

# Biking Culture In US Cities Compared to That of Amsterdam and Copenhagen



# Benefits of Biking

## Environmental

- No emissions (that contribute to air pollution and climate change)
- No dependency on fossil fuels

## Less Expensive

- Both on City and Individual Level
- Certain cities have saved millions of dollars
- It is one of the most equitable form of transportation

## Healthier

- The lack of exercise has led to diseases like diabetes, heart disease, obesity
- Biking allows one to exercise while traveling

## Safer

- Cycling is more dangerous on a per km basis
- Cycling safety increases with number of cyclists
- Cycling can make streets safer for all road users

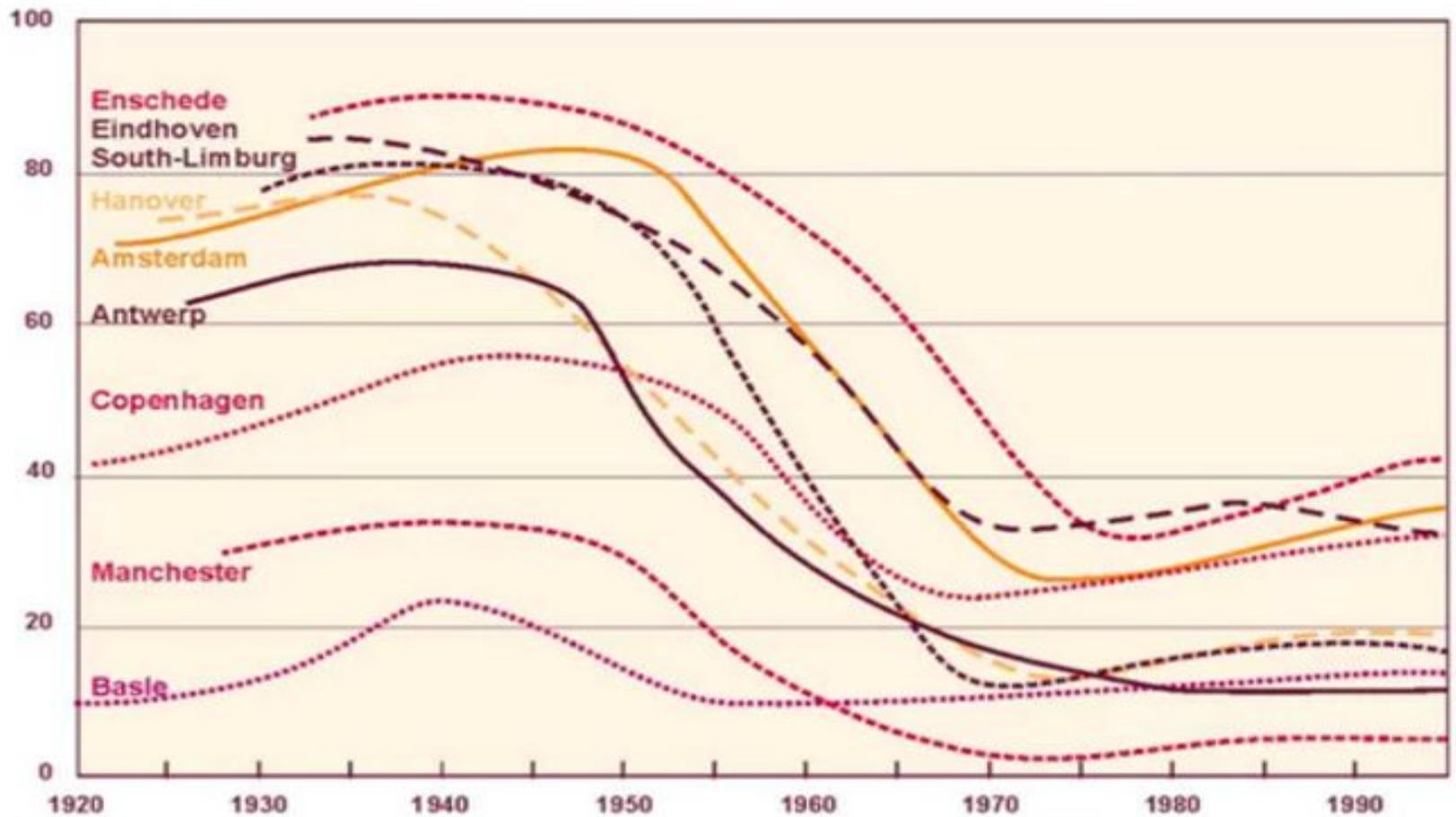
# Purpose

- Cycling is suffering in the US
- 25% of trips made in Denmark and The Netherlands are by bike<sup>1</sup>
- 1% of trips made in the US are by bike<sup>2</sup>
- Understanding the differences between these cities could help make cities in the US more bike friendly

1. Zee, R. V. (2015, May 05). How Amsterdam became the bicycle capital of the world. Retrieved March 26, 2017, from <https://www.theguardian.com/cities/2015/may/05/amsterdam-bicycle-capital-world-transport-cycling-kindermoord>

2. Pucher, J., & Buehler, R. (2008). Making Cycling Irresistible: Lessons from The Netherlands, Denmark and Germany. *Transport Reviews*, 28(4), 495-528. doi:10.1080/01441640701806612

Have Amsterdam and Copenhagen  
Always Been Biking Cities?



1. Zee, R. V. (2015, May 05). How Amsterdam became the bicycle capital of the world. Retrieved March 26, 2017, from <https://www.theguardian.com/cities/2015/may/05/amsterdam-bicycle-capital-world-transport-cycling-kindermo>



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How the Dutch got their cycling infrastructure. (2014, October 20). from <https://bicycledutch.wordpress.com/2011/10/20/how-the-dutch-got-their-cycling-infrastructure/>



How the Dutch got their cycling infrastructure. (2014, October 20). Retrieved from <https://bicycledutch.wordpress.com/2011/10/20/how-the-dutch-got-their-cycling-infrastructure/>



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# Research Questions

- How do the challenges currently faced by bike coordinators in the US compare with those faced by Amsterdam and Copenhagen in the 1970s?
- What are the differences between the opinions and approaches of bike programs in different US cities?

# Methods:

- Ten US cities were selected
  - Boston
  - Milwaukee
  - Miami
  - Houston
  - San Diego
  - Phoenix
  - Detroit
  - Los Angeles
  - Columbus
  - Charlotte

-E. A. (2011). *US and Canada Green City Index Assessing the environmental performance of 27 major US and Canadian cities* (Rep.). Munich, Germany: Siemens AG.

-Dill, J., & Carr, T. (2003). Bicycle Commuting and Facilities in Major U.S. Cities: If You Build Them, Commuters Will Use Them. *Transportation Research Record: Journal of the Transportation Research Board*, 1828, 116-123.  
doi:10.3141/1828-14

# Synopsis of Study

- Three main steps to data collection
  - Empirical research on cities
  - Interviews with bike coordinators from US cities
  - Interviews with individuals from bike organizations in Copenhagen and Amsterdam

# Challenges Faced By US Cities

## Biking Infrastructure

Lack of Bike Facilities\*

Lack of Connected Bike Facilities\*

Difficulty in Expanding Bike Facilities

## Physical Qualities of The City\*

Unfavorable weather

Hilly, uneven streets

Long trip distance

## Influence of Driving

Competing with the convenience and low cost of driving

Driving being a culture/habit\*

## Support for Biking

Public opposition to expanding bike infrastructure

Lack of political support for reducing car use

Lack of Funding

## Perception of Biking

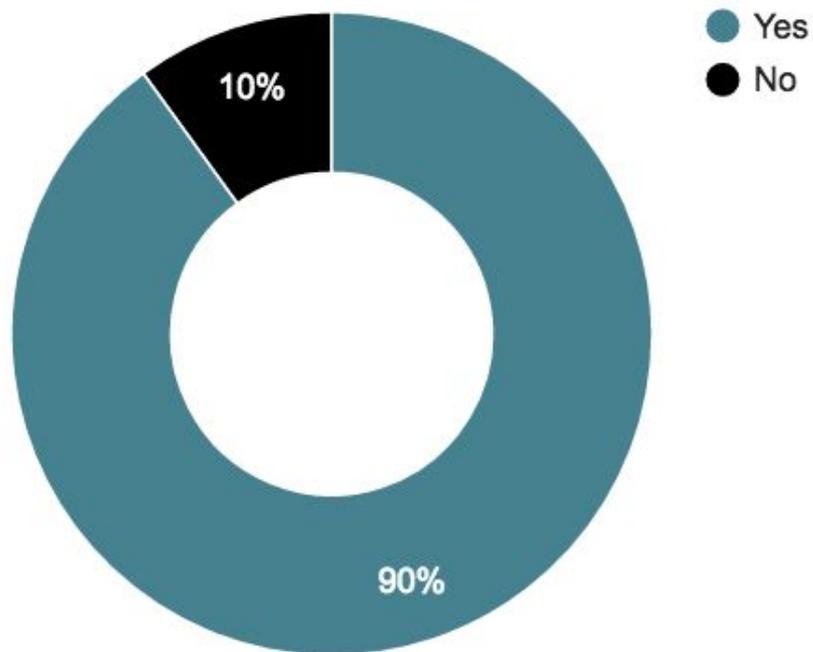
Perceived status of car ownership, and a negative perception to transit and bike use

Perceived danger of biking compared to driving

Lack of Cycling Education\*

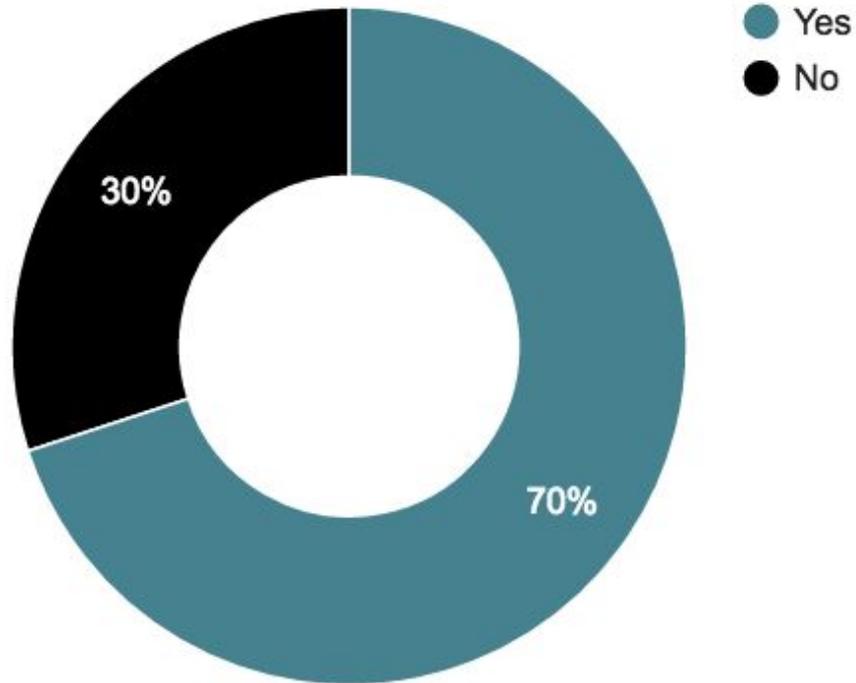
# Biking Infrastructure

## Cities that faced Challenges Relating to Infrastructure



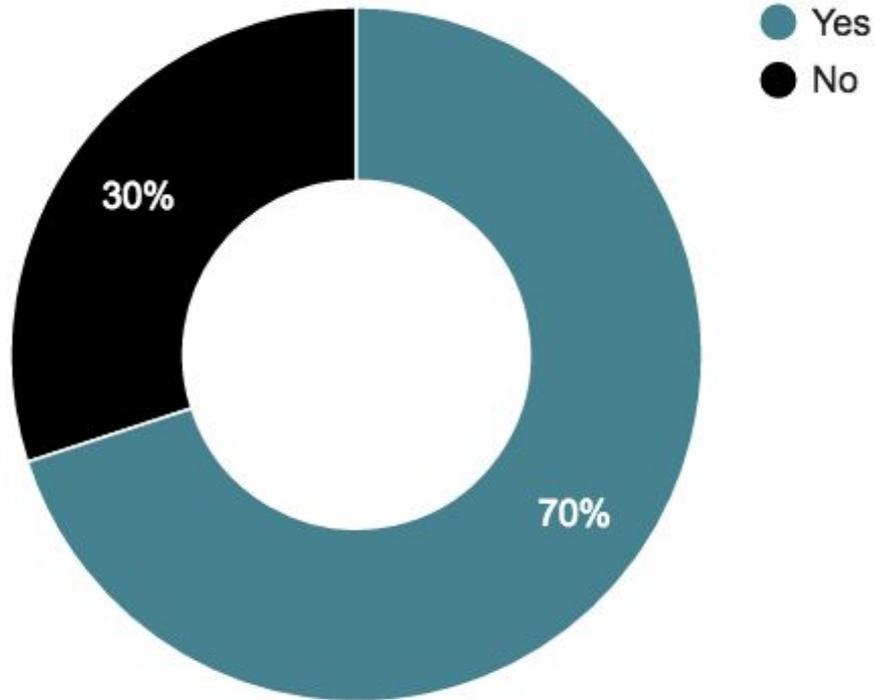
# Support for Biking

## Challenges Relating to Support For Cycling



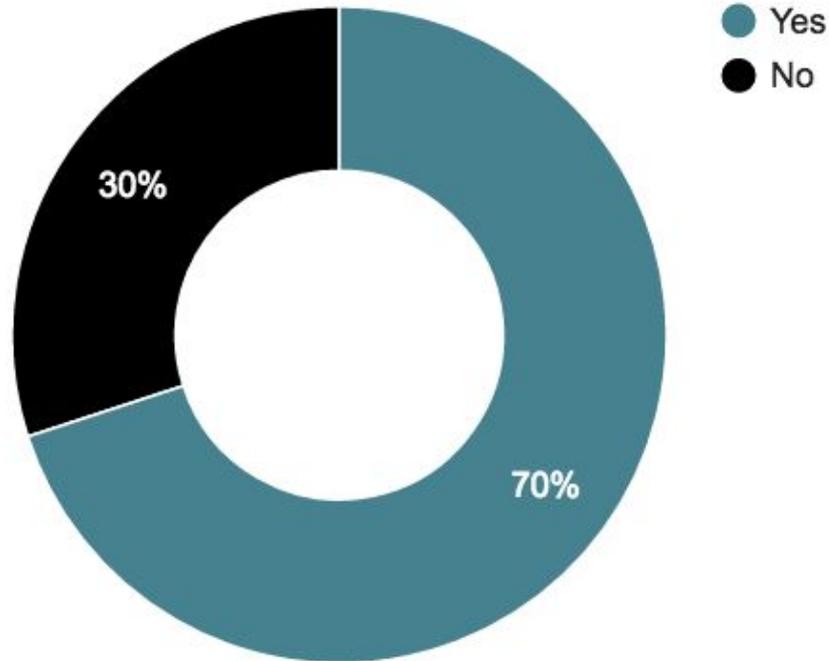
# Physical Qualities of Cities

## Challenges Relating to Physical Qualities of The City



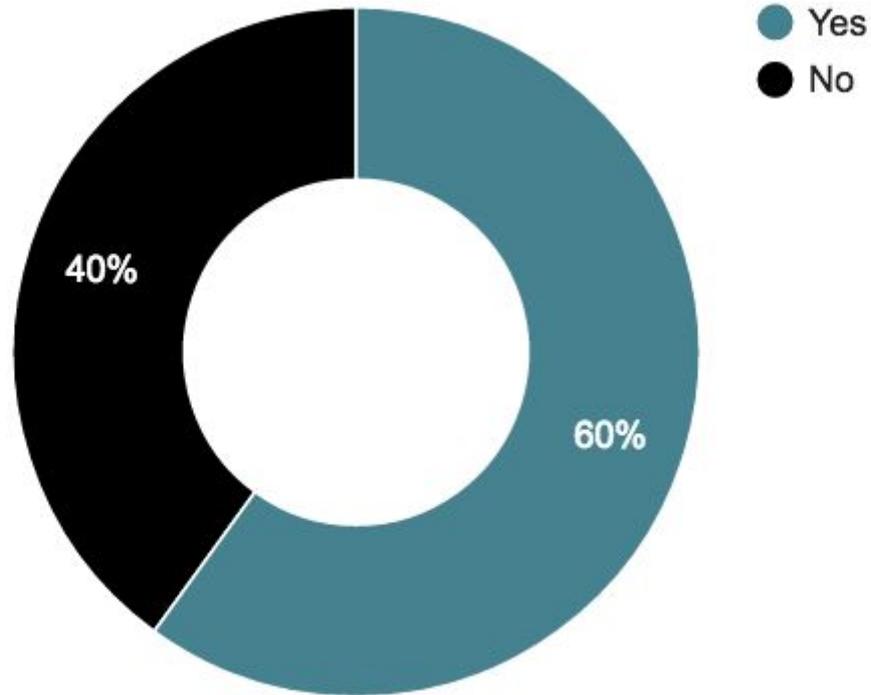
# Perception of Biking

## Challenges Relating to Citizen Perception of Biking



# Influence of Driving

## Challenges Relating to Influence of Driving



# Cycling Organizations in Amsterdam and Copenhagen

- The Cycling Embassy of Denmark (Copenhagen)
- Fietsersbond (Amsterdam)
- CycleSpace (Amsterdam)

# Bike Infrastructure

- Both Cities had to increase infrastructure
- Narrow streets were seen as an advantage-not a disadvantage

# Support for Biking

1. Both cities Faced Opposition From Businesses
2. Gaining political support took time and citizen pressure
3. Funding was seen as important, but as a huge challenge

# Perception of Biking

1. Driving is not a status symbol in these cities
2. Unsafe conditions led public support to shift towards
3. Both cities have a challenge competing with the convenience of cars

# Conclusions

- US cities are facing the same challenges but more intensely
- Cycle movement came from citizens in Amsterdam and Copenhagen but few people in US cities support biking
- Future Research:
  - How much of an effect will this difference have in the time it takes for biking to increase in popularity in US cities

# Limitations

- Representation of US cities
- Most of conclusions based on interviews
- Interviews were with individuals who worked for the cities

# Acknowledgements

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