



POLICY WEBINAR

Transportation + Climate Change: A Critical Linkage

WITH
Natural Resources
Defense Council

Environmental Defense
Fund

Chesapeake Bay
Foundation

The Sierra Club

MODERATED BY
Transportation for
America



The transportation system no longer supports the American Dream – a dream of livable communities free from pollution with less time spent in traffic, less oil use, and less global warming. By failing to provide options, we are failing to give our children healthy, safe, and affordable communities.



Poorly planned transportation spending out of step with local needs has restructured America's landscape and put enormous pressure on our natural resources. Transportation-related pollution has had extreme and adverse impacts on our water quality and air quality while creating myriad negative public health effects.



While federal legislation has done much to mitigate environmental degradation, the benefits of these efforts – especially in air quality and water quality – are gradually being overtaken by growth in motor vehicle traffic and urban sprawl.

There is a need for change.

**Climate Change
+ Transportation**

facts

- Developed land in the U.S. has increased almost three times faster than population. The United States contains about 4.5 percent of the world's population but emits close to 25% of all GHG^{1,2}.
- Each second, America's transportation sector burns 6,300 gallons of oil, producing **more CO2 emissions than any other nation's entire economy except China**³.
- Transportation accounts for the second largest share of the US's GHG emissions, about 33 percent⁴.
- Shifting 10 percent of long-haul freight from the highway to the railway would reduce annual greenhouse gas emissions by more than 12 million tons⁵.
- Eliminating one vehicle and using public transit can **reduce a two-car household's carbon footprint between 25-30 percent**⁶.
- Residents of the most walkable areas of the country **drive 26 percent fewer miles per day than those living in the most sprawling areas**⁷.

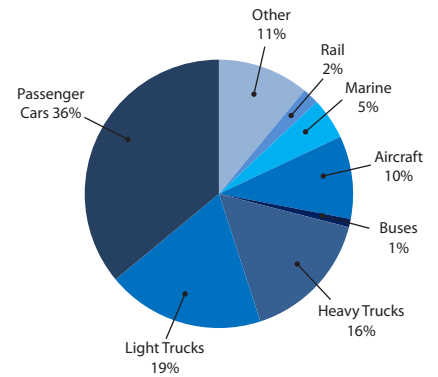
Transportation + Climate Change: The Debate is Over

Scientists have come to a clear and definitive consensus that the earth is getting warmer and that human activity is one of the main causes for the increase in temperature. The

increase in greenhouse gas emissions, and in particular of carbon dioxide emissions (CO₂), has helped create broad agreement among industrialized nations that greenhouse gas (GHG) emissions need to be reduced 60 to 80 percent below 1990 levels by 2050.

Discussions about climate change and the need to reduce greenhouse gas emissions from automobiles often focus on just two solutions: (1) improving fuel economy; and (2) reducing the carbon content of the fuel itself. These important goals need to be joined with a third solution: policies that reduce America's oil dependence and give Americans more transportation options and help them to drive less each day. Without this third solution, improvements in fuel economy and quality will be canceled out by projected increases in both population and vehicle ownership in the United States.

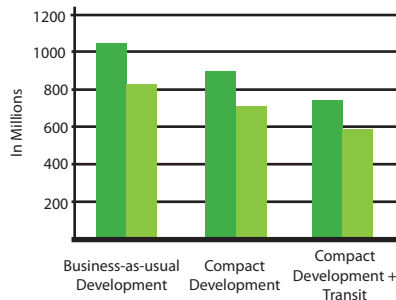
US Transportation Emissions by Sector



Source: US Environmental Protection Agency, 2002

The Climate - Land Use Connection

Since 1980 driving has grown three times faster than population, and almost twice as fast as vehicle registrations. This is due to sprawling growth – the developed portions of the U.S. have



Source: CTOD

How will we house the next 100 million Americans?

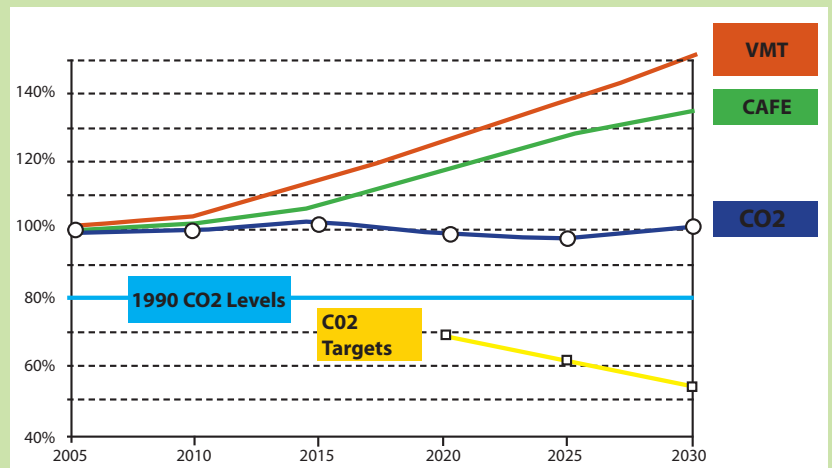
How we grow will determine if we can meet the climate challenge. Compact, walkable and bikable neighborhoods create less driving and less carbon emissions. A walkable neighborhood with transit access produces even less carbon.

grown almost three times faster than population. Studies that compare different neighborhood and regional development patterns find strong evidence that more compact development generates less overall driving, reducing trips by 20-50 percent⁸.

While fuel efficiency standards have been raised, carbon levels in fuels have decreased, and new research has increased the viability of biofuels and electric vehicles. However, the continued growth in total miles driven (Vehicle Miles Traveled, or VMT) is on track to overwhelm these technological development, so if current trends continue, VMT will increase by 60 percent from 2005 to 2030, making it almost impossible for the country as a whole to meet the GHG reductions targets by 2050.

This chart shows the upward trajectory of nationwide VMT and its impact on CO₂ emissions levels despite efforts to reduce carbon via efficiency measures.

VMT's Impact on CO2 Reductions



Source: Steve Winkelman, Center for Clean Air Policy - 2007

We can make a difference... here's how.

Our Goals

- Mitigate the impact of volatile energy costs and increasing commute burdens on families by increasing transportation options for access to jobs, education, shopping and recreation.
- Make a significant contribution to achievement of the nation's climate change objectives through transportation program reform. Increase access for households of all incomes to decent, affordable housing near public transit, job centers and other locations that facilitate reductions in transportation costs.

Policy Recommendations:

Establish National Transportation Objectives that include energy use and greenhouse gas emission reduction targets.

- Set emissions reduction targets for the transportation sector to 20% below 1990 levels by 2020 and to 80% below 1990 levels by 2050
- Reduce our reliance on petroleum products for transportation to no more than 20% by 2050 (from more than 95% today).
- Use a Blueprint planning process to set states and regions on the right track towards reducing emissions via comprehensive, informed transportation and land use planning.
- States and regions should receive funding to help them make the upfront infrastructure investments contained in the Blueprint plan that will help reduce emissions, through public transportation, bike and pedestrian infrastructure, and land use changes that help encourage more walkable communities and compact development.
- USDOT should be provided the funding necessary to work with states, regions and localities to improve transportation and land use modeling, provide technical assistance to communities to develop and monitor plans, and support research and best practices to reduce transportation related GHG emissions.

Dedicate a significant portion of the revenues from a national cap-and-trade system to improving public transit and other emissions-reducing measures.

- Any solution to climate change must dedicate a substantial portion of revenue, whether raised from auction allowances, taxes, or any other sources, towards reducing greenhouse gas emissions from the transportation sector by supporting clean transportation such as public transit, bicycling and pedestrian options, passenger and freight rail, traffic management, and telecommuting, and by coordinating these investments with development goals.
- The climate bill should be used to jumpstart America's 21st Century economy by providing opportunities for infrastructure investment that creates lasting and well-paying green jobs in the transportation sector.

Increase investment in all transportation modes.

- Federal policy should focus on improving the conditions and safety of existing roads and bridges to reduce congestion and decrease fatalities.
- Put all modes on equal footing for cost participation ratios and the project approval process.
- Maintain the environmental protections enacted since 1970, including NEPA, the Clean Air Act, Clean Water Act, and other related legislation.



We envision a U.S. transportation system that supports a wide array of accessible, affordable and interconnected transportation choices that are both healthy for the environment and for people.



Transportation For America is a growing and diverse coalition focused on creating a national transportation program that will take America into the 21st century by building a modernized infrastructure and healthy communities where people can live, work and play.

We have formed a broad coalition of real estate, housing, environmental, public health, equity, urban planning, transportation and other organizations that seek to align our national, state, and local transportation policies with an array of issues: economic opportunity, climate change, energy security, health, housing and community development. We believe a new national vision will play a key role in strengthening the foundation of our nation.

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1. Center for Environment and Population, *U.S. Population, Energy & Climate Change*, 2008.
2. Intergovernmental Panel on Climate Change, *Climate Change 2007: Synthesis Report*, November 2007.
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