## Transportation, Land Use, and Climate Change: What You Need to Know



## **The Problem**

Transportation is the largest source of climate change, driving greenhouse gas (GHG) emissions nationwide and in the South. Most of these emissions come from the tailpipes of passengar vehicles. Local air pollution from transportation disproportionately impacts under-resourced communities and communities of color, which tend to be closer to major highways and freight routes due to historical factors such as redlining and urban renewal.

Further, the amount of driving we do is closely linked with the way our communities grow. Highway construction and expansion encourage scattered development, requiring a car to get around. This cycle of highway expansion and suburban sprawl increases GHG and air pollutants, limits access to cleaner and more equitable travel options, and destroys natural resources that provide resiliency against the effects of climate change.

#### The Cycle of Highway Expansion and Sprawl



### Solutions

There is no one "silver bullet" solution, but many working together to curb transportation emissions and create cleaner, healthier, and more equitable communities.

• Reduce driving by expanding travel choices and developing strategically

A key piece of the puzzle is enabling people to drive less by redesigning our communities to support travel by alternative modes. This transformation will require reorienting transportation funding, which for decades has heavily favored highways, as well as better coordinating land use and transportation planning.

Electrify transportation systems

For the vehicles that remain on our roads, shifting to electric vehicles (EVs) and other clean vehicle technologies can greatly reduce the remaining emissions. On average, the electricity required to power an electric car driven today contributes just one-third of the GHG emissions of a gas-powered car, and this gap will grow as we increase the use of renewable energy sources like wind and solar to generate electricity. Since EVs do not produce any tailpipe pollution, they have the potential to dramatically reduce local air pollution as well.

Together, these solutions can help break the cycle of highway construction and sprawl and enable our communities to meet the climate crisis and achieve a cleaner and more equitable transportation future.

# Plan for this ...



Building more compact communities with a mixture of land uses and an array of transportation options reduces the need to drive and reduces the distance when we do drive, cutting pollution, improving health, fostering economic growth, and promoting equity.





#### For more information, contact

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