Transit as a Climate Solution: Telling a Compelling Story

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Rail~Volution
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About Frontier Group

Frontier Group is a non-profit, public interest think tank that provides information and ideas to help citizens build a cleaner, healthier and more democratic America.

www.frontiergroup.org

Part of the public interest network
Climate change: A time for urgency

In pathways limiting global warming to 1.5°C with no or limited overshoot as well as in pathways with a high overshoot, CO₂ emissions are reduced to net zero globally around 2050.

Intergovernmental Panel on Climate Change
Transportation is Climate Enemy #1

EMISSIONS FLIP
Transportation is Biggest Source of U.S. Emissions

Million Metric Tons of Carbon Dioxide

Source: EIA, Annual Energy Review
Transit is a key element of a zero-carbon transportation system.
Transit-oriented cities emit less carbon.

UC Berkeley CoolClimate Network, Average Annual Household Carbon Footprint (2013)
Is the public getting the message?

Responding to a question about public transit and urban sprawl, Musk said, "I think public transport is painful. It sucks. Why do you want to get on something with a lot of other people, that doesn't leave where you want it to leave, doesn't start where you want it to start, doesn't end where you want it to end? And it doesn't go all the time."

Right now, fully autonomous cars are rolling around Pittsburgh, the San Francisco Bay area, and parts of Michigan, shuttling people from here to there with minimal manual intervention. Instead of fixing the old trains, let's rip out the tracks and fill the tunnels with fleets of autonomous vehicles running on pavement. The result would be radical improvements in throughput while saving money and increasing the ability of the system to survive a fire, flood, or terrorist attack.
Three narratives on transit and climate for the 21st century

• Transit as the centerpiece of a car-light transportation system.
• Transit as the centerpiece of livable cities.
• Transit as the leading edge of the electric vehicle revolution.
Transit as centerpiece of car-light transportation system.

“[S]hared services can act as feeder for existing metro and commuter rail lines, thus complement metro and commuter rail services and help increase their ridership.”
- International Transport Forum
Transit as centerpiece of livable, low-carbon cities.
Transit as the leading edge of the electric vehicle revolution.
No time to lose
Additional resources
Thank you!

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