# **URBAN LIFE ACCOUNTS**

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TRENDS IN COPENHAGEN'S URBAN LIFE 2010

### **2 MORE PEOPLE TO WALK**

95% of Copenhageners find it important or very important that their city offer a dynamic and varied urban life.\* A good urban life is an important fact for the quality of life for Copenhageners, and it is one of Copenhagen's advantages in the competition with other cities.

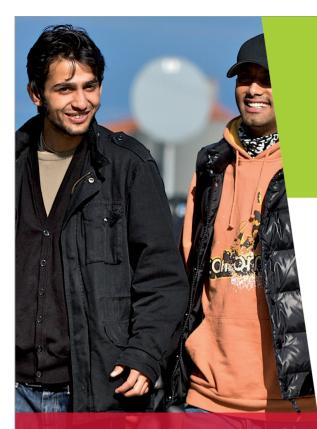
Therefore, Copenhagen has a vision of being a metropolis for people. A city with a diverse and unique urban life for all. We have set three goals for urban life in Copenhagen in 2015: More urban life for all, More people to walk more and More people to stay longer.

This booklet focuses on the second of the three goals: More people to walk more. The booklet presents a snapshot of where and how much Copenhageners walk, and when we choose to walk instead of taking the bicycle, the car or the bus. On this background we take stock of foot traffic in Copenhagen, on a general level, and describe some development trends.

\* Source: Catinét

#### COPENHAGEN TOGETHER

**CITY OF COPENHAGEN** The Technical and Environmental Administration



#### METHOD

The urban life accounts are based on figures from several studies, including counts and surveys of pedestrians and the recreational use of streets, city squares and parks, two polls carried out by Catinét, a poll carried out by Megafon, a study of transport habits carried out by the Technical University of Denmark and many other figures and statistics from the City of Copenhagen, Technical and Environmental Administration. Most of the figures are from 2010, although some date back to 2008 and 2009.

In cases where the statistical uncertainty is particularly pronounced, this is mentioned in a note.

Some of the raw data material is available on www.kk.dk. Here you will also find additional information about urban life in Copenhagen to supplement the stories that have been highlighted in this booklet.

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## 1. COPENHAGENERS ON FOOT



#### A GOOD CITY IS A CITY WHERE MANY PEOPLE WALK

Pedestrians contribute to a vibrant city. The more people walk, the more life there is in between the buildings, and that makes a city appealing. Green, beautiful and lively – but not noisy – streets and urban spaces encourage us to get around on foot. A city with many pedestrians is also a safe city. Schoolchildren walking on foot are an indication that the city feels safe.

Walking is simple, healthy and free. When we move through the city on foot, we are in touch with the physical environment through our body, and that provides familiarity, attachment and a sense of shared ownership. We can use our senses to explore our surroundings, meet other people and make eye contact. We can notice and explore new aspects of the city, and we can stop and pause when we encounter interesting people, places or events.

Copenhagen is involved in the international study WALK 21, which compares the walking habits in four cities. The other three cities are London, Barcelona and Canberra. The first results from the study are expected in 2011. You can read more about it at www.walk21.com.

#### 2015 GOAL

The goal for 2015 is to make Copenhageners walk 20% more than they did in 2010. The pedestrian strategy outlines ways of reaching that goal, which includes developing a pedestrian culture, creating pedestrian routes and meeting places, improving the shopping streets and upgrading the traffic hubs.

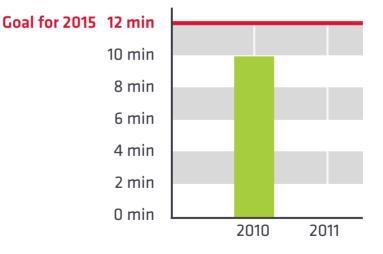
## **COPENHAGEN'S 2015 GOAL**

BY 2015 FOOT TRAFFIC HAS INCREASED BY 20% COMPARED WITH TODAY.

### **2010 STATUS**

IN 2010 THE AVERAGE COPENHAGENER WALKED FOR 9.86 MINUTES A DAY, NOT INCLUDING TRIPS THAT ALSO INCLUDE OTHER FORMS OF TRANSPORTATION.

THE OBJECTIVE FOR 2015 IS FOR COPENHAGENERS TO WALK FOR AN AVERAGE OF 12 MINUTES A DAY.



Source: DTU - Technological University of Denmark



### **2010 STATUS**

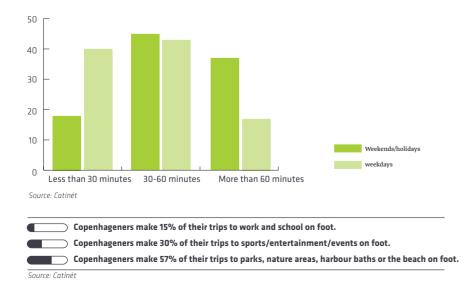
#### **COPENHAGENERS WALK MORE THAN THE AVERAGE DANE**

Copenhageners walk for 9.86 minutes a day, covering a distance of 0.93 km. That is two and a half minute and 240 metres more than the average Dane, who only walks for 7.37 minutes a day, the equivalent of 0.63 km. The figures represent trips that are made exclusively on foot.

	min/day	km/day
Copenhageners walk for	9,86 min/day	0,93 km/day
The average Dane walks for	7,37 min/day	0,63 km/day

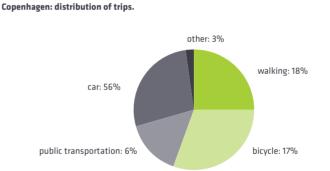
Source: study of transportation habits carried out by the Technological University of Denmark

### If we include walking to get to a bicycle, a car or a bus, 40% walk between 30 and 60 minutes every day.

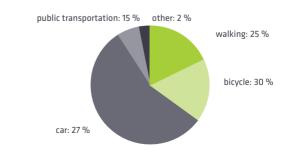


#### **EVERY FOURTH TRIP IS MADE ON FOOT**

On average, Copenhageners make 25% of all trips on foot, whether they are going to work or school, running an errand or attending a leisure activity. The preferred mode of transportation for Copenhageners is the bicycle, which is used for 30% of all trips, while 27% of the trips are made by car.



#### Denmark overall: distribution of trips.



Source: study of transportation habits carried out by the Technological University of Denmark



## 2. WHERE, WHEN AND WHY WE WALK



#### WHERE WE WALK

In June 2010 the City of Copenhagen did foot traffic counts for a whole day in 80 streets in the city. The count showed that inner city pedestrian streets have the largest volume of foot traffic. Of the Top 10 foot traffic streets, only two are not located in the inner city.

#### TOP 10 FOOT TRAFFIC STREETS IN COPENHAGEN BASED ON THE 2010 TRAFFIC COUNT

1.	Vimmelskaftet (middle section of Strøget)	3,128
2.	Frederiksberggade (western section of Strøget)	3,083
3.	Frederiksborggade (east of Nørre Voldgade)	2,974
4.	Østergade (eastern section of Strøget)	1,964
5.	Vesterbrogade (by Tivoli)	1,516
6.	Frederiksborggade (west of Nørre Voldgade)	1,490
7.	Nørrebrogade (by Nørrebro Station)	1,367
8.	Fiolstræde	913
9.	Nyhavn	898
10.	Kay Fiskers Plads (by Field's)	873
12.	Østerbrogade (by Trianglen)	818
13.	Jernbane Allé	771
And furthe	r down the list	
26.	Flintholm Station	514
28.	Nordre Frihavnsgade	501
30.	Amagerbrogade (by Hollænderdybet)	473
33.	lstedgade (by Gasværksvej)	455
37.	Blågårdsgade	369
44.	Valby Langgade	165
45.	Emil Holms Kanal	120
49.	Sluseholmen	97



#### THE INNER CITT HAS BECOME ONE BIG PEDESTRIAN ZONE

Historically, the inner city of Copenhagen has developed from an area where all types of traffic could go everywhere to being increasingly off-limits to cars and motorcycles and in some cases also bicycles. Since the first pedestrian street, Strøget, was established in 1962, a growing number of streets and squares have been transformed to improve conditions for pedestrians in particular by providing a safe environment with little noise. Parking spaces in city squares have been replaced with benches and outdoor seating for cafés and restaurants. And asphalt has been replaced with granite and other stone surfaces, signalling that pedestrians have the right of way.

Over the years, the inner city has become increasingly pedestrian-friendly through decades of efforts to improve streets and squares. Now the focus has shifted to the Vesterbro, Nørrebro and Østerbro and the outer districts. Integrated Urban Renewal projects and awareness of the importance of shopping streets for urban life are key aspects in the efforts to improve conditions for pedestrians.

The Royal Danish Academy of Fine Arts, School of Architecture has documented the historical development of Copenhagen's inner city, including the growing area reserved for pedestrians over time and the number of pedestrians who use specific streets and squares in the city.

#### THE GRADUAL DEVELOPMENT IN THE SIZE OF PEDESTRIAN AREAS IN COPENHAGEN'S INNER CITY FROM 1962 TO 2005



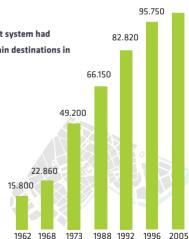
First pedestrian street 1962, 15,800 m2.



In 1973 the expansion of the pedestrian street system had reached a point where it connected all the main destinations in the city centre, 49,200 m2.



In 2005, the network of streets and squares that were off-limits to cars reached 99,770 m2.



The bar chart illustrates the development of pedestrian areas in m2 in Copenhagen's inner city from 1962 until 2005.

Illustration: Gehl Architects

99.770



#### WHEN WE WALK

If we look at the traffic pattern for the main shopping streets it is clear that pedestrians are distributed more evenly over the course of the day than bicyclists and motorists. An example from Amagerbrogade, where we counted pedestrians throughout 2010 clearly reveals the differences.

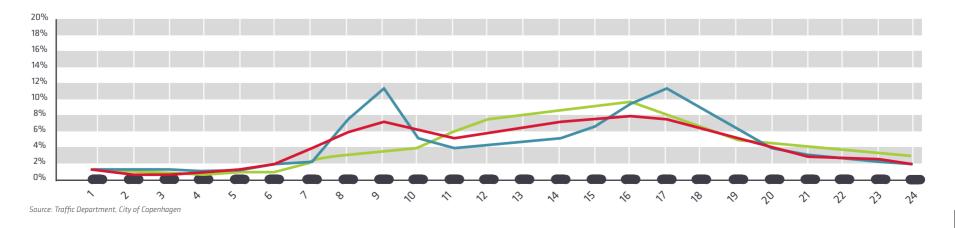
The differences in the time pattern for pedestrians and other groups reveal that there is no rush hour for foot traffic. While the number of cars and bicycles clearly peaks around 9 a.m. and 5 p.m., the intensity of foot traffic increases gradually throughout the morning and the afternoon. This pattern matches the findings in a poll which found that many Copenhageners walk simply to get some fresh air or do some window-shopping, not just to get to and from work. In comparison with bicycle rides and car trips, walks are mainly recreational and unrushed.

#### 24-HOUR CYCLE FOR PEDESTRIANS, BICYCLISTS AND DRIVERS

Pedestrians

Drivers

Bicyclists





#### WHY WE WALK

Most trips involve some amount of walking. If the person does not walk all the way, he or she typically walks to and from the car, the bicycle or the bus stop.

Only 15% of Copenhageners walk all the way to and from work, but feet are the preferred mode of transportation for going to the park, walking the dog, exercising, going to the market or grocery shopping. If we go to a restaurant or a café, we are just as likely to take the bicycle. And we walk with our children. Copenhageners are almost four times more likely to walk to the playground than to take the bicycle, while trips to school are mostly made on bicycle, with walking as a close second.

Thus, there is a clear pattern where walking is closely associated with leisure activities, exercise, recreation and everyday errands. The main reason why Copenhageners prefer walking is that we like being outdoors. We walk to get some fresh air.

When we ask Copenhageners why they sometimes choose to bike or drive instead of walking, some of the most common answers are that it is hard to carry groceries, or that walking takes too long. When asked what might encourage them to walk more, most people say that a clean, green urban environment is the main motivator; this underscores the impression that walks are mainly a recreational activity. COPENHAGENERS' TOP 5 REASONS FOR WALKING RATHER THAN USING OTHER FORMS OF TRANSPORTATION

- 1. Because I enjoy being outdoors (70%)
- Because I like to look around and enjoy the environment (nature, buildings, particular areas, etc.) (69%)
- 3. Because exercise is good for me (68%)
- Because I find it relaxing (for example a break from stress at work, stress at home, psychological problems, etc.) (56%)
- 5. Because it is more convenient (44%)

#### COPENHAGENERS' TOP 5 PERSONAL REA-SONS FOR NOT WALKING

- 1. I prefer biking (33%)
- 2. I find it difficult to carry groceries etc. (29%)
- 3. It takes too long (18%)
- 4. I am usually in too much of hurry (16%)
- 5. I am lazy (6%)

The lists have a certain statistical uncertainty. Source: Catinét





#### COPENHAGENERS' TOP 5 ENVIRONMENTAL REASONS FOR NOT WALKING

- 1. Too much traffic (17%)
- 2. The area is filthy/not inviting for walks (14%)
- 3. Too much air pollution (12%)
- 4. The pavements are too uneven (12%)
- 5. The area is poorly lit (11%)

#### TOP 5 FACTORS THAT WOULD MAKE COPENHAGENERS WALK MORE

- 1. More green routes and foot paths (61%)
- 2. Greener environment (60%)
- 3. If the city were cleaner (49%)
- 4. Improved air quality (48%)
- 5. If the city were generally better suited for pedestrians (45%)

The lists have a certain statistical uncertainty. Source: Catinét







#### LOCAL VARIATIONS IN REASONS FOR NOT WALKING

Figures from the various neighbourhoods in Copenhagen suggest that there is considerable variation between the neighbourhoods in reasons for not walking. Narrow pavements are a problem in Nørrebro in particular, while the residents on eastern Amager are more likely than other Copenhageners to avoid walking because of poor lighting.



#### SATISFACTION WITH PAVEMENTS AND SNOW CLEARING

There are local variations in the residents' satisfaction with the state of the pavements in various neighbourhoods. Eastern Amager has the highest share of residents who are satisfied with the maintenance of the pavements. In a poll, 78% of the residents on eastern Amager said that they were somewhat or very satisfied. At 61%, Vanløse has the lowest share of residents who are satisfied with pavement maintenance.

Nørrebro has the largest share of people who are satisfied with snow clearing and salting of local pedestrian streets and squares. Here, 76% say that they are somewhat or very satisfied. The lowest rating is found in Bispebjerg, where only 64% are satisfied with snow clearing and salting of pedestrian streets and squares.

### NEIGHBOURHOODS WITH THE HIGHEST AND LOWEST SATISFACTION RATINGS

🛞 Highest satisfaction: 😕 Lowest satisfaction:		
How satisfied are you with pavement		
maintenance?	Amager Øst	Vanløse
How satisfied are you with snow clearing		
and salting of pedestrian streets and squares?	Nørrebro	Bispebjerg

Source: Megafon



## 3. MAIN SHOPPING STREETS



#### MAIN SHOPPING STREETS

The most intense foot traffic is found in Copenhagen's inner city pedestrian streets. But all districts have busy streets, and the main shopping streets in particular attract many pedestrians. There are eleven main shopping streets in Copenhagen, located in Vesterbro, Nørrebro and Østerbro and the outer districts. Bispebjerg is the only district in Copenhagen that does not have a major shopping street.

The shopping streets have a concentration of shops, cafés, restaurants and other attractions. Most of them have a high volume of all sorts of traffic. The shopping streets are some of the most important everyday urban spaces, which many Copenhageners visit often.

Copenhagen has an ambition of upgrading the main shopping streets, including improving conditions for pedestrians. Wider pavements with quality paving are one element. Copenhagen's Municipal Plan has identified eleven streets as main shopping streets. These streets are found both in the inner and outer districts.

#### NUMBER OF PEDESTRIANS IN THE MAIN SHOPPING STREETS PER HOUR

Torvegade (Christianshavn)	907
Nørrebrogade	794
Jernbane Allé	771
Østerbrogade	602
Nordre Frihavnsgade	501
Istedgade	493
Amagerbrogade	428
Frederikssundsvej	331
Borgbjergsvej	303
Holmbladsgade	289
Valby Langgade	165

Based on a foot traffic count in all Copenhagen's main shopping streets in June 2010. The figure refers to number of pedestrians per hour. In some of the streets, counts were carried out in several locations; in these cases the figures represent an average. For example, there are 1,367 pedestrians an hour in Nørrebrogade by Nørrebro Station but only 442 in the same street by Assistens Cernetery. In Nørrebrogade, traffic counts were carried out in four locations, and the average is 794 pedestrians an hour.

Source: Traffic Department, City of Copenhagen

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None

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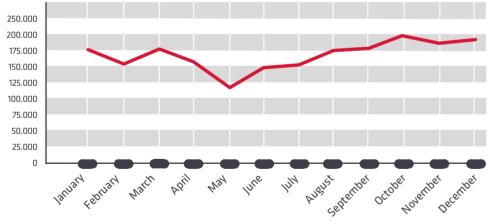
Frederikssundsvej



#### WE WALK MORE IN THE MAIN SHOPPING STREETS IN AUTUMN

One might think that Copenhageners would pour out into the shopping streets to go shopping when the sun comes out in spring and summer. But in fact, May and June are the two months of the year that have the lowest number of pedestrians, according to a whole-year count in Amagerbrogade. Instead, the number of pedestrians in the shopping streets peaks in October, November and December.

#### VARIATION OVER THE YEAR IN FOOT TRAFFIC IN AMAGERBROGADE IN 2010

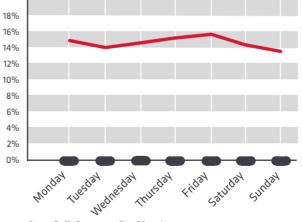


Source: Traffic Department, City of Copenhagen

#### WE WALK MORE IN THE MAIN SHOPPING STREETS ON FRIDAYS

Copenhageners tend to walk more in the main shopping streets on Mondays, Thursdays and Fridays. Throughout 2010, traffic counts were carried out in several locations in Amagerbrogade, and the graph below represents an average over the year. Whether the pattern from the shopping street matches pedestrian habits in other types of streets, such as local streets, we do not know. The distribution across the week may be related to shopping and errands and, for example, the longer business hours in banks and stores on Thursdays and Fridays.

### VARIATION OVER THE WEEK IN FOOT TRAFFIC IN AMAGERBROGADE IN 2010



Source: Traffic Department, City of Copenhagen



#### GENDER DIFFERENCES IN PERCEIVED SAFETY:



MEN

### I WORRY ABOUT BECOMING A VICTIM OF CRIME AFTER DARK:



## 4. SAFETY FOR ALL PEDESTRIANS



#### **PEDESTRIAN SAFETY**

Pedestrians in Copenhagen generally feel safe in their local areas and in the city as a whole. But there are major variations in perceived safety in the daytime versus night-time and in men's and women's respective sense of safety.

One safety aspect is traffic-related, another with people's general sense of safety when walking in the city.

#### **PERCEIVED SAFETY**

In a poll, 78% of Copenhageners responded that they were satisfied with conditions for pedestrians in their local area, while 9% said that they were unsatisfied, and 14% said neither/nor.

45% said that there is too much traffic in their local area, 23% do not feel safe crossing the street in their local area, and 9% are worried about becoming a victim of crime during the daytime.

Generally, however, Copenhageners feel fairly safe in the city. 74% generally feel safe outdoors after dark, while 80% feel safe crossing the street in the dark.

Feel safe crossing the street in the daytime	76.5%	
Feel safe crossing the street at night-time	80%	
Feel safe in the city after dark	74%	
Feel safe in the city during the daytime	89.8%	
Lighting makes it feel safer to travel outdoors	90%	

Source: Catinét, Megafon

WOMEN



#### PARENTS PREFER TO WALK THEIR CHILDREN TO SCHOOL

Most schoolchildren in Copenhagen are walked to and from school by their parents. Copenhagen parents feel that walking with their child is the safest way to get to and from school, and as long as the school is less than 500 metres away from home, accompanied walking is the most common form of travel.

When the children live one to two km away from their school, the bicycle is the most common form of transportation for parents and children living in Copenhagen. If the school is more than two km away, the children are usually driven to school. The car is perceived as the second-safest form of transportation after walking the child to school.

### COPENHAGEN PARENTS' PERCEPTIONS OF THE SAFETY OF VARIOUS WAYS OF GETTING TO SCHOOL

Walking (parents and children walking together)	4,55	
Car	4,27	
Bicycle (child's seat on the bicycle, carrier cycle, trailer) )	4,12	
Bus	3,92	
Bicycle (riding together on separate bicycles)	3,91	
Train/metro	3,82	
Walking (children walking on their own)	3,44	
Bicycle (children riding on their own)	2,70	

The respondents rated safety on a scale from 0 to 5, with 5 as absolute safety. Source: Optimizers.



#### STREETS WITH MORE MALE THAN FEMALE PEDESTRIANS:



MEN

ISTEDGADE: 16% MORE MALE THAN FEMALE PEDESTRIANS (DAYTIME) NYHAVN: 21% MORE MALE THAN FEMALE PEDESTRIANS (NIGHT-TIME)

Source: Catinét

#### WOMEN'S STREETS AND MEN'S STREETS

More women than men walk in Copenhagen. In the manual pedestrian count in all Copenhagen neighbourhoods in 2010, 49% pedestrians were women, 42% were men, and the rest were children. But men and women do not walk in the same areas. In some streets, one gender is so over-represented that they can almost be classified as women's streets and men's streets.

The largest share of men was found in Istedgade during the daytime from 7 a.m. to 7 p.m. The count found 16% more male than female pedestrians. During that same time, a traffic count found 15% more male than female pedestrians in Kalvebod Brygge, and 8% more male than female pedestrians in Nørrebrogade by Assistens Cemetery.

On the other hand, there were 22% more female pedestrians than male in Frederiksborggade, east of Nørre Voldgade, and 22% more in Jernbane Allé by Vanløse Station. Vesterbrogade by Westend also had a considerable over-representation of women with 19% more women than men, while there were 17% more women at Trianglen in Østerbro and 17% more in Frederikssundsvej by Husum Torv.

In the night-time there are generally more male than female pedestrians in Copenhagen. The largest gender differences in the time span from 8 p.m. to midnight is found in Nyhavn, where there are 21% more male than female pedestrians, in Strøget, which has 17% more men, and in Vesterbrogade by Scala, which has 17% more male than female pedestrians.





FREDERIKSBORGGADE: 22% MORE FEMALE THAN MALE PEDESTRIANS (DAYTIME)

VESTERBROGADE: 19% MORE FEMALE THAN MALE PEDESTRIANS (DAYTIME)

WOMEN MEN

Source: Catinét

#### **URBAN LIFE ACCOUNTS**

- Trends in Copenhagen's urban life 2010

URBAN LIFE ACCOUNTS 2010 are the first of their kind in Copenhagen. The purpose of the accounts is to measure the quality of and satisfaction with urban life in Copenhagen. The City of Copenhagen is currently pursuing strategies and efforts to improve urban life.

The urban life accounts were prepared by Technical and Environmental Administration, City of Copenhagen

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Copenhagen 2011 www.kk.dk

