

## Taking the Car out of Carbon

UITP Sustainability Commission, Antwerp

December 1, 2014

Projjal K. Dutta, AIA, LEED AP  
Director, Sustainability Initiatives  
[pduutta@mtahq.org](mailto:pduutta@mtahq.org) (212) 878 1065  
[www.mta.info/sustainability](http://www.mta.info/sustainability)  
twitter: @projjal  
[takingthecaroutofcarbon.tumblr.com](http://takingthecaroutofcarbon.tumblr.com)



## Adaptation and Climate Change







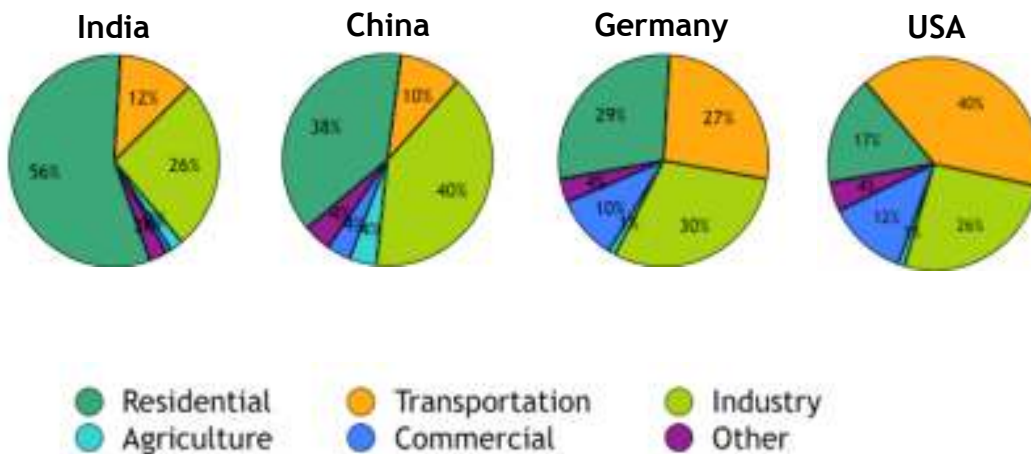




# Energy Consumption & Sustainability: Macroview

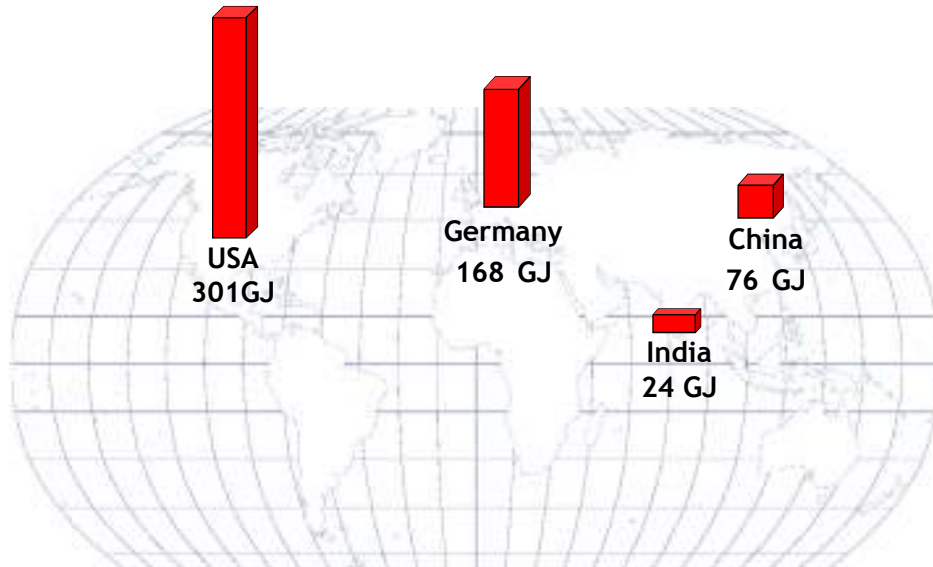


## Energy Consumption by Sector, 2005



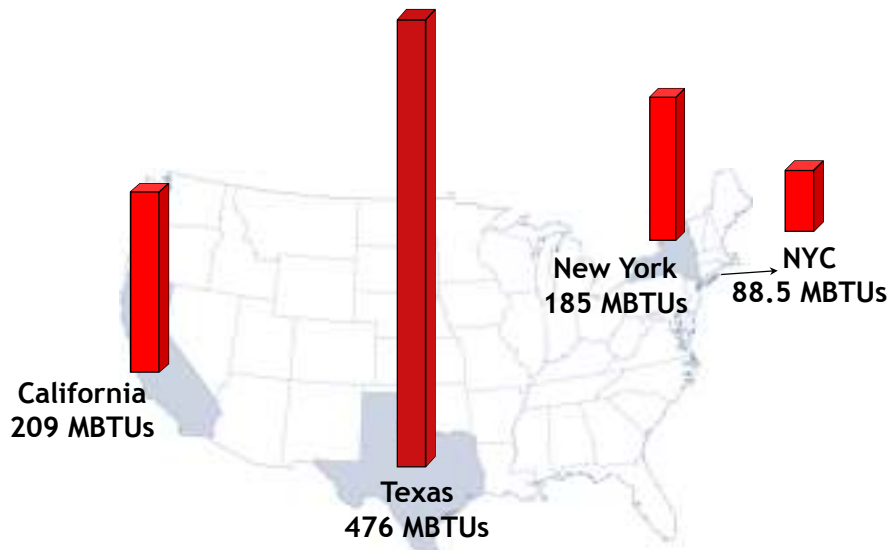
Source: World Resources Institute

## Total Energy Consumption per Capita, 2012



Source: WB World Development Indicators

## Total Energy Consumption per Capita, 2011



Source: Energy Information Administration

# Energy Consumption & Sustainability: Microview



## Energy Consumption: Tall Urban Building vs. Low-Rise Office Park

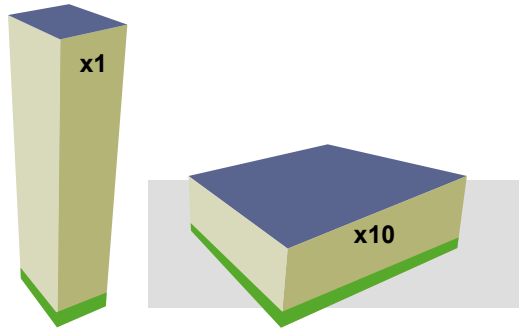


## Energy Consumption: Tall Urban Building vs. Low-Rise Office Park

### Number of buildings

High-Rise: 1

Low-Rise: 10

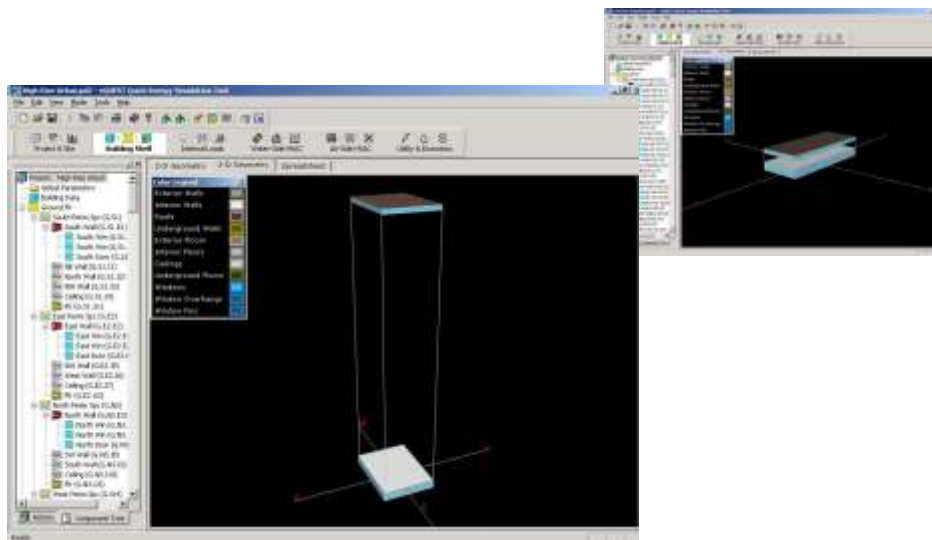


Average floor size	<b>30,612 sf</b>	<b>36,000 sf</b>
Area of roof	<b>88,000 sf</b>	<b>375,000 sf</b>
Area of ext. wall	<b>343,000 sf</b>	<b>385,000 sf</b>
Area for parking	<b>0 sf</b>	<b>1,837,500 sf</b>

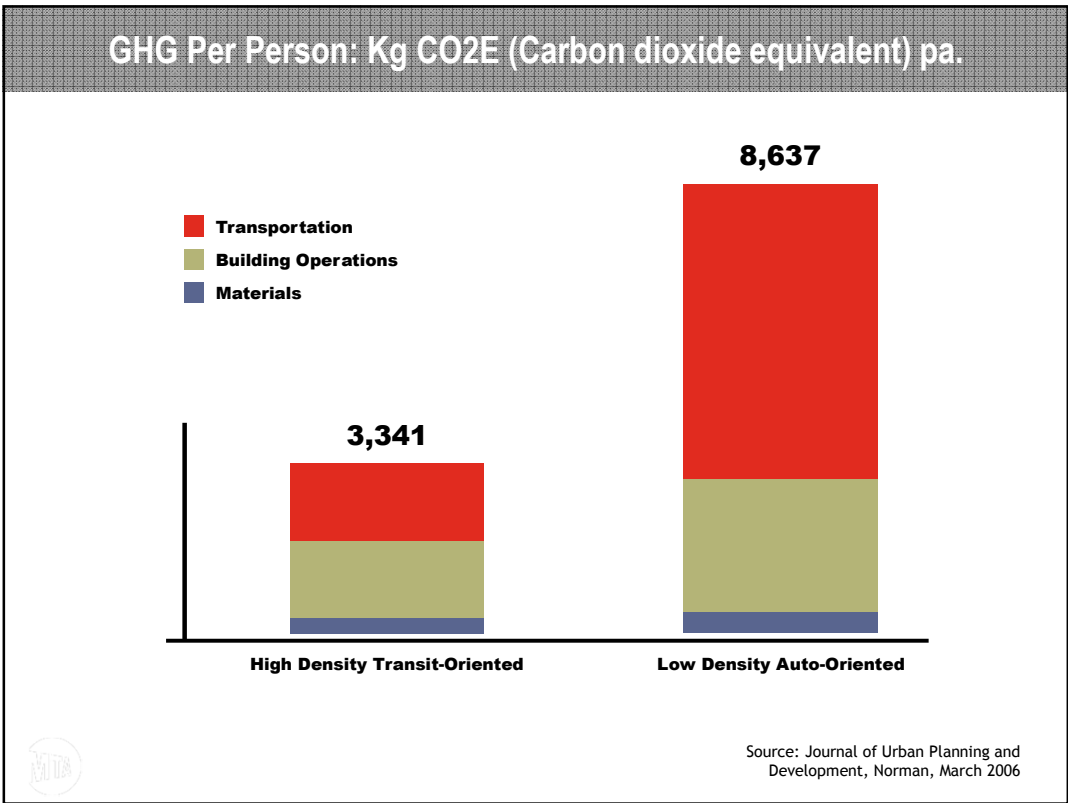
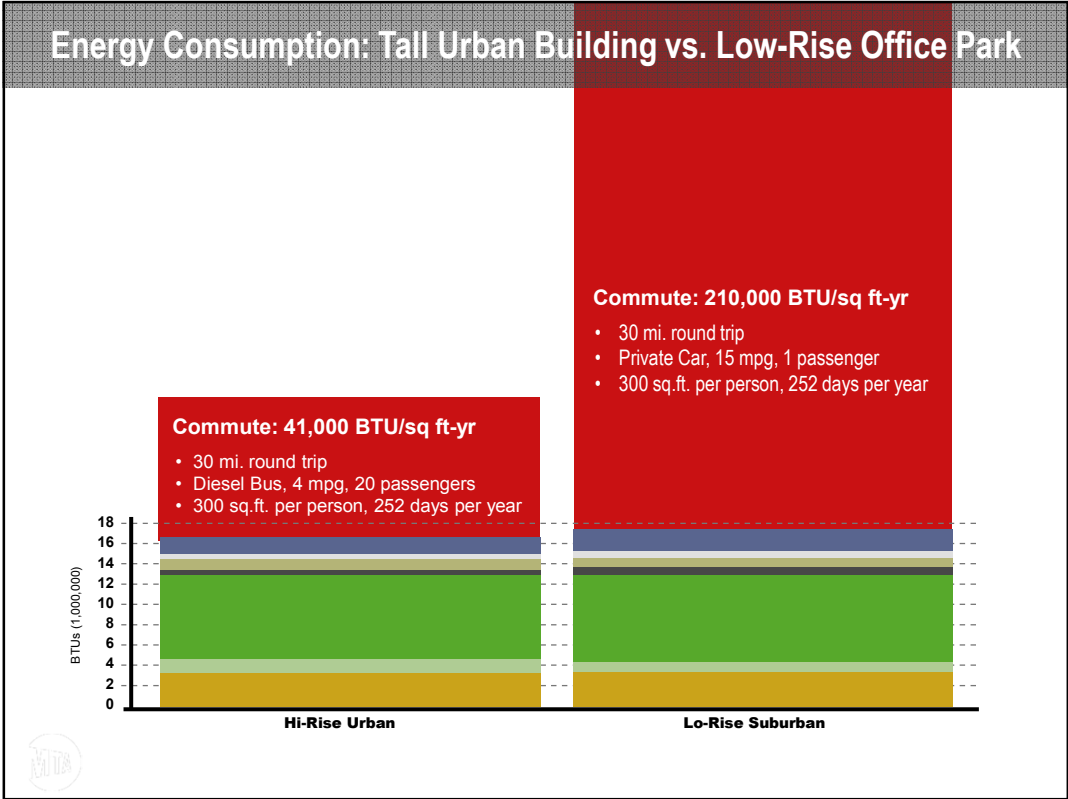


15

## Energy Consumption: Tall Urban Building vs. Low-Rise Office Park





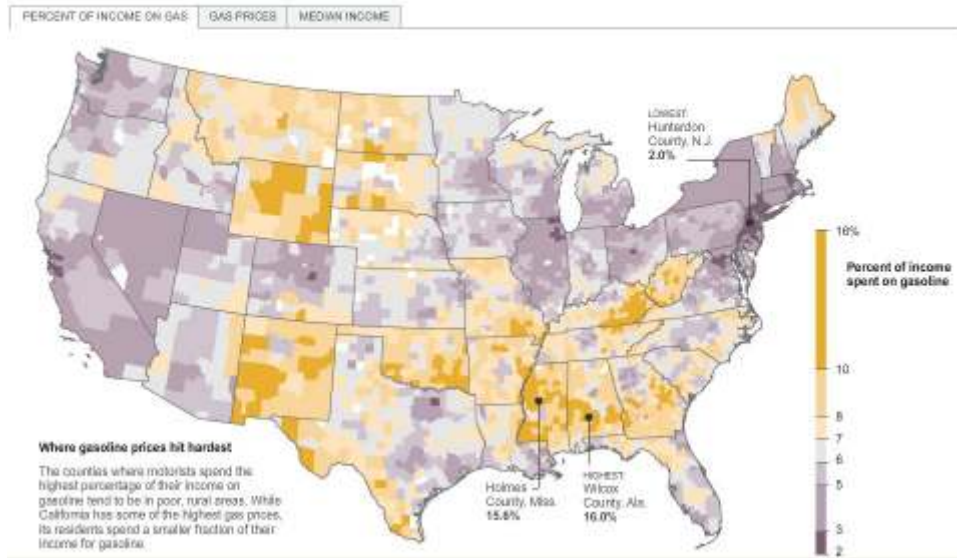


# Taking the carbon out of the car Vs Taking the car out of carbon



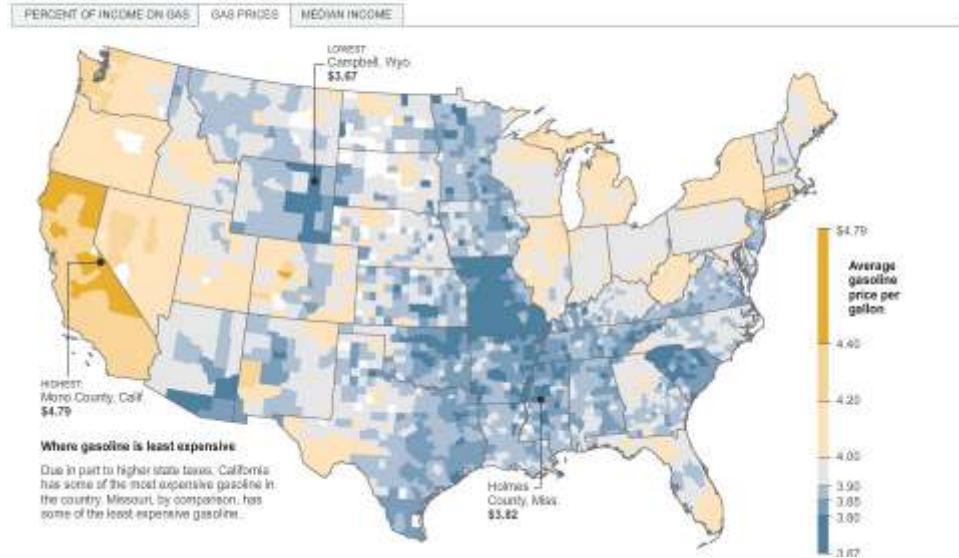
## The Varying Impact of Gas Prices

Gas prices are high throughout the country, but how hard they hit individual families depends on income levels, which vary widely.



## The Varying Impact of Gas Prices

Gas prices are high throughout the country, but how hard they hit individual families depends on income levels, which vary widely.



# Public Transportation and Public Health

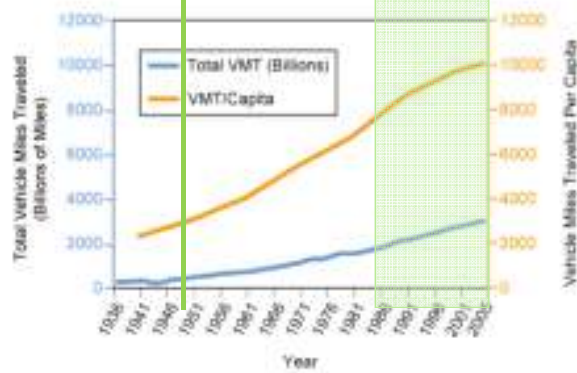




## Vehicle Miles Traveled trend-lines

### Trends in Vehicle Miles Traveled

United States, 1936 - 2005

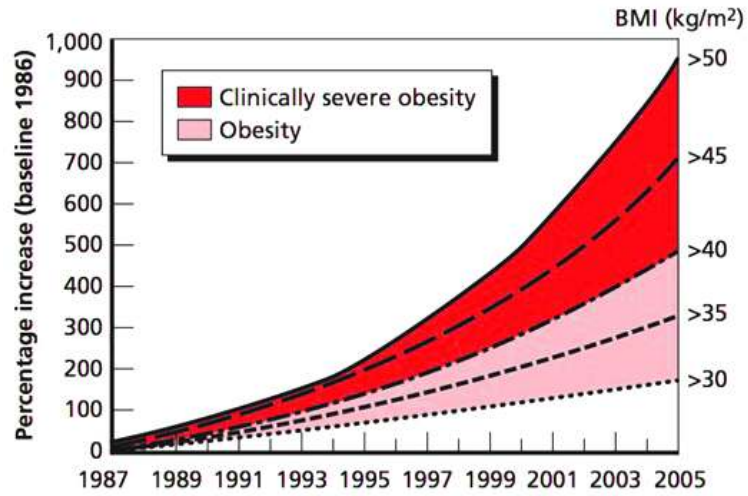


Sources: US DOT, Federal Highway Administration  
US Census Bureau

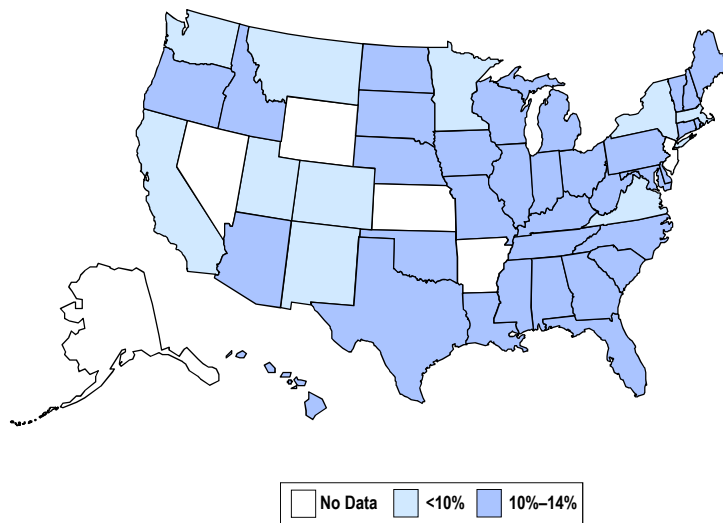




## Obesity Trend-lines



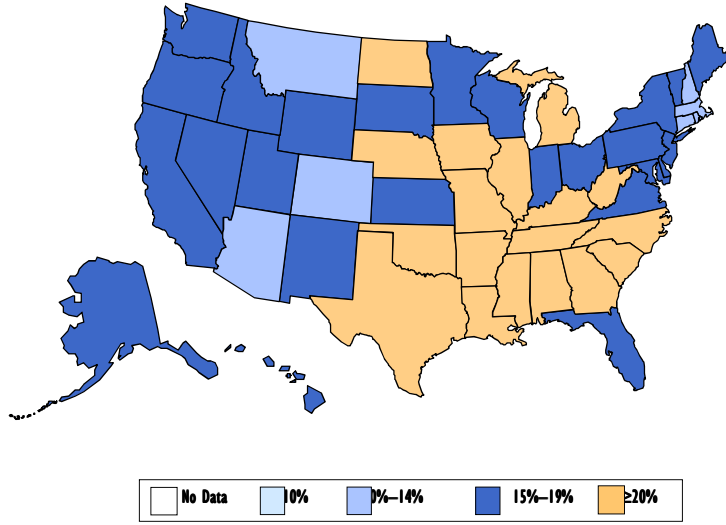
## Obesity Trends\* Among U.S. Adults BRFSS, 1990



(\*BMI ≥30, or ~ 30 lbs. overweight for 5' 4" person)



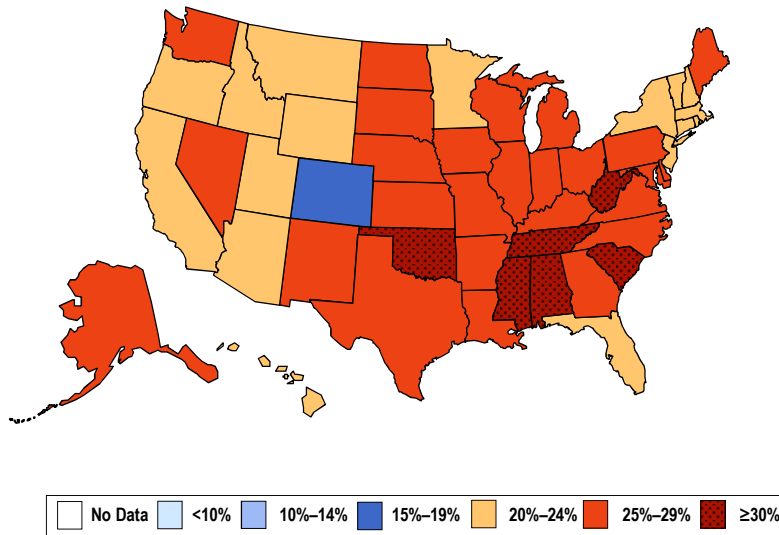
## Obesity Trends\* Among U.S. Adults BRFSS, 1999



(\*BMI ≥30, or ~ 30 lbs. overweight for 5' 4" person)



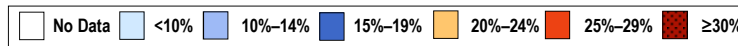
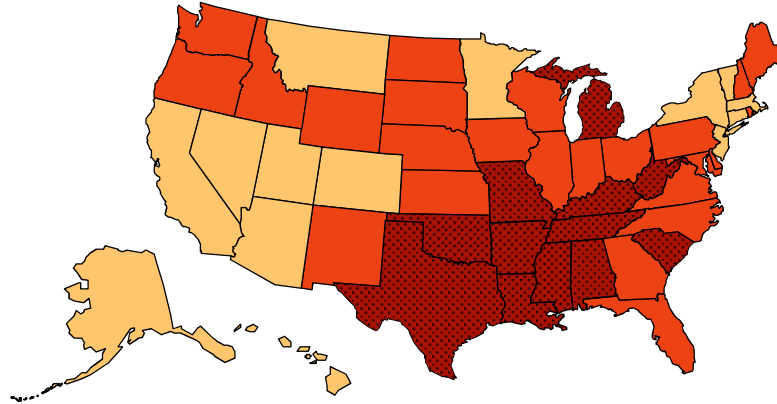
## Obesity Trends\* Among U.S. Adults BRFSS, 2008



(\*BMI ≥30, or ~ 30 lbs. overweight for 5' 4" person)



## Obesity Trends\* Among U.S. Adults BRFSS, 2010



(\*BMI ≥30, or ~ 30 lbs. overweight for 5' 4" person)

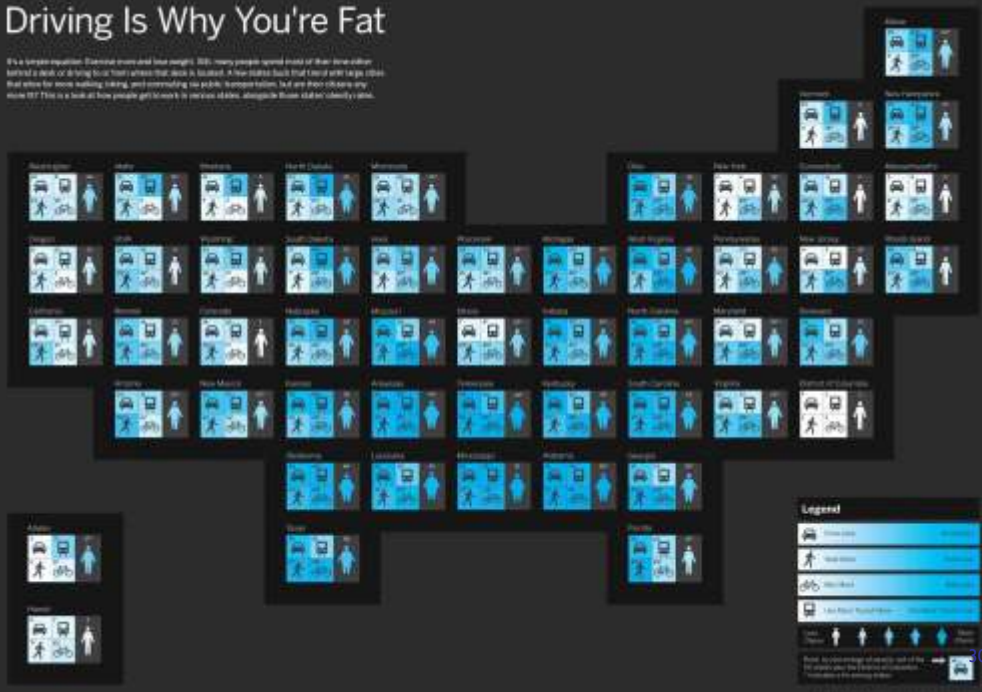


29

## Obesity Trends\* Among U.S. Adults BRFSS, 2008

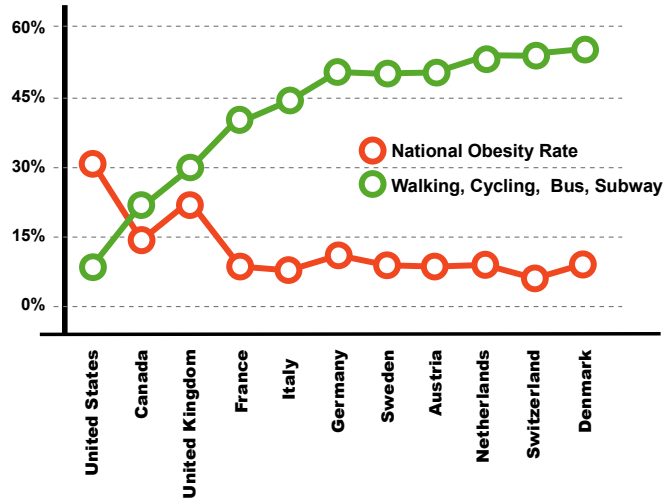
### Driving Is Why You're Fat

It's a broken equation. Exercise more and lose weight. But many people spend most of their time either behind a desk or driving to and from areas that desk is located. In the states that have the largest cities that allow for more walking, biking, and commuting via public transportation, but are their citizens any more fit? This is a look at how people get to work in various states, alongside those that are obesity rates.



## Inverse Correlation

### Do Cars Make Us Fat?

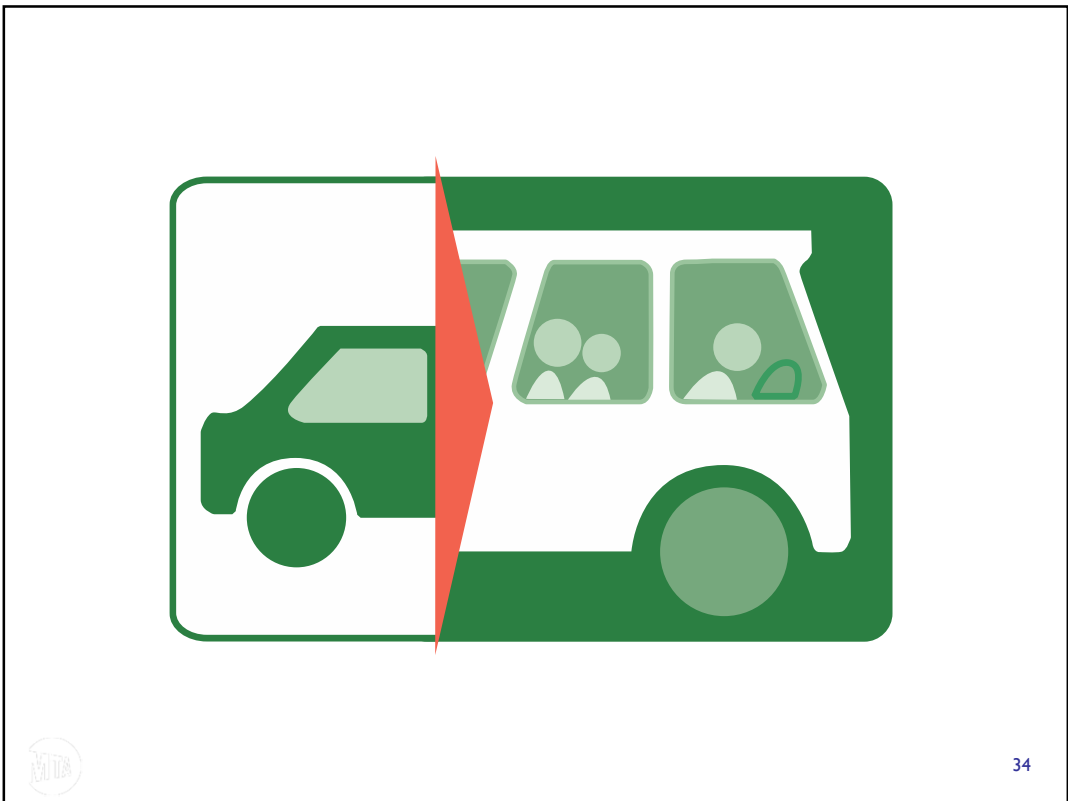
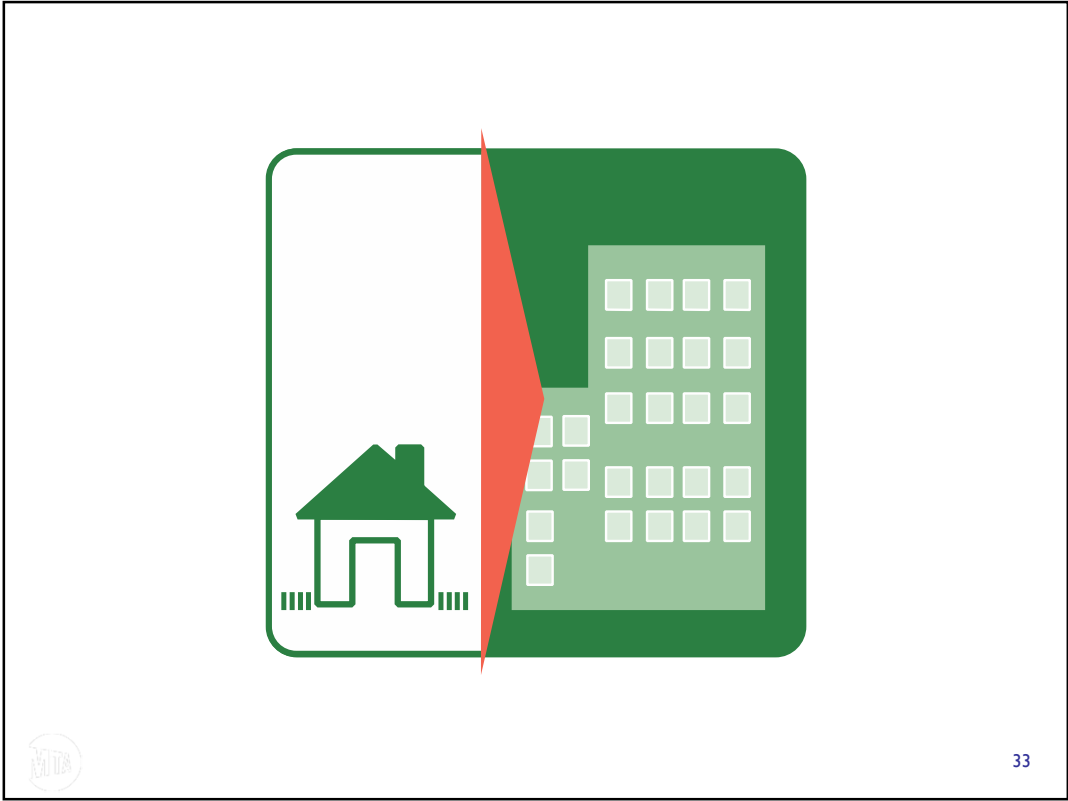


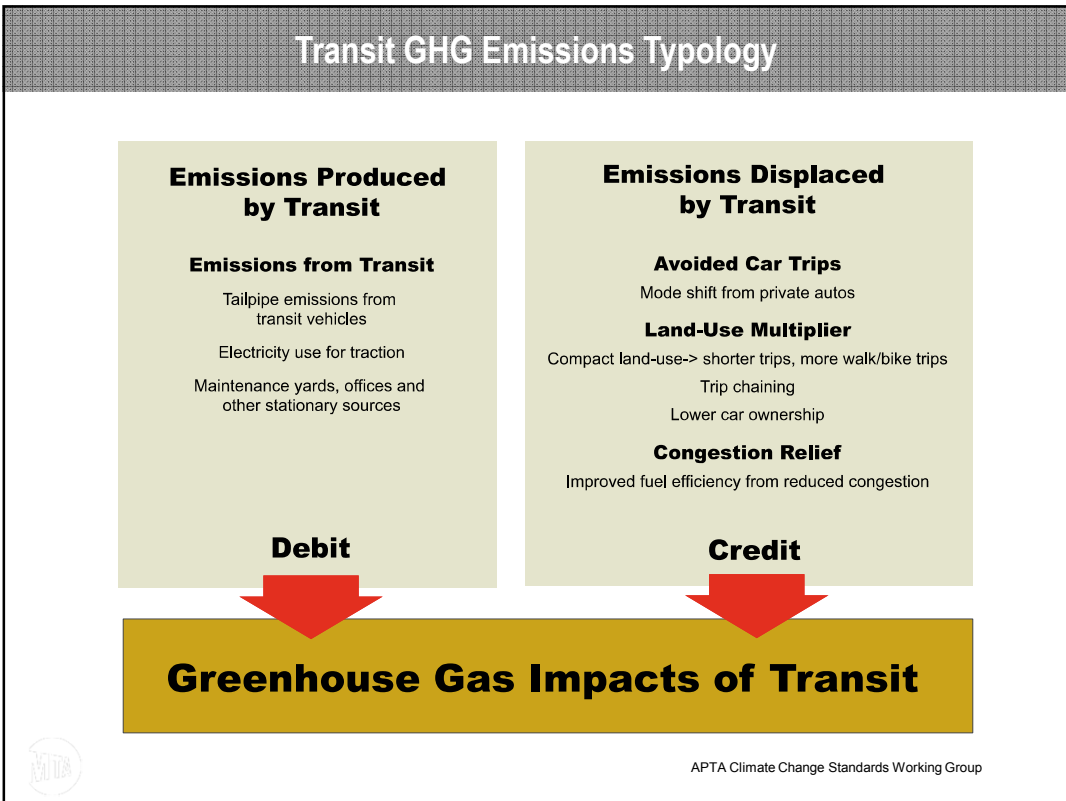
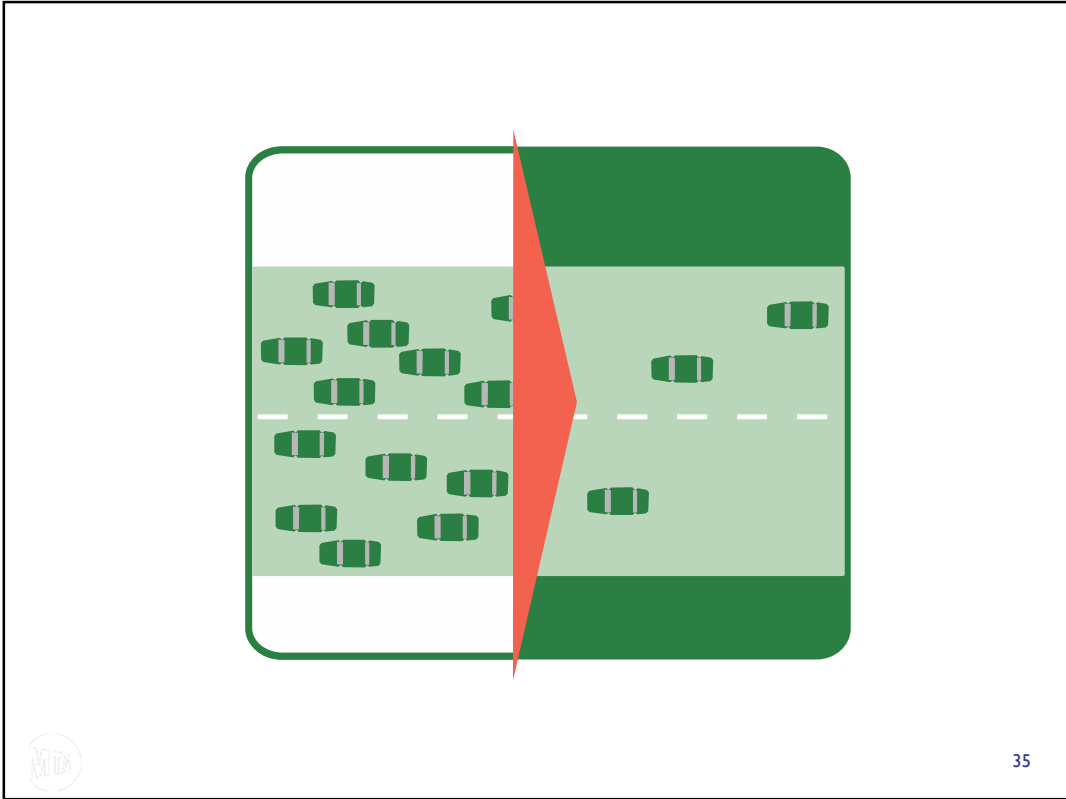
Source: Professor John Pucher/Rutgers University  
CalorieLab.com

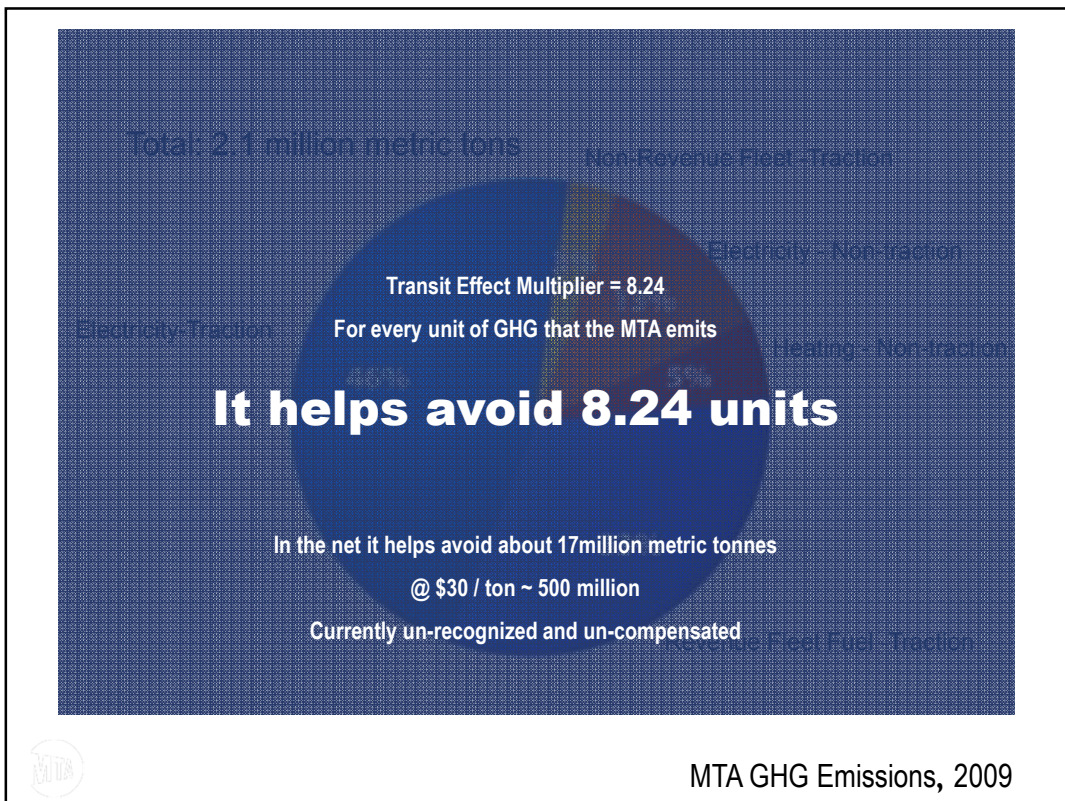
# What is it worth?













“Does not anywhere  
but New York”





Is Transit for Everywhere? Cincinnati's Close Brush



Is Transit for Everywhere? Cincinnati's Close Brush



Is Transit for Everywhere? What happened in NYC?



Is Transit for Everywhere? What happened in NYC?





## Is Transit for Everywhere? Can LA become a Transit City?



## Is Transit for Everywhere? Can LA become a Transit City?

hollywood blvd, vine street, la

Search Maps

Show search options





1995

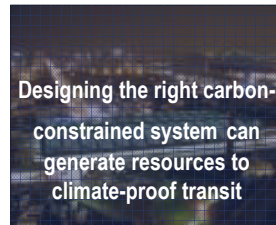
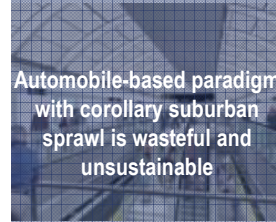
2005







## Summary

























# Taking the Car out of Carbon

UITP Sustainability Commission, Antwerp

December 1, 2014

Projjal K. Dutta, AIA, LEED AP  
Director, Sustainability Initiatives  
[pducta@mtahq.org](mailto:pducta@mtahq.org) (212) 878 1065  
[www.mta.info/sustainability](http://www.mta.info/sustainability)  
twitter: @projjal  
[takingthecaroutofcarbon.tumblr.com](http://takingthecaroutofcarbon.tumblr.com)

