SAN FRANCISCO—As the nation’s climate leader, California should consider adjusting a system that pins transportation infrastructure funding to the sale of gasoline and diesel. That's the message of a new white paper coming on the heels of the passage of SB 1. While SB 1 is a step in the right direction, Beyond the Gas Tax: Funding California Transportation in the 21st Century makes clear that it does not do enough to close the critical gap between the amount of money needed to undertake the backlog of repairs to fix California’s roads, and the amount of tax revenue that will be collected. Successfully meeting the state’s climate goals will only exacerbate this deficit.

Beyond the Gas Tax: Funding California Transportation in the 21st Century, a comparative analysis brief commissioned by the nonprofit nonpartisan organization Next 10 and prepared by Beacon Economics, points out that while California roads are among the worst in the nation, funding for repairs and improvements — which traditionally comes largely from motor vehicle fuel taxes — is declining as cars become more fuel-efficient and the state's electric vehicle fleet grows. California must develop a sustainable new model for transportation funding in order to address infrastructure needs.

“We found that more than two-thirds of California’s roads are in poor or mediocre shape, compared to a quarter of roads nationally,” said businessman and Next 10 founder F. Noël Perry. “But revenue from fuel taxes is shrinking, and the gap between what we need and what we have to spend will keep growing, despite the passage of SB 1. This bill is a great start, but the state needs to adapt its approach in order to fund our roads down the line.”

While SB 1 is expected to bring in $52.4 billion in revenue over a ten-year period, that figure falls short of the current $137 billion deferred maintenance deficit that has not been addressed. And that deficit may continue to grow. Inflation-adjusted fuel tax revenue declined 20 percent from 2010 to 2015, despite the fact that Californians have been driving more than ever, logging a record 335 billion vehicle-miles travelled in 2015.

Fuel taxes are down in large part because low gas prices have driven reductions in tax revenue and new passenger cars and trucks have dramatically improved their fuel economy. New vehicles have improved fuel efficiency by over 27 percent in a decade,
going an average of five and a half miles farther on every gallon of gas. In addition, California’s commitment to zero-emission vehicles is bearing fruit, with some 258,000 electric vehicles having been sold in the state so far. If California succeeds in putting 1.5 million zero-emission vehicles on the road by 2025, this displacement of gasoline would mean a revenue loss of $572 million in state gasoline taxes and $276 million in federal excise taxes.

“Our current transportation funding system cannot support our needs over the long-term,” said Adam Fowler, manager of public policy research at Beacon Economics. “We delved into statewide data from California and across the country to get a better handle on this problem and identify possible solutions. We found that California has some of the highest fuel tax rates (7th for gasoline and 8th for diesel), but its fuel tax revenue continues to decline and the roads continue to worsen.”

Most California roads are at least 40 years old, and have reached or exceeded their designed useful life. Bad roads come with a cost: the American Society of Civil Engineers’ 2017 Infrastructure Report Card estimates that driving on poorly maintained roads costs each California motorist $844 in vehicle repairs per year. That’s the nation’s second-highest cost per driver, trailing only Connecticut.

While SB 1 provides some important steps forward, such as tying new excise tax rates to inflation, the legislation does not account for user-specific costs, which will be key in ensuring sustainable funding in an evolving vehicle marketplace. Tying taxes and fees to usage will help provide more reliable revenue as cars and trucks improve efficiency and the electric vehicle market grows.

“SB 1 may prove to be a temporary solution to a growing and permanent problem,” Beacon Economics’ Adam Fowler said. “Given the fact that the transportation sector is California’s greatest contributor of greenhouse gas emissions, the state needs to work on expanding flexible funding solutions in order to meet its climate goals while keeping its roads safe and in good repair in the long term.”

Beyond the Gas Tax: Funding California Transportation in the 21st Century points out that road damage is increasingly linked to miles traveled rather than to fuel used. And some vehicles, such as heavy-duty trucks, damage roads more than others.

“A sustainable solution would involve a system that fairly ties tax revenues to road damage and other externalities,” Fowler said. “That would involve making a greater effort to identify where gaps between road use and damage exist – particularly in the case of heavy-duty trucks- and attempting to better align the two.”

California is exploring a mileage-based user tax, which charges the most to drivers who use the roads the most. The white paper discusses privacy, tracking concerns, and public trust issues, as well as questions about equity and efficiency.

“People have gotten used to the idea that, for example, their smart-phone apps share location information with unseen companies large and small. But letting the government know how far you’ve traveled is a different matter for many,” said Next 10’s Perry.
Another solution is to fund toll roads through public/private partnerships. This could save taxpayers money, and ensure that the people who pay for a given road are the people who actually use that road. The risk is that private companies may pursue more low-risk, profit-driven projects that might not align with the infrastructure needs of the state or the transportation needs of its residents.

“Pilot programs testing alternative funding systems could help arm California with the information it needs to design improved programs that will more sustainably, effectively, and equitably deliver needed funds to the state’s roads and infrastructure,” Perry said.

The white paper can be downloaded from the Next 10 website at www.next10.org/transportation-funding.

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**About Next 10**
Next 10 ([www.next10.org](http://www.next10.org)) is an independent, nonpartisan organization that educates, engages and empowers Californians to improve the state’s future. With a focus on the intersection of the economy, the environment, and quality of life, Next 10 employs research from leading experts on complex state issues and creates a portfolio of nonpartisan educational materials to foster a deeper understanding of the critical issues affecting our state.

**About Beacon Economics**
Beacon Economics ([www.BeaconEcon.com](http://www.BeaconEcon.com)) is one of California’s leading economic research and consulting firms, specializing in economic and revenue forecasting, economic impact analysis, economic policy analysis, regional economic analysis, real estate market and industry analysis, and EB-5 Visa analysis. Known for delivering independent and rigorous analysis, Beacon gives its clients an understanding of economic trends, data, and policies that help strengthen strategic decision-making.

**About Compare 50**
This comparative analysis white paper is a product of Next 10’s Compare 50 project. Compare 50 is a website that allows users to explore more than 150 environmental, economic, and quality of life indicators across all 50 states. The analysis from this white paper was powered by Compare 50 data sets. Users can further explore many of the data discussed in this brief at [www.compare50.org](http://www.compare50.org)