

TRAFFIC IN COPENHAGEN 2009

PUBLISHED IN MAY 2010



Preface

Dear reader,

Welcome to “*Traffic in Copenhagen 2009*”. You can get an overview here of the traffic figures, and noise and air measurements which the Technical and Environmental Administration has been taking in 2009.

The basis for the Administration’s work on noise, traffic safety, parking strategy, congestion and so on is the Traffic and Environmental Action Plan from 2004. In this edition of “*Traffic in Copenhagen*” we have chosen to look at the results achieved. We examine the 20 focal areas of the Traffic and Environmental Action Plan, viewing them from a five-year perspective: How far have we progressed in the development of Copenhagen traffic,

cycling infrastructure, environmental zones etc.? And are we keeping up the pace in terms of our ambitions from 2004?

At the same time this review, which shows how far Copenhagen has come in a great many areas over the past five years, raises the question of new goals – also as an extension to the plans The Environmental Metropolis and A Metropolis for People as well as Copenhagen’s ambitious climate plan, the objective of which is to make Copenhagen CO₂ neutral by 2025. Against the backdrop of the results accomplished, new targets can be set for traffic, mobility, safety and sustainability in Copenhagen.

Copenhagen, May 2010

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Masthead

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Bicycle traffic

Copenhagen aims to become the best cycling city in 2015.

The City of Copenhagen has therefore set out three ambitious targets in *The Environmental Metropolis: Our Vision CPH 2015*:

- At least 50% cycle to their place of work or education in Copenhagen
- The number of seriously injured cyclists has more than halved by comparison with 2005
- At least 80% of Copenhagen cyclists feel safe in the traffic.

All initiatives in the field of cycling aim to support the achievement of these targets.

In many ways 2009 was a remarkable year for cycling in Copenhagen. More particularly, there has been wide-ranging interest in Copenhagen as the city of cycling. That interest attests to the fact that Copenhagen's cycling culture and the Authority's work to continually improve the city for the benefit of cyclists has now given Copenhagen the status of a model city in terms of its commitment and dedication to green mobility. Among other things, it has resulted in laudatory mentions in the *NY Times*, on *BBC World* and in the French *Le Monde*.

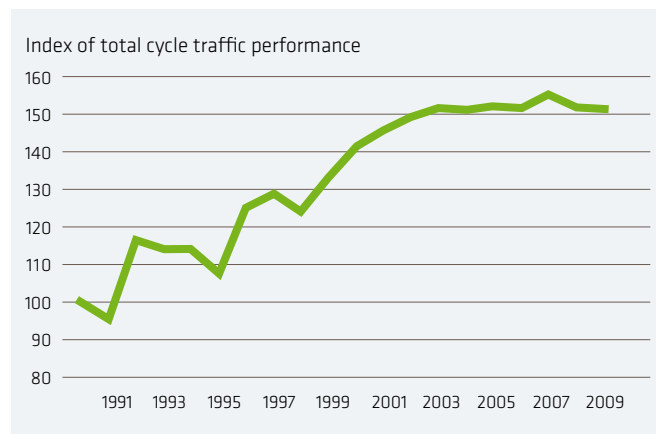
2009 saw the construction of cycle tracks along Carl Jakobsens Vej and Øresundsvej. The planned creation of a cycle track in Stormgade had to be postponed till the first half of 2010 owing to safety considerations surrounding the UN Climate Summit in Copenhagen.

In order to create greater comfort for the city's cyclists, the City implemented a series of pilot projects in 2009, including dustbins for cyclists so that they can dispose of litter and waste as they are cycling, plinths (foot supports) at traffic lights, making it more comfortable to wait at a red light, and covered parking for carrier cycles.

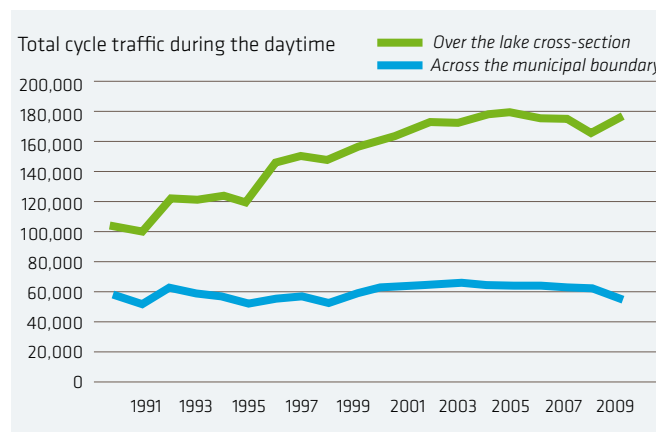
The bicycle is the form of transport most widely used for work and study, measured in trips. The bicycle's market share has been roughly stable for the past five years (36% in 2004 and 2006, 37% in 2008 and 2009); the same is true if we measure traffic performance. During a time of increasing car ownership and the opening of the Metro, that's impressive in its own right.

However, it does not change the fact that efforts need to be re-doubled if the market share is to be increased sizably—cf. the City of Copenhagen's aim of a bicycle market share of 50% forming part of "The Environmental Metropolis: Our Vision CPH 2015".

The City of Copenhagen is aiming to be able to introduce a new 'commuter-friendly' urban bicycle in 2013. So in 2009 the City held an international competition to sound out ideas of what a pioneering urban bicycle system may look like. No fewer than 127 suggestions from five continents took part in the competition. They can all be enjoyed at www.cphbikeshare.com.



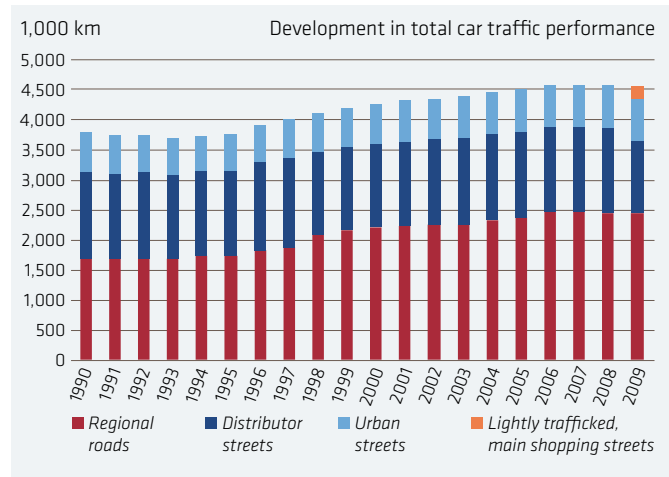
Development in total traffic performance (number of km ridden) on a bicycle from 1990 to 2009.



Development in cycle traffic from 1990 to 2009.

Car traffic

The overall development in car traffic performance (no. of km driven) in Copenhagen shows an increase of about 20% from 1990 to 2009. The increase has centred mainly on the largest of the roads, while there have been no major changes to distributor streets and urban streets in recent years. The City of Copenhagen has revised its road network plan in 2009 and, among other things, introduced a new type of road: strøggader (lightly trafficked, main shopping streets (or “high streets”). This has resulted in a change in the statistical calculation method for car traffic performance. From 2008 to 2009, the volume of traffic on the road network as a whole has remained virtually unchanged. Over the past 15 years car ownership has risen among Copenhageners. The number of private passenger cars was approx. 50% higher in 2009 than in 1995. From 2008 to 2009 there was an increase of slightly over 3% in the number of private cars in Copenhagen.



Development in total traffic performance (no. of km driven) in cars from 1990 to 2009.



The City's major roads broken down by type of road.

In 2009 there were 228 privately owned cars per 1,000 inhabitants in the municipality. Nationwide, the equivalent figure is approx. 60% higher. Thus Copenhagen still has far fewer cars per inhabitant than the rest of the country, but the number is rising.

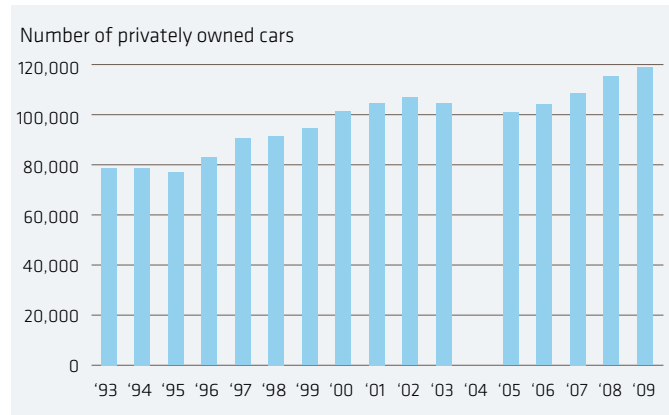
The increase in car ownership has put great pressure on street parking. Partly for this reason the City of Copenhagen has adopted a new parking strategy in 2009, which is intended to limit the congestion problems in Copenhagen and simultaneously improve parking conditions for residents in the Blue Parking Zone, where three fully automated underground parking installations will open in 2010.

Car traffic is not growing evenly throughout the municipality. One cross-section, where the roads cross the municipal boundary, has seen growth well in excess of 30% since 1990. From 2008 to 2009 the volume of traffic remained virtually unchanged, currently being on a par with traffic in 2005. Car traffic across the lake cross-section, where the roads cross the lakes and the port, has remained virtually unchanged from 1990 to 2009. Since 2002, however, there has been a slight downtrend.

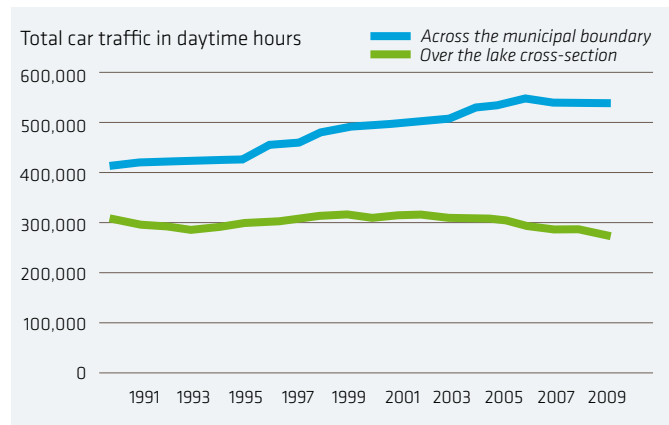
The proportion of heavy goods vehicles (HGVs) varies from section to section. At the municipal boundary and the lake cross-section that proportion is around 5% in 2009. Heavy traffic at both the municipal boundary and the lake cross-section has generally been on the decline since 2000.



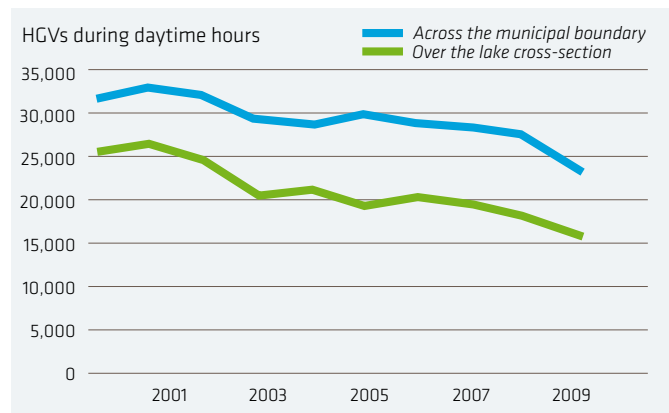
Every year the municipality counts the traffic at the lake cross-section and the municipal boundary.



Development in privately owned cars in the City of Copenhagen from 1993 to 2009. The method of computation has been changed in relation to previous editions of "Traffic in Copenhagen".



Development in car traffic, 1990 - 2009.



Development in the number of HGVs, 2000 - 2009. Figures from previous years have not been computed.

Public transport

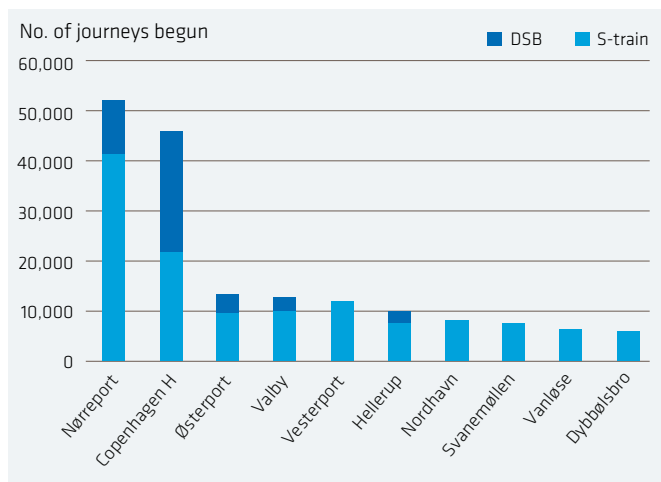
On a weekday, public transport takes more than 700,000 passengers in the City of Copenhagen. Access to public transport is from just under 1,200 bus stops and 40 stations to trains, metropolitan S-trains and the Metro.

More than half of passengers take the bus, while the rest use the train or Metro.

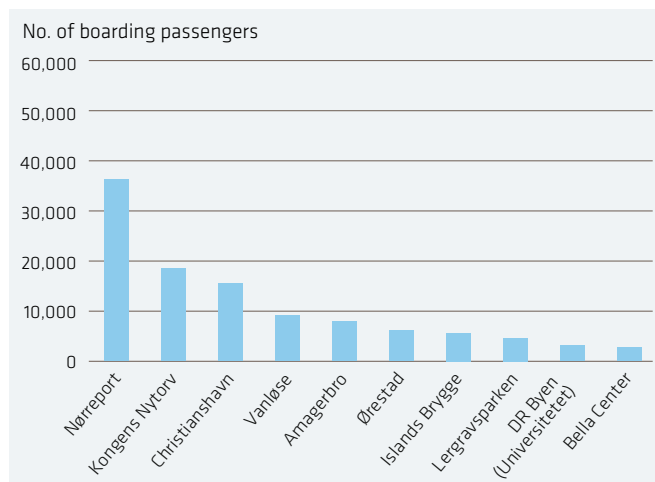
Nørreport Station and Copenhagen Central Station are the two stations where most passengers start their train journey. Nørreport is the station most used by train, Metro and bus passengers alike.

The number of Metro passengers in the City of Copenhagen has risen by 8% from 2008 to 2009. The increase is primarily due to general growth in passengers, as no new Metro stations were opened, unlike 2008.

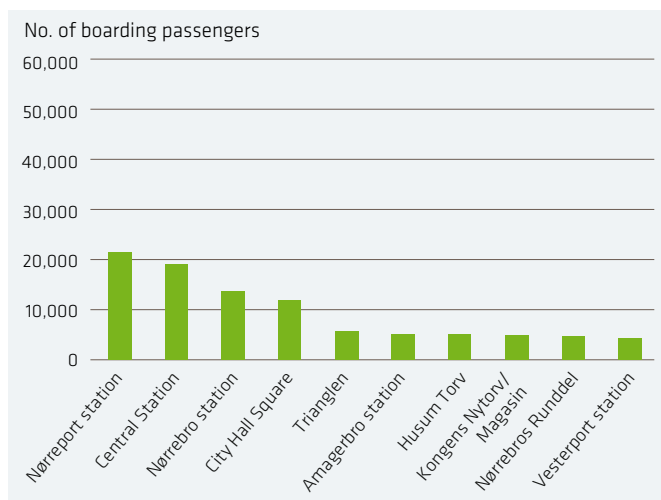
Overall passenger figures for public transport rose marginally from 2008 to 2009 and are currently at their highest level since 1995 at almost 750,000 passengers daily.



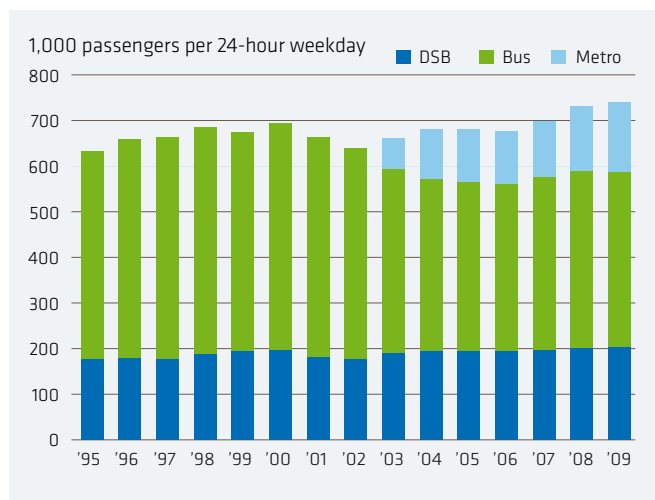
Journeys begun by S-train and other trains at the ten most used stations in the municipality counted on a weekday in November 2008.



Metro passengers at the ten most used stations in the municipality on a weekday in 2009.



Bus passengers at the ten most used bus stop groups in the municipality on a weekday in November 2009.



Development in public transport in the municipalities of Frederiksberg and Copenhagen, 1995-2009.

Traffic safety

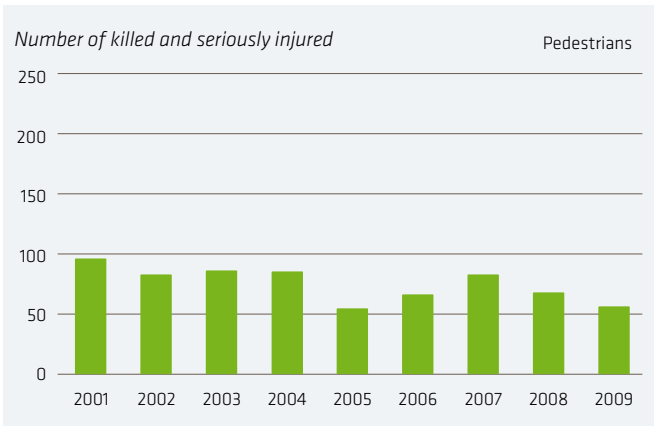
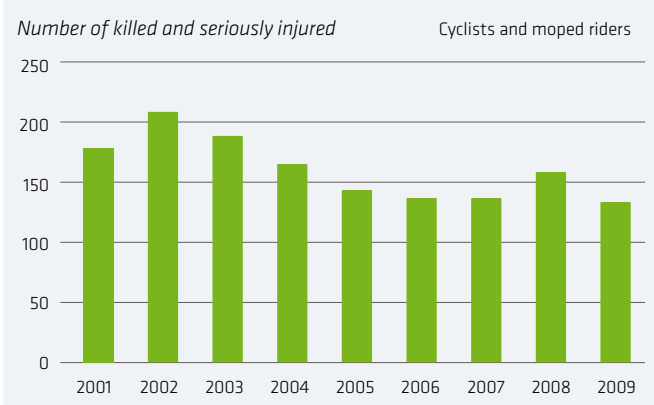
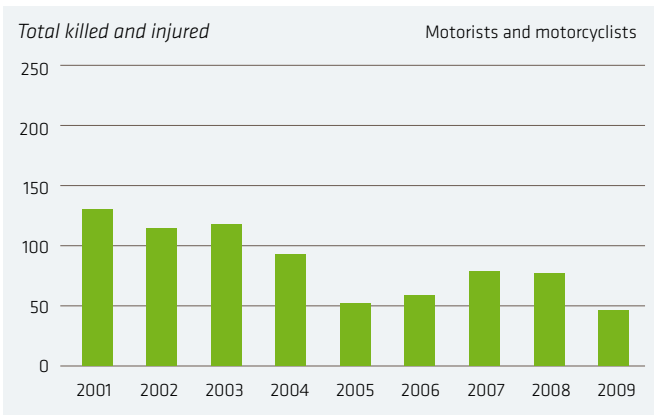
One of the adverse consequences of traffic is the occurrence of accidents that take their toll in human terms. The City targets its work at reducing the scope of these, and devised a Traffic Safety Plan in 2006 as one of its tools. The aim is to slash the number of killed and seriously injured (KSI) road-users by 40% by the end of 2012. The baseline figure is an average for the years 2003-2005.

The Traffic Safety Plan highlights four important commitments: cyclists, pedestrians, intersections and young at-risk motorists. As part of this, there is a great focus on rebuilding intersections and drawing up initiative plans for cyclists and pedestrians. 2010 will also see a focus on young car-drivers who are not averse to taking risks.

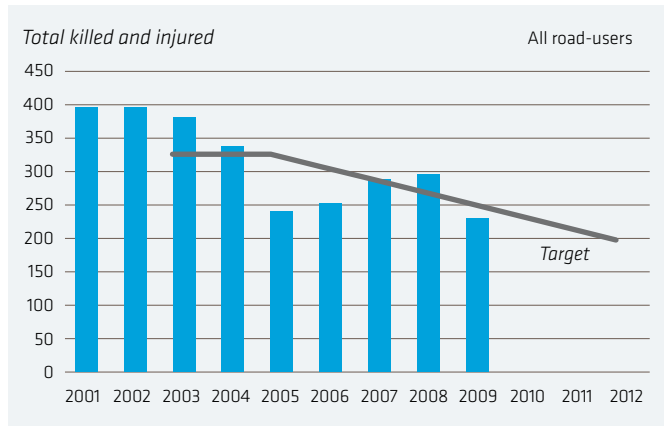
In 2009, 230 KSI (5 killed and 225 seriously injured) were recorded in the City of Copenhagen. This is 70 fewer than in 2008 and means that the number of people killed and seriously injured in traffic is meeting the City of Copenhagen's ambitious targets.

Cyclists account for most KSI. In 2009 they made up 45% of all KSI, and together with moped riders (11%) made up a total of 56%.

The proportion of pedestrians was 23% of the total KSI in 2009. Together the soft road-users - pedestrians, cyclists and moped riders - comprise 79% of those injured. For the other road-users a fall in the number of KSI was also recorded. Motorists account for 15% and motorcyclists 4% of the casualties.



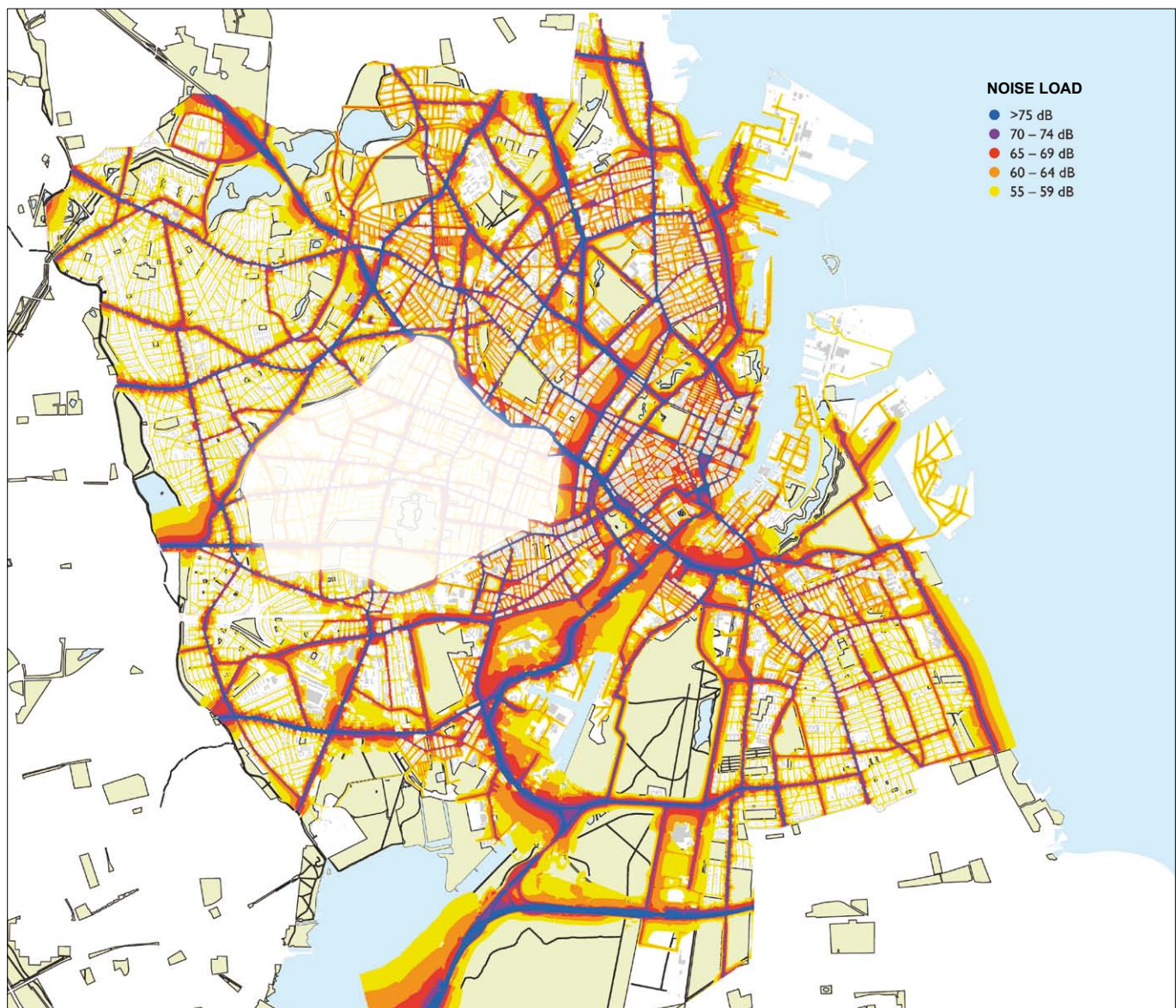
Development in the number of killed and seriously injured.



Development in the total number of killed and seriously injured.

Noise and air pollution

In Copenhagen a large proportion of the noise nuisance stems from road traffic because the busiest roads are flanked by homes. Road traffic noise is averaged out over a 24-hour period by calculating it using a mathematical noise model that employs lots of data about traffic volumes, speeds and the siting of homes etc. Noise in the evening and at night is weighted high, being allocated 5 and 10 dB, respectively. The map shows the noise impact from traffic at a height of 1½ metres in the City of Copenhagen.



Mapping of the average noise load from traffic in the City of Copenhagen. Data from 2005.

The table below shows the noise impact on Copenhagen homes from traffic at facade level. Data have been calculated as weighted daily averages, taking into account the actual position of the homes in terms of height.

Weighted daily average for traffic noise in Copenhagen near all homes					
	< 58 dB	58-63 dB	63-68 dB	68-73 dB	> 73 dB
Number of homes	112,827	79,432	44,713	42,435	6,673
Proportion of all homes	39 %	28 %	16 %	15 %	2 %

At just under 40% of the homes in Copenhagen, the weighted daily average of the noise is below 58 dB, which is characterized as a low noise level at which a maximum of between 10 and 15% of all individuals perceive the noise as a severe nuisance. In the case of 17% of homes, the noise level is so high that they are characterized as severely impacted by noise (68 dB or higher).

Another nuisance from car traffic is the escape of air pollutants. Car traffic is estimated to account for up to 90% of the air pollution in the busiest street spaces of Copenhagen. The City of Copenhagen therefore has a metering station in H.C. Andersens Boulevard to monitor developments in the concentration of health-hazardous substances in the air.

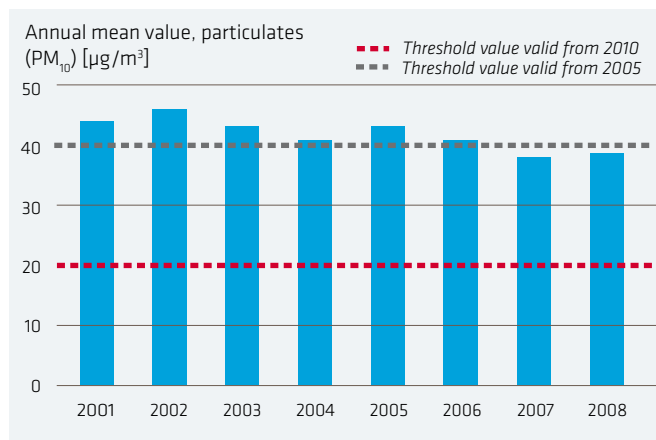
Concentrations of certain pollutants such as lead, carbon dioxide (CO) and sulphur dioxide are falling and are currently far below applicable threshold limits. This is due to a reduction of

sulphur in fuels, the introduction of unleaded petrol and the requirement for catalytic converters on petrol-powered cars. Conversely, the air's content of nitric oxides (NO₂) and larger particulates (PM₁₀) has been stagnant in recent years.

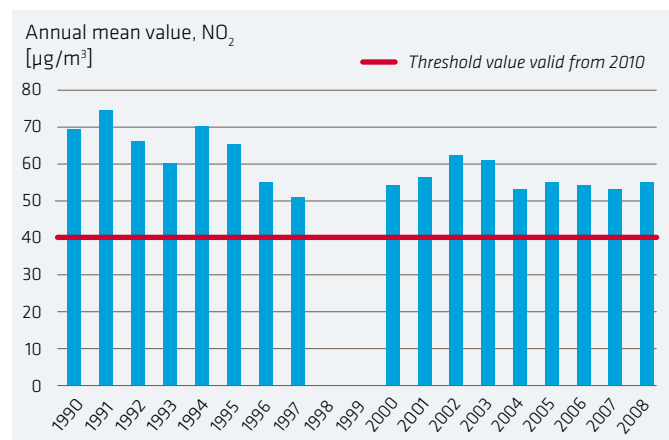
Since 1990 there has been a constant level of suspended dust particles in H.C. Andersens Boulevard, and recent years have seen a focus on the health-hazardous effects of particulate pollution. There has been a drop in NO₂ concentration since the start of the 1990s to the present.

The provisional result for 2008 measurements shows that the annual threshold value for PM₁₀, applicable from 2005, has been observed, whereas the air quality requirement for annual threshold values has unfortunately been exceeded. The future annual threshold value for NO₂ (from 2010) has also been exceeded on a great many sections of street in Copenhagen.

As a result of general developments in technology, use of cleaner fuels and regulation of the air pollution produced by companies, it is presumed that the air's content of pollutants will generally be on the decline. Despite this, Copenhagen nevertheless faces challenges, particularly in relation to the air's content of NO₂ and PM₁₀, presumably due to more diesel traffic in the city. Additional efforts are needed in order to keep to the EU's threshold values. The Danish EPA is the agency with overall responsibility for evaluating air quality and compliance with threshold values to ensure proper air quality for the population.



Concentration of particulates (PM₁₀) at metering station in H.C. Andersens Boulevard during the period 2001-2008.



Concentration of NO₂ at metering station in H.C. Andersens Boulevard during the period 1990-2008.

Traffic and Environmental Action Plan – 2009 update

On 28 April 2005 the Copenhagen City Council adopted the 2004 Transport and Environmental Action Plan for the City authority. The plan was worked out in a dialogue with the citizens and includes the City authority's vision of the way traffic and traffic development can be planned and influenced in the years ahead so as to achieve a smooth-functioning and healthy city.

The Transport and Environmental Action Plan's overriding objective is to assure a fully functional transportation system to service the city while creating substantially less environmental impact than today. This means that it will be attempted to cater for the increase in traffic activity by increasing use of public transport and bicycles, and to minimize environmental problems.

The Transport and Environmental Action Plan contains an action plan on 20 initiatives. These will be implemented within the existing economic framework of the administration, possibly supplemented with extra appropriations. A progress report will be given below on what has been happening in these areas of commitment in 2009.

1. Construction of missing cycle tracks and expansion of those under most strain

To all intents and purposes the Cycle Track Priority Plan 2006-2016 is being followed. Among other things, 2009 saw the construction of a cycle track in Øresundsvej and Carl Jakobsens Vej. In addition, a large number of projects have been designed in 2009, for which reason a number of initiatives are expected to be realized in 2010.

2. Creation of the cycling routes expected to handle most bicycle traffic

The south part of the Green Cycle Route, the Nørrebro route, was constructed in 2009. The cycle route is in Valby and creates a link between the Municipality of Frederiksberg's Green Path and Valby Langgade. The project will be completed with remodelling of the square and cycle route signposting in May 2010.

3. Work to create a City Circle Line in collaboration with the government and the Municipality of Frederiksberg

Metroselskabet, Frederiksberg and the City of Copenhagen are in full swing with the planning of the future City Circle

Line. For the City of Copenhagen it will mean, in particular, that traffic management will be evaluated in connection with the building works, just as it has been decided to make local plans for all stations during 2010. A start has been made in the field on piping and cable rerouting work, and the preparatory works around stations and workplaces, so the Metro construction will be visible in the city in the years ahead. Read more at www.m.dk.

4. Planning public transport in urban development areas

In new urban development areas the City authority has set itself the objective of spreading traffic sustainably across different forms of transport. That means that at least one-third of all trips have to be done by bicycle, at least one-third by public transport and at most one-third by car. Urban planning is therefore being viewed from a strategic perspective in terms of achieving the best possible service by public transport. One example is the winning project for Nordhavn, which flags up a solution in the form of a Metro, and further consideration is therefore being given to whether this is the solution to be adopted. Another example is Carlsberg, where it has been planned to relocate Enghave Station in order to improve servicing of the area by public transport.

5. Improvement in bus manoeuvrability on key sections

In 2009 the administration focused on ensuring that previously implemented manoeuvrability measures are still working as intended. In addition, work was done to put in place active bus-prioritizing measures using GPS technology. As a result, buses can prolong the green period at the traffic signal—allowing them to get across while the lights are green—by transmitting their position to the traffic signal installation. Initial experience with the solution indicates that there are great time savings for the buses while at the same time the solution is easy to implement.

6. Improving traffic safety

The City of Copenhagen is working in a targeted fashion to improve traffic safety within the authority, and significantly fewer killed and seriously injured in traffic were recorded in 2009 than in the previous two years.

2009 saw the completion of several minor road reconstructions. For instance, a red central reservation area was created in Øster Farimagsgade. Trials have been conducted with luminous markings on the carriageway to prevent right-turn accidents. In addition to this, speed control measures have been set up, including at Islands Brygge and Artillerivej.

Through the agency of the City Traffic Council a number of campaigns were conducted to improve road-user behaviour. For example, the campaigns conducted addressed accidents involving pedestrians at junctions and right-turn accidents, and cycle helmets have been handed out to all 3rd grade pupils in the City's schools.

During the period 2009 to 2012, DKK 50m of the authority's budget has been earmarked to safeguard the authority's school routes. The work includes rebuilding roads, implementing campaigns, and drafting traffic policies and teaching material for the schools.

7. Work to influence Copenhageners' traffic habits

In 2009 the marketing of Copenhagen as the world's best cycling city made a serious impact both nationally and internationally. This has been underpinned by campaigns such as handing out rolls for breakfast to cyclists and issuing bicycle lights. In addition, more focus was placed on the correlation between cycling and health in 2009 in order to thereby increase the number of cyclists.

The City of Copenhagen is not concentrating exclusively on bicycle traffic, but also aspires to get a certain amount of Copenhageners to swap their petrol and diesel-powered cars for electric or hydrogen cars. In order to promote this development, therefore, the local authority is working to create an infrastructure for electrical and hydrogen cars, granting permission for "quick chargers" to be set up at several points around the city this autumn. Furthermore, electric cars can park free of charge at the authority's charged parking spaces and for the time being there is no cost to "fill up" on electricity from chargers set up on public roads.

8. Providing traffic management on the Copenhagen road network

A new road network plan has been devised for the City of Copenhagen as part of its adoption of the 2009 Local Authority Plan. The road network plan includes classifying the road network corresponding to the roads' traffic function. To date, the authority's roads have been divided into regional roads, distributor streets, urban streets and local streets. The new road network plan introduces a new category of road called lightly trafficked, main shopping streets, which are commercial streets with a concentration of retail and grocery stores as well as a café and restaurant milieu (not pedestrianized streets). The road network plan will form the basis for traffic planning in the authority, the overriding principle being to concentrate through-car traffic on the authority's regional roads and avoid through-traffic driving through urban areas (see map, p. 4).

9. Setting up 40 kph speed zones in local streets in all residential areas

40 kph speed zones, and even 30 kph zones in some places, were set up in the Inner City and Christianshavn in 2009. The speed limits are being lowered in order to improve traffic safety. Generally speaking, it looks as if the lower speed limit is having a positive effect on the number of accidents. One example is found in the Northwest quarter, where the number of accidents has fallen from 36 to 21 over a three-year period.

10. Work to construct a road link between Nordhavn and the Helsingør motorway

The Nordhavn road was adopted as part of the agreement between the City of Copenhagen, the government and the Municipality of Frederiksberg relating to the building of the City Circle Line. The road will connect Nordhavn with the motorway network and relieve local streets of traffic. In 2009 an EIA was carried out for two possible solutions: an excavated tunnel and a drilled tunnel. In April 2010 the Copenhagen City Council made its final decision on the choice of road proposal. Read more at www.kk.dk/nordhavnsvej.

11. The possibilities of traffic-calming the Inner City

In the summer of 2009 the Technical and Environmental Committee approved a strategy for developing the mediaeval centre; at the same time the Committee decided that an implementation plan should be drawn up for the initiatives contained in the strategy. The purpose of these initiatives is to reinforce the identity and the urban spaces for the benefit of residents, commercial life and visitors. In autumn 2009 the Technical and Environmental Committee approved a proposal for an implementation plan containing prioritization of a number of proposed initiatives. In spring 2010 the Committee will be presented with a more detailed description of the prioritized initiatives with proposals for specific activities in relation to funding. Read more at www.kk.dk/middelalderbyen.

12. Devise a new parking strategy

In 2009 the City Council adopted the "Restyled Parking Strategy" on the basis of an evaluation of the existing parking strategy from 2005. The aim is still for the parking strategy to limit congestion and environmental problems in Copenhagen, as well as to ensure that Copenhageners' car ownership can grow in step with the general increase in prosperity in Denmark. The objective concerning urban space improvements and discontinuation of on-street parking was dropped and replaced by a new political objective to set up as many angle (or echelon) parking spaces as possible at the lowest possible cost, having regard for architectural values, traffic safety and the environment. In the spring and summer of 2010 three new fully automated car-parks will open in Nørre Allé, Leifsgade and Under Elmene with a total of 840 parking spaces. During the period 2010-11, 540 more on-street spots will be created by making greater use of angle parking and 100 more on-street spots by extending street corners.

13. Draw up local noise action plans and sound-insulate dwellings

By way of follow-up to the noise mapping conducted, a noise action plan is being put together for the whole municipality in accordance with the Danish Executive Order on Noise. The noise action plan will take as its basis The Envi-



ronmental Metropolis's objective that by 2015 Copenhageners should be able to sleep peacefully without being bothered by harmful levels of noise from street-level traffic, and that all schools and day-care centres may during the daytime only be exposed to low levels of noise from traffic.

14. Laying noise-deadening asphalt during maintenance works on noise-impacted sections

In 2009 some 157,000 sq.m noise-reducing asphalt wearing course was laid, including parts of Jyllingevej, Kalvebod Brygge, Åboulevard, Øster Farimagsgade, Sølvgade, Øster Voldgade and Tagensvej. Since 2006 noise-reducing asphalt has been laid on approx. 400,000 sq.m, roughly equivalent to 32.5 km road. In 2010 the City of Copenhagen will continue laying noise-reducing asphalt on noise-impacted sections of road due for imminent refurbishment.

15. Creating an "Environmental Zone" in the inner half of the municipality

On 1 November 2009 the Environmental Zone in Copenhagen was extended to the municipal boundary. As a result, Vanløse, Brønshøj-Husum, Bispebjerg and the remainder of Valby are now covered by the Environmental Zone too. Copenhagen's first environmental zone was established in 2008, taking in two-thirds of the municipality at that time. With the extension of the zone, the whole of the City of Copenhagen has now become an environmental zone.

On 1 July 2010 the rules for driving in the environmental zone will be tightened. That means that all diesel-powered vehicles weighing more than 3.5 tonnes and not complying with the Euro 4 norm must be fitted with a particulate filter in order to drive in the zone. At the present time diesel-powered HGVs must comply with the Euro 3 norm before driving in the environmental zone is permitted, unless the vehicle is fitted with a particulate filter. Read more at www.miljozone.dk.

16. Active support for trialling and developing eco-friendly technologies

In conjunction with the authority's project on climatically sound vehicles, eight hydrogen cars have been purchased and a publicly accessible hydrogen filling station set up in Sydhavn. As part of the Danish Energy Agency's trial scheme on electric cars, the municipality has also bought some 25 electric cars, which together with the hydrogen cars will be used as part of its daily operations within the domiciliary care and fire services, among others.

17. Draw up a heavy traffic strategy

In 2009 the City of Copenhagen drafted a proposal for a heavy traffic strategy to minimize the nuisance from HGVs and enhance traffic safety for "soft" road-users. The strategy headline is to ensure that unauthorized heavy traffic is routed out of the city, and heavy traffic serving the city is distributed across the overarching road network and managed in a traffic-safe, secure and environmentally correct way.

In summer 2009 the overall Strategy for Heavy Traffic was adopted by the City Council. Here the politicians also decided to signpost the first stage of the recommended route network. The strategy provides scope for further optimizing traffic safety on the recommended route network, inter alia by means of intersection re-engineering, traffic light controls and improved signage.

In November the City Council decided to have a fresh review of the Strategy for Heavy Traffic during the first quarter of 2010 and to postpone signposting of the recommended

route network for lorries until after the hearing. Read more at www.kk.dk/tungtrafik.

18. Generate new knowledge about pedestrian travel patterns, accessibility, congestion etc.

Data collected on pedestrian traffic and resident surveys of city life and pedestrians in 2009 form part of an international benchmarking project entitled "Making Walking Count". The first cities in the collaborative project are Copenhagen, London, Barcelona and New York. Pedestrian counts and observations of urban life will be conducted in 2010 and included in a set of Urban Accounts for 2010.

19. Publish an annual overview of developments in the field of traffic and the environment

The publication "Traffic in Copenhagen" is the City of Copenhagen's annual, overall summary and overview of developments and status in the field of traffic and the environment. This publication is the fifth edition.

20. Help clarify how congestion problems in the metropolitan region can be solved

On the basis of the Danish Association of Municipalities' report entitled "Congestion Charging in the Greater Copenhagen Area", the Danish Board of Technology arranged a consultation, at which one of the conclusions was that a vital contribution to solving the capital's road congestion problems could be made right now by introducing an automatic payment ring with the same technology as used in the BroBizz toll scheme or camera-operated numberplate recognition. And in the longer term the problems could best be solved by adopting a multi-pronged approach, e.g. both a satellite-based GPS system, including all cars and all roads, changes in taxes and rates, and investments in high-grade public transport as an alternative to the car. The government is currently working to introduce a national, GPS-based road pricing system, but for the time being its implementation has been deferred till 2018. To what extent the national system will remedy the capital region's traffic and environmental problems remains uncertain. Read more at www.traenssel.dk/upload/traenssel/dokumenter/congestion%20charging%20in%20gca.pdf

Traffic and Environmental Action Plan – 2004-2009 update

The preceding four pages give a progress report on the 20 areas of commitment described in the 2004 Traffic and Environmental Action Plan, focusing on developments in 2009. These two pages take stock of developments from 2004 to 2009.

1. Construction of missing cycle tracks and expansion of those under the most strain

The Cycle Track Priority Plan 2006-2016 is roughly being adhered to, and good headway is being made on the construction of new cycle tracks.

2. Creation of the cycling routes expected to handle most bicycle traffic

The Nørrebro Route has been substantially expanded, partly by creating the "Åbuen" bridge across Ågade. Another major improvement is the Bryggebroen Bridge, which routes bicycles and pedestrians across the harbour.

3. Work to create a Metro City Circle Line in collaboration with the government and the Municipality of Frederiksberg

The project has been adopted and construction work has begun around the city. The City Circle Line is due for completion in 2018.

4. Planning public transport in urban development areas

There is great focus on accessibility to public transport in connection with urban development projects. Specific projects include the development of Nordhavn and the Carlsberg area of Valby.

5. Improvement in bus manoeuvrability on key sections

Since the introduction of the A-bus network, the authority has worked to guarantee and improve manoeuvrability for these central bus lines. The initiatives include physical conversions of junctions and prioritization at the city's signalized intersections.

6. Improving traffic safety

Targeted work is in progress to improve traffic safety in the municipality; this is being done partly by converting junctions and sections as well as reducing the speed limit. From

2004 to 2009 the number of killed and seriously injured has fallen by 32% in the City of Copenhagen.

7. Work to influence Copenhageners' traffic habits

A number of initiatives have been implemented to market Copenhagen as the world's best cycling city. In addition, work is going on to promote environmentally friendly transport, and free chargers have been set up for electric cars at a number of points around the city.

8. Providing traffic management on the Copenhagen road network

The new road network plan from 2009 is an essential part of the basis for traffic planning in the authority, the overriding principle being to concentrate through-car traffic on the authority's regional roads and avoid through-traffic driving through urban areas.

9. Setting up 40 kph speed zones in local streets in all residential areas

40 kph speed zones have been introduced in a great many places in the city.

10. Work to construct a road link between Nordhavn and the Helsingør motorway

The project has been adopted, and an EIA carried out for two possible solutions. The final choice of solution was made by the City Council in April 2010.

11. Consider the possibilities of traffic-calming the Inner City

A strategy for developing the mediaeval centre was adopted in 2009. The main purpose of this strategy is to reinforce the identity and the urban spaces for the benefit of residents, commercial life and visitors.

12. Devise a new parking strategy

A "Restyled Parking Strategy" was adopted by Copenhagen's City Council in 2009.

13. Draw up local noise action plans and sound-insulate dwellings

By way of follow-up to the noise mapping conducted, a

noise action plan is being put together for the whole municipality in accordance with the Danish Executive Order on Noise.

14. Laying noise-deadening asphalt during maintenance works on noise-impacted sections

Since 2006 noise-reducing asphalt has been laid in connection with a large number of maintenance works on central sections in the city.

15. Creating an “Environmental Zone” in the inner half of the municipality

The Environmental Zone came into force on 1 September 2008 for the central part of the municipality and was extended on 1 November 2009 to include the whole of the municipal authority.

16. Active support for trialling and developing eco-friendly technologies

The City is supervising a project with environmentally sound vehicles, and the project includes both hydrogen and electric cars, which are being used around the municipality as part of its daily operations.

17. Draw up a heavy traffic strategy

In 2009 an overall heavy traffic strategy was adopted by the City Council. Among other things, its purpose is to handle heavy traffic in a traffic-safe, secure and environmentally correct way.

18. Generate new knowledge about pedestrian travel patterns, accessibility, congestion etc.

Pedestrian counts and observations of urban life have been conducted from 2008 and will be included in a set of Urban Accounts for 2010.

19. Publish an annual overview of developments in the field of traffic and the environment

The publication “Traffic in Copenhagen” is the City of Copenhagen’s annual, overall summary of developments and status in the field of traffic and the environment. This publication is the fifth edition.

20. Help clarify how congestion problems in the metropolitan region can be solved

Together with a number of other municipal authorities in the metropolitan region, the City of Copenhagen has for a number of years been looking into the possibilities of setting up a system with a payment ring.

Sources and references

Supplementary information and background data can be found at the City of Copenhagen and the public transport authorities:

<http://www.kk.dk/borger/byogtrafik> (Links to other publications about traffic from the City of Copenhagen)

<http://www.kk.dk/miljoe> (Facts about noise and air pollution)

<http://www.kk.dk/statistik> (General statistics about the City of Copenhagen)

<http://www.moviatrafik.dk/> (Facts about public transport in the metropolitan region)

<http://www.m.dk/> (Facts about the Metro)

<http://www.dsb.dk/> (Search for “Østtælling” (DSB’s annual census of passenger traffic east of the Great Belt))



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