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Getting Back on Track: Aligning State Transportation Policy with Climate Change Goals



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With a comprehensive climate bill stalled at the federal level, many are turning to the states to make progress toward reducing carbon emissions. Are the states ready? To succeed, many sectors will need to reduce their carbon emissions. In *Getting Back on Track*, NRDC examines what states are doing to curb emissions caused by transportation. As such, it is the first report to evaluate state transportation policy as it affects greenhouse gas emissions and compare performance across the states.

State transportation policy has the potential to significantly reduce greenhouse gas emissions while also effectively meeting the nation's wide-ranging mobility needs. Few studies have specifically sought to evaluate how states' transportation policies impact greenhouse gas emissions. This analysis seeks to build on the work of *Moving Cooler*, a 2009 report by Cambridge Systematics, which quantified the carbon reduction benefits of various transportation strategies. Here we evaluate how well state-level transportation decisions are aligned with efforts to reduce greenhouse gas emissions by examining a selection of key transportation policies currently in place in the 50 states. The findings suggest that there is tremendous potential for states to make progress on reducing transportation-related carbon emissions. The report's recommendations suggest ways states can improve their climate performance while meeting their mobility needs.

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Greenhouse Gases From Transportation Are a Growing Problem

Presidents Barack Obama, George W. Bush, Bill Clinton, and George H.W. Bush have each called for reductions in greenhouse gas emissions, yet nationwide emission rates have steadily increased, rising 27 percent between 1990 and 2007. Nearly *half* of the net increase has been due to increasing emissions from the transportation sector, which today accounts for 32 percent of the country's total carbon emissions according to the U.S. Energy Information Administration. Without bringing down transportation emissions, it will be impossible to achieve the reductions scientists have deemed necessary to avoid the worst effects of climate change. Between 1977 and 2001, driving in the United States measured in vehicle miles traveled (VMT), grew by 151 percent. Average trip lengths, trips per capita and the proportion of drivers traveling alone also increased, all of which have contributed to rising emission rates.

Innovations leading to more efficient vehicles and new, cleaner fuels could mean large reductions in greenhouse gas emissions, but the projected 50 percent increase in VMT between 2005 and 2030 would undermine much of the savings these technologies would earn. Without changes to the transportation sector, it will be impossible to achieve the emissions reductions necessary to avoid the worst effects of climate change.

State Transportation Policies Do Not Manage Carbon Emissions, and Often Make Them Worse

States are in a unique position to bring down transportation-related greenhouse gas emissions, given their primary role in setting statewide transportation policy and directing large amounts of transportation funding. This report seeks to better understand the patterns and impacts of current state transportation policies and investment decisions in all 50 states.

The results of the analysis are sobering: most states use few of the available transportation policy tools to reduce greenhouse gas emissions from the transportation sector, and in most cases make decisions that will likely increase emissions. No state received a higher grade than "B-," and most states scored lower than "D," demonstrating a lack of alignment between transportation and climate policies. Most states do not make any effort at all to connect transportation policy with climate change and energy goals, and some put in place systems that effectively sabotage these goals. In sum, current transportation policy in most states will likely worsen greenhouse gas emission trends in the United States.

It is important to note that the report does not suggest that greenhouse gas emissions trends are the only metric that should define transportation performance. On the contrary, efforts to reduce greenhouse gas emissions through transportation strategies must be balanced with other important goals such as mobility, access, connectivity, economic development, congestion, public

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health, and other environmental impacts. The policies we evaluated have been shown contribute to these other goals as well (*see full report for a more thorough review of these benefits*).

Evaluating States' Policies to Curb Emissions from the Transportation Sector

This analysis evaluates each state based on 17 policy and spending criteria that have been compared by expert analysis to achieve transportation sector greenhouse gas reductions. States can also implement these criteria independent of local or federal action and each criterion has successfully been adopted in one or more states. The selected evaluation criteria fall into three categories:

- **Infrastructure Policies**—These are policies that result in specific changes to transportation infrastructure projects and associated land use patterns, or that change the way people use infrastructure through pricing and other incentives. This category evaluates a state's overall policy framework, including how it uses innovative policy tools to improve transportation system efficiency while reducing its climate impact.
- **Investments Decisions**—This category of evaluation criteria tests the degree to which states support their overall policy intentions with corresponding investment decisions. Do states direct their transportation dollars in ways that support and promote low-carbon transportation? The investment criteria look at such things as whether a state takes advantage of the programmatic flexibility of federal funds, uses state funds to invest in cleaner transportation projects, and maintains its existing assets in a state of good repair. These criteria are used to evaluate the state's overall performance in implementation and support of lower carbon transportation policies.
- **Touchstone Policies**—These policies show the depth of a state's intention to reduce transportation sector emissions. Examples of touchstone policies include establishing a statewide VMT reduction target or adopting stringent carbon emission standards for vehicles. Having these policies on their own may not directly reduce greenhouse gas emissions or affect infrastructure decisions, but they are important indicators of the level of recognition by a state that transportation policies affect greenhouse gas emissions, and the commitment of the state to reducing emissions from transportation.

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OVERALL STATE BY STATE SCORES													
	State	Policy Score	Investment Score	Touchstone Bonus	FINAL SCORE	Tier		State	Policy Score	Investment Score	Touchstone Bonus	FINAL SCORE	Tier
1	CA	85	58	15%	82	1	26	KY	39	30	0%	35	2
2	MD	90	56	5%	77		27	AK	22	42	5%	34	
3	NJ	93	49	5%	75		28	SC	37	26	5%	33	
4	CT	75	47	15%	70		29	ME	27	35	5%	33	
5	WA	68	56	10%	68		30	NH	22	41	0%	32	
6	OR	86	37	5%	65	2	31	GA	46	15	0%	31	
7	MA	84	33	10%	64		32	KS	27	34	0%	31	
8	RI	49	68	5%	61		33	ID	23	36	0%	30	
9	DE	47	66	5%	59		34	OH	19	37	0%	28	
10	MN	71	46	0%	59		35	IA	18	37	0%	28	
11	VT	54	55	5%	57		36	TX	26	26	5%	27	
12	VA	67	35	5%	54		37	NC	18	31	5%	26	
13	IL	68	32	5%	53		38	MO	19	30	0%	25	
14	WI	59	38	5%	51		39	OK	27	18	5%	24	
15	HI	50	46	5%	50		40	LA	37	7	5%	23	
16	PA	47	53	0%	50		41	MT	15	29	5%	23	
17	MI	36	51	5%	46		42	AL	19	26	0%	23	
18	AZ	47	43	0%	45		43	SD	15	30	0%	23	
19	FL	46	35	10%	45		44	WY	0	41	0%	21	
20	NV	42	42	0%	42		45	IN	7	31	5%	20	
21	NY	9	62	15%	41	46	NE	0	35	5%	18		
22	NM	38	29	10%	37	47	ND	8	27	0%	18		
23	CO	38	34	0%	36	48	WV	19	7	0%	13		
24	UT	24	48	0%	36	49	MS	5	18	5%	12		
25	TN	33	34	5%	35	50	AR	0	4	5%	2		

The total score and individual Policy, Investment, and Touchstone subtotals for each state can be found in the table. To give additional context to these numbers, each state is further categorized into three scoring tiers as defined below:

Tier 1 (75 - 100): Most alignment between transportation policy with climate change goals. These states are leading the way in setting transportation policies that support greenhouse gas emissions reduction. However, even these states must strive to do more to support a truly sustainable transportation system.

Tier 2 (25 - 74): Some alignment between transportation policy and climate change goals. These states are taking some actions that will support greenhouse gas reduction goals, but there are many actions they are not taking. They must do more to get on the right track.

Tier 3 (0 - 24): Limited or no alignment between transportation policy and climate change goals. Though these states' transportation policies may support climate change goals in some very limited ways, this is countered by many of their other policy choices. Most of the potential to reduce emissions through transportation strategies remains underutilized.

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The Transportation Sector Can Deliver Major Reductions in Greenhouse Gas Emissions

Because states shape transportation decisions to such a large degree, changes at the state level are critically important. Conflicts between greenhouse gas reduction goals and transportation policies at the state level will hinder progress toward reducing emissions, just as aligning these policies will encourage it. The authors of the *Moving Cooler* report found that there is the potential to reduce transportation sector emissions nationwide by 24 percent by 2050. All 50 states can take individual action to better align their transportation policies with climate change goals. The following strategies can help dramatically change the trajectory of climate change while improving travel choices for Americans. States should:

- Balance state transportation investments by using state and federal resources to support robust public transportation service, prioritize highway repair and safety over new capacity, support non-motorized transportation, and ensure state fuel taxes can support all transportation modes.
- Manage traffic through congestion pricing tools and incentivize low-carbon transportation options through comprehensive commuter programs.
- Link transportation and land use in transportation plans, implement smart growth and growth management policies, and promote transit-oriented development.
- Set a course to reduce emissions by setting per capita transportation greenhouse gas or VMT reduction targets.

Federal transportation policy also has a strong influence on state and local transportation decisions and current federal policies may be contributing to the lack of progress in the states. Therefore, along with reform at the state level, changes to federal transportation policy are essential. Congress and the White House



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must work to align transportation policy more directly with national climate and energy goals. The following policies would strengthen the country's transportation network and reduce carbon emissions. The federal government should:

- Set specific greenhouse gas emissions reduction targets for the transportation sector.
- Establish greenhouse gas emission impacts from transportation plans and projects as a criterion for receiving federal aid.
- Update transportation financing and funding formulas to reward reductions in driving, VMT, and fuel consumption, instead of rewarding increases in these areas, as is the current practice.
- Prioritize cleaner transportation modes throughout all programs and policies.
- Dedicate revenue from greenhouse gas fees to fund clean transportation investment.

While significant power to implement change rests in the hands of individual states, the results of this analysis show that most will not seek to curb emissions from transportation sector without federal leadership and guidance. Together, federal and state leaders can make the nation's climate and transportation goals mutually supportive, but it will require actions at both levels.