New Jersey Future is a statewide land-use policy organization. Why is “clean and reliable transportation” our issue?

Transportation is clearly an emissions and energy use issue; this meeting wouldn’t be happening if the people in the room didn’t think so. The transportation sector is now the biggest contributor to New Jersey’s greenhouse gas emissions. It is helpful to express total emissions from the transportation sector as a mathematical product of two terms: total emissions = emissions/mile \times \text{total vehicular miles traveled (VMT)}.

Most speakers have focused on the “emissions per mile” component of this equation, citing the need to promote greater use of alternative-fuel vehicles, and particularly electric vehicles. But if we’re not careful, improvements in reducing emissions per mile can be neutralized if the other factor in the equation – vehicle-miles traveled – keeps increasing. And VMT is a land-use issue.

The amount people travel is a direct function of where and how we build things – that is, land-use decisions directly affect travel behavior. If we build things close together, people don’t need to travel far to get from one activity to another. Conversely, if we build things farther apart, with different types of destinations separated from each other, people have to travel farther among their desired destinations.
We can see this phenomenon at work within New Jersey. In Hunterdon County, where development is spread out and mostly car-dependent, per-capita daily VMT is 44.2 miles. This is exactly five times the rate of 8.8 miles per day per capita in Hudson County, which is characterized by compact, mixed-use development where people can walk, bike, take public transit, or drive much shorter distances than is true in Hunterdon. With a few exceptions, there is a clear overall pattern in which counties with higher population densities (where destinations are generally closer together) have lower rates of daily vehicular travel per capita, while residents of more spread-out counties drive more (see graph below).

![Per-Capita Daily Vehicle-Miles Traveled by County -- Counties Sorted by Population Density](image)

Because emissions and energy use are dependent on travel behavior, and because travel behavior is in turn dependent on development patterns, New Jersey Future recommends that state agencies review their programs, policies, and regulations and assess the extent to which they influence New Jersey residents’ travel behavior. And for those
programs that do affect travel behavior, we recommend that the agencies consider how to modify those programs so as to discourage the spread of low-density, car-dependent development and to instead incentivize the creation or enhancement of compact, walkable, mixed-use centers, especially near transit – that is, how to put major destinations closer to each other and closer to transit – which will in turn decrease per-capita VMT.

As a bonus, fostering more center-based development will help New Jersey retain its Millennial workforce. Members of the Millennial generation are attracted to compact, walkable cities and towns where they can live, work, and play all in the same place. This is not just pop-culture media hype; New Jersey Future has examined this phenomenon and the numbers back it up. So if New Jersey can encourage more compact, walkable urbanism – adding jobs and housing to our existing centers, and creating new centers where they are currently lacking – we will get more Millennials.

Finally, the Governor and the legislature should continue pushing for the construction of the Gateway Tunnel. If we want more people to live in transit-oriented development (TOD) and have the option of not having to drive everywhere, but we then turn around and say to these new TOD residents sorry, we don’t actually have the capacity on the transit network to get you where you want to go, this amounts to false advertising. We don’t want to be guilty of that, so we need the new transit system capacity that the Gateway Tunnel will create if we want the system to be able to accommodate all the new riders we’re encouraging to move into new TODs.