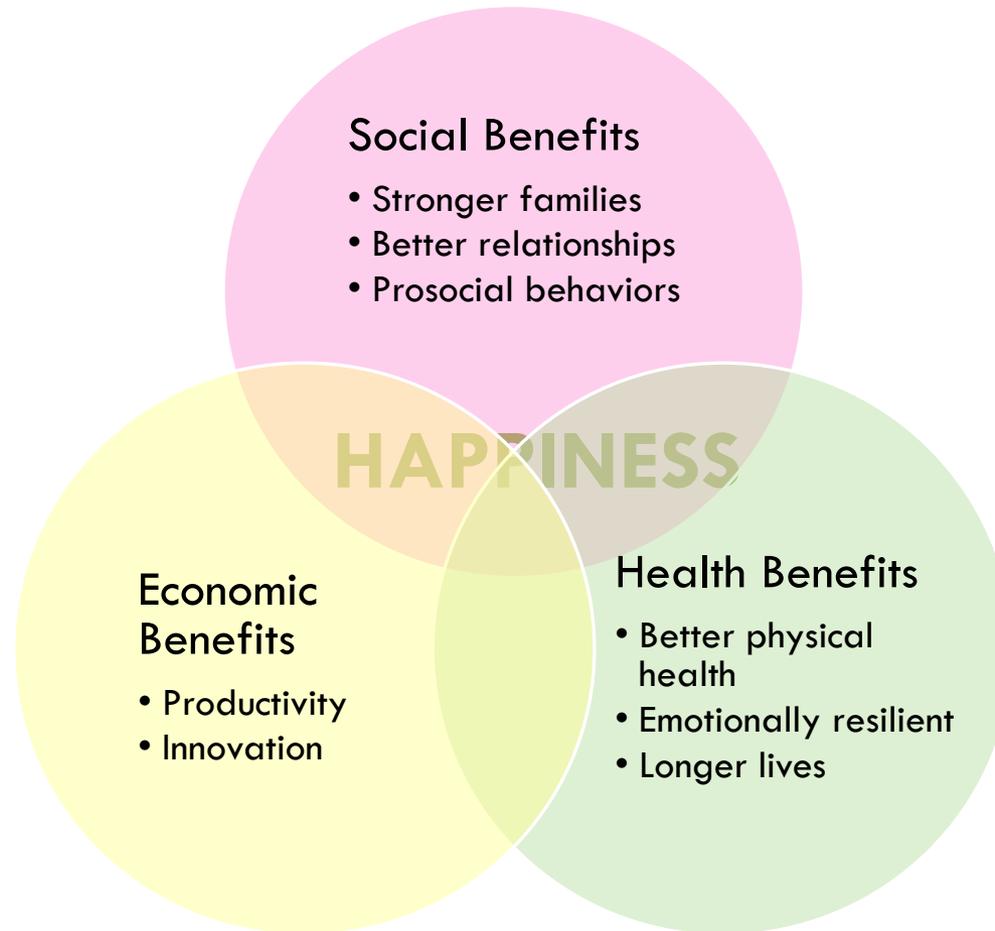


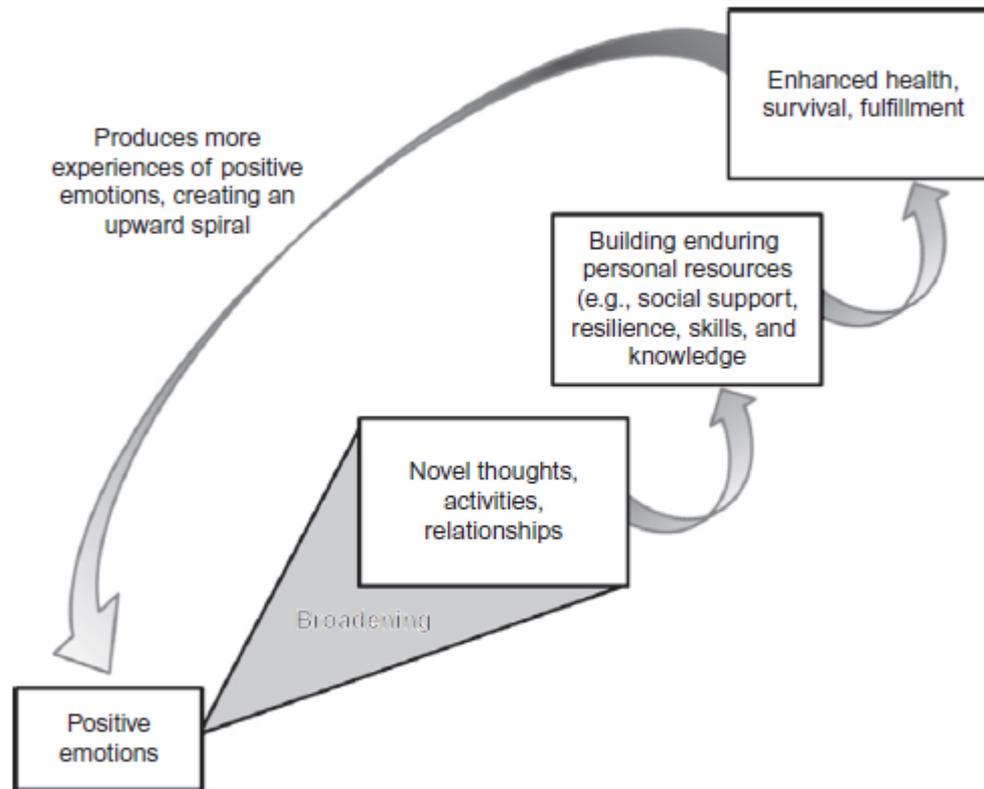
# **HAPPY CITIES: THE ROLE OF TRANSPORTATION**

**Yingling Fan**  
**University of Minnesota**  
Twitter: @yinglingfan

# Why is happiness important?



# Positive psychology: Broaden and build



**Figure 1.1** The broaden-and-build theory of positive emotions. *Adapted from Fredrickson and Cohn (2008, Fig. 48.1)*

# Life circumstances play a important role!

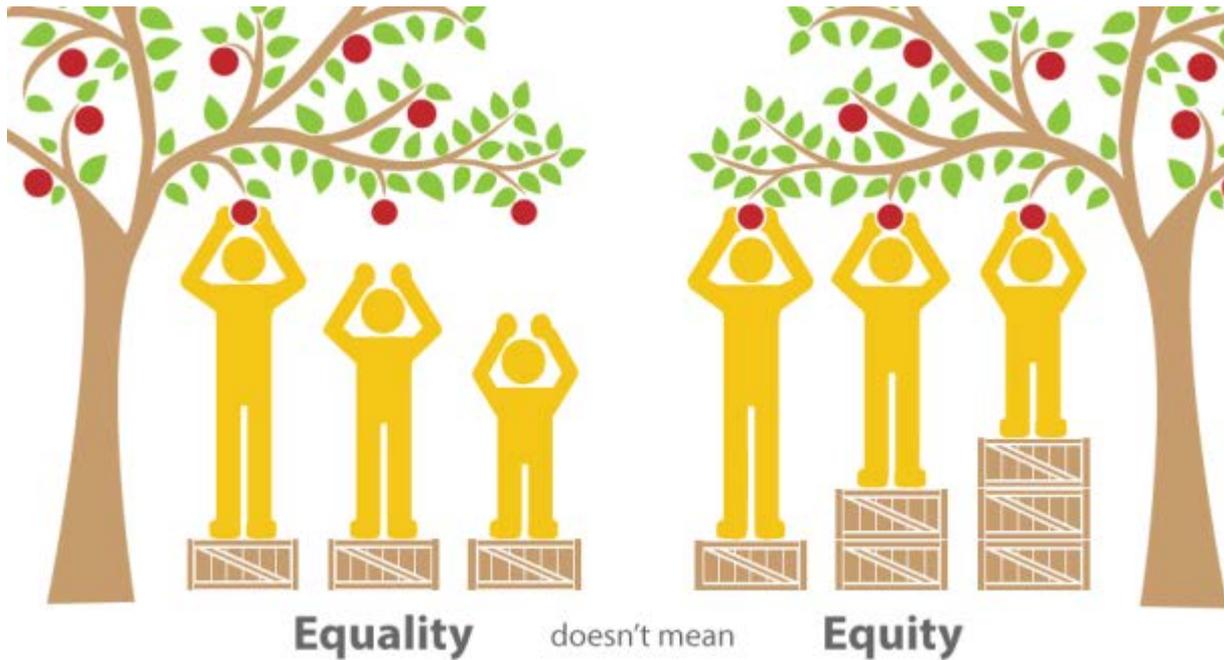
Happiness is NOT simply

- Working harder
- Earning money
- Buying more things
- Keep going

Happiness is volatile and responsive to environmental conditions.



# Pursuing Happiness: The Issue of Equity



# Study questions

## **How does happiness vary across trip categories?**

- Implications for NYC?

## **How does happiness during trips vary across population groups?**

- Implications for NYC?

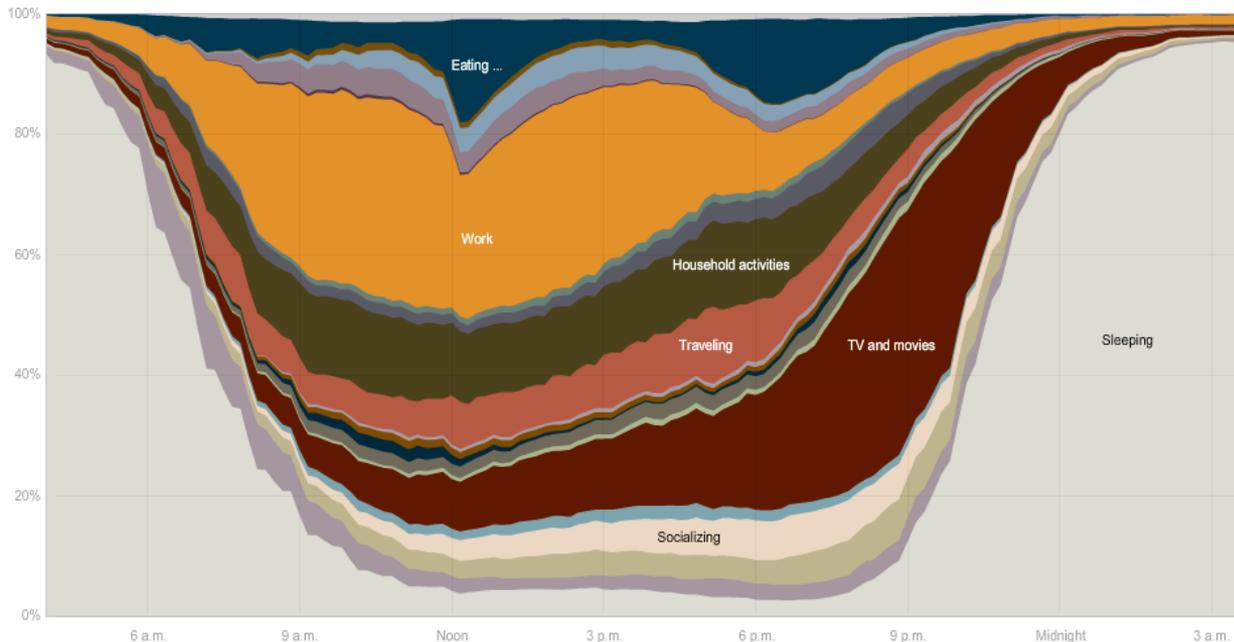
## **Are there urban planning and transportation policy implications when it comes to travel and happiness?**

# Travel and Happiness Data: The 2012-13 American Time Use Survey

## Everyone

Sleeping, eating, working and watching television take up about two-thirds of the average day.

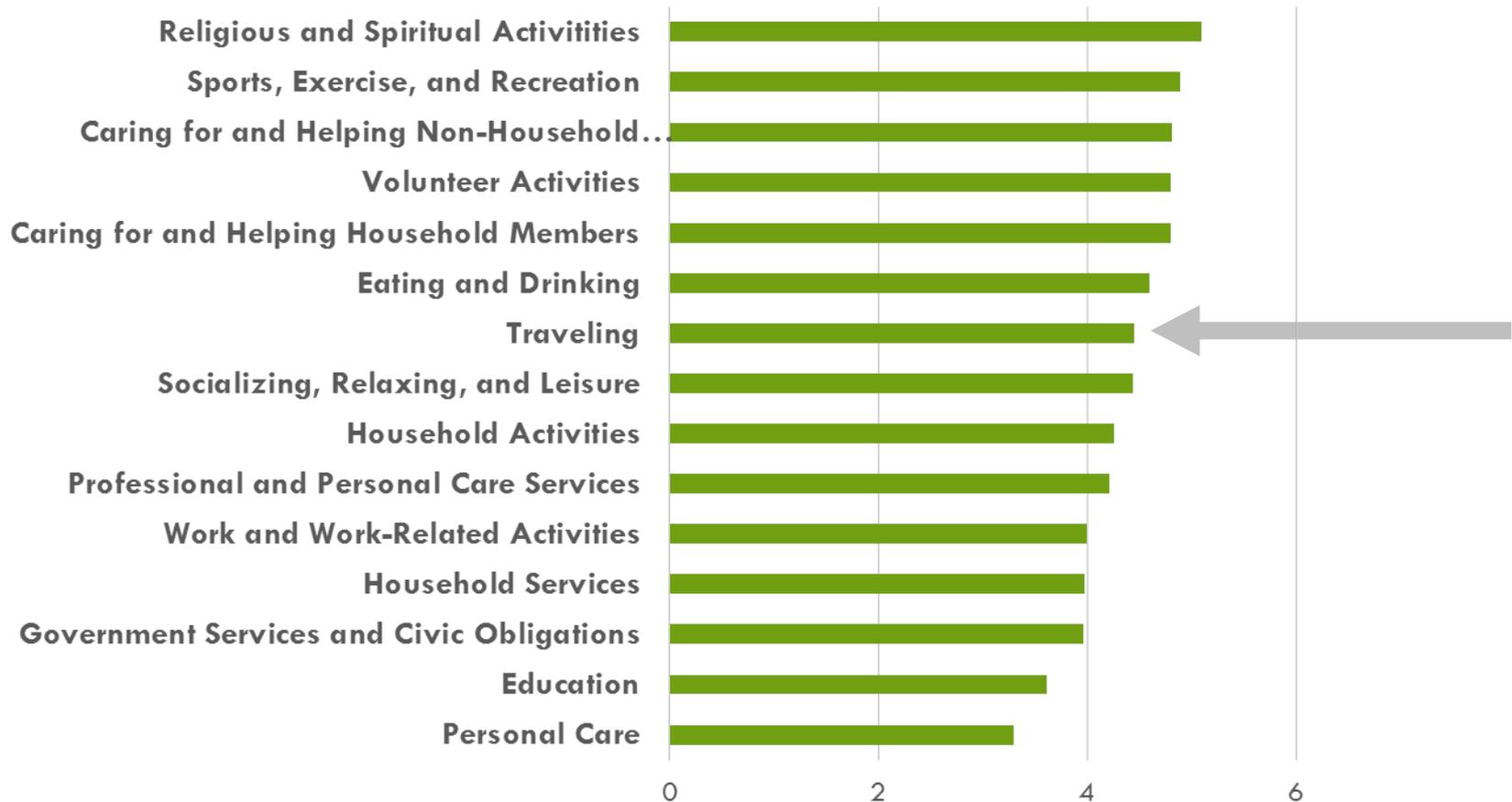
Everyone	Employed	White	Age 15-24	H.S. grads	No children
Men	Unemployed	Black	Age 25-64	Bachelor's	One child
Women	Not in lab...	Hispanic	Age 65+	Advanced	Two+ children



By SHAN CARTER, AMANDA COX, KEVIN QUEALY and AMY SCHOENFELD | [Send Feedback](#)

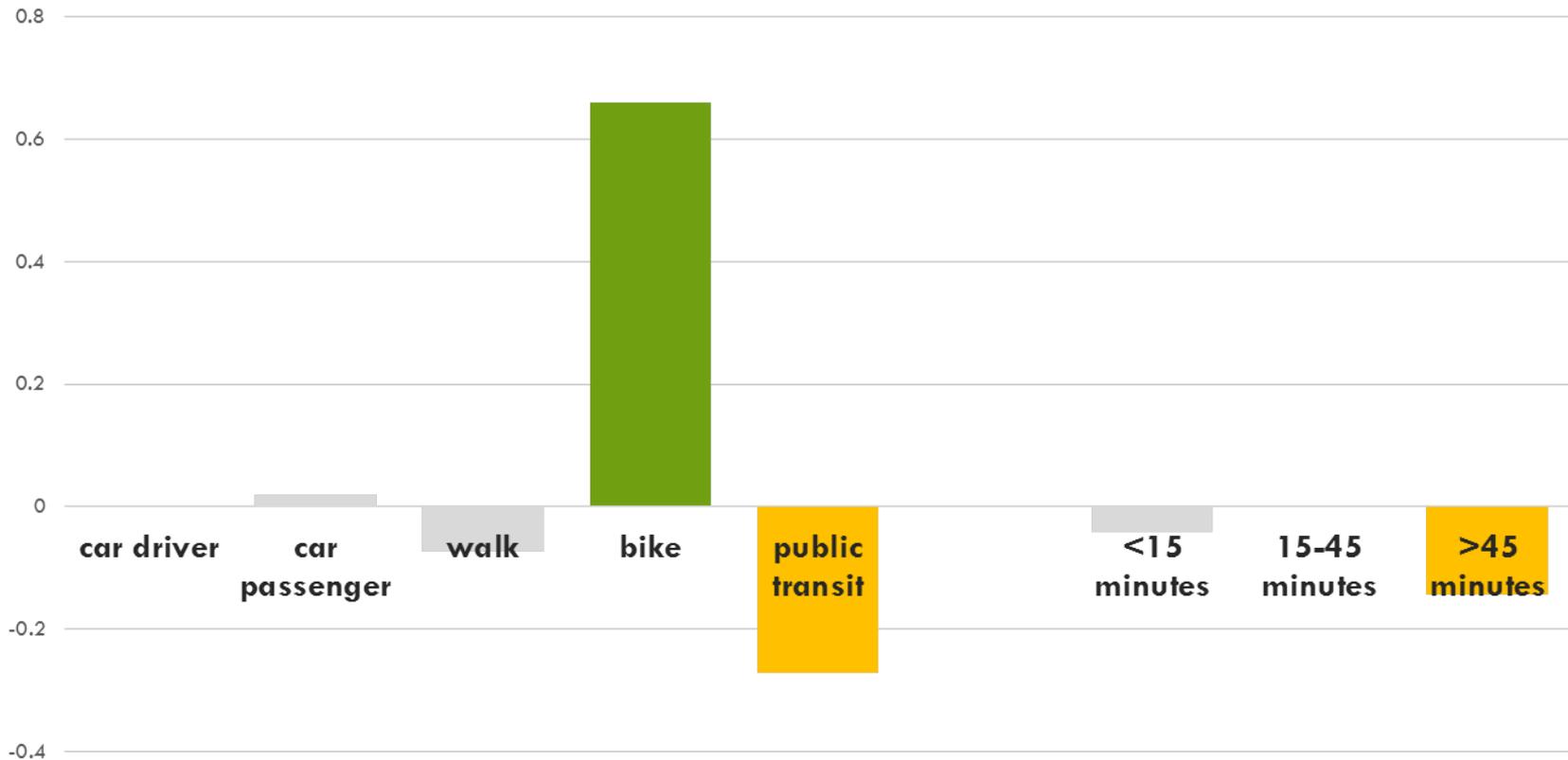
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# Travel vs. other activities: National average happiness scores

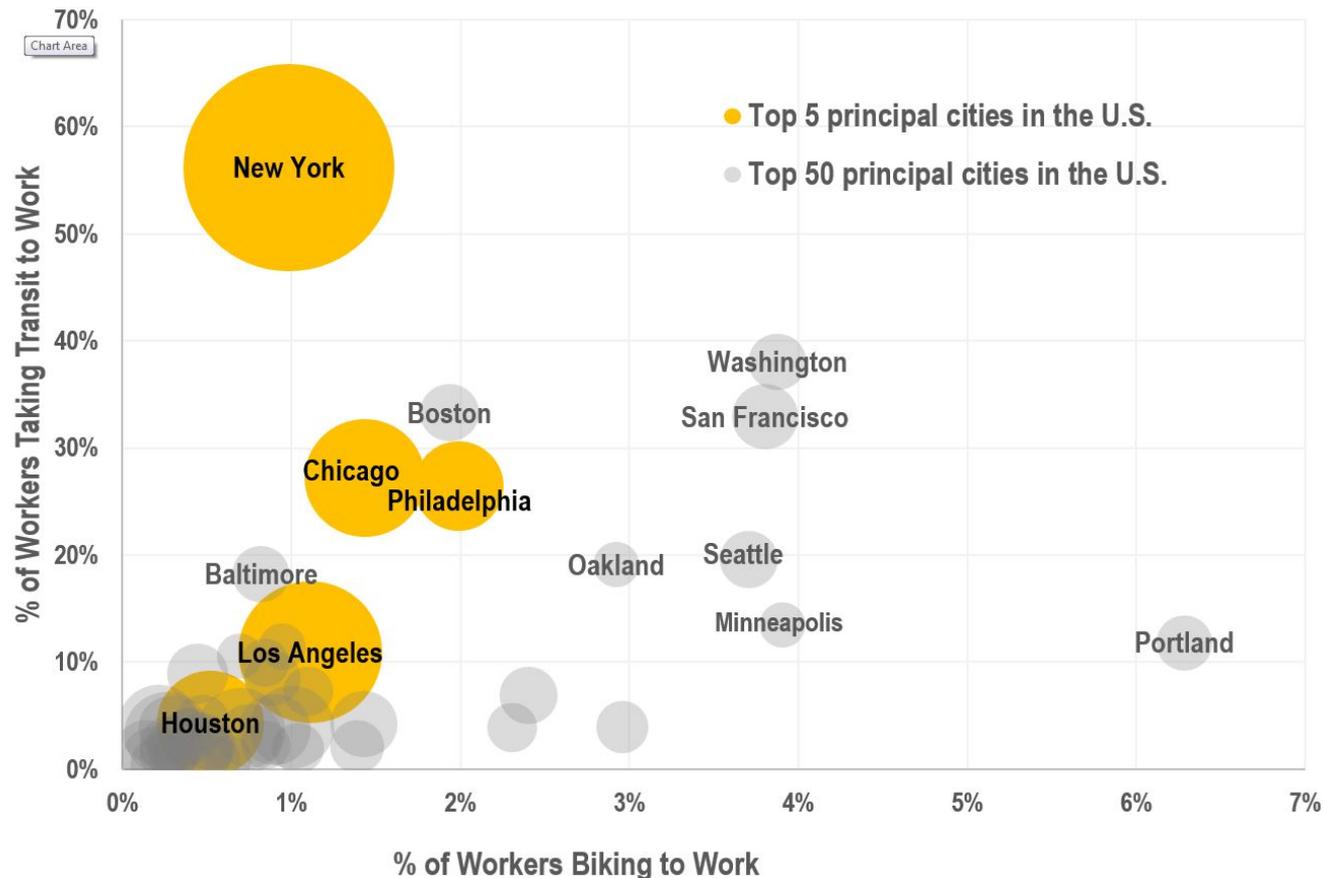


# How does happiness vary across trip categories?

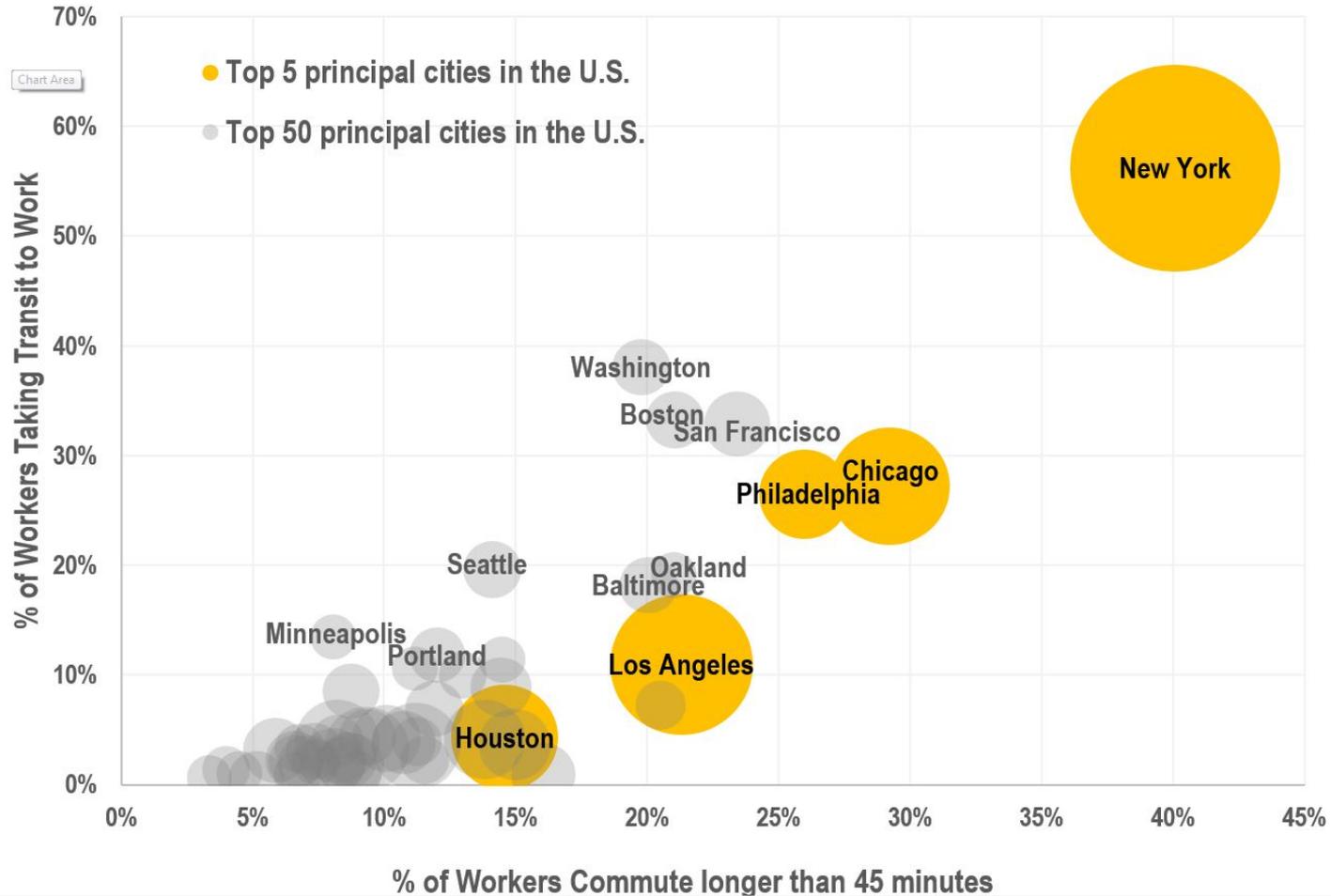
Across Modes and Duration Categories



# 56% New Yorkers take transit to work, only 1% bike to work



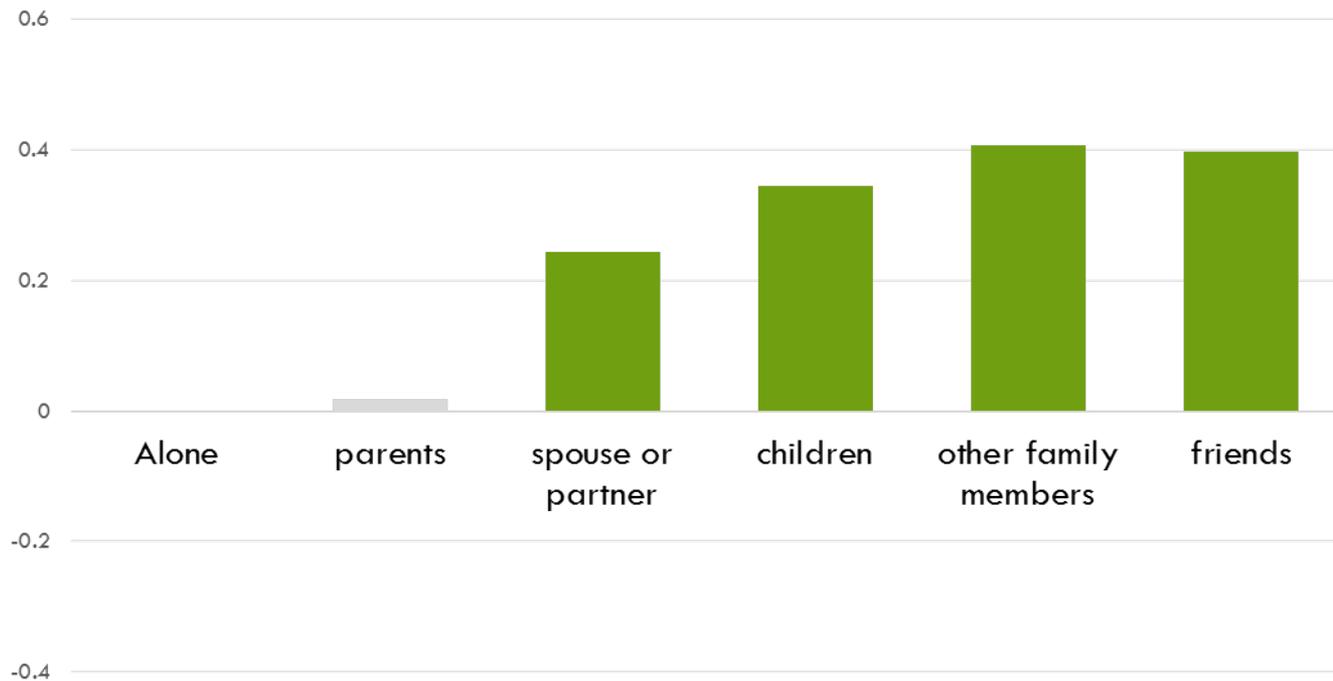
# 40% New Yorkers commute longer than 45 minutes



# Trip Companion

Differences  
in happiness  
scores

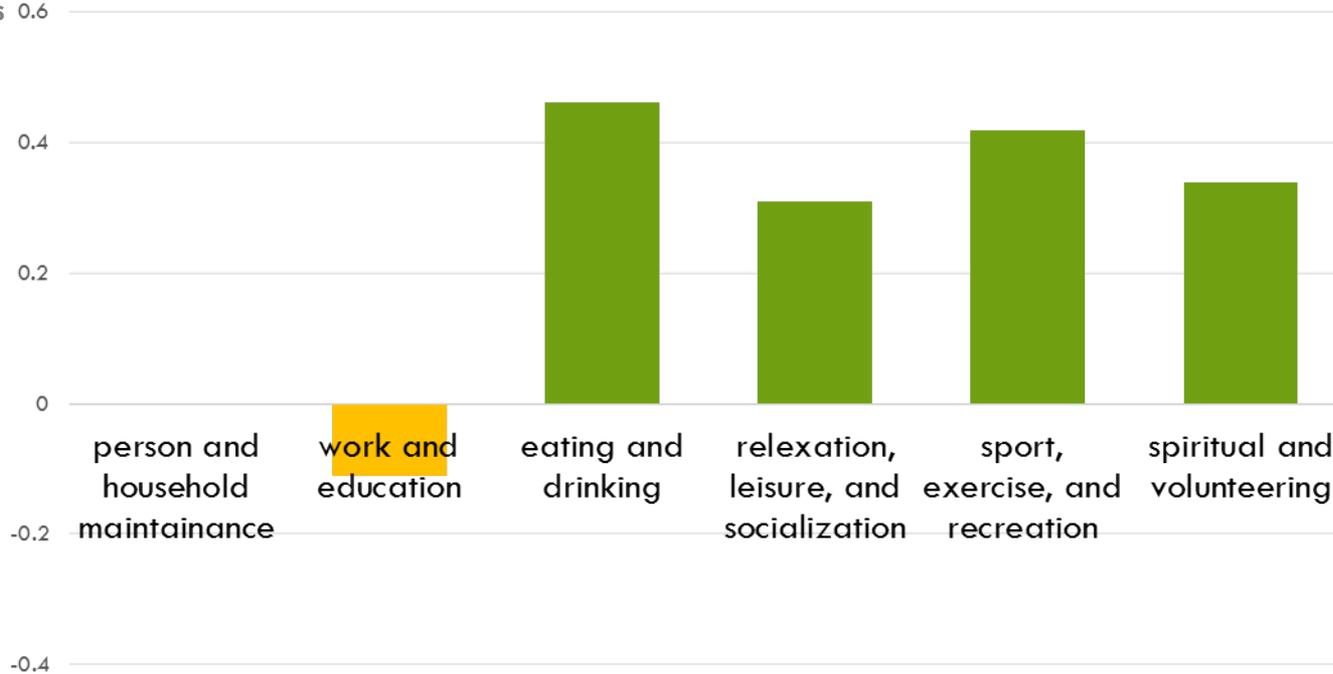
## Across Companionship Categories



# Trip Purpose

Differences  
in happiness  
scores

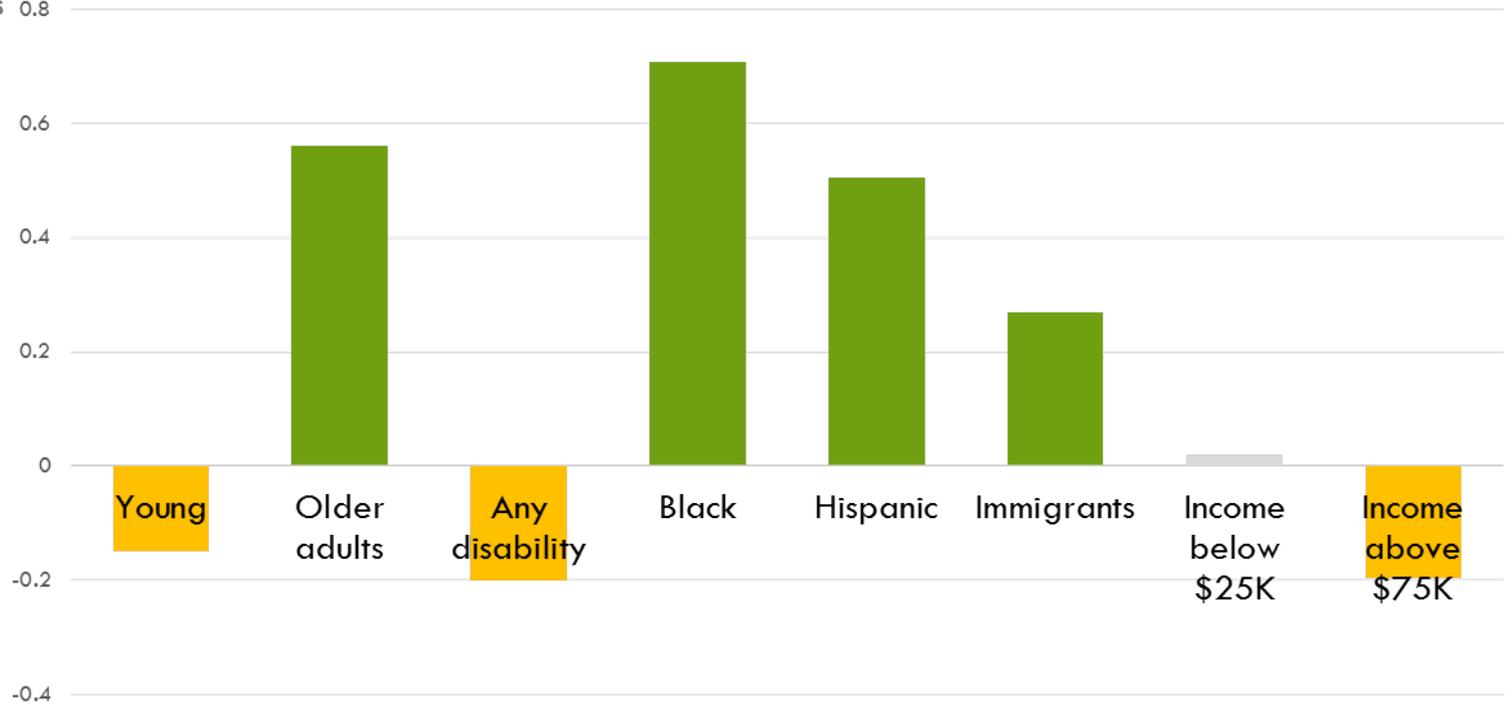
## Between Purpose Categories



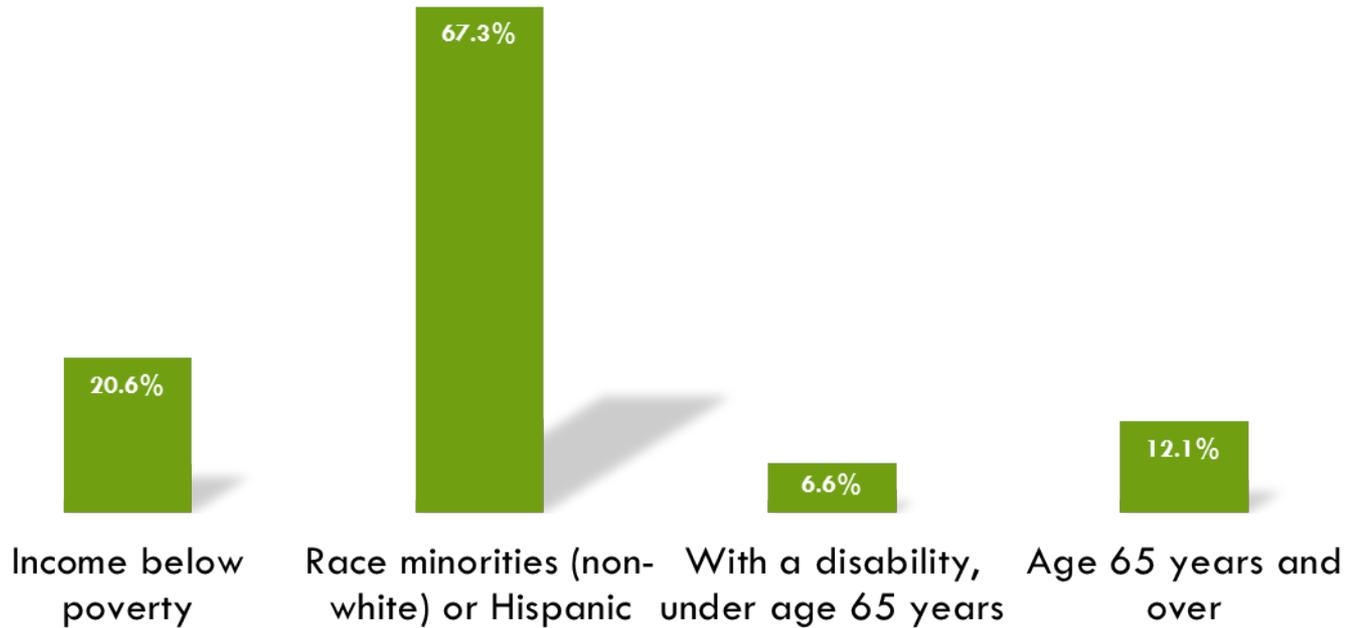
# How does happiness during trips vary across population groups?

Differences in happiness scores

## Across Population Groups



# NYC Demographics





# ADVICE ON TRAVEL AND HAPPINESS

Travel with anyone except your  
parents ☺

Do not travel for work or  
education ☺

# Improve the emotional intelligence of transit infrastructure

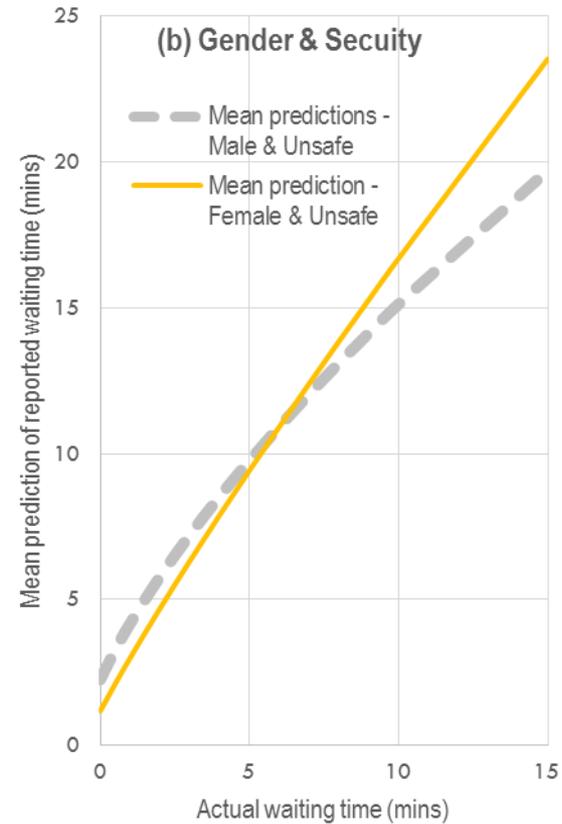
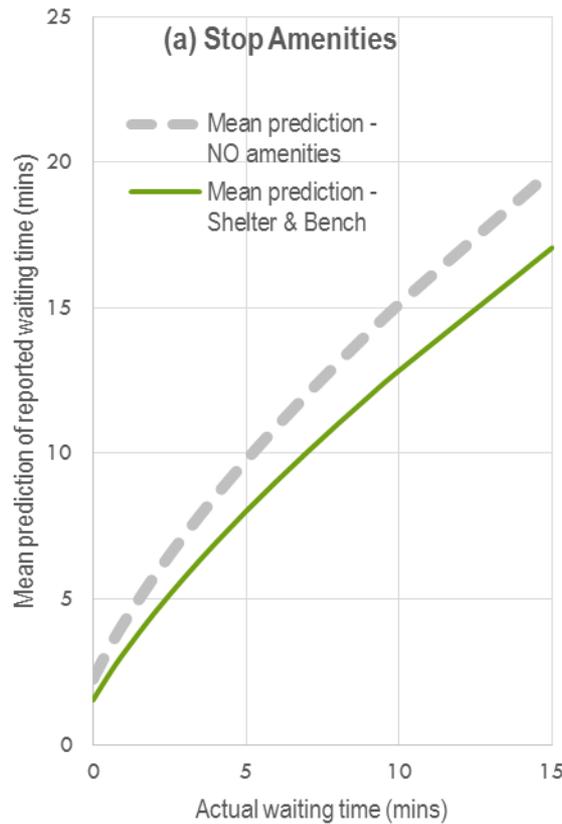


Every minute at the bus stop feels longer than it actually is

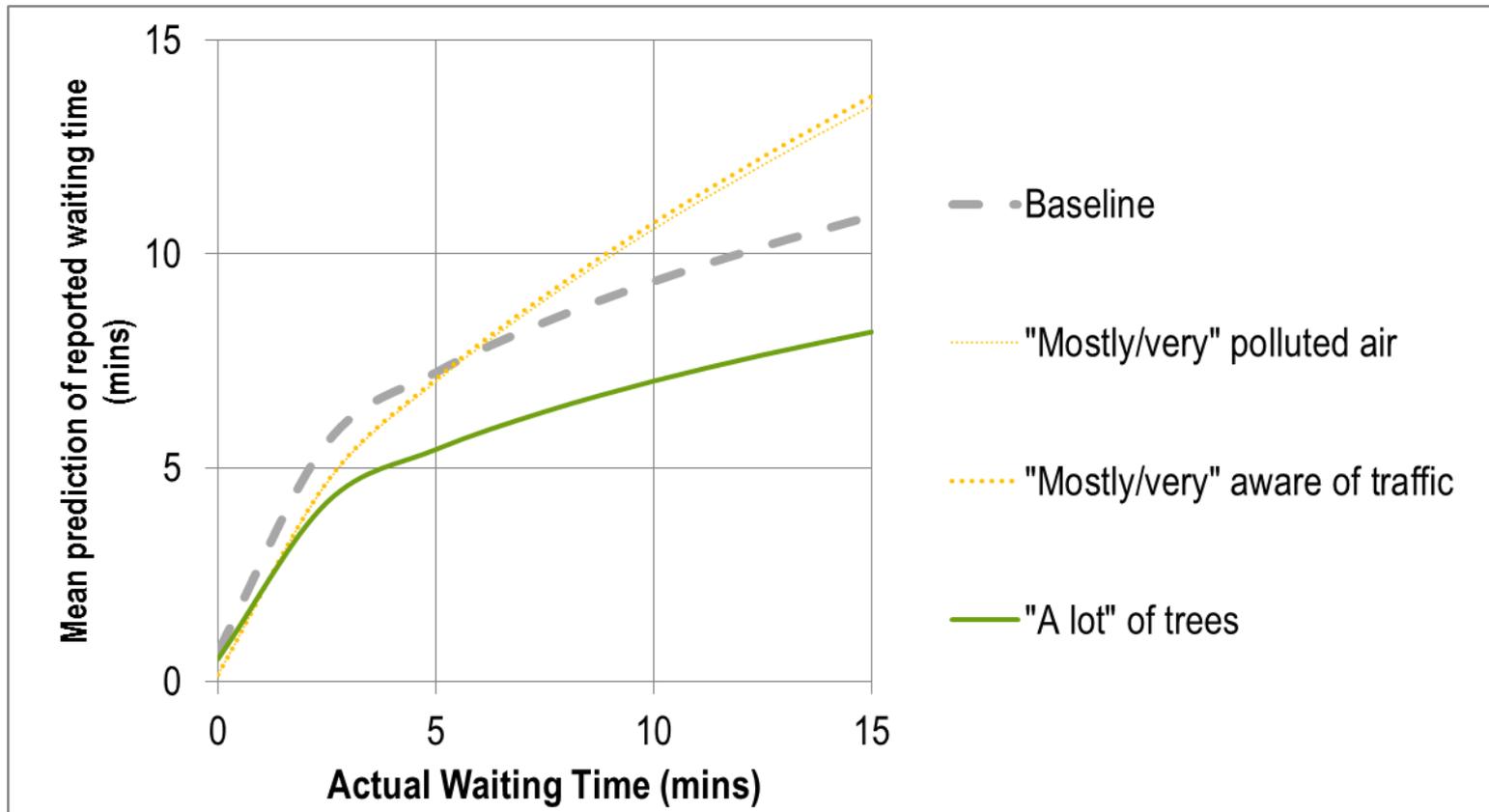


(Photo: [Public Domain Pictures/Pixabay](#))

# Perceptions of waiting time by amenities, gender and security



# Impacts of trees, traffic exposure, and polluted air on waiting time perception



# Make the city more bike-friendly



# Make biking accessible for all

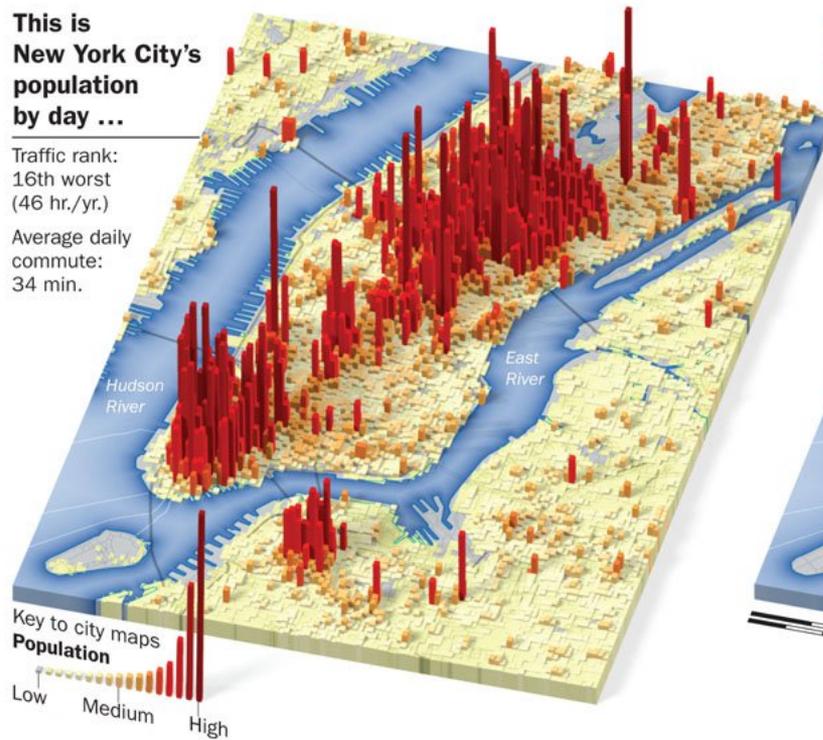


# Promote jobs-housing balance to shorten commute length

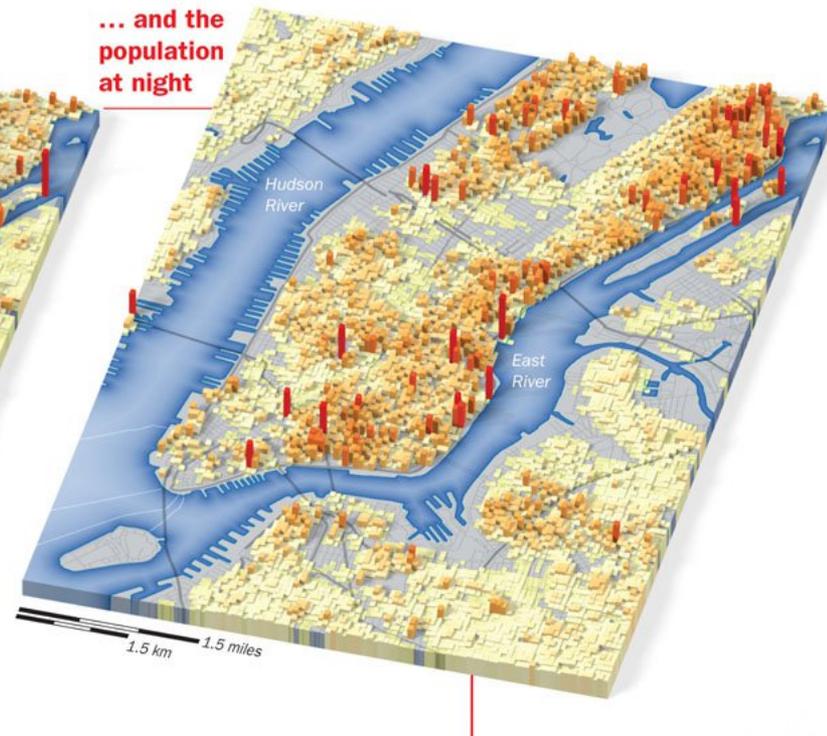
This is  
New York City's  
population  
by day ...

Traffic rank:  
16th worst  
(46 hr./yr.)

Average daily  
commute:  
34 min.



... and the  
population  
at night



# Address special needs of disabled travelers



Create good-quality public spaces that encourage out of home leisure, dining, and recreation.





**THANK YOU!**

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