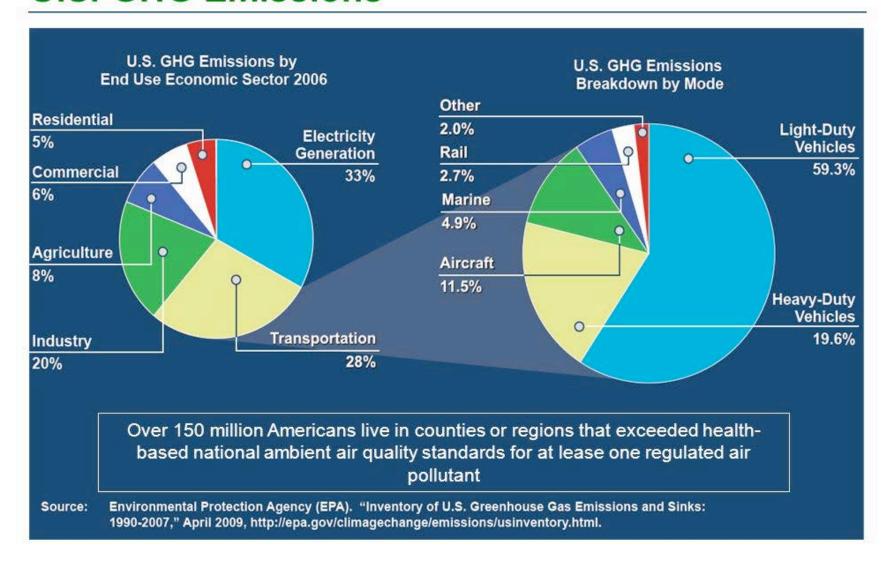


Sustainable Communities Sustainable Transportation



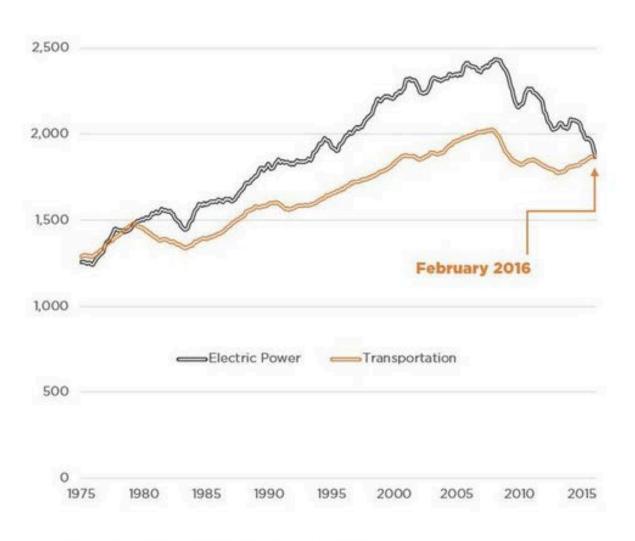
Beth Osborne

U.S. GHG Emissions



Carbon Dioxide Emissions by Sector Moving 12-Month Total

3,000 Million Metric Tonnes of Carbon Dioxide

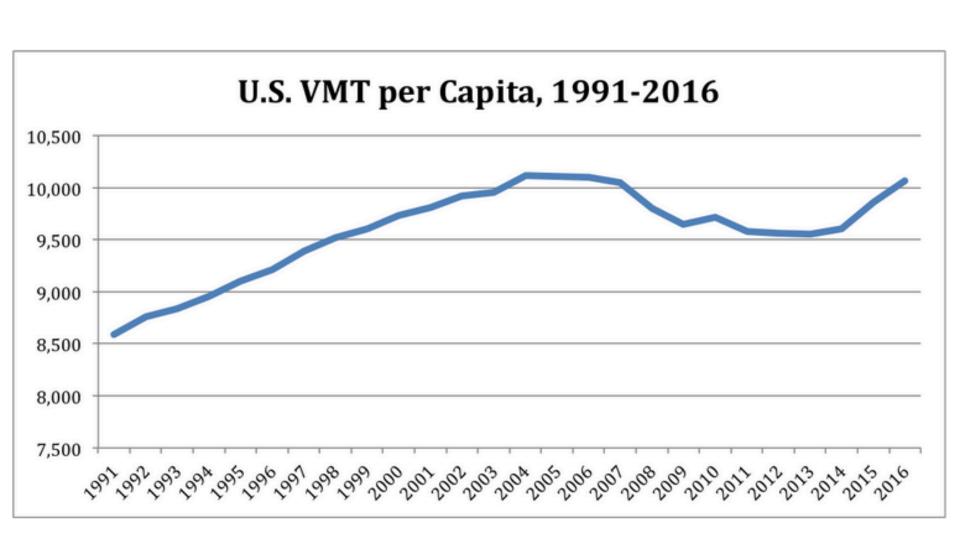


Source: DOE, EIA, May 2016 Monthly Energy Review

Three Factors That Influence Transportation GHG Emissions

GHG Emissions from Transportation

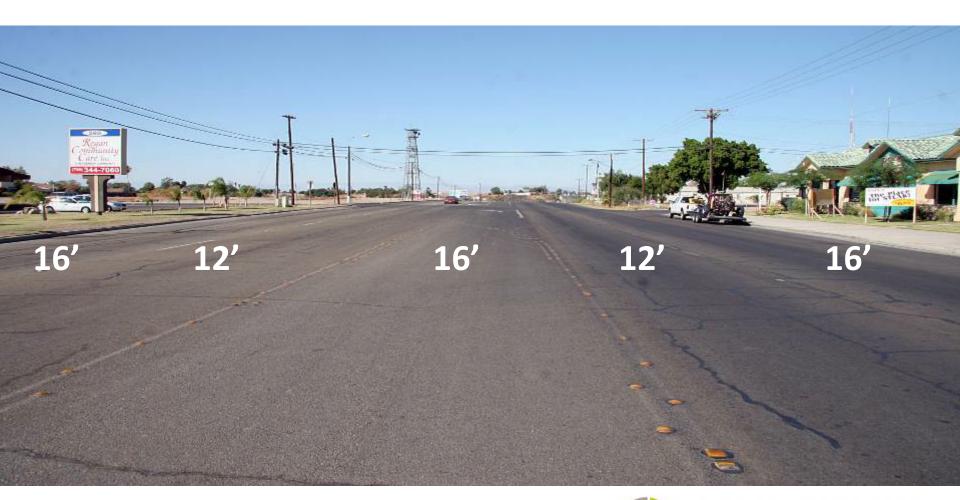
- Fuel Properties
- Vehicle Efficiency
- Total Demand for Transport



Mistakes state transportation agencies make



Wide lanes





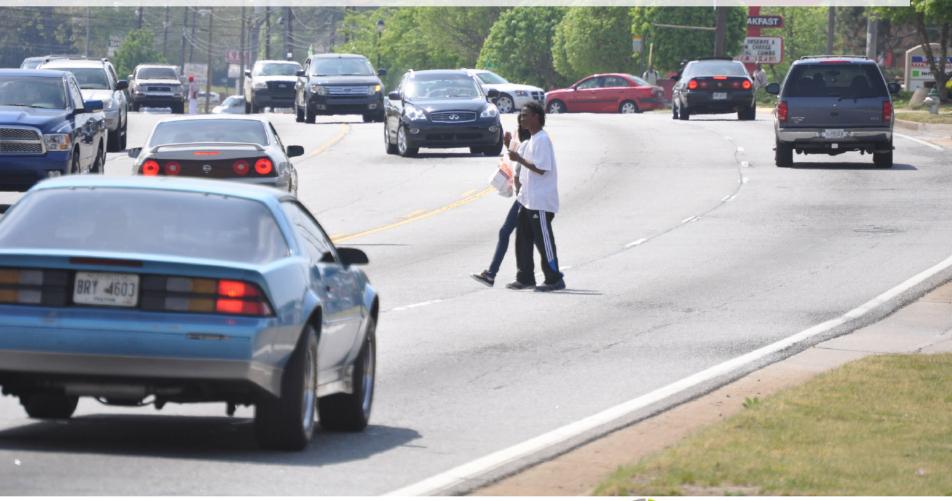
Wide roads



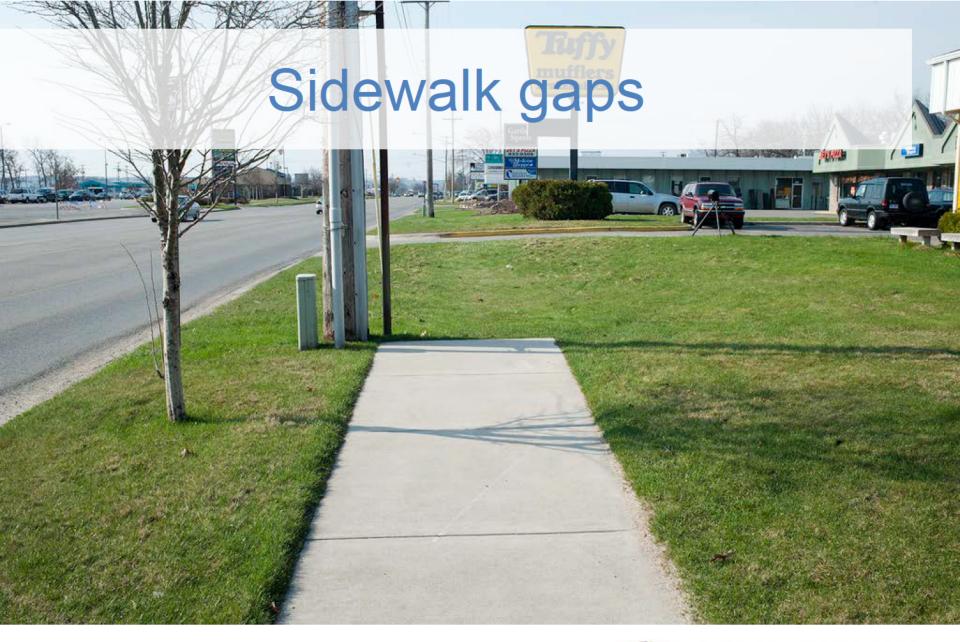
Wide turn radius/Slip lanes



No sidewalks/crosswalks









Wrong design vehicle for the context





Roadway design only





Roadway design with land use





Roadway design, land use and aesthetics





Roadway design, land use, aesthetics – and people



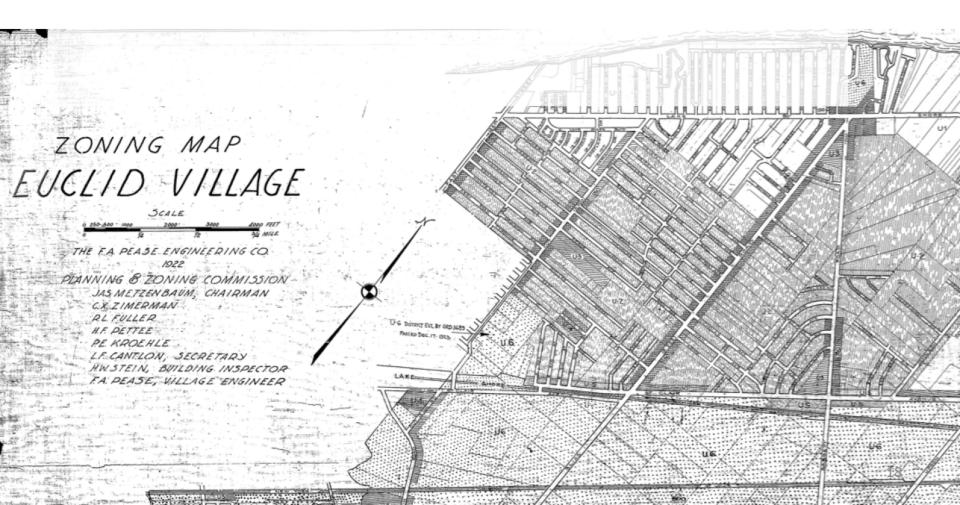


Mistakes local agencies make



Euclidian Zoning

1924: Amber Realty vs. City of Euclid, OH



History and legal basis for planning

<u>Standard Zoning Enabling Act – 1925</u>

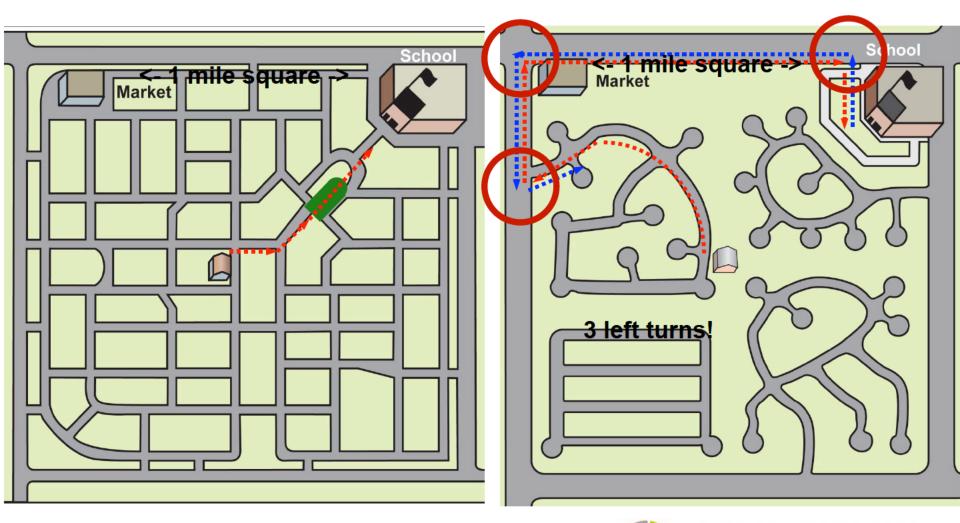
- Promulgated by U.S. Department of Commerce during Herbert Hoover administration.
- Viewed as a means to protect the interests of business as well as residents.
- Provided model language for zoning ordinances.

<u>Standard Enabling Planning Act – 1927</u>

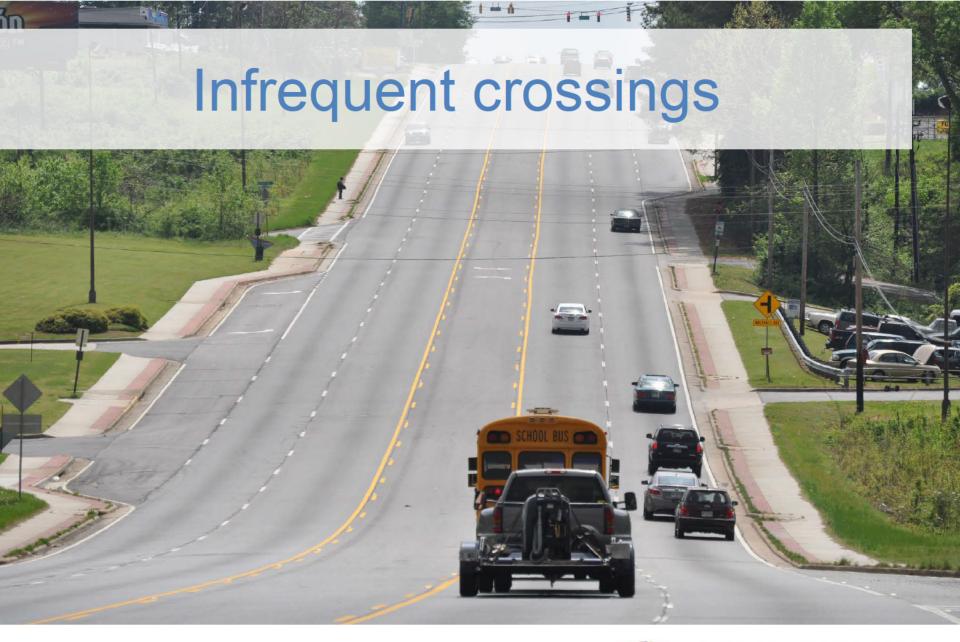
- Also from the Department of Commerce.
- Set forth that zoning and land use regulations should be based on comprehensive planning goals and objectives arrived at democratically.



Poor local street connectivity









Reliance on LOS





Setbacks and dead space



Sidewalk blockages

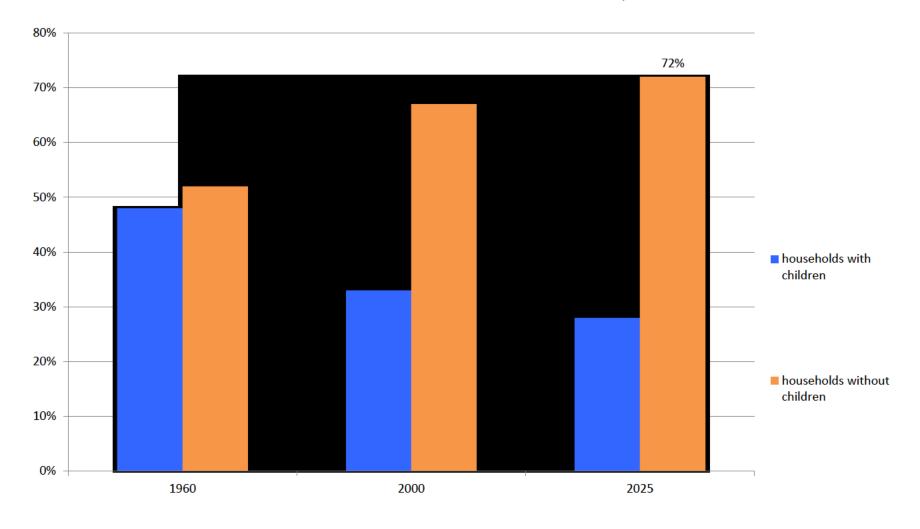


Sustainable environment and economy



American households are changing

Households with and without children, 1960-2025



N.Y. / REGION

Suburbs Try to Prevent an Exodus as Young Adults Move to Cities and Stay

By JOSEPH BERGER APRIL 16, 2014

It is a well-trod trail: Suburban youngsters enter their early 20s, leave their parents' comfortable Tudors or colonials for the pizazz of the city, dawdle a few years until they find mates and begin having children and then, seeking more space and good public schools, move back to the suburbs and into their own Tudors or colonials.

But that pattern is changing, or at least shifting. A recent report on the suburb-dotted New York counties of Westchester, Nassau and Suffolk, based on United States census data, found that those young people seem to be lingering longer in New York City, sometimes forsaking suburban life



Young Americans ditch the car

By Steve Hargreaves @CNNMoney September 17, 2012: 11:30 AM ET.



FH010 THINKSTOCK

NEW YORK (CNNMoney) -- America's young people just aren't buying cars like they used to.

The share of new cars purchased by those aged 18-34 dropped 30% in the last five years, according to the car shopping





Municipality: Hilo, HI

Traditional measures of housing affordability ignore transportation costs. Typically a household's second-largest expenditure, transportation costs are largely a function of the characteristics of the neighborhood in which a household chooses to live. Location Matters. Compact and dynamic neighborhoods with walkable streets and high access to jobs, transit, and a wide variety of businesses are more efficient, affordable, and sustainable.

The statistics below are modeled for the Regional Typical Household. Income: \$52,108 Commuters: 1.12 Household Size: 2.90 (Hilo, HI)

Map of Transportation Costs % Income



Location Efficiency Metrics

Places that are compact, close to jobs and services, with a variety of transportation choices, allow people to spend less time, energy, and money on transportation.

0%

Percent of location efficient neighborhoods

Neighborhood Characteristic Scores (1-10)

As compared to neighborhoods in all 955 U.S. regions in the Index

Job Access 5

Moderate access to jobs

AllTransit Performance Score

1.7

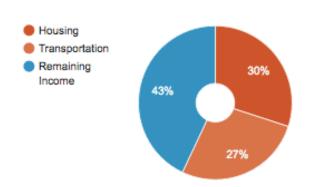
Car-dependent with very limited or no access to public transportation Compact Neighborhood

2.1

Low density and limited walkability

Average Housing + Transportation Costs % Income

Factoring in both housing and transportation costs provides a more comprehensive way of thinking about the cost of housing and true affordability.



Transportation Costs

In dispersed areas, people need to own more vehicles and rely upon driving them farther distances which also drives up the cost of living.



\$13,819

Annual Transportation Costs





1.84

Autos Per Household

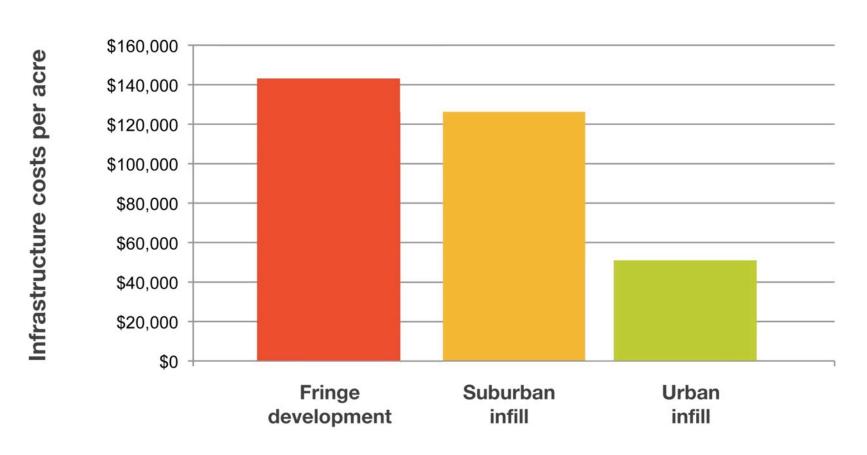


23,454

Average Household VMT

Development affects costs

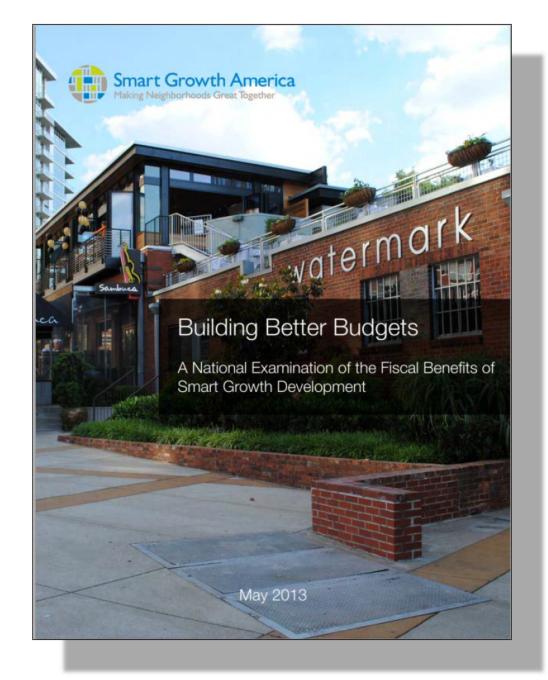
Per acre infrastructure costs for single-family homes by location













Smart Growth America is the only national organization dedicated to researching, advocating for and leading coalitions to bring smart growth practices to more communities nationwide.

www.smartgrowthamerica.org

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