

Trends in New Jersey Land Use

New Jersey Future
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Smart Growth research, policy and advocacy organization

Development that protects open space and farmland, revitalizes communities, keeps housing affordable, and provides transportation choices



Land-Use in New Jersey: Overview

- Most developed state in the nation
- Highest population density in the nation
- Second highest rate of transit ridership
- Large portion of land is either protected open space or falls under the jurisdiction of one of three regional areas
(The Pinelands, Highlands and Meadowlands)

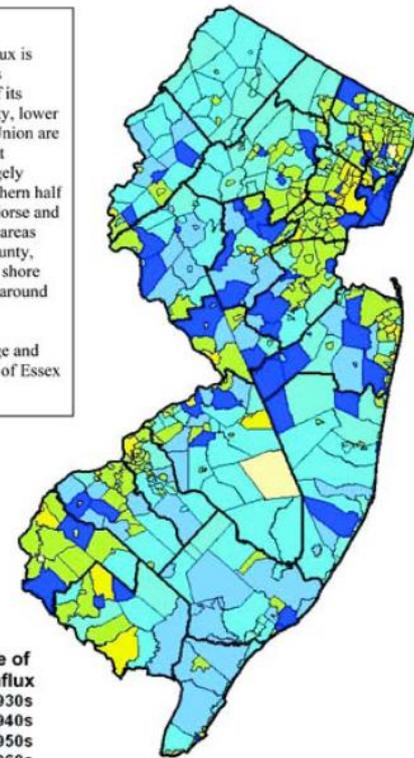
Spreading out from the Urban Core

- Post-war suburbs (yellow and green) were built in the 1940s and 50s
- 2000 – 2010 saw the fastest growth in South Jersey
- Immigrants are repopulating some of our cities

Municipalities by Decade of Maximum Absolute Population Increase

The decade in which a municipality experienced its largest population influx is often a good indicator of the age of its physical infrastructure and the bulk of its housing stock. Most of Bergen County, lower Passaic, western Essex, and most of Union are characterized by post-war suburbs that boomed in the 1950s and are now largely built-out. The same is true in the northern half of Camden County along the White Horse and Black Horse Pikes. Mature suburban areas also appear in northern Middlesex County, eastern Morris, along the Raritan Bay shore and Atlantic coast in Monmouth, and around Trenton in Mercer.

Most of New Jersey's cities (both large and small), and the urbanized eastern half of Essex County, developed even earlier.



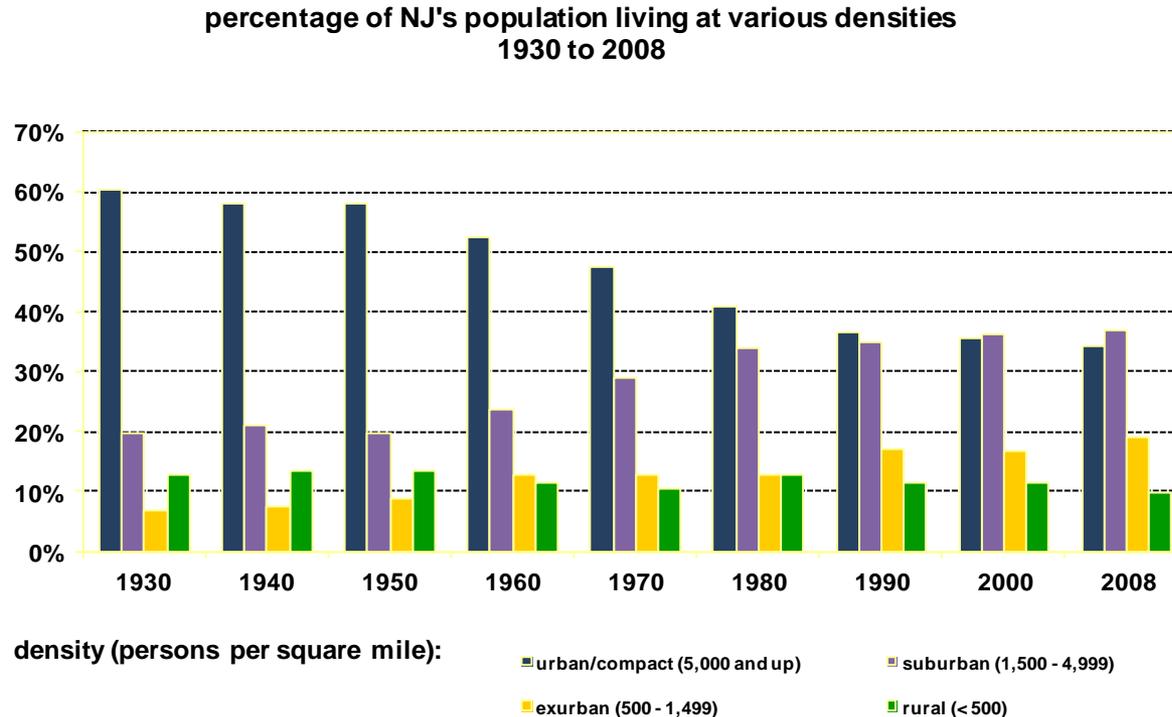
data source: U.S. Bureau of the Census
spatial data source: NJ Dept. of Environmental Protection
map prepared by New Jersey Future

**Moving Out, NJ Future, 2006*

“De-densification”

Percentage of NJ's Population Living at Various Densities, 1930 to 2008

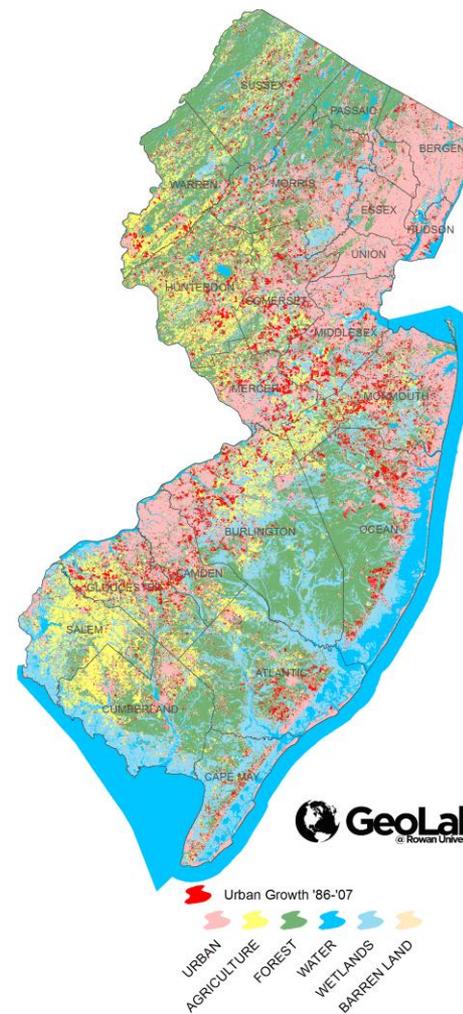
•Newly-developed acres grew **1.3 times as fast as population** between 1995 and 2002 (down from 2.3 times as fast between 1986 and 1995)



*Tim Evans,
New Jersey Future

Rapid Loss of Open Space, 1986 - 2007

- NJ more developed than anything else (30%)
- Developed footprint grown 25% since 1986
- Suburbanization accelerated 2002 – 2007



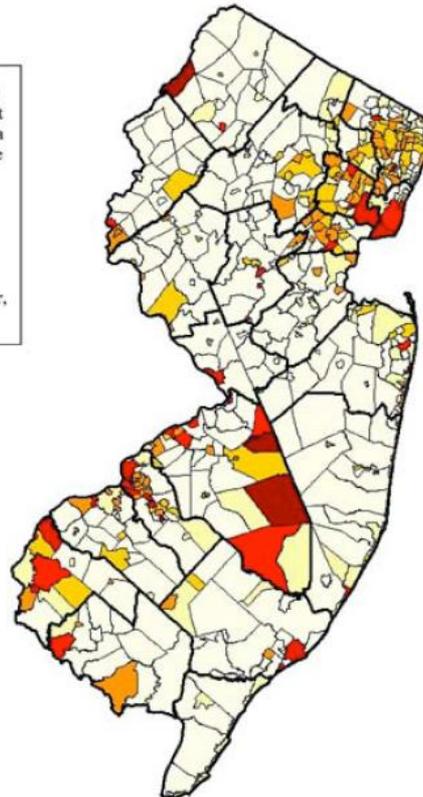
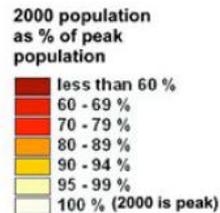
**Changing Landscapes in the Garden State,*

Rowan & Rutgers, 2010

Urban Areas Have Lost People...

Figure 7
2000 Census Population as a Percent
of Peak Population, by Municipality

The 297 New Jersey municipalities having fewer people in 2000 than at some time in the past together had a total 2000 population that was three quarters of a million people fewer than the sum of these municipalities' peak populations. Much of the population growth in New Jersey's outlying counties is clearly coming as a direct result of the depopulation of the state's older, built-out areas.



data source: U.S. Bureau of the Census
spatial data source: NJ Dept. of Environmental Protection
map prepared by New Jersey Future

Some recent trends are encouraging

- New Jersey's 8 "urban centers" accounted for only 3.9% percent of residential building permits issued statewide in the 1990s
- Their share tripled to 11.8% in the 2000s.

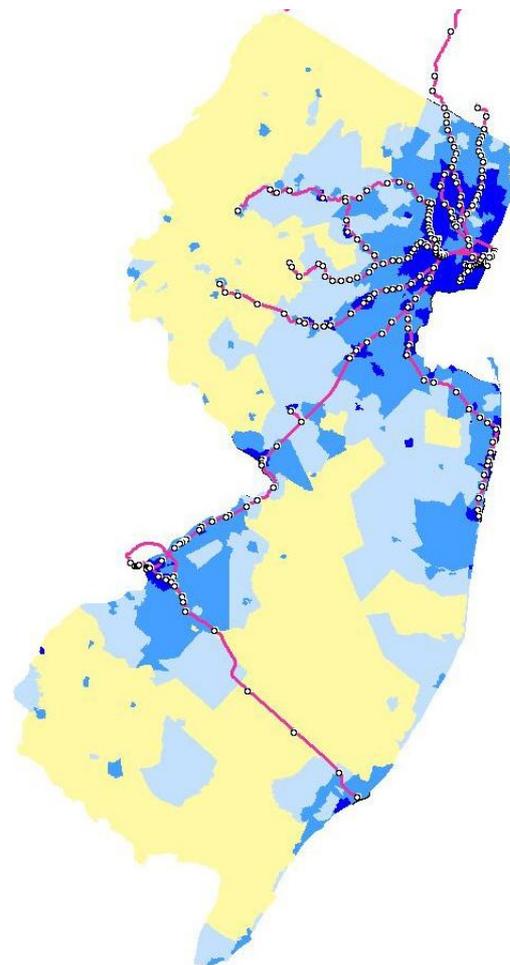


Jersey City, 2006

**Built Out But Still Growing, New Jersey Future, 2010*

Transit Rich New Jersey

- **224** rail stations
- Approximately **70 percent** of the New Jersey residents live within **5 miles** of a train station
- **1.9 million** jobs (50%) are located in towns served by rail transit

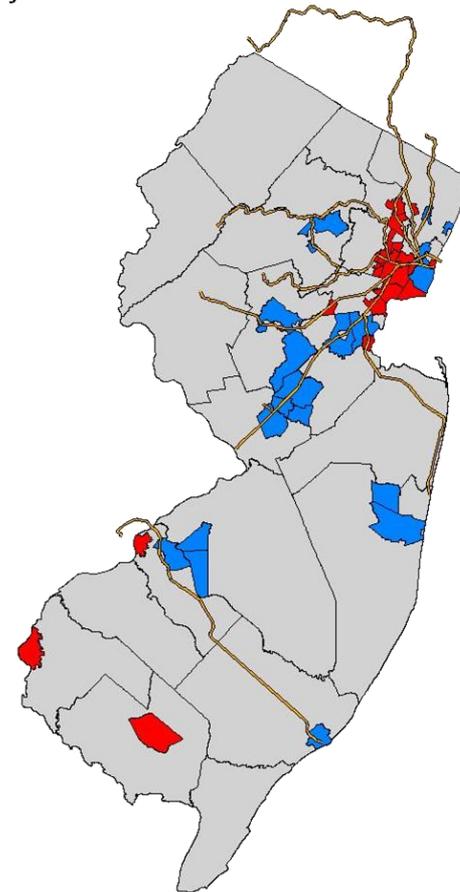


**Getting to Work, New Jersey Future, 2008*

But Jobs are Dispersing

**Job losses near transit;
job gains along the highway**

20 largest job-gaining and job-losing municipalities, 1980-2003:

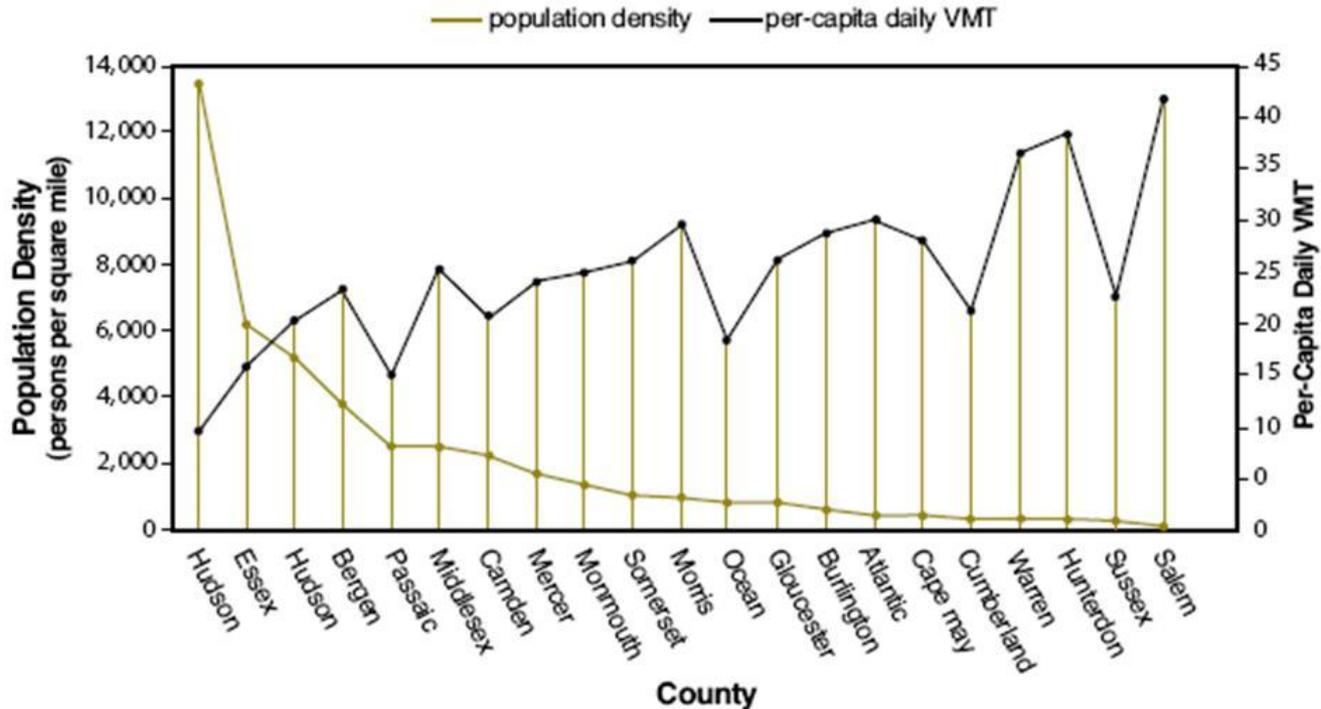


*Getting to Work, New Jersey Future, 2008

Population Density Effects Vehicle Miles Travelled, and thus GHG Emissions

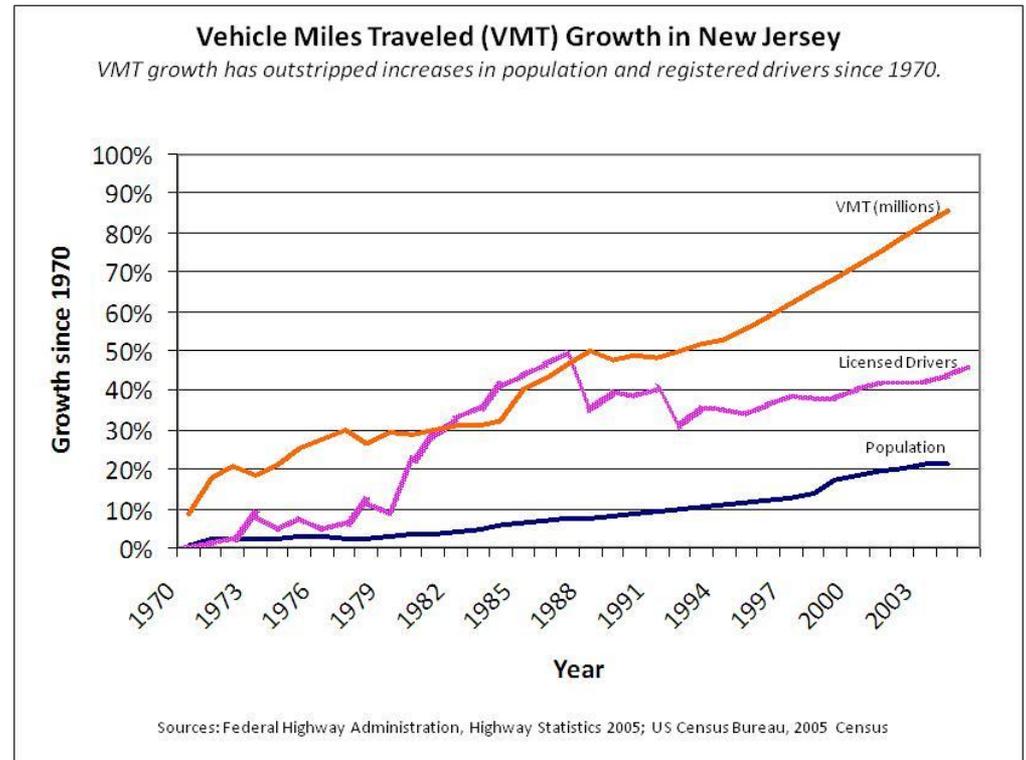
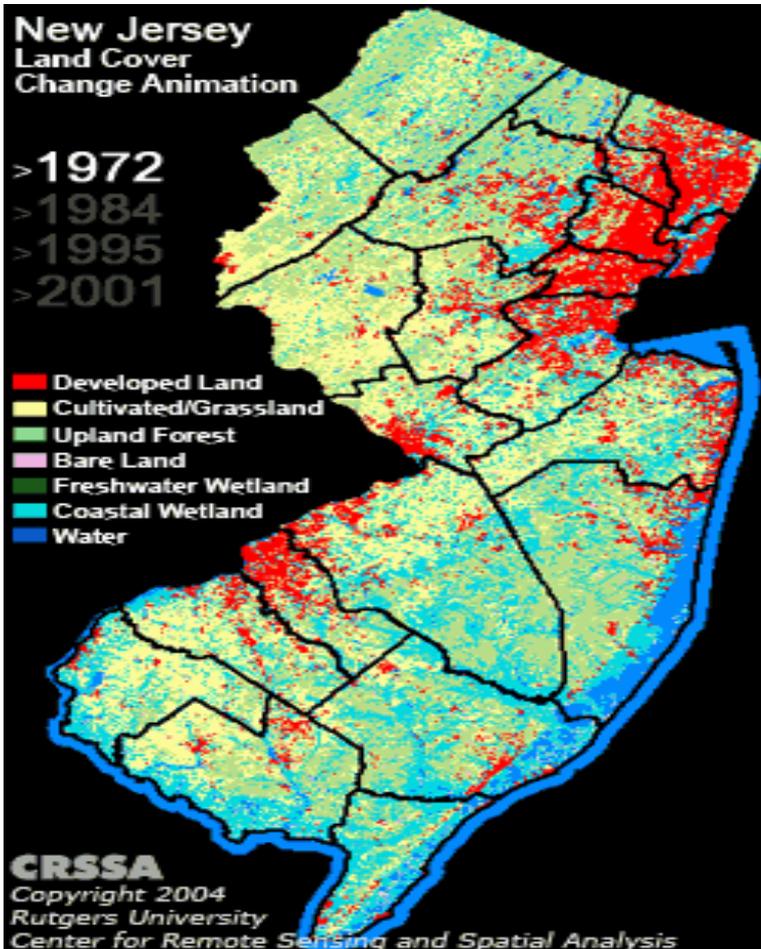
Population Density vs. Per-Capita Daily Vehicle Miles Traveled (VMT), 2002

Residents in compact areas drive less, thanks to good transportation alternatives.



Sources: NJ Department of Transportation (VMT); US Census Bureau (population)

As Land Use Has Spread Out, VMT Has Risen Dramatically

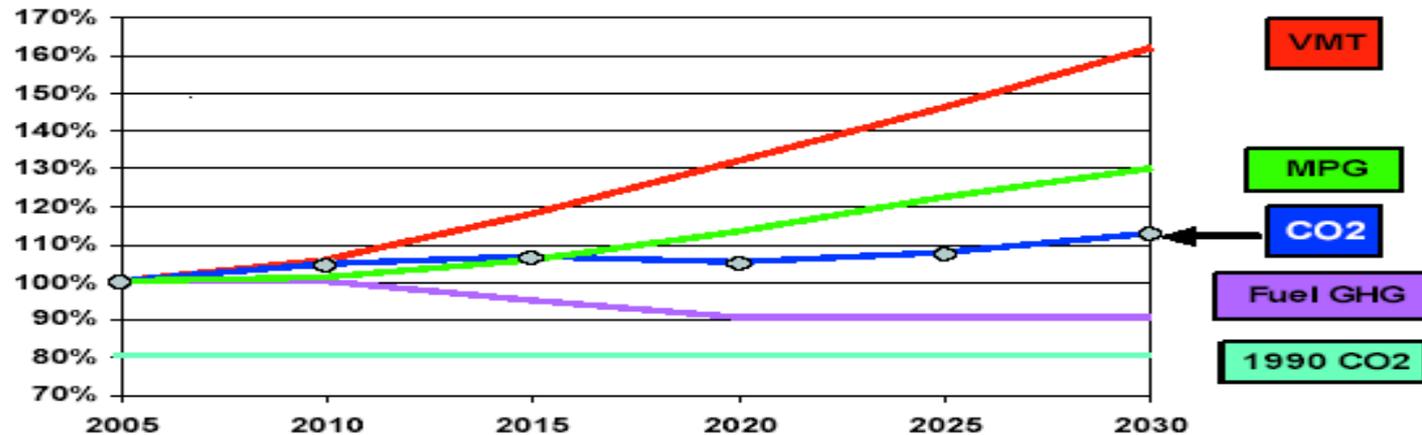


And VMT is Projected to Grow

FIGURE O-3

PROJECTED GROWTH IN CO₂ EMISSIONS FROM CARS AND LIGHT TRUCKS ASSUMING STRINGENT NATIONWIDE VEHICLE AND FUEL STANDARDS*

*WITH SENATE CAFE LEVELS -- NEW PASSENGER VEHICLE FUEL ECONOMY OF 35 MPG IN 2020 AND CALIFORNIA LOW CARBON FUEL STANDARD OF -10% IN 2020 APPLIED NATIONALLY.



Sources: VMT: EIA with 10% rebound MPG: US Senate, Fuels: C.

How Can We Lower VMT through Land-Use?

- Density
- Design
- Connectivity of Destinations
- Transportation Options



Design



Do: Exchange Place

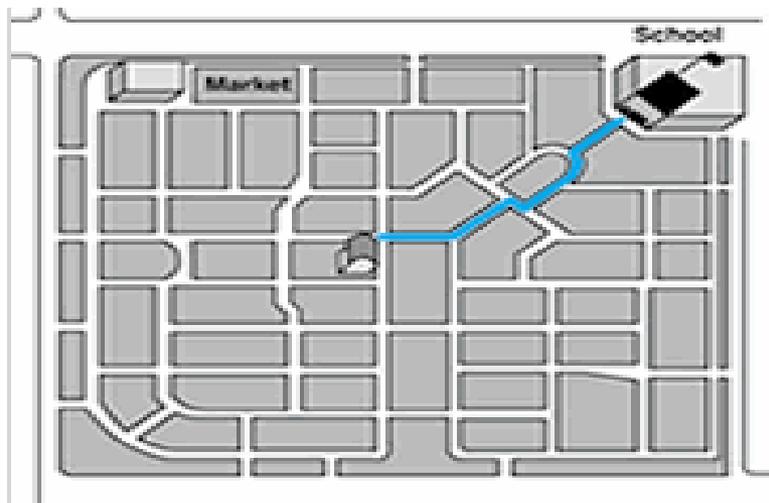


Don't: Metro Park

- Should encourage pedestrian activity
- Mix of uses
- Linked to transit when possible

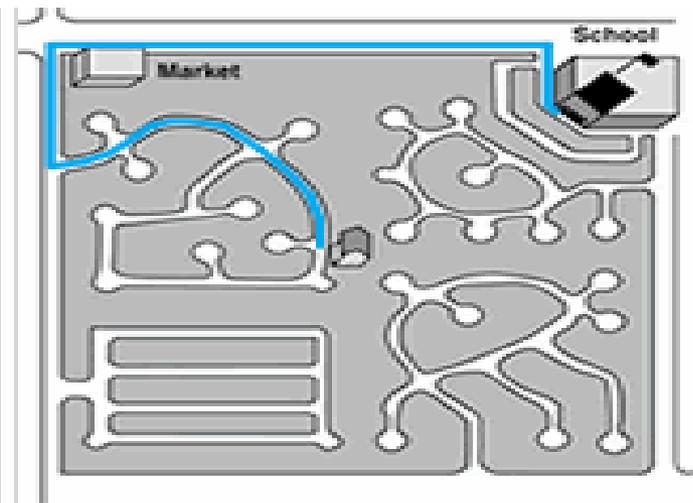
Other Design Factors

More of this:



Street Connectivity - Many Options

And less of this:



Lack of Connectivity - Few Options

*Transpo Group

Connectivity of Destinations



- More housing near transit stations
- Reconnecting jobs with transit centers
- Mix of uses (retail, housing, entertainment, office)

Transportation Options



- Majority of Americans want to walk, bike and take transit more if it were more available.
- More transit service
- Complete Streets

Complete Streets

Accommodate ALL Users for ALL Trips Safely & Efficiently

- Public transit users
- Bicyclists & Pedestrians
 - All ages
 - All abilities
- Motorists



About a third of Americans don't drive

- Older people who don't drive
- All children under 17
- Some people with disabilities
- Many low income people who cannot afford automobiles.
- Those that prefer a car-free lifestyle



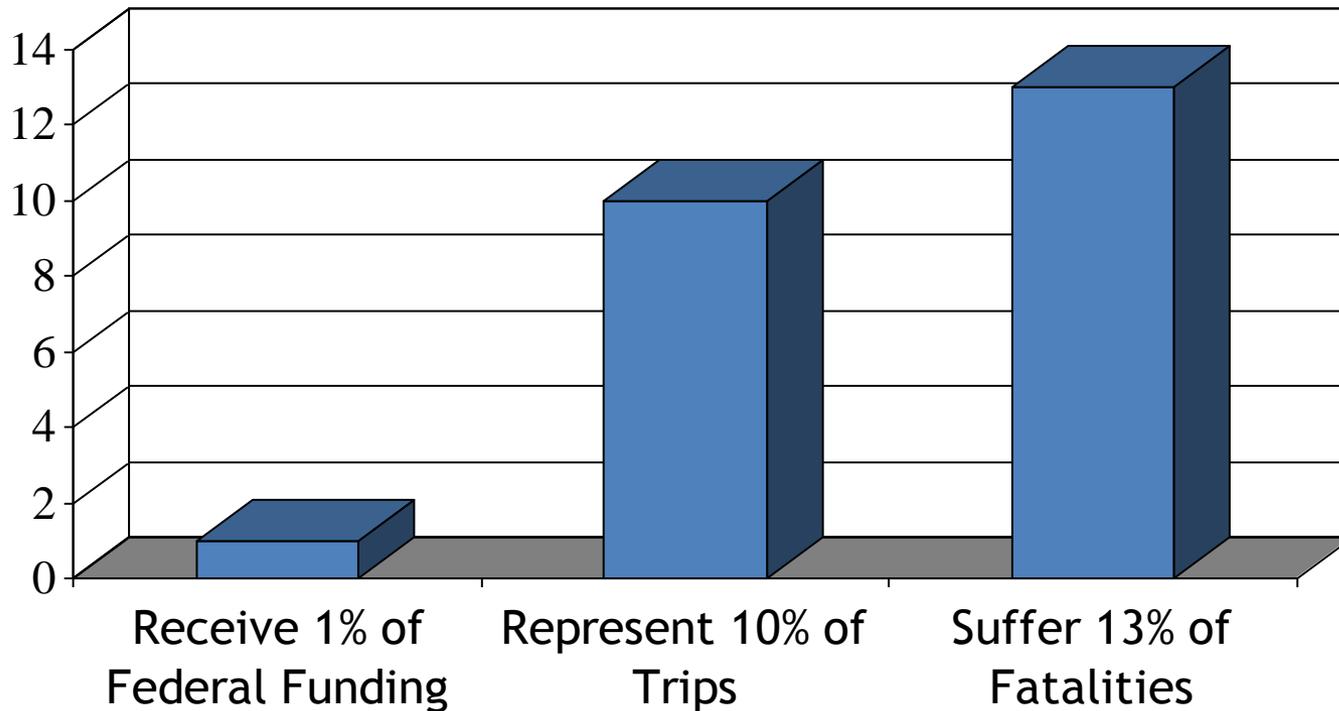
Existing Streets are Inadequate

- No sidewalks for pedestrians
- Lanes are too narrow for motorists to share with bikes
- Streets are too wide, too dangerous to cross on foot
- No accommodations for people with disabilities



Incomplete Streets Are Unsafe

Pedestrians and Bicyclists...



Source: FMIS, NHTS, FARS federal databases

Many Types of Complete Streets

CONTEXT

Rural

Low Density

Town

Dense Suburb

City

Center



Corridor



Waterfront



NEEDS

Complete Streets Benefits

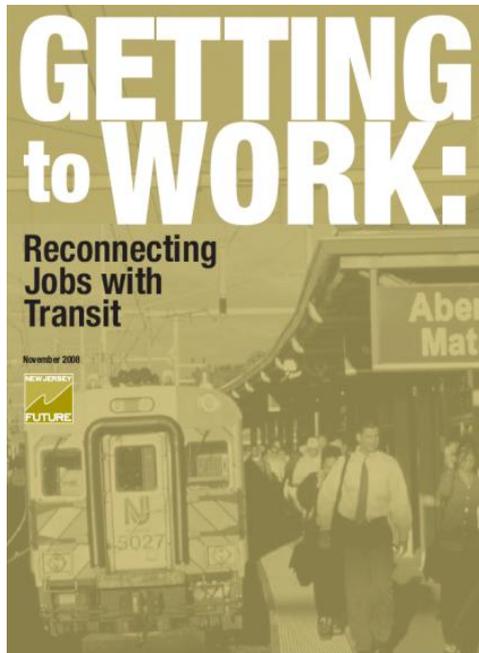
- Improve Safety
- Provide Connections
- Promote Healthy Lifestyles
- Create More Livable Communities
- Reduce Congestion & Greenhouse Gas Emissions
- Make Fiscal Sense



Report Recommendations

- Consider low-cost bike/ped improvements on resurfacing projects
- Reward Local Aid projects that include Complete Streets
- Reform maintenance requirements for sidewalks
- Integrate ADA compliance with Complete Streets
- Develop standards for local policies
- Exempt new sidewalk construction from DEP stormwater regulations

Resources



Climate Change & Land Use

Smart Growth Recommendations from New Jersey Future
October 2008

Connecting Climate Change and Land Use

There is growing recognition in New Jersey and across the world that global warming is a serious problem that will require action in the coming years and decades. Add to that the recent spike in fuel prices, and more and more people are talking seriously about hybrid cars, renewable energy, green building technology and other ways to reduce greenhouse gases and save on energy costs. There is one crucial piece of the puzzle, however, that is often omitted from this conversation: the role of land use in influencing carbon emissions.

Land use—the decisions we make about where and how to develop—has a profound and lasting effect on our greenhouse gas emissions. And unlike cars or appliances, which can be replaced every few years if a newer, more efficient model comes along, the decisions we make about how to develop, and the impacts those decisions have on our carbon footprint, will be with us for generations. Poor land-use decisions not only lead to higher emissions today, but they also limit our ability to reduce those emissions well into the future.

Recommendations in Brief

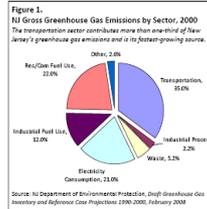
- 1) Establish a statewide target for reduction in vehicle miles traveled (VMT).
- 2) Develop state and local land-use strategies to reach stated target.
- 3) Align state rules, regulations and infrastructure investments in accordance with the land-use strategies, including prioritized investments in the transit system.
- 4) Call on local governments to create plans and zoning regulations that foster development in areas appropriate for growth and discourage sprawling development patterns.
- 5) Provide local governments with financial incentives to change their land-use plans and zoning ordinances to support walkable, mixed-use development where appropriate.
- 6) Design places that are friendly to multiple modes of transportation, including biking, walking, transit and automobiles.

Transportation Sector is Dominant Source of Carbon Emissions in New Jersey

Land use plays a critically important role in climate change because it directly affects emissions from the transportation sector. In New Jersey, transportation accounts for the largest single sector of our carbon footprint, representing 35 percent of emissions (see Figure 3), compared with 26 percent for the nation as a whole. It is also projected to be the fastest-growing sector for the foreseeable future. The vast majority, 78 percent, of emissions from the transportation sector are attributable to gasoline burned in private automobiles.

Three main factors determine the emissions rate from the transportation sector:

- 1) Vehicle miles traveled (VMT), or the amount each person drives;
- 2) Fuel efficiency, or how many miles per gallon (MPG) a car gets; and
- 3) The carbon content of gasoline, calculated as emissions per gallon, which influences how much carbon dioxide is released for each gallon of gasoline burned.



Working for Smarter Growth...More Livable Places and Open Space



Filling in the Gaps:

Assessing the Implementation of NJDOT's Complete Streets Policy



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