

Institutional arrangements for cycling:

Challenges in Latin American cities

Velo-City 2017 Arnhem-Nijmegen, 14-06-2017

Jeroen Buis (JB Mobility), Liliana González (JB Mobility), Damien O'Tuama (Dublin, Mobilities Researcher), Zé Lobo (Rio de Janeiro, Transporte Ativo)



1. Study on Institutional arrangements in 8 cities



Scope of study

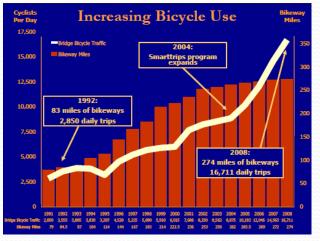
- BID (IADB), Universidad de Los Andes (Bogota)
- 8 cities: Literature review
- Own experience
- At least 2 interviews with each city with municipal coordinator, cycling organisation, state



4 Successful cycling cities in Europe and

United States

- Rotterdam (The Netherlands)
 - Growing cycle use since 2002
- Seville (Spain)
 - 1 5% cycling 2007 -2010
- Dublin (Ireland)
 - Reversed decline of cycling between 1997 and 2005.
- Portland (USA)
 - 1.1 \rightarrow 7.2% of commuter trips (1990-2014)



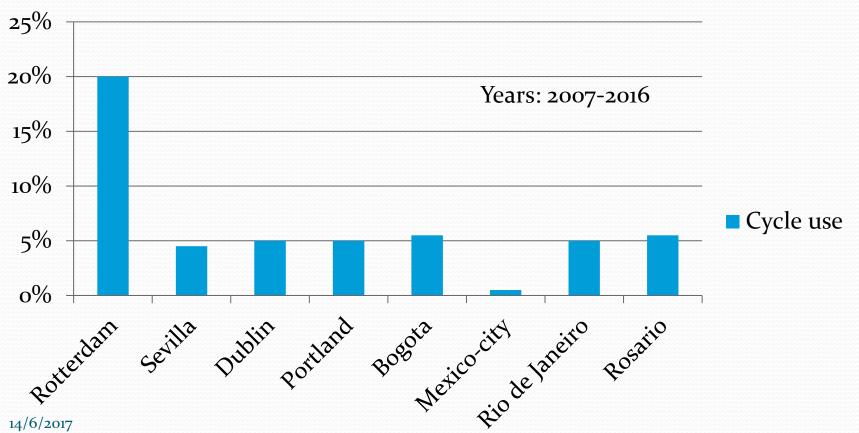


Latin-American cities that (more or less) successfully promote cycling

- Bogotá (Colombia):
 - Peñalosa I: Bicycle Network 0.5 → 4% (1999-2004). Now 5-6%.
- Mexico-city (Mexico):
 - Local increase of use (e.g. PBS). Still very low overall.
- Rio de Janeiro (Brazil):
 - Planning since 1970's, now 4%
- Rosario (Argentina):
 - Increase of use in crisis, planning followed



Cycle use in the 8 cities

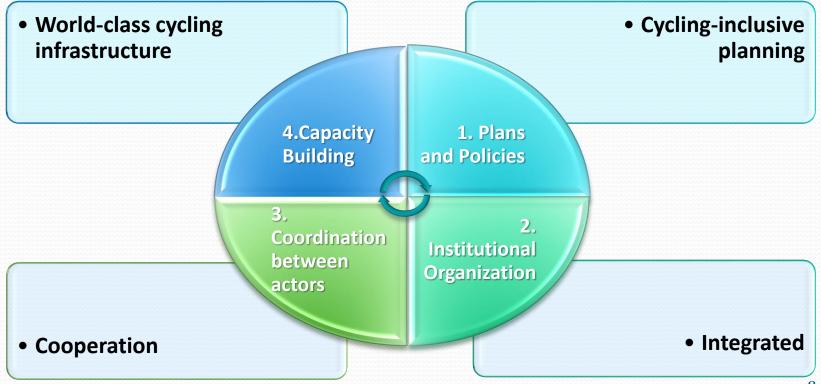




2. Institutional arrangements for the promotion of cycling in Latin-America



Elements of Institutional arrangements





2.1 Cycling-inclusive plans and policies

2.2 Institutional organization

2.3 Coordination between actors

2.4 Capacity to create a cycling-inclusive city

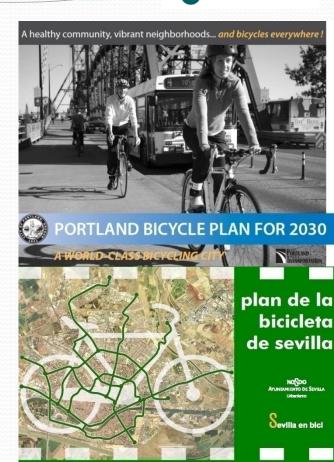


2.1 Cycling-inclusive plans and policies



2.1 Politics, policies and plans

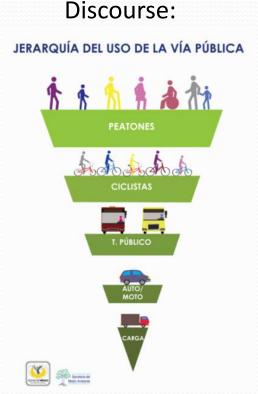
- Defining what you want (vision, objectives)
- How you want it (policy and plan)
- And how and when you will implement it (action plan).





A. Politics, vision and discourse (1)

- Does political discourse and practice match?
- E.g.: Mexico-city



Practice (investments):

Zona Metropolitana de Valle de México

2013

2011 2012

2014

∳ 0%

12%

†

8%

26%

4 32%

Inversión Total en Movilidad 2014 \$4,928,087,156.00

20%

Source:

Department of Environment, Mexico)



A. Politics (2)

Cycling is (very) political in L.A. and Spain

Cycling is important, but less political in Rotterdam, Dublin and

Portland

Latin American cities:

Strong focus on kms, often ignorining quality or need

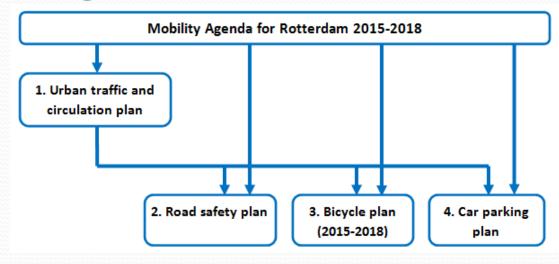
 Focus on scoring politically often leads to rushed projects and implementation (Bogotá 2015)





B. Cycling plans integrated?

- Are cycling plans and policies integrated in other plans and policies?
 - E.g. Cycling-inclusive mobility plans and policies
- Yes: Rotterdam, Dublin, Portland
- Limited: Seville
- No: Bogota, Mexico-city, Rio de Janeiro, Rosario



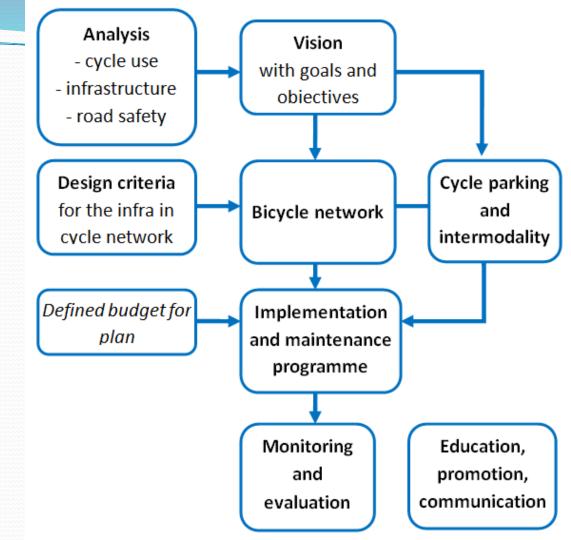
Latin America:

Cycling is a stand alone issue, not integrated in general traffic and transport plans

C. Complete Bicycle Masterplans?

L.A. cities:

No complete bicycle masterplans that include all these components





Masterplan? Example Rio de Janeiro

- Rio de Janeiro 2009 2012 'Programa Rio Capital Urbano da Movilidade em Bicicleta'
 - Only: A goal to double length of cycle network to 300 kms
 - By: Department of Environment to reduce emissions
 - Not a plan with a network and project list
- From 2015: Project to develop a real Bicycle Masterplan
- Up to 2016: Cycling infrastructure created bit by bit, not as part of network (some feeder to BRT)





Vision, goals and objectives (1)

- L.A. cities, Seville and Dublin: only kms of cycling infra
- Rotterdam, Portland: also goal to increase cycle use

	1. Rotterdam	2. Seville	3. Dublin	4. Portland
Plan	Bicycle plan 2015 – 2018 (4 years)	Bicycle Plan 2007 – 2010 (4 years)	Regional Cycle Network plan 2013-2021 (8 years)	Bicycle Plan 2010-2030 (20 years)
Goals	+ 10% cycle trips	City Network: 77 km. cycle tracks	Regional Network: 2900 km.	Cycling to work: 7 to 25%

Rotterdam & Portland: also expansion of cycling infrastructure!



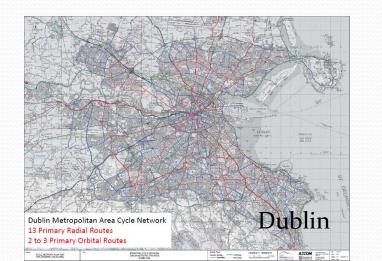
Latin-American Bicycle Plans

	5. Bogota	6. Mexico-city	7. Rio de Janeiro	8. Rosario
Plan	Development plan 2012- 2016 (4 years)	Programme for mobility 2013-2018 (6 years)	"Bicycle Plan" 2009 – 2012 (4 years)	Mobility plan 2010
Goals	145 km new cycle lanes and tracks	Ecobici x2 + 114 km cycling infra	+ 150 km cycling infra (undefined)	+ 150 km cycling infra (undefined, no year)

Does this matter?

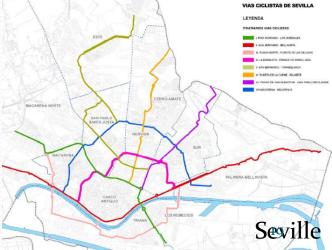


- No: Mexico, Rio, Rosario
- Yes: Rotterdam, Seville, Dublin, Portland











Bicycle network defined (2)

- Bogota: Yes, but...
 Bicycle strategy 2013
- But:
 - No political status
 - No implementation plan (when to implement what?)
 - Guidance document
 - Latest: Cycle track along metro line



Implementation plans (3)



- E.g. Rotterdam

Vision and overall policy

Mobility agenda 2015-2018, Traffic and Transport Plan 2003-2020



Plans and policies (incl. bicycle plan)

Traffic & Transport

Road Safety

Cycling

Parking



Implementation and action plans

Traffic & Transport

Road safety

Cycling

Parking



Implementation plans

- Rotterdam, Portland:
 Yes. With projects, budget and year of implementation
- Dublin:
 No. But overall network is defined with regional funding.
- Seville:
 One plan implemented in 4-year term
- 4 Latin-American cities:
 No overall implementation plan, no budget reserved



Maintenance (4)

- 4 Latin-American cities have no maintenance plan or budget for maintenance → Politicians want to score with new cycling infrastructure
- E.g.: Bicycle Masterplan Tilburg 2005-2015: 43% budget



Ex. Rio de Janeiro: 'Cycle track': part of 450 kms of cycle tracks (2016)



Conclusions for LA cities

- No objectives for cycle use or cycling accidents

 what do you want to achieve?
- No bicycle network plan with implementation plan and budget → no clear commitment
- No maintenance



2.2 Institutional organization for cycling and actors



Institution responsible for cycling:

	Traffic Planning	Urban Planning	Environmental
Rotterdam			
Dublin			
Seville			
Portland			
Bogota			
Mexico city			
Rio de Janeiro			
Rosario			



Institutional models

Integrated	Not Integrated	
Bicycle Coordinator	Without Coordinator	
Cycle Work Group	Without Cycle Work Group	



Integrated Model

Traffic and Transport Planning

Traffic Planning

Cycle Network Planning

Road Design

Cycling
Infrastructure
Design

Parking

Bicycle Parking

Public Transport

Intermodality Bicycle



Rotterdam: Integrated planning





Not Integrated model

Cycle infrastructure projects

Environment

Generates and Submits

Mexico

Public Works

Generates and Submits

Rosario / Rio

Approves or rejects

Transport / Mobility

Urban Planning

Generates and Submits

Bogota



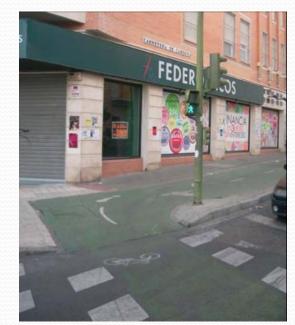
Example Seville

Urban Planning Department cannot intervene in the

carriageway

'footpath' cycle tracks







Cycling infra integrated in traffic



Safe intersection when cycle infrastructure is integrated.

Example Rotterdam



Entities initiating cycling projects

	Traffic / Transport	Public Works	Urban Planning	Environment
Rotterdam				
Seville				
Dublin				
Portland				
Bogota				
Mexico-city				
Rio de Janeiro				
Rosario				



Other entities with cycling projects

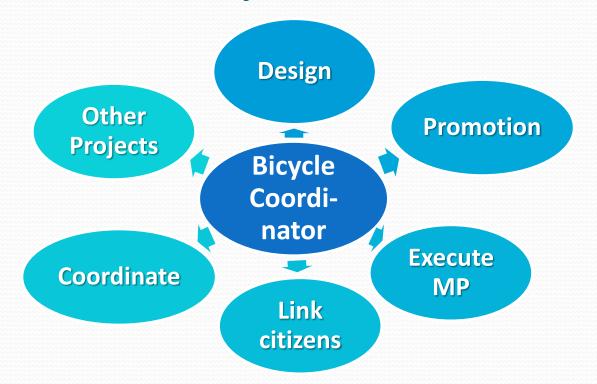
Mexico city: The *Delegaciones* have jurisdiction over secondary roads





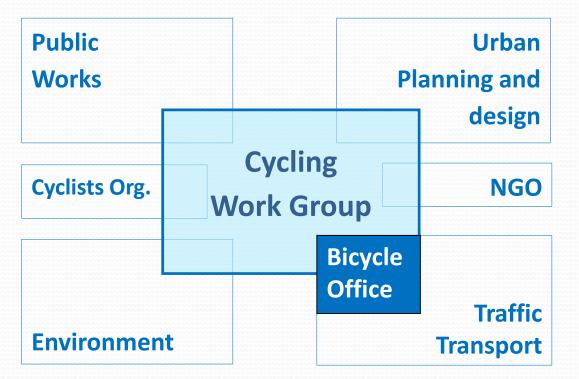


Functions of Bicycle Coordinator





Coordination mechanism (proposed):



Zé Lobo (Rio)

14/6/2017

36



Conclusions for LA cities

- Only responsible agency should initiate cycling projects
- Integrating cycling in traffic and transport leads to better results (than in environment, urban planning)
- Designate a bicycle coordinator (or office)
- Cycling working group is effective institutional arrangement to coordinate cycling plans and projects



2.3 Interaction between actors



Citizens / cycling groups

- Important to involve them and to allow them to give input
- Example: In Portland Citizen's task force was strongly involved in the bicycle plan

- But, if there is no real planning, citizens and cycling groups cannot compensate for this shortcoming
- Example Rosario:
 - Citizens vote for which project to implement (no network plan)



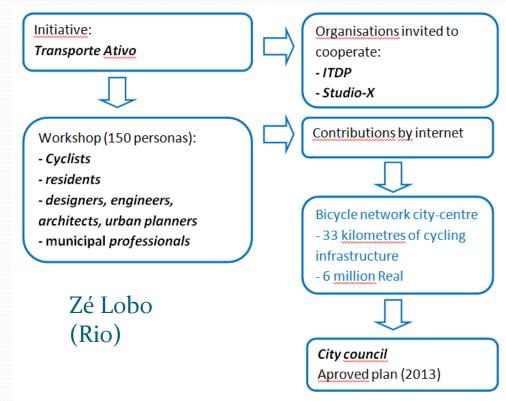
Citizens (neighbours) not involved





NGOs

- NGOs in Latin America and Seville are essential for cycling and have a lot of expertise:
 - ITDP, Transporte Ativo, Despacio, A Contramano, etc.
 - Example City-centre cycle plan Rio





QUEM PEDALA NO CENTRO HOJE

PARA ENTENDER QUEM PEDALA HOJE NO CENTRO, REALIZAMOS CINCO CONTAGENS EM PONTOS ESTRATÉGICOS: CANDELÁRIA, PASSEIO PÚBLICO, ESTÁCIO-CIDADE NOVA, PRAÇA XV E AV. CHILE. ENCONTRAMOS UM TOTAL DE MAIS DE 3.000 CICLISTAS, SENDO 40% BICICLETAS DE SERVIÇO, E % DESTAS, TRICICLOS. UM DOS PRINCIPAIS INDICADORES QUE ATESTA A QUALIDADE DA INFRAESTRUTURA PARA O CICLISTA É A QUANTIDADE DE MULHERES PEDALANDO. NESTE QUESITO, O CENTRO FOI REPROVADO: APENAS 3% ERAM MULHERES.



COLETAMOS DADOS EM

100 PONTOS

DO CENTRO DA CIDADE, OLHANDO PARA TODOS OS DIVERSOS SEGMENTOS DAS RUAS.

EXEMPLO DE COLETA DE DADOS DE CAMPO

1 P	Trecho P. L. C. P. S. SAMPANO Trecho P. L. C. P. S. SAMPANO Construction de via Trans de riserreno Tra Comm. T. S. Sampano T. S. J. F. S. Sampano Tra Comm. A. S. Sampano T. S. J. F. Sampano Theorem. A. S. Sampano T. S. Sampano T. S. Sampano Theorem. A. S. Sampano T. S. Sampano Theorem. A. S. Sampano T. S. Sampano T. Sampano T. S. Sampan
Corru	Transition of Colored States o
EXTACIO ASE TO SE STATE OF SE	Obi.
引()) ド	ринан. 25

CICLO ROTAS CENTRO

PROJ

EXISTENT









Metropolitan cooperation

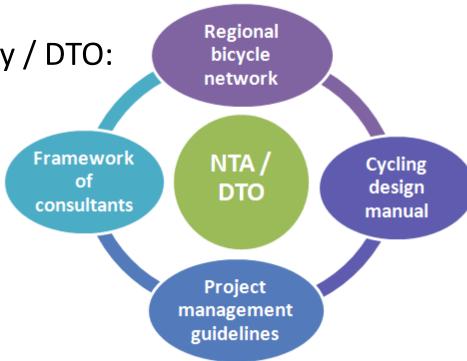
- Cycling plans and policies beyond municipal boundaries
- Dublin, Portland and Rotterdam have metropolitan authorities that are also responsible for cycling



Example Dublin

National Transport Authority / DTO:

- Regional network
- Funding to municipalities when designs in line with design manual
- and in regional network





Municipality in region (+ consultants):

- Preliminary plans including pre-planning consultations
- Planning consent through statutory process (several options)
- Detailed design, tendering process and construction



Main conclusions

- Involvement of NGO's and citizens is essential for support and to get input from users
-but there needs to be a structure (institutional arrangement)



2.4 Capacity to generate cycling-inclusive plans and infrastructure



Capacity needed to deliver

- Skilled professionals (traffic planners, designers, etc.)
- Ability to create good quality (cycling) infrastructure
- Juridical arrangements
- Capacity to secure funding



Cycle planning and design expertise

- Latin America (and many other countries):
 - Expertise needed to design good quality cycling-inclusive road infrastructure is (generally) missing

 Worse: In many cases there is little awareness that this expertise is missing



Expertise: Cycling design is not easy



Lack of road safety
Dangerous bollards (Seville)
14/6/2017



Lack of continuity / integration in traffic (Bogotá)

017



Causes of poor designs

- Lack of expertise and/or budget for expertise
- Not taking space from motorised traffic
- Experts on 'political' positions
- Belief: anything is better than nothing
- Architects design cycling infrastructure (L.A., Sevilla)
 - Lack of understanding of (motorised) traffic and road design
- Political pressure and lack of time and budget for studies and designs: Deliver 'now' ('victorias tempranas')



Design issues

Not wanting to take away road and parking Space (Dublin)







Institutional arrangements to create capacity:

Institutional arrangement	Limitation / condition
University education	Needed, but long-term solution
Training courses and workshops by experts	Useful, but limited reach
Cycle manuals and guidelines	Doesn't teach real life situations
Design projects by cycling experts	Excellent if together with local consultants



Cycling infrastructure design Manuals

- Developed in/for Colombia, Mexico, Brazil (Peru, Chile)
- Quality differs but is improving.
- National manuals:
 - Cities are not always aware of existence
 - Often by consultant without creating ownership with national and local authorities
- Local manuals:
 - Few. Simple Rio de Janeiro guidelines are good step to create more uniformity in design



Examples of juridical arrangements (laws)

 Oregon (1971): Municipalities need to spend at least 1% of state infrastructure budget on cycling infrastructure

 Rio de Janeiro (2005): Shopping centres need to provide cycle parking.



Conclusions for LA cities - Capacity

- Take cycling serious
- Make studies and professional designs
- Hire experts if not available
- Don't rush



Thank you for your attention

Jeroen Buis, Liliana Gonzalez, (Damien O'Tuama (Dublin), Zé Lobo (Rio de Janeiro))



Panel Anything to add?



Discussion and questions

- Plans and policies (1), Institutional organization (2),
 Coordination (3), Capacity (4)
- Can you identify some of these institutional challenges in your cities?
- Which of the arrangements discussed could be incorporated in your city?