Supporting bicycle monitoring from civil society: the example of Bogotá's bicycle account

Carlosfelipe Pardo

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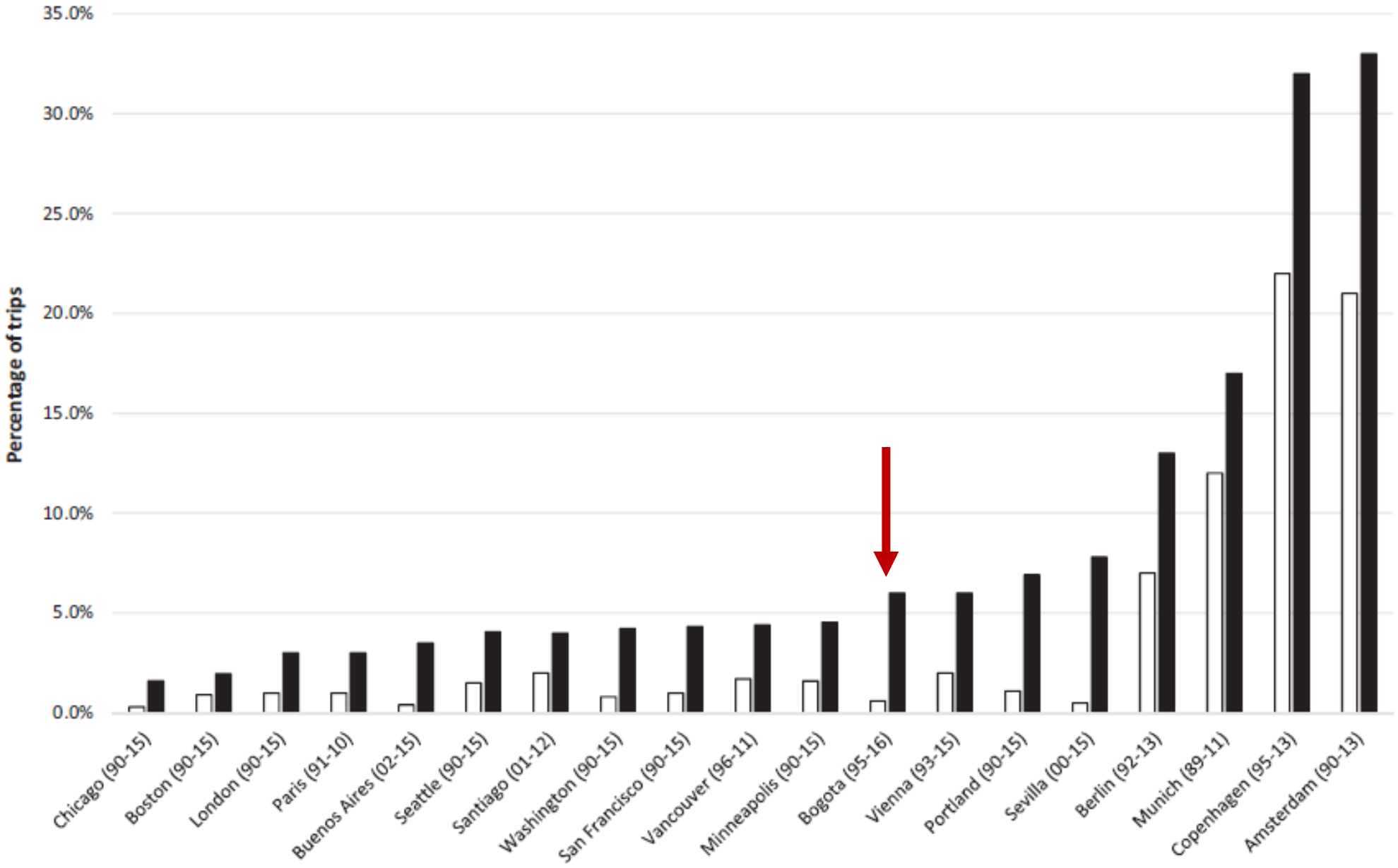
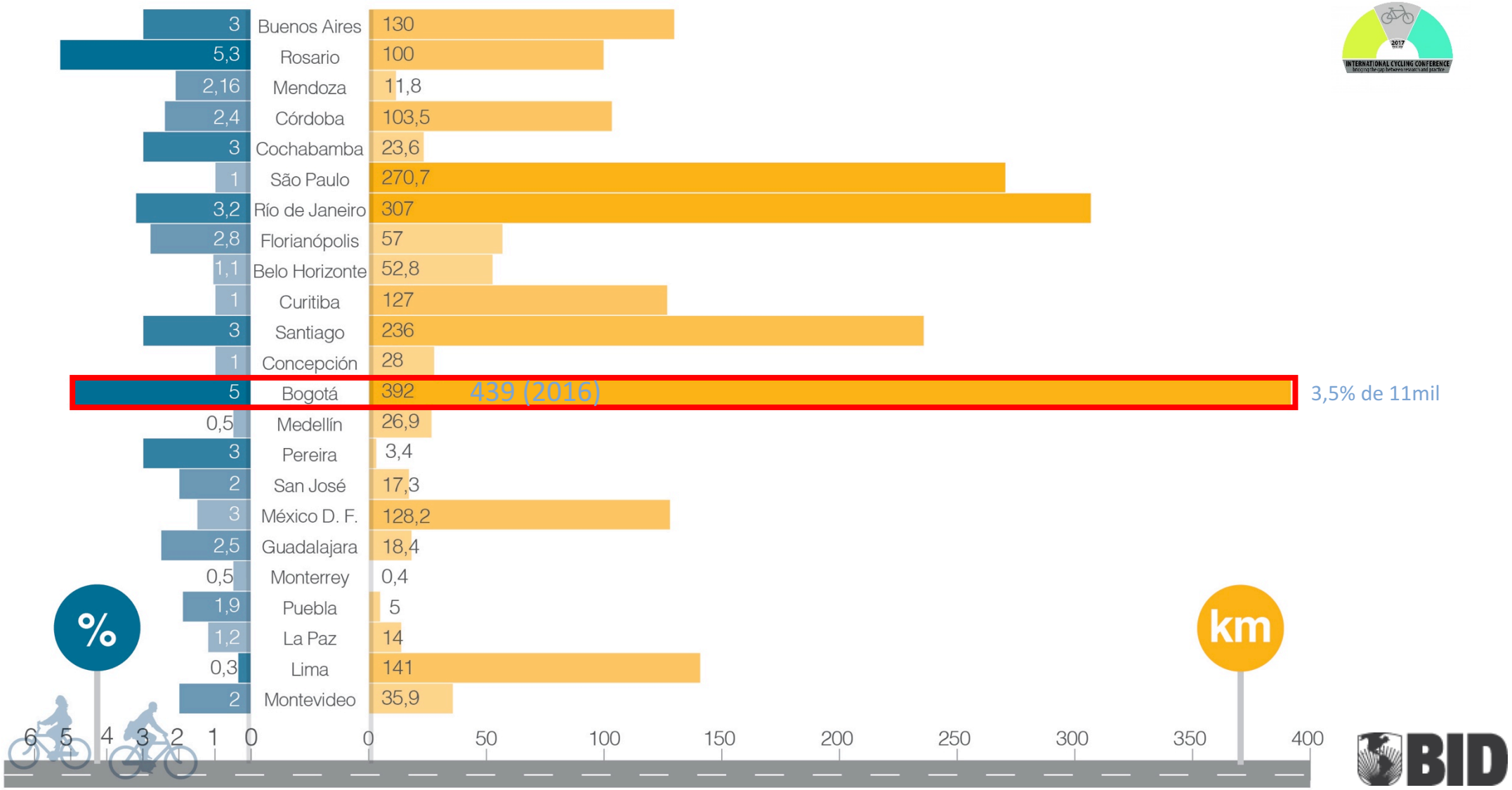


Figure 2. Increasing bike mode shares in large cities of Europe and the Americas, 1990–2015. Sources: Based on travel surveys conducted for each city.

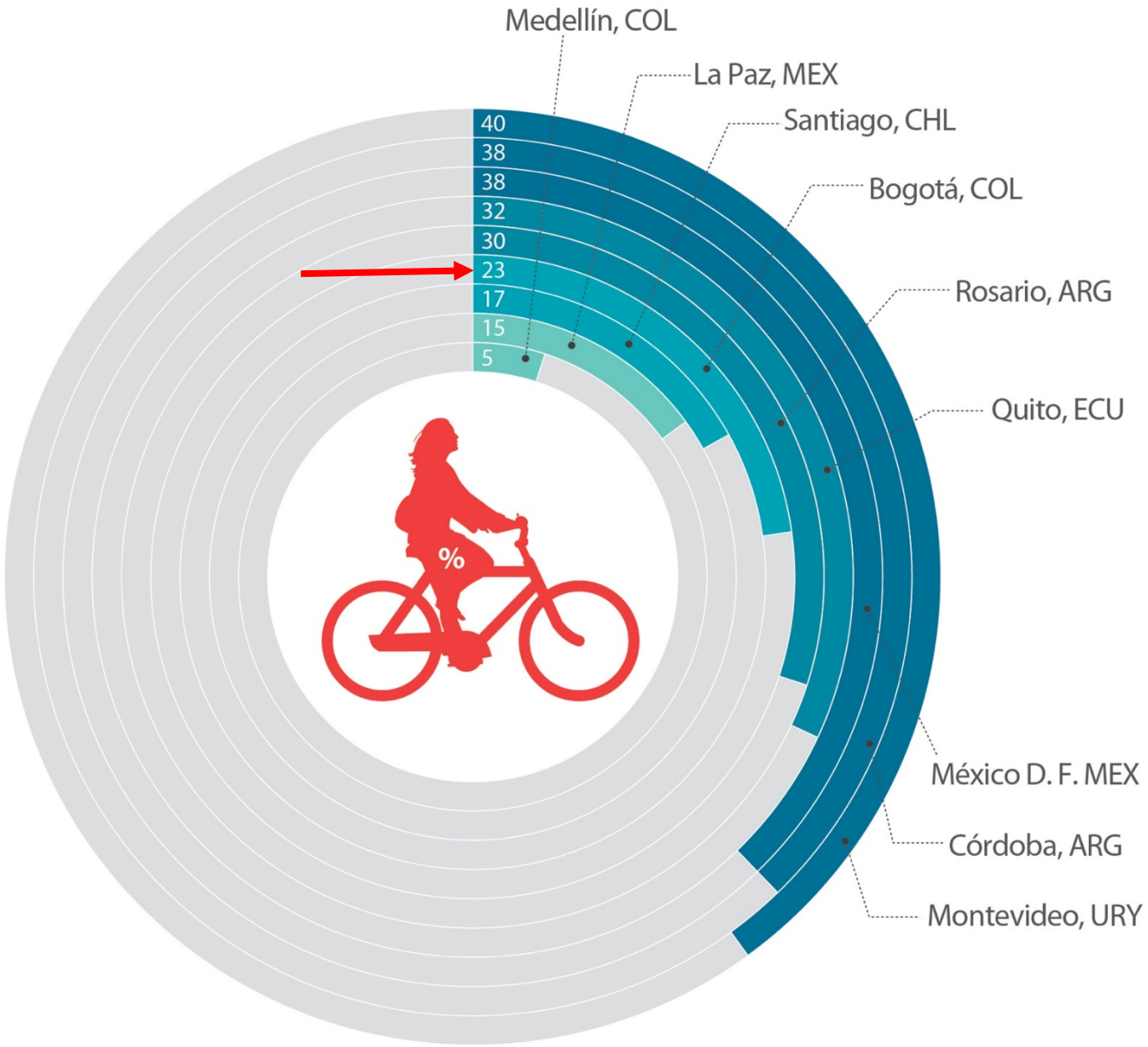
Bicycle modal share vs. Km of cycle-infrastructure



3,5% de 11mil

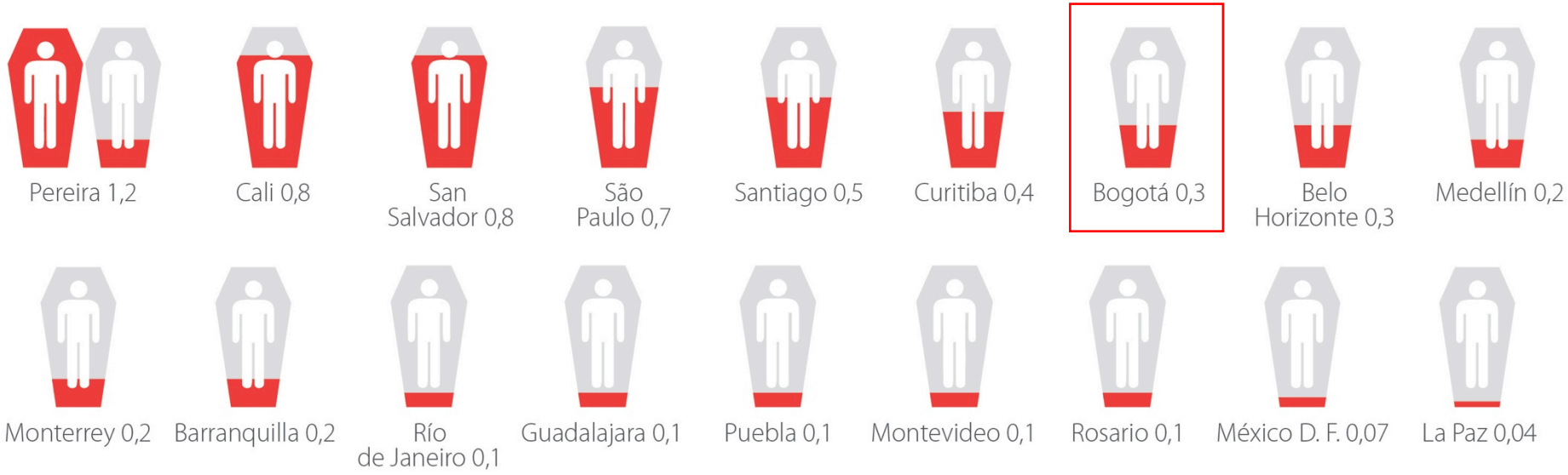
Source: BID, 2015

Percentage of bicycle trips carried out by women



Source: BID, 2015

Total cyclists deaths per 100.000 inhabitants (per year)



Fuente: BID, 2015

National level: support

LEY No. 1811 21 OCT 2016

POR LA CUAL SE OTORGAN INCENTIVOS PARA PROMOVER EL USO DE LA BICICLETA EN EL TERRITORIO NACIONAL Y SE MODIFICA EL CÓDIGO NACIONAL DE TRÁNSITO

MINTRANSPORTE
NIT.899.999.055-4

TODOS POR UN NUEVO PAÍS
PAZ EQUIDAD EDUCACIÓN

Para contestar cite:
Radicado MT No.: 20172100035361
07-02-2017

Bogotá, 07-02-2017

PARA: ALCALDES MUNICIPALES, ORGANISMOS DE TRÁNSITO, DIRECCIÓN DE TRÁNSITO Y TRANSPORTE DE LA POLICIA NACIONAL, DIRECCIONES TERRITORIALES, CENTROS DE DIAGNÓSTICO AUTOMOTOR, CENTROS DE RECONOCIMIENTO DE CONDUCTORES, CENTROS DE ENSEÑANZA AUTOMOVILÍSTICA

DE: VICEMINISTRO DE TRANSPORTE

ASUNTO: Implementación Resolución 160 de 2017 – Registro y Circulación de Ciclomotores, Tricimotos y Cuadriciclos.

MINTRANSPORTE
NIT.899.999.055-4

TODOS POR UN NUEVO PAÍS
PAZ EQUIDAD EDUCACIÓN

RESOLUCIÓN NÚMERO 0000160 DE 2017

(-2 FEB 2017

"Por la cual se reglamenta el registro y la circulación de los vehículos automotores tipo ciclomotor, tricimoto y cuadriciclo y se dictan otras disposiciones"

EL MINISTRO DE TRANSPORTE

En ejercicio de sus facultades constitucionales y legales, en especial las conferidas por los artículos 208 de la Constitución Política, 1 de la Ley 769 de 2002 modificado por el artículo 1 de la Ley 1383 de 2010, 2 parágrafo de la Ley 1811 de 2016 y 6 numeral 6.2 del Decreto 087 de 2011, y

CONSIDERANDO

MINTRANSPORTE
TODOS POR UN NUEVO PAÍS


H81 USME PORVENIR II
28
LONDON
HIX 971

Introduction

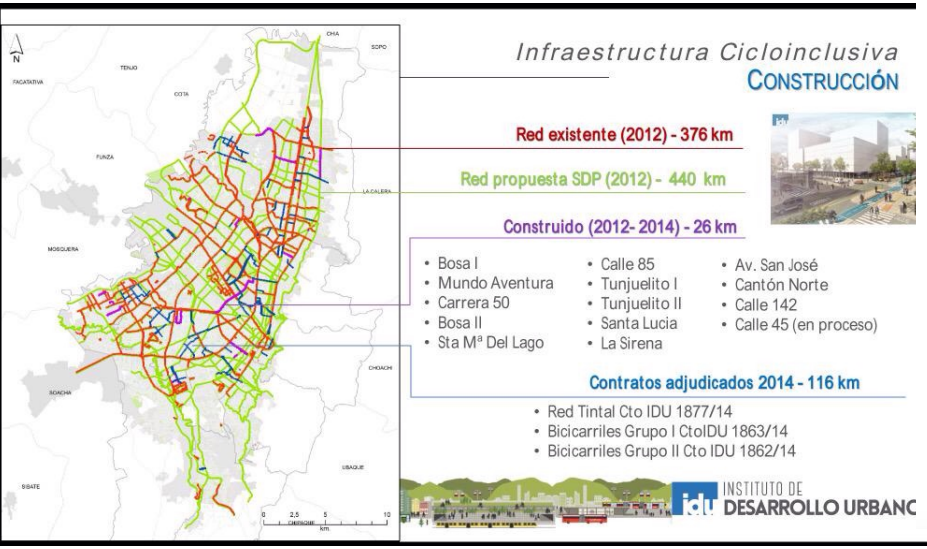
- Bogotá Bicycle Account presents facts and figures about the state of cycling in Bogotá.

- Bogotá:
  - nearly 8 millon inhabitants.
  - Average density 201 inhabitants per ha (7th largest density in the world, densest city in the American continent)
  - Located 2600m above sea level.

- Developed by NGO, no financing from anyone else

Background

Historical Moment	Bicycle Users	Bicycle Uses	Perception of Bicycles
1800s arrival of the bicycle	High Income Men and women	Transport Recreation	High status
1903 Arrival of the automobile	Children are main bicycle users (high class)	Bicycle as children's recreation	Bicycles are for children
1950 Vuelta a Colombia (Tour of Colombia)	Low income people	Sports	(for high status) vehicle of the poor
1974 Ciclovía (Sunday carfree day)	The entire population	Sports, recreation	Vehicle for everyone's recreation
1998 – first mass bikeway construction	Varied (mostly low income, but increasingly also high income)	Transport	Increasingly positive
2000 – first Carfree day (one a year)	The entire population	Transport	



RED DE CICLORRUTAS:

Estudios que:

- **Permitan la implementación de ciclorrutas (en calzada y anden).**
- **Generen conexiones en la red existente.**
- **Permitan la optimización de la red de ciclorrutas.**

376 KM Línea Base 2012

197 KM Viabilizados 2012-2015

63,1 KM Implementados 2012-2015

✚

14,2 KM En informe de factibilidad

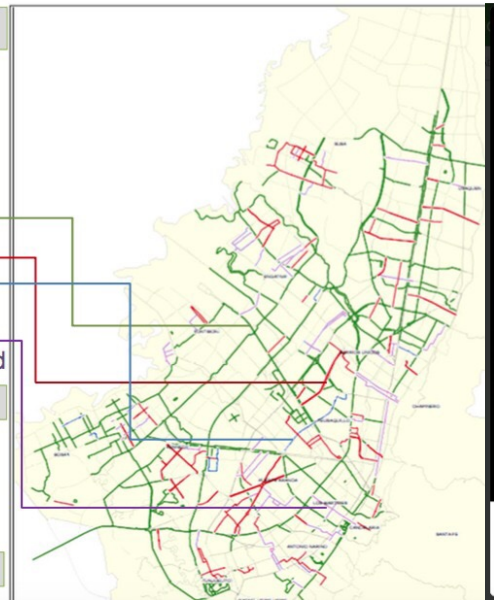
23,1 KM En estudio de prefactibilidad

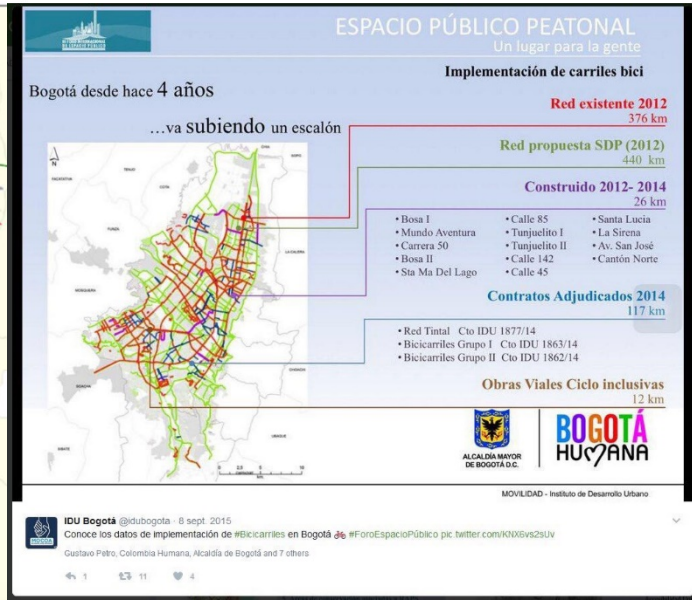
IMPLEMENTACIÓN (IDU):

CONTRATO	META	EJECUTADO
1877-2014 Red Tintal	9,74 KM	
1862-2014 Grupo II	56.78 KM	**15.08 KM**
1862-2014 Grupo I	51.71 KM	**21.05 KM**

Fuente: IDU

SOCIALIZACIÓN (IDU):



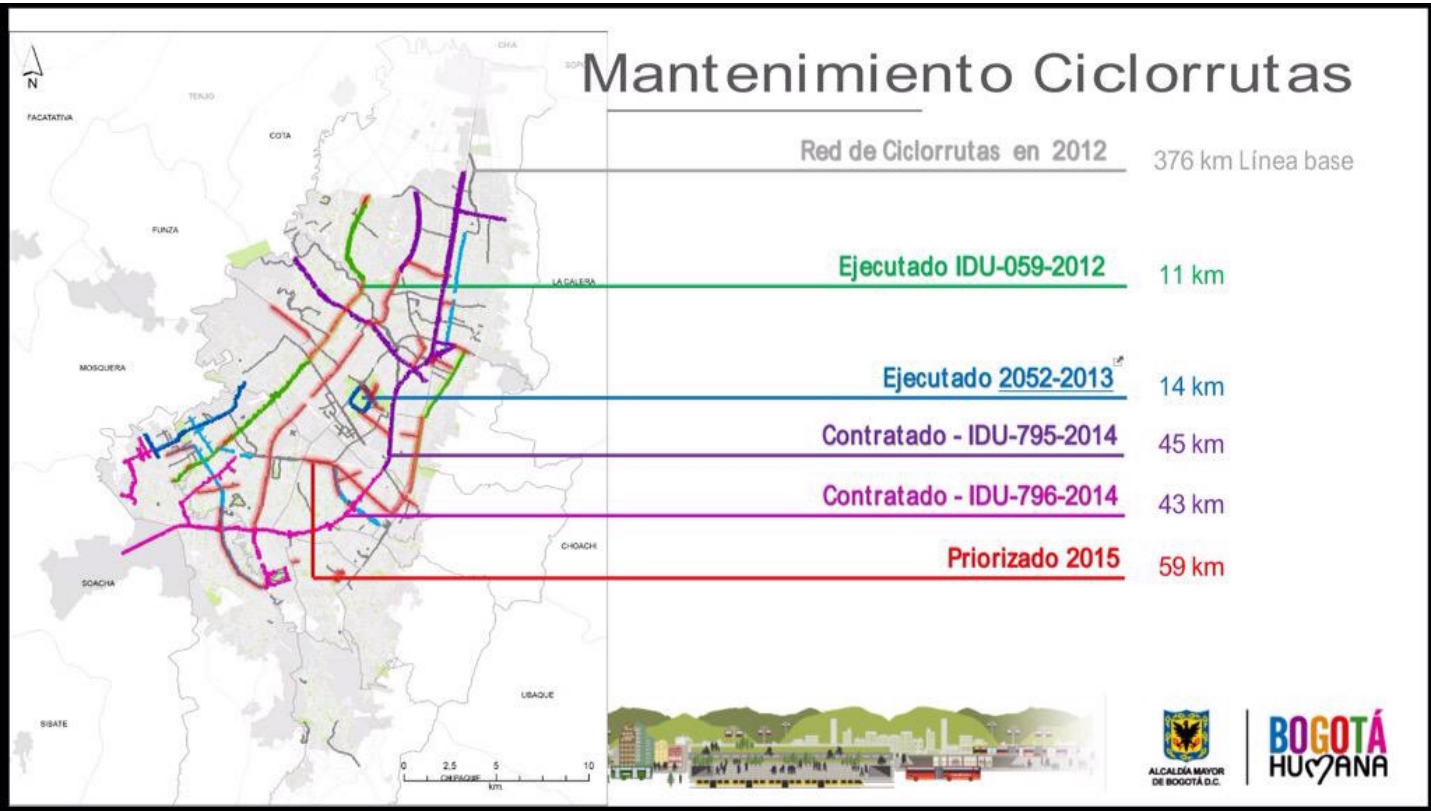


Comparativo por ejecución de la red de ciclorrutas 1995-2003

Período	1995	1998	1999	2000	2001	2002	2003	km
IDU		7.2		81.3	91.9	36.5		216,9
EAAB		0,7			35.6	12.7		49,0
IDRD				20.5				20,5
OTRAS		6.3		2.8				9,1
km		6,3	7,9	232,1		49,2		295,5

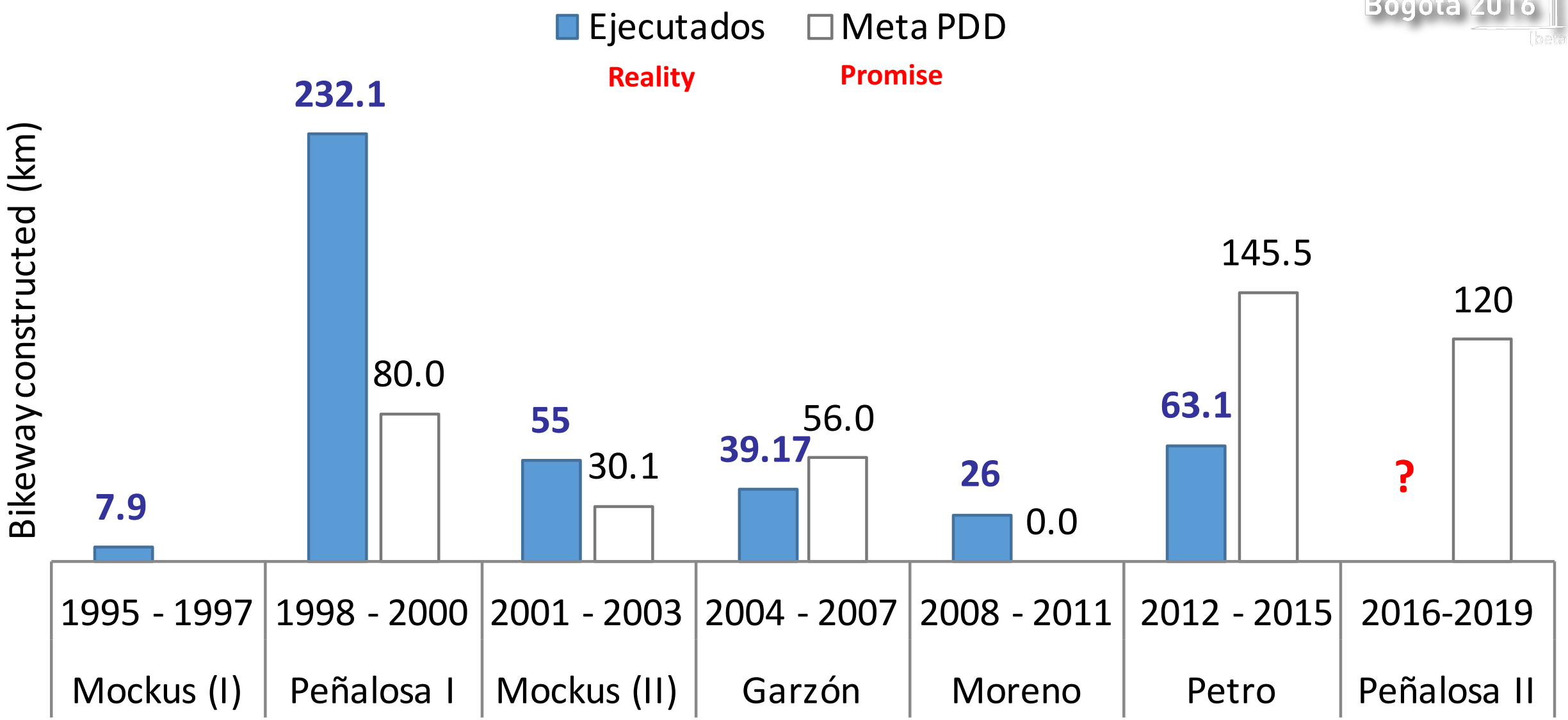
C. Salitre — Metrovivienda

ón y elaboración a partir de información propia. *Presentación Ciclorrutas Diciembre-2003*



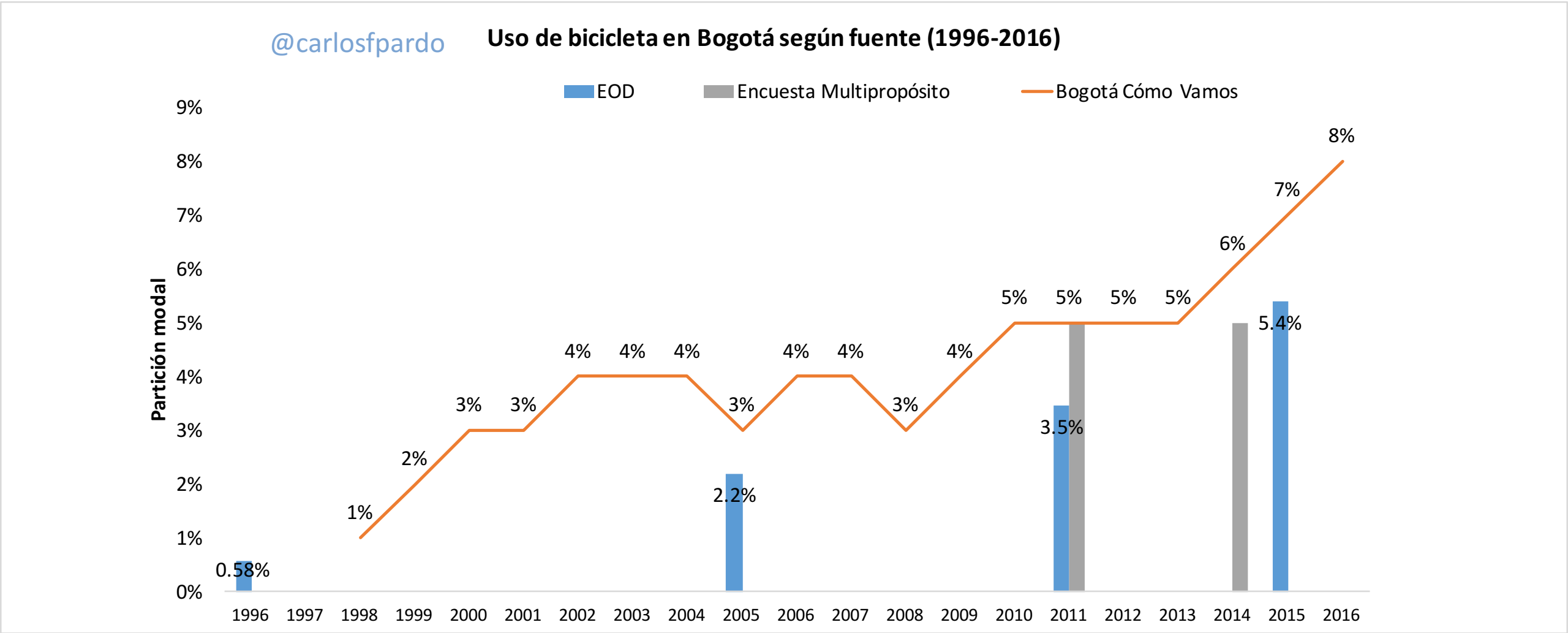
Coordination…

Ciclo-infraestructura según mandato (meta vs ejecutado)

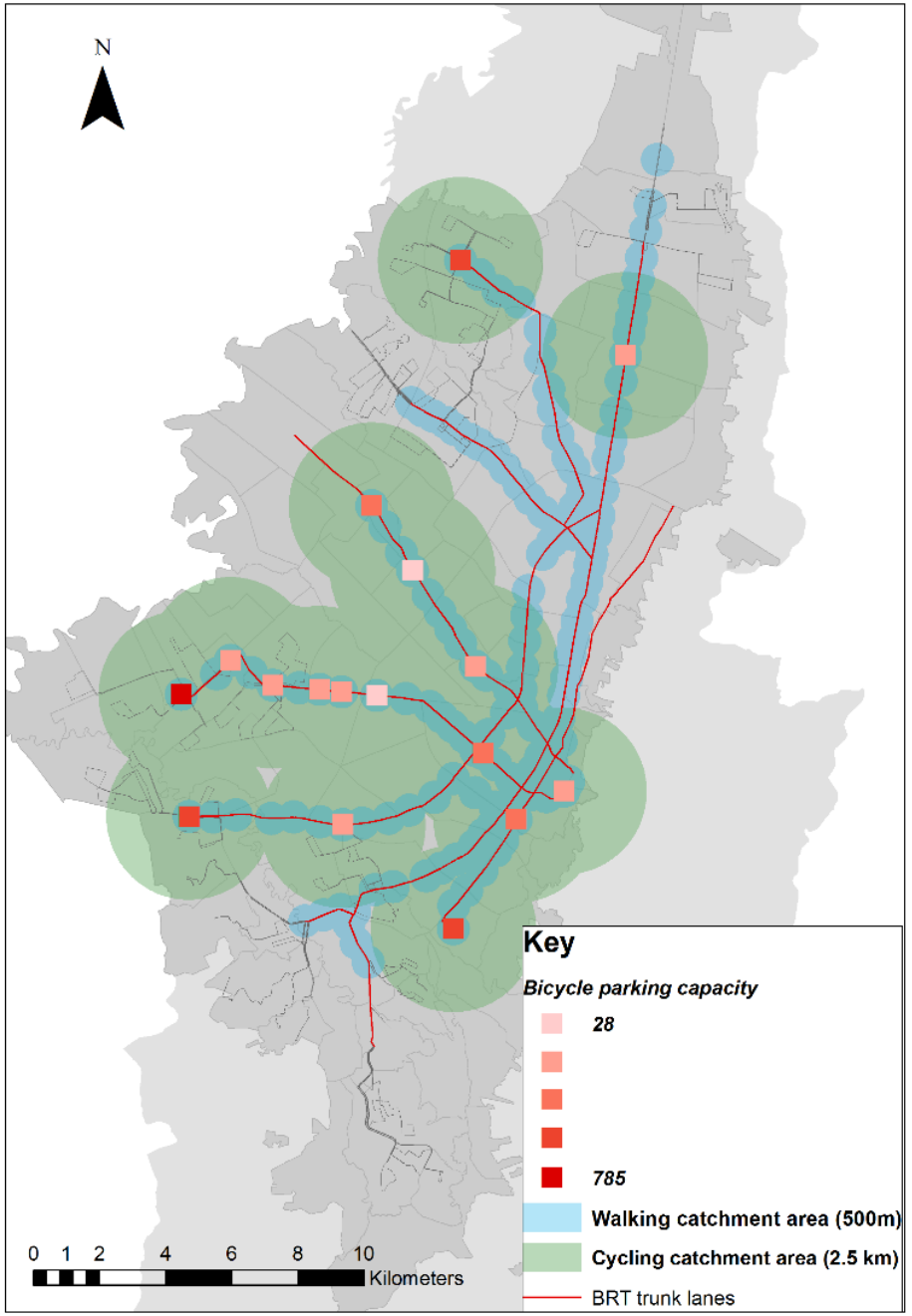


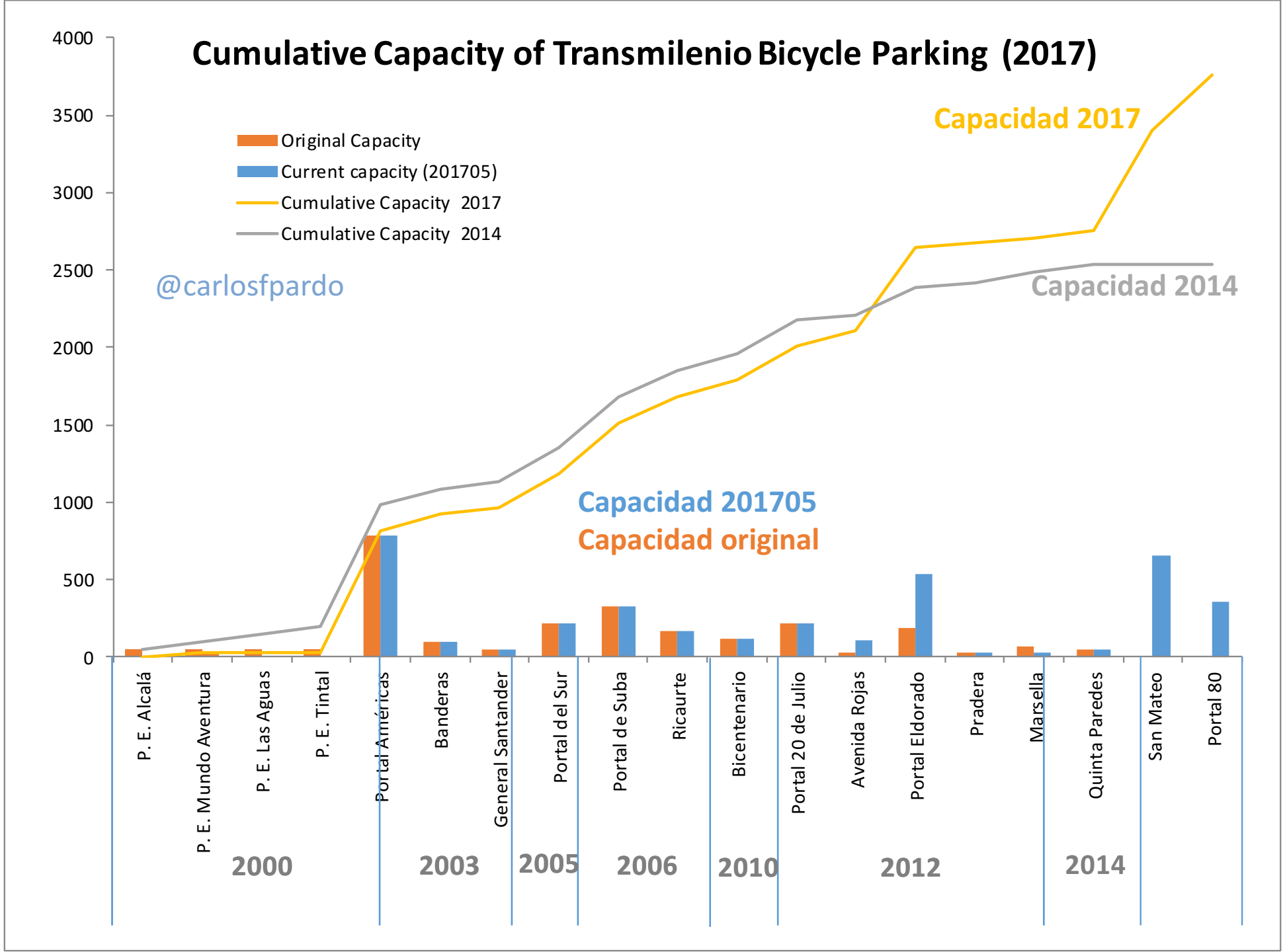
Sources: SDM 2015, Contraloría de Bogotá, Planes de Desarrollo de cada mandato

Bicycle use (various sources)



Integration with TransMilenio





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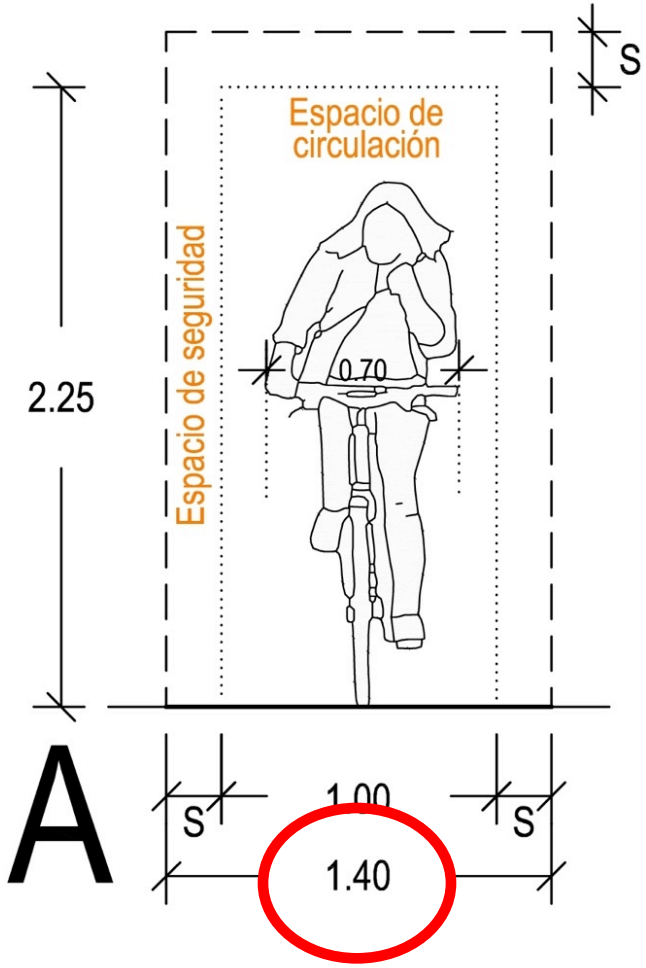
Meta 2016-2019: 1.500 más

2532 vs 3758

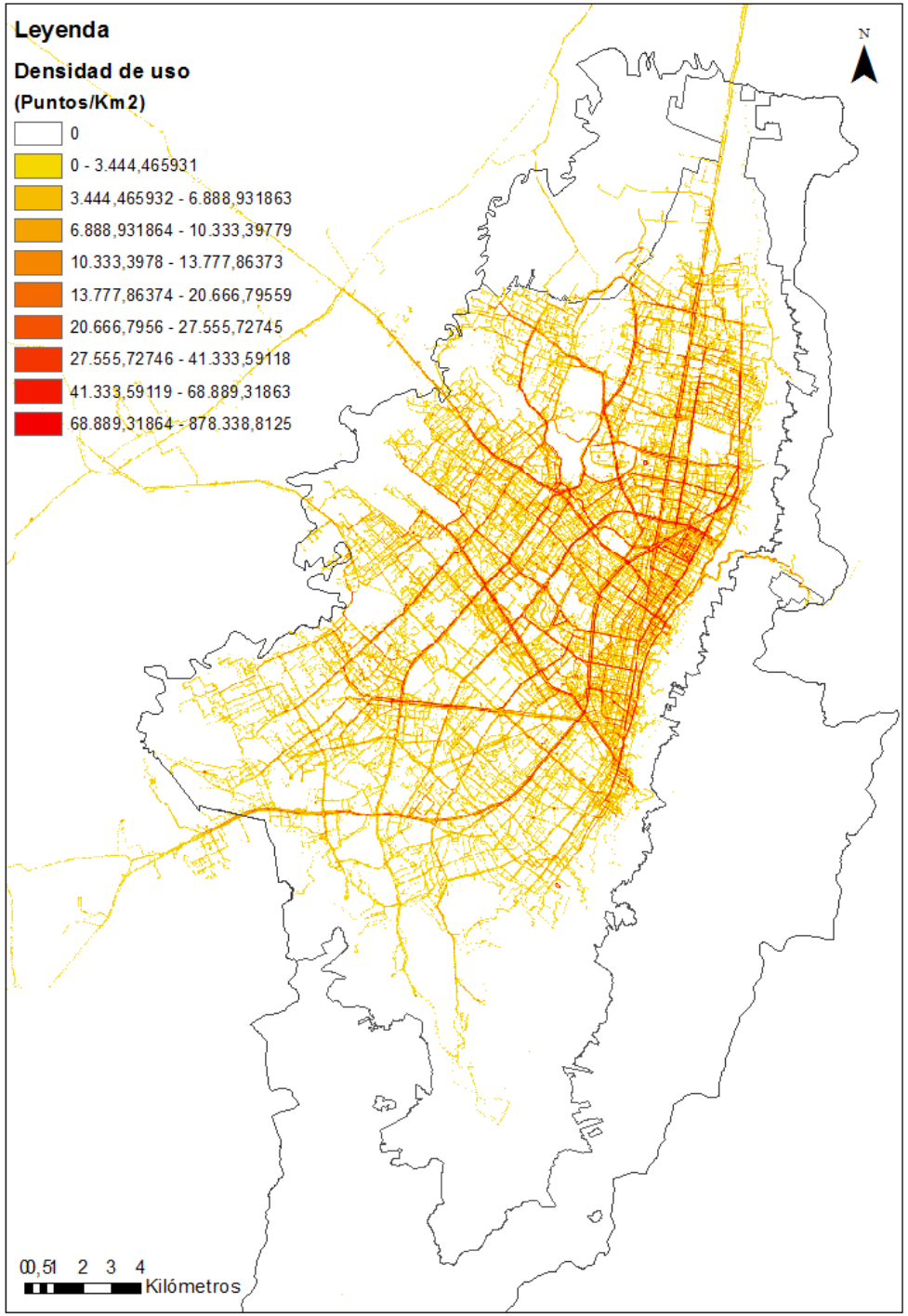
Bogotá – lane width measurements

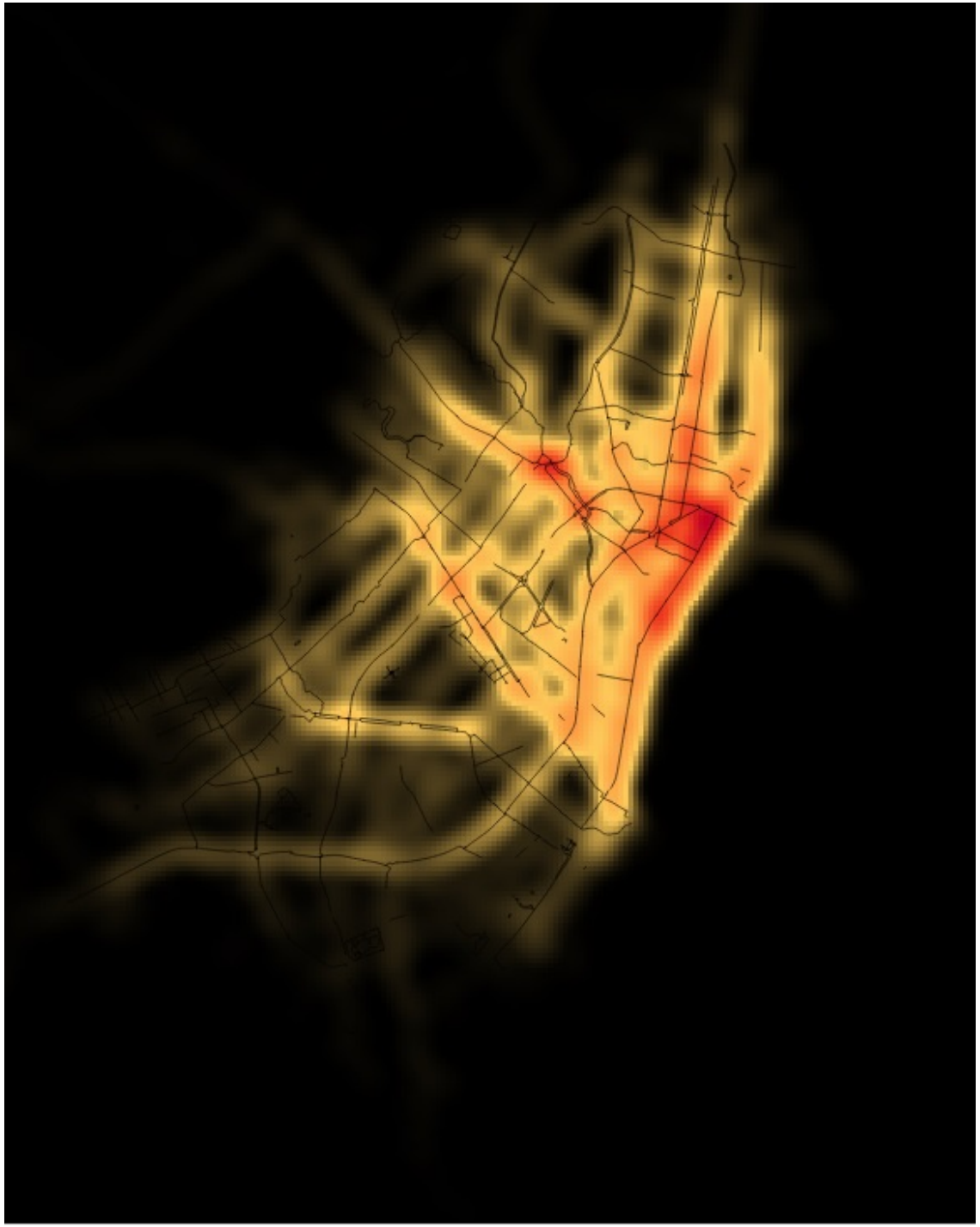
- Measurements considered:
  - 26 portions were measured, these included all types of infrastructure
  - Narrowest lane was 95 cm and widest 142 cm (300 cm for shared lane)



(Measures suggested by colombian guide)

todos	
Máximo	300
Mínimo	57,5
Promedio	117
sin vía compartida	
Máximo	142,5
Mínimo	57,5
Promedio	110,442308





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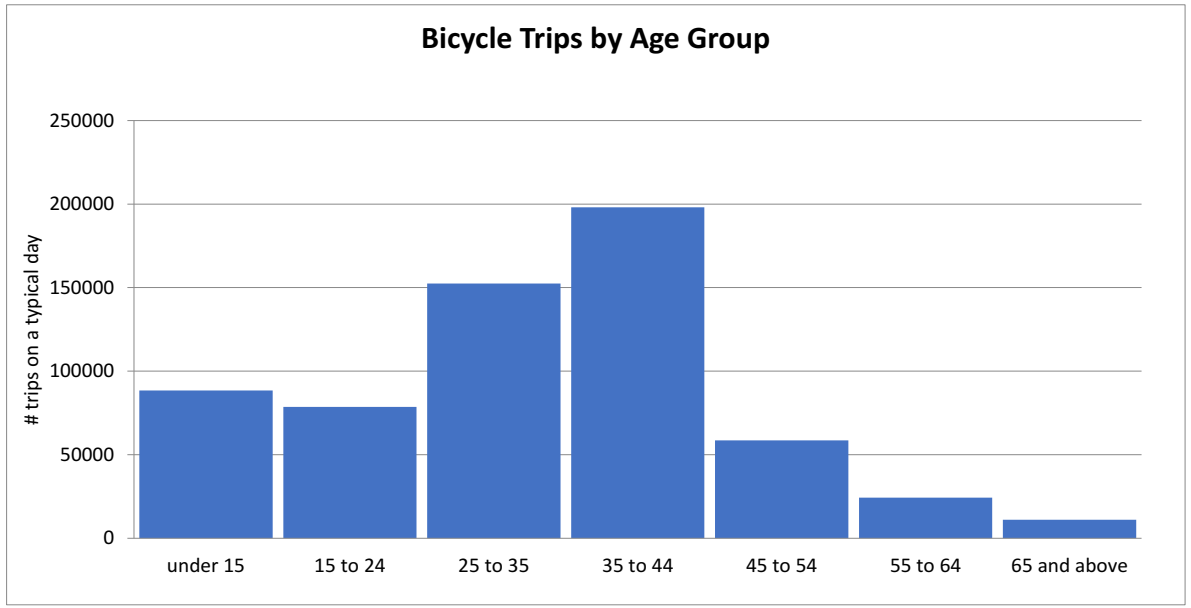
biko
INTERNATIONAL CYCLING CONFERENCE

Heatmap Biko use
March 27- April 2

Demographic data

Gender	% of Bicycle Trips on a Typical Day	Average length of trip
Male	75%	6 km
Female	25%	4 km

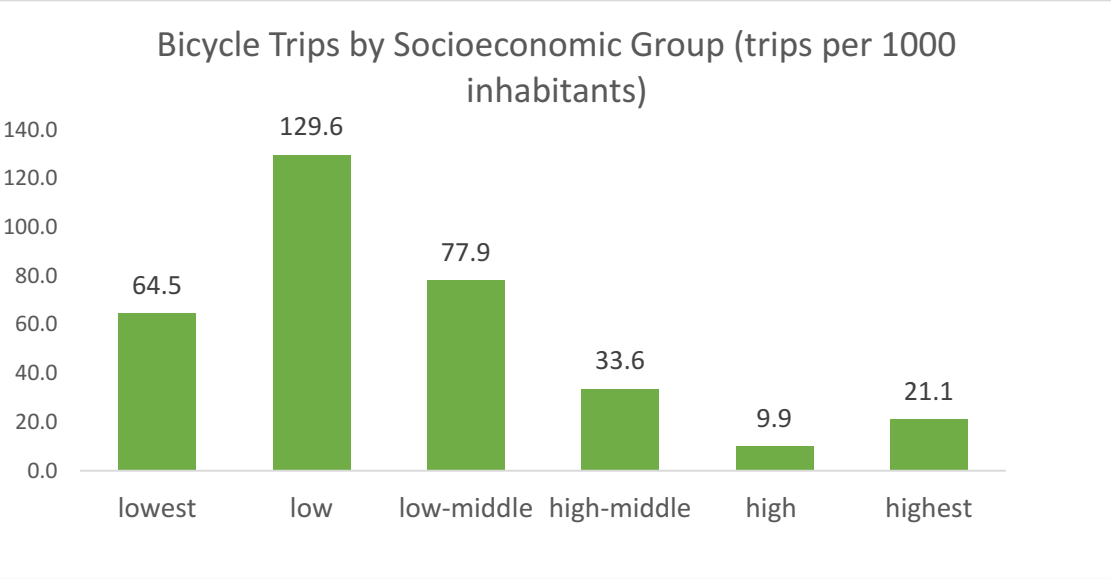
- There is a significant difference in bicycle use by gender.
- Men tend to travel longer distances.
- Women contribute to 25% of all trips on a typical day.



- The age groups with the highest levels of bicycle use on a typical day were between 25 and 44, comprising around 57% of all bicycle trips.
- People under 44 make up 85% of all trips.

Source: Bogotá's Mobility Survey, 2011

Demographic data



The three lowest socioeconomic groups make most bicycle trips per 1000 and around 80% of all bicycle trips on a typical day.

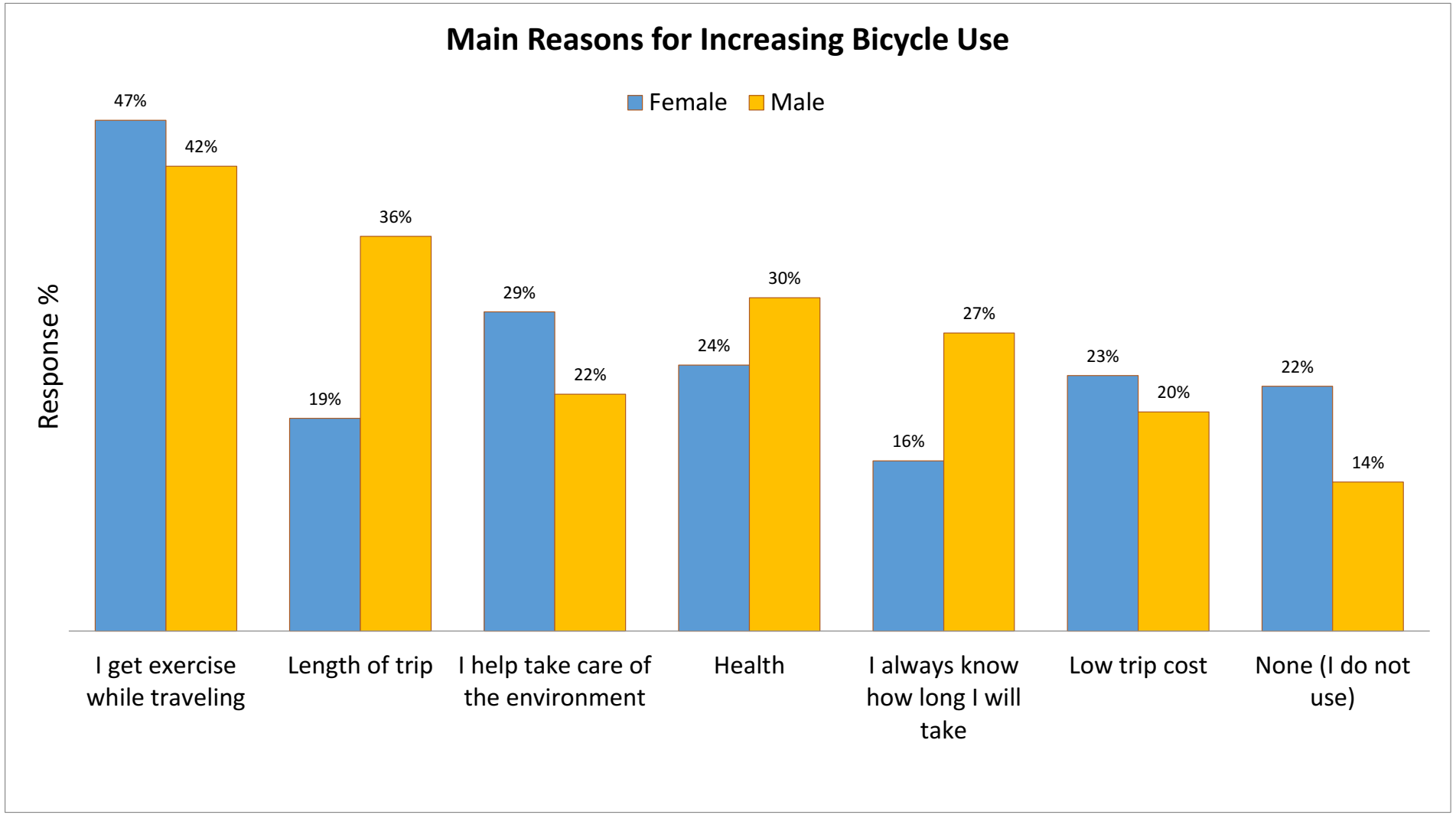
What do Bogotanos think?

- Why do Bogotanos use bicycles?

Percieved positive factors of cycling

Positive Factor	Response %
Fitness	44%
Health	28%
Trip duration	28%
Environment	25%
Reliability	22%
Trip cost	21%

What do Bogotanos think?



What do Bogotanos think?

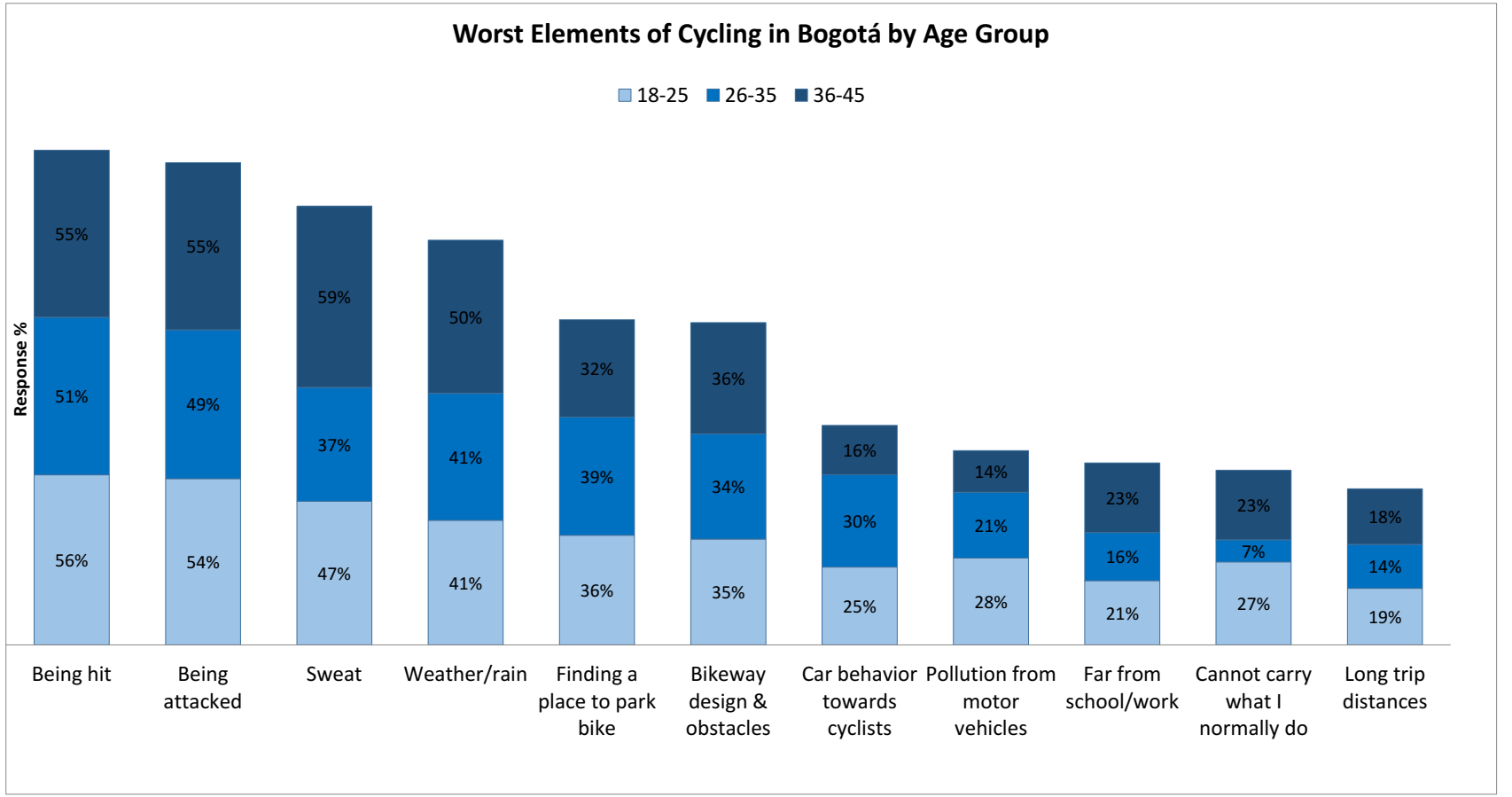
- Why do they not use bicycles?

Perceived adverse factors

Adverse Factor	Response %
Being attacked	**56%**
Being hit	**53%**
Weather/rain	**46%**
Car behavior towards cyclists	**42%**
Pollution from motor vehicles	**39%**
Bikeway design & obstacles	**37%**
Finding a place to park bike	**26%**
Sweat	17%
Cannot carry what I normally do	17%
Far from school/work	16%
Cannot leave bike anywhere (if I don't return on bike)	15%
Clothes get dirty / have to use athletic wear	14%
Cannot leave bike anywhere (if I get tired, have an accident, etc.)	11%

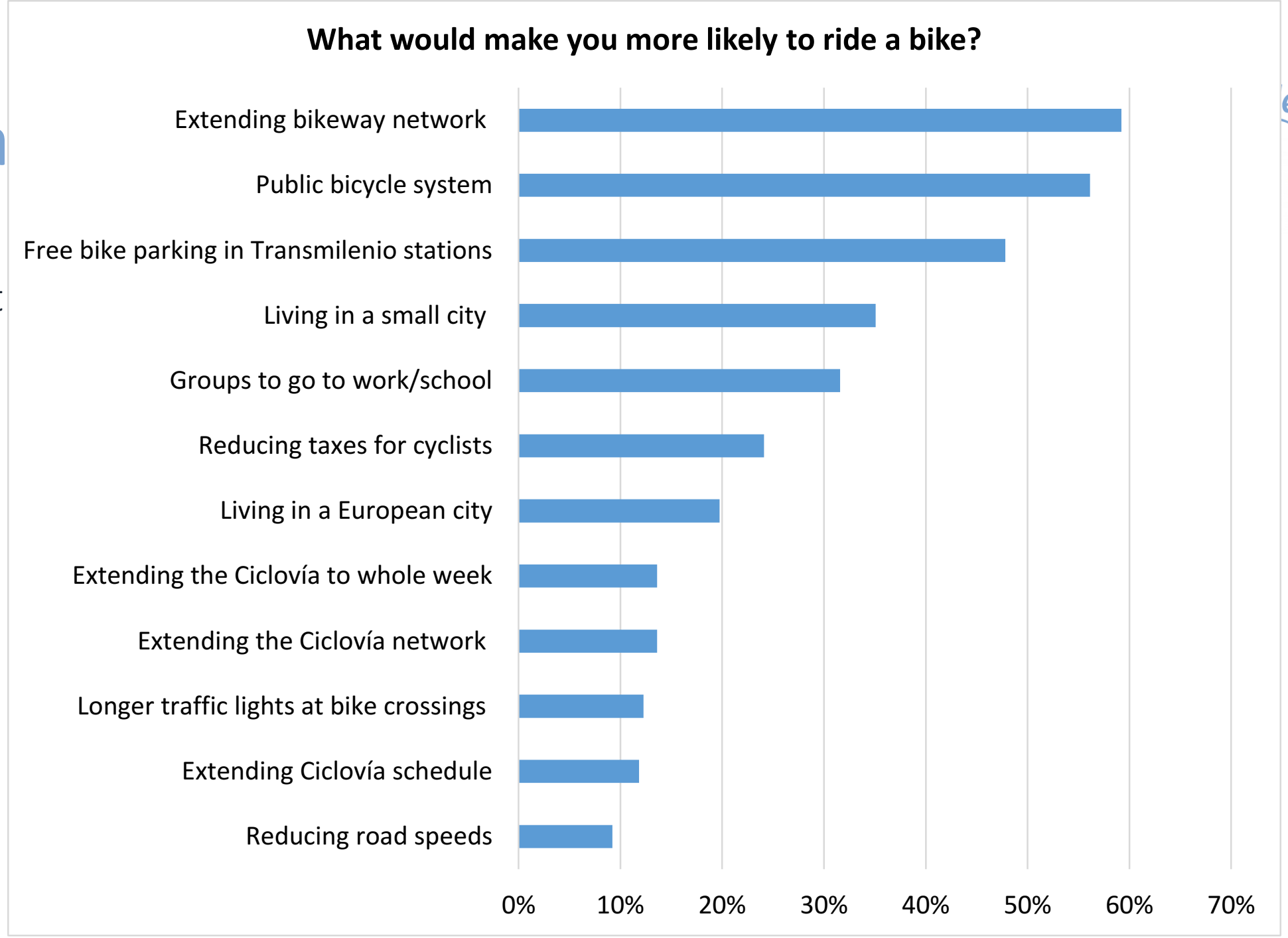
What do Bogotanos think?

- Why do they not use bicycles?



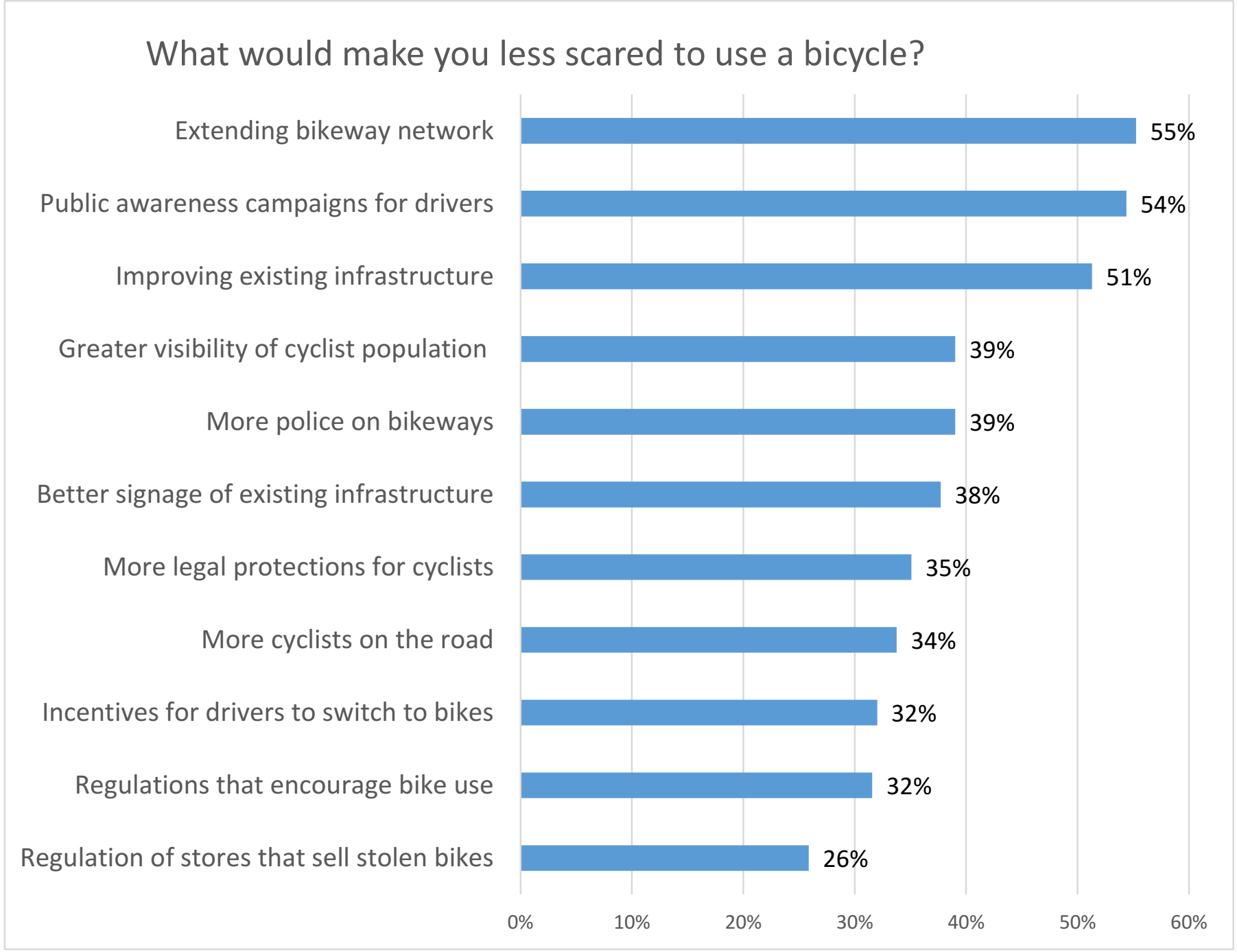
Wha

- What


What would make you more likely to ride a bike?
Extending bikeway network
Public bicycle system
Free bike parking in Transmilenio stations
Living in a small city
Groups to go to work/school
Reducing taxes for cyclists
Living in a European city
Extending the Ciclovía to whole week
Extending the Ciclovía network
Longer traffic lights at bike crossings
Extending Ciclovía schedule
Reducing road speeds
0%
10%
20%
30%
40%
50%
60%
70%

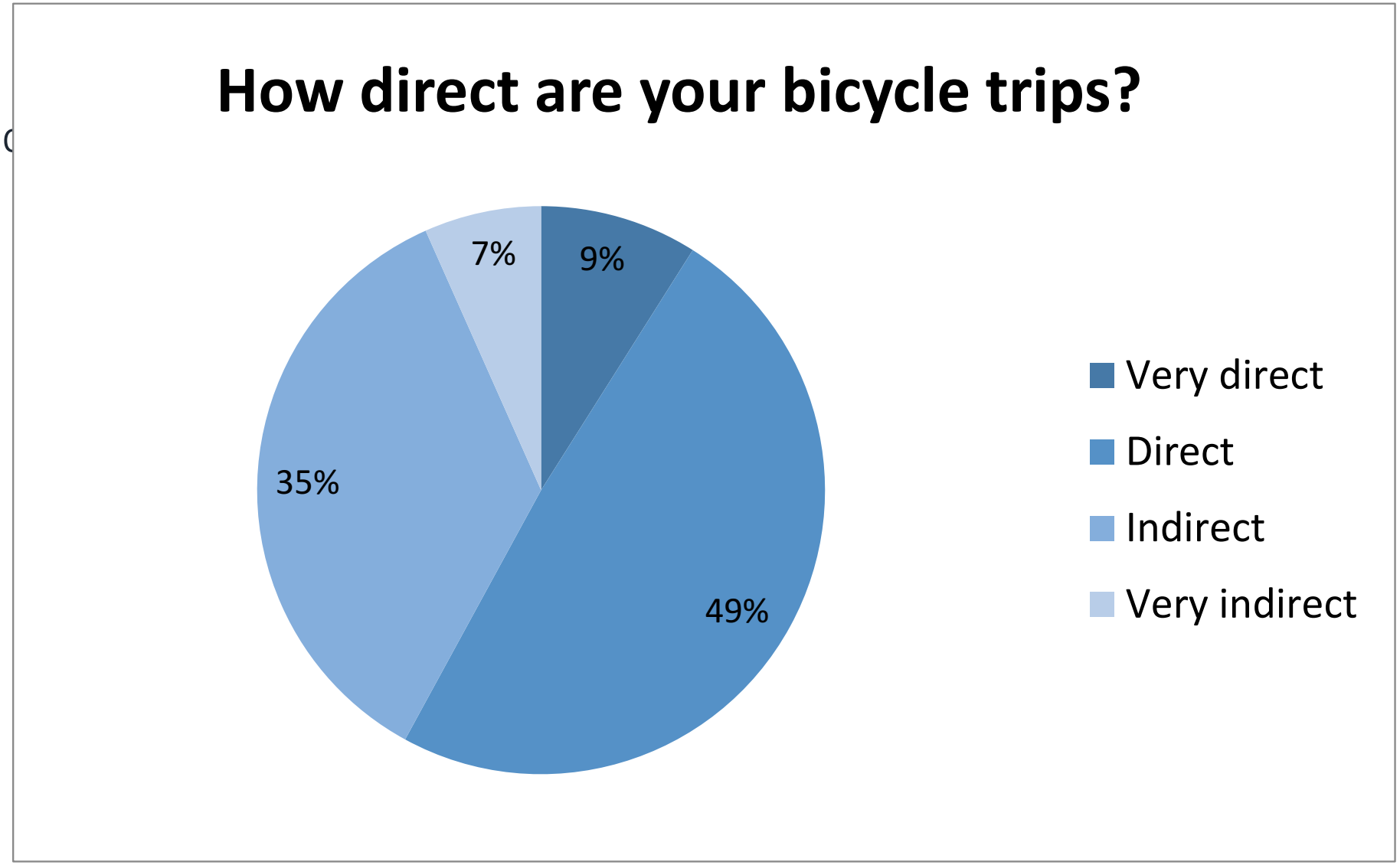
Wha

- What


What would make you less scared to use a bicycle?
Extending bikeway network
55%
Public awareness campaigns for drivers
54%
Improving existing infrastructure
51%
Greater visibility of cyclist population
39%
More police on bikeways
39%
Better signage of existing infrastructure
38%
More legal protections for cyclists
35%
More cyclists on the road
34%
Incentives for drivers to switch to bikes
32%
Regulations that encourage bike use
32%
Regulation of stores that sell stolen bikes
26%
0%
10%
20%
30%
40%
50%
60%

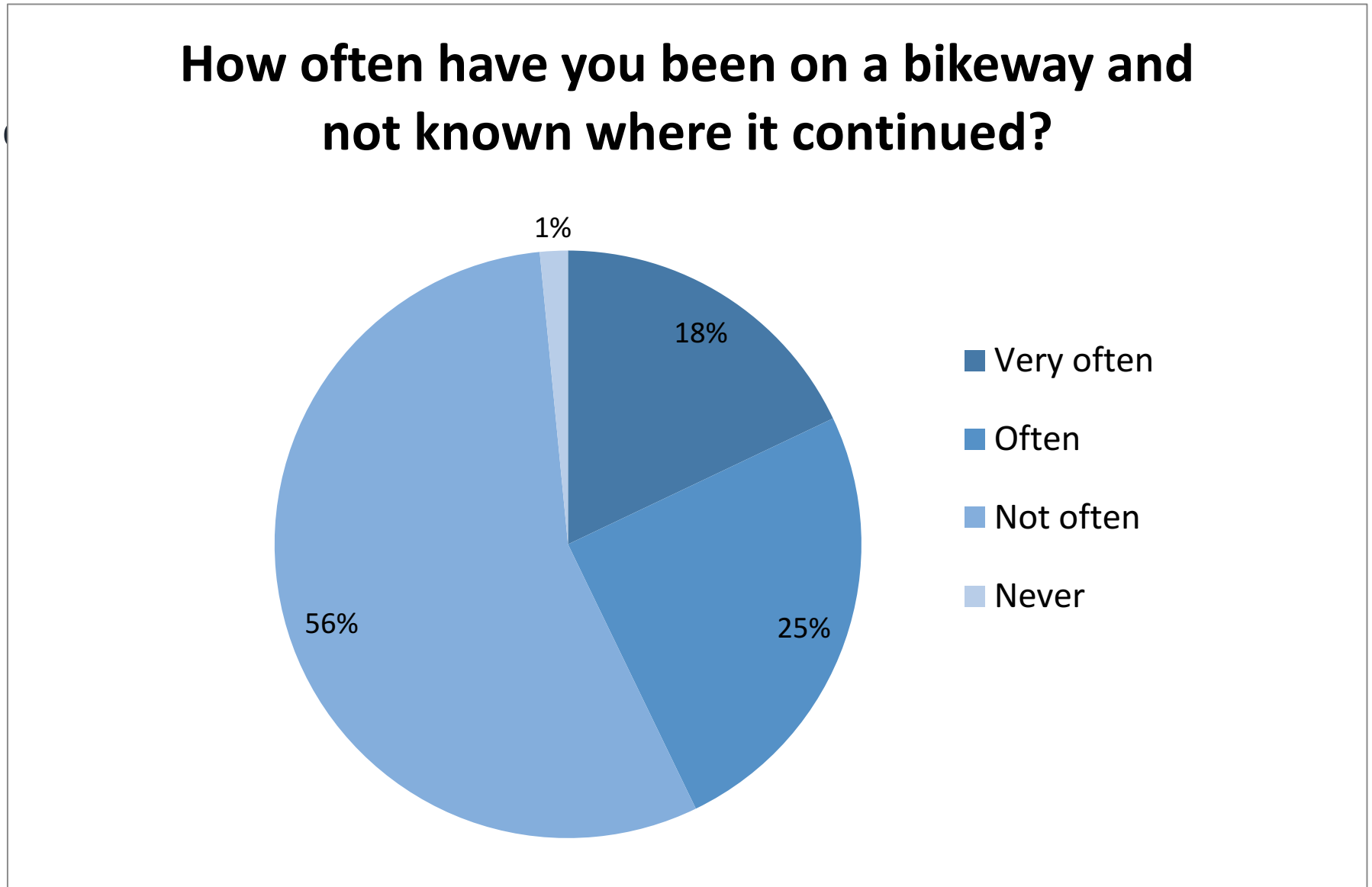
What do Bogotanos think?

- How c



What do Bogotanos think?

- How



What do Bogotanos think?

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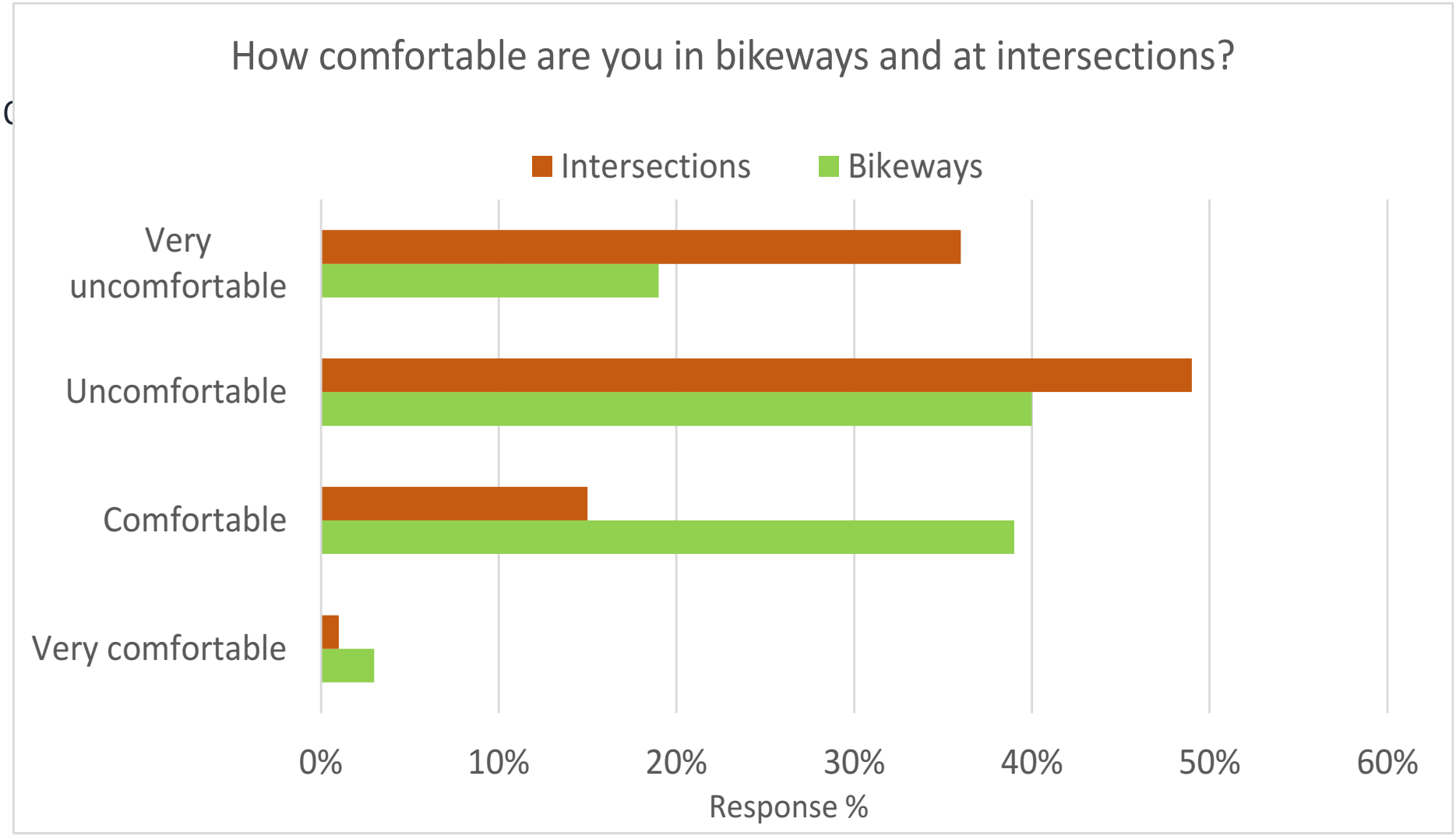
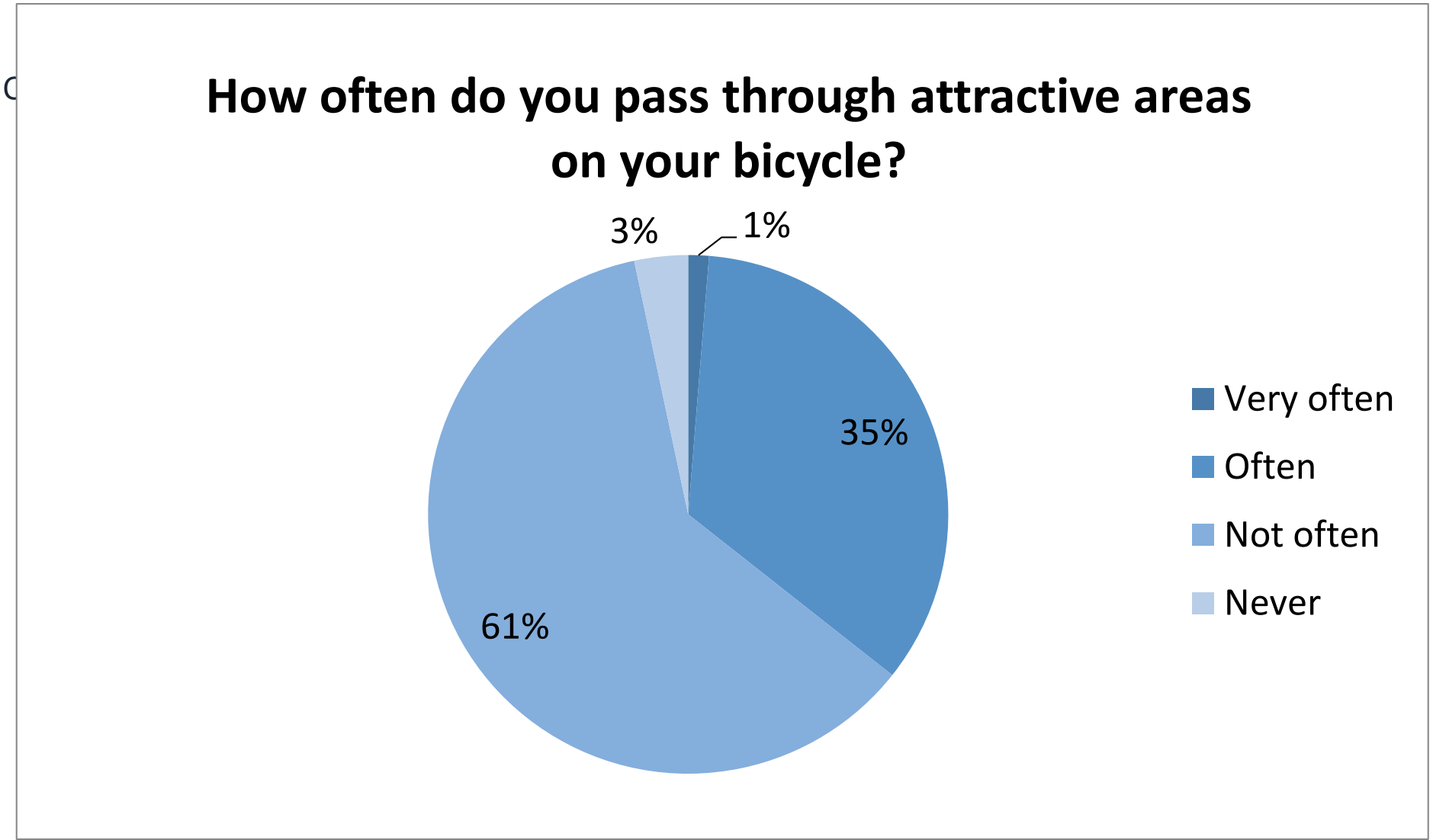
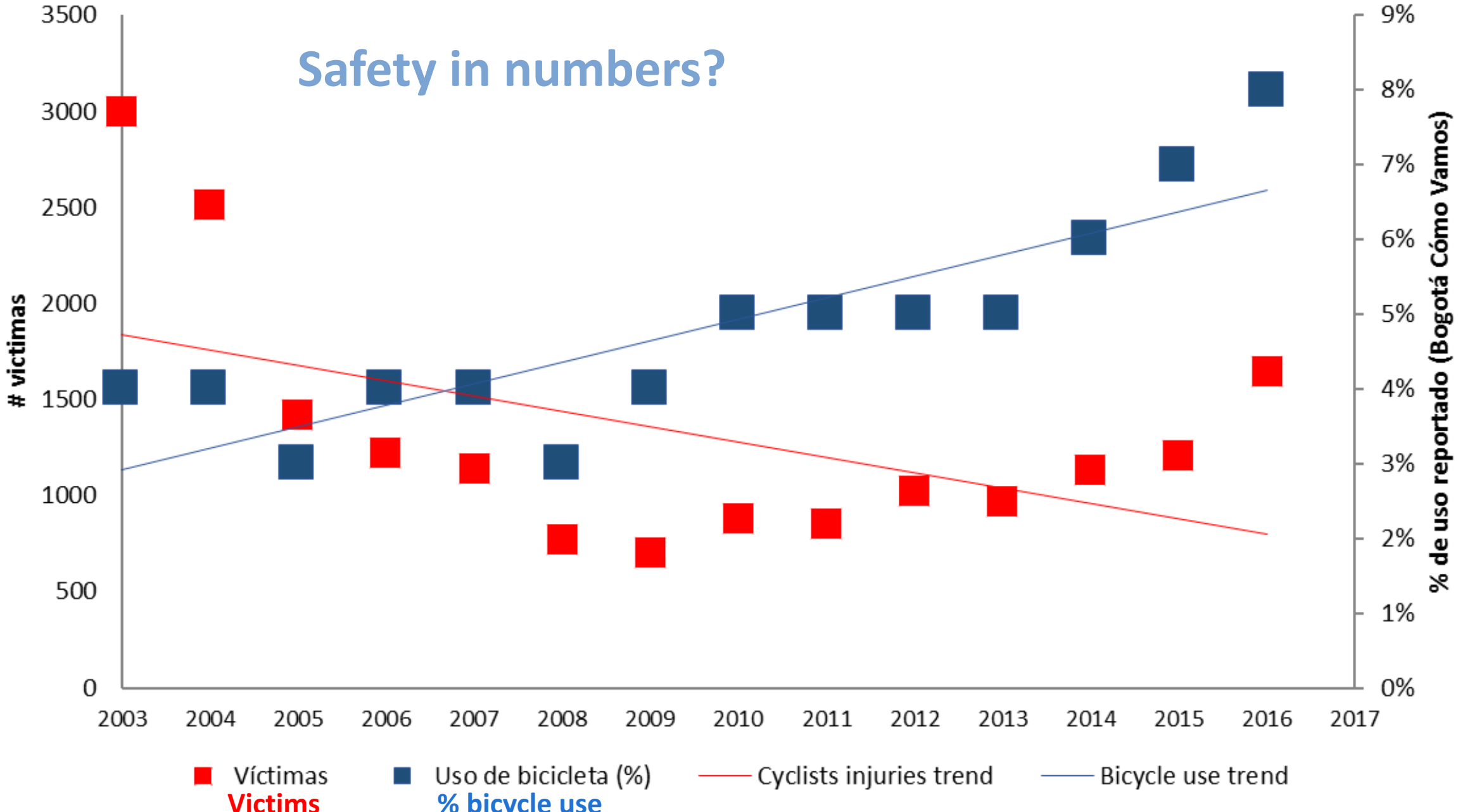


What do Bogotanos think?

- How do

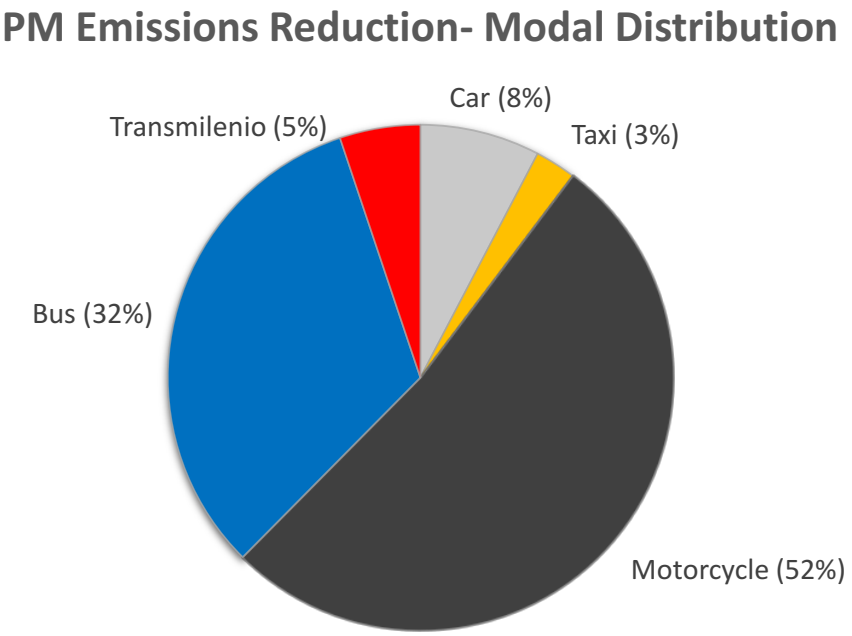


Victimas y uso de bicicleta, 2003-2016

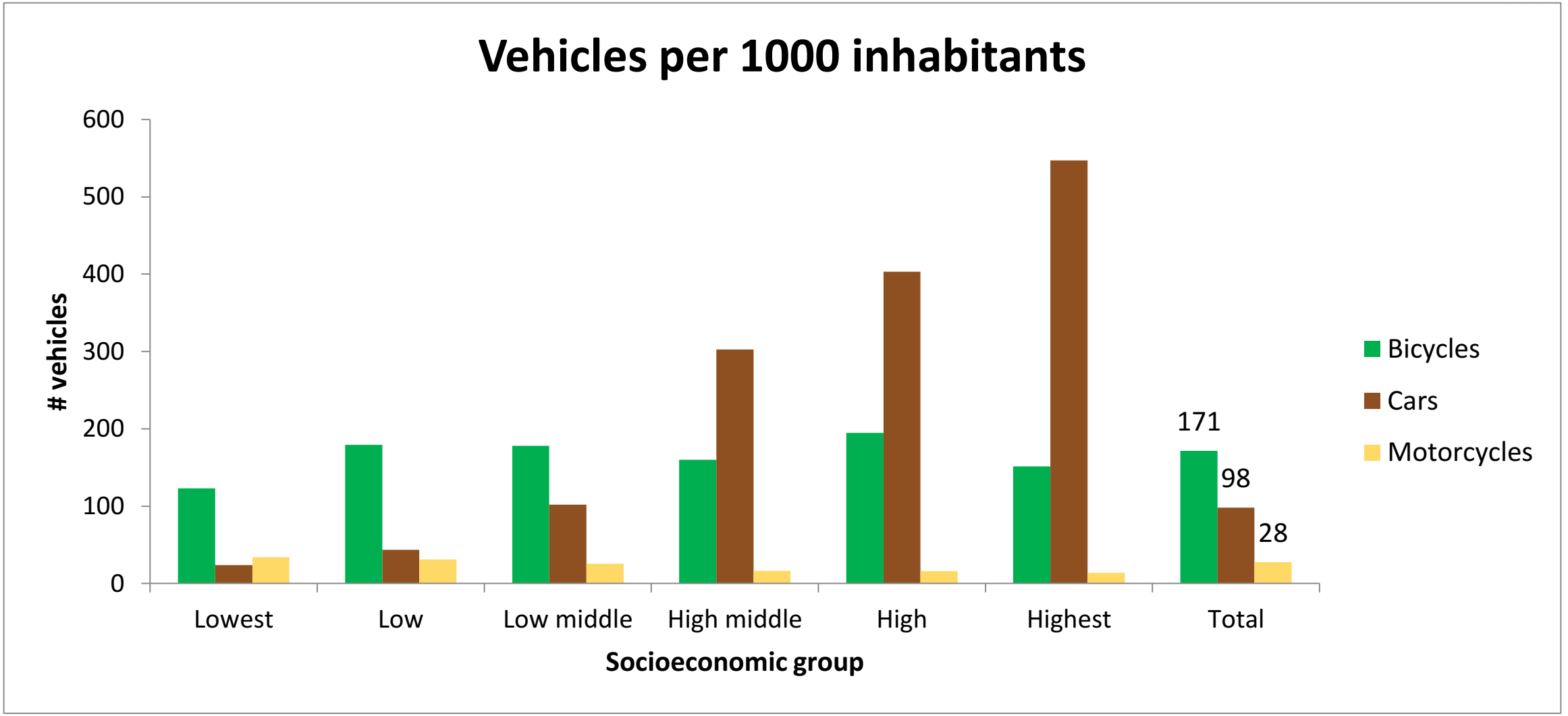


Estimated Societal Benefits of Bicycle Use

- Approximately **eight tons of PM** would have been emitted if cyclists had opted for other modes. (2011)
- Motorcycle and bus are the primary polluters



From Car to Bicycle



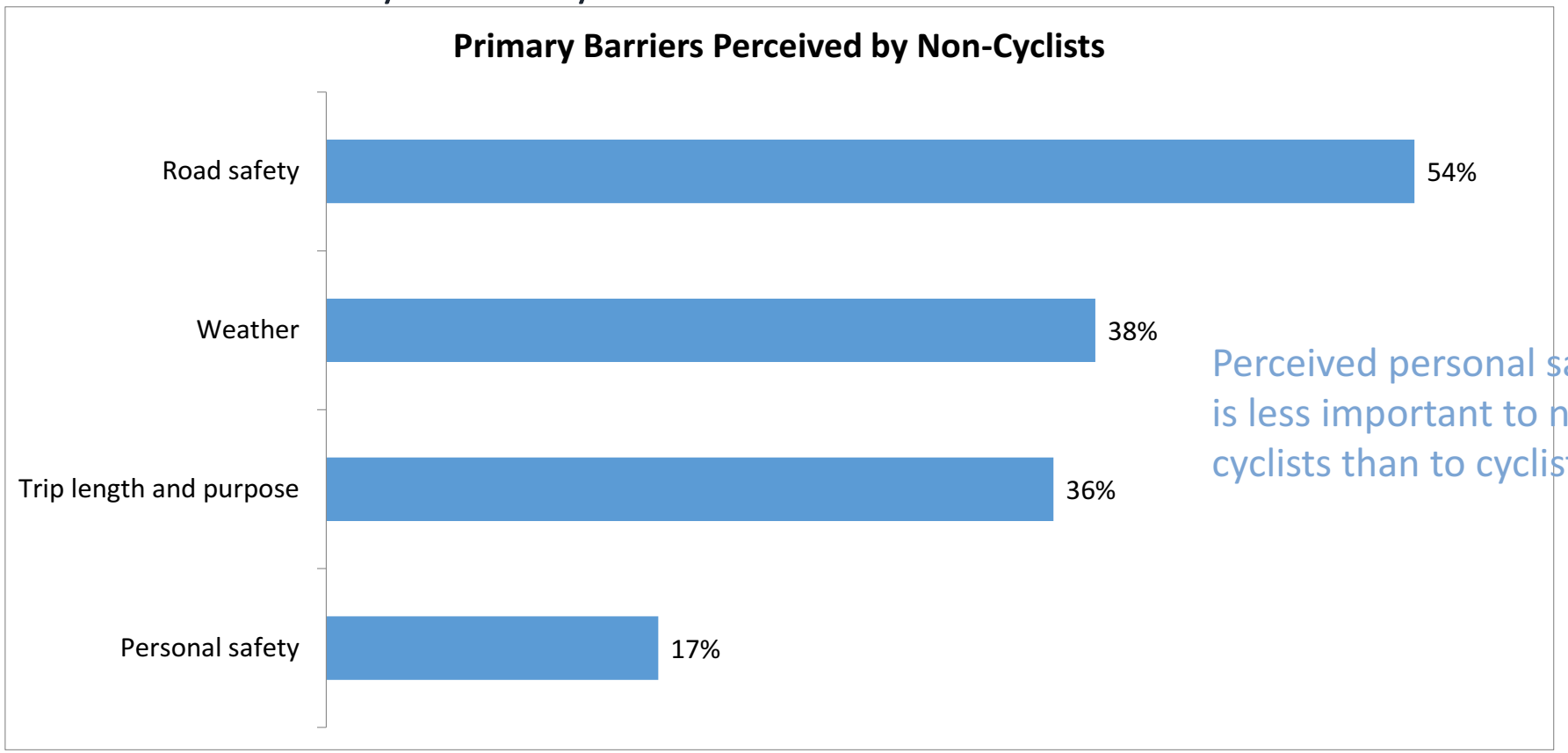
From Car to Bicycle

- On average, (urban) car trips are *shorter* than bicycle trips.

Trip Length	Percent of Car Trips	Percent of Bicycle Trips
Less than 5 kilometers (high potential for mode shift)	58%	28%
Less than 9 kilometers (medium potential for mode shift)	81%	45%

From Car to Bicycle

- Perceived barriers by non-cyclists



Perceived personal safety is less important to non-cyclists than to cyclists

Conclusions

- For Bogotá to become a true cycling city, much still needs to be done.
- Road safety remains a primary barrier to bicycle use.
- There are huge sectors of the population that do not use bicycles even if they have one.
- A concerned effort should be made to encourage the modal shift from car to bicycle specially for short trips.
- It is important to annually monitor the indicators presented in order to properly comprehend trends in bicycle use and citizens perception about it.
- **Civil society can help elevate the discussion on cycling and bridge the gap between research and practice**