



Framtidens transportløsninger for byer

Byutviklingskonferansen 2019

25.04.2019 Gjøvik

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sjefarkitekt Vegdirektoratet, professor NMBU*







Drammen på wikipedia.org



NATUR





BYEN LITT FRA SIDELINJEN





BYGNINGER







Hva skjer når riksvegen kommer til Gjøvik?

Påstand:

Riksveg 4 kommer aldri til byen,
vegen unnviker den

RETORIKK OG MÅL

FRA RETORIKK TIL PRAKSIS

ÅDT 20.000 - Kirkeveien ved Marienlyst



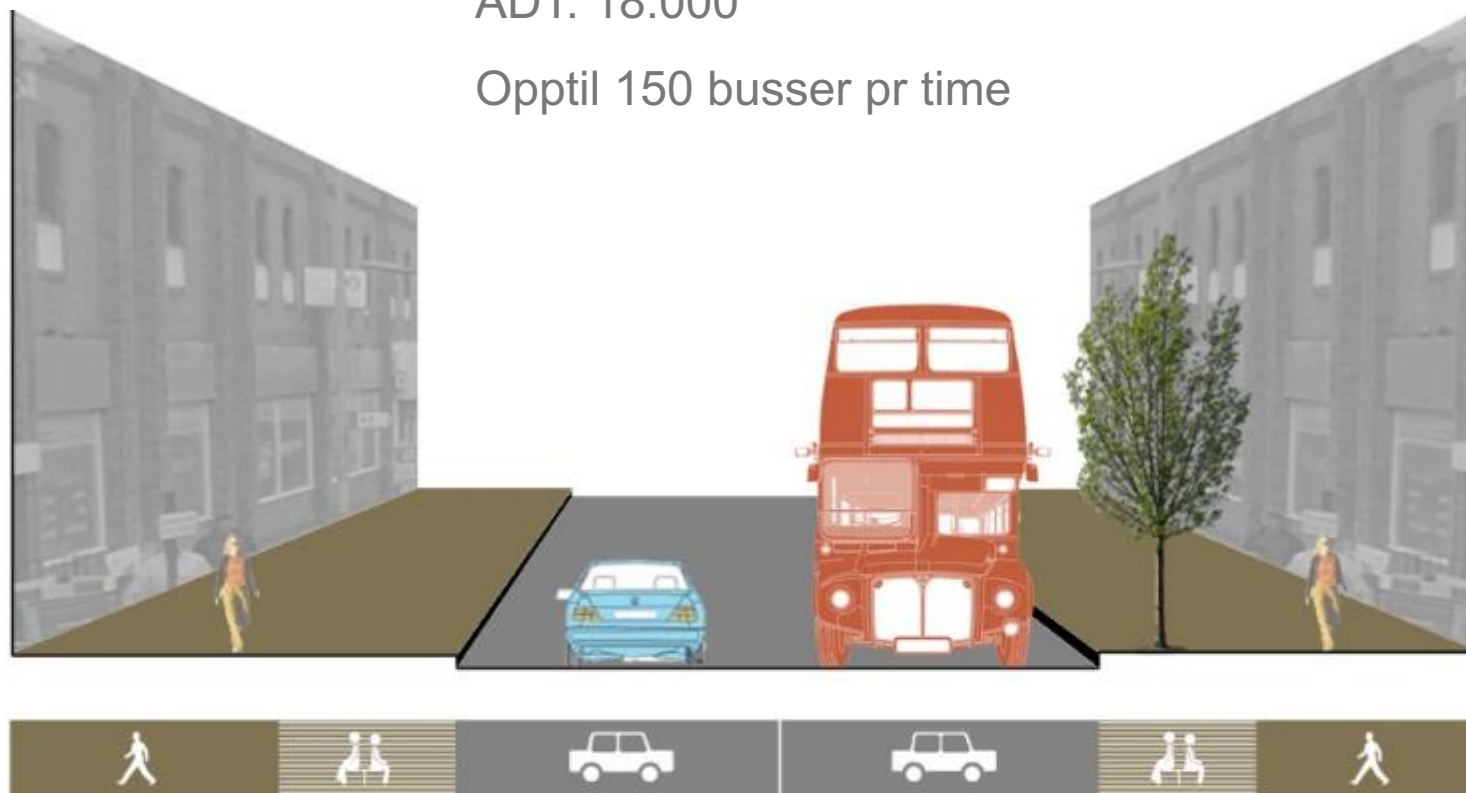
IKEA Slependen	80.000
	70.000
Helsfyr	60.000
Smestad	50.000
	40.000
Kalbakken	30.000
Marienlyst	20.000
Makrellbekken	
Voldsløkka	10.000

Ombygget gate

Strøksgate

ÅDT: 18.000

Opptil 150 busser pr time



WALWORTH ROAD | LONDON



Høytrafikkerte gater – 13.02.17



WALWORTH ROAD | LONDON



WALWORTH ROAD | LONDON

Høytrafikkerte gater – 13.02.17

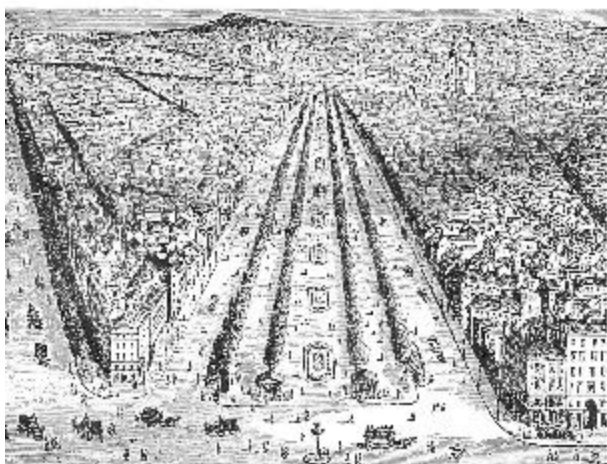
A1

Upper Street, borough of Islington – "extremely fashionable"

EINAR LILLEBYE

Da motorveien kom til byen

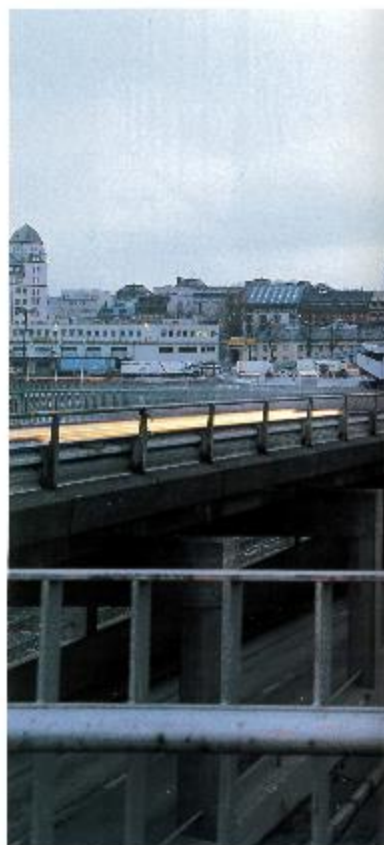
Veien har alltid vært en viktig premisse for lokalisering og utvikling av bysamfunn. Byforming som fag er veldokumentert, men veiens betydning i byens strukturelle oppbygging har vært viet liten oppmerksomhet. Den urbane transportøven har imidlertid en klar byforandringshistorisk forandring. Denne forandringen er viktig for fremtidig byutvikling der veier og gater utvilsomt blir bærende forbygningselementer.



Et historisk bilde av Grevsteds park, som ble planlagt for Paris i 1850. Bildet viser en bred, rett vei som skiller parken fra byen. Bildet er et trykk fra en av de mange planene som ble laget for Paris i 1850. Bildet er et trykk fra en av de mange planene som ble laget for Paris i 1850.

Industrialiseringen medførte store omveltninger i byene. Økt produktivitet og sentralisering av industriell produksjon førte til en rask befolkningsvekst. Mange byer var ikke rustet på for en slik rask urbanisering. Byens infrastruktur ble presset. Byplanleggingen endret fokus fra formelle spørsmål til praktisk arbeid med byens funksjonelle problemer. På denne måten fikk byplanleggingen som fag en ingeniørfarerskapelig tilnærming.

Et klassisk og kjent eksempel er baron Haussmanns (1801-1891) plan for Paris, som ble gjennomført i perioden 1853-1870. Målet var å løse midtbyens problemer: sanitære og belemningsproblemer. Det var også en krig å utbygge det økende transportbehovet, og revolusjonen i 1848 frembrakte et ønske om bedre tilgjengelighet for politi og tropper for å kunne



« Enhver byutvikling må være tuftet på en visjonær holdning til byens estetiske kvaliteter og muligheter. Når motorvegen kommer til byen, må den bli en del av byens estetiske og funksjonelle helhet. »

Byggekunst nr 1/ 1993

Hvis ikke faglig og politisk retorikk kan omsettes i fysisk form så har den ingen verdi

STEDET OG VEGEN

Et idékraft om miljøprielivert gjennomkjoring
med ofteringer fra gjennomførte prosjekter.



Statens vegvesen

Likelydende brev – se vedlagt liste

Behandende enhet:
Vegdirektoratet

Saksbehandler/telefon:
Trang Nhat Thi Tran /
22073237

Vår referanse:
15/238407-2

Deres referanse:

Vår dato:
26.11.2015

NA-rundskriv 2015/15 – Nye føringer for hovedveger – Etablering av rundkjøringer, omkjøringsveger og miljøgater.

Vi viser til brev fra Samferdselsdepartement datert 19. desember 2014. Rundkjøringer skal bare unntaksvis anlegges på riksveger. Riksveger skal i størst mulig grad legges utenom byer og tettsteder.

Saken er behandlet i ELM 9 jan. 2015 og følgende ble vedtatt:

«Vegdirektoratet skal fraviksbehandle alle rundkjøringer og miljøgater på riksvegnettet for å sikre at føringene følges opp på en ensartet måte. Sentral behandling vil vise om vi har felles praksis som er i tråd med brevet, eller om det er behov for en innskjerping. VT/TMT tar dette med inn i revisjonen av N100.»

I brev fra Samferdselsdepartement av 26.08.2015 er det gitt aksept for rundkjøringer på riksveger der riksvegen går gjennom byer og tettsteder, fartsnivået skal være 60 km/t eller lavere. Dette vil være «hovedgate» ikke hovedveg.

Håndbok N100 Veg- og gateutforming 2013-utgaven endres herved.

Rundkjøring skal kun unntaksvis anlegges på nasjonale hovedveger dimensjoneringsklasse H2 til og med H5. Miljøgate skal ikke brukes på riksveg.

Føringene slår inn for alle prosjekter i planfase, prosjekter med godkjent reguleringsplan, prosjekter der fraviksbehandling er ferdig, samt for prosjekter som er tatt opp til bevilgning. For disse prosjektene skal regionen søke fravik.

Vegdirektoratet vil beslutte om det er aktuelt å gjøre endringer. Regionene skal begrunne sitt valg ut fra føringene og ut fra kostnader og konsekvenser av alternative løsninger.

Postadresse:
Statens vegvesen
Vegdirektoratet
Postboks 8142 Dep
0015 Oslo

Telefon: 02 000
Hovingspostvegvesen.no
Org.nr: 971982061

Kontoradresse:
Brynsengstret 5A
0687 Oslo

Føderadresse:
Statens vegvesen
Landskaps- og region
0015 Oslo

Rapport, 1991

NA-rundskriv 15/15, 2015
“Miljøgater skal ikke brukes på riksveg”.

“Veger forbinder steder – gaten er stedet”

Gateseminar i Statens vegvesen, 1994



Foto: tore solberg

Riksveg 5 i Førde, Sogn og Fjordane, 53 m bred



A 1 : utenfor London



A1: Lyttelton Road, borough of Barnet



A1: Market Place, borough of Barking and Dagenham



A1: Upper Street, borough of Islington – "extremely fashionable"



A1: Aldersgate street, borough of City

Manual for Streets 2



Wider Application of the Principles



“En gate er en veg
som har en offentlig
stedsfunksjon i tillegg
til trafikk**bevegelse**”

(Phil Jones,
Manual for Streets UK)

Vegfunksjoner: **bevegelse**

Bevegelse

Fotgjengere

Syklister

Busser

Biler

Levereing

Parkering

Gods/næring

Sted

Handel

Sosialisering

Spise/ drikke

Sitte

Hendelser



Gatefunksjoner: **sted** og **bevegelse**

Bevegelse

Fotgjengere

Syklister

Busser

Biler

Levering

Parkering

Gods/næring



Sted

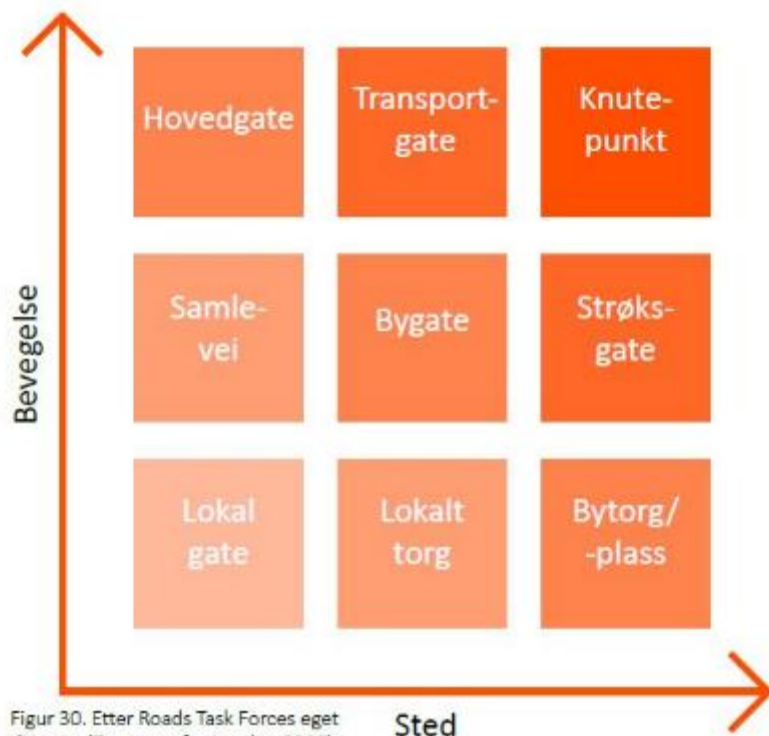
Handel

Sosialisering

Spise/ drikke

Sitte

Hendelser



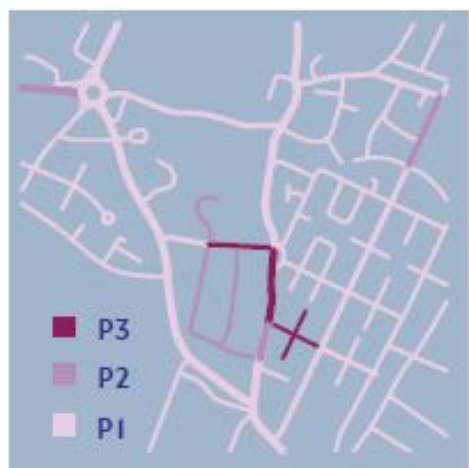
Figur 30. Etter Roads Task Forces eget diagram (Transport for London 2016).



Sted

Bevegelse

Gatetype



+



=

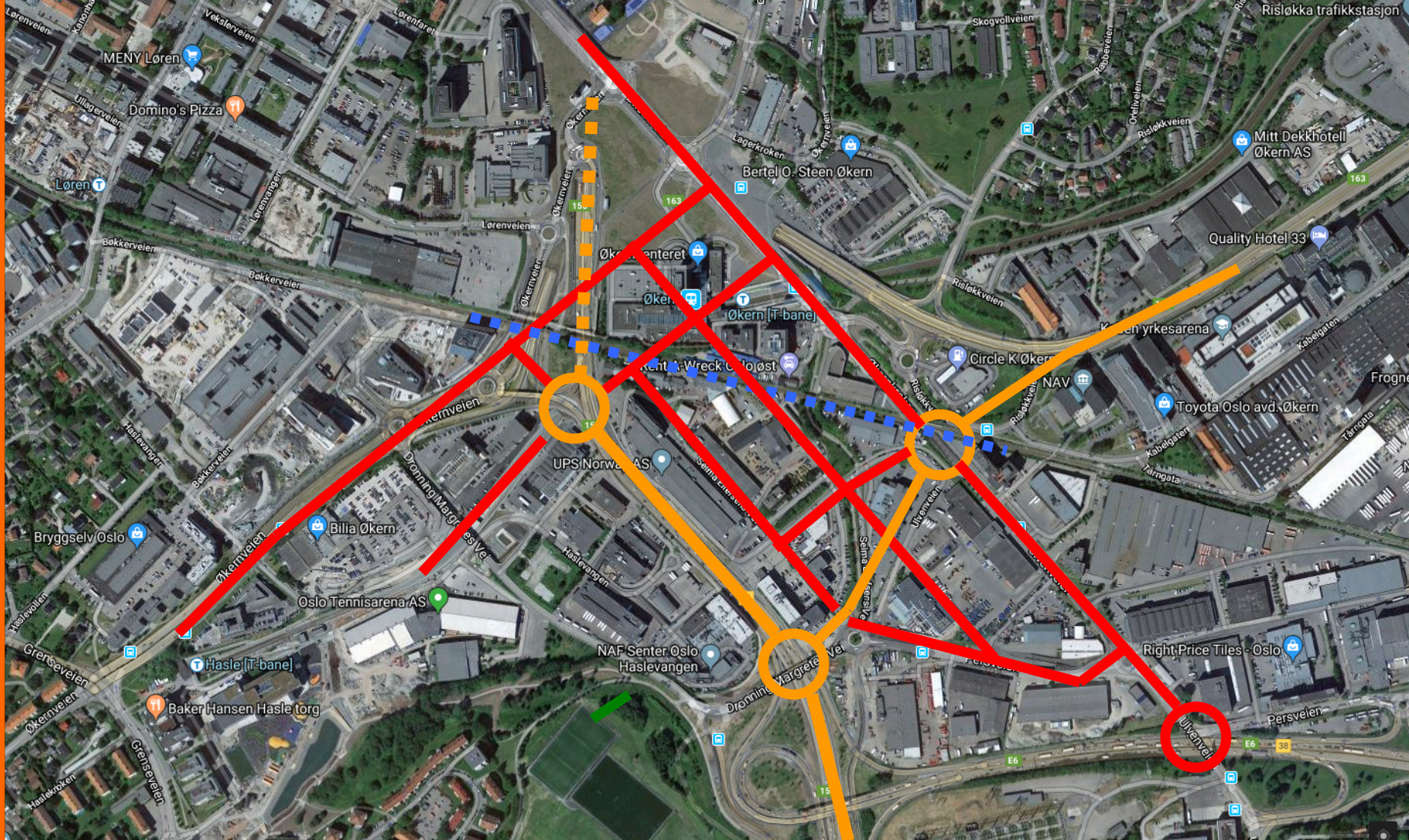


- M3/P1
- M3/P2
- M3/P3
- M2/P1
- M2/P2
- M2/P3
- M1/P1
- M1/P2
- M1/P3

s t e d

I bysammenheng knyttes **sted** til samordnet transport- og arealplanlegging = byplanlegging





Realiseringen av den multidimensjonale kompleksitet -
eller hvorfor gjøre det enkelt når det kan gjøres komplekst.

bevegelse

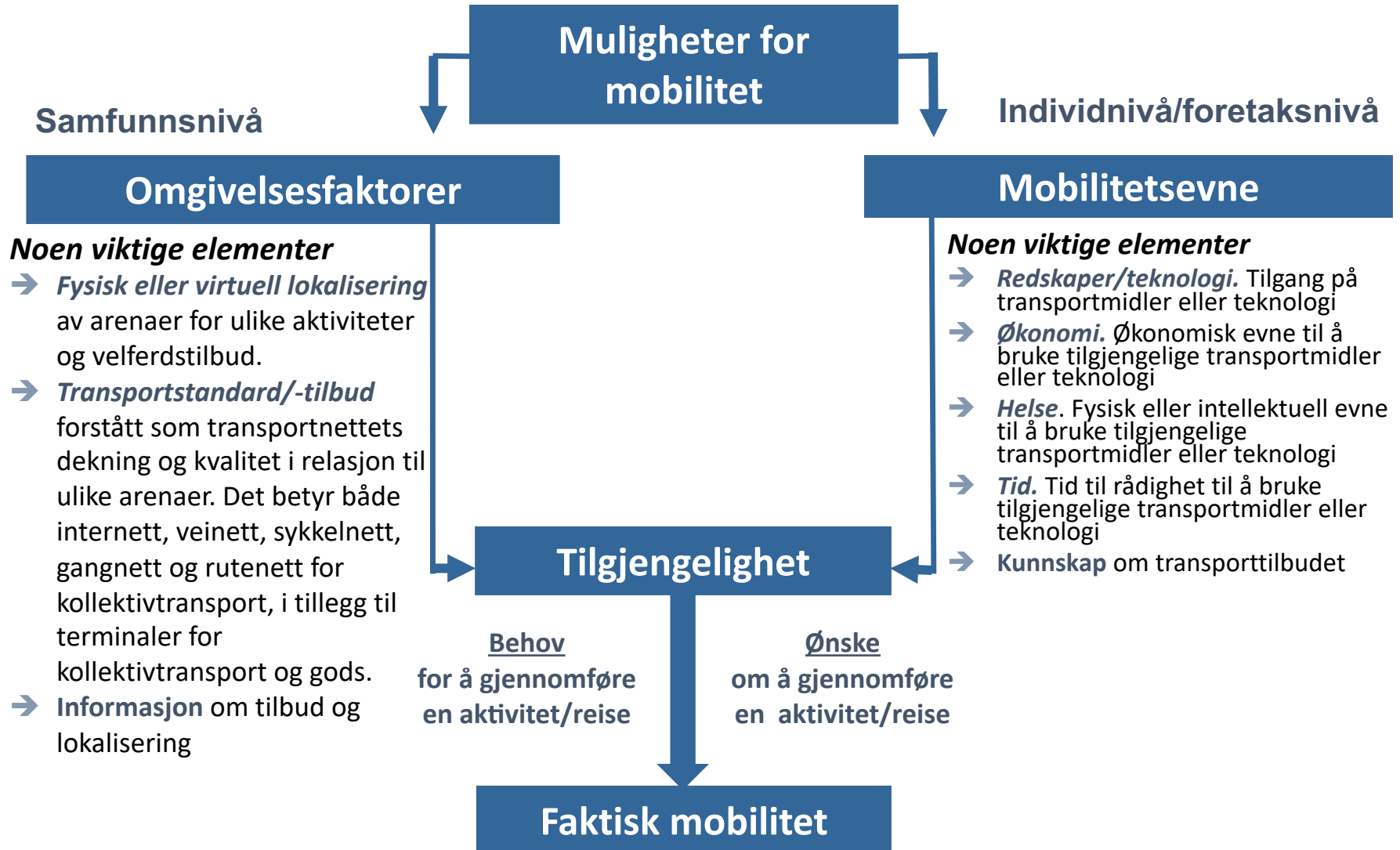
Med bevegelse menes
mobilitet som igjen kan
defineres som

*«transport med
utgangspunkt i
antroposentriske
forhold»*

(Einar Lillebye, 2017)

Mobilitet

Bevegelse eller forflytning av varer, tjenester og mennesker





David Banister
Professor of Transport Studies
at the University of Oxford



Transport Policy 31 (2004) 71–80



The sustainable mobility paradigm

David Banister

Transport Studies Unit, Oxford University Centre for the Environment, Oxford, UK
Available online 25 November 2007

Abstract

This paper has two main parts. The first questions two of the underlying principles of conventional transport planning on the basis of a derived demand and on travel cost minimisation. It suggests that the existing paradigm ought to be more flexible, particularly if the sustainable mobility agenda is to become a reality. The second part argues that policy measures are available to improve urban sustainability in transport terms but that the main challenge relates to the necessary conditions for change. These conditions are dependent upon high-quality implementation of transport schemes, and the need to gain public confidence and acceptability to support their measures through active involvement and action. Seven key elements of sustainable mobility are outlined, so that public acceptability can be more effectively promoted.
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Keywords: Behaviour; Acceptability; Engagement; Participation

1. The problem

It has often been said that transport planning is at a crossroads and that it underestimates the key challenges facing urban planners (Banister, 2005; Bullock and Bailey, 2006; Widdow, 2006). Yet it has also been remarkably robust and it has “survived” all those crises to emerge almost intact, perhaps with some minor alterations. Two fundamental principles are embedded in the approach used, namely that travel is a derived demand and not an activity that people wish to undertake for its own sake. It is only the value of the activity at the destination that travel is to travel. The second principle is that people minimise their generalised costs of travel, mainly operationalised through a combination of the costs of travel and the time taken for travel. These two underlying principles have important consequences, as they are embedded in most analysis and evaluation studies. They help explain the predominance of transport solutions to urban problems, and the huge growth in faster and longer distance travel, so the increased speed of travel has outweighed the increased costs of travel. Even though travel time may have remained constant, as cities have spread, both distances and speeds have increased

substantially (Banister, 2006; Doolan, 2006; Dutton, 2006; Kain, 2004). Local public transport, cycle and walking have become less attractive, and this in turn has resulted in the greater use of the car. Car dependence and the increased decentralisation of cities are difficult problems to reverse – this is the transportised future.

Sustainable mobility provides an alternative paradigm within which to investigate the complexity of cities, and to strengthen the links between land use and transport. The city is the most sustainable urban form and it has to provide the location where more (70–80%) of the world's population will live. Empirical research has concluded that the key parameters of the sustainable city are that it should be over 25,000 population (preferably over 50,000), with medium densities (over 40 persons per hectare), with mixed use developments, and with performance given to development in public transport accessible corridors and near to rapidly public transport accessible interchanges (Banister, 2005, 2006). Such developments conform to the requirements of service and information-based economies. Settlements of this scale would also be linked together to form agglomerations of polycentric cities, with close interactions that would allow a close proximity of everyday facilities and high levels of accessibility to higher order activities (Hall and Pain, 2006).

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0967-0769/\$ – see front matter © 2007 Elsevier Ltd. All rights reserved.
doi:10.1016/j.tranpol.2007.10.001

David Banister introduserer i artikkelen «The Sustainable Mobility Paradigm» (2008) et nytt planleggingsparadigme som innebærer et skifte fra tilrettelegging for transport til bærekraftig mobilitet.

Tilrettelegging for transport

Bærekraftig mobilitet

Regionalt fokus

Lokalt fokus

Motorisert transport

Alle transportformer

Trafikk

Mennesker som skal et sted

Framkommelighet

Tilgjengelighet

Reisetidsreduksjon

Fornuftig reisetid og punktlighet

Øke trafikkhastighet

Få ned bevegelseshastighet

Fysisk dimensjon

Sosial dimensjon

Gate som veg

Gate som sted

Trafikkseparering

Integrering av trafikk og mennesker

Økonomisk virkninger

Analyse av flere virkninger med miljø og sosiale konsekvenser

Trafikkprognoser

Byvisjoner

Modeller

Scenarioer

Etterspørsel

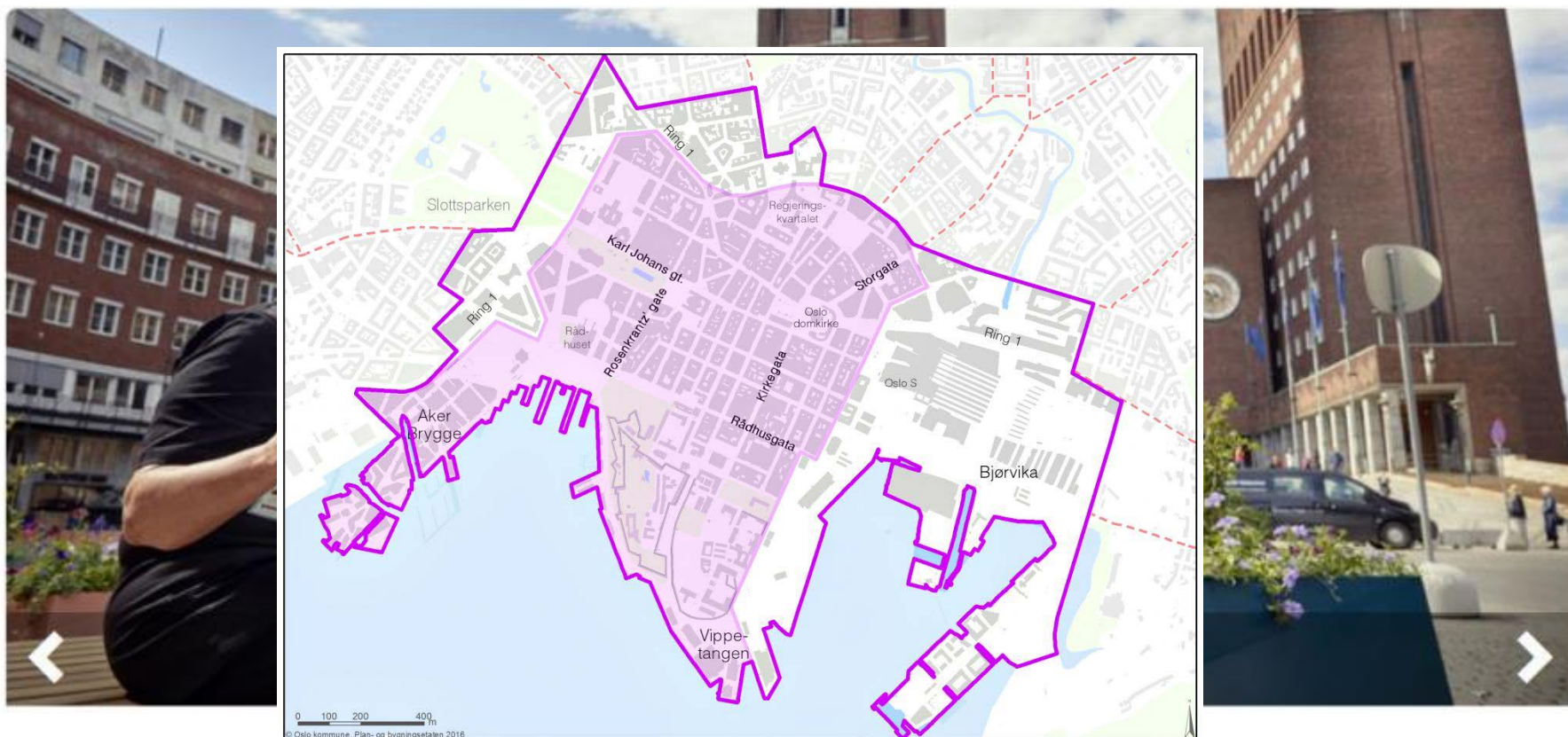
Styring

Bilfritt byliv

MELDING

SIST OPPDATERT, FREDAG, 1. JUNI 2018 14:26

Nytt kjøremønster i Oslo sentrum fra 4. juni









Better Streets Delivered

Projects

Better Streets Delivered 1

- 01 Millson Way
London Borough of Harrow HA8
- 02 Exhibition Road
Royal Borough of Kensington and Chelsea SW7
- 03 Brighton Yard
London Borough of Wandsworth SW11
- 04 Leicester Square
City of Westminster WC2H
- 05 Gower Triangle, Angel
London Borough of Islington EC1V
- 06 Venn Street
London Borough of Lambeth SW4
- 07 Blossombury
London Borough of Camden WC1
- 08 Great Queen Street
London Borough of Camden WC2B
- 09 Angel, Upper Street
London Borough of Islington N1
- 10 Jubilee Gardens
London Borough of Lambeth SE1
- 11 St. Paul's Exchange
City of London EC4
- 12 Windrush Square
London Borough of Lambeth SW2
- 13 Hems Hill
London Borough of Lambeth SE24
- 14 Kingsland High Street
London Borough of Hackney E8
- 15 South Bank
London Borough of Lambeth SE1
- 16 Braham Street Park
London Borough of Tower Hamlets E1
- 17 Fender Triangle
London Borough of Lewisham SE14
- 18 Leytonstone station
area, London Borough of Waltham Forest E11
- 19 Barking station
interchange, London Borough of Barking and Dagenham IG11
- 20 Woodwich Town Centre
Royal Borough of Greenwich SE18
- 21 Stratford High Street
London Borough of Newham E15
- 22 Wimbledon Town
Centre, London Borough of Merton SW19
- 23 Richmond Town
Centre, London Borough of Richmond-Upon-Thames TW9
- 24 Harrow Station Road
London Borough of Harrow HA1
- 25 West Drayton and
Viney Town Centres
London Borough of Hillingdon UB7
- 26 Strand, Aldwych
and Lancaster Place
City of Westminster WC2R
- 27 Britannia Junction
London Borough of Camden NW1
- 28 Oxford Street East
City of Westminster W1D
- 29 Piccadilly two-way
City of Westminster W1A, SW1Y & SW1A

Better Streets Delivered 2

- 01 Southall
London Borough of Ealing UB1
- 02 Ealing Broadway
London Borough of Ealing W5
- 03 Harlesden Town Centre
London Borough of Brent NW10
- 04 Shepherd's Bush
London Borough of Hammersmith and Fulham W12
- 05 Wood Green
London Borough of Haringey N22
- 06 Royal College Street
London Borough of Camden NW1
- 07 Exton Circus
London Borough of Camden W1T / NW1 / WC1T
- 08 Clapham Junction
London Borough of Wandsworth SW11
- 09 Sutton Station Gateway
London Borough of Sutton SM11
- 10 Holborn Circus
London Borough of Camden and City of London EC1N/EC4A
- 11 Romington Square
London Borough of Lambeth SW8
- 12 Clapham Old Town
London Borough of Lambeth SW4
- 13 Leonard Circus
London Borough of Hackney EC2A
- 14 Van Gogh Walk
London Borough of Lambeth SW9
- 15 Leyton High Road
London Borough of Waltham Forest E10
- 16 Aldgate Gyratory
City of London EC3N & E1
- 17 Sydenham
London Borough of Lewisham SE26
- 18 Romford
London Borough of Havering RP11
- 19 Beesleyheath
London Borough of Barking DA6
- 20 Harechurch
London Borough of Havering RP11
- 21 Moe Street
London Borough of Waltham Forest E17
- 22 Wood Street
London Borough of Waltham Forest E17



Plan a Journey

New

My Journeys

Recents

From

To

Leaving: now [change time](#) >[Edit preferences](#) >

Plan my journey

Live
arrivals

Maps



Nearby

Go and discover London this
spring

Start exploring

Tube, DLR, and London
Overground, TfL Rail and Tram



Special service >



Top up Oyster



Congestion Charge



Santander Cycles



Emirates Air Line

 Sign up to our newsletter

Contact us





Kensington High Street, Kensington and Chelsea



Improvements:

- *rethink traffic management*
- *relocate/ merge functions*
- *de-clutter*
- *tidy up*
- *recreate space*

Better Streets Delivered

Learning from completed schemes

September 2013

Sted - Bevegelse

MAYOR
OF LONDON

urban design london

Transport for London





Exhibition Road, Kensington and Chelsea

Royal Borough of Kensington and Chelsea
SW7

Completion date: December 2011
Cost: £29m

Funding sources:

£14.6m Royal Borough of Kensington and Chelsea
£13.4m TfL
£1m City of Westminster

Consultants:

Architecture and masterplanning: Dixon Jones
Traffic, highway and lighting engineering: Project Centre
Project management: Schal
Structural engineering: Arup
Quantity surveying: Davis Langdon

Contractor: Balfour Beatty Regional Civil Engineering Ltd

Stonemason/stone subcontractors: GU Contracts and T&T Groundworks Ltd
Street lighting subcontractor: Volker Highways

Stakeholders:

City of Westminster
English Heritage
Exhibition Road Cultural Group
GLA
Royal Borough of Kensington and Chelsea
TfL



Exhibition Road

Exhibition Road, which runs south from Hyde Park to South Kensington, is home to some of London's top educational and cultural institutions, including the Victoria and Albert Museum, the Natural History Museum, the Science Museum, the Royal Albert Hall and Imperial College London.

Until recently, Exhibition Road had a poor urban environment. It was dominated by traffic, and narrow footways were often blocked by parked coaches, cars and street clutter. With more than 11 million visitors a year, the poor pedestrian facilities frequently became overcrowded with people spilling out on to the busy carriageway.

The Royal Borough of Kensington and Chelsea, in partnership with English Heritage, Exhibition Road Cultural Group, City of Westminster and TfL, worked to transform the busy traffic-dominated road into an elegant pedestrian boulevard. The bold design features a kerb-free surface, with tactile materials to distinguish boundaries between areas for pedestrians and vehicles, plus removing street clutter. Improvements also included removing the gyratory system around South Kensington station and reducing speed limits to 20mph.

The scheme demanded extensive public and stakeholder consultation to ensure not only increased accessibility but also a design that reflected the historical context of the street and the needs of the local residents and institutions. As the layout of the street is unique, it presents challenges for visually impaired people. Because of this, rigorous testing of tactile delineation took place, and Exhibition Road has been closely monitored since completion to assess vehicle speeds and user behaviour.

Improvements

Recreate the street	1
Rethink traffic management	2
Relocate/merge functions	3
De-clutter	4
Tidy up	5

Before



After



Before



After



Upper Street, Angel, Islington + Britannia Junction, Camden

Before



After



Harrow Station Road, Harrow

Better Streets Delivered

Learning from completed schemes

April 2017

Healty Streets





Healthy Streets for London

Prioritising walking, cycling and public transport
to create a healthy city

MAYOR OF LONDON



THE HEALTHY STREETS APPROACH

The Healthy Streets Approach (HSA) er en politisk strategi for å få Londonere til å bruke bilen mindre og gå, sykle og bruke kollektivtransport mer.



Leonard Street, Borough of Hackney



Leonard Circus

London Borough of Hackney
EC2A

COMPLETION DATE
JUNE 2014

COST
£30,000

FUNDING SOURCES
£ 50,000 TfL (Local Implementation Plan)

HEALTH BENEFITS PER YEAR



£1.762m



£225,000

Consultants:
London Borough of Hackney

Contractors:
Volker Highways

Stakeholders:
Living Streets (Hackney)
London Borough of Hackney
London Cycling Campaign
TfL

Better Streets level of intervention

Recreate the street

Rethink traffic management

Relocate/merge functions

De-clutter

Tidy up



Before



After



Leonard Circus is a great example of how a shared space scheme can transform a traffic dominated junction into a public square. Hackney Council used a Dutch design as inspiration for this innovative project which uses pedestrian paving materials at the centre of the junction to create the impression of a usable space.

The newly planted trees help to civilise the space while also acting as obstacles to help slow and direct vehicles. With more people travelling through Hackney on foot or by bike than in any other London borough, the scheme aims to prioritise these vulnerable users over vehicles by turning the

road into a space which is perceived as a pedestrian zone. This makes user priority unclear and forces drivers to slow and be more aware of pedestrians and cyclists.

New lighting, seating and planting are conventional ways of encouraging users to spend time in an outdoor space but Hackney Council has also provided access to power points and WiFi. These facilities create the unique potential of accommodating temporary markets, outdoor cinemas and other events which will bring local people together, giving Leonard Circus the opportunity to become a well-used asset to the community.



Oxford Street, Westminster





MÅLFORMULERING

- a) Byform*
- b) Kollektivtransport*
- c) Byliv*
- d) Sykling og gåing*
- e) Bil*



Carl Berners Plass-prosjektet er et Kinderegg:

- 1. Effektivisert planleggingsprosess:
Ekstrem kort tid fra planleggingsstart til ferdigstillelse på 8 år!*
- 2. Oppnåelse av nasjonalpolitiske mål:
30 000 biler forsvunnet, hvorav 16 000 ikke kan spores!*
- 3. Oppnåelse av krav til stedstilpasning
Stedlig kvalitet ivaretatt og forsterket*



Strandgata 2012
Foto: Statens vegvesen
Paul Berger



Strandgata 2016
Foto: Statens vegvesen
Paul Berger



Strandgata 2012
Foto: Statens vegvesen
Paul Berger



Strandgata 2016
Foto: Statens vegvesen
Paul Berger



Gjøvik park 2012
Foto: Statens vegvesen
Paul Berger

Better Streets Delivered Gjøvik



Gjøvik park 2016
Foto: Statens vegvesen
Paul Berger

An aerial photograph of a city street intersection, likely in a European city. The street is wide and paved, with several cars parked along the sides and a few cars driving. Pedestrians are visible on the sidewalks and crossing the street. In the background, there are buildings, a church spire, and a hillside with more buildings. The sky is blue with some clouds. The text is overlaid on the image in a large, white, sans-serif font.

Framtidens transportløsninger for byer må ta utgangspunkt i lav hastighet, maks 30 km/t. Det gir mulighet for en stedstilpasset gate- og byromsutforming ut fra prinsippene om bærekraftig mobilitet. Den stor utfordringen blir å etablere trygge løsninger for sykling og gåing.



Market Street, Castro, San Francisco

MEN: fremtidens transportløsning
for byer handler egentlig om at
menneskene
igjenerobrer dem !

Castro, San Francisco (foto: Einar Lillebye)