



**Polytechnic Institute** 

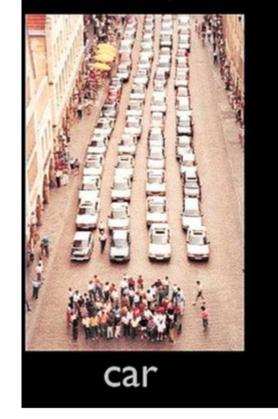
## What Are City Streets For? Bring Back The "Jaywalker"!

Prof. Dr. Bernd Steffensen / Prof. Dr. Robert F. Cox Department of Social Sciences/ Polytechnic Institute

Healthy City Design - International

London – October 15<sup>th</sup>, 2019

# space required to transport 60 people





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## **Topics for Discussion**

- 1) Looking Back 100 to 120 Years
- 2) A Socio-technical System of "Automobility"
- 3) The Jaywalker and Todays Pedestrians
- 4) Changing Behaviors
  - a. Value Propositions
  - b. Social Norms
  - c. Proposed Policy Considerations
- 5) Giving Our Streets Back to the Jaywalker



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Easter morning, 1900. New York City's 5<sup>th</sup> Avenue bustling with horse-drawn traffic and two motor cars

https://www.archives.gov/files/research/americancities/images/american-cities-101.jpg



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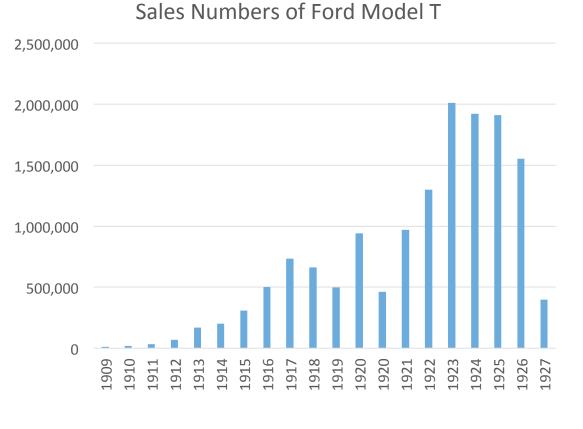
## New York City's 5<sup>th</sup> Avenue in 1911

https://www.shorpy.com/node/22470?size=\_original#caption



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http://mtfca.com/encyclo/fdprod.htm

## The incredible success of the Model T

- Till the end of 1912 about 130.000 cars were sold (worldwide)
- Mass production started in 1913



Wikimedia commons



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## New York City's 5<sup>th</sup> Avenue in 1913

https://www.pinterest.de/pin/392728029975332705/



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## "The Single-story America" – an observation from 1936

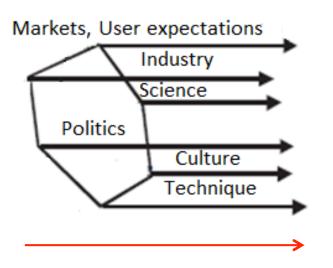
"We were back in the city where 2 million cars are driving and 6 million people are living, who serve the cars. What a beautiful look, when the cars are rolling for a promenade through the Central Park. You can't get rid of the idea that the huge park in the middle of New York was made to allow the cars to gasp some fresh air. There are mainly roadways, and little space is left for pedestrians. Cars captured New York and act in the city as if they were a real occupying force. They kill the inhabitants and make them cripples, treat them with severity, so they don't protest. The people abstain from a lot to saturate their suppressors with gas, to quench their eternal thirst for oil and water."

Jewgeni Petrov / Ilya Ilf 1903-1942 / 1897-1937



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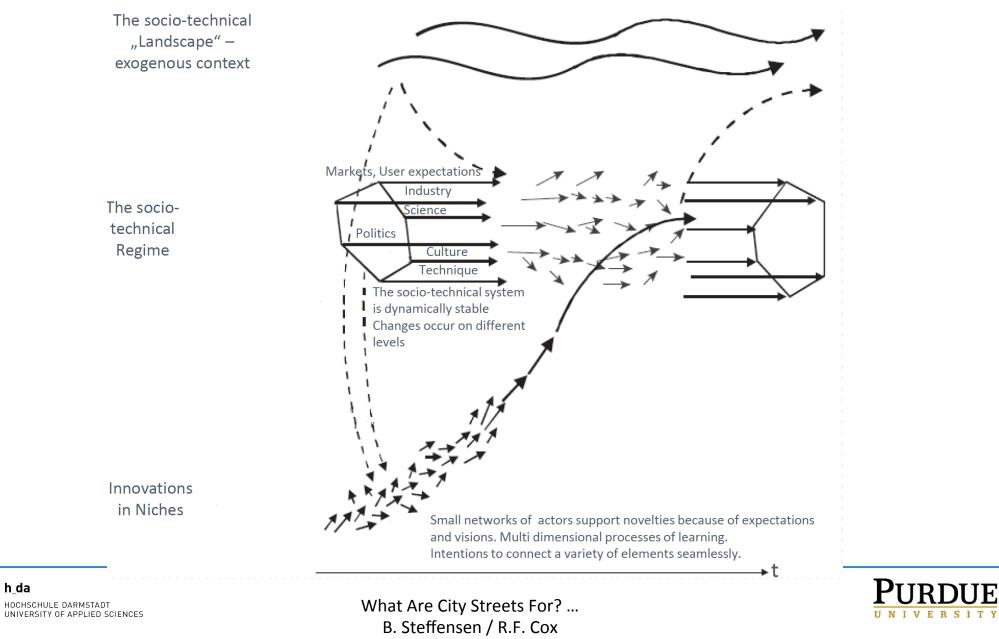
Geels, Frank W. (2005): Technological transitions and system innovations. A co-evolutionary and socio-technical analysis. Cheltenham, UK, Northampton, MA: Edward Elgar.

private picture taken in the Lenbach Haus, Munich



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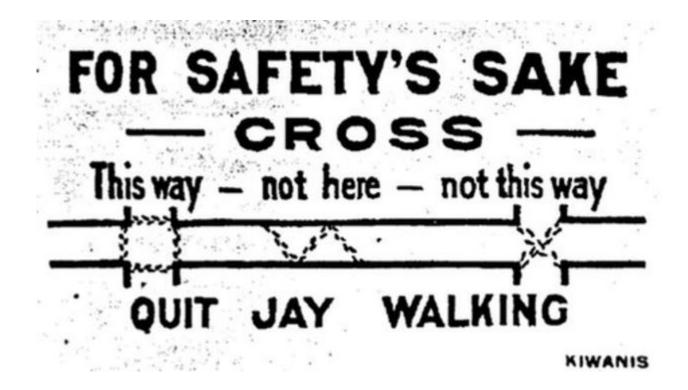




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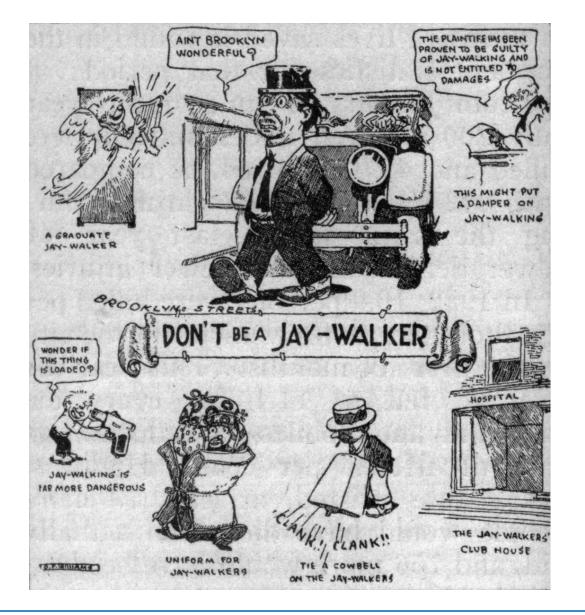
## 3. The Jaywalker and Todays Pedestrians





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## How can we change our dependency on automobiles?

## Concentrate on changing people's viewpoint on their current mobility habits through:

- 1. Increased value propositions
- 2. Social norms and peer pressure
- 3. Safe and convenient active mobility options
- 4. Policy and regulations to encourage change



https://upload.wikimedia.org/wikipedia/commons/thumb/9/9d/ Stop\_sign\_light\_red.svg/1024px-Stop\_sign\_light\_red.svg.png



https://m.imagekind.com/ ComplexFreewayInterchangeNetwork\_art? IMID=4ae0bb5d-9f06-4e24-a7d6-1b7e0e5b0c65



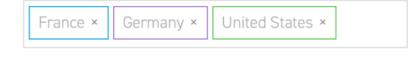
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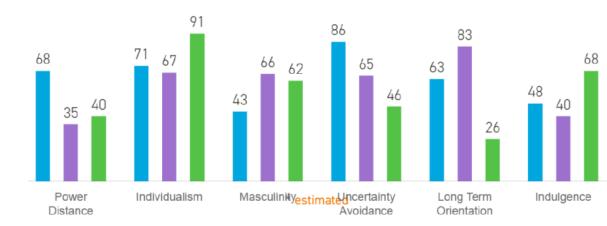
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#### 4. Changing Behaviors: Increased value propositions

Human nature is usually self-indulging (especially in the US), let's review some of those value added propositions with a direct positive financial impact on the individual...

- Reduced overall commuting costs using active transportation
- Increased property values along walking and biking trails (US Cases reported +80-148%)
- Increased lease rates for "WalkUP" tenants in the 30 top US metropolitan markets (+73.9%)
- Increased customer activity and sales within active transportation corridors





https://www.hofstede-insights.com/product/ compare-countries/



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## Social norms and peer pressure

Year	Walked to School	Walked from School	Biked to and from School	
1969	48%			
2007	11.9%	15.2		] •
2013	15.2	18.4	2.2	

Biking and Walking to School Trends in the US

(Source: Bicycling and Walking in the United States, 2016)



Decline in overall biking and walking trends to school in the US since 1969.

- easy to ride the school bus
- US economy requiring two-income families in the late 60's and early 70's
- easier for mothers to drop-off their children at school on their way to work,
- higher numbers of children walking home from school
- nearly 1 (0.86) car for each US citizen
- Practically every US family has an average of 2 cars
- Higher risk for active transportation users and leading to high levels of fatalities in some US cities.

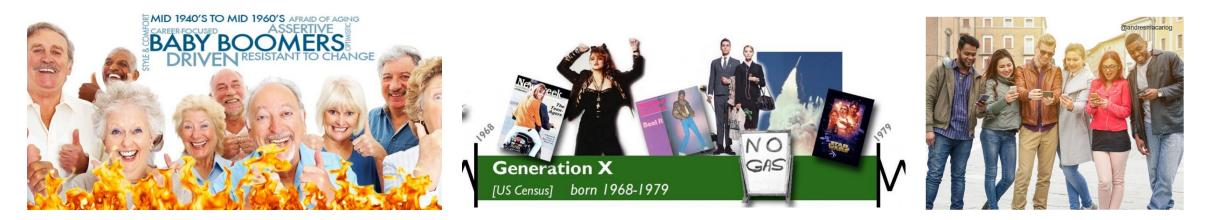


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#### Social norms and peer pressure

Car Commutes to Work	Generation	Year born	Current Age Range in 2019
90%	Baby Boomers	1947-1965	54 - 72
92%	Generation X	1966-1978	41 - 53
77%	Millennials	1979-1995	24-40





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#### **Proposed Policy Changes for Consideration**

Changes in behaviour that lead to more active transportation habits in the US and Europe will result from realization of financial gains (incentives) such as:

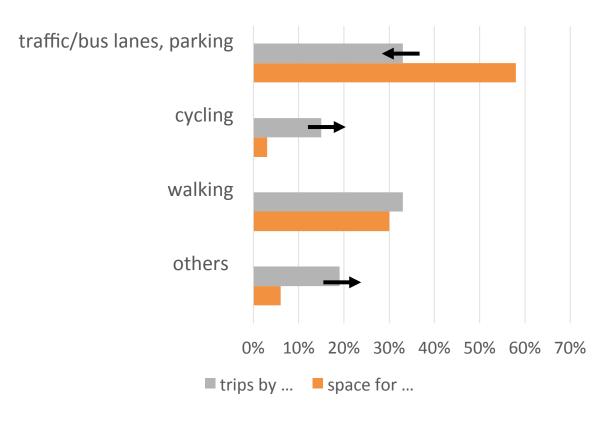
- tax credits for reduction in car ownership;
- increased fuel taxes;
- reduced healthcare insurance premiums for utilizing active transportation
- real estate tax incentives for properties adjacent to /near active transportation corridors;
- policies that reduce real estate taxes on those who live within walking or biking distance to their place of employment.
- real estate tax incentives for inner-city properties;



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## **Closing Thoughts**



## A Matter of Justice?

- A case-study from Berlin based on 187 streets in 2014
- Even though the share of trips by cars is decreasing, the share of space remains unchanged

https://www.clevere-staedte.de/files/tao/img/blog-news/ dokumente/2014-08-05\_Flaechen-Gerechtigkeits-Report.pdf



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## **Closing Thoughts**

Its time to give their fair share of the roads and corridors back to the walker...

## Bring Back The "Jaywalker"!





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## **Questions?**

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Some of the incentives and value propositions that can be realized by individuals and local communities embracing and promoting active transportation include, but are not limited to, the following:

- Decreased overall transportations costs
- Decreased obesity
- Increased overall health
- Increased real estate property values
- Decreased carbon footprint
- Decreased reliance on fossil fuels
- Increased air quality
- Increased productivity
- Increased socio-economic impacts
- Increased mobility options



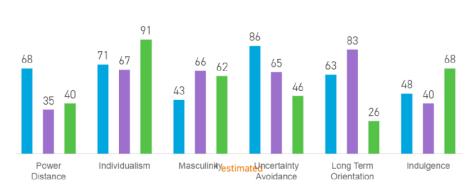


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Human nature is usually self-indulging (especially in the US), let's review some of those value added propositions with a direct positive financial impact on the individual...

- reduced commuting costs using active transportation
- lowered fuel and maintenance costs on their automobile
- car payments, insurance, annual road taxes, nor any licensing fees.
- replace their car with very dependable bicycle for easily loss than 1 or 2 car payments



#### https://www.hofstede-insights.com/product/

<u>compare-countries/</u>





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#### US Case Examples: Real Estate / Property Value Increase

- Orlando Florida's Edgewater Drive project resulted in adjacent property values increasing by 80%
- Indianapolis Cultural Trail property values within a block of the biking / walking trail increased 148% within the first 6 years of opening the 8 mile trail.
  - Total reported increased value of more than \$1 billion across nearly 1800 land parcels within 500 feet (152 m) of the \$62.5 M landscaped trail through the heart of the city.





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#### US Case Examples: Bike Share Program Impacts on Local Businesses: (Buehler & Hamre)

- 66% of bike share riders state that they use bike sharing to make purchases
- 20% of businesses report increased sales thanks to Capital bike share project in Washington, D.C. (CaBi)
- 70% of businesses reported positive improvements in the area
- 23% of riders reported that they spend more because of using bike share
- Customers of the Nice Ride bike share program in Minneapolis spent an estimated \$150,000 in one season at restaurants and other local businesses near Nice Ride Stations (Wang et al, 2012)
- In the 2012 assessment of Sunday Streets San Francisco program reported a 44% increase in customer activity and sales. For every dollar spent during Sunday Streets, \$9.32 was generated in the local economy (Zieff & Chaudhuri, 2013).



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## **Real Estate Values**

- 8 of 10 Complete Street Projects showed increases in property values
- Dubuque, IA realized property value increases of 111%
- Complete Streets were shown as catalyst
- Recent studies of the 30 largest U.S. metropolitan areas found office rental rates were higher in walkable urban places ("WalkUPs") \$35.33 per sf versus \$20.32 per sf in drivable suburban locations.
- WalkUPs garnered a 44% rental price premium over drivable suburban locations in other metro studies, except for in New York city (Leinberger and Lynch, 2014)



https://files.constantcontact.com/ 5600e112101/9c53ea1b-ca55-4f23-89b2ef0803097bd1.jpg

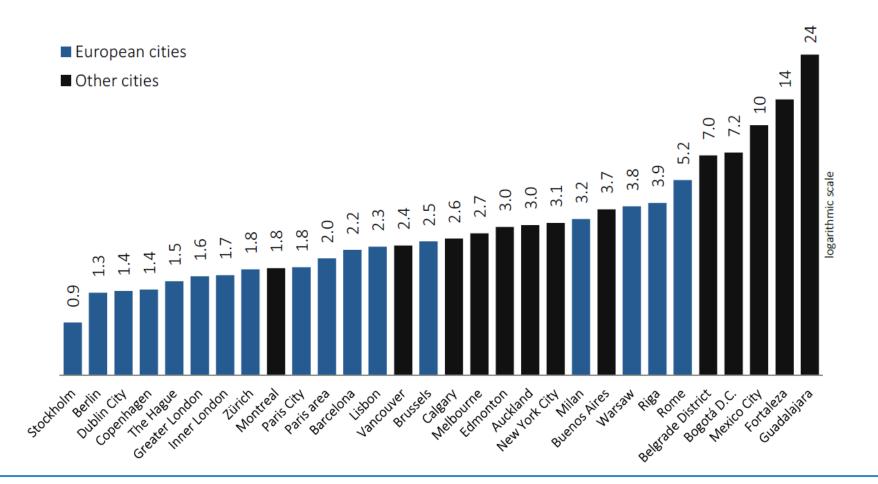


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### Policy and regulations to encourage / support change

Figure 3. Fatalities per 100 000 resident population, 2011-2015





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