Copenhagen - Capital of Denmark

500,000 inhabitants
Total area 88 km²
5,700 inhabitants/km²
Humanizing our cities?
Transportation policy is about our precious mobility!

But it is also about humanizing our cities:

- public health
- individual well being
- feeling of safety
- money spent and time wasted
- liveable environments and modern lifestyle
Building Strategies

Eco-Metropolis

- Centre for world climate policy
- World’s best city for cycling
- A green and blue capital city
- A clean and healthy major city

A Metropolis for People

- More urban lifestyles for all
- More people walk more
- More people staying longer
Our Concrete 2015 Goals

- In Copenhagen at least 50% of people will travel to their workplace or educational institution by bike.
- The number of seriously injured cyclists will drop by more than half compared to today.
- At least 80% of Copenhagen cyclists will feel safe and secure in vehicle traffic.
- By 2015, 80% of Copenhageners will be satisfied with the opportunities they have for taking part in urban life.
- By 2015, the amount of pedestrian traffic will be 20% more than pedestrian mode share today.
- By 2015, Copenhageners will spend 20% more time in urban spaces than they do today.
Copenhagen Modal Split - All Trips

- Cycling and Walking: 59%
- Single Occupancy Vehicle: 21%
- Bus: 5%
- Train and Metro: 8%
- Other Modes: 4%
- Ride-Sharing: 3%

Niels Tørslev
City of Copenhagen
Cycling - A Lifestyle Choice
Traffic Development

Car traffic is increasing 2% a year – mostly from trips crossing the city boundary - but is decreasing in the centre of the city …

Exactly the opposite for bikes!
Traffic Policy In Short..

More:
- Bikes
- Metro
- Bus priority
- Restrictions on private cars

Less:
- Air-pollution
- Accidents
- Noise
- CO₂ emissions
Parking Strategy

Paid parking zones:
- Red  $5 USD/h
- Green $3 USD/h
- Blue  $2 USD/h

Residents 30 USD/year

3,000 new parking places to be constructed in residential areas
Low Emission Zone

Mandatory particle filter for heavy vehicles older than 7 years
(4 years in 2010)
Charging Congestion Proposal

**Pricing:**
- 1.5 Euro per passage
- 3.0 Euro during rush hour
- Free at night

**Effect:** 20% less car traffic
Restrictions on Heavy Trucks

The proposed zone failed.

New solutions?
Re-designing Main Street

"Nørrebrogade"

Niels Tørsløv
City of Copenhagen

Cycling - A Lifestyle Choice
Re-Designing Main Street  "Nørrebrogade"

Niels Tørsløv  
City of Copenhagen

Cycling - A Lifestyle Choice
Traffic Experiment  "Nørrebrogade"

Niels Tørsløv
City of Copenhagen

Cycling - A Lifestyle Choice
Traffic Experiment

"Nørrebrogade"
New Urban Developments
Northern Harbour Development
New Development - Marmormolen
Nordhavnsvej
Developing Infrastructure
Cycle Traffic

1.15 million km cycled every day

36% are arriving at work or school on bikes

60% of Copenhagener are choosing their bike on all trips
Cycle Traffic

50% cycle up to 50 kilometres a week

15% cycle over 100 kilometres a week

60% use their bike every day

85% own a bike
Cycling Safety

92 seriously injured or killed cyclists a year - reduced from 231 in 1995!

Niels Tørsløv
City of Copenhagen

Cycling - A Lifestyle Choice
Cyclists’ Feeling of Safety

Sense of safety is decreasing
57% because of cars
45% because of other cyclist
23% because of buses
Why do Copenhageners cycle?

- Easy and fast 54%
- Excercise 19%
- Financial reasons 6%
- Convenience 7%
- Environment 1%
World’s Best City for Cycling - Our Goals for 2015

- 50% cycle mode-share of commuting (36% today)
- 50% fewer serious injuries to cyclists
- 50% higher sense of safety
Investing

$10-20 million USD annually on new investments:

- New connections
- New cycle lanes
- New cycle tracks
- New green cycle routes
- Other projects
From the ”Urban Planning Tool Box”

• the ”station near” location principle

• developer agreements on infrastructure

• the early stage layout of cycling infrastructure

• mandatory bicycle parking facilities in new developments

  • housing 2,5 parking place per 100 m2
  • workplaces 1,5 parking place per 100m2
  • shops 3 parling places per 100m2
  • educational 0,5 parking places per student
Political Reasons

Less congestion
Better environment
Improved health
Easy to achieve results
Cheap and visible effects
Public opinion?

Niels Tørsløv
City of Copenhagen

Cycling - A Lifestyle Choice
Cycling map + route planner (coming up)
Green Cycle Routes
Green Cycle Routes
Cycle Route Crossing Arterial Road
Safety Redesigning Crossings
Safety: Blue Crossings
Safety

Set Back Stop Line
"Green Wave" Through Traffic Lights
Health Effects 1

The "Traffitec" Study:

Physically active individuals live 5 years longer than inactive individuals.

Active individuals have 4 fewer years of severe illness than inactive individuals.

Only 39% of adult Copenhageners live up to the Board of Health’s recommended 30 minutes of daily exercise.

Niels Tørsløv
City of Copenhagen

Cycling - A Lifestyle Choice
Health Effects 2

The "Traffitec" Study:

New cycle tracks on one kilometer of roadway results in 20% increase of cyclists and 10% fewer cars.

Watch out for safe design - this study showed 10% negative results on safety!
Health effects 3

With a 10% increase in kilometers cycled:

- Healthcare saves $10 million USD annually
- Businesses save $28 million USD due to increased productivity
- The labour market will have 57,000 more workdays
- 61,000 extra years of life
- 46,000 fewer years of prolonged severe illness
- 25 fewer early retirements
Health Effects 4

“One extra kilometer cycled gives an average gain in health- and production-related benefits of more than 5 DKK.”

(COWI)
Health effects

Statements from survey by

Professor Dr. Med. Lars Bo Andersen, Syddansk Universitet:

*children that cycles to school has 10% better physical condition*

*children that starts cycling at 9 years of age - still has almost 10% better physical condition*

*Adults that cycles to work - or every day - has 30% lower mortality rate*
Climate change ...

90,000 Tons CO2 saved annually compared to the same number of kilometers by car.
Public Involvement
Campaigning - Face to Face
Campaigning "Use Your Head"

BRUG HOVEDET

- sænk farten, se op og se til venstre, når du er på vej ud i et kryds!
- tænd lygterne og bliv set af bilisterne, når du cykler i mørke!
- pas på biler, der svinger ud af rundkørslen og drejer mod højre!
- vis ansvar og vær det gode eksempel for børnene på cykelstien!
- hold afstand og ring hellere for meget end for lidt med hviden!
- spænd cykelhjelmen og få 40% større chance for at overleve uheld!

Brug hovedet, hvis du ikke vil med i statistikken!
Er det blikken eller dig på cykel, som skal lære at bruge hovedet?
Giv din mening til kende og se. I hvilke af tyveres værksted du skal bruge hovedet ekstra meget, når du cykler:
WWW.BRUGHOVEDET.NU

Hovedløs cykling trorådes
Campaigning "Biking to Work"
Campaigning ”Biking to Work”
Campaigning

European Mobility Week

Niels Tørslev  
City of Copenhagen

Cycling - A Lifestyle Choice
Campaigning “The Cycle Bus”
Campaigning “I Bike Copenhagen”
Campaigning Merchandise
Campaigning Partnership (Reelight + DTL)
Campaigning
Monitoring and Measuring

Accounting for Bicycles

- Every 2nd year
- Key figures
- Policy target figures
- What cyclists think

Copenhagen • City of Cyclists

Bicycle Account • 2006

Niels Tørsløv
City of Copenhagen

Cycling - A Lifestyle Choice
Monitoring and Measuring

### Overview 1995 - 2006

#### What cyclists think
Cyclists are asked how they rate various cycling facilities in Copenhagen. Their ratings are converted into a point system depicted graphically as 10 little cyclists. The more little cyclists, the better the rating. A rating of 10% satisfied cyclists is depicted as one little cyclist. The survey is based on 561 telephone interviews with cyclists.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Copenhagen as a city of cyclists</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Cyclist sense of safety</td>
<td>5</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Amount of cycle tracks</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>7</td>
<td>6</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Cycle track width</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Cycle track maintenance</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td>Road maintenance</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Cycle parking generally</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Feasibility of combining cycling/public transport</td>
<td>6</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>
Monitoring and Measuring

### Overview 1995 - 2006

#### What cyclists think
Cyclists are asked how they rate various cycling facilities in Copenhagen. Their ratings are converted into a point system depicted graphically as 10 little cyclists: The more little cyclists, the better the rating. A rating of 10% satisfied cyclists is depicted as one little cyclist. The survey is based on 561 telephone interviews with cyclists.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Copenhagen as a city of cyclists</td>
<td>+8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Cyclist sense of safety</td>
<td>5</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Amount of cycle tracks</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>7</td>
<td>6</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Cycle track width</td>
<td>-5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Cycle track maintenance</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td>Road maintenance</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Cycle parking generally</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Feasibility of combining cycling/public transport</td>
<td>-6</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>
www.velo-city2010.com (website launch next week)
Lifestyle
Du får ikke en fød til jorden