

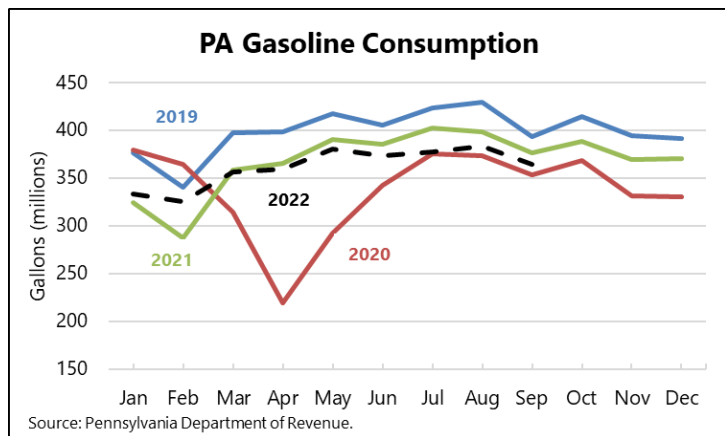
Post-Pandemic Gasoline Consumption



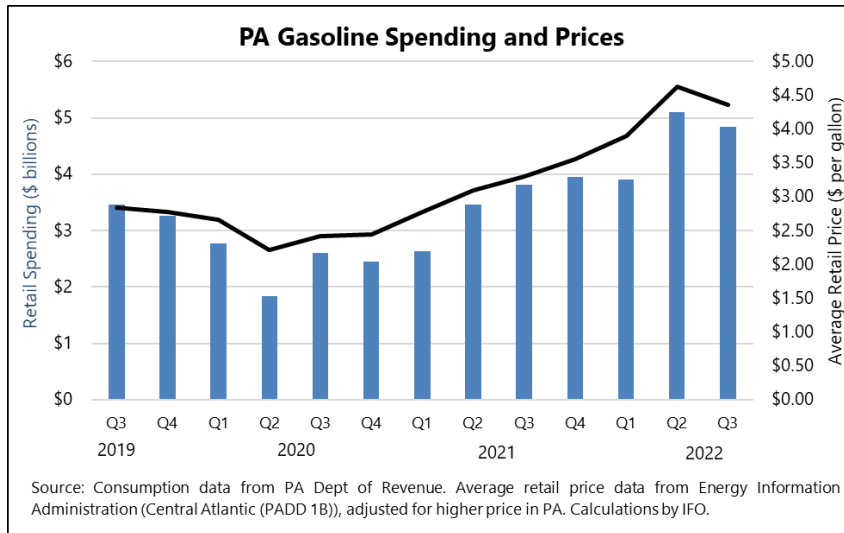
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The accelerated shift of the Pennsylvania workforce to a remote setting has led to a notable decline in gasoline consumption. Before 2020, gasoline consumption had been trending downward, primarily due to improved fuel efficiency. When the pandemic began in early 2020, mitigation efforts caused a dramatic reduction in gasoline consumption. As those measures were lifted, many employees retained a hybrid or full-time work-from-home schedule. A working paper by the National Bureau of Economic Research estimates that in 2022 (nationally), 20% of full workdays will be supplied from home, compared to 5% before the pandemic.¹ For Pennsylvania, nearly four times the share of workers worked from home in 2021 (19%) compared to 2019 (5%).²

Annual gasoline consumption declined 15% during the pandemic (2020 vs 2019, see figure). For 2022 (through September), consumption has partially recovered, but remains below pre-pandemic levels (-9%). Diesel fuel consumption (not shown) was also affected by the pandemic (-3%), but has now fully recovered.



Reduced discretionary travel, caused by high retail prices, also contributed to the decline in gasoline consumption. The figure below displays estimates of retail spending on gasoline. The recent increase was due to the average retail price of gasoline in Pennsylvania, which exceeded \$4.00 per gallon for 2022 Q2 and Q3. That was the highest average price recorded by the U.S. Energy Information Administration.



Gasoline taxes fund 55% of state road and bridge construction, and reduced consumption implies that Pennsylvania will have less state funds available for those critical infrastructure projects. These trends also impact the amount of matching funds available to leverage federal funding. Over the next five years, Pennsylvania is projected to receive \$4 billion in federal matching funds for road and bridge construction.

¹ Barrero, Bloom, and Davis (2021). *Why Working from Home Will Stick*. (<http://www.nber.org/papers/w28731>).
² U.S. Census Bureau, 2019 and 2021 American Community Survey 1-Year Estimates.