



# The Hidden and Preventable Losses to the United States Economy Associated with Inadequate Protective Measures for COVID-19

The COVID-19 pandemic continues to exact a major toll in terms of human health and wellbeing, as well as the economy. Cases, hospitalizations, and deaths have risen recently due to the delta variant, and the spike has caused substantial disruptions and hardships to families across the state (including many children), compromised safety as schools seek to reopen and address the massive educational gap that has surfaced during the pandemic, complicated efforts to return to more normal work environments, and added further strain to an already fragile healthcare complex. Despite these concerns, there has been massive resistance by some policymakers and individuals around the country to basic protective measures, such as appropriate masking requirements and policies, measures to encourage higher vaccination rates, and reasonable distancing protocols. In addition to these obvious consequences, this approach is also resulting in preventable losses to the economy through reduced employment and decreases in productivity. The Perryman Group (TPG) has recently quantified these adverse effects.

Responses such as sensible federal, state, and local actions to address high-risk situations, corporate or venue policies, and personal actions such as distancing, masking, and vaccination could significantly decrease losses over current levels. The Perryman Group estimates that preventable decreases in US output (gross product) due to the inadequate reaction to COVID-19 total **\$288.1 billion** on an annualized basis. Employment losses were found to reach **1.8 million** jobs.

Although the amounts differ markedly by industry, the typical worker who is unable to return to work due to the current situation results in a loss of **\$53,072** in profits for their employer and **\$159,050** to the national economy (gross product) on an annualized basis.

In addition to the tragic human costs in terms of illness and loss of life and compelling social ramifications, inadequate responses to the recent surge in COVID-19 cases also causes quantifiable harms to the US economy.

## The Losses to the United States Economy Stemming from Preventable Decreases in Employment and Productivity Associated with Inadequate Protective Measures for COVID-19

	Total Expenditures	Gross Product	Personal Income	Employment
Agriculture	-\$6.617 b	-\$2.357 b	-\$1.209 b	-16,498
Mining	-\$10.175 b	-\$4.160 b	-\$2.113 b	-7,792
Utilities	-\$21.533 b	-\$4.506 b	-\$2.092 b	-6,356
Construction	-\$22.053 b	-\$11.999 b	-\$9.358 b	-88,535
Manufacturing	-\$99.219 b	-\$35.606 b	-\$23.327 b	-156,913
Wholesale Trade	-\$21.344 b	-\$16.966 b	-\$9.951 b	-68,471
Retail Trade (includes Restaurants)	-\$27.639 b	-\$22.095 b	-\$13.016 b	-321,607
Transportation & Warehousing	-\$14.560 b	-\$9.364 b	-\$6.463 b	-66,375
Information	-\$13.925 b	-\$9.898 b	-\$4.490 b	-19,231
Finance, Insurance, & Real Estate	-\$153.650 b	-\$61.046 b	-\$21.504 b	-102,069
Business Services	-\$49.267 b	-\$36.799 b	-\$32.357 b	-251,137
Health Services	-\$23.217 b	-\$19.508 b	-\$16.074 b	-188,671
Other Services	-\$35.493 b	-\$18.302 b	-\$14.824 b	-231,239
Government	-\$44.634 b	-\$35.477 b	-\$27.655 b	-286,387
<b>Total, All Industries</b>	<b>-\$543.326 b</b>	<b>-\$288.084 b</b>	<b>-\$184.432 b</b>	<b>-1,811,282</b>

Source: US Multi-Regional Impact Assessment System, The Perryman Group

Notes: Based on The Perryman Group's estimates of preventable direct employment and productivity losses associated with inadequate protections for COVID-19; for additional information, see page 2. Monetary values given in billions of 2021 US dollars on an annualized basis. Components may not sum due to rounding.

## METHODOLOGY

The preventable economic losses associated with not implementing reasonable measures to curb the recent spread of new variants of the coronavirus stem primarily from (1) the reduction in overall productivity and resulting inefficiencies generated by uncertainty, delayed activity, and similar phenomena and (2) the employment losses as workers are unable to return due to factors such as safety concerns for themselves and their families and logistical challenges. In order to estimate the productivity effects, TPG implemented an approach similar to that recently used by the National Bureau of Economic Research to examine COVID-19 impacts on labor productivity in the United Kingdom. This analysis makes use of information obtained from the Decision Maker Panel (DMP) which has been maintained since 2016 by the Bank of England in conjunction with Stanford University and the University of Nottingham.<sup>1</sup> This survey is regularly used, with appropriate adjustments, to measure economic effects and responses in other advanced economies, including the US.

TPG adjusted this modeling process to fully reflect incidence and vaccination rates in the US as well as the detailed industrial structure and composition of the US economy and relevant performance patterns. This aspect of the evaluation made use of the detailed sectoral database from the national submodel of the US Multi-Regional Impact Assessment System. A scenario was created and simulated which examines the differential between (1) the productivity patterns that were observed earlier this year as the virus began to abate significantly in response to vaccine availability and behavioral modifications and (2) the current situation (based on periods with similar levels of cases).

The employment losses caused by an inadequate response were estimated using a simulation of the US submodel of the US Multi-Regional Econometric Model which compared labor market performance during the period of improvement earlier this year with the more recent patterns which have surfaced as cases spiked across the nation.

Because the estimates are derived from a large-scale, simultaneous equation system, it effectively controls for other intervening factors which can influence future activity (such as interest rates and fiscal policy measures).

Because the two channels of primary impact have some degree of overlap in their origins and outcomes, they are simulated simultaneously to assure that no double counting occurs. Moreover, because the underlying derivations of the requisite input information each occurred in a manner that incorporates overall economic effects and comprehensively compares two states of the economy, it was neither necessary nor appropriate to compute any additional downstream or multiplier effects. All results are expressed on annualized basis and all monetary values are expressed in constant (2021) dollars to adjust for inflation.

<sup>1</sup>Bloom, Nicholas, Philip Bunn, Paul Mizen, Pawel Smietanka, and Gregory Thwaites, "The Impact of COVID-19 on Productivity," National Bureau of Economic Research, <http://www.nber.org/papers/w28233>, December 2020. See <https://decisionmakerpanel.co.uk/> for additional information.

## THE PERRYMAN GROUP



The Perryman Group is a focused team of analysts who know how to address complex economic information tasks and present our findings effectively.

Our in-house professionals bring expertise in **economics, finance, statistics, mathematics, real estate, valuation, systems analysis, engineering, technical communications, and marketing**. Dr. Ray Perryman, President and CEO, has 40 years of experience in developing systems, analyzing complex problems, and communicating effectively. We have considerable pride in what we do. Our enthusiasm is both unbridled and contagious; every day brings a new opportunity for us to tackle a different problem or create a product or service specifically tailored to our clients.

### OUR SERVICES

#### IMPACT ASSESSMENT

We have developed and continually maintain an extensive set of economic impact evaluation models that can be applied in a variety of contexts.

#### EXPERT TESTIMONY

We help clients analyze and communicate complex information in common-sense terms through comprehensive, objective analyses and clear, concise expert reports and presentations.

#### FORECASTING

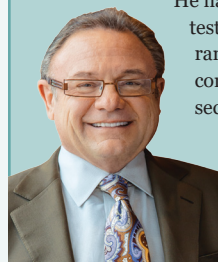
We are at the cutting edge of econometrics and other advanced statistical methods and have provided innovative approaches for many complex applications.

#### SPEECHES


Dr. Perryman addresses dozens of audiences throughout the world every year, catering to a wide variety of events.


### M. RAY PERRYMAN, PH.D.

Dr. Perryman is the President and CEO of the Perryman Group and Distinguished Professor of Economic Theory and Method at the International Institute for Advanced Studies. Over the past 40 years, Dr. Perryman has helped recruit corporations providing tens of thousands of jobs through economic development work, resolved billion-dollar legal issues, and revamped public policy through impact assessments and other studies. His firm has measured economic impacts for corporate locations and expansions involving billions in investments, and his economic forecasts are used by corporations and government agencies alike.




He has provided economic analysis and expert testimony for civil litigation across a wide range of practice areas including antitrust and competition, intellectual property disputes, securities, and commercial and complex litigation. His work combines strong expertise in economic damages calculation, asset valuation, market analysis, and statistical methods and econometrics.


 @PerrymanGroup

 [www.perrymangroup.com](http://www.perrymangroup.com)

 /PerrymanGroup

 [info@perrymangroup.com](mailto:info@perrymangroup.com)

 /in/ray-perryman

 1.800.749.8705

For more information on **subscriptions, economic forecasts, or any of our other corporate services**, call **1.800.749.8705**.