Ministry of Infrastructure and Water Management

The widespread car ownership in the Netherlands

KiM | Netherlands Institute for Transport Policy Analysis

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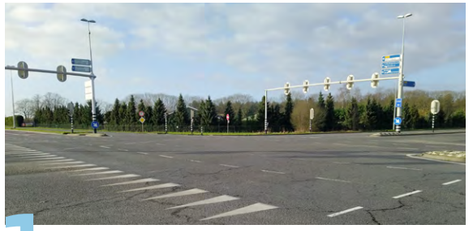
Many Dutch people own cars, and that number is expected to increase further in the coming years. Once someone owns a car, they are not quick to part with it. In this brochure we describe the current state of car ownership and examine some trends. We discuss the societal effects of car ownership and the factors that determine car ownership for households. These determinants are relevant for car ownership policy.



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1 Car ownership in the Netherlands

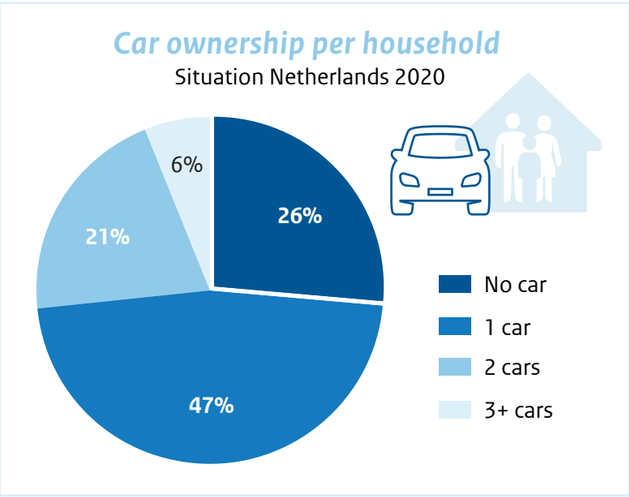
Current situation

About as many cars as households

As of early 2020, the Netherlands had 8.7 million cars owned by private individuals and companies, 17.4 million inhabitants and 8 million households. That equates to 500 cars per 1,000 inhabitants, or an average of just over 1 car per household.

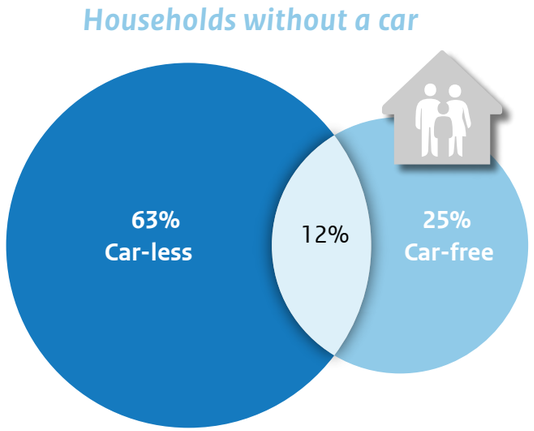
Not all households have cars

Cars are not evenly distributed among households, however. More than a quarter of all households do not have a car; approximately half of all households have one car; and 6% of households have three or more cars, which accounts for 18% of all cars. In other words: 450,000 households collectively account for some 1.5 million cars. Households with more than one car account for 56% of all cars in the Netherlands.



Car-less or car-free

The majority of households without cars can be classified as car-less: these are people who do not own cars due to health reasons, old age or financial problems. These people do not necessarily want to be car-less.



A quarter of households without cars – 6% of all households – deliberately do not own cars; they see no associated added value or are concerned about the climate or environment. This group is labelled as car-free.

Finally, there is an intermediate category, which cannot simply be described as car-free or car-less.

Countries Situation 2019	Cars per 1,000 inhab.	Cars per km²
Netherlands	499	**229**
Belgium	511	192
Luxembourg	681	164
Germany	574	133
Italy	**663**	131
United Kingdom	473	127
Czech Republic	554	75
Denmark	455	61
France	482	59
Sweden	473	11

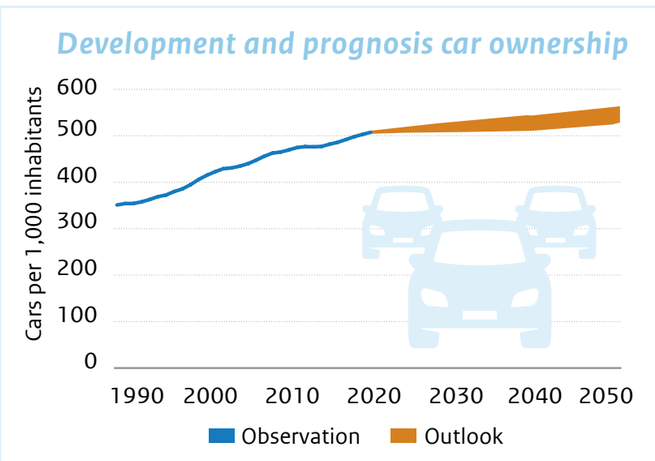
International comparison

The Netherlands has more cars per capita than France, Sweden and the UK, but slightly fewer than Belgium and Germany. However, when calculated per square kilometre of land area, no neighbouring countries can match the Netherlands: within the EU, only the island of Malta has a higher spatial car density.

Trends and outlook

Total car fleet growth, car ownership per household stabilises

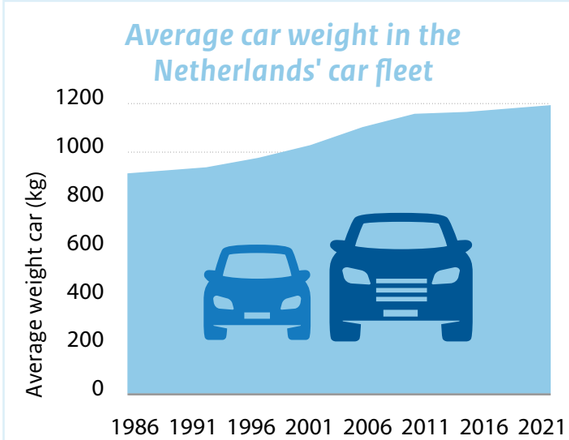
Since 1990, car ownership in the Netherlands has increased from 0.8 to almost 1.1 cars per household. This growth is expected to end, not so much because the number of cars is no longer increasing, but rather because households are getting smaller. There are increasing numbers of single people.
We expect the total car fleet and number of cars per inhabitant to continue growing, but at a slower rate than in recent decades. By 2040 there will be an estimated 10 million cars (523 cars per 1,000 inhabitants) in the Netherlands.



Cars getting heavier

Cars are getting larger, heavier and more powerful, and the Netherlands is following this international trend, also known as SUV-ication. In 2010 newly registered cars in the Netherlands weighed an average of 1,220 kg, compared to around 1,480 kg in 2021, or an increase of 24 kg per year. Consequently, the average weight of the entire car fleet also increased. We observed similar trends for dimensions and power.

Cars weigh more because certain models are getting larger, with people opting for more spacious cars, and also recently due to electric car battery packs. All this has consequences for safety, space requirements, energy consumption, the claim on production materials, and the possibility of circular car production.



> ”In 2010 new cars weighed an average of 1,220 kg, compared to around 1,480 kg in 2021, or an increase of 24 kg per year.”

Lowering financial barriers

The cost of cars decreases in relation to disposable income. Cars in the Netherlands are relatively affordable, according to international comparisons. However, car-related expenditure does not follow this trend: households are acquiring more cars, opting for extra options or add-ons for larger, more luxurious cars or driving more kilometres.

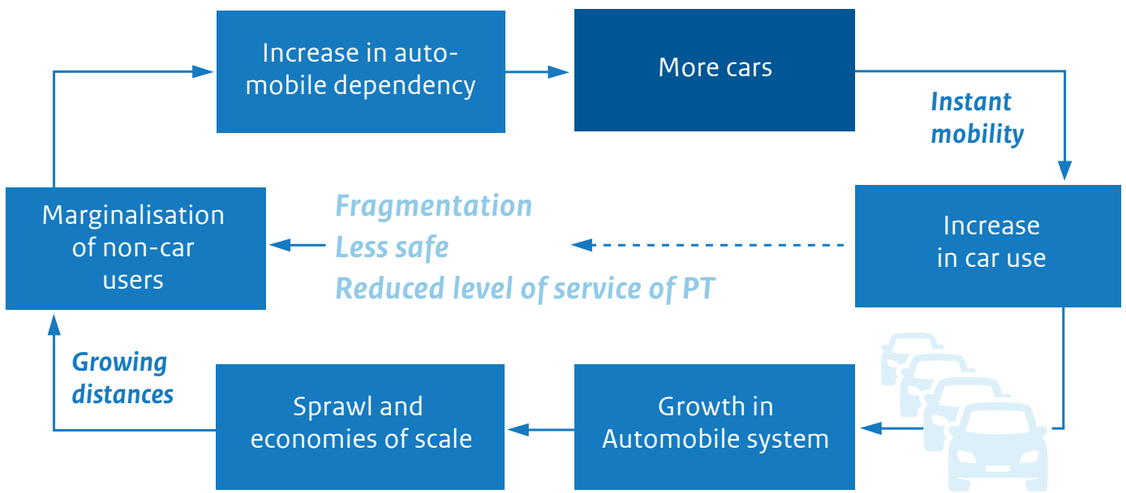
Worldwide growth

Of the 2.5 billion cars produced worldwide by 2020, an estimated 1.3 billion were in use in 2020. Over the past 20 years, 1.6 billion cars have rolled off production lines and we expect this number to continue rising, adding another 2.5 billion cars over the next 25 years, which is as many as were built during the past 130 years.

2 Societal effects of widespread car ownership

The vicious circle of car dependence

The vicious circle of car dependence describes the process whereby more car mobility leads to more car mobility, as we saw in past decades, particularly in Anglo-Saxon countries. We introduce this principle and then show that this circle applies to a limited extent to the Netherlands.



More car ownership ensures more car use

People buy cars to use them. However, once a car is parked before their door, they will also use it to drive to new destinations and to take extra trips, as well as for unforeseen purposes.

Automotive landscape

Increased car mobility is driving the growth of the car system, including more roads, tunnels, parking lots, garages and gas stations, thereby giving all motorists, and not just newcomers, more possibilities to use the system.

Sprawl and economies of scale result from the high speeds associated with motorised transport: megastores are replacing neighbourhood supermarkets, work locations become office parks, residential areas become more spacious, activities are spread out spatially, and the distances everyone must travel increase.

Other transport options under pressure

Long distances are disadvantageous for pedestrians and cyclists, as they are reliant on muscle power. Economic support for collective transport solutions, like buses and trains, is declining, because the average number of people per square kilometre is decreasing, and public transport (PT) passengers are switching to their own cars. The remaining PT users bear the costs of this trend.

New car infrastructure can also encroach on walking and cycling routes or take away space from these road users. Increased numbers of cars also pose greater road safety risks for pedestrians and cyclists.

Growing car dependency

Car ownership used to be a choice but is now a necessity. Cars are becoming the keys to social participation, whereby more people must buy cars, thus completing the circle.

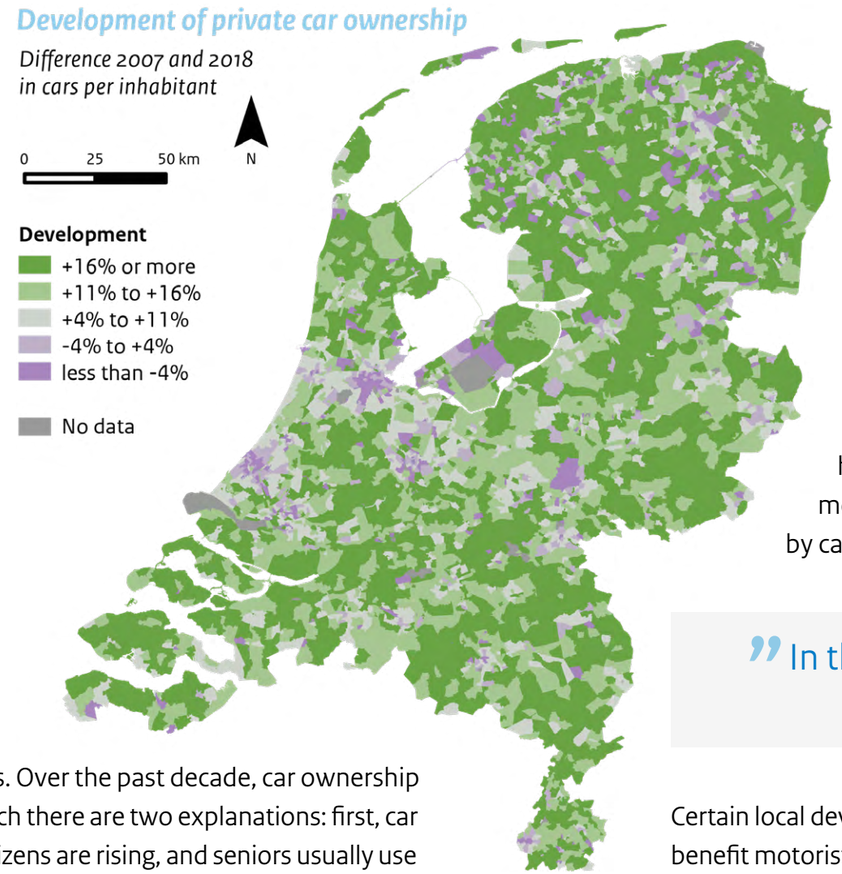
Car dependency in the Netherlands

The vicious circle of car dependency only applies to a certain extent to the Netherlands, thanks to the country's effective spatial policies and support for PT and bicycles. In large Dutch cities we even observed a reverse movement towards fewer cars. Conversely, rural areas are vulnerable to increasing car dependence.

Slight decoupling of car ownership and use

A strong relationship exists between car ownership and car use in the Netherlands. Over the past decade, car ownership has grown slightly faster than car use, for which there are two explanations: first, car ownership rates particularly among senior citizens are rising, and seniors usually use cars less intensively; and second, car ownership is primarily increasing among households that already have cars, and these extra cars are also often used less intensively.

The Netherlands has significant spatial differences in terms of population growth, car ownership and car use. In the country's large (G4) cities, the number of inhabitants has grown strongly in recent years, while car ownership has decreased and car use has remained stable. Hence, in the G4, car ownership and car use are decreasing per inhabitant. Meanwhile, in other urban areas the population is increasing, as is car ownership and car use (slightly). Outside of urban areas, car ownership and car use are increasing at a relatively equal rate, and this is where the majority of Dutch people (approx. 10 million) reside.



Use value of the car

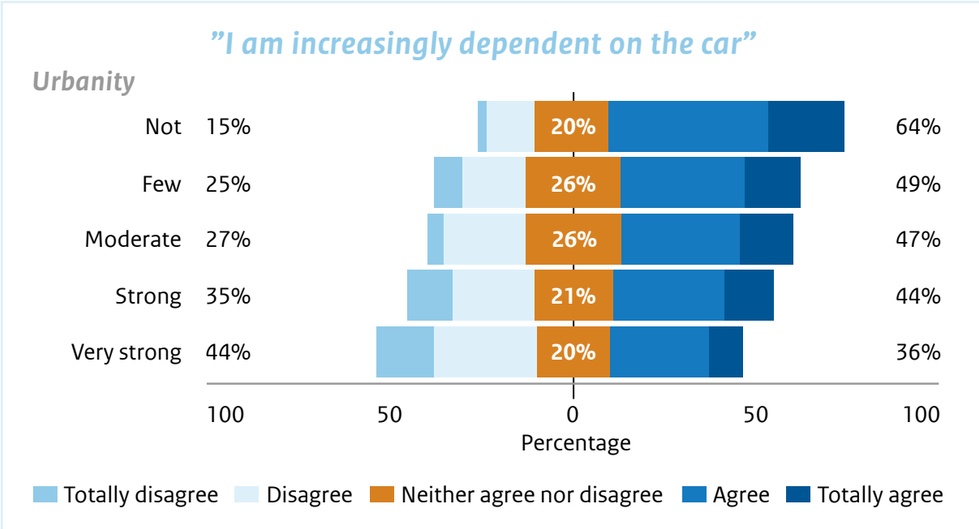
The Netherlands has invested in the car system in many ways over the past decade: through the construction of tunnels, parking spaces and overpasses, additional missing links and car lanes. The highway maximum speed was also raised to 130 km/h, although in 2020 it was again lowered during daytime hours. Car traffic flows were facilitated via green waves, smart technology and measures aimed at maximising the use of road capacity. In practice however such efforts have not resulted in shorter travel times for motorists. Because of increased car and truck traffic, the average speed by car remained virtually the same.

> "In the large Dutch cities there is a trend towards less auto-mobility."

Certain local developments, like in Amsterdam or Utrecht centre, emphatically do not benefit motorists; examples include the narrowing or removal of roads, reductions in numbers of parking places or the lowering of speed limits.

Longer distances

The Netherlands enjoys a rich tradition of spatial planning, which in the past has helped prevent sprawl and scaling-up. Over the past decade many new housing developments were built adjacent to existing urban areas, thereby offering opportunities to travel via PT or bicycles. Concurrently, large new housing estates are situated near main roads, while most new residents reside more than 8 km from a city centre. Consequently, cars remain in a relatively favourable position.



Trip distances are increasing as various (public) facilities disappear. We observed that minimum distances to hospitals, family doctors, supermarkets and libraries are increasing in many regions. We also see improvements in proximity for other facilities, such as daycare.

Other transport options

The Dutch find safety important. In 2006 they found cars to be the safest transport mode, and did so again in 2016.

For an individual traveller, the cost of PT is below the total cost of car usage. However, cars can be cheaper if people travel together. Moreover, car owners primarily consider the fuel costs and not the total costs, whereby PT seemingly becomes the less attractive option. Additionally, PT costs increased more sharply than car costs during the years leading up to 2020.

The Netherlands has a rich cycling culture, offering cycling lessons, free bicycle parking facilities, separate cycling paths, express cycle lanes, bicycles paid for by employers and good legal protection for cyclists, all of which can make bicycles serious competitors for cars.

The car as necessity

Nearly half of all Dutch people (47%) agree or strongly agree with the statement, 'I am increasingly dependent on cars'. One-third of all Dutch people do not regard car ownership as a free choice but rather as a necessity. Other studies also revealed that many Dutch people find it increasingly difficult to live without a car. People residing in the Netherlands' less urban areas are the most dependent on cars for their transport. Shared cars, as alternatives to personal car ownership, are still primarily concentrated in the larger cities.

> "1 in 3 Dutch people do not regard car ownership as a free choice but rather as a necessity."

For many Dutch households car dependency can and will result in the purchase of an (extra) car, although clearly not everyone has the possibility to do so. Moreover, the vicious circle discussed above may exacerbate the underlying car dependency.

Forced car ownership

A certain percentage of the population tolerates the costs associated with car ownership, even if they can hardly afford it. According to our estimates this 'forced car ownership' applies to some 6% of Dutch people with cars; they have low or moderate financial security and paying for car ownership means they must cut their spending on maintenance or other things. Moreover, these people state that they are functionally dependent on their cars.

Finances

After the home itself, cars are usually the largest household expense. Nevertheless, car owners routinely underestimate the costs associated with their cars; they primarily consider the fuel costs, while frequently overlooking the car's depreciation. Statistics Netherlands (CBS) also does not include the costs of car loans or for private driveways at home in the total car costs. And this despite the fact that homes with private driveways, carports or parking garages are considerably more expensive than comparable homes without such car-related facilities. In 2019 a carport was estimated to cost 15,000 EUR. In new home construction projects, mandatory parking spaces can drive up house prices considerably, especially in urban areas, yet not all new homeowners have cars.

Private-lease car contracts are on the rise: they provide greater insights into the total car costs and offer users less risk. However, such contracts can serve to frustrate opportunities on the housing market, because people with private-lease cars are able to borrow much less for their mortgages.

9% of car owners purchased their cars via instalment plans, and 1 in 5 of them indicated that they were cutting back on other expenses.

Financial packages are big business for car manufacturers; they sometimes earn more as financiers than as car manufacturers. The automotive industry's financial activities received substantial support during the credit crisis. These are of such magnitude that they fall under the direct supervision of the European Central Bank.

More car production

Growing car ownership means more car production, which creates jobs but is also ecologically damaging.

Economy

The automotive industry is a major employer worldwide. The Netherlands, like most other countries, has but a modest role in global car assembly; in fact, NedCar, in Born, is the country's only major producer and sometimes struggles to survive.

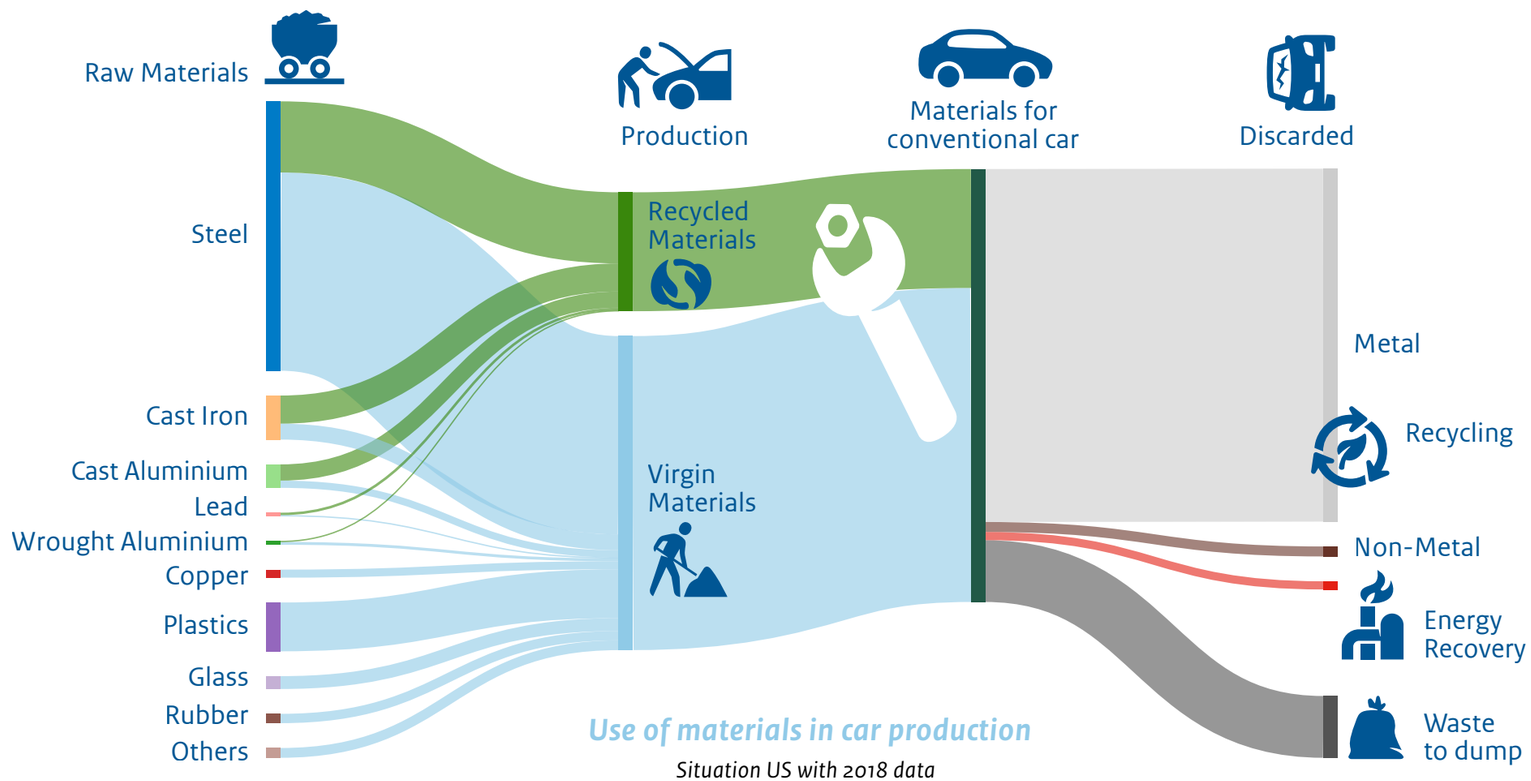
The Netherlands does however play a more important role in the automotive supply sector, including for chips, electronics, steel and paint. Many of the products or parts produced in the Netherlands are exported to Germany. The Netherlands moreover is one of the leaders in the field of research and design, as well in the electrification of mobility. Most employment in the car sector is not in production as such, but rather in garages, the government and road construction.

Raw materials

The automotive industry is a major consumer of raw materials, with millions of new cars produced annually worldwide; moreover, there are thousands of parts per car, and the average vehicle weight is now well above 1,000 kg. A large share of steel, aluminium, copper and rubber production is earmarked for new cars, which, in the EU, amounts to 21%, 42%, 14% and 70%, respectively. The automotive industry is the largest consumer of aluminium and second largest consumer of steel in the EU. Circular production – based on recovered materials from end-of-life vehicles – is still far from becoming a reality. Moreover, it is impossible to close the circle as long as both the numbers of vehicles produced and their sizes continue to increase globally.

An increasingly diverse range of materials are used in car production. In 1970, for example, a car consisted of 80% metal, while in 2010 it was only 50%. Plastic, rubber and other materials have gained ground here. Moreover, digitisation and electrification are further enhancing the diversity of raw materials (cobalt, lithium, nickel, rare earth metals). This also increases the likelihood of disruptions in the production process. Shortages of just one of the various materials is sufficient to shut down a factory's production. It is often impossible to switch to an alternative material, as developing new vehicles takes years and the various materials are used precisely for their unique properties. Temporary or permanent shortages endanger production continuity.

"The automotive industry is the largest consumer of aluminium and second largest consumer of steel in the EU."



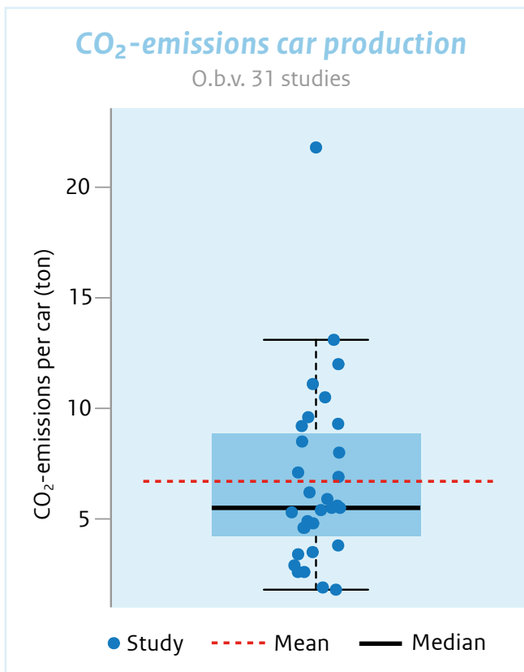
Use of materials in car production

Situation US with 2018 data

"Growth in size and number makes it impossible, for the time being, to use only recycled materials."

Climate and environmental impacts

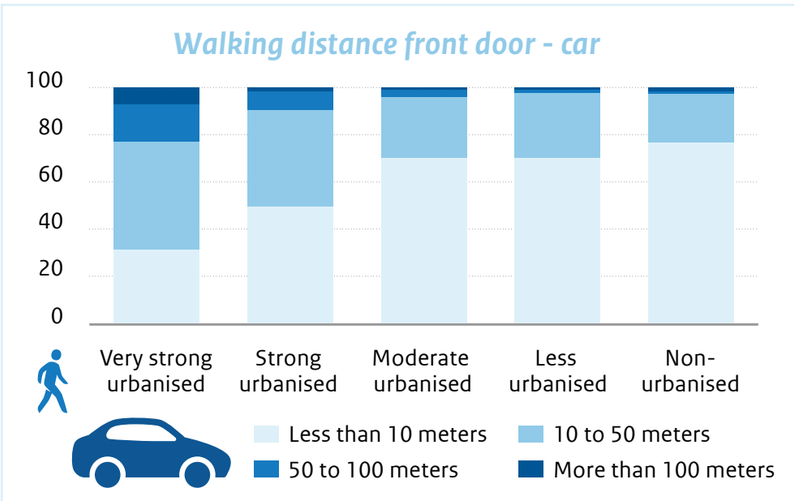
Producing a car has substantial local and global environmental impacts. Producing a car emits approximately 7 tons of CO_2 into the atmosphere, and that figure is currently 30-60% higher for production of battery-electric cars. Moreover, eco-system health is significantly impacted, affecting humans, animals and plants. Some impact are larger for fully electric cars than for conventional cars. Transitioning to electric cars will shift much of the environmental impact from the use phase to the production stage. It is possible to reduce such impacts, but great effort is required. Smaller cars and smaller batteries can contribute as well, as major differences exist between types of cars.



Urban space

Widespread car ownership in the Netherlands has an impact on urban space, as cars are parked for 96% of the time. The Netherlands has some 19 million parking spaces, good for 225 km² or the total surface area of Amsterdam. Most of these parking spaces are in public space.

Construction projects are more complex because of the requisite parking spaces, and consequently (housing) projects can fail to launch or get delayed.



Because parked cars obstruct views, twice as many accidents involving cyclists occur on streets with parallel parking spaces than on streets without such parking spaces. Parked vehicles are related to 1 in 5 accidents involving cyclists or pedestrians.

Most Dutch people are able to park within 10 meters of their homes. The average distance between a home and car is approximately 21 metres; it is therefore often easier to depart by car than by bicycle.

> ”Most Dutch people can park within 10 meters of their homes.”

Once in use, cars occupy much more space. The required space is a function of the speed: the faster one drives, the more space required. Stationary and moving cars claim up to 50% of the public space in cities.

Politics

Important role for democracy

Unlike a bed, parasol or novel, what occurs outside a car determines its practical value: think of speed limits, traffic rules, the extent of the road network hierarchy, pavement quality or availability of parking space. The workings of democratic society also determine a large part of a car's operating costs: think of surcharges, excise duties, subsidies, parking fees and guarantees for the fossil fuel industry.

Past and recent political choices strongly determine the relationship between a car's costs and benefits; hence, stakeholders with interests in the automotive sector also have political interests. Motorists are also interested in policies that increase their car's practical value and reduce its costs. Cars are thus an eminently political issue.

Automotive industrial complex

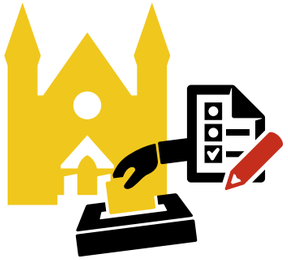
Increased car sales and car use means more power for the automotive and petroleum industries, which influence public opinion via campaigns about climate change, for example. As major employers, these industries can play governments off against each other to achieve (tax) benefits. China, the US and Europe provide this sector and the automotive supply industry with billions in annual subsidies. Moreover, in times of crisis, governments often serve as the 'big insurers', providing stimulus packages and purchasing subsidies, scrapping premiums, or calls to purchase new cars. The sector uses interest groups, PR campaigns and lobbying to influence politicians.

The industry's influence occurs primarily on the European level – less so within the Netherlands itself. Brussels determines safety and emission standards, measurement methods and compliance, and approves the support measures. Presently, many subsidies are specifically earmarked at making production or products more sustainable.

The importance given to this sector results in overcapacity: no region wants to close a production unit, and consequently during economic boom times a quarter of all available capacity remains unused.

Car politics

Motorists are inclined to support car-friendly policies, as local referenda and national elections reveal. Increased numbers of motorists therefore result indirectly in more car-friendly policies. Car-less voters are underrepresented at polling stations, as both car ownership and voting correlate to income and education levels. Additionally, many people without cars have no voting rights. Because there are many locations to vote in the Netherlands, we do not expect that being car-less results in absences at polling stations, although research on this topic is lacking.

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Alkmaar
IJmuiden
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A 6
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Assen
Haarlem
Zandvoort
Keukenhof
Scheveningen
AMSTERDAM
Flevoland
Lelystad
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Nijmegen
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Arnhem
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Breda
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Wijk

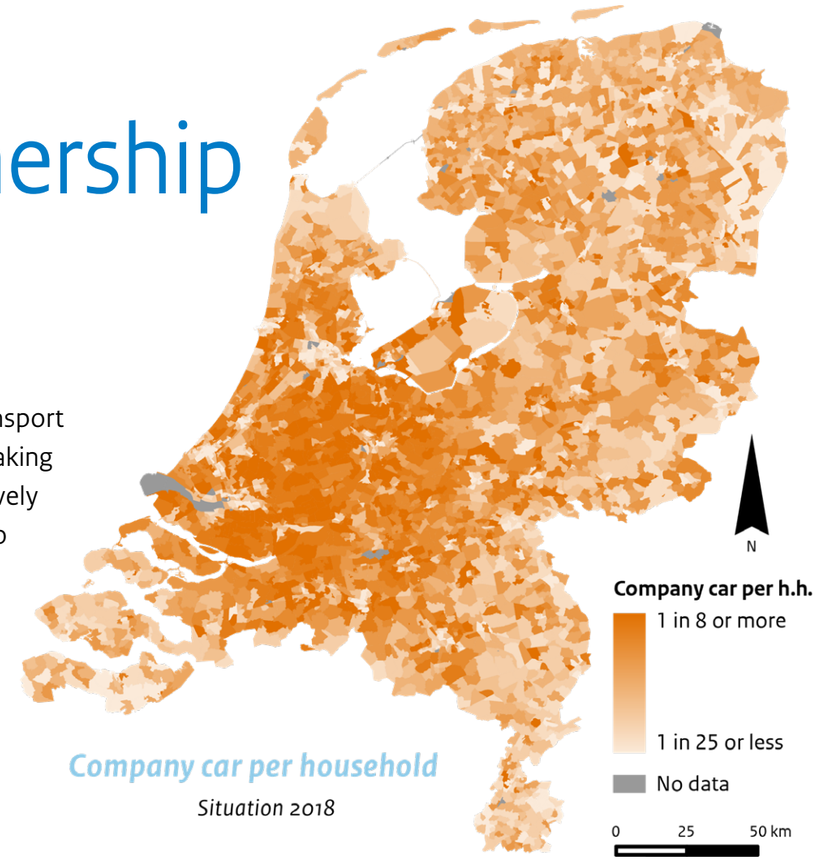
3 Determinants of car ownership

Advantages of cars

There are many advantages to owning a car, which explains its popularity as a transport mode. Such benefits include comfort, protection, space for passengers and ease of taking baggage. An extensive road network makes it easier to cover long distances relatively quickly; moreover, the road network offers many parking spaces, facilitating door to door trips. Although many people recognise such benefits, significant differences in car ownership exist among households, which we explore in this section.

Driving license as precondition

Possessing a driving license is a precondition to owning a car: without a driver's license, one cannot legally drive. Relatedly, age is an additional precondition: a person under the age of 18 cannot register a car.



Company car per household

Situation 2018

Cars as precondition

In a car dependent society, the relationship between income or financial security and car ownership can also be viewed in reverse: cars are thus a precondition for (better) jobs and (higher) incomes, although we expect only a modest relationship here, given the Netherlands' degree of urbanisation and available travel options.

Financial aspects

Sufficient financial security is another condition, although in practice this does not appear to be a strict condition, because even those in a tight financial situation sometimes own a car.

In recent decades the importance of financial means as a determinant of car ownership has declined structurally, as cars have become relatively cheaper and been transformed from luxury products to a key element to social participation.

The employer's contribution

Highly educated employees in particular receive travel allowances for commuting and business trips. Although fiscal options exist for compensating many different transport modes, cars dominate such beneficial tax arrangements, and this lowers the barrier to car ownership for those who can claim such benefits.

Car ownership increases when employers make cars available to employees. Consequently, households with a company car have above average numbers of cars, and this is also because such households do not always get rid of the cars they already had.

Social-demographic perspective

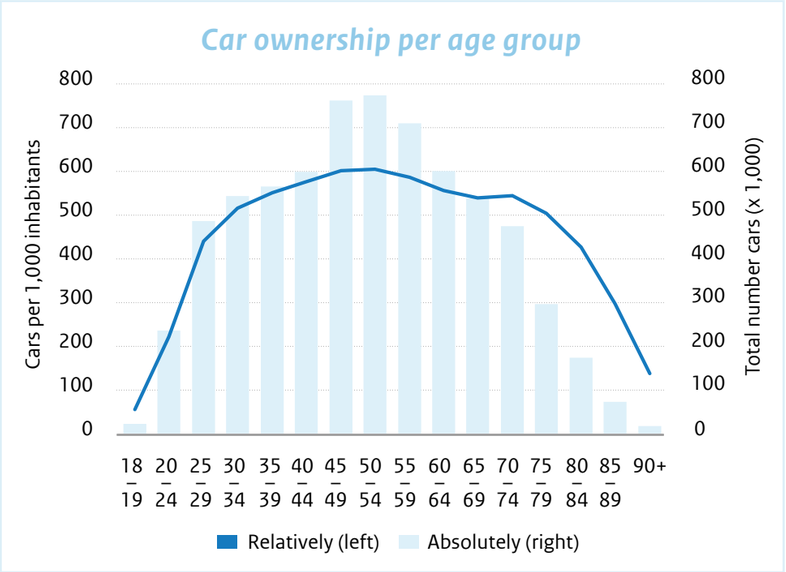
The importance of the phase of life

The beginning or end of a life phase is often marked by a life event, such as a first job, retirement, cohabitation, moving house, birth of a first child, divorce or death of a partner. People often buy or dispose of cars in the run-up to or at the start of a new phase of life.

The typical time to buy a car is at the start of one's working life. Commuting distances can be long and must be travelled several times per week. Many of the car kilometres (approx. 50%) in the Netherlands are therefore work-related. Additionally, employment offers greater financial security or company cars are involved.

When people retire, they do not immediately relinquish their cars. Car ownership is 'sticky': people have developed habitual behaviour and car-dependent lifestyles. Moreover, thanks to their financial assets and pension, there is often no financial need to sell their cars. Recently retired people often can enjoy life, pursuing various social and recreational activities or caring for grandchildren.

Other relevant markers of stages of life are cohabitation and family formation. When two people form a household, barriers to car ownership decrease as jointly they usually have more disposable income. And they will use a car more, because not one but two people can use it (provided they are licensed drivers). In the Netherlands, more than 90% of cohabiting couples (with or without children living at home) own a car.



Peak hour families

Two-income earner families with young children have relatively hectic daytime schedules, with many activities concentrated near the start and end of the working day. These so-called 'peak hour families' often own two cars. Incidentally, families with multiple children do not always own multiple cars, because raising children costs money and hence they have a smaller budget for an extra car.

> "Peak hour families often have two cars."

Car ownership peaks in the 50-55 year old age group, which is perhaps because the older (18+) children with driver's licenses living at home will then use one of the household's cars.

Gender

Men account for two-thirds of all registered cars, and women one-third, a difference that is particularly pronounced among seniors. Gender cannot explain differences in car ownership among households, however. The man or woman's role in the household or the cultural significance of gender are possible explanations. The fact that men register more cars in their names is likely due to the initiative involved in purchasing cars. Moreover, in couples, the man is usually slightly older and has more claim-free years of insurance, for example.

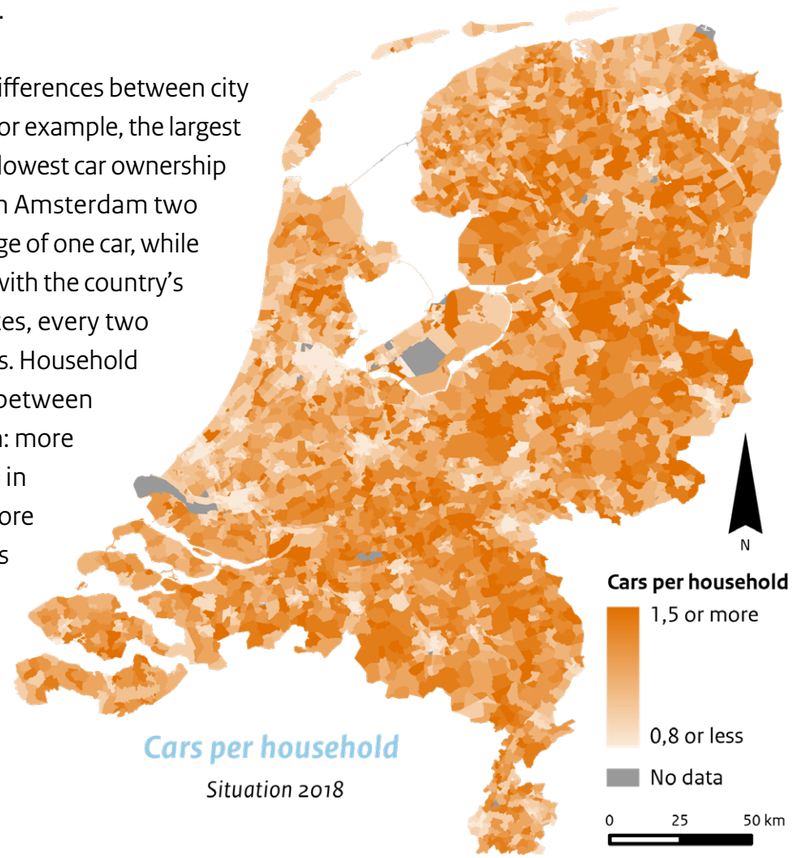
Spatial perspective

City and countryside

Spatial planning impacts household car ownership in different ways and on different levels. A common thread here is the difference between city and countryside: cities offer opportunities for living car-free, owing to the proximity to workplaces, facilities and shops, as well as often wide availability of PT and other mobility services.

At the same time, cities are less suitable for cars, due to less space, more delays, complex traffic situations and higher costs. The same car with the same mileage often costs more in the city than in rural areas.

Statistics also reflect the differences between city and country. Amsterdam, for example, the largest city in the country, has the lowest car ownership rate in the Netherlands. In Amsterdam two households have an average of one car, while in Staphorst, a rural town with the country's highest car ownership rates, every two households have three cars. Household compositions also differ between Staphorst and Amsterdam: more households with children in Staphorst, compared to more single-person households in Amsterdam.



Residing in urban areas sharply reduces car ownership rates, especially for low income individuals, young adults, senior citizens and people for whom cars support their lifestyles.

Stations

Proximity to a train station means fewer cars in a household, and this particularly applies to intercity (IC) train stations. The attractiveness of the PT services offered plays a role here, but not only: intercity stations are usually situated in central locations, close to all manner of facilities and jobs. Additionally, the areas around stations routinely require paid parking and offer a host of alternatives to private cars, including shared cars. Proximity to a large train station is thus an indicator of other factors that inhibit car ownership.

Parking

International research revealed that if parking is situated at a distance, car ownership is supressed. Cars become less attractive if people must first walk hundreds of meters to reach their cars, as it is no longer 'ready-to-go' mobility. However, in the Dutch context, scant evidence exists to support this finding, as virtually everyone can park close to their homes.

Other factors

The social norm

Car ownership is now the norm in the Netherlands: both in terms of what we experience around us (descriptive) as well as a social requirement (prescriptive). Cars are highly visible and well represented on our streets, in magazines, on the radio, in films and online.

Facilities for cars are also ever-present: parking spaces, roads, petrol and charging stations. In society, cars denote maturity, self-reliance, flexibility and masculinity. Owning a car does not require an explanation, but not owning one does.

Cars as social norm is less prevalent in the 'bicycle republic' of the Netherlands than in US, for example. As there are no major Dutch car brands, car ownership is not inextricably linked to (economic) national interest or national pride. Moreover, the Netherlands and many other European countries have strong traditions of public transport, which enjoy broad societal support.

If household members believe that a car 'belongs to' or is 'part of' the good life, they usually own a car. The opposite effect also exists: when people buy cars, their perception is coloured, and they are more likely to regard car ownership as 'normal'.

Ecological awareness

Ecological awareness also impacts the number and types of cars a household owns. For example, GroenLinks, a Dutch green party, is the most popular political party among electric car owners. Car sharing is also more popular among people who vote for green political parties.

Car affinity

The greater the affinity with cars, the more likely a household will own multiple cars. For households with the financial means, such strong affinity can also result in car collections: some 12,000 Dutch households have more than six cars, for example.

Car ownership as status symbol?

Cars have traditionally served as status symbols, a means by which one can showcase their social status. However, given today's widespread car ownership, people can no longer distinguish themselves with any car. Differences are now mainly established via brands, versions and models. Compared to many other countries, socio-economic inequality is not especially pronounced in the Netherlands. Rather, it is in highly unequal societies that people particularly flaunt their material status symbols. Consequently, in the Netherlands, the car as status symbol does not play a particularly relevant role in explaining the differences in numbers of cars per household.

Barriers

A significant share of the Dutch population suffers from physical or mental disabilities that can prevent them from driving cars, including motor or sensory limitations. Approximately 300,000 Dutch people are blind or partially sighted, for example. Mental disabilities include a mental disability or fear of driving: some 800,000 licensed Dutch drivers feel in some way inhibited from getting behind the wheel. A disability can also increase one's dependence on a (modified) car. It is certainly not a 1-to-1 relationship.

> "Some 800,000 licensed Dutch drivers feel in some way inhibited from getting behind the wheel."

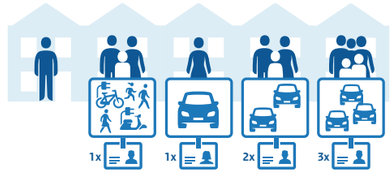
Illustration

In the table we applied various determinants to five fictitious households, from which we gained a sense of the expected number of cars per household.

Preconditions for car ownership have far-reaching consequences. In the table, Mr. Rutgers does not have a driver's license and is not expected to have a car. Ms. Van de Pas is financially insecure but nevertheless has a driver's license and car, partly because she adheres to the norm of car ownership, does not reside in a highly urbanised area and lives far from a PT station.

Household composition is also crucial: the primary factor here is the number of adults (with driving licenses), as illustrated by the Jansen family. (Underage) children living at home are less of a factor for car ownership.

Mr. and Mrs. De Vries, from Baarn, are financially secure, also because both are employed. Time is scarce in two-income households though, so the speed that cars afford is attractive. Mrs. De Vries also has a company car, and hence the likelihood that this household has two cars. Mr. and Mrs. De Jong are also both employed, and, as with the De Vries family, their children live at home. However, the De Jong family lives in Amsterdam and has fundamental objections to car ownership; consequently, the expected number of cars in this household is between 0 and 1.



	Mr. Rutgers	Family De Jong	Mrs. Van der Plas	Family Jansen	Family De Vries
	Senior, no driver's licence	From Amsterdam	Single mother	From Waalwijk	From Baarn
Estimated number of cars	**0.01**	**0.56**	**1.01**	**1.73**	**1.87**
Two-income household	N/A	Yes	N/A	No	Yes
Enough financial security	Yes	Yes	No	Yes	Yes
Lease car	No	No	No	No	Yes
Amount driving licenses	0	1	1	3	2
Children living at home	0	3	2	2	2
Address density (addr./km^2)	4,000	4,800	2,000	1,200	1,500
Distance to IC station (m)	1,200	540	3,500	10,000	4,000
Social norm	-	--	+	+	++
Ecological Awareness	+	++	0	-	0
Car affinity	--	--	0	++	+
Barriers	0	-	0	--	0

4 About this publication

This brochure provides a summary of the insights offered in two reports by the KiM Netherlands Institute for Transport Policy Analysis. One report explains the differences in car ownership among Dutch households, while the other presents the societal effects of widespread car ownership in the Netherlands. We refer to these reports for the research methods, data and references used.

Witte, J., Zijlstra, T. and Bakker, S. (2022) *Verklaringen voor de verschillen in autobezit bij Nederlandse huishoudens.* The Hague: KiM Netherlands Institute of Transport Policy Analysis

Zijlstra, T., Witte, J. and Bakker, S. (2022) *De maatschappelijke effecten van het wijdverbreide autobezit in Nederland.* The Hague: KiM Netherlands Institute of Transport Policy Analysis

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