been inhabited for many years, the transition from urban to rural is very small. While in the immediate vicinity of Cologne and Bonn the respective regions are more strongly influenced by urban influences, in the vicinity of the small and medium-sized towns of the region - such as Hennef, for example - the influence of the rural environment dominates. The rural structures that have grown over centuries still exist today, especially in the everyday life of families. In contrast, many working people accept longer commuter routes in order to reach jobs in the cities, but at the same time benefit from the living conditions in rural areas. As in many other German districts, this also applies to the Rhein-Sieg district. This aspect is important against the background of the transferability of the results from the Pilot Lab Rhein-Sieg to other German, but also similarly structured regions, for example in Belgium, the Netherlands or northern France.

The entire new development area Hennef Im Siegbogen has an area about 18 hectares (=0.18 qm²) and is located in the eastern part of Hennef, next to the district Weldergoven and in the immediate vicinity of the local recreation area Siegaue. In March 2009, the city and the municipal utilities began marketing the new development area Im Siegbogen. In late summer 2013, the complete sale of all plots for detached houses was announced. It's classified as a peri-urban area.

In Hennef Im Siegbogen there is predominantly residential development. The buildings are predominantly single or semi-detached houses as well as multi-family houses with apartments of different sizes and layouts. As is customary in North Rhine-Westphalia, the land areas are between 250 and 350 sqm in size (see figure 2).

As part of the Rhein-Sieg district, the city of Hennef is integrated into the Verkehrsverbund Rhein-Sieg (VRS, a German public transport association) with regard to public transport. Within the Verkehrsverbund, the travel times of the bus and train lines are coordinated. The VRS coordinates all cross-company activities in the Verbund region. One of the central design elements is the Verbund tariff, the same tickets and ticket prices are charged across companies. This means that

with a ticket sold from the local bus transport company, for example, you can travel to Cologne by S-Bahn and vice versa.²

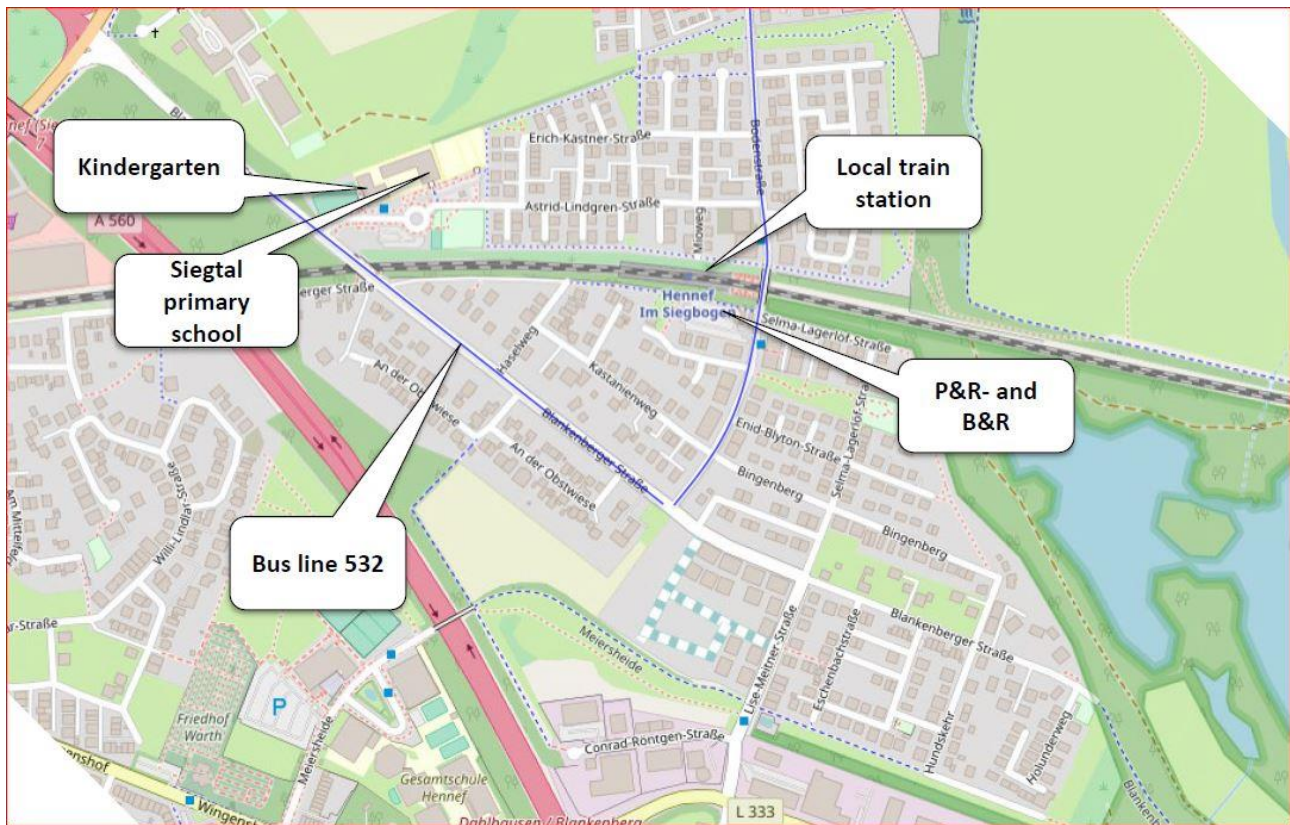


Figure 2 - Map of pilot lab area Hennef Im Siegbogen

Source: Google maps, own editing

The bus stop Hennef Im Siegbogen belongs to the peri-urban area of Hennef and is located at the edge of the new development area in the Siegbogen. The stop is served by the local train lines S12 and S19, the bus 532 as well as the "Anruf-Sammel-Taxi Hennef" (AST 582).³ The local train stop Im Siegbogen is connected to Hennef city, Siegburg, Cologne/Bonn Airport and Cologne three times per hour during the day (Monday - Friday). The bus line 532 connects the bus stop Hennef Im Siegbogen to Hennef train station. During rush hours the buses run every half hour, otherwise every hour. The primary school Siegtal is always served on the route. Barrier-free low-floor buses are used in Hennef. The stop Hennef Im Siegbogen is barrier-free. Aids for the blind and deaf are available. There are a total of 54 covered and illuminated Bike&Ride places at the stop, some of

² The VRS offers both temporary and spatially limited tickets as well as flat-rate tickets. The latter are usually open to special social groups, i.e. there is a flat-rate ticket for pupils ("VRS SchülerTicket"), but also for working people ("VRS-JobTicket") or senior citizens ("VRS-Aktiv60Ticket"). Beside these there are tickets in the single purchase, i.e. one acquires a ticket for a journey. Total ticket prices are proposed by carriers operating within the VRS and confirmed (or rejected) by political bodies. Further information on tariff offers is available at www.vrs.de.

³ The Anruf-Sammel-Taxi (AST) is a local form of demand transport. Customers must order the ride by telephone in advance and are picked up at special AST stops and, if desired, driven at home within the municipal boundaries. The offer is integrated into the VRS tariff and costs € 4.00 (adults) or € 3.00 (adults with a valid VRS ticket).

which can be rented as bicycle boxes. The change from bicycle to train or bus and vice versa can be done quickly and easily. Both the railway lines S12 and S19 as well as the bus line 532 are conventional public transport.⁴

The Rhein-Sieg district, in cooperation with the city of Hennef, is the planning authority and thus responsible for the preparation of the timetables in Hennef, but also for covering the financial deficit. The bus services are provided by Rhein-Sieg-Verkehrsgesellschaft (RSVG), a bus company owned by the district and the individual municipalities. The S-Bahn is operated by DB Regio, a subsidiary of Deutsche Bahn. The VRS is responsible for setting the tariff, in close coordination with the transport companies operating within the network. The public transport offer is subsidised by the state of North Rhine-Westphalia, the district and the local communities. In addition to the subsidies, the revenues generated by ticket sales are of course an essential basis for public transport, too.

Hennef is connected to the NRW cycle path network and also has other local cycle paths in the town centre. However, many roads are also dominated by the MIV, and cycle traffic is either made possible by a combination of sidewalk and cycle path, or the road space can be shared by cyclists. In such an area there are no clearly defined paths for cyclists. If the cycle path has been moved to the sidewalk, the entrances located along the road space can be dangerous. From Hennef Im Siegbogen, the various schools in Hennef as well as the city centre can be reached by bicycle without great effort, although not always directly. There are bicycle parking facilities at the schools.

At the station in Hennef and also at the local train station Hennef Im Siegbogen bicycle parking facilities are available. Most of these are covered. There is currently no bicycle rental system in Hennef.

2.2 Brief summary of the objectives of the Pilot Lab

The planning approach "from above" still often dominates in traffic planning today. With the help of statistics and traffic analyses, local solutions are created which are often car-centric and not the "big picture" with equal consideration of all means of transport. Therefore, the general goal for the pilot lab Rhein-Sieg was to find out whether the actual mobility needs in an area that is developed in terms of traffic networks can be satisfactorily met. As a result, the insight grew that a survey of residents regarding their needs and demands, which are undoubtedly also subject to change, is a mandatory prerequisite for the planning and implementation of further measures.

Against this background, it must be seen that an overriding objective of the work in the pilot lab Rhein-Sieg is to empower children and young people as far as possible so that they can achieve their everyday destinations through mobile independence and their social exclusion can be avoided.

⁴ During the late evening hours and at weekends, AST line 582 complements and sometimes replaces the "normal" public transport service. AST is demand public transport and is the short form of "AnrufSammelTaxi". It picks up passengers at special stops, but then takes them to their front door within the city limits of Hennef. The trip must be ordered minimum 30 minutes in advance by telephone and costs a surcharge of € 3.00 for VRS subscribers and € 4.00 for non-customers.

The second step - based on the results of the previous survey - is to improve and develop the mobility offers, especially for the target group of families with (young) children.

For this target group, the focus is on showing children and young people the possibilities of how they can achieve their everyday goals on their own without having to rely on parental transport. In addition, the parents of younger children who cannot/should not yet be travelling alone should be shown alternatives to bringing and/or picking up the children by car. This can mean changing the vehicles used, for example, sharing the bicycle for short and medium distances instead of the car, but also adapting everyday routines.

Breaking through everyday routines is particularly interesting when new offers or technical developments suddenly create opportunities for change that were not feasible a few years ago. Here, the increasing spread of e-bikes is a particularly interesting point. Because due to falling prices and improved technology, it is now possible to cover either longer distances in the same time or the same distance in less time than with a "normal" bicycle. Topographical issues now also play a secondary role due to the support of an electric motor.

All in all, the design and implementation of the INCLUSION project in the Pilot Lab Rhein-Sieg aims to improve the framework conditions for independent mobility of children and adolescents, in order to reduce the necessary pick-up and drop-off trips by parents, thus enabling children to participate in a variety of offers.

2.3 Main outcomes of the design phase

The main fields of action are therefore the reduction of costs for the use of public transport, the improvement of public transport services, and the improvement of safety in bicycle traffic (Safety in this context means safety in road traffic, i.e. above all in relation to passenger cars), which results from the answers given by the participants of the before survey conducted in autumn 2018 in the pilot lab area. To all households of the PL area an eight-page questionnaire was sent which asked for the daily routes of the inhabitants (adults and children), the used means of transport on this routes and the reasons for the needs of bringing and picking up children. The survey was designed by the department of market research of the VRS in collaboration with the University of Aberdeen. From the outset, the survey was designed in two parts - a before survey and an after survey to document developments and an evaluation of the measures implemented, which in turn were based on the results of the before survey.

The before survey also highlighted the means of transport mostly used. The survey showed that the car is the most frequently used means of transport in almost all everyday journeys, and that more than two thirds of those surveyed use it every day. According to the survey, public transport or bicycles are used far less frequently. In addition, all rare users were asked why they did not use the respective means of transport.

At the end of the before survey, possible suggestions for improving the traffic situation in Hennef were asked about the respective means of transport. Most users want more and safer cycle paths and more bicycle racks, and in terms of public transport, many users would want cheaper prices and better connections to encourage more frequent use of transport in the future.

From the results of the survey, clear areas can be defined which can contribute to improving the local offer. These are for public transport:

- Significantly improved local offering during off-peak hours (afternoon, early evening)
- Lower prices for PT use

There are three main aspects for cycling in Hennef Im Siegbogen and in the city of Hennef resulting of the survey:

- More cycle paths
- Safer cycle paths
- More bike racks

The topic "safety" here refers less to a "stranger danger" for children and young people, but rather to the dangers of participation in road traffic by bicycle, if the roads are predominantly designed for car traffic and the bicycle traffic is rather tolerated and not equal. This aspect is particularly important, since the bicycle plays a central role in the mobility of children and adolescents, both for the routes to school and for leisure activities in the local area. The extent to which the role of helicopter parents and/or curling parents also has an impact here is difficult to assess. At the same time, the aim must be to counteract even a "perceived" lack of security through good offers.

In this respect, safety for cycling (and especially for children riding bicycles) can be achieved on the one hand by improving cycle paths, i.e. by infrastructural measures, but on the other hand also by strengthening the abilities of cyclists, i.e. by helping them to learn correct behaviour in road traffic and developing strategies for making calm, prudent and correct decisions in potentially dangerous situations.

In addition, another aspect seems to be that the existing offers and the resulting possibilities are not sufficiently known by (potential) users. In this respect, a further field of action has been defined as how offers can be communicated better and more user-oriented, e.g. via a performance-oriented approach.

This means that not only possible new offers must be communicated, but the existing ones should also be made known in detail. Furthermore, communication must reach new customers as well as existing users, not least in order to further increase satisfaction among this customer group and thus strengthen loyalty to public transport and cycling.

3 Pilot Lab implementation activities, timing and milestones

3.1 Actions at mobility service level

In the Pilot Lab Rhein-Sieg an analysis of the existing transport offer was first carried out in order to have an accurate and reliable picture of the current mobility behaviour. It was crucial that not only the services and offers of the local public transport system were examined, but especially the other offers, i.e. to what extent, for example, cycle paths were available, whether bicycle parking facilities were available in sufficient numbers, and also how far away the important and for the everyday life of the inhabitants relevant destinations were.

The second and equally important step was to carry out our own comprehensive survey⁵ of the residents and to derive the measures to be implemented from the results of this survey. Linked to this was the expectation that measures would be implemented which actually meet the needs of the residents and not only from the point of view of the planners represent a good idea. In addition, it could be expected that measures derived from the needs of the residents would generally be better perceived and also more widely used than those proposed from outside.

Furthermore, a renewed survey of the local residents after the introduction of the measures offered the opportunity to obtain an assessment from them. In this respect, a before and after survey was planned from the outset. Nevertheless, when planning the surveys, there was already an awareness that the time span between the implementation of the measures and the after-survey should be as long as possible, because experience shows that it takes some time before new or changed transport services "catch on" and are integrated into the everyday life of the residents. In general the time span should last minimum six months to establish a new or an extend offer. If it lasts longer it is even better, of course.

In the Pilot Lab Rhein-Sieg three main results were derived from the answers of the participants of the before survey:

- the reduction of costs for the use of public transport
- the improvement of public transport services
- the improvement of safety in bicycle traffic (Safety in this context means safety in road traffic, i.e. above all in relation to passenger cars).

These three findings, in turn, formed the basis for the measures that were ultimately implemented in the Pilot lab Rhein Sieg. The measures developed from this together with the department

⁵ Note: The previous survey was already explained in detail in the interim report (D4.2) and is therefore no longer explained in detail here.

Economic Development and strategic district development/Mobility and traffic of the Rhein-Sieg district and the department PT/Tourism of city of Hennef are:

1. additional trips of the bus line 532 from Hennef Im Siegbogen to Hennef City
2. cheaper fare for the bus line 532 between Hennef Im Siegbogen and Hennef City
3. weekly pedelec rental at very favourable conditions
4. development and printing of a mobility card for Hennef with all mobility offers

In the following, the measures are described individually, even if they are mutually dependent or support each other in their effects.

3.1.1 Additional trips at busline 532

The bus line 532 connects the bus stop Hennef Im Siegbogen to Hennef train station. During rush hours the buses run every half hour, otherwise every hour. The primary school Siegtal is always served on the route. Furthermore, there is a bus to the comprehensive school Meiersheide and a bus to the school centre Hennef Fritz-Jacobi-Straße. The journey to the primary school from the stop Im Siegbogen takes two minutes and to Hennef Mitte ten minutes. On weekdays, the first journey starts at 5:41 a.m. and the last at 21:41 p.m. On Saturdays and Sundays, line 532 runs every two hours. Barrier-free low-floor buses are used in Hennef. The bus line 532 is a circular service, i.e. start and finish are at Hennef station. The bus stop Hennef Im Siegbogen is served twice for each of the trips, on the outward and return route.

One result of the previous survey was that the offer in bus transport was perceived as insufficient. This was also determined in particular for the target group of children and adolescents, for whom it was difficult to participate in public life at certain times without having to rely on the transport or transportation provided by their parents due to the insufficient offer.

532		Hennef Bf S - Weldergoven - Lauthausen - Bödingen - Altenbödingen - Weldergoven - Hennef Bf S																		gültig ab 28.08.2019																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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Figure 3 - Timetable bus line 532 after measure implementation

Source: VRS GmbH, RSVG

Especially during the late afternoon, between 4 and 7 p.m. on weekdays, the buses of line 532 operated only at hourly intervals. As a result, the waiting times for independent travel to sports training or other leisure activities were often very long. Parents who wanted to avoid having to wait

long in public places for their children to start the respective offer were increasingly either bringing their children themselves by car or the children could not participate.

In order to counteract this, the bus service was doubled during this period, i.e. the hourly frequency was changed to a half-hourly frequency. The implementation of this expanded service was planned for the Rhein-Sieg district and implemented by Rhein-Sieg Verkehrsgesellschaft. The measure was launched on 28 August 2019, the end of the summer holidays. Figure 3 shows the timetable of bus line 532 after implementation of the additional bus trips.

The new services will be carried out with standard scheduled buses that meet all the requirements of a modern bus service - multi-purpose platform, visual and acoustic displays, wide rear entrance, wheelchair ramp, etc.

The measure will continue to be offered regardless of the end of the INCLUSION project.

3.1.2 Reduced tariff at busline 532

One of the results of the previous survey was that public transport and its services were perceived as too expensive. This certainly ties in with a more fundamental problem of public transport, that costs for offers and services are directly perceived through the direct purchase of a ticket, whereas the costs for the individual traffic such as car traffic, which are usually not paid directly in addition to the costs at the petrol station and therefore not directly perceived (such as loss of value of the vehicle, insurance, tax, maintenance and repair shop, environmental damage ...).

On the other hand, the Verkehrsverbund Rhein-Sieg does not have one ticket which is valid for all purposes, but a variety of different ticket offers which considerably reduce the costs for a trip, such as the JobTicket (about 70 € monthly = about 2.33 €/day) or the SchülerTicket (12 € monthly = about 0.40 €/day). Experience shows that the SingleTicket is always mentioned as an example for the costs of a trip with public transport.

In order to take this psychologically important ticket as a starting point and at the same time create a financial incentive for previous non-users or occasional users in public transport, the second measure was to reduce Hennef Im Siegbogen's route from VRS price level 1a to VRS short distance⁶. This results in a price reduction of 0.50 € per ticket for adults and 0.30 € per ticket for children (between 6 and 14 years). Younger children generally travel free of charge. Price level 1a applies to a journey within a city or municipal area, and for tickets of the short-haul tariff the rule 1 + 4 applies, i.e. boarding stop plus four additional stops.

⁶ The VRS tariff is not distance-based but is defined from the boundaries of the different municipalities, which means the level 1a is guilty in one city or municipality. The level 2a is guilty in two cities/municipalities in neighbourhood. For very short trips by bus the short-haul tariff is guilty. It doesn't depend on municipal boundaries but only on counting bus-stops. The short-haul tariff can be used for trips passing four bus-stops plus the bus-stop where the passenger gets in the bus. If there are special bus-stops which are only in one direction in use, there are special conditions on these stops – there is the possibility that they are not counted for the regular trip. Further exceptions are possible in principle, but must be objectively justified in the interests of the customer. More information about the idea and the further rules behind the tariff at www.vrs.de.

Figure 4 shows a screenshot of www.vrs.de from Tuesday, 23rd of June and is an example of a query from the VRS online information system for the connection from Hennef Im Siegbogen to Hennef station including the fare stage "Price level K" in the lower left corner.

Fahrplanauskunft

Ihre Verbindung

Start

Im Siegbogen (S), Hennef

am 23.06.2020 um 17:27

Ziel

Hennef Bf

Verkehrsmittel




Gehgeschwindigkeit: normal

[Listenansicht](#)
[Rückfahrt](#)
[Anschlussfahrt](#)
[Verbindung ändern](#)

1	2	3	4	5
ab 17:41 an 17:51	ab 17:46 an 17:58	ab 18:11 an 18:21	ab 18:16 an 18:46	ab 18:41 an 18:51
 0  10 min  0 min  2.58 km	 1  12 min  3 min  3.21 km	 0  10 min  0 min  2.58 km	 1  30 min  3 min  3.21 km	 0  10 min  0 min  2.58 km

ab 17:41

Im Siegbogen (S), Hennef



Linie 532 Richtung: Hennef Bf

[Zwischenhalte anzeigen »](#)

an 17:51

Hennef Bf (Bussteig B), Hennef

[Erklärung zu Zeitangaben](#)
[In Kalender eintragen](#)
[Auf Karte anzeigen](#)

VRS-Tarif

Preisstufe K [Kurzstrecke] 2,00 € (als HandyTicket nur 1,80 €)

Tarifberatung und Ticketkauf

Figure 4 - Screenshot of online timetable data

Source: www.vrs.de

The tariff change has been integrated into the app in September 2019 and also into the online information system of the VRS, but for tariff association reasons it only applies to bus line 532 and not to the local train line between Hennef Im Siegbogen and Hennef Mitte, as the association tariff excludes the application of the short-haul tariff on regional and local train lines.⁷ The pre-INCLUSION standard adult tariff was € 2.50 instead of the € 2.00 shown in the screenshot. The saving for the adult customer is € 0,50 per trip, for children the discount is € 0,30 per trip. Both savings for customers wouldn't be implemented without the INCLUSION project.

The screenshot also shows the additional services offered at bus line 532 within the INCLUSION project. Trips no. 1, 3, and 5 are the bus-line based trips, which proves the newly introduced half-hourly service at the bus-line 532. The trip by bus lasts 10 minutes, it is a direct connection (there is no changing of busses necessary), and no additional way by foot has to be done.

⁷ For more details see www.vrs.de/tickets/tarifbestimmungen.

The measure will continue to be offered regardless of the end of the INCLUSION project.

3.1.3 E-Bike rental⁸

From the respondents' answers to the previous survey, it was clear that many would like to see an improvement in the services offered to cyclists, particularly with regard to safety. In this context, safety does not, as might be suspected in the context of children, refer to fear of strangers, but essentially to road safety.

This can certainly be improved by infrastructural measures such as the extension of cycle paths, their lighting, the construction of safe and dry car parks for bicycles, etc. However, infrastructure measures are not part of the INCLUSION project and, moreover, would not be plannable and implementable within the time frames set by the project duration.

In addition, in cooperation with the responsible department PT/Tourism of the city of Hennef, it was possible to establish that a large proportion of the municipal cycle paths meet the prescribed requirements for a safe cycle path in any case, which leads to the conclusion that not every participant in the survey was necessarily aware of this fact.

Furthermore, another aspect emphasized by the participants in the survey was that the distances from Pilot Lab Hennef Im Siegbogen to the destinations within Hennef are sometimes perceived as too long to be covered by bicycle.

The aim of the measures to be developed and implemented had therefore to be, on the one hand, to show that the spatial distances between the Pilot Lab area and the various destinations in Hennef as well as the topography in reality should not be real obstacles to the use of bicycles, and, on the other hand, that information on the existing bicycle infrastructure (cycle paths, parking facilities, etc.) was obviously not available everywhere in full. In order to do justice to both objectives in an appropriate manner, an e-bike rental service was developed as one measure and a mobility map was also planned (cf. Chapter 3.1.4).

In order to create an offer that residents of the Polit Lab area can use cheaply and easily, two pedelecs were rented from a local bicycle wholesaler for the period from June to October 2019. These could then be reserved by telephone and in person for one or up to four weeks through a simple booking process. The costs for the users amounted to 5.00 € per week and bicycle. One ladies' bicycle and one men's bicycle were rented. The delivery and return of the bikes were carried out via the tourist information office of the city of Hennef.

⁸ Whenever the text and the brochure refer to e-bikes, the term refers more precisely to a pedelec, i.e. a bicycle that is supported by an electric motor, but whose motor only engages when the rider also pedals. The motor supports the rider according to German laws only up to a maximum speed of 25 km/h. At higher speeds, the rider must work exclusively with muscle power. Although the terms are clearly separated and defined in Germany, the e-bike has established itself in colloquial language. There is no compulsory insurance for pedelecs in Germany and no driving licence is required.

In order to make the new offer as widely known as possible, a separate flyer in the format DIN long was designed and printed for the e-bike rental business (see figure 5). This was distributed by direct household distribution through an external service provider in the Pilot Lab area in June 2019.



**Einfach mal ein
E-Bike
testen?**

**Für alle
Anwohner
Im Siegbogen
und
Weldergoven**





Projekt INCLUSION
Die Stadt Hennef, der Rhein-Sieg-Kreis und der Verkehrsverbund Rhein-Sieg wollen die Mobilitätsbedürfnisse von Familien besser verstehen und entsprechende Angebote bereitstellen. Das Angebot, E-Bikes zu testen, ist ein Teil davon.

Verleih der E-Bikes
Wir stellen Ihnen ein E-Bike für bis zu vier Wochen für insgesamt 20€ zur Verfügung. Sie testen das E-Bike auf Ihren Alltagswegen und berichten über Ihre Erfahrungen, wenn Sie mit dem E-Bike zum Einkauf, zum Sport oder zur Arbeit fahren.



Kontakt und weitere Informationen
Abholung und Abgabe der Pedelecs erfolgt bei der Touristinfo im Rathaus in Hennef. Vorab nehmen Sie bitte Kontakt mit dem Rhein-Sieg-Kreis auf:
Petra Gloge
Tel.: 02241-133257
petra.gloge@rhein-sieg-kreis.de



Figure 5 - E-Bike rental brochure (left side front, right side back)

Source: VRS GmbH

By borrowing the pedelecs, the users could use the bikes for their everyday trips to try out in peace and quiet whether the daily trips could be done with a bicycle (or even a pedelec) or whether the bikes could even replace trips previously made by car. This was also one of the main reasons for the weekly rental period - this way the pedelec could be better integrated into the complete

everyday life of the users. In addition, possible weather influences could be minimized, because if it should rain and the user has only rented the bike for one day, it will certainly hardly be integrated into the daily routine, and the hoped-for effect of the measure would at least fizzle out for this user.

3.1.4 Mobility map

As already deduced in Chapter 3.1.3, there is a lack of information, at least among some users, about the existing offers for cycling in the urban area of Hennef, both with regard to the existence of individual routes and offers and the quality or condition of the respective offer. In order to counteract this deficit, a physical mobility map was developed in which all relevant mobility offers are bundled both cartographically and with further explanations and links.



Figure 6 - Mobil in Hennef map (front)

Source: VRS GmbH

The map was conceptualised in spring 2019 and its contents were edited during the summer. The cartographic information on the cycle paths and the Forgotten Paths was checked and edited by

the city of Hennef until October 2019. The cartographic basis is OSM data, which will however be checked, revised and made more visually appealing.

The map was then finalised, printed and distributed to all households by separate household distribution in the Pilot Lab area Hennef Im Siegbogen at the end of November 2019. In addition, the map was also laid out at various publicly accessible locations in Hennef, for example at the tourist information office. The map has the overall format 501mm x 426mm, folded to DIN long. It is free of charge for users and is also available online as a PDF file, e.g. via the VRS homepage. Optically, it has been converted into a CD (colour scheme, fonts, etc.) of the VRS for better recognition.

With the mobility map of Hennef, the use of advertising etc. was deliberately avoided. Instead, both the front and the back of the map were filled with relevant content. Figure 6 shows the front of the map, figure 7 shows it's back.

The front side shows the title page in the upper right corner, which in the folded version is the first impression customers see. Immediately below this is the back of the folded version - this is where contact addresses and key contacts in mobility matters are shown. Thus, even when folded, the map basically provides useful information for users.

In the lower section, there are brief notes on the VRS app and its free purchase, for example, the presentation of the timetable information as a mini timetable and the 24/7 telephone information service. A further column is devoted to the tariff details of the combination of bicycle and public transport, e.g. costs of bicycle transport, free transport of folding bicycles, etc. A last column refers to further URLs on mobility, sorted by topics such as "public transport", "cycling", "car-sharing", "local government" and "leisure and tourism".

The upper part of the front page is dominated by one of the two topographic maps in this mobility map of Hennef. The map on the front side highlights the cycle paths in Hennef, including the relevant additional infrastructure. Furthermore - starting from the Pilot Lab area Hennef Im Siegbogen - three different coloured radii show how far you can cycle in five minutes (red radius), ten minutes (orange radius) and fifteen minutes (green radius).

The radii were deliberately given time specifications, as experience from other projects has shown that many customers are less able to estimate distances than time specifications. Therefore, if a map indicates that you have to travel one kilometre to reach a destination, many readers think that this distance is too great and prefer to use a car. If, however, the distance is given as a unit of time, i.e. it takes about ten to twelve minutes on foot, many people feel that this distance is no longer too far - even though it corresponds to about one kilometre. We used a similar approach with the map for distances that can be covered by bicycle. One can quickly see from the map that all relevant destinations in the city centre of Hennef can be reached within ten minutes, and within fifteen minutes the schools on the other side of town and the extensive sports grounds, which is particularly important for the target group of children and young people.

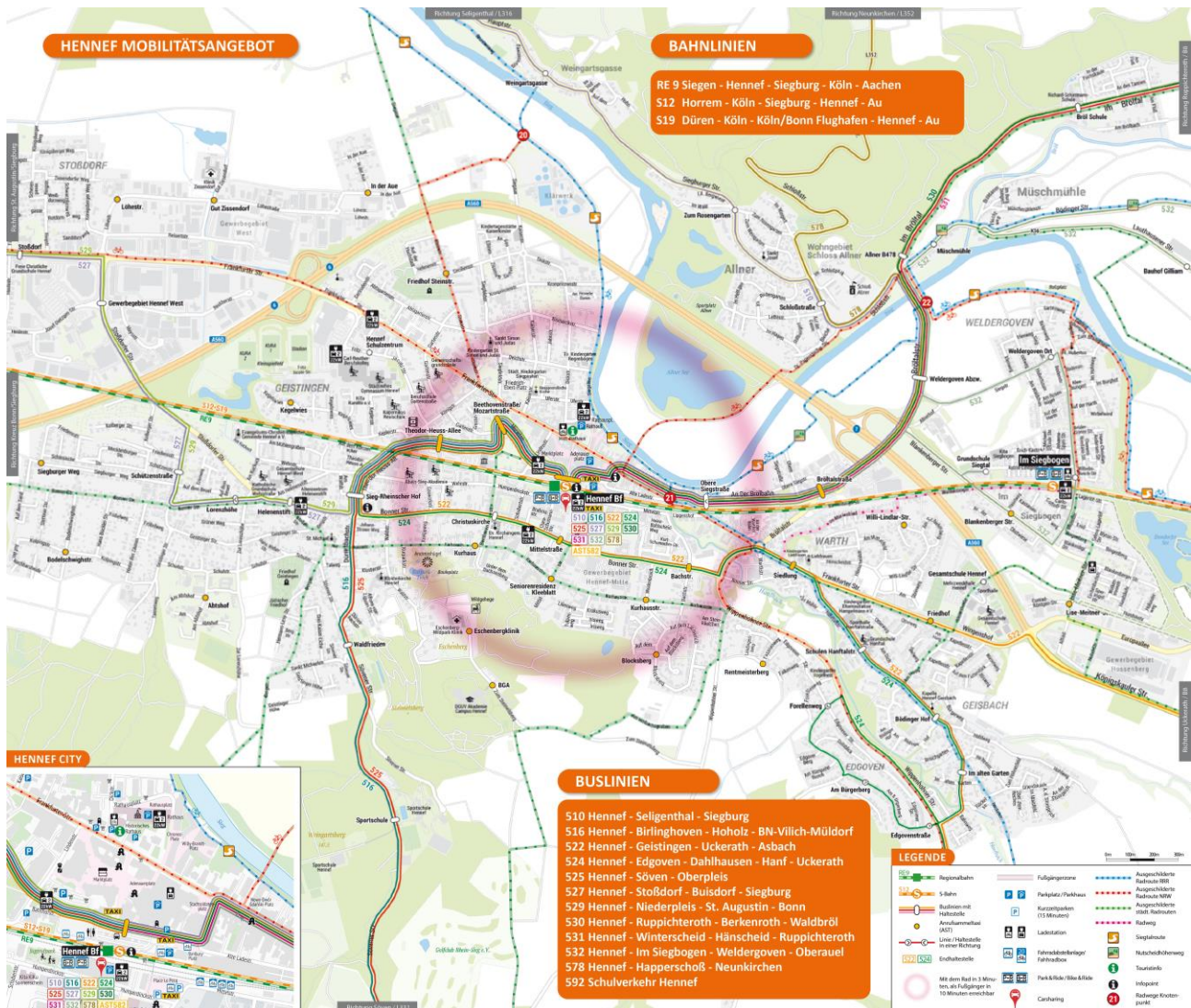


Figure 7 - Mobil in Hennef map (back)

Source: VRS GmbH

The back of the map (see Fig. 7) shows the complete map size of the city of Hennef including the Pilot Lab area Hennef Im Siegbogen. All relevant information on mobility is incorporated into the map, such as

- Bus and train lines incl. stops
- Cycle paths
- Bicycle storage facilities
- Car-Sharing stations
- Taxi zones
- Park & Ride facilities
- Multi-storey car parks
- Tourist Information Office

In addition, there is an enlargement of the inner city area and routes to all bus and train lines in Hennef.

The Mobil-in-Hennef map provides the user with all relevant information on local and regional mobility, with a focus on public transport and cycling. In addition, a radius around Hennef railway station has also been drawn in, showing which destinations can be reached by bicycle in around three to five minutes and by foot in ten minutes.

4 Deviations from planning and corrective actions

In the Pilot Lab Rhein-Sieg, the first step was the preliminary survey, followed by the planning and implementation of the measures derived from the results of the preliminary survey. Their implementation was planned at different times.

While the start of the e-bike rental service began punctually and the implementation of the extended timetable for line 532 also took place at the planned date, the start of the application of the cheaper tariff on bus line 532 was delayed.

Delay of implementation of short-haul tariff

Originally, its implementation was planned to coincide with the extended timetable on August 28, 2019. Since both measures concern the same bus line, a corresponding simultaneous implementation was also sensible from a communication point of view. Since both measures are also integrated into the existing timetable app of the VRS, simultaneous implementation would have been simplest, also due to the internal work processes.

The partners involved (Rhein-Sieg district, Rhein-Sieg-Verkehrsgesellschaft, Verkehrsverbund Rhein-Sieg) had agreed on the measures and the binding plans had been made. Shortly before implementation, however, the Rhein-Sieg-Gesellschaft had concerns that the loss of revenue threatened by the conversion of the tariffs could be higher than initially calculated. After immediate intervention by the Verkehrsverbund Rhein-Sieg and the Rhein-Sieg-Kreis, the new, extended timetable could be implemented on time, but unfortunately the tariff adjustment had to be suspended.

The topic was immediately dealt with in a persuasive manner. In various discussions, the concerns about excessive revenue shortfalls were dispelled with the argument that any additional users that might be expected could at least mitigate the shortfall if not compensate for it. It was also pointed out that the total amount of revenue shortfalls should not play too big a role overall. An exemplary calculation was made using the following formula:

20 existing customers/day = €10.00 loss of revenue

5 new customers/day = 10,00 € additional income

In this respect, one quarter of new customers in relation to existing customers is sufficient to completely offset the decline in revenue. Even if, based on the example given above, only two new customers instead of five can be acquired, the revenue decline amounts to €6 per day, which is negligible for a company with around 74,000 customers per day.

Delay on distributing Mobil-in-Hennef-map

The mobility map was to appear at the same time and be distributed to households in Hennef Im Siegbogen. However, due to a prolonged illness of the responsible contact person on the subject of cycle paths and forgotten paths at the city of Hennef, there was a delay here which could not be compensated by colleagues or relocation of work.

Especially under the aspect of not producing a complete or incomplete version of the map, the Rhein-Sieg.Kreis and the Verkehrsverbund Rhein-Sieg decided to wait with printing and publishing the map. This delayed the budget distribution of the mobility map by about eight weeks.

Failure of additional passenger count on bus route 532 due to COVID-19 pandemic

Due to the outbreak of the COVID-19 pandemic and the associated nationwide lockdown in Germany, several measures in the Pilot Lab Rhein-Sieg were influenced or could not be implemented as planned.

In addition to the subsequent survey in the Pilot Lab Rhein-Sieg, a passenger count on bus route 532 was also planned in cooperation with the Rhein-Sieg district and Rhein-Sieg Verkehrsgesellschaft. The aim of the boarding and alighting count was to determine at each stop where how many passengers boarded and alight. In comparison to older counts, the aim was to determine whether more passengers have been using bus route 532 since the introduction of the measures. In addition, the census was also intended to determine the extent to which the newly introduced journeys on the 532 line were used in the afternoon (number of passengers boarding and disembarking, occupancy rate), also in relation to the other, already existing journeys.

The passenger count on the journeys on Line 532 was planned for March 2020, because experience shows that at that time weather-related influences on people's mobility behaviour have less influence. In addition - and this is the locally more significant reason - the carnival season ended in mid-February 2020. During or immediately after the carnival days, which are celebrated very intensively in the Rhineland, it is not very useful to carry out a passenger survey, as the use of transport during this time is strongly influenced by the celebrations and therefore no generally valid data can be expected. In addition, the counting should start as late as possible after the introduction of the new, extended timetable.

However, with the start of the survey, the pandemic-related lockdown took place throughout Germany, which is why no censuses could be carried out. A postponement of the survey by two or three months was not an option either, as this would have exceeded the deadlines of the project on the one hand, and on the other hand no rapid restoration of existing driving habits could be expected, so that all data that could be collected would be of very dubious validity.

Since the passenger survey on Line 532 was in any case only intended as a supplementary data set to the qualitatively much more comprehensive results of the a posteriori survey (see Chapter 7), it was not used in the INCLUSION project. Although this is regrettable, it has no significant effect on the basic results of the Pilot Labs Rhein-Sieg.

Failure of city festival in Hennef due to COVID-19 pandemic

As part of the INCLUSION project, a separate information stand was also planned for the city festival in Hennef on 29 March 2020. The city festival was held under the theme "Mobility" and would have been a very good opportunity to present and discuss the contents of the INCLUSION project and the measures on site with residents and other interested parties. The project staff of the VRS would have been on site. Of course, the free distribution of the Mobil-in-Hennef map was also planned, as well as further brochures on public transport, cycling etc. This event, to which several thousand visitors are expected each year, was cancelled due to the outbreak of the Covid 19 pandemic. A catch-up date has not yet been announced. Although, due to the timing, participation in the event would not have had a direct influence on the results of the catch-up, it would probably have had a lasting impact on the change in mobility through the opportunity for discussion.

Nevertheless, the Verkehrsverbund Rhein-Sieg will participate in the event, should it be caught up. This will presumably only be in 2021, depending on the further development of the pandemic.

5 Promotion and stakeholders' involvement

The main players in the Pilot Lab is the department of communication and marketing of the VRS GmbH. The VRS coordinated all measures in the Pilot Lab Rhein-Sieg, established and maintained contact with all other partners and actors and is responsible for all local activities.

The Rhein-Sieg district was represented by the department Economic Development and strategic district development/Mobility and traffic. They supported the local activities and established contacts with other authorities.

The public transport/tourism department from the city administration of Hennef provided similar support. They established contact with local contacts and associations and supported the local measures in terms of content.

The department Market research of the Verkehrsverbund Rhein-Sieg designed the before and the after survey, supported the implementation of the surveys, evaluated the results and prepared them in a presentable way.

The Future Network Mobility Coordination Office Rhineland supported children and young people in all traffic-related questions and organised a lecture event on child-oriented traffic planning.

Rupprecht Consult acted as WP3 leader through the contact persons in an advisory capacity for the Pilot Lab Rhein-Sieg and was intensively involved in the planning process.

Additionally, the VRS invited leading representatives of the schools in Hennef, parents' representatives, youth street workers, representatives of the youth welfare office, sports clubs, local networks such as the Interessengemeinschaft Weldergoven, kindergartens, etc. This panel of local experts was convened to discuss the results of the survey on the one hand and to receive further suggestions and food for thought on the other. This mixed-method-approach allowed verification of the survey results to a certain extent and at the same time served to collect possible solutions.

All invited participants act on the one hand as multipliers and are also deeply involved in local issues and problem areas of local mobility. The group discussion was moderated by Ralf Brand (Rupprecht Consult), while Bernd Knieling (VRS) presented some key survey results of the before-survey. In the idea, this supplementary group discussion follows a mixed-method approach.



Figure 8 - Group discussion with stakeholders in Hennef

Source: Ralf Brand

6 Institutional, regulatory and financial issues

The four measures implemented in the Pilot lab Hennef Im Siegbogen were each subjected to a process evaluation within the INCLUSION project and assessed accordingly.

E-Bike rental

The basis for the success of such a measure is the comparatively low cost, the use of new technology in everyday life and the use of the existing cycle path infrastructure. Strong drivers of the measure are communication and marketing to make the lending system known in the first place, knowledge about the actual needs of potential users such as interesting destinations and possibly alternative approaches in the lending system. Other weaker drivers are the financial support from various sources and the comparatively positive public perception of e-bikes in general. Obstacles could be seen on the one hand in the low data volume due to the small number of e-bikes available and the only partial support by stakeholders as the measure was advertised only to a limited extent and did not appear in public communications, e.g. via the homepage of the city of Hennef.

Additional bus trips and implementation of the short-haul tariff at bus line 532

The implementation of the two measures could only be achieved with the support of the Rhein-Sieg district as the responsible authority and the local transport company Rhein-Sieg Verkehrsgesellschaft (RSVG). It became apparent that the cooperation with the two partners could be both driver and barrier at the same time. While the commitment of the Rhein-Sieg district was clear and goal-oriented, the RSVG still had to address concerns about the introduction of the short-haul tariff, which unfortunately delayed the implementation process. For example, the business model, that the acquisition of additional passengers or the revenues from additional trips would compensate for the lower revenues, was not initially understood. After additional discussions, however, the support of RSVG was achieved. Better access to everyday mobility has been achieved, albeit limited by the obstacle that the parallel (faster) local train could not be integrated into the short-haul tariff because the VRS-wide tariff regulations do not allow it.⁹

Mobil in Hennef map

The development of the mobile in Hennef map would not be possible without the GIS-based data, which are now available in very large quantities, and are therefore the strongest drivers besides the content aspects. Also important as drivers is the integration of specific knowledge of local cycle paths, unknown sections etc. as well as the integration of existing cycle infrastructure and cycle path networks. Limiting factors can include inflexible municipal budgets and a lack of human

⁹ Due to the outbreak of the Covid-19 pandemic, the censuses of passengers on bus route 532, scheduled for mid-March, could no longer be carried out in order to compare them with older censuses. This would have allowed changes in passenger numbers to be determined on a line basis, so that the potential impact of the measures could be quantified. Making up these counts makes no sense for the time being, because the effects of the pandemic on the behaviour of public transport users will reverberate for some time to come, which would significantly distort the results.

resources in the municipality. Since the specific knowledge of cycle paths and forgotten paths is concentrated in very few people and not mapped and systematically recorded in detail, there were delays due to illness. Here it is undoubtedly important that the local structures are more strongly illuminated in advance in order to prevent such developments or to avoid project delays caused by them.

Overall, the involvement of local residents has proved to be an important part of the implementation of all measures, not least in order to gather accurate information about actual needs.

The fact that municipal and city budgets are relatively static and - also depending on the city's financial situation - the possibility of implementing measures that are not absolutely necessary is limited has an inhibiting effect financially. In addition, the financing of public transport in Germany is quite complex and is not only to be implemented by the local public transport authority, but also depends on other actors such as the state and the district. All these factors make a rapid implementation of measures at least more complicated and protracted.

7 Main results of the pilot

7.1 Evaluation activities and target indicators

After the implementation of the measures derived from the results of the previous survey, it was of course also necessary to determine the awareness and the probable effects of the measures to the everyday mobility of the inhabitants of the pilot lab area Hennef Im Siegbogen. For this purpose, an after-survey was carried out, which was directly based on the before survey, but at the same time also focused on the measures implemented in the pilot lab area. The after-survey was already in mind while designing the before-survey.

The after-survey was again designed together with the market research department of the Verkehrsverbund Rhein-Sieg and then coordinated with the Rhein-Sieg district, the city of Hennef and the University of Aberdeen as the responsible work package leader (WP 5).

In addition to the limiting factors already described in Chapter 4, the outbreak of the COVID-19 pandemic must also be considered a possible limiting factor for the subsequent survey. The survey was started as late as possible in order to allow as long a time span as possible between the implementation of the measures and the survey. The time window for the survey was placed between Carnival 2020 and Easter 2020. A later date would have jeopardised the timely evaluation within the project duration.

As in the previous survey, an eight-page questionnaire was sent by mail to all households in the pilot lab area Hennef Im Siegbogen. In addition to the questionnaire, each letter contained a cover letter that informed them about the survey and was signed by the District Administrator of the Rhein-Sieg district, the Mayor of the city of Hennef and the Managing Director of the Verkehrsverbund Rhein-Sieg, as well as a self-addressed and stamped return envelope. As in the previous survey of 2018, the participants were sent an amazon voucher of € 10.00 by e-mail as a thank-you when returning the completed questionnaire.

The address data was provided by the city of Hennef and deleted immediately after use. All relevant data protection regulations were observed in the forwarding and processing of the address data.

A total of 646 questionnaires¹⁰ were sent out during the follow-up survey at the end of February 2020. This is 79 more than in the previous survey, which is due to the inclusion of additional streets in the study area, which in turn are based on an expansion of the Hennef Im Siegbogen development area that has taken place in the meantime.

202 fully completed questionnaires were sent back to the VRS. This means a response rate of 31%, which is about 13% lower than in the previous survey but still a very good turnout. Since the erratic spread of the corona virus in Germany occurred in March 2020 and the pandemic and its effects had a considerable impact on people's everyday lives, it can be assumed that the lower response

¹⁰ A copy of the questionnaire and the covering letter is placed in the annex.

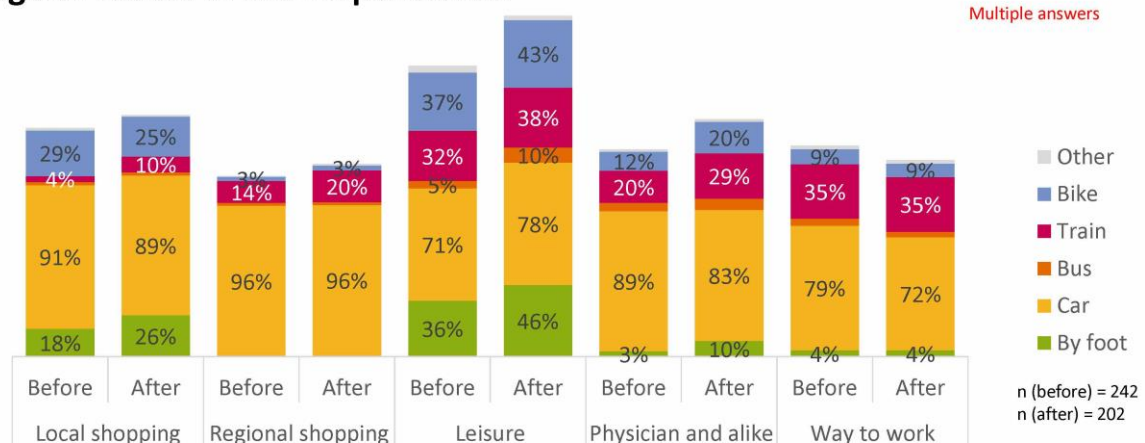
rate is related to this. Irrespective of this, however, the number of completed questionnaires is absolutely sufficient to be put into relation to the figures of the first survey. 27 of the 202 respondents stated that the move-in did not take place until 2019, so they could not have taken part in the first survey. And from the expectations of the market research department are both response rates very high and can be interpreted as a high interest of the inhabitants in the mobility aspects of their "home quarter".

The survey was aimed at the person in the household who has a general view of the household organisation and is mainly concerned with the regular journeys of any children who may be living in the household. The person interviewed thus answered on behalf of all persons living in the respective household. Descriptive statistical data in the overview:

- There are children in 63% of households
- There are 1.13 children/household on average
- The average household size was 3.02 persons
- 54% of respondents are female
- The average age of the respondents is 43 years

In the following, the results are documented and evaluated by means of graphs that compare the results of the before and after survey. The full presentation of the results and the cover letter are given in annex to this report.

Regular routes of the respondents



With the exception of leisure travel, respondents cited the passenger car as the main means of transport less frequently. Buses and trains are mentioned more frequently, with the exception of commuting to work.

Question 8) What routes do you take yourself regularly? Which means of transport do you use mainly?

Figure 9 - Regular routes of the respondents

Source: Own questionnaire, VRS GmbH

Figure 8 shows a comparison of the regular routes taken by the respondents, sorted by reason for the route. A significant increase in the use of bus and train (orange and red in the illustration) can

be seen for "shopping near", "leisure" and "doctor". However, especially in the area of "leisure" this also applies to all other means of transport, which leads to the conclusion that the exclusive use of one means of transport is much less pronounced here. Instead, the means of transport used for leisure travel is probably the one that "fits" best for the situation at hand. The clearly discernible trend towards more multimodality in transport in the "leisure" sector in particular, with its very heterogeneously distributed destinations in terms of both space and time, allows the conclusion to be drawn that residents who have so far relied exclusively on the car now also choose alternative means of transport.

The situation is different for commuting to work. Although the proportion of trips made by car has fallen from 79% to 72% (yellow in the figure), the proportion of other means of transport has not risen accordingly. The fact that multimodality has not increased is no surprise here - the frequent change of means of transport on the same route to and from work is probably the exception rather than the rule. There are two possible explanations for the decrease in the proportion of cars. Since multiple answers were possible with this answer, it could be that more people who previously, for example, travelled by bicycle or train as well as by car, now only indicated bicycle or train. In this case the share of car transport would decrease without the shares of the other means of transport increasing. The second explanation is, that possibly the first effects of the COVID-19 pandemic and the associated protective measures are already apparent here, with employees increasingly working from home. But this is only a conjecture.

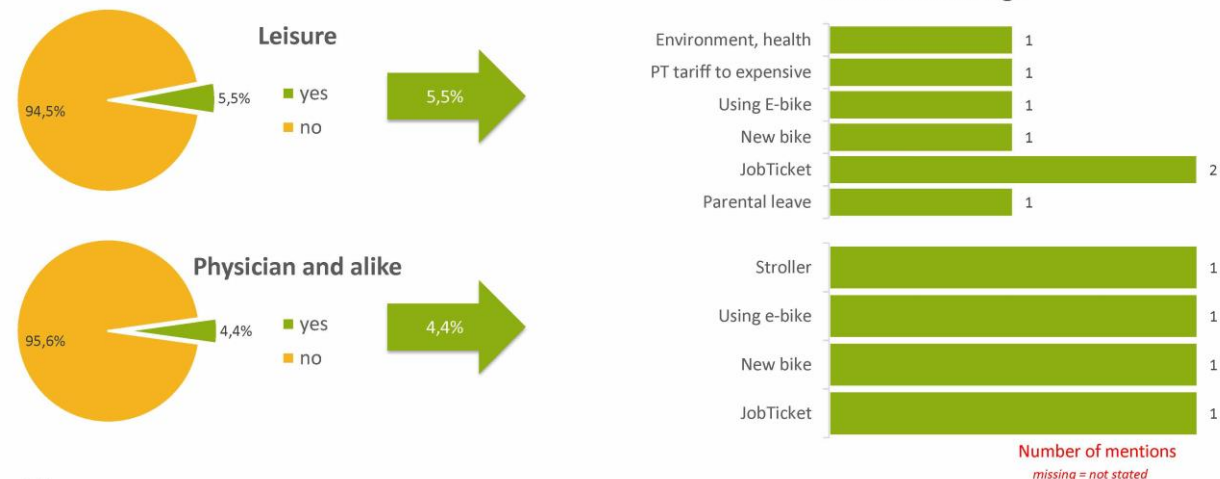
Another significant result is that the number of footpaths (green in the figure) is increasing for most travel occasions. Bicycles (blue in the figure) are increasingly used for leisure activities and for errands such as visits to the doctor or similar.

The survey deliberately allowed for multiple answers in both the before and the after survey. Against this background, it can be generally recognised that the use of different means of transport has become a matter of course for all journeys apart from commuting. Conversely, this means that the car, for example, continues to be an important part of the total means of transport used, but the focus on one means of transport for all journeys seems to be giving way to a broader use of different means of transport. This can initially only be read as a trend from the available data, but it will certainly be exciting to observe in the future.

In detail, Figure 9 shows for the route purposes "leisure" and "doctor or similar" how many users have changed their means of transport between the two surveys. According to this, 5.5% (11 persons) stated that they changed their means of transport for their leisure travel. This was correspondingly 4.4% (around 9 persons) for journeys to supply services.

The reasons for switching are similar for both types of travel. Two persons each stated that they owned a new bicycle or a new pedelec. A total of three persons stated that they now own a JobTicket, i.e. use the public transport. One person stated "pram" or "parental leave" as the reason for the change. Once "environment and health" was generally named as the reason for the change. All these changes lead to the assumption that car journeys were replaced by public transport, cycling or walking. Only the statement "ticket prices for public transport too high" indicates that in this case a change from public transport was made, possibly to the car.

Change in means of transport



n = 202

Has your choice of transport mode changed in this route over the last six months?
If yes, why?

13

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Figure 10 - Change of means of transport

Source: Own questionnaire, VRS GmbH

If one evaluates the respondents' use of transport as in Figure 10, the beginning of a possible change can be observed. While the number of frequent travellers in public transport remains virtually at the same level, the number of those who never use public transport has fallen from 18% to 11%, while the number of those who use public transport several times per month has risen from 8% to 16%. The reasons for this change, which were also surveyed, are manifold - from environmental aspects to the new ownership of a JobTicket¹¹ to the better offer, everything is represented - but there is also still the statement that public transport is too expensive.

On the other hand, the use of the passenger car has declined somewhat. This is especially true for those who used the car almost daily before. Here, too, the reasons for the change are broadly diversified - again, ecological aspects have played just as much a role as moving, but the purchase of a JobTicket, parental leave or more home office were also mentioned. Especially the increase in the proportion of home offices could already be a first sign of the COVID-19 pandemic. It will certainly be interesting to see whether this trend will continue after the pandemic (hopefully sometime in the future) or whether the old work patterns and commuter routines will prevail again. In view of the current developments, it can be assumed that the trend towards more home offices will continue.

¹¹ The JobTicket is in the VRS tariff a network-wide valid subscription at a very favourable price (about 70 €/month or less). It cannot be taken out by a single customer, but only by companies, which then order a corresponding JobTicket for each of their employees. Many companies reduce the price for the JobTicket for their employees additionally out of conviction, but also in order to avoid the obligation to keep an appropriate number of parking spaces available, which makes the JobTicket even more favourable from the user's point of view.

Use of means of transport of respondents

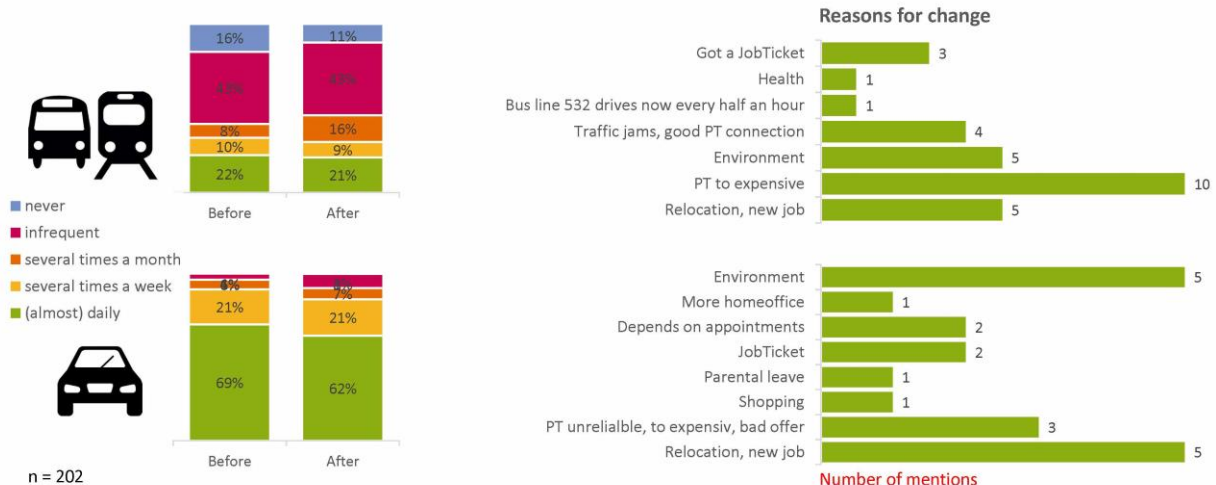


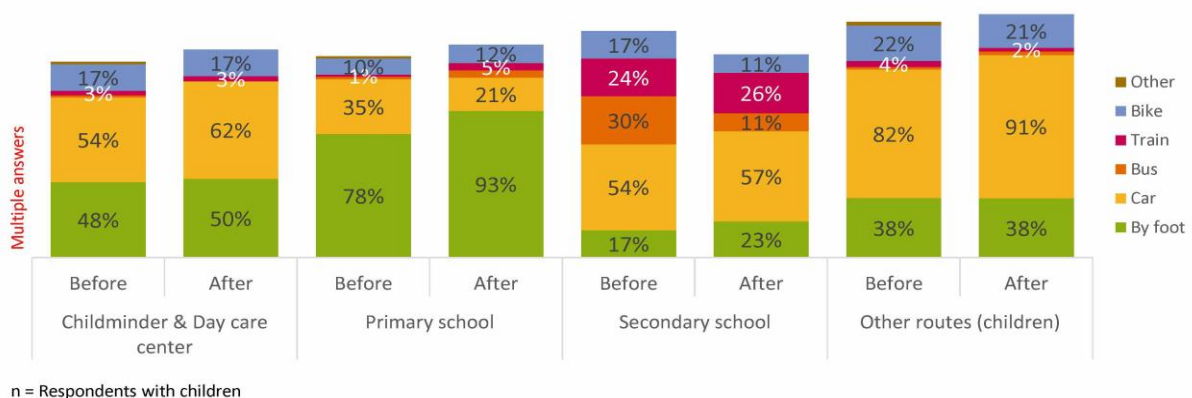
Figure 11 - Use of means of transport of respondents

Source: Own questionnaire, VRS GmbH

If one compares the data on bringing and fetching persons, no uniform picture emerges (see figure 11). While the car not only dominates the trips to and from the childminder/daycare centre and

Regular routes of Respondents

Bringing and/or picking up of persons



Question 8) What routes do you take yourself regularly? Which means of transport do you use mainly?

15

Figure 12 - Regular routes of respondents (Bringing and picking up children)

Source: Own questionnaire, VRS GmbH

other routes taken by the children, but the proportion has risen again from the first to the second survey, the trend is the opposite for trips to and from primary school. Here in particular, the increase in pedestrians is significant and seems to be directly related to the significant decrease in the number of children transported by car.

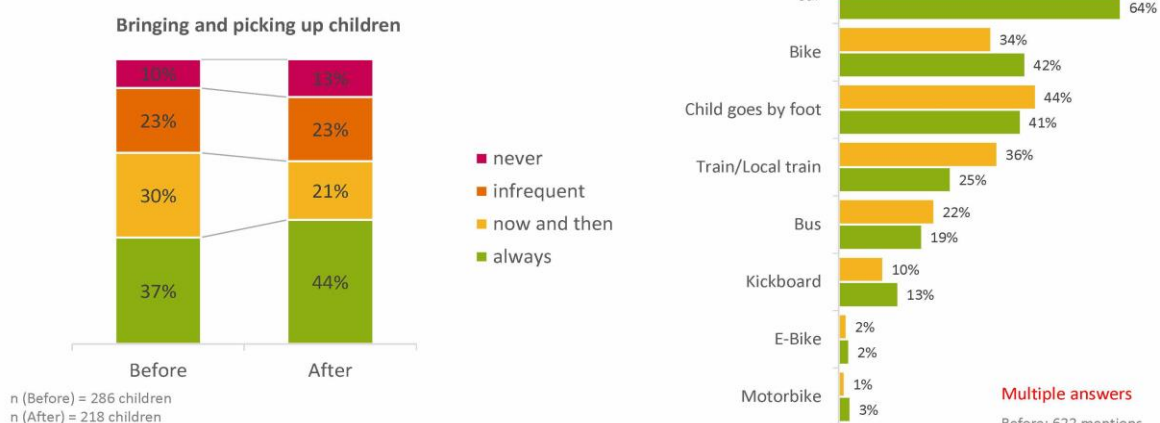
The car, which already played a smaller role with 35%, is even further reduced in the second survey with 21%, while the walking distances, but also the number of trips to and from school by bus, train and bicycle has increased. The proportion of trips to and from secondary school has changed again - the proportion of trips made on foot has increased, as have those made by car, while trips by bus have fallen significantly and those by bicycle have fallen more moderately. This is from the perspective of all households of the Pilot lab area Hennef Im Siegbogen.

We asked at another part of the survey to answer the questions from the perspective of the children. This data refers to the households in Hennef Im Siegbogen where children live (63% of all questionnaires sent back).

Looking at the periodic routes of children in figure 12 shows the graph at the left side presents a somewhat inconsistent picture. The proportion of children who are never brought or picked up raised moderately from 10% to 13%, but the proportion of children who are always brought rises, too, from 37% in the before survey up to 44% in the after survey. On the right side is shown, which means of transport are used (the yellow bar in the graph show the results of the after survey, the green bar the results of the before survey). Slightly more children are brought by foot and by bus, but the train is used now by 36% (instead of 25% during the before survey). On the other side there are significant less children brought by bike (34% vs. 42%).

Periodic routes of children

Data per child in the household.



Question 31) Is the child brought/picked up during his or her regular routes? (Data per child in the household)

30

Question 32) Which means of transport does the respective child use for his or her regular routes?

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Figure 13 - Periodic routes of children

Source: Own questionnaire, VRS GmbH

The picture becomes somewhat clearer when the delivery and collection journeys are viewed from the perspective of different destinations. Figure 13 shows that the share of car use decreases at both primary and secondary school, from 34% to 27% at primary school and from 50% to 35% at secondary school. At the same time, the proportion of walking and cycling among primary school pupils is increasing, while public transport plays no role in either survey.

Used means of transport by bringing/picking up children

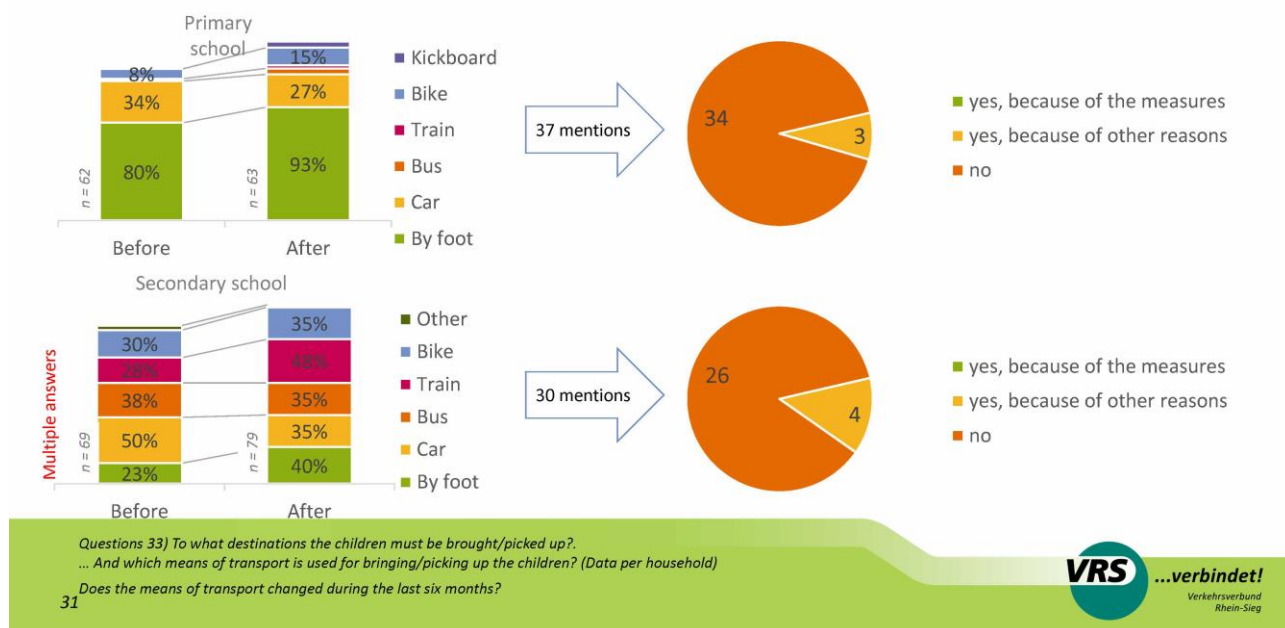


Figure 14 - Used means of transport by bringing/picking up children 1

Source: Own questionnaire, VRS GmbH

Among secondary school pupils, however, the use of bicycles has increased slightly, but the use of trains has increased more significantly from 28% to 48%. For both types of school it was also asked whether the choice of transport had changed in the last six months and if so, why. Three out of 37 mentions at primary school and four out of 30 mentions at secondary school affirmed this but stated that it was not due to the measures implemented within INCLUSION, but that the change was due to other, unspecified reasons.

Similarly, the information on the choice of means of transport can be interpreted for the destinations "visit to grandparents" and "cinema" (see figure 14). There are slight shifts, but the measures implemented in the project only seldom provided the reason for a change of means of transport. There is another special feature of going to the cinema, which was already evident in the first survey in autumn 2018 and has become even more pronounced since the second survey in spring 2020 - here the proportion of those using bus (orange) and train (red) is relatively high.

The high proportion of train users can easily be explained by the fact that his cinema centre in Siegburg is located right next to the station and can be reached directly by the S-Bahn from Hennef in the Siegbogen district - it can be reached in a few minutes by SchülerTicket without additional

costs. However, this does not explain the significant increase in the number of bus trips to 10%. It is to be assumed that a smaller cinema, which is located near the train station in Hennef, can be reached more or less directly by bus.

Used means of transport by bringing/picking up children

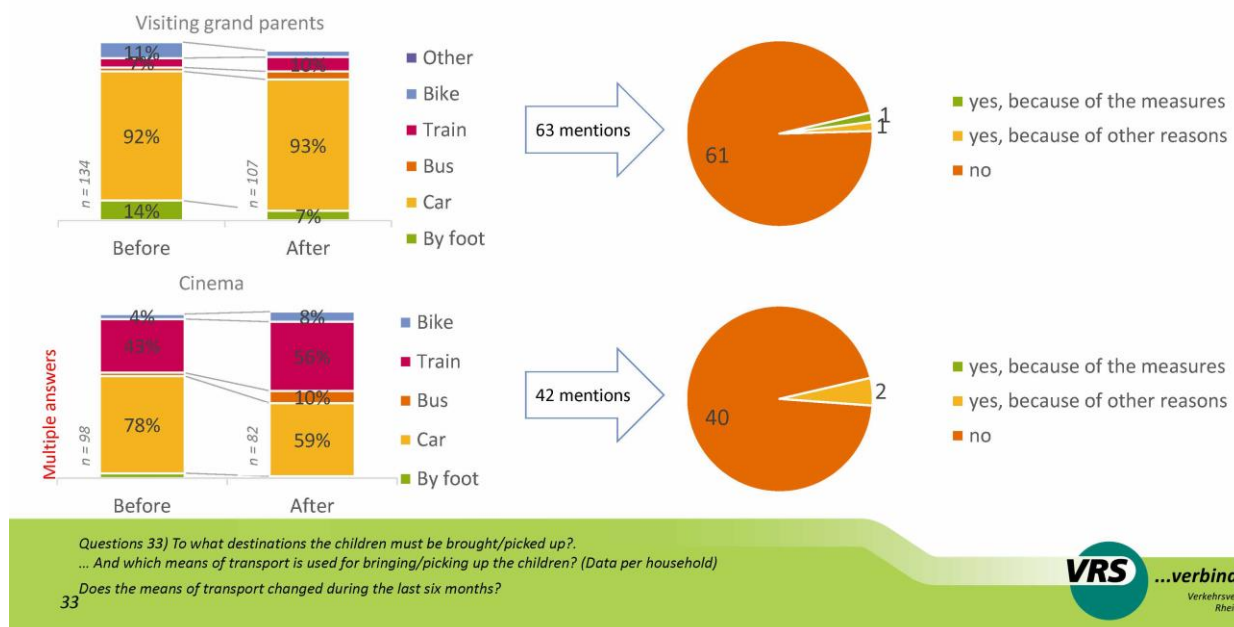


Figure 15 - Used means of transport by bringing/picking up children 2

Source: Own questionnaire, VRS GmbH

Finally, in the questionnaire it was also asked about the four measures that were implemented in Hennef Im Siegbogen as part of the INCLUSION project. For each measure the question was asked whether the measure is known, the general assessment of the measure, and how often the measure is used.

The level of awareness of a measure naturally plays a (considerable) role in how intensively it is used. If, for example, only a few people have the information about the additional bus trips on line 532, only a few people can take advantage of this offer. However, the reverse is only valid for a limited period of time. Even if all people have the information, the number of users does not automatically increase, because there can be many other reasons why one does not want to or cannot use the additional bus trips on the bus line (e.g. general refusal of bus trips, the time range with the additional trips does not fit my personal schedule, and much more).¹²

According to this, figure 15 shows three graphs in one picture. In the pie chart on the left is shown the awareness of the measure. The half-hourly interval on line 532 was known to a total of 22% of

¹² It was not a question here of evaluating the communication measures taken. Information on the measures was mainly distributed to each household, but also via the VRS homepage, the VRS app, via press release and via the tourism office of the city of Hennef. But perhaps the data helps for future adaptations of the project.

the residents. 85% of the respondents found the measure very good or good (shown in the bar chart in the middle), but at the time of the survey 69% had never used the extended offer, 15% rarely used it, 11% occasionally and 5% regularly (column chart at the right side).

Implementation of measures

More trips at bus line 532

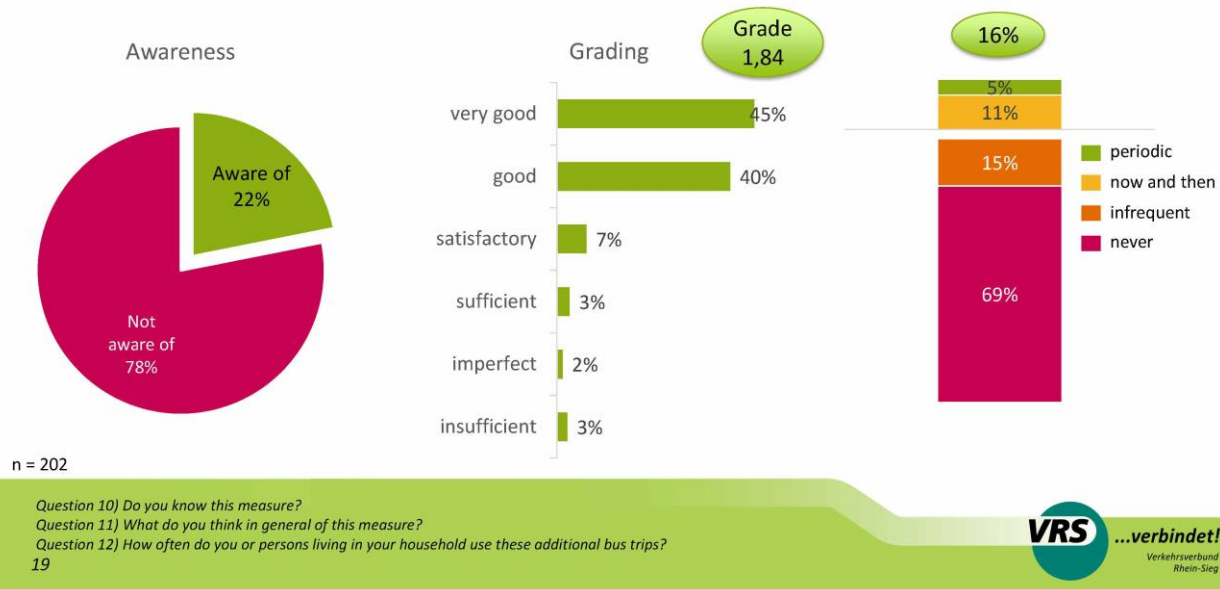


Figure 16 - Implementation of measures - Half-hourly cycle

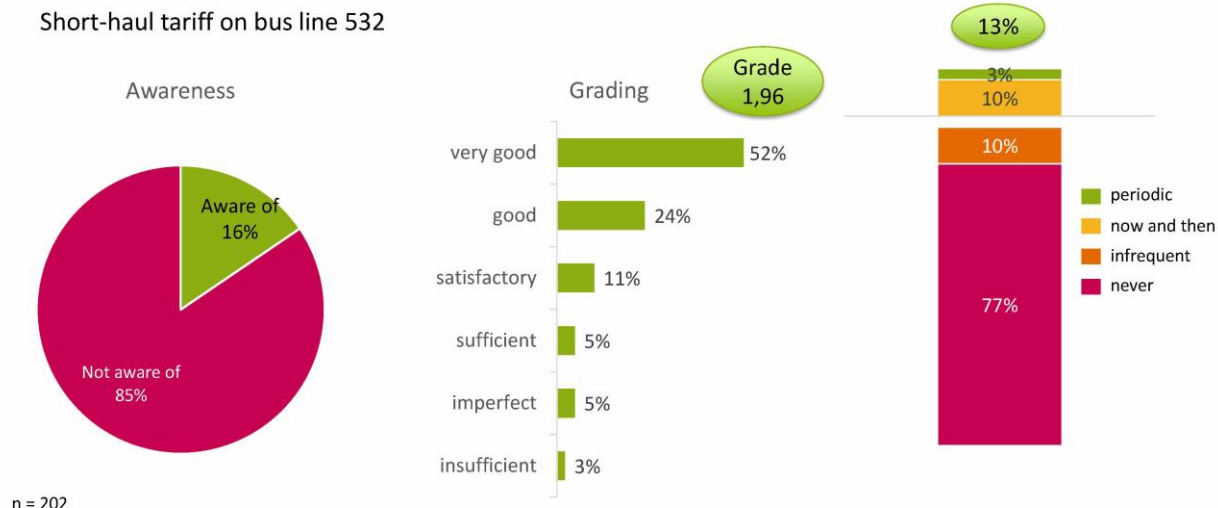
Source: Own questionnaire, VRS GmbH

Similarly, although somewhat weaker, is the awareness and use of the short-haul tariff, as shown in figure 16. While 16% of the respondents were aware of it (pie bar at the left), 77% have never used it, but 13% have used it regularly or at least occasionally (column bar at the right). The higher proportion of people who have not yet taken advantage of the discount is significantly higher than for the additional travel offer. This can possibly be explained, at least in part, by the fact that users of a season ticket or season ticket cannot take advantage of the change to the cheaper short-haul tariff because short-haul does not exist for the type of ticket.

This measure was also rated as very good or good by 76% of the respondents. The share of ratings with "very good" is here at 52%, an even higher level. This leads to the conclusion that many participants generally have a high affinity for costs and thus perceive a reduction in the price of an offer, whether they use it or not, very positively.

Implementation of measures

Short-haul tariff on bus line 532



Question 15) Do you know this measure?
Question 16) What do you think in general of this measure?
Question 17) How often do you or persons living in your household use this short-haul tariff?
20

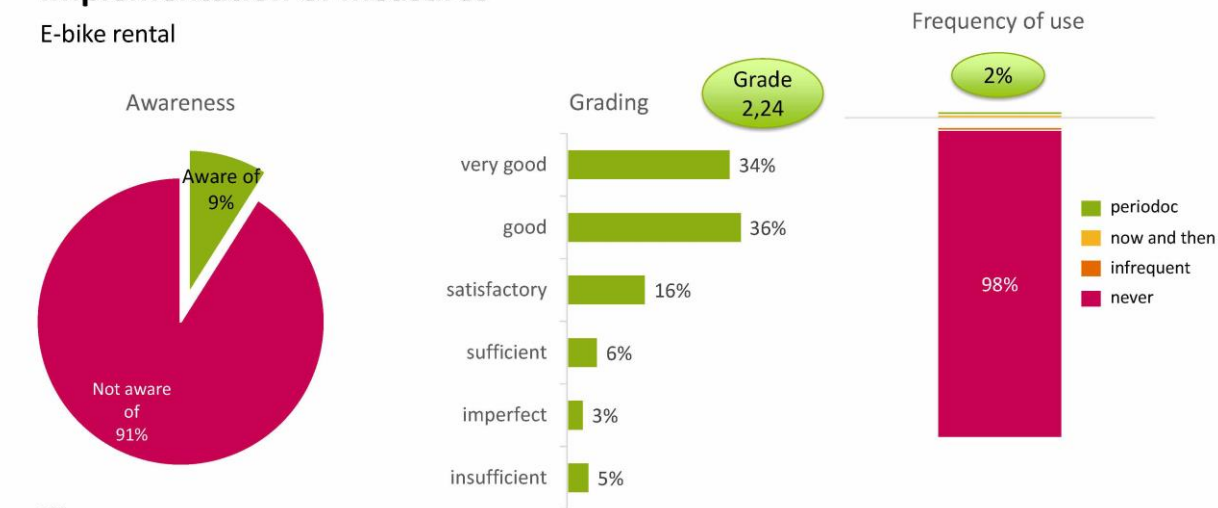


Figure 17 - Implementation of measures - Short-haul tariff

Source: Own questionnaire, VRS GmbH

Implementation of measures

E-bike rental



Question 20) Do you know this measure?
Question 21) What do you think in general of this measure?
Question 22) How often do you or persons living in your household use this e-bike rental?
21



Figure 18 - Implementation of measures - E-Bike rental

Source: Own questionnaire, VRS GmbH

Figure 17 shows the e-bike rental business, which is significantly weaker in terms of awareness and use. Only 9% were aware of the measure and only 2% used it (pie chart on the left). However, the evaluation was predominantly positive - 70% rated the measure as very good or good (bar chart in the middle). Why the measure receives so little attention despite the budget allocation of the brochure and other publicity can only be speculated. One reason for this could be that this measure ended in October/November 2019 and was either not sustainable enough (the survey was conducted at the beginning of March 2020) or no direct connection was made to the measure among the participants in this survey.

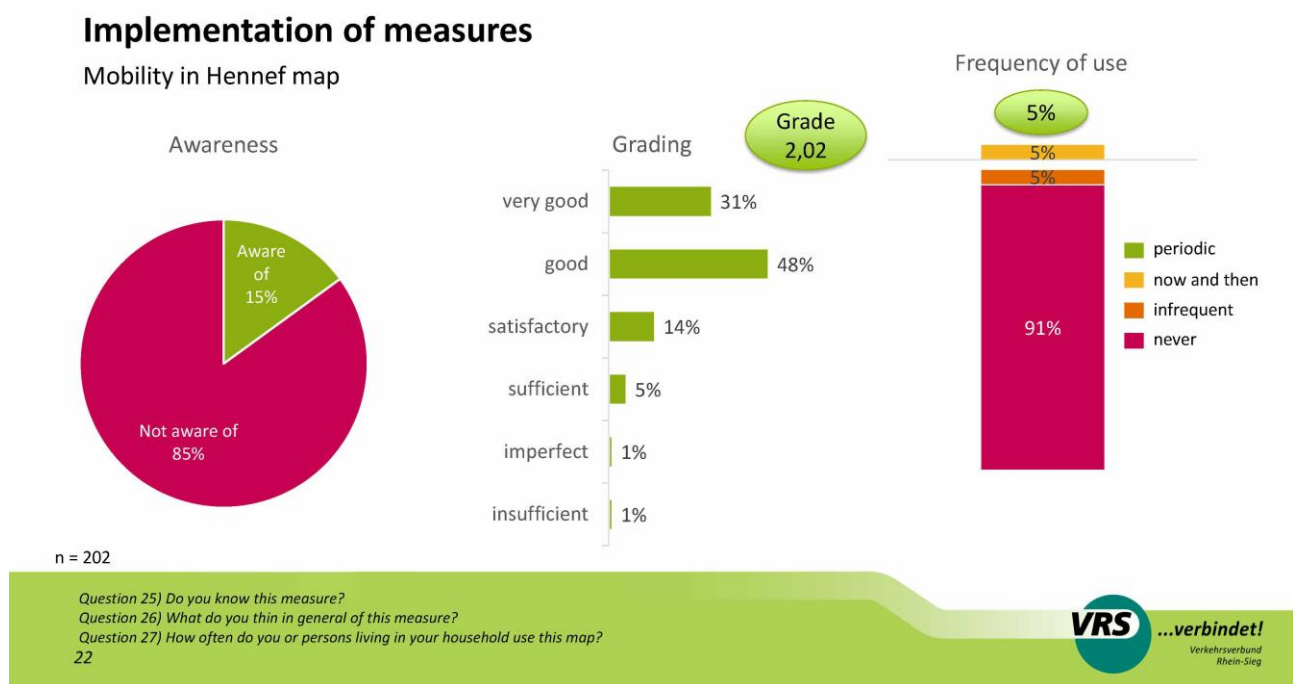


Figure 19 - Implementation of measures - Mobility map

Source: Own questionnaire, VRS GmbH

The results of the questions referring to the mobility map are shown in figure 18. The mobility map was also distributed to all households in Hennef Im Siegbogen, was known to 15% of the participants (pie chart on the left). Also well graded (79% rated the map very good or good as shown in the bar graph in the middle), it was used only by 5% from time to time and by another 5% rarely (column chart on the right).

It should be noted here that the map was distributed as a last measure at the end of November, beginning of December 2019 and thus the period until the survey was conducted was quite short. In addition, the winter weather does not necessarily invite you to try out new cycle paths, if you have not or only very rarely cycled so far.

In summary, it can be stated that the measures were all predominantly rated very good or good, so that the basic construction of the new offers seems to be reasonable and correct for the participants of the survey.

7.2 Pilot Lab vs INCLUSIVITY goals

Of the eight INCLUSIVITY goals Accessibility, Affordability, Convenience, Efficiency, Empowerment, Empathy, Gender Equality, and Safety on which the INCLUSION project is based (see figure 19), six of the principles were taken into account by the measures implemented in the Pilot lab Rhein-Sieg.

The short-haul tariff measure implemented will increase the **affordability** of public transport for individual users, and in particular for rare users.¹³ The price reduction for the purchase of single tickets on the bus line 532 in both the children's and adult tariffs will make the trips from the pilot lab area Hennef Im Siegbogen to Hennef Mitte noticeably cheaper for the users of the bus service.

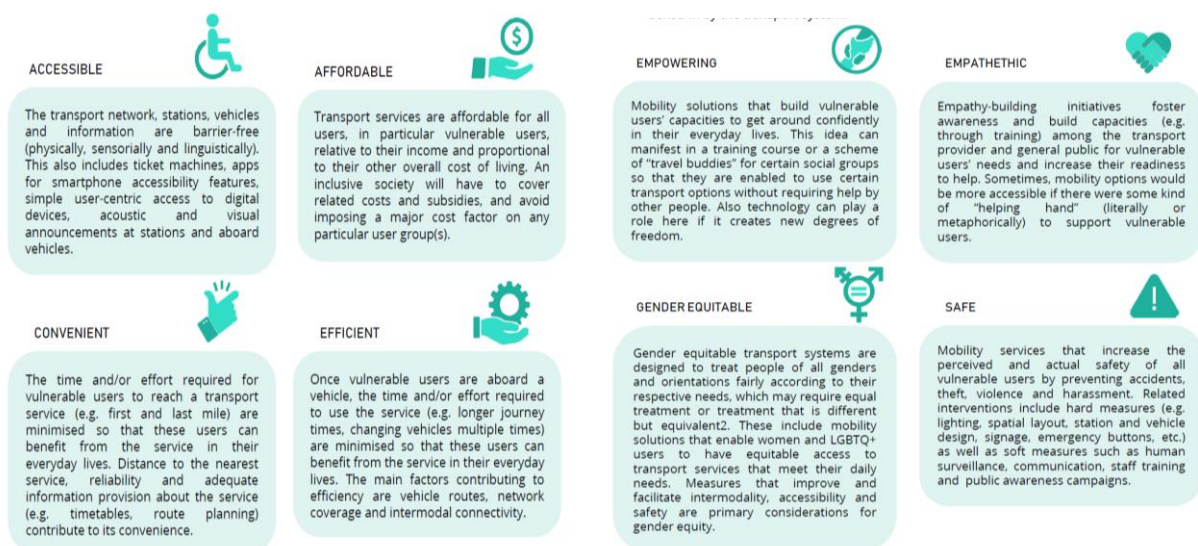


Figure 20 - The eight INCLUSIVITY goals of the INCLUSION project

Source: INCLUSION project

By extending the number of trips from an hourly to a half-hourly interval on bus route 532 in the afternoon between 4 p.m. and 7 p.m., the **efficiency** for reaching the daily routes has been noticeably improved, because on the one hand the public transport system now offers additional journeys and on the other hand previously existing waiting times for changing to other bus routes have been significantly minimised. In addition to this, the introduction of the mobility map "Mobil in Hennef" can also help to simplify or speed up transfer processes, as it visualises possible connections or changing lines at other stops that may not have been known to users before, thus increasing efficiency.

¹³ Persons who travel regularly and use one of the various subscriptions of the federation tariff for this purpose do not benefit from the changeover to the short-haul tariff because it is not available with the subscriptions, but these customers do benefit from the reduced subscription prices. For example, a SchülerTicket of the VRS tariff costs 12 euros per month and entitles the holder to any number of journeys within the entire VRS network in all available means of transport, i.e. buses, trams, local and regional trains.

An important goal of the Pilot lab Rhein-Sieg is to increase the independent mobility of children and young people and thus reduce their dependence on bringing and/or picking up services by parents or grandparents which supports **empowerment**. All measures implemented focus on this goal. In particular, it is important that the measures encourage children and young people to participate in social or societal activities such as sports clubs, music schools, meetings at friends' homes or in youth clubs, as well as leisure activities in general, such as visiting a cinema or a swimming pool. But also that the children and young people are more multimodal on the move, i.e. that they are aware of the broad range of mobility offers at least for certain routes and use them. All measures implemented support this approach either in a direct way (extension of public transport, short-distance tariff) or in a more indirect way (mobility card, e-bike rental).

All measures in the Pilot lab Rhein-Sieg meet the requirements for **gender equality**. There were, are and will be no restrictions on use.

The **safe** participation of younger children in particular in transport is promoted in the long term, because the increased number of trips and the discounted tickets on bus route 532 give them easier access to a very safe means of transport that they can use without parental guidance. In addition, the mobility map "Mobil in Hennef" helps parents to plan their children's independent participation in the mobility offers in Hennef together at home, thus providing a reliable aid for the children and their parents.

Even though the measures may not increase **accessibility** to mobility, it should be pointed out in general terms that, regardless of the INCLUSION project and the associated measures, the public transport stops in the VRS area (and thus also in Hennef) are already barrier-free or will become so soon (implementation planned by end of 2023). For example, the Hennef Im Siegbogen stop is already completely barrier-free with lifts, a guidance system for the blind as well as acoustic announcements, visual guidance system and displays for the deaf etc., as is the Hennef Mitte stop. In addition, all vehicles used on bus route 532 are also fully prepared and equipped for the use of persons with restricted mobility and the staff have been trained accordingly. Information channels such as the VRS app are also already barrier-free. The VRS tariff provides for the free transportation of severely disabled persons and any accompanying persons who may be required.

7.3 Lessons learnt

Within the framework of the INCLUSION project, it is of course very important with regard to the transferability of the measures implemented in the individual pilot labs to collect, evaluate and document the experiences and developments made in the respective pilot labs, but also the errors and risks, in order to benefit from them in the future application of the experiences and to structurally improve follow-up projects.

A very important result in a positive way of the pilot lab Rhein-Sieg is the realization that the willingness of the residents to actively and constructively participate in the discussion about local mobility offers is very high. This can be seen both in the high participation rate in the two extensive surveys and in the willingness to answer the questions by means of free text in addition to answering the actual questions. In addition, participation in the meeting of experts in Hennef in

January 2019 was also gratifyingly high and the discussion was lively and constructive.¹⁴ In future projects, this aspect should be given high attention and should definitely be included in the planning.

- **Lesson learnt: Early involvement of residents at local level is very important and helpful.**

From this it can be deduced that, on the one hand, it can be assumed that the early involvement of residents through surveys or similar activities will produce reliable results that can provide important suggestions for the subsequent planning process. On the other hand, by inviting the public to participate, a more targeted project development can be implemented to meet the needs of the residents. The small-scale survey, e.g. limited to one district, seems to be more effective because the mobility needs are presumably similar, but the mobility solutions sometimes differ considerably depending on the respective framework conditions. The conditions can vary considerably even between different parts of the same city, be it through a different settlement structure, relief, type of housing, type of existing (transport) infrastructure and much more. It also means that, as a matter of principle, surveys should not be conducted with regard to a single means of transport but should always take a multimodal approach to transport and appropriate planning approaches should always point in this direction. One result of the two surveys in Hennef Im Siegbogen is also that the mobility needs of local residents are just as heterogeneous as the possible solutions for satisfying these needs. This approach should also be given due consideration in future projects.

- **Lesson learnt: Think multimodal mobility solutions and implement them according to the specific local conditions.**

At the level of implementing the measures, the experience gained from the Pilot lab Rhein-Sieg suggests that early involvement of all partners involved on the supply side also plays a major role. In addition, it must be discussed in advance that certain measures in the overall context may not be to the full satisfaction of one of the implementing partners. Because if you ask questions, you should be able to deal with the answer. Nevertheless, this should not result in a delay in implementation, but all those involved should look at the bigger picture. In this respect, it must also be clear to all those involved that the surveys also generate expectations that must not be disappointed.

- **Lesson learnt: Prepare carefully all professional partners for possible measures and their implementation.**

Communicating the relevant measures at local level is both simplified and made more difficult by the small scale of the project. Even the distribution of flyers to all households in a clearly defined area obviously does not reach all people in a wave, but is only perceived as information by about one fifth, even if the communication of the measures and the project is still supported by other

¹⁴ It should be noted that the after-survey was already influenced by the Covid 19 pandemic, at least with regard to the number of returned questionnaires, as the survey could only start at the end of February due to the frame schedule. The lockdown measures were already announced in mid-March: So only three weeks were available for the survey. Against this background, the participation rate of over 30% reinforces the impression that there is a high participation rate in view of the measures taken as a result of the lockdown, including school closures.

channels such as a municipal information sheet, the tourist office or press releases, the homepage of the Rhine-Sieg Transport Association and its Facebook presence. On the other hand, the more extensive use of locally limited in-app advertising or similar is possible, but significantly increases the costs to be incurred. It would be conceivable to use the budget distribution repeatedly in future projects in order to achieve a higher effect. In this respect, it can be stated as an experience for the pilot lab Rhein-Sieg that the communication of individual measures should be implemented in future projects with a higher repetition rate, even if the residents have already been sensitised by the letters etc.

- **Lesson learnt: Possible repeated use of means of communication.**

In this context, there is certainly also a recognition that the time span between the implementation of a measure and the measurement of its level of awareness should not be too short. In the Pilot lab Rhein-Sieg, the implementation of the measures resulting from the previous survey could only be carried out at the end of August at the earliest, because the previous survey first had to be compiled, carried out and evaluated, and then, in coordination with the partners Rhein-Sieg-Kreis, the city of Hennef and Rhein-Sieg-Verkehrsgesellschaft, measures had to be developed from the survey results, which had to be planned, communicated and implemented. This requires time, which has to be taken into account in the planning process, especially when the end is firmly defined as in the INCLUSION project. When designing future projects, the time span for implementation should be as long as possible.

- **Lesson learnt: The time span between the implementation of a measure and its evaluation in a survey should not be too short.**

8 Assessment

8.1 Benefits of the actions developed

Based on the original objectives of the joint project participation of the Rhein-Sieg district and the Verkehrsverbund Rhein-Sieg, the question was whether the existing mobility offer in a new development area was sufficient to meet the requirements of everyday mobility beyond the way to work. Of particular interest was whether the public transport offer and the cycle path network could sufficiently cover the diverse needs in order to enable children and young people to be independently mobile and reduce their dependence on parental transport services. A varied mobility offer, which can also be used unaccompanied, forms an essential basis for participation in public and social services (sports club, music school, going to the cinema, meeting friends, etc.). To achieve this, however, the offer must also be targeted and correspondingly effective.

To this end, it was determined which measures could help, from the point of view of the residents (parents and children), to reduce possible obstacles or mobility deficits and, as a result, to enable children and young people to achieve greater independent and safe mobility. The before and after surveys were designed with these aspects in mind. Furthermore, care was taken to ensure that the measures also fit together or are mutually supportive, such as the extension of the timetable on line 532 and the simultaneous reduction of fares for single journeys on this line.

As already described in chapter 7.1, the implemented measures are predominantly rated "good" or "very good" by the participants of the survey. Only some of the survey participants express negative or negative opinions (see figures 16 to 19).

This leads to the conclusion that the measures basically meet the needs of the residents and take their specific mobility requirements into account. Here it is certainly exciting to observe the extent to which the measures become even more established in the further course of the project, as it can be assumed that, due to the short time span between the implementation of the measures and their verification by the after-survey, the changes in use by the residents are only partially reflected in the survey data of the after-survey.

The COVID-19 pandemic will of course also have a restrictive effect on further development - as is currently the case with so many mobility offers. At the present time, it is not possible to make a serious assessment of the long-term impact of the pandemic on the use of local public transport in particular. However, it can be assumed that the effect already explained in Chapter 7.1, namely that the use of various means of transport has increased, that the residents of the pilot lab Rhein-Sieg will make their daily journeys beyond the commuting to work more multimodal, will ongoing increase, not least because individual transport (car, but also bicycle) has increased considerably as a result of the pandemic.

Moreover, the numerous and predominantly positive feedback on freedom of expression at the end of the ex-post survey is a further indication that the measures implemented are being received positively. They also show that the topic of "local mobility" is of great importance to people in their

everyday lives. After all, around two thirds of all participants took the opportunity to add their own opinions to the questionnaire. Some examples¹⁵:

- "There are many options. The incentive to use rail must be increased to keep the city attractive (costs). Children need safe cycle paths to stay cyclists."
- "Thanks for the positive change."
- "Buses from Siegbogen to Hennef run too rarely. More bike paths are needed."
- "The new measures should be better communicated. A reduction of the rail prices in the Siegbogen - Hennef is desirable."
- "The situation for cyclists has never been good and has become even worse with the change in the use of Frankfurter Strasse for children."
- "For us the mobility offer is sufficient."
- "What I find best is the extension to the half-hourly interval of the bus line 532 at certain times and the price reduction in the short-haul tariff."
- "Cycling with children is really not easy in Hennef. Bad cycle paths, no cycle paths, too close to the motorway, suddenly ending cycle paths - it's no fun."
- "Hennef should become more bicycle-friendly, e.g. Bonner Str. (new regulation impossible and dangerous). Bus and train network is great for Hennef Im Siegbogen."
- "I think it's good that Hennef is doing something and expanding the offer. It would be nice to have more flexibility and cheaper ways to use public transport."
- "More public information through advertising!"
- "We are very satisfied with the S-Bahn connection Im Siegbogen and the existing day-care and primary school directly in the residential area. This was also a reason for the choice of residence."
- "Provide information to new inhabitants."
- "Let public transport run more often, children under 18 free of charge, get tax money for it. Provide more opportunities to take bicycles on the buses (in case of rain)."
- "PT interval ok, single trips short distance too expensive."
- "To reach a destination from Siegbogen to Hennef centre by bike and a family of 4 people means pure stress. Radical expansion of the cycle paths is necessary. Car-free Sundays in the city."
- "Why does the bus (line 532) only run every two hours on Saturday and Sunday? It's not senior-friendly."
- "It's getting better. Because of their age, the kids don't travel alone on all routes."
- "We're very satisfied. The connections are really better. Thank you very much."

8.2 Key transferability issues

The four measures implemented in the Pilot lab area Hennef Im Siegbogen are mutually dependent. Of course, in the perception of the users there is a connection between the extension of the range of trips on the bus line 532 and the reduction of the tariff. And the offer of a very low-

¹⁵ The complete 128 answers are listed in the annex.

priced e-bike rental is of course to be seen in conjunction with the mobility map for Hennef, because the infrastructure for cyclists shown on the map (cycle paths, parking spaces, stations for charging infrastructure) is therefore naturally of interest to the users of the bikes. At the same time, the map also shows the public transport routes as well as tips for obtaining further information (timetable app, etc.). This mutual complementarity of the measures is certainly one of the strengths of the concept.

In addition, the measures could be implemented very precisely by determining the needs of the residents beforehand and thus directly benefit the residents. This local implementation enables very precise control and a very high degree of adaptation to local characteristics. However, the locally very differentiated implementation also requires a very intensive study of the local conditions in advance. This means that its simple transfer of the measures to other regions cannot be implemented one-to-one but should be determined in advance through a survey of the local residents.

In addition, experience shows that measures implemented in public transport need some time to establish themselves in the minds of the users and thus develop their full effect. Therefore, a duration of one year or longer is certainly preferable to a duration of only a few months.¹⁶

The situation is similar with rental systems for e-bikes. The rental system is very easy to install locally but using only a few bikes for rental also provides little data and little public attention. A much higher number of bikes that can be rented is desirable, but also much more expensive and time-consuming to organize. The increased use of bicycles is very weather-related, especially for bicycle sceptics. While people who have already firmly integrated cycling into their everyday mobility have correspondingly fewer concerns here, the diffuse concern about possible weather restrictions is much higher among non-cyclists. Therefore, it is certainly sensible to offer rental systems ideally in the warm half of the year, e.g. to start in April.

With all these measures, the communication effort should not be underestimated. As can be seen in Figures 15 to 18, even with household distribution and supportive communication channels via the official gazette, homepage, etc., only about one-fifth of the residents can be reached in one go. It is therefore necessary to take additional communication measures or to use the selected communication channels several times. This, of course, increases the costs and also the personnel expenditure.

With regard to the measures concerning bicycle traffic, it is clear, not least from the reactions of the participants in the survey, that parallel to measures of information and the transfer of use of bicycles, an expansion of the bicycle infrastructure is an important part that could not be achieved within the framework of the project. Parents in particular complain that the cycle paths to be used by their children are sometimes not in good structural condition or that the traffic regulations focus

¹⁶ The outbreak of the Covid-19 pandemic and the associated - also long-term - effects on public transport are currently very difficult to assess. It is to be assumed, however, that they will be serious even on a local level.

on motorised individual traffic and "plan around it".¹⁷ In this respect, a rethinking of the planning of cycle traffic is certainly absolutely necessary in order to significantly increase the proportion of cycle traffic in everyday life.

The results of the surveys and the evaluations of the implemented measures are made available to both the city of Hennef and the Rhein-Sieg-Kreis. The database is also presented to the political committees. Likewise, all residents of the Pilot Lab area will be informed about the results of the survey by mail, where the main results will be explained to them and further figures will be made available via a link. This will ensure that the participation of the residents is further appreciated and that the issues raised regarding local mobility will remain in the local discussion.¹⁸

¹⁷ In fact, some of the survey participants explicitly referred, for example, to the traffic regulation along Frankfurter Strasse in Hennef. Here, cyclists are sometimes instructed to cycle between parked cars and the flowing traffic, or the cycle path is in some places along the pavement and close to the entrances of shops, which naturally increases the accident potential.

¹⁸ August/September 2020 will also see the launch of the "RSVG-Bike" project, a bicycle rental system in initially four towns in the Rhine-Sieg district: Siegburg, Sankt Augustin, Niederkassel and Hennef. The station-based bike rental system will initially start with around 300 conventional bikes. This fleet of rental bikes will soon be supplemented by e-bikes, load bikes and e-load bikes. The bikes can be rented per app for a small fee (1€ per 30 minutes, maximum 9€ per day; there are discounts for VRS subscribers). Bikes can be rented in Hennef and can be parked in Sankt Augustin, for example.

9 Conclusion

In the introduction to this report, the question was raised as to why, despite a wide range of options offered by various means of transport, many parents drive their children to many destinations by car, even though this not only restricts the self-determined mobility of their children, but is also neither necessary nor environmentally friendly.

By means of four measures implemented in the Pilot Lab Hennef Im Siegbogen and two related surveys¹⁹, the aim was to determine whether and in what way there have been developments in the behaviour of local residents and also to determine the "why".

Fortunately, the implemented measures have generally been evaluated as very good or good by the residents of the pilot lab area, which will further increase and consolidate their awareness and acceptance of the measures - and thus hopefully also their integration into the mobile everyday life of the residents - especially in the long term. In addition, participation in the two surveys conducted was very high (before survey: 44%; after survey: 31% - despite the coronavirus pandemic). From the point of view of market research, these are pleasingly high values, which form a solid data foundation, but at the same time show that the issues addressed move residents, and local mobility is obviously a very important topic for each individual. Against this background, it is pleasing that three of the four measures will be continued immediately and unchanged after the end of the INCLUSION project (extended bus offer, short-haul tariff, Mobil-in map), while the bicycle rental will be raised to a much more efficient level by the RSVG bike offer²⁰ which will start soon.

As already described in detail in Chapter 7 and documented by means of graphs, changes have taken place in residents' choice of transport. Residents are making their journeys much more multimodal²¹, i.e. they no longer rely on a single mode of transport for leisure activities, for example, but use different modes of transport for different occasions. The car is still very important in everyday mobility, but it is apparently losing its status as the "solution for everything". This leads to the conclusion that more objectification in the choice of transport mode is gaining the upper hand here and that the emotionally high level of attachment to the car is receding somewhat into the background. This in turn means that the residents of the Pilot Lab are now more inclined to consider which is the most practical and/or efficient means of transport for the respective route.

The embedding of the measures in the inclusivity goals of the INCLUSION project has been successful, and the goals set have been achieved. Transferability to other regions is also possible without difficulty, even if the framework conditions should differ in part. The key to this is undoubtedly the small-scale implementation, i.e. the target area selected for the project

¹⁹ A survey was carried out before the implementation of the measures - this survey also formed the basis for the developed measures and a survey was carried out after the implementation of the measures - here the measures could then be evaluated by the residents and at the same time changes in transport choice behaviour could be determined.

²⁰ Hennef Im Siegbogen will also have its own bicycle rental station in the RSVG-Bike project. See also footnote 18.

²¹ The exception here is commuter traffic, which is more or less consistently monomodal, even if there are shifts between the individual means of transport, e.g. from car to train.

implementation must not be too large (or should be divided into smaller units) in order to be able to really make the locally specific adaptation of possible measures. At the same time, the implementation in Hennef Im Siegbogen has shown that the communication of the different offers should be comprehensive and that a successful implementation takes time. Appropriate success controls should take this into account.

From this conclusion, two demands for future activities can be derived for the municipalities and local transport authorities, respectively, in order to further steer the choice of transport modes in the desired direction:

1. the inhabitants must be well informed about the local transport services available in order to make the best decision for each route from their point of view
2. transport services must be efficient and must be able to compete with other transport services in light of users' needs

The extent to which the outbreak of the COVID-19 pandemic and the measures associated with it, cannot be seriously assessed at present. This applies both to restrictions and - in the medium term - changes in everyday mobility, but also to the mobility behaviour of each individual. However, it is to be assumed that the operators of public transport in particular - to put it in neutral terms - will have to react to considerable changes, while private transport and especially cycling will be the beneficiaries, at least in the short term. However, for both means of transport it is true that a lot will certainly have to be invested in supply and infrastructure, but at the same time the psychological component must be kept in mind. Decisions for or against a certain means of transport are often "head decisions" in areas where a wide range of different means of transport is available, as the results of the surveys also underline.

Responding to these circumstances and factors will be the great challenge for future mobility, both in Hennef Im Siegbogen and everywhere else.

Annex I – Cover letter



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Glockengasse 37-39
50677 Köln

Bernd Knieling
0221-20808-21
bernd.knieling@vrs.de

« »
«KopfName»
«KopfAdresse»
«KopfPLZOrt»

Hennef, im Februar 2020

Neue Wege zur Mobilität

«TextAnrede» «TextGeschl» «TextName»,

Im Oktober 2018 hat die Stadt Hennef gemeinsam mit dem Rhein-Sieg-Kreis per Befragung zur Alltagsmobilität ermittelt, welche Wünsche die Einwohner von Hennef Im Siegbogen zur Mobilität haben. Sie haben uns dabei mit Ihrer Teilnahme unterstützt, wofür wir herzlich danken. Aus den Ergebnissen haben wir vier Maßnahmen abgeleitet, die 2019 umgesetzt wurden. Das sind:

- zusätzliche Fahrten nachmittags auf der Buslinie 532 von Im Siegbogen nach Hennef
- die Einführung des Kurzstreckentarifs für Busfahrten von Im Siegbogen nach Hennef
- der kostengünstige wochenweise Verleih von Pedelecs für Alltagswege und
- eine neue Mobilitätskarte mit allen Informationen zu Rad- und sonstigen Wegen.

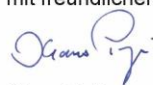
Vielleicht haben Sie die eine oder andere Neuerung beim Mobilitätsangebot bereits genutzt. Im Rahmen des von der EU geförderten Projektes INCLUSION ist es nun für uns sehr wichtig zu erfahren, ob die umgesetzten Maßnahmen Einfluss auf Ihre tägliche Mobilität genommen haben. Daher möchten wir Sie bitten, den beiliegenden Fragebogen vollständig auszufüllen und bis zum 18. März 2020 mit dem adressierten Rückumschlag an uns zurück zu schicken.

Als Dankeschön für Ihre Mühen erhalten alle Teilnehmer, die den Fragebogen ausfüllen und zurückschicken, einen Gutschein von Amazon im Wert von € 10,00. Bitte hierzu Ihre E-Mail-Adresse auf dem separaten Formular eintragen und dem Rückumschlag beilegen. Die Daten werden nur im Rahmen des Projektes anonymisiert ausgewertet und anschließend vernichtet.

Weitere Informationen zu INCLUSION finden Sie unter www.h2020-inclusion.eu und www.vrs.de.

Wir hoffen, Sie für diese Befragung gewinnen können, um die Lebensqualität in Hennef weiter zu erhöhen und verbleiben

mit freundlichen Grüßen



Klaus Pipke
Bürgermeister
Stadt Hennef



Sebastian Schuster
Landrat
Rhein-Sieg-Kreis



Michael Vogel
Geschäftsführer
Verkehrsverbund Rhein-Sieg GmbH

Annex II – Questionnaire (8 pages)



Umfrage zum Mobilitätsangebot in Hennef

Die Umfrage ist an die Person im Haushalt gerichtet, die die Haushaltsorganisation allgemein im Blick hat und sich ggf. hauptsächlich um die regelmäßigen Wege der im Haushalt lebenden Kinder kümmert.

1. Wie viele Personen leben in Ihrem Haushalt?	
insgesamt:	→ davon Kinder ...
	→ bei einer Tagesmutter:
	→ im Kindergarten:
	→ noch nicht bei Tagesmutter/KiGa:
	→ in der Schule:
	→ in Ausbildung/ Studium:
2. Seit wann wohnen Sie an Ihrer jetzigen Adresse?	
☐ seit 2019	☐ vor 2019
3. Anzahl PKWs in Ihrem Haushalt ...	4. Anzahl an Fahrten, die in einer durchschnittlichen Woche mit den PKWs durchgeführt werden ...
PKWs im Haushalt	ca. Fahrten in der Woche (Hin- und Rückfahrt entsprechen 2 Fahrten)
5. Wie alt sind Sie?	6. Sie sind ...
Jahre	☐ männlich ☐ weiblich
7. Wenn Sie an alle Wege denken, die Sie in Hennef regelmäßig zurücklegen:	
Wie zufrieden sind Sie ganz allgemein mit der Möglichkeit, Ihre Ziele in Hennef zu erreichen? Bitte denken Sie an alle Verkehrsmittel, die Sie hierbei nutzen können.	
	
	
☐	☐
☐	☐

Umfrage zum Mobilitätsangebot in Hennef

8. Welche Wege machen Sie selbst regelmäßig?			
Und welches Verkehrsmittel nutzen Sie dafür hauptsächlich?			
<i>Wege, die Sie nicht regelmäßig unternehmen, können Sie überspringen.</i>			
Ziel des Weges	i.d.R. genutzte(s) Verkehrsmittel	Hat sich Ihre Verkehrsmittelwahl <u>im letzten halben Jahr</u> auf diesem Weg geändert?	Falls ja, warum?
☐ Einkauf Nah (täglicher Bedarf)	☐ zu Fuß ☐ Fahrrad ☐ PKW ☐ Kickboard ☐ Bus ☐ Motorrad ☐ Bahn ☐ sonstiges	☐ ja ☐ nein	<i>Stichwörter sind ausreichend</i>
☐ Einkauf Weit (besonderer Bedarf)	☐ zu Fuß ☐ Fahrrad ☐ PKW ☐ Kickboard ☐ Bus ☐ Motorrad ☐ Bahn ☐ sonstiges	☐ ja ☐ nein	
☐ Freizeit	☐ zu Fuß ☐ Fahrrad ☐ PKW ☐ Kickboard ☐ Bus ☐ Motorrad ☐ Bahn ☐ sonstiges	☐ ja ☐ nein	
☐ Arzt oder ähnliches	☐ zu Fuß ☐ Fahrrad ☐ PKW ☐ Kickboard ☐ Bus ☐ Motorrad ☐ Bahn ☐ sonstiges	☐ ja ☐ nein	
☐ Wege zum/vom Arbeitsplatz	☐ zu Fuß ☐ Fahrrad ☐ PKW ☐ Kickboard ☐ Bus ☐ Motorrad ☐ Bahn ☐ sonstiges	☐ ja ☐ nein	

Umfrage zum Mobilitätsangebot in Hennef

Ziel des Weges	i.d.R. genutzte(s) Verkehrsmittel	Hat sich Ihre Verkehrsmittelwahl im letzten halben Jahr auf diesem Weg geändert?	Falls ja, warum?
☐ Bringen/Holen von Kindern zur Tagesmutter oder KiTa	☐ zu Fuß ☐ Fahrrad ☐ PKW ☐ Kickboard ☐ Bus ☐ Motorrad ☐ Bahn ☐ sonstiges	☐ ja ☐ nein	<i>Stichwörter sind ausreichend</i>
☐ Bringen/Holen von Kindern auf dem Schulweg (Grundschule)	☐ zu Fuß ☐ Fahrrad ☐ PKW ☐ Kickboard ☐ Bus ☐ Motorrad ☐ Bahn ☐ sonstiges	☐ ja ☐ nein	
☐ Bringen/Holen von Kindern auf dem Schulweg (weiterführende Schule)	☐ zu Fuß ☐ Fahrrad ☐ PKW ☐ Kickboard ☐ Bus ☐ Motorrad ☐ Bahn ☐ sonstiges	☐ ja ☐ nein	
☐ sonstiges Bringen/Holen von Kindern (z.B. Freunde, Sport)	☐ zu Fuß ☐ Fahrrad ☐ PKW ☐ Kickboard ☐ Bus ☐ Motorrad ☐ Bahn ☐ sonstiges	☐ ja ☐ nein	
☐ Bringen/Holen sonstiger Personen	☐ zu Fuß ☐ Fahrrad ☐ PKW ☐ Kickboard ☐ Bus ☐ Motorrad ☐ Bahn ☐ sonstiges	☐ ja ☐ nein	
☐ sonstiges: 	☐ zu Fuß ☐ Fahrrad ☐ PKW ☐ Kickboard ☐ Bus ☐ Motorrad ☐ Bahn ☐ sonstiges	☐ ja ☐ nein	

Umfrage zum Mobilitätsangebot in Hennef

9. Wie häufig nutzen Sie in der Regel folgende Verkehrsmittel?		Hat sich die Nutzungshäufigkeit dieses Verkehrsmittels <u>im letzten halben Jahr</u> verändert?	Falls ja, warum?
Fahrrad	☐ nie ☐ seltener ☐ mehrmals im Monat ☐ mehrmals die Woche ☐ (fast) täglich	☐ ich nutze das Rad <u>häufiger</u> ☐ ich nutze das Rad <u>weniger</u> ☐ die Nutzung ist unverändert	<i>Stichwörter sind ausreichend</i>
E-Bike bzw. Pedelec	☐ nie ☐ seltener ☐ mehrmals im Monat ☐ mehrmals die Woche ☐ (fast) täglich	☐ ich nutze das E-Bike <u>häufiger</u> ☐ ich nutze das E-Bike <u>weniger</u> ☐ die Nutzung ist unverändert	
Bus- und Bahn	☐ nie ☐ seltener ☐ mehrmals im Monat ☐ mehrmals die Woche ☐ (fast) täglich	☐ ich nutze den ÖPNV <u>häufiger</u> ☐ ich nutze den ÖPNV <u>weniger</u> ☐ die Nutzung ist unverändert	
PKW	☐ nie ☐ seltener ☐ mehrmals im Monat ☐ mehrmals die Woche ☐ (fast) täglich	☐ ich nutze den PKW <u>häufiger</u> ☐ ich nutze den PKW <u>weniger</u> ☐ die Nutzung ist unverändert	
Carsharing	☐ nie ☐ seltener ☐ mehrmals im Monat ☐ mehrmals die Woche ☐ (fast) täglich	☐ ich nutze Carsharing <u>häufiger</u> ☐ ich nutze Carsharing <u>weniger</u> ☐ die Nutzung ist unverändert	

Umfrage zum Mobilitätsangebot in Hennef

Das Angebot auf der Buslinie 532 wurde seit dem 28. August 2019 in den Nachmittagsstunden zwischen 16.00 und 19.00 Uhr von einem Stunden- auf einen Halbstundentakt verdoppelt.

10. Ist Ihnen diese Maßnahme bekannt? ☐ ja ☐ nein	11. Was halten Sie ganz allgemein von dieser Maßnahme? <i>Bitte bewerten Sie die Maßnahme auf einer Schulnotenskala von 1 = „sehr gut“ bis 6 = „ungenügend“.</i> ☐ 1 (sehr gut) ☐ 2 (gut) ☐ 3 (befriedigend) ☐ 4 (ausreichend) ☐ 5 (mangelhaft) ☐ 6 (ungenügend)
12. Wie häufig nutzen Personen in Ihrem Haushalt diesen Halbstundentakt? ☐ regelmäßig ☐ ab und zu ☐ selten ☐ noch nie	13. Bitte begründen Sie kurz Ihre Bewertung der Maßnahme:
14. Wie viele PKW-Fahrten werden in Ihrem Haushalt, in einer durchschnittlichen Woche, durch diese Maßnahme ersetzt? _____ Fahrten <i>(Bitte denken Sie an alle Personen in Ihrem Haushalt; Hin- und Rückfahrt entsprechen 2 Fahrten)</i>	

Die Fahrt von "Hennef Im Siegbogen" nach Hennef mit der Buslinie 532 ist seit September 2019 mit dem Kurzstreckentarif des VRS zu erreichen, womit eine Reduzierung der Fahrtkosten verbunden ist: Erwachsene zahlen nun 2€ statt 2,50€ und Kinder 1€ statt 1,30€.

15. Ist Ihnen diese Maßnahme bekannt? ☐ ja ☐ nein	16. Was halten Sie ganz allgemein von dieser Maßnahme? <i>Bitte bewerten Sie die Maßnahme auf einer Schulnotenskala von 1 = „sehr gut“ bis 6 = „ungenügend“.</i> ☐ 1 (sehr gut) ☐ 2 (gut) ☐ 3 (befriedigend) ☐ 4 (ausreichend) ☐ 5 (mangelhaft) ☐ 6 (ungenügend)
17. Wie häufig nutzen Personen in Ihrem Haushalt diesen Kurzstreckentarif? ☐ regelmäßig ☐ ab und zu ☐ selten ☐ noch nie	18. Bitte begründen Sie kurz Ihre Bewertung der Maßnahme:
19. Wie viele PKW-Fahrten werden, in einer durchschnittlichen Woche, in Ihrem Haushalt durch diese Maßnahme ersetzt? _____ Fahrten <i>(Bitte denken Sie an alle Personen in Ihrem Haushalt; Hin- und Rückfahrt entsprechen 2 Fahrten)</i>	

Umfrage zum Mobilitätsangebot in Hennef

Die Anwohner des Wohngebietes "Hennef Im Siegbogen" hatten seit Juni 2019 die Möglichkeit, sehr **kostengünstig Pedelecs** bei der Stadt Hennef auszuleihen. Sie sollten testen, inwieweit sich die täglichen Wege mit diesem Angebot umweltfreundlicher erledigen lassen.

20. Ist Ihnen dieses Angebot bekannt? ☐ ja ☐ nein	21. Was halten Sie ganz allgemein von dieser Maßnahme? Bitte bewerten Sie die Maßnahme auf einer Schulnotenskala von 1 = „sehr gut“ bis 6 = „ungenügend“. ☐ 1 (sehr gut) ☐ 2 (gut) ☐ 3 (befriedigend) ☐ 4 (ausreichend) ☐ 5 (mangelhaft) ☐ 6 (ungenügend)
22. Wie häufig haben Personen in Ihrem Haushalt diese günstigen Pedelecs genutzt? ☐ regelmäßig ☐ ab und zu ☐ selten ☐ noch nie	23. Bitte begründen Sie kurz Ihre Bewertung der Maßnahme:
24. Wie viele PKW-Fahrten wurden, in einer durchschnittlichen Woche, in Ihrem Haushalt durch diese Maßnahme ersetzt? Fahrten (Bitte denken Sie an alle Personen in Ihrem Haushalt; Hin- und Rückfahrt entsprechen 2 Fahrten)	

Die neu erstellte **Übersichtskarte „Mobil-in-Hennef“** stellt alle Mobilitätsangebote vom ÖPNV bis zum CarSharing gebündelt dar und bietet damit einen guten Überblick über die zahlreichen Möglichkeiten in Hennef.

25. Ist Ihnen dieses Angebot bekannt? ☐ ja ☐ nein	26. Was halten Sie ganz allgemein von dieser Maßnahme? Bitte bewerten Sie die Maßnahme auf einer Schulnotenskala von 1 = „sehr gut“ bis 6 = „ungenügend“. ☐ 1 (sehr gut) ☐ 2 (gut) ☐ 3 (befriedigend) ☐ 4 (ausreichend) ☐ 5 (mangelhaft) ☐ 6 (ungenügend)
27. Werden durch diese Karte Radverkehrswege genutzt, die vorher in Ihrem Haushalt unbekannt waren? ☐ regelmäßig ☐ ab und zu ☐ selten ☐ noch nie	28. Bitte begründen Sie kurz Ihre Bewertung der Maßnahme:
29. Wie viele PKW-Fahrten werden, in einer durchschnittlichen Woche, in Ihrem Haushalt durch diese Maßnahme ersetzt? Fahrten (Bitte denken Sie an alle Personen in Ihrem Haushalt; Hin- und Rückfahrt entsprechen 2 Fahrten)	

Umfrage zum Mobilitätsangebot in Hennef

In den nachfolgenden Fragen geht es um die Wege aller Kinder, die in Ihrem Haushalt leben. Falls keine Kinder in Ihrem Haushalt leben, können Sie direkt zum Ende des Fragebogens (Frage 33) gehen.

30. Wie alt sind die Kinder, die in Ihrem Haushalt leben?

	Kind 1	Kind 2	Kind 3	Kind 4
Alter	_____ Jahre	_____ Jahre	_____ Jahre	_____ Jahre

31. Wird das Kind bei seinen regelmäßigen Wegen gebracht/abgeholt?

	☐ immer ☐ teilweise ☐ selten ☐ nie	☐ immer ☐ teilweise ☐ selten ☐ nie	☐ immer ☐ teilweise ☐ selten ☐ nie	☐ immer ☐ teilweise ☐ selten ☐ nie
--	---	---	---	---

32. Welche Verkehrsmittel nutzt das jeweilige Kind für seine regelmäßigen Wege?

Bitte denken Sie auch an Fahrzeuge, mit denen Kinder gebracht/abgeholt werden.

Bitte nennen Sie uns für jedes Kind das bzw. die entsprechende(n) Verkehrsmittel.	Kind 1	Kind 2	Kind 3	Kind 4
a) Kind geht immer zu Fuß	☐	☐	☐	☐
b) Pkw	☐	☐	☐	☐
c) Bus	☐	☐	☐	☐
d) Bahn/S-Bahn	☐	☐	☐	☐
e) Fahrrad	☐	☐	☐	☐
f) E-Bike /Pedelec	☐	☐	☐	☐
g) Kickboard bzw. Tretroller	☐	☐	☐	☐
h) Motorroller/Mofa	☐	☐	☐	☐
i) Motorrad	☐	☐	☐	☐
j) Sonstiges: _____	☐	☐	☐	☐

Umfrage zum Mobilitätsangebot in Hennef

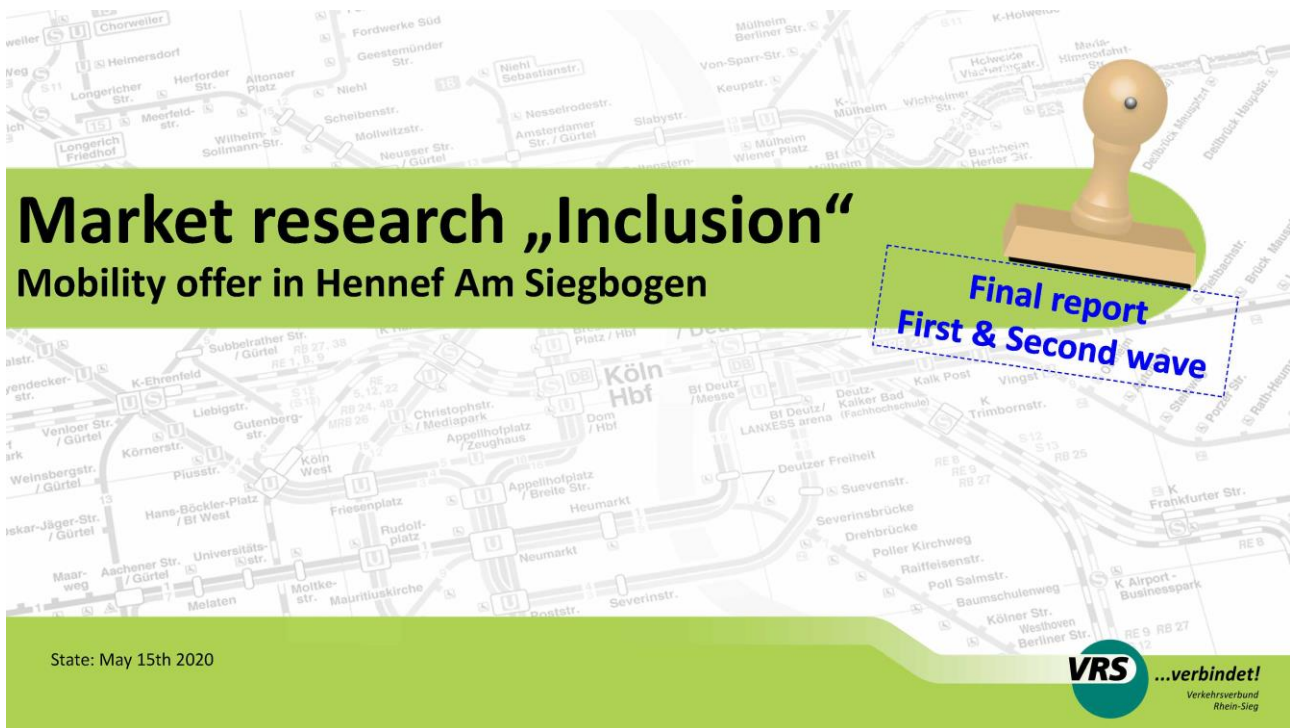
Bitte beantworten Sie folgende Frage, falls ein Kind in Ihrem Haushalt gebracht/abgeholt wird.

**33. Zu welchen Zielen müssen die Kinder gebracht/abgeholt werden.
... Und welches Verkehrsmittel wird zum Bringen/Abholen genutzt?**

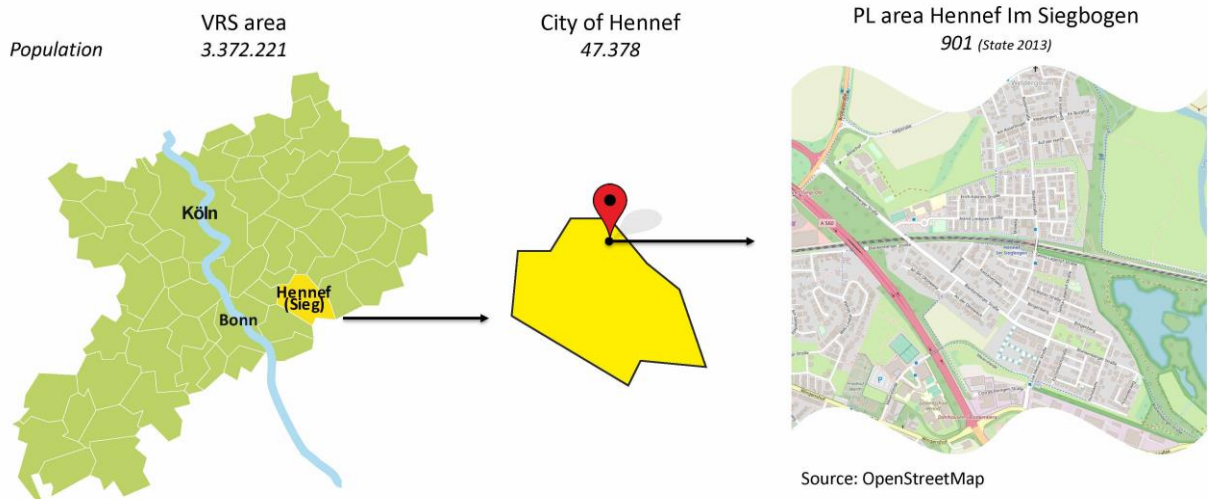
Ziel	Verkehrsmittel	Hat sich die Wahl des Verkehrsmittels <u>im letzten halben Jahr</u> verändert?	Warum ist das Ziel für das Kind nur in Begleitung zu erreichen?
☐ Grundschule	☐ zu Fuß ☐ PKW ☐ Motorrad ☐ Bus ☐ Fahrrad ☐ sonstiges ☐ Bahn ☐ Kickboard	☐ ja, wegen der Maßnahmen ☐ ja, aus anderen Gründen ☐ nein	<i>Stichworte sind ausreichend</i> _____
☐ weiterführende Schule	☐ zu Fuß ☐ PKW ☐ Motorrad ☐ Bus ☐ Fahrrad ☐ sonstiges ☐ Bahn ☐ Kickboard	☐ ja, wegen der Maßnahmen ☐ ja, aus anderen Gründen ☐ nein	_____
☐ Sportverein	☐ zu Fuß ☐ PKW ☐ Motorrad ☐ Bus ☐ Fahrrad ☐ sonstiges ☐ Bahn ☐ Kickboard	☐ ja, wegen der Maßnahmen ☐ ja, aus anderen Gründen ☐ nein	_____
☐ Freunde	☐ zu Fuß ☐ PKW ☐ Motorrad ☐ Bus ☐ Fahrrad ☐ sonstiges ☐ Bahn ☐ Kickboard	☐ ja, wegen der Maßnahmen ☐ ja, aus anderen Gründen ☐ nein	_____
☐ Oma/Opa	☐ zu Fuß ☐ PKW ☐ Motorrad ☐ Bus ☐ Fahrrad ☐ sonstiges ☐ Bahn ☐ Kickboard	☐ ja, wegen der Maßnahmen ☐ ja, aus anderen Gründen ☐ nein	_____
☐ Kino	☐ zu Fuß ☐ PKW ☐ Motorrad ☐ Bus ☐ Fahrrad ☐ sonstiges ☐ Bahn ☐ Kickboard	☐ ja, wegen der Maßnahmen ☐ ja, aus anderen Gründen ☐ nein	_____
☐ Schwimmbad	☐ zu Fuß ☐ PKW ☐ Motorrad ☐ Bus ☐ Fahrrad ☐ sonstiges ☐ Bahn ☐ Kickboard	☐ ja, wegen der Maßnahmen ☐ ja, aus anderen Gründen ☐ nein	_____
☐ Einkaufsmöglichkeiten	☐ zu Fuß ☐ PKW ☐ Motorrad ☐ Bus ☐ Fahrrad ☐ sonstiges ☐ Bahn ☐ Kickboard	☐ ja, wegen der Maßnahmen ☐ ja, aus anderen Gründen ☐ nein	_____
☐ Sonstiges, z.B. Musikunterricht: 	☐ zu Fuß ☐ PKW ☐ Motorrad ☐ Bus ☐ Fahrrad ☐ sonstiges ☐ Bahn ☐ Kickboard	☐ ja, wegen der Maßnahmen ☐ ja, aus anderen Gründen ☐ nein	_____

34. Abschließend können Sie uns Ihre Meinung zum Mobilitätsangebot in Hennef mitteilen:

Annex III – After survey: Results



Hennef Siegbogen



Source (VRS and City of Hennef): IT.NRW, state: 31.12.2017 resp. 30.06.2018
Source (Hennef Im Siegbogen): City of Hennef, state: 05.09.2013

2

Hennef Im Siegbogen



The entire "Im Siegbogen" development area is about 18 hectares.

The local train station offers connections to Hennef and Cologne every 20 minutes.

The adjacent Park & Ride area with 75 parking spaces for cars also offers train drivers from outside the residential area the opportunity to use the area. Cyclists have 51 covered parking spaces and 38 lockable bicycle boxes at their disposal. The Boxes are each equipped with a charging station for e-bikes, the car park has two parking spaces with RWE charging stations for electric vehicles.

Source: Stadt Hennef, <http://dev-hennef.stadt-hennef.de>

Source: OpenStreetMap

3



Mobility measures

Measure:

More trips at busline 532

Doubling of the offer in the late afternoon hours from an hourly to a half-hourly frequency.

Measure:

Short-haul tariff at busline 532

Application of the short-haul tariff, thereby reducing costs.

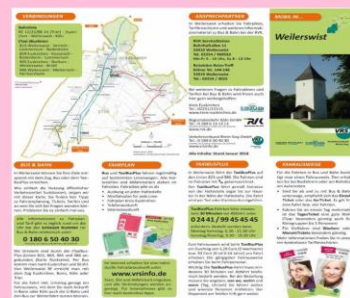
Measure:

E-Bike rental at low price.



Measure:

Mobility map „Mobil in Hennef“



4



Methodology

- Written household survey: all households were written to in Hennefer Im Siegbogen.
- The questionnaires were sent by post: The first wave in autumn 2018 (**before** implementation of the measures) and the second wave before Easter 2020 (**after** implementation of the measures)
- Each questionnaire in both waves was rewarded with an Amazon voucher of 10 Euros when completely filled in and returned.
- In addition to closed questions, the participants had the opportunity to state his/her opinion openly on many questions and to make suggestions for optimisation.
- The questionnaire was to be filled in by the person who has a general view of the household organisation and, if necessary, is mainly responsible for the regular routes of the children living in the household.

5



Who took part?

6



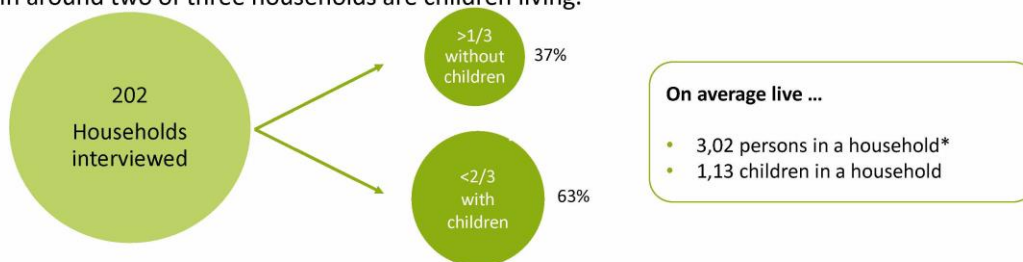
Who took part at the second wave market research?

- In total 646 questionnaires were sent in the second wave to the households.
- In comparison to the first wave (N=567) this means 79 additional questionnaires. The expansion of the addressed households results in the addition of further streets.
- With 202 returned questionnaires in the second wave, the response rate was 31%, which was 13% below the response rate of the first wave (44%).
- 27 of the 202 participating households (13%) moved to Hennef Im Siegbogen in 2019.
- The lower response rate could at least partly be due to the special circumstances of the Covid-19 pandemic and its impacts.

7

Representative interviews

- The survey was addressed to the person in the household who has a general view of the household organisation and, if necessary, is mainly responsible for the regular ways of children living in the household.
- The interviewed person answered on behalf of all persons in the household.
- In around two of three households are children living.



* Rhine-Sieg district = 2.2 persons in a household, Source: Mobility in Germany 2017 (MiD 2017)

8

Deskriptive statistics



Comparing to the first survey there were no big structural differences in the composition of the sample. Generally speaking more of the respondents of the second survey were female, they were a little older (average age 44 years instead of 43 years) and were more affined to cars (99% of the households own a car instead of 96% in the first survey).

n = 202

9

Regular routes

Used means of transport and distances

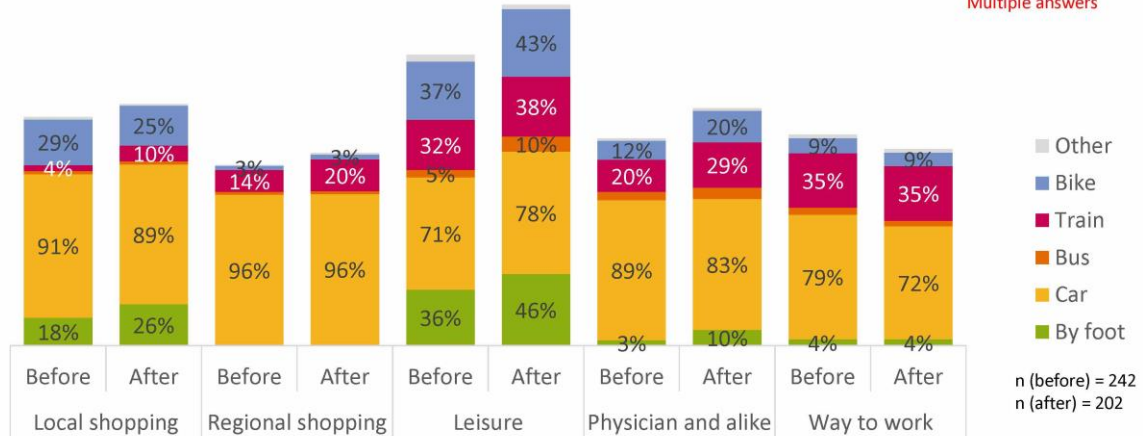


The following evaluations refer to the person who has a general view of the household organisation and, if necessary, mainly looks after the regular routes of the children living in the household.

Note: In the following graphs is the first survey called "Before", the second survey "After" to underline the link to the measures.

10

Regular routes of the respondents



With the exception of leisure travel, respondents cited the passenger car as the main means of transport less frequently. Buses and trains are mentioned more frequently, with the exception of commuting to work.

Question 8) What routes do you take yourself regularly? Which means of transport do you use mainly?

11

Change in means of transport



Reason for change



Just in a few cases is named a concrete reason for the change of means of transport.

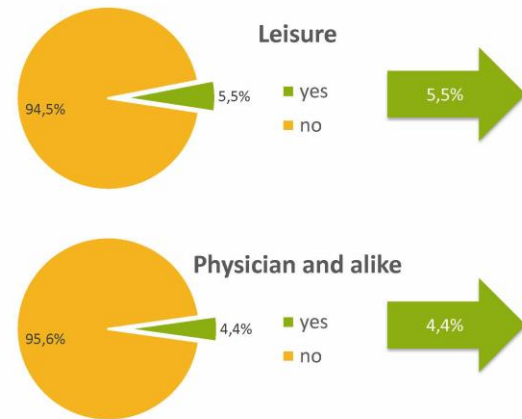
n = 202

Number of mentions
missing = not stated

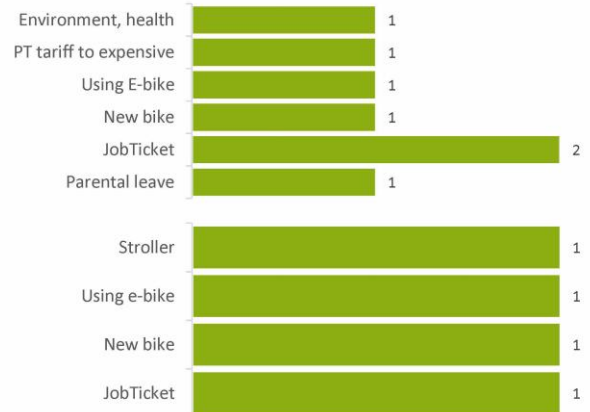
Has your choice of transport mode changed in this route over the last six months?
If yes, why?

12

Change in means of transport



Reason for change



Number of mentions
missing = not stated

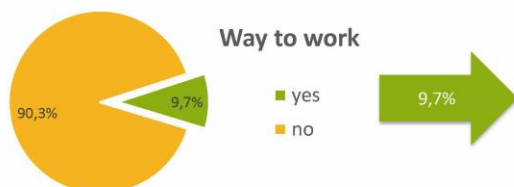
n = 202

Has your choice of transport mode changed in this route over the last six months?
If yes, why?

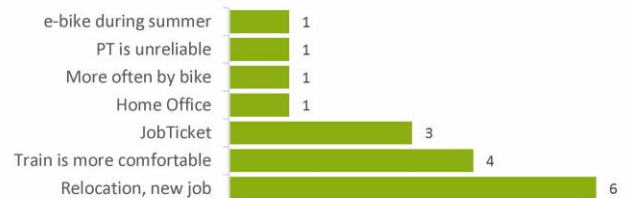
13



Change in means of transport



Reason for change



Number of mentions
missing = not stated

Nearly one in ten said that the choice of transport has changed on the way to work in the last six months. It should be noted here that just under 14% of those surveyed have only been living in Hennef Siegbogen since 2019. This is also reflected in the individual responses. 6 persons stated that they had changed their means of transport due to a relocation or a new job.

n = 202

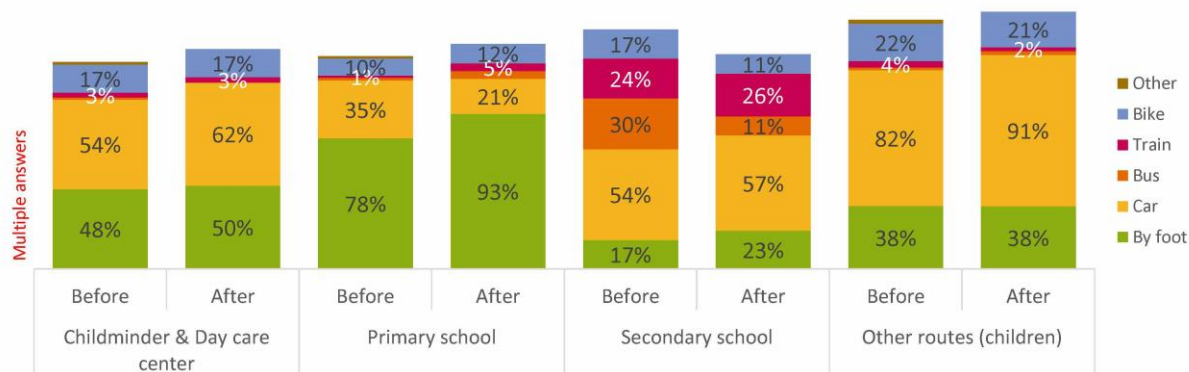
Has your choice of transport mode changed in this route over the last six months?
If yes, why?

14



Regular routes of Respondents

Bringing and/or picking up of persons

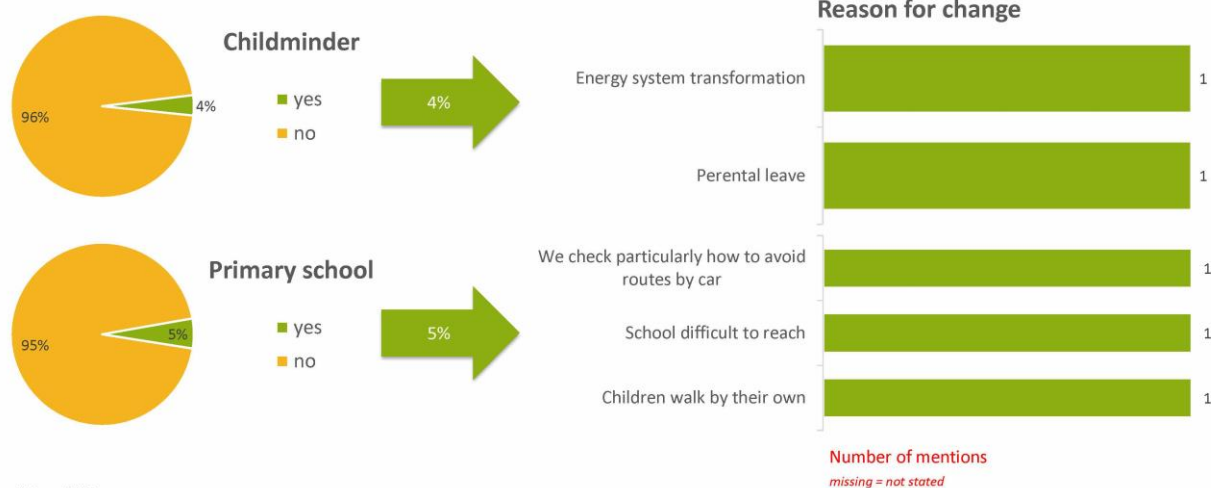


n = Respondents with children

Question 8) What routes do you take yourself regularly? Which means of transport do you use mainly?

15

Change in means of transport: Bringing and/or picking up children

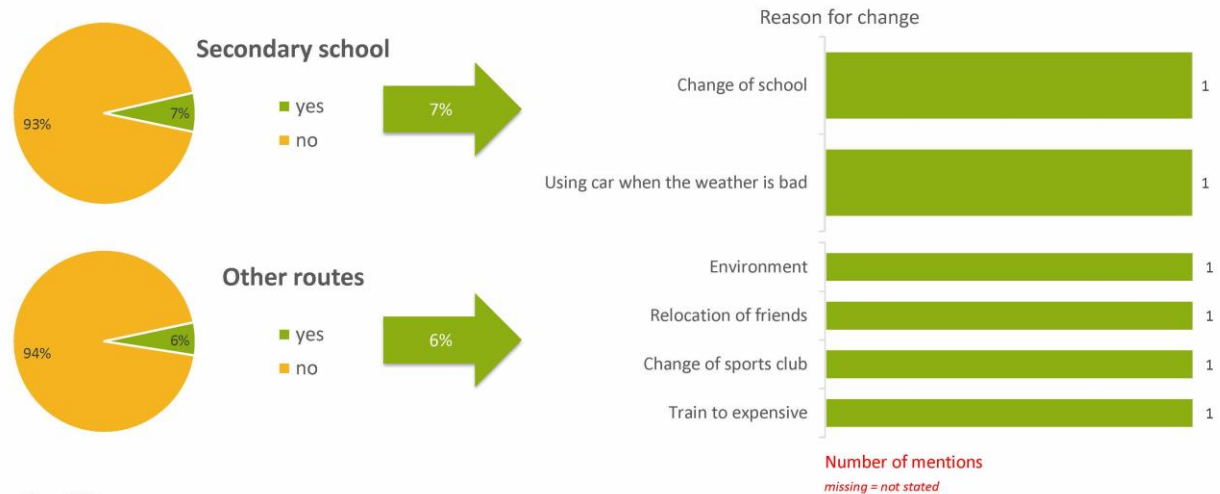


n = 56 and 38

Question 8) What routes do you take yourself regularly? Which means of transport do you use mainly?

16

Change in means of transport: Bringing and/or picking up children



n = 29 and 69

Question 8) What routes do you take yourself regularly? Which means of transport do you use mainly?

17

Measures

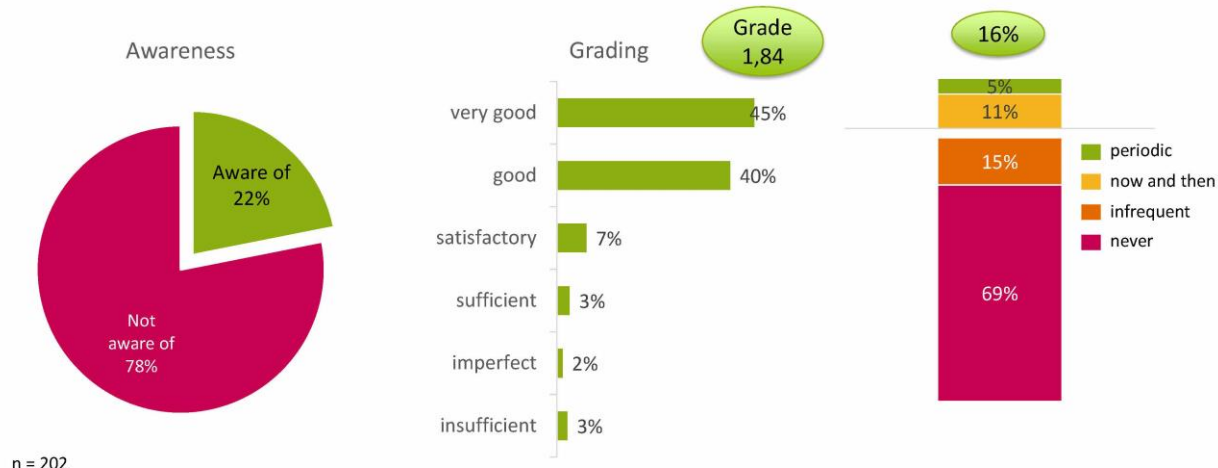


The following evaluations refer to the person who has a general view of the household organisation and, if necessary, mainly looks after the regular routes of the children living in the household.

18

Implementation of measures

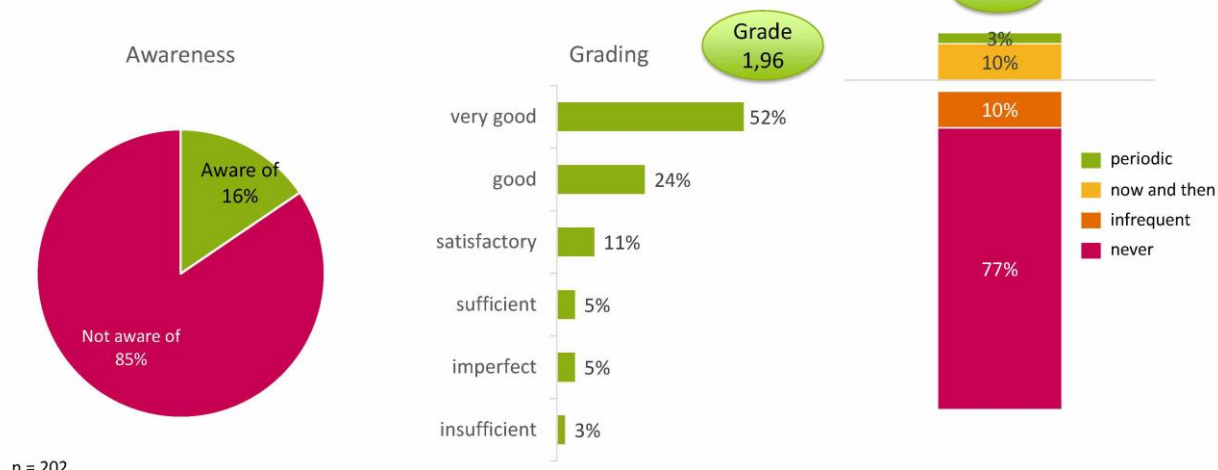
More trips at bus line 532



Question 10) Do you know this measure?
 Question 11) What do you think in general of this measure?
 Question 12) How often do you or persons living in your household use these additional bus trips?
 19

Implementation of measures

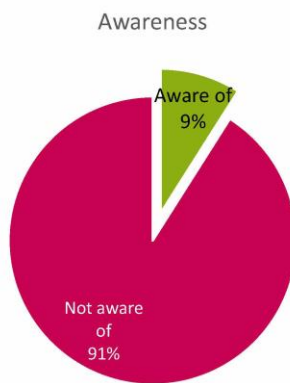
Short-haul tariff on bus line 532



Question 15) Do you know this measure?
 Question 16) What do you think in general of this measure?
 Question 17) How often do you or persons living in your household use this short-haul tariff?
 20

Implementation of measures

E-bike rental

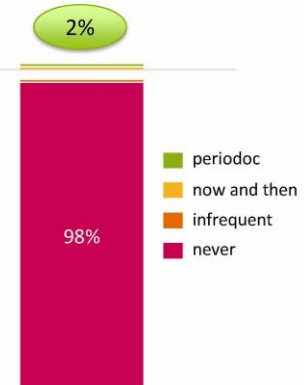


n = 202

Question 20) Do you know this measure?
 Question 21) What do you think in general of this measure?
 Question 22) How often do you or persons living in your household use this e-bike rental?
 21

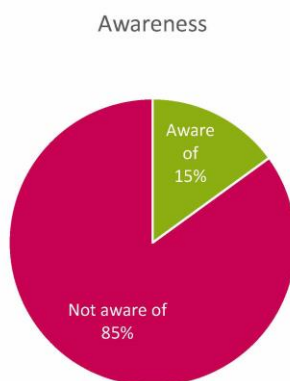


Frequency of use



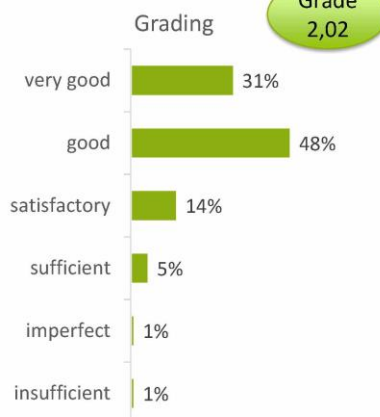
Implementation of measures

Mobility in Hennef map

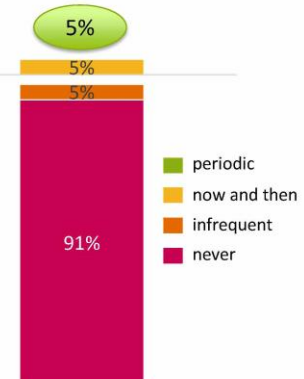


n = 202

Question 25) Do you know this measure?
 Question 26) What do you think in general of this measure?
 Question 27) How often do you or persons living in your household use this map?
 22



Frequency of use



Use of means of transport

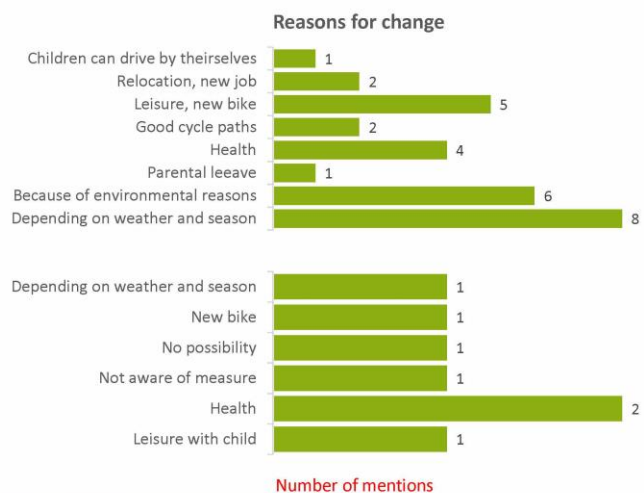
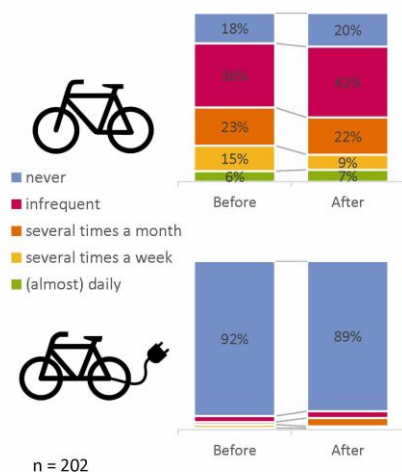


The following evaluations refer to the person who has a general view of the household organisation and, if necessary, mainly looks after the regular routes of the children living in the household.

Note: In the following graphs is the first survey called "Before", the second survey "After" to underline the link to the measures..

23

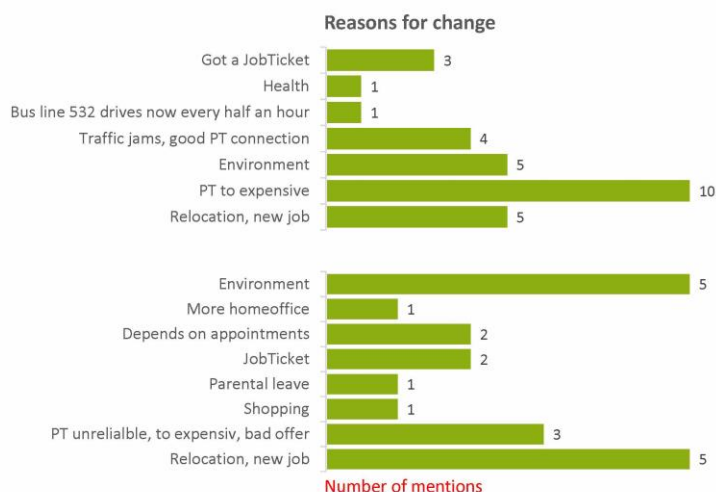
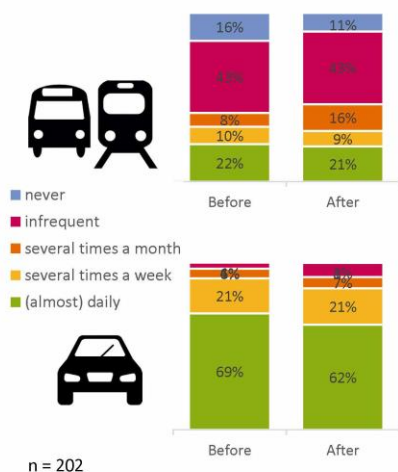
Use of means of transport of respondents



Question 9) How often do you use normally the following means of transport? Does the frequency of use changed during the last six months? If yes, why?

24

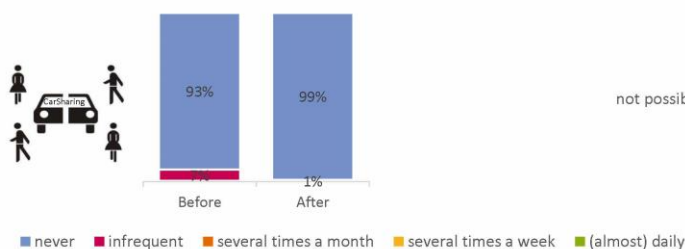
Use of means of transport of respondents



Question 9) How often do you use normally the following means of transport? Does the frequency of use changed during the last six months? If yes, why?

25

Use of means of transport of respondents



Question 9) How often do you use normally the following means of transport? Does the frequency of use changed during the last six months? If yes, why?

26

Evaluation of everyday mobility

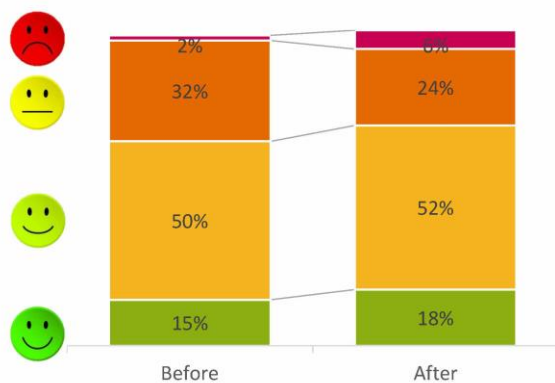


The following evaluations refer to the person who has a general view of the household organisation and, if necessary, mainly looks after the regular routes of the children living in the household.

27

Evaluation of everyday mobility by respondents

... all means of transport which can be used



n = 202

Question 7) When you think of all the routes you regularly take in Hennef: How satisfied are you in general with the possibility to reach your goals in Hennef? Please think of all means of transport that you can use for this purpose.

28

Bringing/picking up children

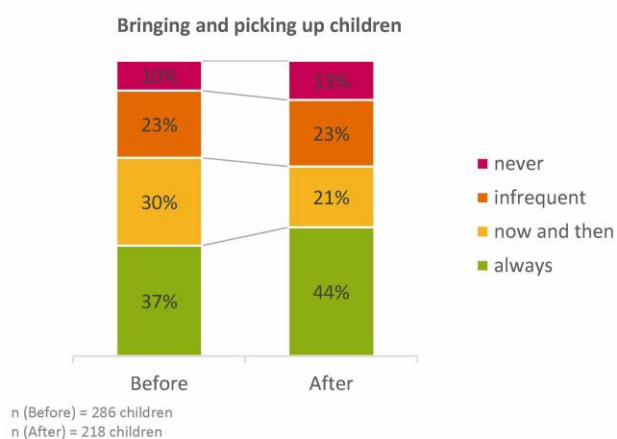


The following evaluations refer to the households where children live. (around 63% of all questionnaires sent back)

29

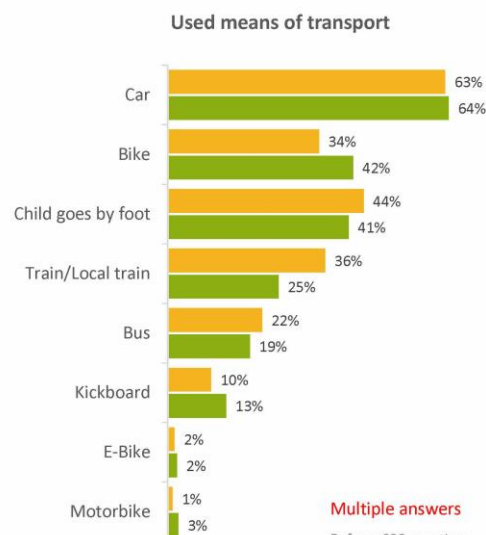
Periodic routes of children

Data per child in the household.



Question 31) Is the child brought/picked up during his or her regular routes? (Data per child in the household)

30

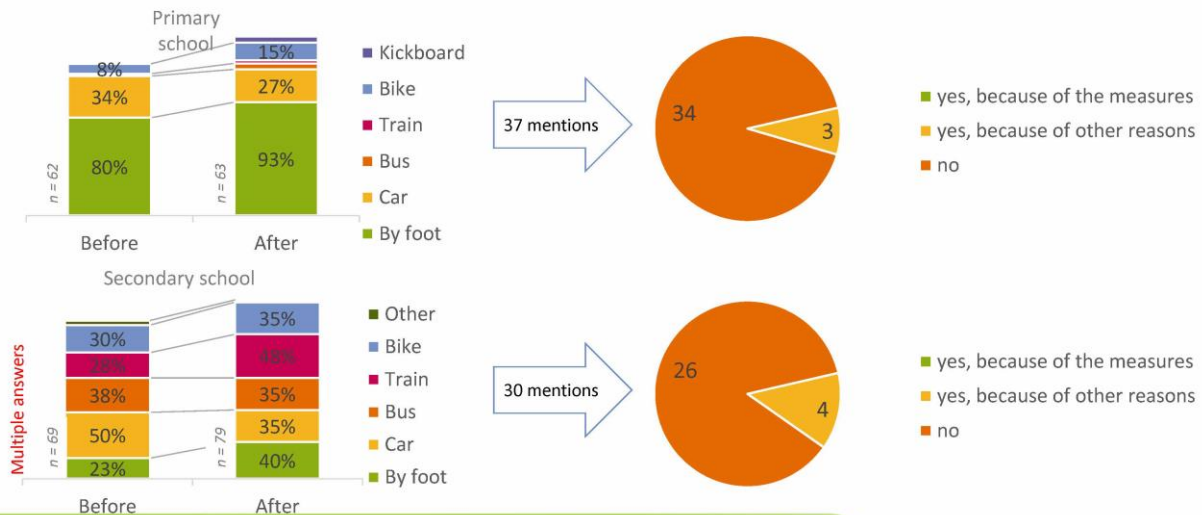


Multiple answers

Before: 622 mentions
After: 466 mentions

Question 32) Which means of transport does the respective child use for his or her regular routes?

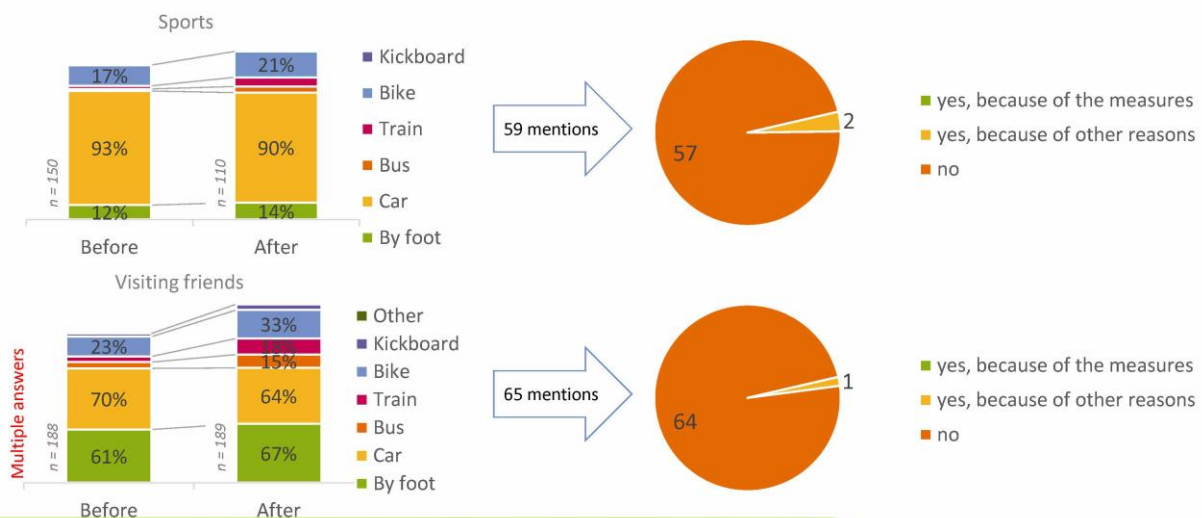
Used means of transport by bringing/picking up children



Questions 33) To what destinations the children must be brought/picked up?
 ... And which means of transport is used for bringing/picking up the children? (Data per household)
 Does the means of transport changed during the last six months?

31

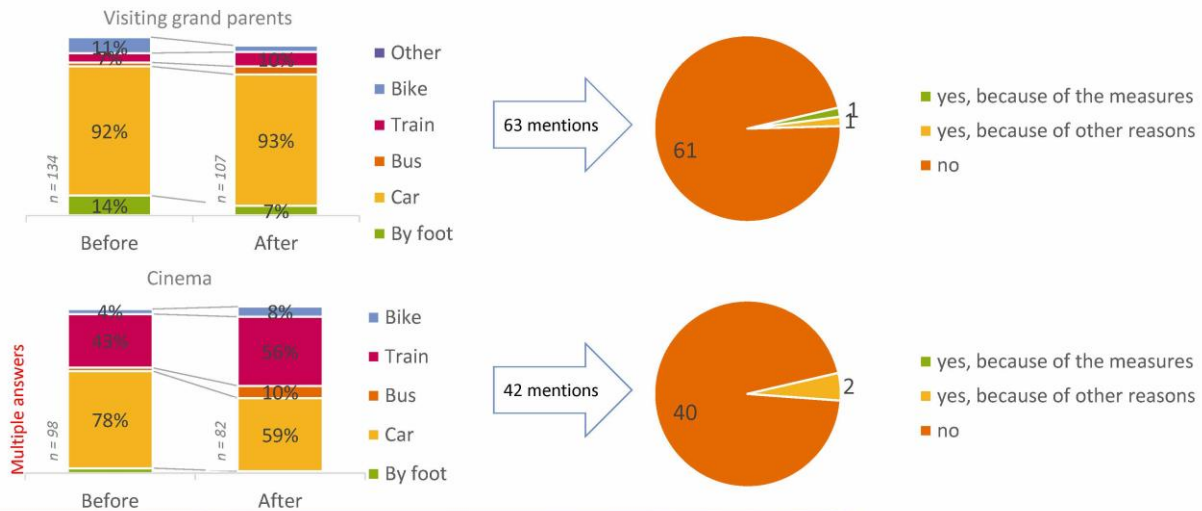
Used means of transport by bringing/picking up children



Questions 33) To what destinations the children must be brought/picked up?
 ... And which means of transport is used for bringing/picking up the children? (Data per household)
 Does the means of transport changed during the last six months?

32

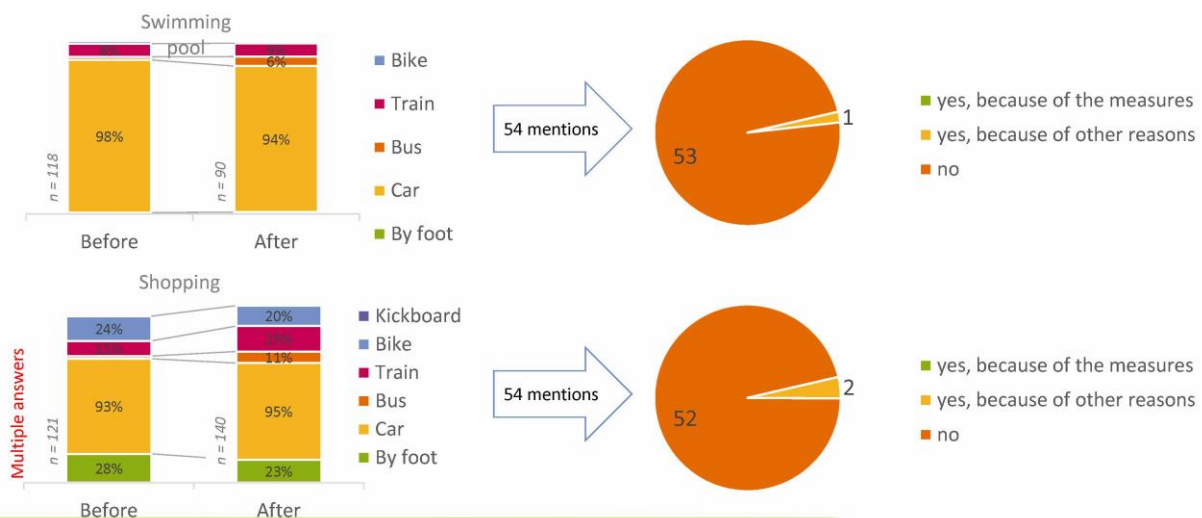
Used means of transport by bringing/picking up children



Questions 33) To what destinations the children must be brought/picked up?
... And which means of transport is used for bringing/picking up the children? (Data per household)
Does the means of transport changed during the last six months?

33

Used means of transport by bringing/picking up children



Questions 33) To what destinations the children must be brought/picked up?
... And which means of transport is used for bringing/picking up the children? (Data per household)
Does the means of transport changed during the last six months?

34

Opinion on the mobility offer in Hennef



The following mentions refer to data for the entire household. The person who responded is the person who has a general overview of the household organization and, if necessary, is mainly responsible for the regular routes of the children living in the household.

35



Opinion on the mobility offer in Hennef

Multiple answers

Frank comments

- In a concluding commentary field there was the possibility to openly express one's opinion regarding the mobility offer in Hennef.
- 126 of 202 people took advantage of this opportunity.
- The range of the comments mentioned is very diverse and ranges from great praise, such as "We are very satisfied, the connection possibilities are really better! Thank you very much" to criticism such as "Apart from Mc Donalds and Baker, there's nothing around here."
- The majority of those questioned expressed themselves very constructively and positively regarding the mobility offer in Hennef.
- A list of all 126 comments can be viewed via an XLS list.

Question 34) Finally you can write us your opinion on the mobility offer in Hennef!

36



Herausgeber:

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Alexander Schwan
Department of market research

Köln, May/July 2020

Annex IV – After survey: open answers

Meinung zum Mobilitätsangebot in Hennef

	Häufigkeit
ohne Angabe	73
1 Euro Ticket für die Anwohner --> sind da Anregungen vorhanden? Regionalbahn Haltepunkte im Siegbogen erhöhen.	1
Abgesehen von Mc Donalds und Bäcker ist hier nichts in der Nähe.	1
Als Siegbogenbewohner bin ich generell zufrieden. Super wäre eine vergünstigte Bahnfahrt Siegbogen/Hennef Stadt, da wesentlich schneller als Bus.	1
Am besten finde ich den "Ausbau" auf Halbstundentakt der Buslinie 532 zu gewissen Uhrzeiten sowie die Preissenkung im Kurzstreckentarif des VRS.	1
Anbindung Siegbogen - Innenstadt nicht attraktiv (weder unterhalb der Autobahnbrücke noch hinter dem Breuer). U.a. Beleuchtung, Pflasterung, Abgrenzung zur Blankenberger Str. (der Weg an der Sieg ist schön, aber weiter und nicht immer für den Alltag geeignet).	1
Angebot ist gut. Allerdings Preis/Einzelfahrt nach Hennef wäre 1€ attraktiver.	1
Angebot ist vielseitig, Anreiz Bahn zu nutzen muss erhöht werden, um Stadt attraktiv zu halten (Kosten), Kinder brauchen sichere Radwege, um Radfahrer zu bleiben.	1
Ausbau der Blankenberger Straße ist miserabel! Schlechter Fußweg, parkende Autos, Unterführung DB am Lidl-Kreisel nicht im Bau!	1
Ausbau der S19 . Keine S-Bahn in Hennef enden lassen, sondern erst in Blankenbrüg.	1
Ausbau Verbindungen Richtung Köln/Eitorf durch s-Bahnhof ist ein sehr großer Gewinn. Auto- und Fahrradfahren in Hennef durch ständige Überlastung der Straßen und zu wenig Raum für Fahrräder eine Katastrophe!	1
Bahnfahrten müssen billiger werden, insbesondere für die Strecke Hennef Bf. - Im Siegbogen (1 Station).	1
Bessere Information an zentralen Orten (Bahnhof, Apotheken, Banken) erforderlich.	1
Bisher nicht bekannt. Keine Informationen!	1
Bitte die Unterführung Hennef-Ost unterhalb der Bahn bauen.	1
Bitte mehr Infos dazu, ich wusste von nichts! Postalisch oder E-Mail.	1
Bitte Preise viel attraktiver gestalten. Insbesondere S-Bahn!!! Viel zu teuer! Kinder fahren so gerne Bahn.	1
Bitte um Information	1
Bus und Bahn sind ausreichend! In den Abendstunden (Sport, Kino etc.) für jüngere Kinder aber nicht geeignet. Fahrradwege fehlen aber massiv! Besonders für Kinder, die noch unsicher im Straßenverkehr sind. Frankfurter Str. ist eine Katastrophe!	1
Buslinie 532 fährt am Wochenende zu wenig insbesondere vormittags, beispielsweise samstags nur fVerbindung 8:41 Uhr dann erst um 10:41 Uhr. Zu große Zeitspanne. Ansonsten sehr gute Ideen, Umsetzungen.	1
Da ich mich noch nicht damit beschäftigt habe mit dem Thema, kann ich nichts dazu sagen.	1
Da ich nur mit dem Pkw unterwegs bin, habe ich mich noch nicht so ausführlich mit dem Thema "Mobil in Hennef" beschäftigt.	1
Da wir innerhalb von 5 km alle in Hennef Stadt erreichen, ist das Mobilitätsangebot innerhalb Hennefs nur bedingt nützlich für uns, der ÖPNV/VRS ist viel zu teuer für Siegburg/Bonn/Köln.	1
Danke für die positive Veränderung.	1
Das Angebot (vor allem häufiger fahrende S-Bahnen) würden wir sehr gerne annehmen --> nach Hennef, Siegburg, Troisdorf. Bei regelmäßiger Nutzung für eine Familie (nur für die Freizeit) viel zu teuer. Z.B. 1 x vom Siegbogen nach Hennef (z.B. essen gehen) 12,60 € für eine 3-köpfige Familie. Hier liegen wir fast bei dem Taxipreis (eine Fahrt!).	1
Das Angebot hier in Hennef ist gut, aber noch ausbaufähig!	1
Das Angebot ist gut, könnte aber sicher noch besser sein- Außer der Buslinie 510 existiert keine Linie, die das östliche Hennef direkt z.B. mit Siegburg verbindet. Gerade auf Wegen zum Einkauf vermeidet man gerne lästiges Umsteigen.	1

Das Angebot ist gut. Uns wären viele unnötige Fahrten mit dem Pkw erspart geblieben, wenn wir für unsere Kinder einen Kita-Platz in der Umgebung und nicht am anderen Stadtende bekommen hätten.	1
Das Mobilitätsangebot generell ist sehr gut. Um die Bahn nutzen zu können, um pünktlich auf der Arbeit zu sein, ist die Taktung zu groß. Zu keiner Zeit passt es mit meinen Arbeitszeiten.	1
Der ÖPNV ist zu teuer für normale Bürger; das SchülerTicket ist preislich attraktiv; die Fahrradwegesituation ist unbefriedigend.	1
Der S12-Vertrag wurde im Siegbogen sehr verspätet und auch bisher eher schlecht am Wochenende umgesetzt. Die Einhaltung des Vertrages mit zuverlässigen Bahnen ist geboten.	1
Die Anbindung Im Siegbogen ist klasse. Leider sind die Preise für die kurze Strecke (Hennef/Siegburg) eine Unverschämtheit. Der Bau der Unterführung in der Warth würde die Verkehrssituation entlasten. Einkaufen und Abfahren.	1
Die Busse aus dem Siegbogen nach Hennef fahren zu selten. Mehr Radwege sind erforderlich.	1
Die Maßnahmen waren uns bis jetzt leider nicht bekannt. Sehr positiv, aber es sollte nach außen besser kommuniziert werden.	1
Die Mobilität in Hennef und vor allem in Verbindung mit dem Siegbogen ist sehr gut.	1
Die Mobilitätsangebote haben sich verbessert und mehr Möglichkeiten gegeben.	1
Die neuen Maßnahmen sollten besser kommuniziert werden. Eine Reduktion der Bahnpreise Hennef Siegbogen --> Hennef Bf ist wünschenswert.	1
Die Neuerungen im Mobilitätsangebot sind wohl nicht ausreichend publiziert worden.	1
Die Preise der Bahnen sind viel zu teuer. Für eine Station von Im Siegbogen - Hennef Bf. zahle ich über 2€.	1
Die Preise müssen sinken, mindestens halbieren. ÖPNV ist zu teuer und dadurch unattraktiv.	1
Die Situation für Fahrradfahrer war noch nie gut und ist durch die Änderung der Nutzung der Frankfurter Straße für Kinder noch schlechter geworden.	1
Die Stadt bemüht sich um ein gesteigertes Mobilitäts-Angebot. Unsere Familie konnte aus verschiedenen Gründen noch nicht auf andere Verkehrsmittel umsteigen (Kostenfrage auch oft im Vordergrund). Wir ziehen bald um, dann wird sich unsere Lage ändern.	1
Durch die fehlende Unterführung (Kreisel Bröltalstr.) statuiert sich immer der Verkehr. Im Ergebnis fahren wir u.a. nach Lohmar zum Einkaufen. so verliert man Steuereinnahmen.	1
Durch die schnell wachsende Zahl der Einwohner in Hennef-Siegbogen ist das Angebot der Buslinie 532 sowohl in den Vor- als auch in den Nachmittagstunden zu verbessern. Dies gilt auch für die S-Bahn-Linien S12/S19.	1
E-Bike müssen besser gefördert werden.	1
E-Roller??	1
Eine Station mit der Bahn ist super teuer, zudem Fahrstuhl oft defekt, Handwerker weigern sich zu helfen, Tritt zum S-Bahn-Steig viel zu hoch.	1
Erfreulich, wo es zum Bedarf passt.	1
Es fehlt an schnellen, z.B. Expressverbindungen per Bus nach z.B. Uckerath, ohne die vielen Stopps. Die Bahnen sollten öfters bis zum Siegbogen fahren oder in Hennef sollte direkt ein Bus zur Weiterfahrt bereit stehen.	1
Es fehlt direkte Verbindung Hennef im Siegbogen zu Allner Schloßstr. oder in Richtung Bröl und in Richtung Hennef über Warth.	1
Es fehlt ein Bike-Sharing am Bahnhof.	1
Es wird langsam besser, leider das Parkplatzangebot immer kleiner (nein ich kann nicht im Rathaus parken und bei DM einen Familien-Stoßeinkauf tätigen). Bitte weiter aktiv planen!	1
Fahrrad fahren mit Kindern ist in Hennef wirklich nicht einfach! Schlechte Radwege / keine Radwege / zu nahe an der Fahrbahn / plötzlich endende Radwege.... es macht keinen Spaß.	1
Für uns ist das Mobilitätsangebot ausreichend.	1

Ganz Wichtig: Der Rad- und Fußweg auf der Blankenbergerstr. zwischen Astrid Lindgren Str. und Bröltalstr. müsste dringend und zeitnah erneuert und gesichert werden, auch vor dem geplanten Ausbau der Blankenberger Str.	1
Grundsätzlich finde ich die Mobilitätsangebote der Stadt Hennef gut. Ich fahre lieber mit dem Pkw, da ich viele (auch lange) Strecken mit Erledigungen/Arbeit besser verbinden kann und dafür weniger Zeit benötige.	1
Grundsätzlich gut, aber die Situation an den Bahnübergängen ist sehr nervig. Die Stadt kommt mehrmals in der Stunde zum Erliegen und vom Siegbogen aus hat man keine Chance, es zu umgehen, wenn man nach Hennef rein will.	1
Grundsätzlich gut. Ein 10-minütiger Takt der S12/S19 bis Blankenberg wäre zu den Pendelzeiten in der Woche wünschenswert.	1
Grundsätzlich sind die Fahrwege mit Ausnahme an der Sieg schlecht ausgebaut und sind sehr unsicher für Kinder.	1
gut	1
Gut bis auf abends / nachts	1
Gut, es fehlen aber zum Teil sichere Fahrradwege, bspw. Frankfurter Straße / City	1
Gute Anbindung vom Siegbogen. Bahnpreise für Kurzstrecke z.B. nach Hennef oder Siegburg viel zu teuer. Würden die Bahn sonst gerne öfter nutzen.	1
Gutes Angebot, das ich künftig (wenn Kind im Kindergarten) sicherlich auch nutzen werde!	1
Häufigere S-Bahn-Fahrten ab/bis Im Siegbogen. Lauthausen den Sportplatz besser anbinden, die Rückfahrt über Bödingen ist zeitaufwendig und Fahrradwege bauen!	1
Hennef City ist für uns völlig unattraktiv, also kein Ziel. Schulbus fährt zu voll und unpünktlich, deshalb unattraktiv.	1
Hennef sollte fahrradfreundlicher werden, z.B. Bonner Str. (neue Regelung unmöglich und gefährlich!). Bus- und Bahnnetz ist für Hennef im Siegbogen toll!	1
Ich bin gespannt auf das Carsharing-Angebot.	1
Ich bin sehr zufrieden, vor allem das S-Bahn-Angebot ist toll!	1
Ich bin aus Köln zugezogen und bin dadurch ein völlig anderes ÖPNV-Angebot gewöhnt. Besonders die Anbindung an die 66 in Siegburg ist schlecht.	1
Ich fahre im wesentlichen Fahrrad. Die Radwege auf meiner Strecke (Siegbogen - Schulzentrum) sind z.T. in sehr schlechtem Zustand oder nicht vorhanden.	1
Ich fahre seit einem Jahr täglich mit der Bahn zur Arbeit in Bonn. Leider ist die Verbindung nur mit Glück gut. Grundsätzlich brauche ich jeden Tag mindestens 45 Minuten mehr als mit dem Pkw. Während Corona waren die Bahnen viel zu voll.	1
Ich finde das Angebot in Hennef sehr gut. Besonders die gute Bahnanbindung nach Köln und Bonn. Die Bahnen fahren sehr häufig.	1
Ich finde es gut, dass Hennef etwas tut und das Angebot erweitert. Schön wäre mehr Flexibilität und kostengünstigere Möglichkeiten den ÖPNV nutzen zu können.	1
Ich finde es klasse, wie Hennef sich entwickelt hat. Wäre schön, wenn die Fahrten zur Schule günstiger wären. Für Geschwisterkinder ein Bonus geben.	1
Ich möchte dringend darum bitten, dass alle schulpflichtigen Kinder eine Fahrkarte erhalten, um die Mobilität und Selbstständigkeit der Kinder zu fördern (unabhängig von der Entfernung der weiterführenden Schule)! Das ist sooo wichtig!	1
Ich wünsche mir eine Verbesserung der Rad-Infrastruktur und eine Entzerrung der Pkw-Stau-Stellen (Autobahnende an der Meiersheide, Autobahn-Abfahrt Hennef-Ost und Bahnübergang am Kreisverkehr)!	1
Ich würde sehr viel öfter den ÖPNV nutzen, wenn die Bahnhaltestelle "Im Siegbogen" öfter (gerade in den Abendstunden) angefahren werden würde. Leider halten die meisten Züge nur in Hennef selbst, sodass man Schwierigkeiten hat nach Hause zu kommen.	1
Innerhalb der Stadt Hennef ist für uns alles gut zu Fuß / mit dem Fahrrad zu erreichen. Wege z.B. nach Bonn sind schwierig und per Bahn zu teuer.	1
Insgesamt bin ich sehr zufrieden. Nutze eher Bahn als Bus. Wichtig im Siegbogen wären mir Zebrastreifen auf der Bodenstraße! Dort queren viele Kinder.	1
Insgesamt sehr gut!	1
Ist bestimmt ausreichend, jedoch nicht für mich von Nutzen. Busse sollten elektrisch fahren. Bus und Bahn sollte für jeden kostenlos sein.	1

Kostenloser ÖPNV Stadtgebiet, f. Vergünstigte Tarife für Kreis oder nach Köln/Bonn. Ausweitung der Linie S19, S13, S12, RE9 (Halt Siegbogen).	1
läuft	1
Mangelhaft! 50 Cent pro Station ist zu teuer. Eine Hin- und Zurückfahrt nach Hennef kostet 4€. Wer macht das täglich? Um die Menschen dazu zu bringen, Bus und Bahn zu nutzen, müssen die Preise mindestens halbiert werden.	1
Mehr Aufklärung der Bürger --> Werbung	1
Mehr S-Bahnen nach Blankenberg.	1
Mir fehlt immer noch eine direkte Buslinie von "Im Siegbogen" nach Uckerath.	1
Mit Angebot zufrieden; es fehlt nur die Unterführung der Bahn in Hennef-Ost.	1
Mit dem S-Bahnanschluss im Siegbogen und der vorhandenen Kita und Grundschule direkt im Wohngebiet sind wir sehr zufrieden. Dies war auch ein Grund für die Wohnortwahl.	1
Mobilitätsangebot in Hennef gut, jedoch wünschte ich mit einer kürzeren Taktung der Bahnen S12, S19, Re9 bzgl. meiner berufl. Tätigkeit (Schichtdienst).	1
Mobilitätsangebot scheint es zu genüge zu geben, leider wussten wir darüber nichts. Der Verkehr ist zu den Stoßzeiten trotzdem noch katastrophal voll.	1
Neuankömmlingen Informationen zukommen lassen.	1
ÖPNV häufiger fahren lassen, Kinder unter 18 Jahre kostenlos, Steuergelder dafür abrufen. Mehr Mitnahme-Möglichkeiten für Fahrräder in den Bussen vorhalten (bei Regen).	1
Optimal wäre es, wenn man innerhalb Hennefs zum Nulltarif die S-Bahn nutzen könnte, oder innerhalb der Gemeinde mit dem Bus 1 Station umsonst fahren könnte.	1
Preise z.B. mit der Bahn günstiger; auch für Kinder. Nutze die Bahn sehr selten, da Preise viel zu hoch.	1
SchülerTicket für Kreis Hennef günstiger, ab 11,5 J. zu teuer	1
Sehr gut. Gewünscht wäre eine engere / dichtere Taktung der S-Bahn ab Hennef Im Siegbogen Richtung Köln.	1
Seit der S-Bahn-Haltestelle Im Siegbogen würde ich das Angebot als gut bezeichnen. Schlecht finde ich, dass Kinder mit 14 Jahren schon Erwachsenentarif bezahlen müssen. Wenn ich in Rente gehe, werde ich ohne JobTicket ÖPNV gar nicht mehr nutzen, da zu teuer!	1
Sie seit Jahren fehlende DB-Unterführung am Kreisel und der fehlende Ausbau der Allner Brücke sind eine verkehrstechnische Katastrophe. Das muss umgesetzt werden!	1
Sollte dringend verbessert werden, insbesondere die Taktung der S-Bahn.	1
Soweit alles in Ordnung, halbstündige Taktung sollte beibehalten werden.	1
Taktung ok, Einzelfahrten Kurzstrecke zu teuer.	1
Tarifsystem zu kompliziert, zu teuer, Umstieg von Pkw auf Bahn nur, wenn Tickets billiger werden und Taktung alle 10 Minuten.	1
Tolles Angebot, zu wenig beworben! Keine Kenntnis bisher darüber. Für meinen Arbeitsweg leider keine Hilfe.	1
Trotz besserer Fahrzeiten bleibt die Bahn zu teuer, selbst im Vergleich zum Pkw.	1
Um ein Ziel vom Siegbogen bis Hennef Zentrum mit dem Fahrrad und einer 4-köpfigen Familie zu erreichen, bedeutet purer Stress! Radikaler Ausbau der Fahrradwege muss her! Autofreie Sonntage in der City!	1
Unser Sohn wird ab Sommer 2020 das ShH in Hennef besuchen. Wir wohnen im Siegbogen und müssen für das Ticket 35 Euro zahlen für 1 Station! Dies ist für uns absolut unbegreiflich und völlig absurd!	1
Verkehrsentlastung rund um den REWE / Autobahnausfahrt wäre wünschenswert.	1
Versuche öffentliche Verkehrsmittel häufiger zu nutzen. Verzicht auf den eigenen Pkw von Vorteil. Planbarkeit und Zeitmangel müssen eigenhändig besser organisiert sein.	1

VRS-Angebot weiter optimierungsfähig, insbesondere die Kosten, Autofahren nach wie vor günstiger und flexibler. Jedoch auch hier starke Optimierung erforderlich (Umgehung der Gleise durch Brücken oder Tunnel), Frankfurter Straße muss Fußgängerzone werden. Dann würden auch mehr Menschen ÖPNV nutzen. Bis zur Umsetzung Ampeln, Zebrastreifen installieren, Überqueren der Frankfurter Straße mit Kindern zu gefährlich.	1
Warum fährt der Bus am Samstag und Sonntag nur alle 2 Stunden (532)? Ist nicht seniorenfreundlich.	1
Weiter so!	1
Wenn man mit dem Rad von der Stadt kommt und dann Richtung Penny fahren möchte, kann man schlecht die Straße überqueren (falls der Siegradweg gesperrt ist).	1
Wie erfährt man von den Maßnahmen? Die Öffentlichkeitsarbeit ist unterirdisch.	1
Wir sind sehr zufrieden, die Anbindungsmöglichkeiten sind wirklich besser! Vielen Dank!	1
Wir sind zufrieden mit dem Mobilitätsangebot in Hennef, weil wir sehr viel mit dem Fahrrad fahren. Pkw nutzen wir nur dann, wenn die Strecke mit dem Fahrrad nicht zu erreichen ist.	1
Wir wohnen im Siegbogen, das 8-jährige Kind geht zur Hanftalschule, da ist uns nicht bekannt, dass es einen Transport gibt, 8 - 16 Uhr.	1
Wird besser, aufgrund des Alters machen die Kinder nicht alle Strecken alleine.	1
Zu wenige Fahrten des RE und der S-Bahn zum Siegbogen, zu kleine P&R-Plätze/Parkhaus, zu viele Staus! Fehlen der Bahnunterführung!	1
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