

Wednesday, July 27, 2022

## Connecting the Dots Between Transportation, Climate, and Inflation

Land Use Lab at Urban
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## We're Stuck in a Vicious Cycle of Automobile Dependence



Existing land uses \& those who are there are left behind

Political support for public money to subsidize highways


Roads and auto-oriented land uses are built


Cumulative spending on infrastructure, all governmental levels, 1956 to 2017

Source: CBO; chart by Yonah Freemark/The Transport Politic


## In Metropolitan Areas around the Country, Commuters Are Choosing to Walk and Take Transit to Work Less Frequently

Change in share of working-age commuters using transit or walking to get to work, 1970-2019, nine largest metropolitan areas (2019)

METROPOLITAN AREAS SCALED INDEPENDENTLY


## Automobile Dependence Costs Everyone More Money



## Households with Cars Spend Considerably More on Transportation

Share of consumer expenditures spent on transportation
$\square$ Household with no vehicles $\quad$ Household with at least one vehicle


Source: Interview data from the US Bureau of Labor Statistics' Consumer Expenditure Surveys for the second
URBANINSTITUTE quarter of 2020, representing data from previous quarters.
Notes: Data are for households with a primary householder between 25 and 65 years old. There is no statistical difference ( $p<0.05$ ) in $t$-tests comparing overall nontransportation expenditures among the income buckets above $\$ 25,000 . n=3,332$ respondents.

## Suburban

City's Annual Cost, per Household

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Sidemales 8 Curbs
$\$ 194$



## Urban

City's Annual Cost, per Household


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## Car Dependence Means Excessive Exposure to Inflation

- Imagine three hypothetical households in a world of \$3/gallon gas
- Assumes 30 mpg cars and \$7,000/ year for car maintenance
- Household 1
- Spends \$3,000 a month on mortgage
- Lives in a walkable community and doesn't own a car
- \$4,000 a year on transit, bikes, taxis
- Total: \$40,000
- Household 2
- Spends \$2,500 a month on mortgage
- Owns 1 car.

Averages 14 mi driving/day

- \$10,000 a year on car, transit, bikes
- Total: \$40,000
- Household 3
- Spends \$2,000 a month on mortgage
- Owns 2 cars.

Averages 40 mi of driving/day

- Spends \$16,000 a year on cars
- Total: \$40,000


## Under High Gas Inflation....

- Imagine three hypothetical households in a world of \$6/gallon gas
- Household 1
- Spends no more on transportation expenditures
- Household 2
- Spends around \$500 extra per year on gassing up, totaling \$1,000
- Household 3
- Spends around \$1,500 extra per year on gassing up, totaling \$3,000

That's a 7.5 percent increase in household expenditures

## Reducing Automobile Dependency Can Reduce Costs

- A society where fewer people drive is a society with less transportation expenditures overall
- It's a society that's more resilient to random spikes in energy prices and that is less destructive to the environment
- It's also a place where access to daily needs isn't dependent on personal wealth

Thanks!

