

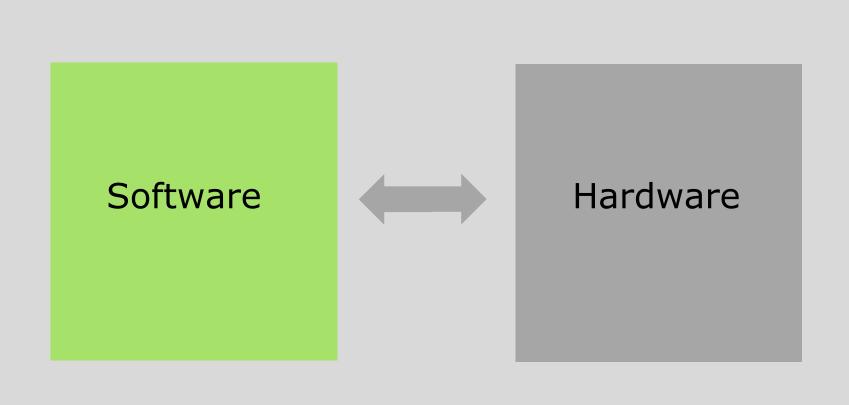
1. Kontoret og København

2. Mexico City

3. New York

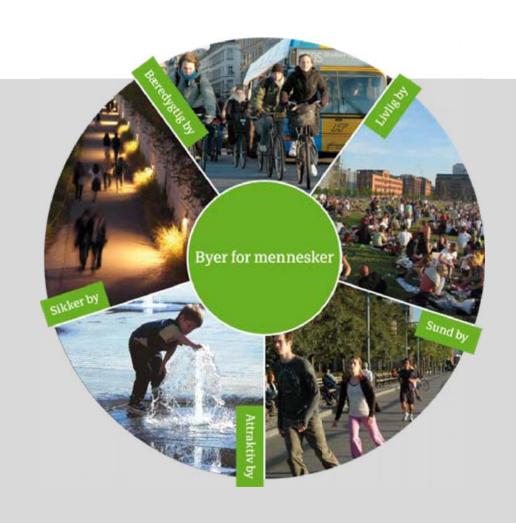
Fysisk utformning Kultur





Vores filosofi

Gehl Architects arbejdet med at skabe livlig, bæredygtig, attraktiv, sikre og sunde byer med henblik på at forbedre folks livskvalitet



Kontoret



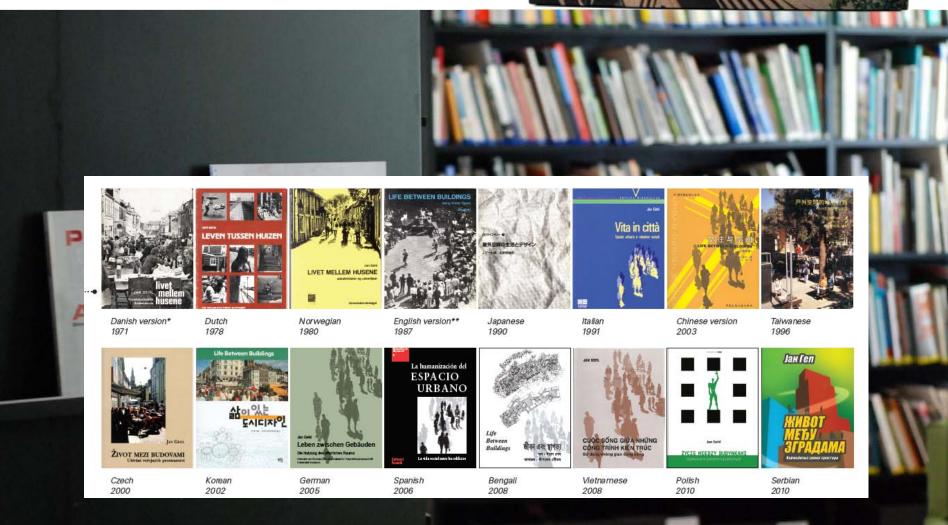






Fundamentet er bøker og forskning





Våres metode: Menneskets adferd og behov studeres og kartlegges







Rådhuspladsen

- fra en isolerede ø til byens hjerte





"Skilpadde prosessen"

The gradual development of pedestrian areas in the heart of Copenhagen from 1962 - 2005.



First pedestrian promenade in 1962: 15,800 m²

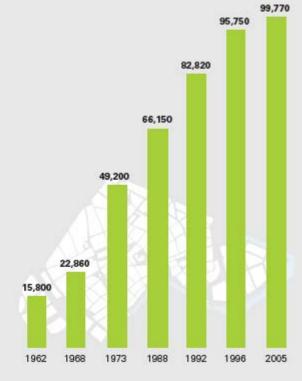


By 1973, the network of pedestrian streets connected the most important locations in the city centre: 49,200 m²



The network of car-free streets and squares in 2005: 99,770 m² Copenhagen / Public spaces - Public life / 1996





The graph shows the development of pedestrian areas in the parts of the inner city where studies have been conducted from 1968-2005. The numbers indicate m²

Hvor 25% av alle 2-barns-familiene har en ladesykkel

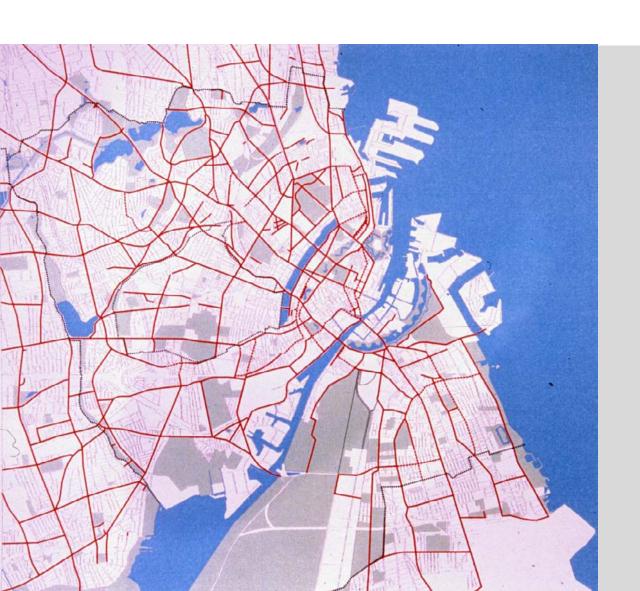


70% fortsetter å sykle om vinteren



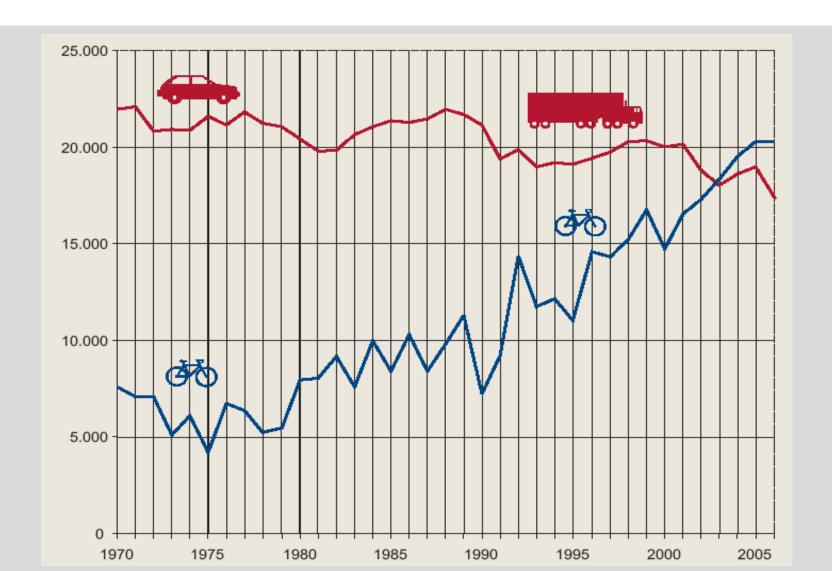
Hvor man måker sykkelstiene først





Flere sykler enn biler i morgen trafikken

38% sykler til arbejde/utdannelse Målsetning: **50**%



? » V Y b \ UNjørbrebrogade Pilot prosjekt



København som inspirasjon

Borgermester Marcelo Ebrard og Miljøborgemester Martha Delgado med team besøker København





Sykkelprosjekt fase 0.0



Sykkelprosjektet del av en plan for å avhjelpe byens enorme problemer

The San Diego U **(**♠ SAVE THIS **(**□ EMAIL THIS **(**€

Mexico is second-fatt U.S.

Where hunger once prevailed, death

By Franco Ordonez MCT NEWS SERVICE

March 24, 2008

MEXICO CITY - Fueled by the rising food restaurants, Mexico has become world. Mexican health officials say it the most obese country within 10 year

More than 71 percent of Mexican wor men are overweight, according to the

With diabetes now Mexico's leading cause of death, activists and leaders hope to renew efforts to crack down on



eople In Mexico City Losing Their Sense of Smell. Produced by the EMBARQ Network

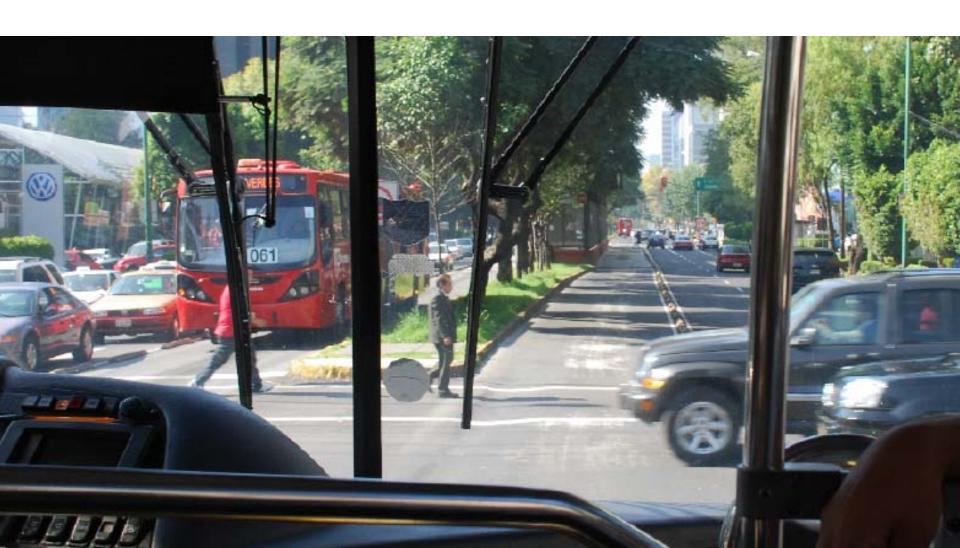
Rhys Thom and I recently visited Mexico City where we met with two researchers at UN National University – who are doing some fascinating research. Robyn Hudson, a cha-

26 fotgjengere

gjennomsnitlig drep hver dag i indre by



Gjennomsnittelig transport tid er 2,5 t hver dag



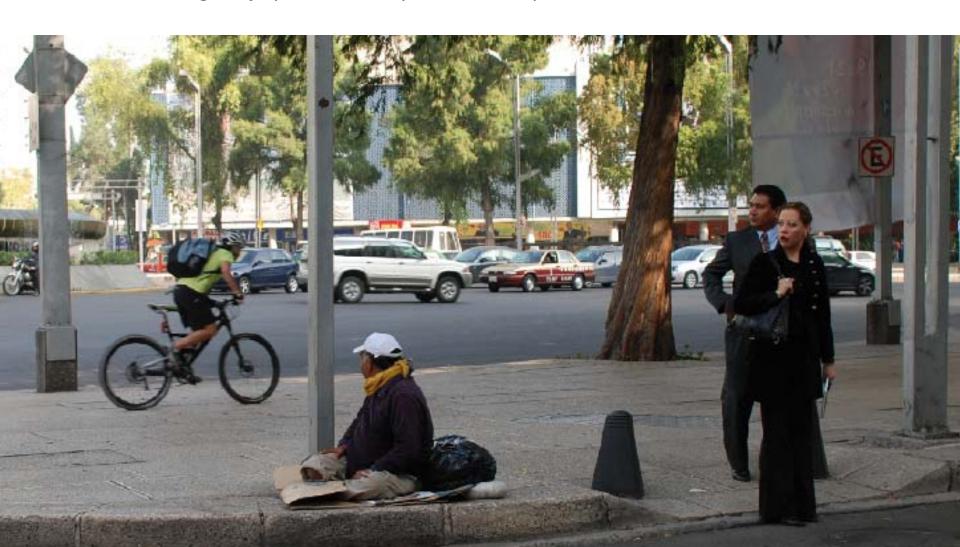
Sykling er den hurtigste form for transport i rushtiden med 12km/t

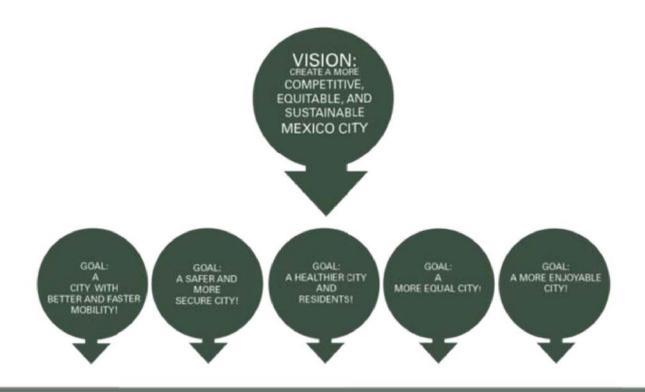


Gehl Architects hyret av kommunen (SMA) og det lokale universitet (UNAM)for å utvikle en sykkelstrategi i 2008



Våres utgangspunkt var at det var mye mere enn en sykkelprosjekt, vi øsnekt at skape en katalysator til å forbedre byens rum for alle og avhjelpe noen av byens enorme problemer





CREATE A BICYCLE CULTURE IN MEXICO CITY

INTEGRATION STRATEGY: Create integration between

public transportation and bicycles

NETWORK STRATEGY:

Create a city wide infrastructure for bicycles with a physical network

ACCESS STRATEGY: Create access to

bicycles

CULTURE STRATEGY:

Create awareness and skills







Ønske om en Mexico City model som bygget på internasjonal best practice.....



.....og lokale kondisjoner



Et system- for hele byen....



...som over tid kan vokse sammen til et helhetlig system



Modellen var kvalitetsbasert

Integrated!

Safe!

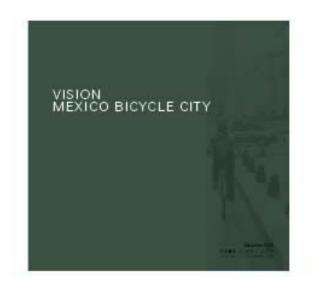
Comfortable!

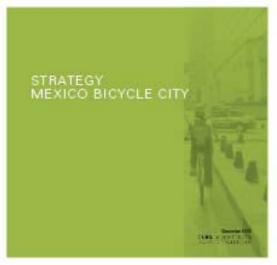
Enjoyable!

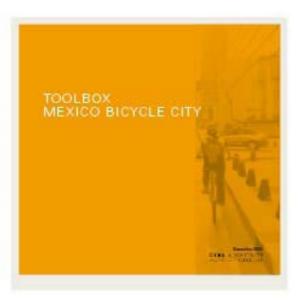
INTEGRATION WITH THE NETWORK INTEGRATION WITH STREETS AND INTEGRATED BICYCLE PARKING **PUBLIC SPACES** CONNECTED DESTINATIONS STREETS . Linked up with key destinations at city . Bloyde parking is integrated at key level and/or at local level. · Creating a more well-belanced street. destinations, public transport nodes and in . Giving easy acces to public transport giving place for all traffic modes. public spaces · Possible to bring bloydes along on PUBLIC SPACES ALONG ROUTES public transport and at taxis. . Integrated in public spaces and pades-· Bicycle parking is provided along along . Connecting to other bicycle lanes and trian priorly streets. . Integrated with the pedestrian network PROTECTION A GAINST PROTECTION AGAINST PROTECTION AGAINST UNPLEASANT TRAFFIC ACCIDENTS CRIME AND VIOLENCE SENSORY EXPERIENCES PHYSICALLY SEPARATED 24 HOUR LANES . Clearly defined protected space for cyclists. · Alternative routes through populated/ · Pollution/Furnes . Cars are prevented from intruding the mixed use areas are always offered at Noisa bloyde lane. CLIMATE PERSONAL SAFETY . Encourage use of bloyde helmet and . Well lit lanes, crosses and parking. · Wind / Draft light on the bicycle. . Rain / Flood ON SUBFACE . Cold / Heat . Routes at street level 99% of the time. ON THE 'RIGHT SIDE . Dusy Glare Tunnels and bridges are avoided. . One directional bioyole lanes placed to the 'right' from cars when integrated in streets with motor traffic. . Bloyde parking has supervision, good OVERNEW, CONTACT & VISIBILITY overview and no dead ends.

Possibility for locking the bike safely. . Good overview is provided in crosses and along roads . Physical and visual contact between vehicles and bicycles. . Bioyolists are clearly visible for cars and public transport. . Bloycle lanes are lit at night time. COMFORTABLE TO CYCLE EASY TO FIND & UNDERSTAND COMFORTABLE TO STOP CONSISTENCY Routes are direct and allow for travelling with high speed. . Consistent physical layout - lanes, . Parking located on the way to and close to destinations. crosses and signage. CONTINUITY . Continous lanas without interruptions or . Resting and drinking opportunities along . Legible way-finding. obstanias. . Bioydie lanes, bioyole parking and WIDTH
* Room for cyclets to overtake. related program are easy to operate and understand. . Room for different types of bloydes. . Smooth comfortable surface. . Good water drainage. . Trees give comfortable shade along lanes. ENJOYING OTHER PEOPLE ENJOYING THE SURROUNDINGS **ENJOYING SENSORY EXPERIENCES** VARIATION & BEAUTY **HUMAN SCALE** · Varied surroundings along route. . Room for cyclets to go side by side. . Dimensions of streets, lanes and spaces related to human sences, movements, . Rich flora, nature and landscape and/or attractive, vibrant urban areas. size and behavior. . Routes through areas with city life. · Art and vegetation along route. . Quality design, fine detailing, robust . Unhindered views allowing the cyclists to experience human activities along the . Positive aspects of climate (sun / shade, wermth / copiness, breeze / ventilation). . Invitations to stop and take part in TALK HEAR activities along the route. . Interesting views / vistas. . Sloydle lanes enable to communicatie while cycling. . Unhindered views.

Målrettet kommunikasjon

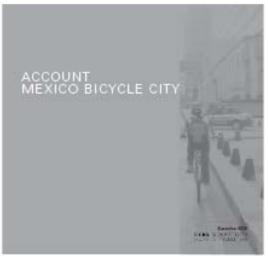












TOOLBOX MEXICO BICYCLE CITY





A COMFORTABLE STREET

COMFORTABLE AND SAFE WIDTH OF THE PATH

The width of the bicycle path determines both flow, risk of conflict, and user profiles. Generous width is important to create a comfortable cycling experience.

- Narrow bicycle paths make overtaking difficult and are stressful for the cyclists.
- Narrow bicycle paths increase the risk of accidents among cyclists, or cyclists accidentally being pushed into the traffic.
- Wide bicycle paths give cyclists a comfortable safety margin and increase the pleasure of riding.
- Safety and comfort are closely linked. A safe and comfortable cycling environment is important to attract cautious cyclists, the young, old, and women.

STANDARD BICYCLE PATH WIDTH

Bicycle paths of minimum 220 cm width that make it possible for two cyclists to keep up a conversation, thereby increasing the social pleasure of cycling. If a third cyclist should be able to overtake them, the width must be 280 cm.

POSSIBILITY FOR OVERTAKING

Sometimes the standard is not possible, then the 190 cm. option could be considered, after making car lanes to the minimum. To safely overtake another bloycle, a bloycle path should have a minimum width of 190 cm. Thoycles are the lorries of cycling and need extra wide cycle paths not to block the bloycle-traffic. They can carry both goods and people and should be accommodated well into the bloycle-environment.

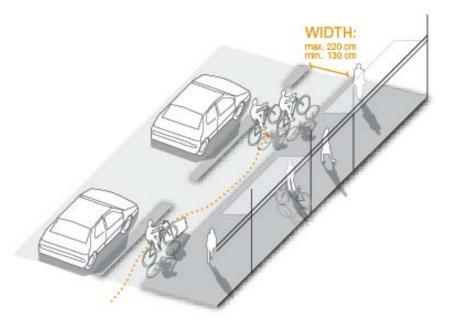
EXCEPTIONS- MINIMAL VERSION

At some points narrow passages will occur, but it is still better to have narrow bike paths than none at all. The connection of the network is be prioritized over having a perfect bicycle path at 190-220 cm. Therefor when there is only space enough for a very narrow path this should impermented. The minimum width of a path is 130 cm.

Lane width, cars lanes		Lane width, bus lanes
High (70-80 km/h) Medium (50-60 km/h) Low (30-40 km/h) Very low (10-20 km/h)	3,50 m 3,00 – 3,25 m 2,75 m 2,50 m	3,50 m 3,50 m 3,50 m 3,50 m

Bus lenes ought to be 3,50 m wide. If the street is very narrow, and over a short distance, the width can be reduced to 3,00 m.

If bicycles use the bus lene the with ought to be 4,50 m (minimum 4,00 m)



STANDARD 220 CM DOUBLE BICYCLE LANE

The Mexico City standard bicycle path should be 220 cm wide, this will ensure that two bicyclists can ride comfortably side by side, and makes overtaking possible.











A SAFE STREET PHYSICAL SEPARATION OF CARS AND BICYCLES

SAFETY

A clear separation between bicycle path and car traffic is absolutely nesseary to schieve sele conditions for cyclists, and thereby make bicycling a sele transport alternative. This is crucial on City and District roads.

- It is absolutely necessary to keep cars out of the bicycle path. This should be done by median blocks of sufficient height and width to prevent cars from entering or parking in the bicycle path.
- If space allows, wide medians should be provided so that doors of parked cars does not open up into the bicycle path and injure cyclists.

RAIN WATER DRAINAGE

Moxico City streets have drainage at the edge of the sidewalk and have large amounts of run-off water from the streets.

•The separating median for the bicycle path must allow water from the street to flow across the bicycle path and into the drains, and must therefore be made of individual elements.

TECHNICAL MEMO

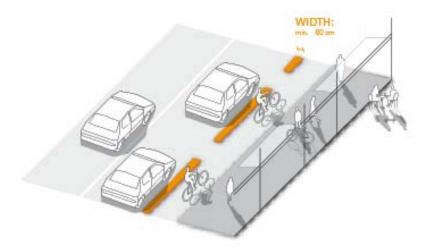
- The median, however wide, must be a minimum of 15 cm high on the street side and a maximum of 7 cm high on the sidewalk side. This is to both avoid cars entering and cyclists hitting their pedals on the median and to prevent bioyolists to hit their pedal on the median and that could cause accidents.
- . The standard width of the median should be 60 cm.
- To avoid cars entering or parking in the intervals between the elements, they must be a maximum 120 cm apart.

EXCEPTIONS

- Neighbourhood streets
- . Pedestrian priority streets

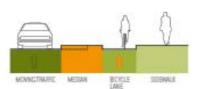


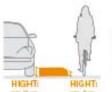
Bicycle lane median Melboume, Australia



A WIDE MEDIAN FOR EXTRA PROTECTION

This type median provides a physical barrier between cars and cyclists with a minimum width of 60 cm. Each element of the median is placed with spacing to allow for drainage of the street across the bloyde path. If possible this is the preferred option and will be in most streets on artistal reads in the future.







THE MEDIAN SEPARATES THE HIGH SPEED TRAFFIC FROM THE LOW SPEED TRAFFIC

Placement follows speed.

A MEDIAN TOO HIGH FOR CAR WHEELS BUT NOT TOO HIGH FOR BICYCLE PEDALS

The detailing of the median is important if it is to serve its function. Each element must be high enough on the street











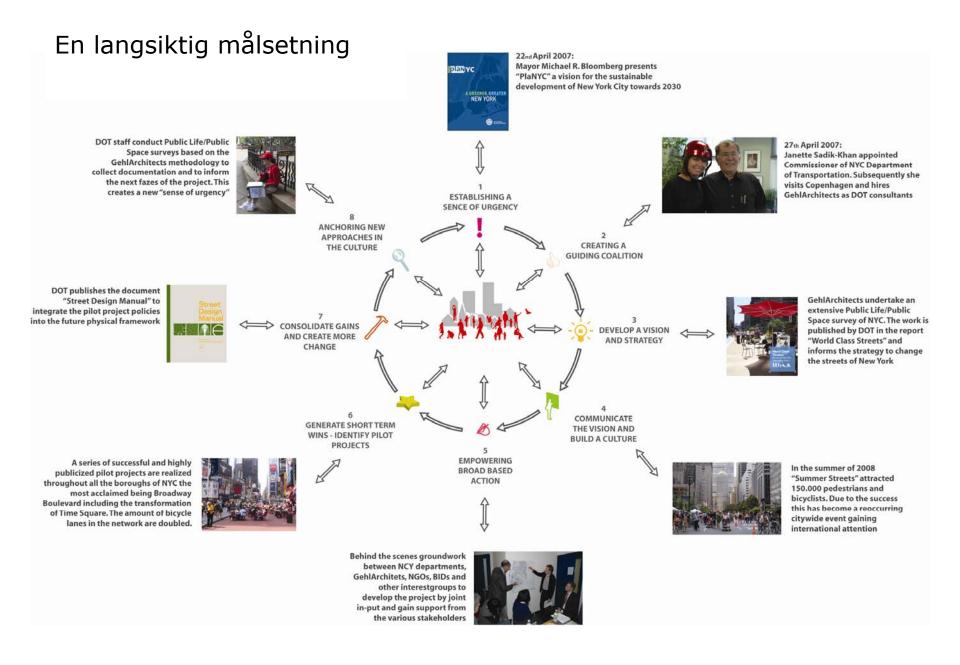




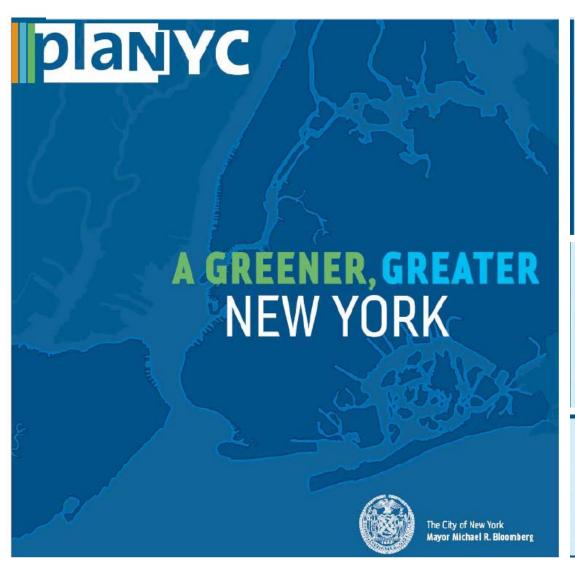
København som inspirasjon

DOT (Department of Transportation) New York besøker København Janette Sadik-Khan *"En sådan by vil jeg ha!"*





En langsiktig målsetning



We have also considered that the world is a different place today than it was half a century ago. Our competition today is no longer only cities like Chicago and Los Angeles—it's also London and Shanghai. Cities around the world are pushing themselves to become more convenient and enjoyable, without sacrificing excitement or energy. In order to compete in the 21st century economy, we must not only keep up with the innovations of others, but surpass them.

The result, we believe, is the most sweeping plan to strengthen New York's urban environment in the city's modern history. Focusing on the five key dimensions of the city's environment—land, air, water, energy, and transportation—we have developed a plan that can become a model for cities in the 21st century.

The growth that prompted this effort in the first place will also enable us to pay for many of the answers. By guiding and shaping this growth, we believe it can be harnessed to make a city of 9.1 million people easier, more beautiful, healthier, and more fair than our city of 8.2 million today.

Test the waters – De første pilot prosjekter

Small scale- I 'forgotten' city spaces



Enormt bakgrunnsarbejde

Argumentasjonen oppbygges

World Class Streets Streeting Navi York City's Wiltin Stealm

Method for measuring pedestrian traffic

This part of the study provides information on how much-and where-people walk sit, stand or carry out various stationary activities in the city. These are a good indicator of the quality of an urban space.

A high number of pedestrians walking in a city does not necessarily indicate a high-quality walking experience. However, it a large number of people choose to engage in voluntary activities (having an outdoor lunch, playing, or sunbathing then a city most likely has an excellent public realm.

NYCDOT and Transportation Alternatives recruited over 40 volunteers to assist the Gehl staff with data collection in Fall 2007, NYCDOT and Gehl Architects. conducted thorough volunteer orientation sessions to ensure data was collected in accordance with the methodology employed by Gehl Architects in cities around the world

Gehl and NYCDOT are presently coordinating the training and transfer of the Public Space/Public Life survey methology to NYC agencies.

Gehl has used its method in studies in London, Sydney, Perth, Adelaide, Melbourne, Wellington, Rotterdam, Dublin, Riga, Stockholm, Oslo and Copenhagen.

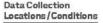
Surveyors counted pedestrians on streets for 10 minutes every hour between 8 a.m. and 8 p.m.



Survey Areas

Selection of public life and public space survey areas

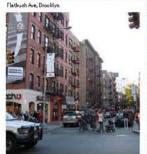
The vast size and diversity of New York City's five boroughs and numerous neighborhoods make it impractical to survey the entire city in detail. Instead DOT suggested survey areas that are centers of activity along key multimodal corridors. By studying these very different but vibrant centers of city life, this survey provides snap shots of the potentials and challenges found In the public realm of New York City today. The study team gained an overall understanding of pedestrian activities along key corridors in Brooklyn, the Bronx, Manhattan and Queens, These insights form part of the basis for NYCDOT's public realm programs.



Gehl chose specific locations near key intersections and major destinations. They were chosen to investigate special conditions in each neighborhood as well as typical conditions that can be applied to much of each borough. Data was collected from 8am-8pm during a series of weekdays in October under good weather conditions.







Soho, Spring Street, Manhattan.







Main Street, Flushing.

World Class Streets Semalong Nau York City's William Stales

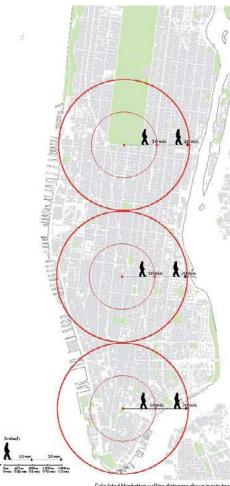
A Walking (and Bicycling) City

New Yorkers spend a lot of time in the public realm as a result of the city's density, which promotes walking, public transit riding and, increasingly, bicycling. Improving walking conditions will benefit everyone in New York City, create more pleasant links between destinations and provide an environment that is enjoyable as well as functional.

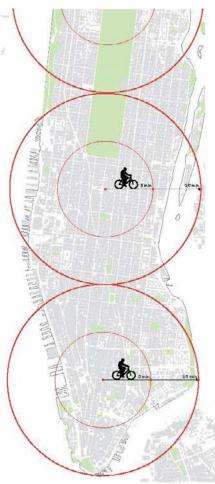
> Most New Yorkers are never more than a 20 minute walk away from a subway or train station.



10 and 20 min walking catchment area to subway and train stations



Calculated Manhattan walking distances shown in minutes.



Calculated Manhattan cycling distances shown in minutes.





Pedestrian traffic

New York has some of the highest volumes of pedestrians in the world, and New Yorkers flock to inviting public spaces, such as the Hudson River Greenway, the car-free parks on weekends and the new public spaces that NYCDOT created along Broadway in Midtown Manhattan during 2008.



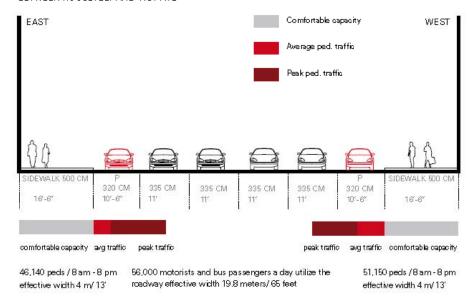
12

CONGESTED SIDEWALKS FLUSHING MAIN STREET

FLUSHING MAIN STREET



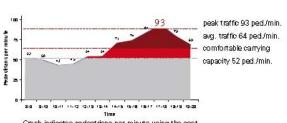
FLUSHING MAIN STREET, QUEENS
BETWEEN ROOSEVELT AND 41ST AVE



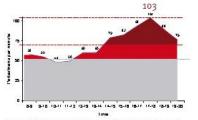
The side walks on Flushing Main Street are crowded

83%

of the day



Graph indicates pedestrians per minute using the east side walk between 8 am - 8 pm



Graph indicates pedestrians per minute using the east side walk between 8 am - 8 pm

WHO USES **NEW YORK** STREETS?

BROADWAY



Pedestrians along Broadway between 14th and 23rd are

between 14 and 65



Pedestrians along Broadway between 14th and 23rd are

under 14



Pedestrians along Broadway between 14th and 23rd are

over 65





Pedestrians along Flatbush Ave. Pedestrians along Flatbush Ave

Pedestrians along Flatbush Ave.

between 14 and 65



under 14



over 65





Pedestrians along E. Fordham Rd. are

between 14 and 65



Pedestrians along E. Fordham Rd. are

under 14



Pedestrians along E. Fordham Rd. are

over 65



FLUSHING MAIN ST.

Pedestrians Flushing Main St.



Pedestrians Flushing Main St.

under 14

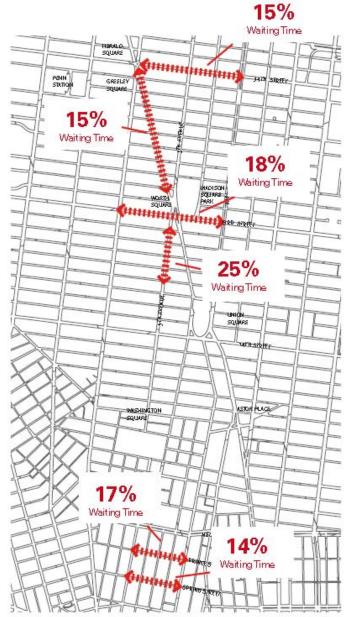


Pedestrians Flushing Main St.

over 65

FORCED TO WAIT





waiting times exemplify pedestrians

low priority

in the City environment

In Sydney CBD waiting time is

30-50% of the walking time

In Copenhagen main streets waiting time is

2-4%

of the walking time

A-B STREETS

Number of stationary activities per 100 m street



17 BROADWAY

34,820 pedestrians daily *85 activities in 500 m 17 activities per 100m 22

FLATBUSH AVE.

23,110 pedestrians daily *159 activities in 730 m 22 activities per 100m



350

E. FORDHAM RD.

80,570 pedestrians daily * 327 activities in 150 m 218 activities per 100m



FLUSHING MAIN ST.

97,290 pedestrians daily * 780 activities in 220 m 354 activities per 100m

ACTIVITIES

physical activities
cultural activities
commercially activities
lying down
sitting on secondary seating
sitting on cafe chairs
sitting on benches
waiting for transport
standing

107



LONDON, REGENT ST. 60,690 pedestrians daily *642 activities 107 activities per 100m 74



LONDON,
TOTTENHAM COURT
44,640 pedestrians daily
* 738 activities
74 activities per 100m

COPENHAGEN, STRØGET 58,500 pedestrians daily *922 activities

350 activities per 100m

240



MELBOURNE, SWANSTON ST. 51, 580 pedestrians daily * 330 activities 240 activities per 100m

^{*}total number of activities surveyed at approx. 11am, 3pm, and 5pm

A CITY WITHOUT SEATS



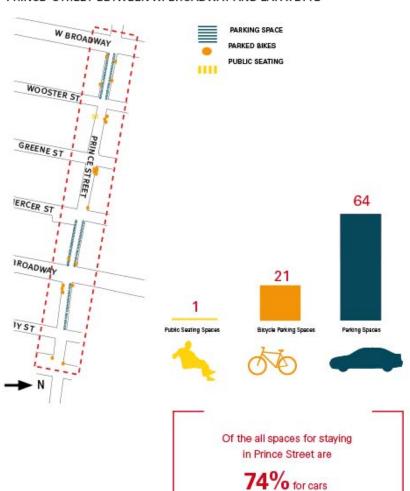
The few public seating opportunities in the streets are of poor quality exposed to traffic.



People finding alternative seating where is nothing else provided.

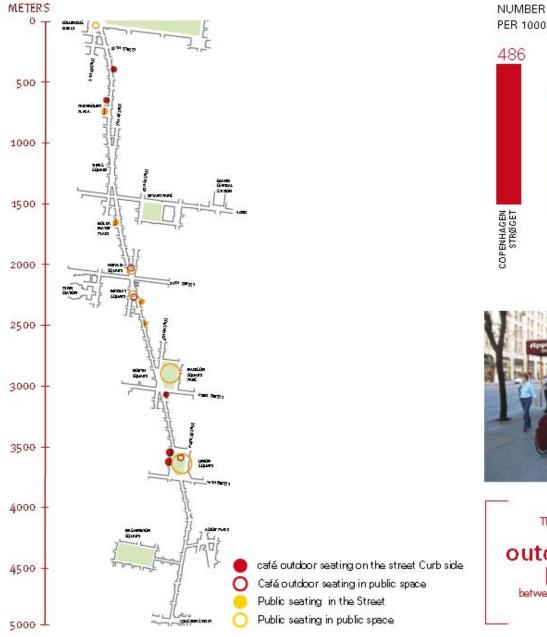


PRINCE STREET BETWEEN W. BROADWAY AND LAFAYETTE

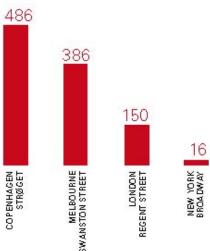


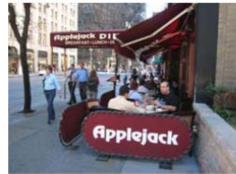
1 % for people 25 % for bicycles - illegal

A CITY WITH FEW CAFÉ OUTDOOR SEATING



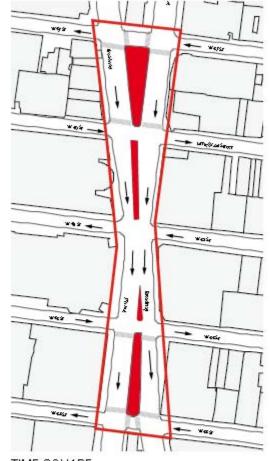
NUMBER OF CAFE SEATS PER 1000 M / 3,280 FT







PUBLIC SPACES ARE HARD TO GET TO



TIME SQUARE total area: 16 960 m2 Pedestrian area: 1 880 m2

> Times Square consists of 89 % road space 11 % people space



Time Square at night. People are crowding on a strip of concrete surrounded by traffic.



Getting to Time Square is a journey dominated by heavy traffic.



CELEBRATE MAIN STREETS

CELEBRATE NY MAIN STREETS WITH SPECIAL DESIGNTREATMENTS
THAT CAPITALIZE ON THE UNIQUE CHARACTER OF THE INDIVIDUAL CITY
DISTRICTS







BALANCETRAFFIC MODES TO ENSURE SPACE FOR ALL USERS INTHE STREET



IMPROVE PEDESTRIAN QUALITY
- PAVING, CROSSINGS, SIDEWALK
ZONING -TO CELEBRATE MAIN
STREETS AS PEOPLE STREETS



BEAUTIFYTHE STREET; INTRODUCE UNIFYING ELEMENTS - LIGHTING, GREENERY, SIGNAGE, PAVING, PUBLIC ART



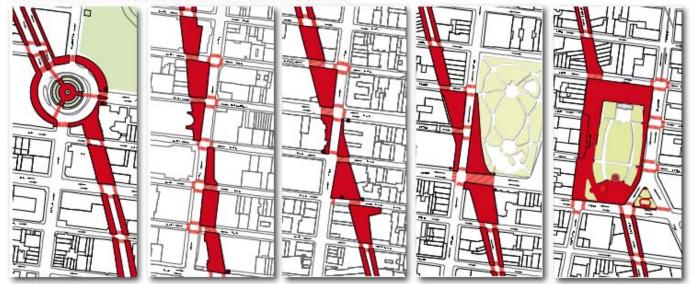
La Rambla, Barcelona



Champs Élysée, Paris

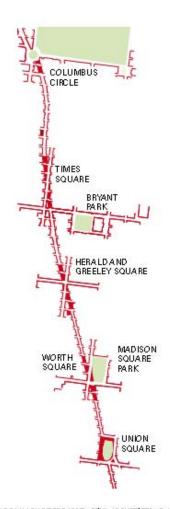
Five extended public spaces and nine new public spaces

TOTAL PUBLIC SPACE RECLAIMED FOR PEOPLE: 385,000 FT2 (35,771 M2)





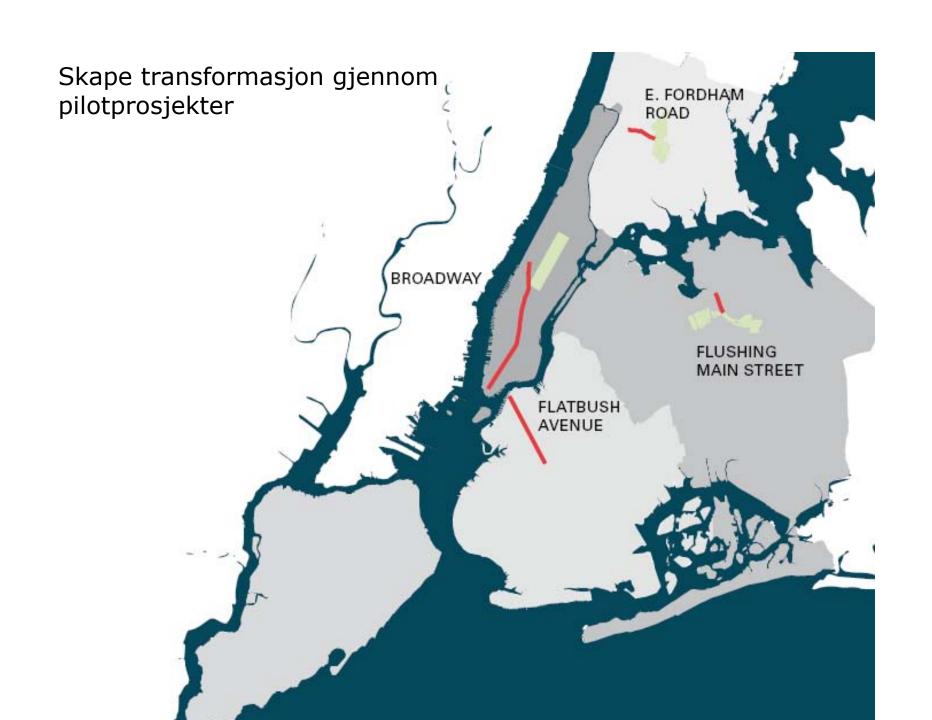
COLUMBUS GROLE	TIMES SQUARE	HERALD SQUARE GREELEY SQUARE	MADISON SQUARE PARK	UNION SQUARE
NEW PUBLIC SPACE			WORTH SQUARE	
58 TH STREET SQUARE	47TH ST. SQUARE	35TH ST. SQUARE	25TH ST. SQUARE	17TH ST. SQUARE
57 TH STREET SQUARE	42ND ST. SQUARE	31ST ST. SQUARE	FLAT IRON SQUARE	
GAINED PUBLIC SPACE				
GAINED 39,190 FT2	GAINED 107,790 FT2	GAINED 79,930 FT2	GAINED 100,390 FT2	GAINED 57,726 FT2



www.nyc.gov/html/dot







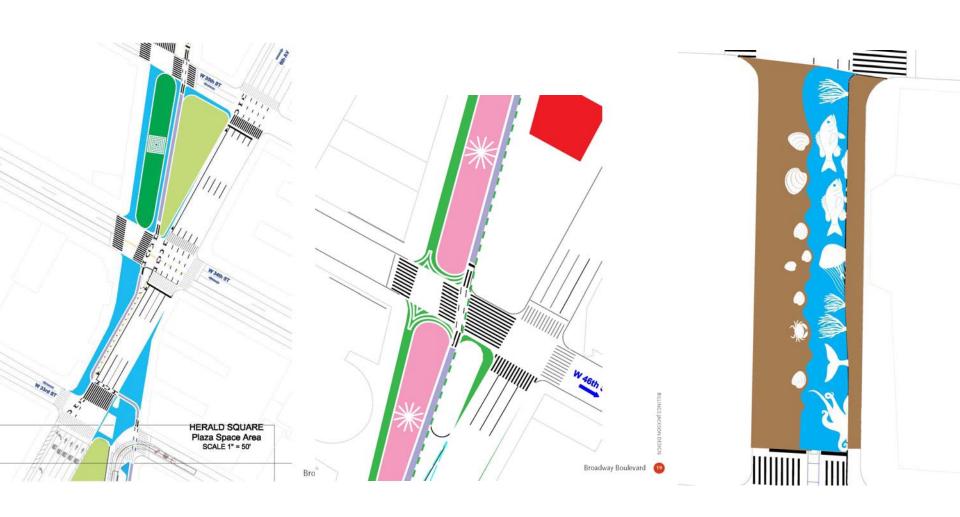
DOT (*Department of Transportation*) brukte interne medarbejdere og resurser til å levere prosjektet.



DOT (*Department of Transportation*) brukte interne medarbejdere og resurser til å levere prosjektet.



DOT (*Department of Transportation*) brukte interne medarbejdere og resurser til å levere prosjektet.



Estimert kostnad \$1.5 million for 40.000 m2 byrum







Transformasjonen skjedde nesten over natten



Transformasjonen skjedde nesten over natten



DOEstimert kostnad \$1.5 million for 40.000 m2 byrum



Fysisk modning og...



...kulturelle begivenheter "forbreder" borgerne på prosjektet



Kulturelle begivenheter "forbreder" borgerne på prosjektet



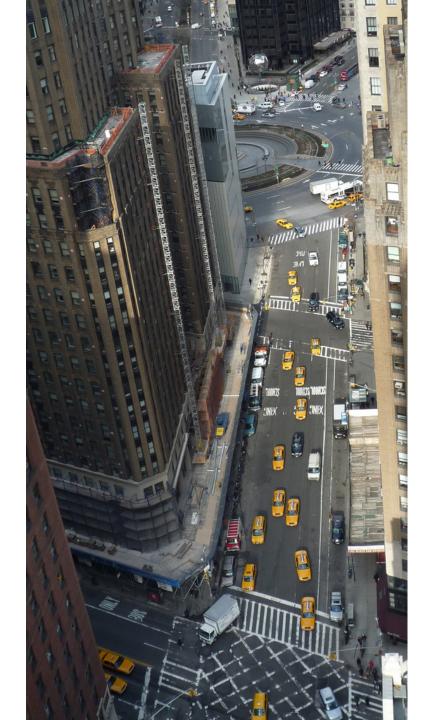
Columbus Circle - før



Columbus Circle - etter



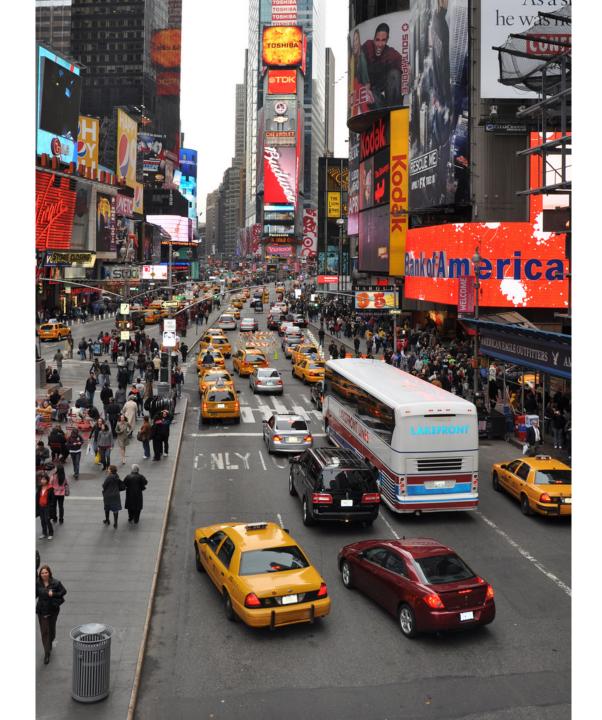
Columbus Circle - før



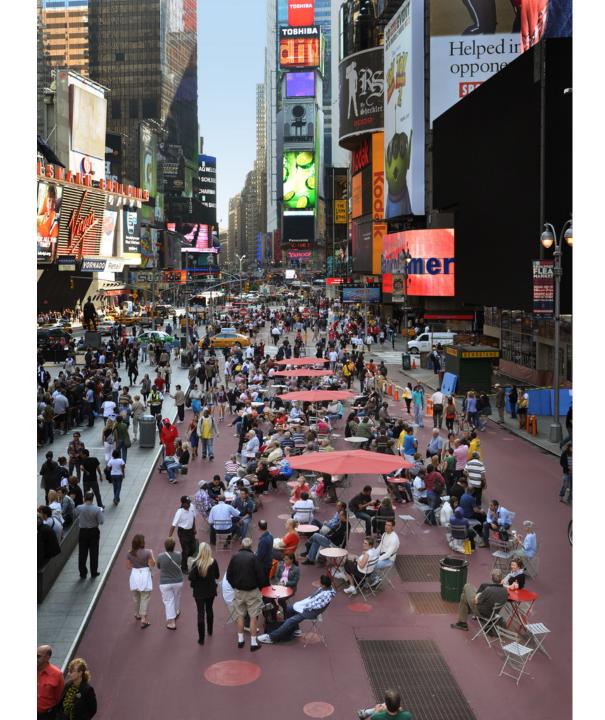
Columbus Circle - etter



Times Square - før

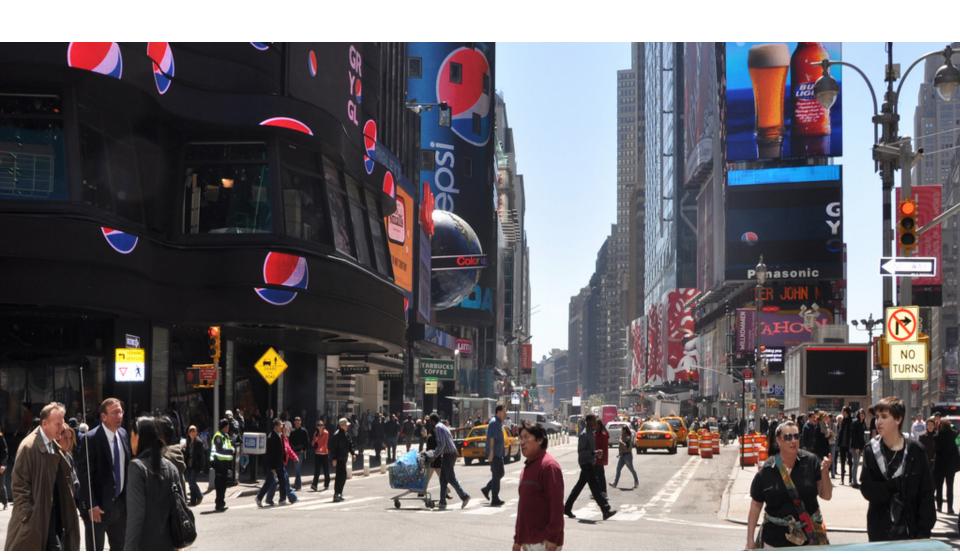


Times Square - etter



Times Square

- før



Times Square

- etter









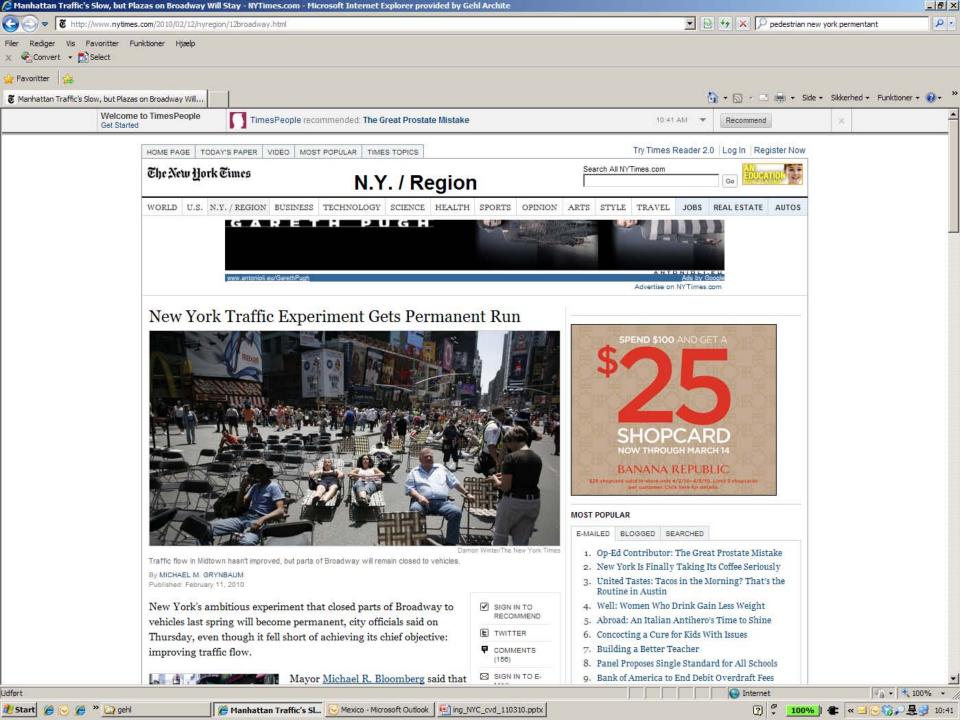


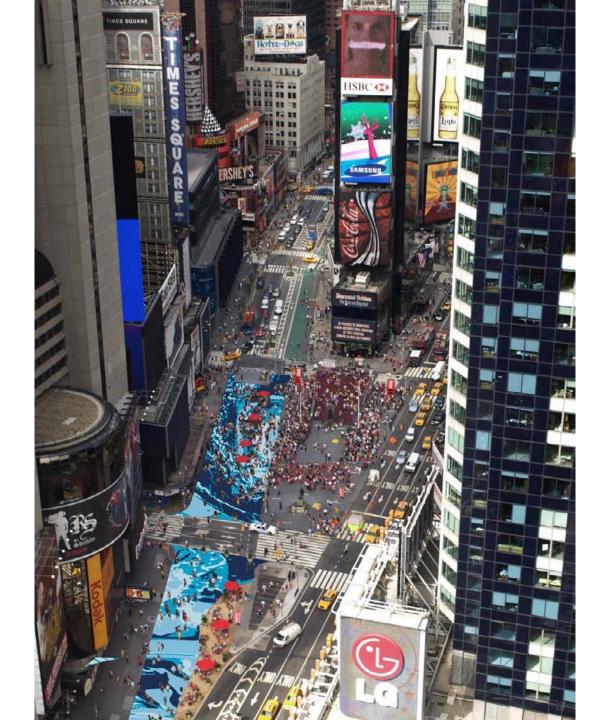












Helt til sist..

New York

Juni 2009, DOT hadde bygget 320 km sykkelbaner



Mexico City

1,114 public bicycles



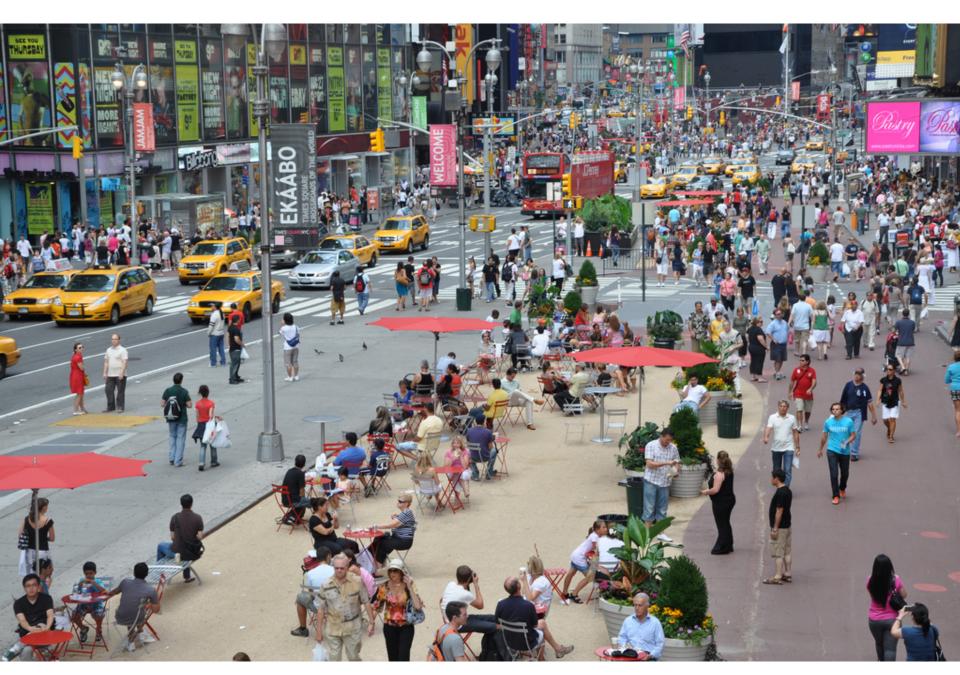




New York City's incredible list of accomplishments

Of this: 4.9 miles of bike paths physically separated from car traffic lanes, 20 sheltered bike parking structures, and 3,100 bike racks

These projects led to more than 45% growth in commuter cycling in that time (3 years)

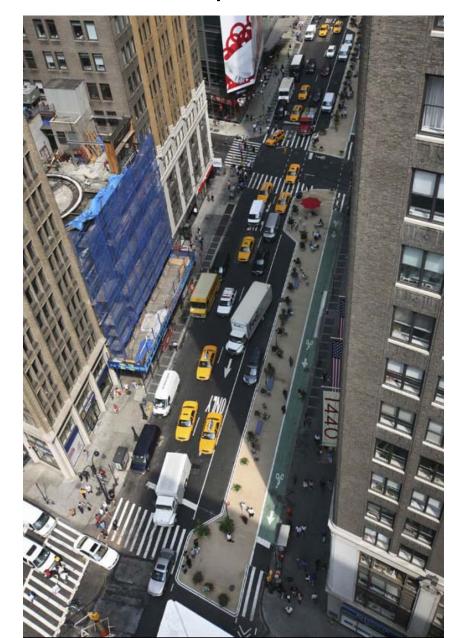


Times Square - after





What began with the 'pearls' ... spread out to the 'strings' as well









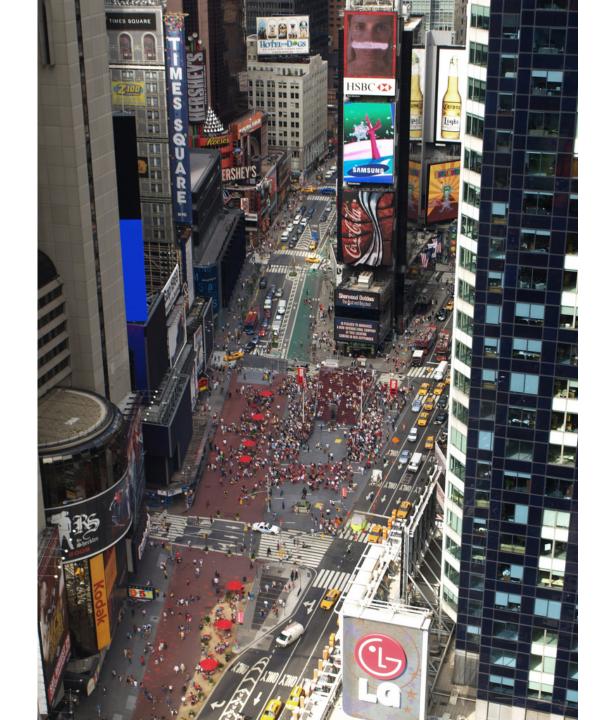








Times Square - etter



Times Square - after



Herald Square - før



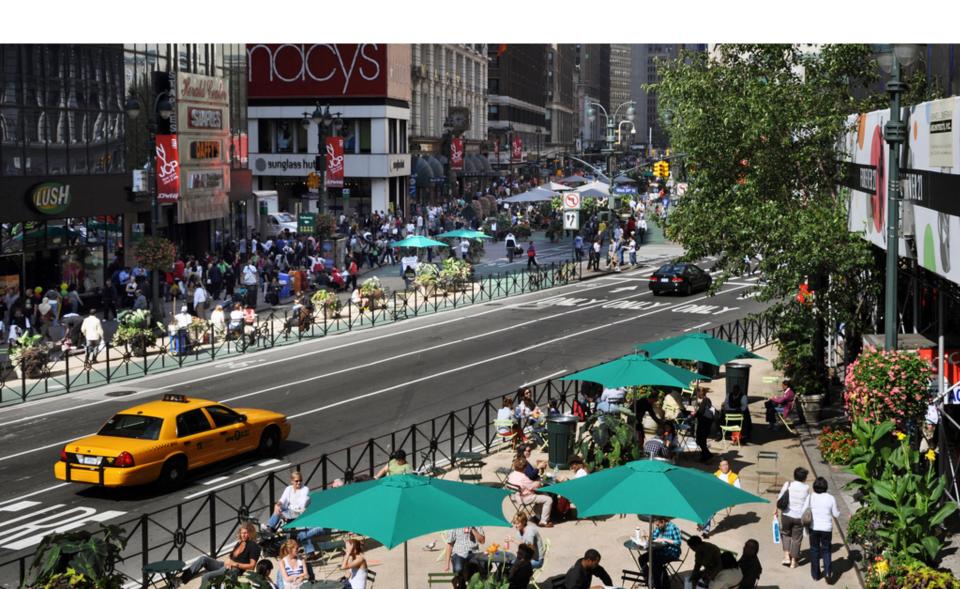
Herald Square - etter



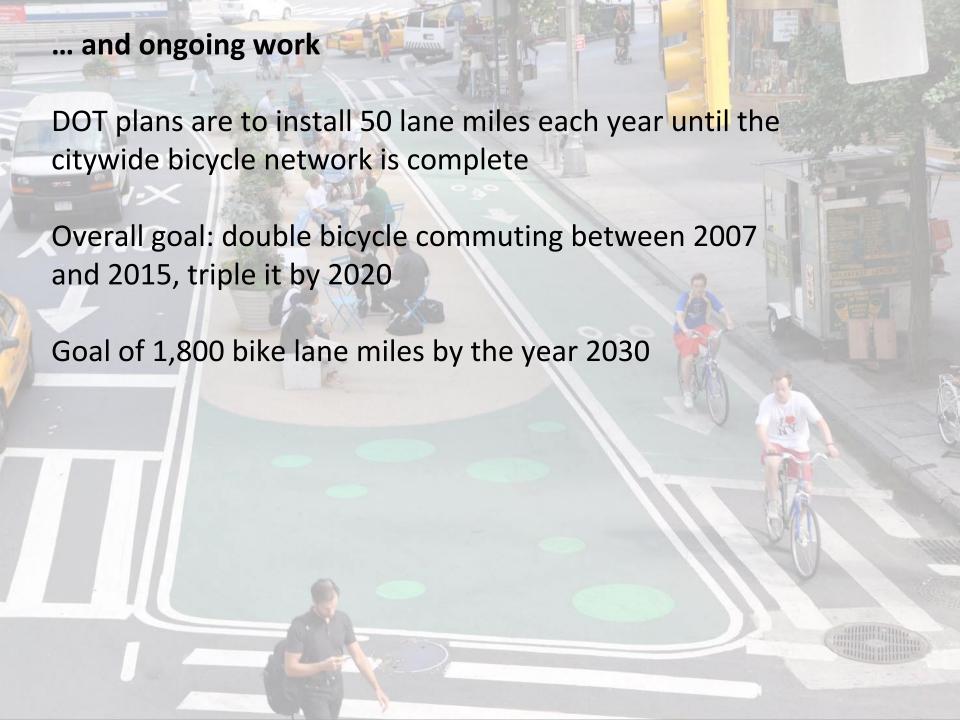
Herald Square - before

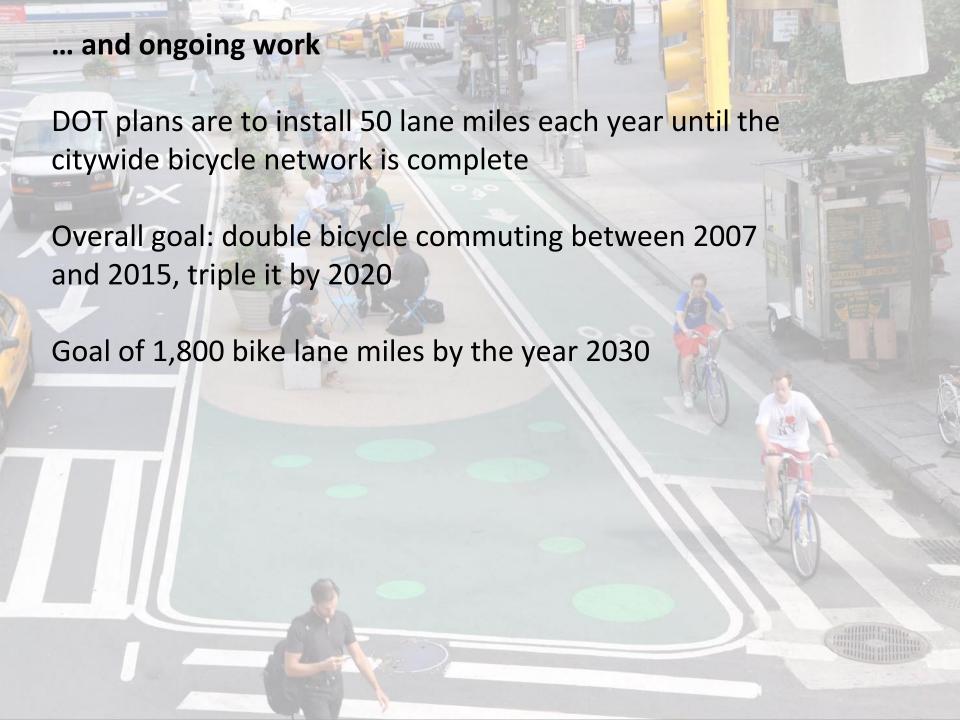


Herald Square - after



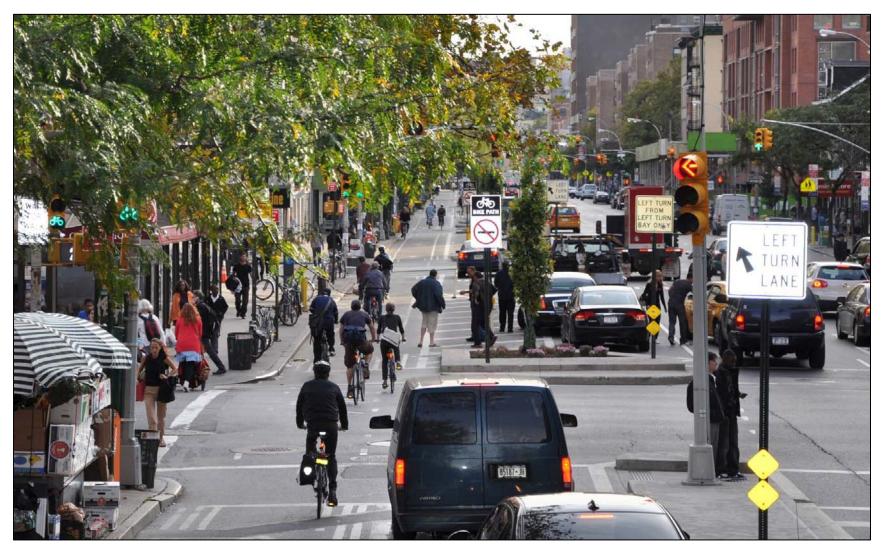












9th Avenue, Manhattan





Muscat:

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I dag:
Byrum designet for 80km/h





I dag: En by med moblitet for få

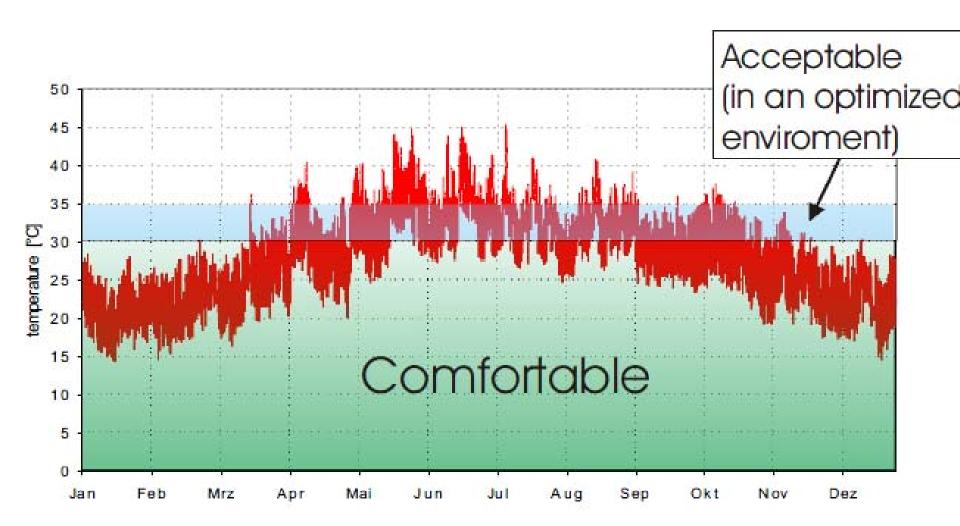


I dag:

En ekstremt varm by- få brukere av byens rom



Klima



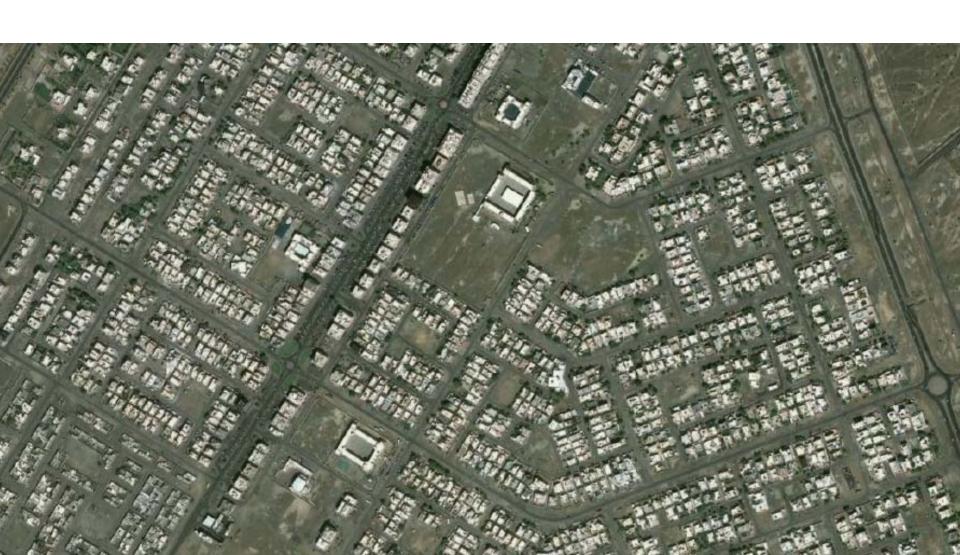
I dag:

Manglende eller utflytende urban form

! KUghY``Ub[']X



Urban sprawl



Byens liv:

Aktivitet om morgen og aften



Byens liv:

Aftenpromenade langs vannet



Byens liv:

Handelsaktivitet i souken



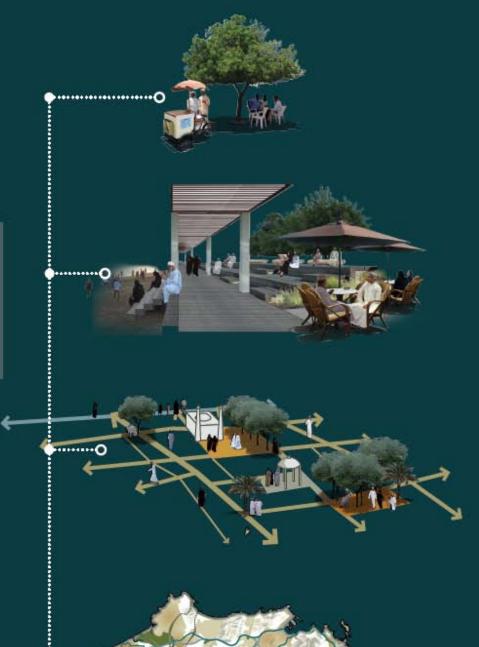




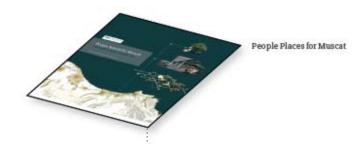
GEHL ARCHITECTS

People Spaces for Muscat Towards a more livable city

VISION & TOOLBOX FOR MUSCAT - JANUARY 2010



Vision & Toolbox

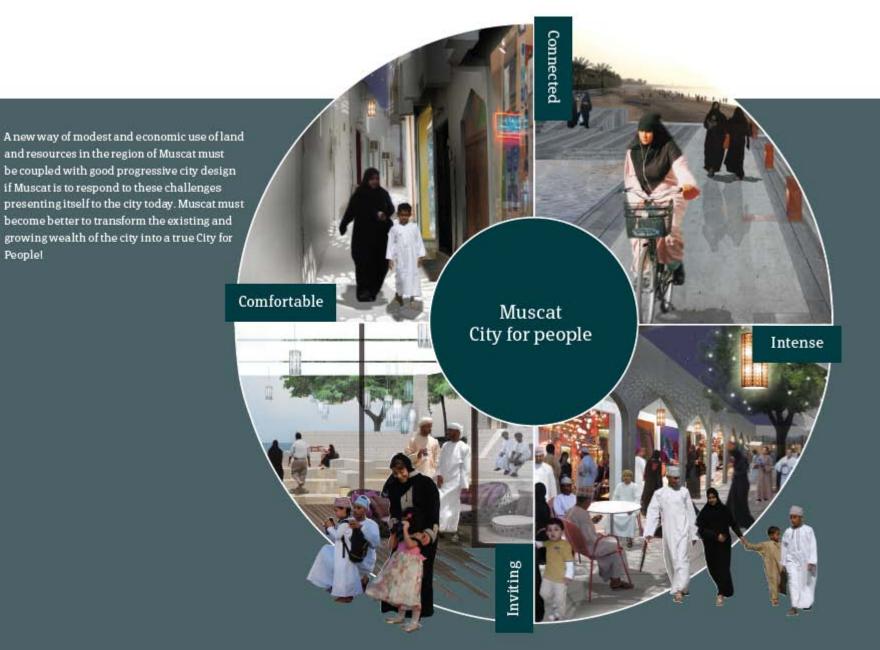


District Strategies



Pilot Projects





People!

Muscat a world-class city for people



Inviting public spaces Quality



Connected public spaces

Comfortable public spaces

Intensified public spaces Urban form

Vision

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Location of furniture

Furniture should be located after careful consideration of sun, shade, breeze, light and darkness throughout the day. In areas or routes where many people pass through, seating needs to be placed at close intervals, to offer plentiful resting opportunities. It should also support meeting places and be set away from traffic and noise.





Placement of furniture

Furniture should always be in relation to pedestrian desirelines, but off the actual waiting path so that they don't become obstacles.

Two-way benches

A two-way bench provides the option of the most comfortable position and the option to choose company or being alone. Sitting up against a wall or allike
A seat positioned with its back towards a wall or similar, provides a sense of feeling safe.

Comfortable furniture

People like to sit differently depending on age and ability. It's important to offer choice. A group of children can more easily sit together on larger-scale seating whilst the elderly require ergonomically designed seats with backrests and armrest. Surfaces must be cool to the touch and comfortable for sitting on.

Seating should ensure that it possible to strike up conversation through arrangement of seating furniture.



Talkscape: loose chairs Loose chairs offer excellent possibilities of hearing & talking and are flexible because they are movable.



Talloscape: curved bench A curved bench is fixed but can invite small groups to



Talkscape: large plinth A large plinth style seet offers flexibility in sitting constellations & talking.







Some sitting furniture should always provide argonomic arm- and backrests in comfortable materials to invite old people to enjoy outdoor spaces.

Seating variation

large and extra-large seating objects are elements with a strong connection with the unique setting of a place. The form is integrated in landscape design or buildings. When it comes to the extra-small, small and medium size furniture these are furniture which can be moved. They are in a family and could be developed as strong characteristic elements of Muscat. The seating variation offers opportunities for solitude or company. Some furniture invites to activity and playing and some can offer more sculptural attraction.





The flexible use of large cushions and chairs to form intimate social spaces in Oman should be developed into a XS-type seating type for public spaces. Sitting on edges, bollards and dwarf wells should also be considered and effect the design of these types of urban furniture and fiftings.



A combination of seating in groups with the inclusion of tables, providing good talkscapes and the possibility to drink and eat.





Traditional 1,5-2m long benches with space for 2-4 people. Some seets could offer the possibility of lying down to rest. Most seats will need arm- and



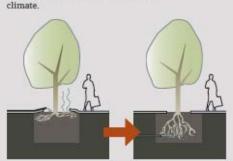
Spetial seating elements which can act as space dividers, protect from strong, hot winds or be integrated into building facades



Seating integrated into the landscape where turnous or steep gradients are found. Use XL seating where there are large events such as sport, performances etc. The weterfront promenade is an example of where the XL seating could be integrated.

Water-conserving landscape

In order to reduce irrigation and maintenance, only native species or very drought resistant species should be planted. Muscat could become a champion country in using water conserving landscaping eg. find ways that reduce or eliminate the need for supplemental irrigation and develop planting schemes suitable for the arid



Deep pipe irrigation Deep pipe irrigation is a way of ensuring less evaporation and make roots grow downwards to find naturally occuring water sources.



Water consuming landscape
Entrance to a new development in Muscat laid with lawn requiring large amount of irrigation.



Native species in soil covered with pebbles to reduce the evaporation.

Public Spaces / Tools

Responsible water features

Water features should only be planned in well protected spaces with excellent shading. Minimizing evaporation is the key to creating a responsible water feature. The drier the air and the more vigorous the water's motion, the faster water evaporates. Even modest spill fountains can be as cooling as powerful sprays and thundering cascades. Ensure water flow is slow and sophisticated.

The other key principle is that water features should always be an element of play for people. Children love getting soaked, jumping over jets or playing with boats. Water is a successful element when it comes to animating a space.

Water features should be set on timers so that they shut off during the hottest periods of the day and at night. Where possible saltwater should be used to



Water pool in shade Shallow, reflective pools bring tranquility and are safe for children



Water in motion Water in movement; cascading jets, spraying fans, felling water wall.











Vison

Attraktive muligheter for alle til å komme rundt

Quality for pedestrians

Access to a rich and diverse network of pedestrian spaces that connect public destinations and transportation infrastructure are at the heart of this system.

Sidewalks free of obstacles

- Sidewalk interruptions from private driveways to be avoided
- · Sidewalks with good level of shading and frequent resting opportunities
- · Streets must be easy to cross in many places
- Street intersections should prioritize safe and direct pedestrian crossings
- · Ground floors of buildings should be at the level of the sidewalk
- · Ground floors of buildings should avoid steps and level changes



Direct pedestrian routes

To make walking and cycling routes in Muscet attractive they need to be as direct as possible between A to B destinations. Bridges and underpasses should be avoided.



be provided at all street sections and at high

set back from the intersection.

frequency along linear street segments. They

should be direct, generous, at grade and not be

Control medians

Central medians allow people to cross streets where they wish with comfortable places to stand in the centre of the road whilst traffic is passing. The risk of pedestrian accidents is reduced.



Dropped kerbs

Where pedestrians cross streets the kerb detailing should ensure that dropped kerbs make crossing easy for all.



Footpaths on both sides of the street

All streets in urban areas should have pedestrian footpaths on both sides of the street.



Generous green phases

Pedestrian green phases should allow people to cross in peace, not in a hurry. Information on the length of green phases can put people at ease.



In the Muscat climate it is important to provide shade slong key pedestrian movement paths.



Continuous footways

Padastrian movement should be continuous over secondary street junctions. Cars should make the level change and allow pedestrians to pass first.



Pedestrian-friendly signage

Intuitive pedestrian way-finding can be assisted through additional simple international signage.



Attractive ground floors

The pedestrian experience is enriched by a varied, open and stimulating building edge avoiding excessive building setbacks



Fit for walking

Climate and materiality of the streetscape should invite walking on clutter free sidewalks and promenades.



Safe routes by night

The pedestrian network should also facilitate the safe pedestren passage after sunset. Routes need to feel safe and be safe.



Invitations to rest

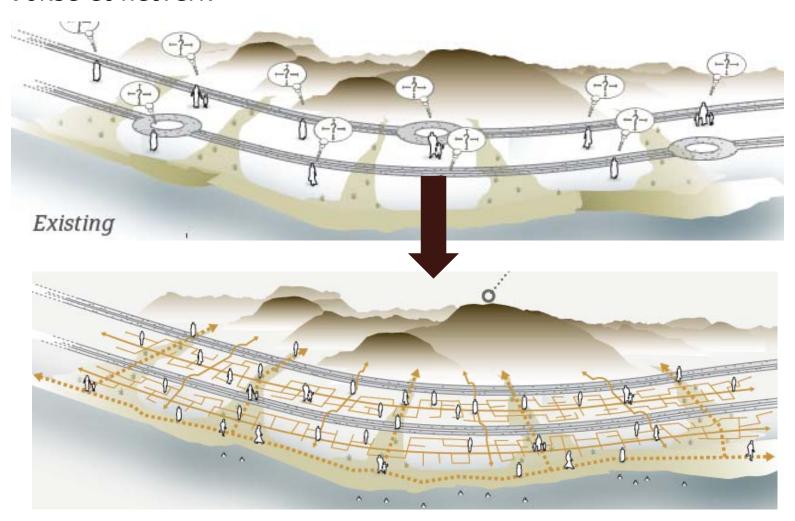
The pedestrian experience should always be complemented by positive interruption in the form of beautiful open spaces and resting opportunities. for people to enjoy city life.





Vison

Vokse et netverk

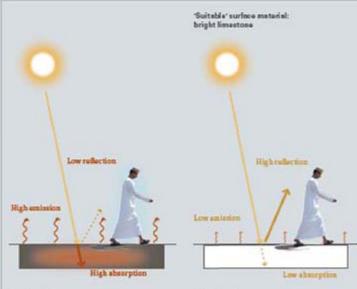


Vison

En by med et mere komfortabelt klima ! 9 b a Y f Y Y j Y b X Y V M



Material properties



Explanation:

A. Reflection

When a material has a high reflection it does not store the heat. Instead it reflects the heat back into the sky.

8. Absorption

High absorption meterials store the heat and thereby heat up the air around them through radiation.

C. Emission

As the meterial is getting warm by the sun, it tries to cool down, and therefore the material radiates the heat away. The emission is the radiated heat you expanence.

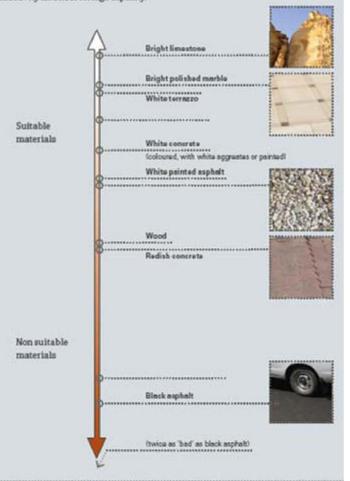
Conclusion:

A surface material with a positive impact on the outdoor comfort has following qualities:

- High reflection
- Low absorption - Low emission

Materials for surfaces

The parameters for evaluation: reflectivity and heat storage capacity.



Heat island effect

High solar absorption and high heat storage ability of materials often used in cities (black asphalt, concrete etc.) cause the heat island effect. This means that the outdoor climate is worse than it has to be.

The heat island effect in a city may be reduced by introducing brighter materials and proper sunshading in open space, where people walk and spend time.

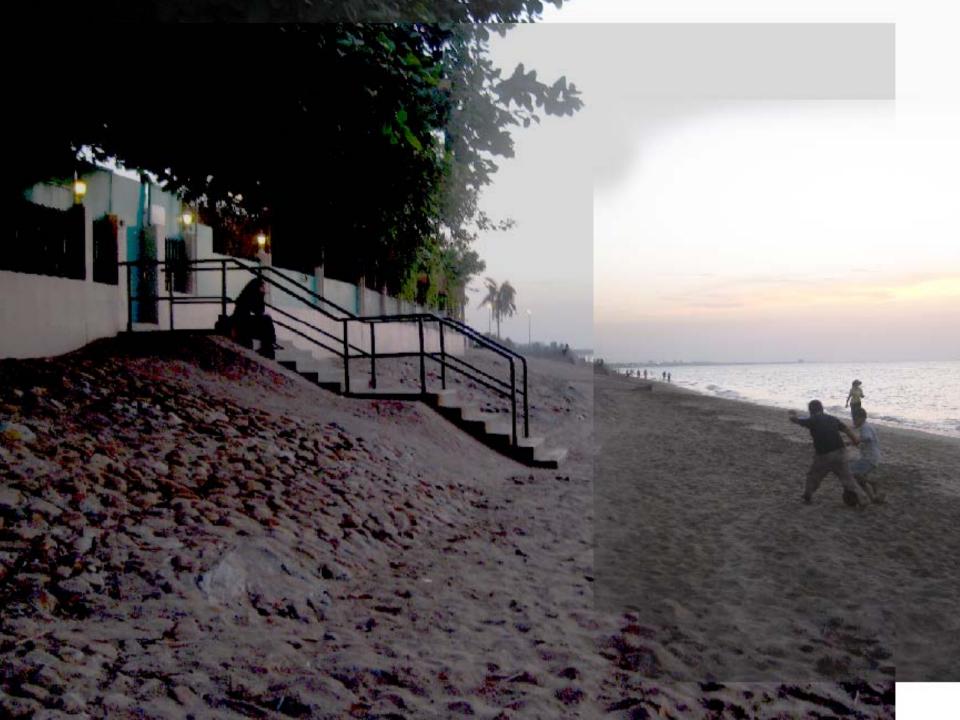


Colour & reflection



Material colours

The colour of a meterial is the most important property. Rule of thumb: bright is better than dark, since bright materials has high reflection.







Activating vacant plots

It is natural for neighbourhoods and districts to change and optimize their physical structure along the requirements of a growing and transforming local community. Vacant plots are a common phenomenon found in young urban districts. They appear as poorly maintained residual land of no apparent value. Planning needs to intervene to activate this land and to stimulate development with new buildings or public spaces of value to the community.



Branking down the scale
Large monotonous surface our parks are an insult to the urban spirit. They should be upgraded to treat motorists with more respect as they close their our dones and become podestrians.



Defining the edge

Breaking down the scale

good locations.

The reduction areas occupied by surface car

parks can provide apportunities for new public

dustinations. Public spaces for people can emerge

where surfaces are released from parking cars in

Where building development is not an option other massurus can be taken to airmide a coherent street edge. A line of trees, public seating and other street furniture can provide continuity.



The temporary activation of space lying dormant pending development can actually increase the vitality of an erea and make a positive contribution to the desire to build on vacent land.



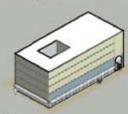
Multi-storay ear parks

Parking should increasingly be facilitated above or below the ground plane of public destinations in the future. The ground floor of such structures can contain restaurants and other public service facilities.



Surfaces with more than one purpose. More than one activity can take place at public destinations during different times of the day or the week. Tennis on a cer park, a circus on a field.

or an artistic light installation only visible by night.

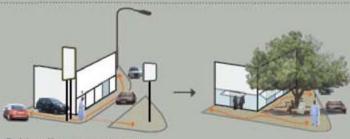


Build it!

Gaps in 'first generation city districts' need to be filed. Planning and local administration should seek to atmiliste building development and get tough on speculative land holdings where atmiliation fals.

Spatially defined streets

Streets are the most important open spaces along which the growth of communities takes shape. They require a high level of physical cohesion to induce a sense of urban complexity. Human scale and human perception need to be respected in the design of streets and buildings. The way in which built and open spaces relate to one another must be clear and legible.



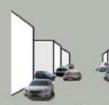
Red nim traffic space to people space

Slip lands create dangarous situations for pedestrians and should be avoided in urban areas. Highway paraphernalis makes people feel 'not welcome here'.



Clear ownership

Layering of space from the public to the private domain is a principle that should create a clear set of thresholds of ownership and responsibility for maintanance.



Evolution Phase 1: Tame wild driver behavior Support the evolution of a more respectful street culture by restricting the land take of inoving and perked cers. Start to reclaim the street for the local population.



Evolution Phase 2: Fill the gaps
The spatial experience of street can be intensified
by filling gap sites with new buildings.

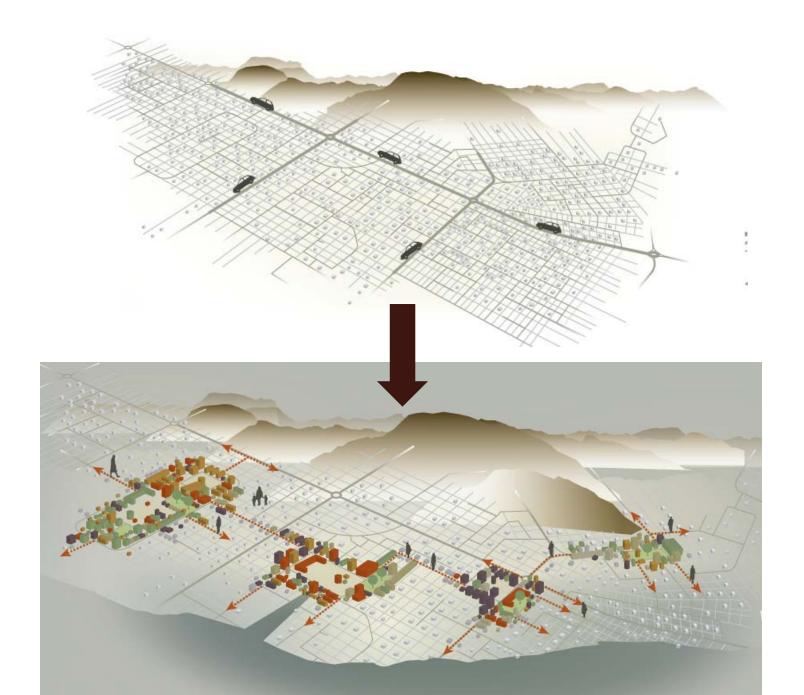


Evolution Phase 3: Implement clear street zoning

Narrow the carriage way and allocate more space to slow local foot traffic by limiting space for moving and parking cars.



Evolution Phase 4: Break down the seal a The full inventory of street furniture and street planting is designed and installed along legibility principles that respect the mevement sequirement of pediatriess.



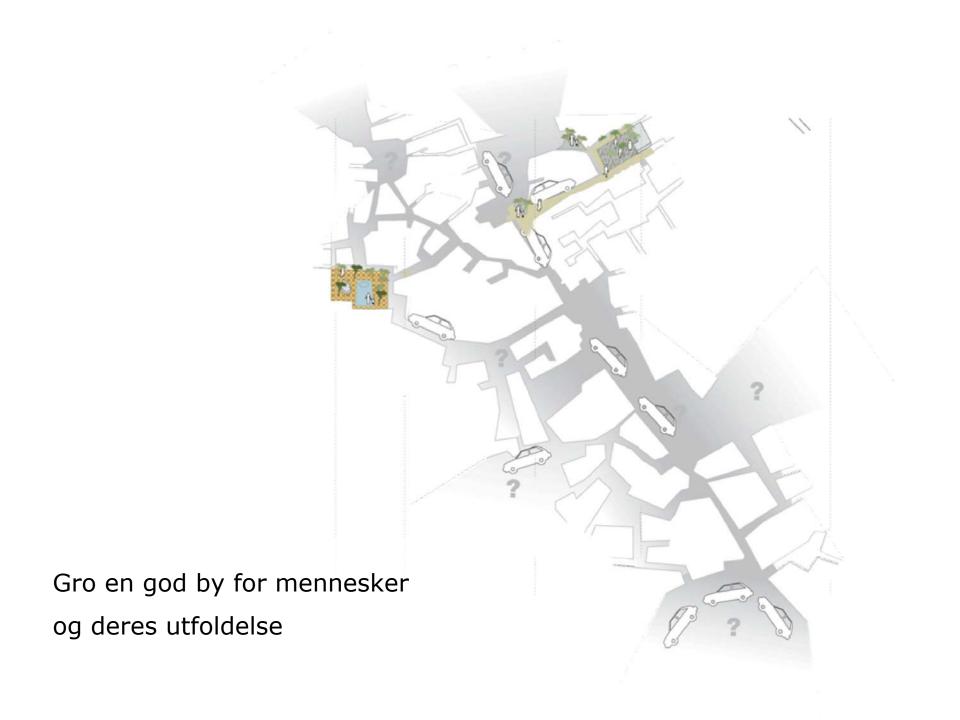
Typology matrix

Soulcs

Squares

Waterfront Promenades





Test the waters – the first pilots





Test the waters – the first pilots

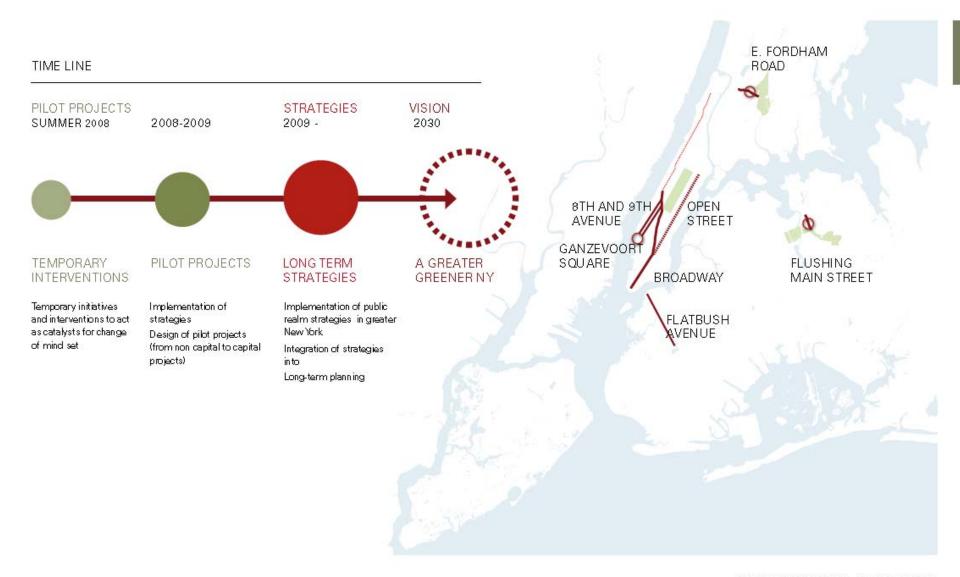
Watch and see

- •What are the problems? And successes?
- •Who uses the spaces?

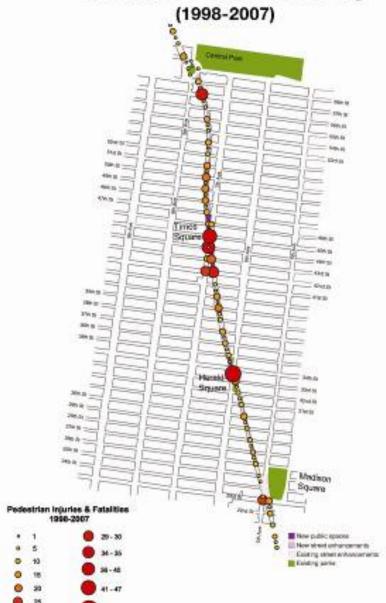




Gehl Architects are engaged



Pedestrian Injuries and Fatalities on Broadway



Broadway Pilot Program

Expected Travel Time Improvements



