



INFRASTRUCTURE INVESTMENTS A MEGAREGION PERSPECTIVE ON FREIGHT

Megaregions demonstrate strong economic linkages and support extensive internal freight movements amongst their constituent metropolitan areas. As megaregions continue to grow, the number of freight movements is likely to increase, and new infrastructure or policies will become necessary to accommodate that growth. Texas was the origin of nearly \$1.9 trillion in freight shipments in 2012, more than any other state. Those shipments accounted for 244 billion ton-miles, and the vast majority of this freight originated in the Texas Triangle.

How can innovative freight strategies be incorporated at the megaregion level technically, economically, and politically? This research examines the applications of both underutilized and emerging freight technologies for the Texas Triangle.

Freight movements at the megaregion level broadly have a choice between two modes: highways or trucking. Because freight mode choice has large external costs, this research looks at the network effects of different strategies, and potential policy levers available at the megaregion level to effect socially desirable outcomes.

Strategies to be tested include truck-only lanes, freight rail electrification, and truck platooning, including autonomous truck platooning. Each of these strategies has the potential to bring about large changes in freight mode utilization, and efficiency. Consistent policies throughout a megaregion will be necessary for smooth policy implementation and maximum social benefits, but this will require coordination amongst the megaregion's municipal, regional, and state authorities.

The Effects of Transportation Infrastructure Investments on Freight Mobility: a Megaregion Perspective (#CM2-10)

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<http://sites.utexas.edu/cm2/files/2018/03/Year-1-Michael-Walton-The-Effects-of-Transportation-Infrastructure-Investments.pdf>



*Map and rendering of
Truck-Only Lanes Simulation*

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