The Perryman Group The High Cost of the Texas Panhandle Wildfires March 2024

Recent wildfires in the Texas panhandle have burned well over a million acres, causing tragic loss of life and devastating local communities. In addition, the fires have destroyed livestock and grazing land in this region which is crucial to the US beef industry.

Although the high human cost and devastation are the primary concerns at this time, the fires also involve very large economic harms. The Perryman Group estimated the losses associated with the agricultural sector based on the acreage burned, farm and ranch land in the affected counties, and typical reductions in the level of output caused by fires. These preliminary estimates are for the current year only, as there will be ongoing losses going forward as the land recovers.

The Perryman Group estimates that when multiplier effects are considered,

agriculture-related losses associated with the Texas panhandle wildfires will lead to a reduction in economic activity including \$219.8 million in gross product and 2,035 job-years in the region. For the state as a whole, losses include a projected \$264.6 million in gross product and 2,336 job-years (including results within the Panhandle Region as well as effects in other areas). (A job-year is one person working for one year, though it could be multiple individuals working partial years.) Industries which would be particularly hard hit by agricultural losses include not only agriculture itself, but also consumer-related businesses such as retail trade, restaurants, and others.

The recent wildfires have decimated livestock herds and grazing lands. They have also destroyed homes and businesses. Even worse, they have caused the tragic loss of human lives.

A Preliminary Estimate of the Impact of Agricultural Losses Associated with the Texas Panhandle Wildfires

Region	Expenditures	Gross Product	Income	Job-Years*		
Panhandle	-\$623.3 m	-\$219.8 m	-\$139.3 m	-2,035		
Texas	-\$723.6 m	-\$264.6 m	-\$163.9 m	-2,336		
Source: US Multi-Regional Impact Assessment System The Perryman Group						

Notes: Losses for the current year only; effects will be ongoing as the land recovers. Monetary values given in millions of 2023 US dollars. A job-year is one person working for one year, though it could be multiple individuals working partial years. See page 2 for industry detail and page 3 for additional information on methods and assumptions used.

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Results by region and industry

	Expenditures	Gross Product	Income	Job-Years'
PANHANDLE				
Agriculture	-\$301.2 m	-\$79.9 m	-\$54.4 m	-70
Mining	-\$9.8 m	-\$2.3 m	-\$1.1 m	-(
Utilities	-\$16.9 m	-\$3.9 m	-\$1.7 m	-
Construction	-\$8.8 m	-\$4.4 m	-\$3.6 m	-4
Manufacturing	-\$98.6 m	-\$20.3 m	-\$10.6 m	-11
Wholesale Trade	-\$20.0 m	-\$13.5 m	-\$7.8 m	-7
Retail Trade*	-\$56.3 m	-\$42.5 m	-\$24.8 m	-61
Transportation & Warehousing	-\$16.2 m	-\$10.6 m	-\$7.0 m	-7
Information	-\$6.0 m	-\$3.7 m	-\$1.6 m	-1
Financial Activities*	-\$44.1 m	-\$12.1 m	-\$4.8 m	-4
Business Services	-\$7.6 m	-\$4.4 m	-\$3.6 m	-3
Health Services	-\$14.7 m	-\$10.3 m	-\$8.7 m	-11
Other Services	-\$23.2 m	-\$11.8 m	-\$9.6 m	-19
Total, All Industries	-\$623.3 m	-\$219.8 m	-\$139.3 m	-2,03
TATE OF TEXAS				
Agriculture	-\$301.6 m	-\$80.1 m	-\$54.5 m	-70
Mining	-\$10.8 m	-\$2.6 m	-\$1.4 m	
Utilities	-\$24.5 m	-\$5.6 m	-\$2.5 m	-
Construction	-\$11.3 m	-\$5.7 m	-\$4.7 m	-5
Manufacturing	-\$114.4 m	-\$27.0 m	-\$14.5 m	-17
Wholesale Trade	-\$28.7 m	-\$19.5 m	-\$11.2 m	-10
Retail Trade*	-\$62.4 m	-\$47.0 m	-\$27.4 m	-68
Transportation & Warehousing	-\$19.4 m	-\$12.7 m	-\$8.4 m	-9
Information	-\$9.5 m	-\$5.9 m	-\$2.5 m	-1
Financial Activities*	-\$81.6 m	-\$24.1 m	-\$8.5 m	-7
Business Services	-\$16.9 m	-\$10.0 m	-\$8.1 m	-8
Health Services	-\$15.7 m	-\$10.9 m	-\$9.3 m	-12
Other Services	-\$26.7 m	-\$13.6 m	-\$10.9 m	-21
Total, All Industries	-\$723.6 m	-\$264.6 m	-\$163.9 m	-2,33

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

Notes: Losses for the current year only; effects will be ongoing as the land recovers. Monetary values given in millions of 2023 US dollars. A job-year is one person working for one year, though it could be multiple individuals working partial years. See page 3 for additional detail on the methods and assumptions used. Components may not sum due to rounding. Retail Trade includes Restaurants, Financial Activities includes Real Estate.

The Perryman Group's US Multi-Regional Impact Assessment System was used to estimate the total (not only direct, but also indirect and induced) effects of agricultural losses associated with the Texas panhandle wildfires. The System was developed by the firm about 40 years ago and has been used in hundreds of analyses for clients ranging from major corporations to government agencies and has been peer reviewed on multiple occasions. The impact system uses a variety of data (from surveys, industry information,

and other sources) to describe the various goods and services (known as resources or inputs) required to produce another good/service. This dynamic process allows for estimation of the total economic impact (including multiplier effects) of the direct costs associated with the wildfires.

Total economic effects are quantified for key measures of business activity. Note that these are different ways of looking at the same economic effects; they are not additive. Total expenditures (or total spending) measures the dollars

changing hands as a result of the economic stimulus. Gross product (or output) is production of goods and services that will come about or be foregone as a result of the activity. Personal income is dollars that end up in the hands of people in the area; the vast majority of this aggregate derives from the earnings of employees, but payments such as interest and rents are also included. A job-year is one person working for one year, though it could be multiple individuals working partial years.

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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.



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