



The Perryman Group

# Economics of the 2024 Solar Eclipse

March 2024



On Monday, April 8, a total solar eclipse will cross North America, passing over Mexico, the United States, and Canada. The path of totality enters Texas around Eagle Pass and crosses the state to the northeast, exiting near the northeast corner. About 12 million Texans reside in the path of totality, which includes the major metropolitan areas along the I-35 corridor.

Although there was a total eclipse in August 2017, this one will be even more impressive. In particular, the moon will be closer as it passes between the sun and earth, thus causing totality to be longer in duration and occur across a wider path. The sky will darken as if it were dawn or dusk for several minutes. In addition, the next total solar eclipse that will be visible in the United States will not occur until August 2044.

Because of the unique nature of the upcoming eclipse, more than one million people are expected to visit Texas to witness the phenomenon. From small towns to large population centers, the numbers of visitors are projected to be unusually large. These travelers will spend money locally for accommodations, meals, gasoline, and retail items. The result will be a substantial economic stimulus.

The Perryman Group estimated the potential economic benefits associated with the eclipse and found that Texas is likely to see an increase in direct expenditures by visitors of about \$427.7 million. When the downstream/multiplier effects through the economy are considered, expected economic impacts rise to almost \$1.4 billion, with a gain of \$749.5 million in gross product and \$453.6 million in personal income flowing to

## Estimated Economic Impact of the 2024 Solar Eclipse on Business Activity in Texas

Region	Direct Expenditures	Total Expenditures*	Gross Product*	Personal Income*
<b>State of Texas</b>	<b>\$427,680,000</b>	<b>\$1,397,677,662</b>	<b>\$749,521,038</b>	<b>\$453,636,796</b>
Path of Totality	\$408,693,083	\$1,335,627,554	\$716,245,940	\$433,497,523
Remaining Counties	\$18,986,917	\$62,050,108	\$33,275,098	\$20,139,273

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

**Notes:** Monetary values in 2024 US dollars. Total Expenditures, Gross Product, and Personal Income include downstream multiplier effects. For more information, see methodology on page 4.

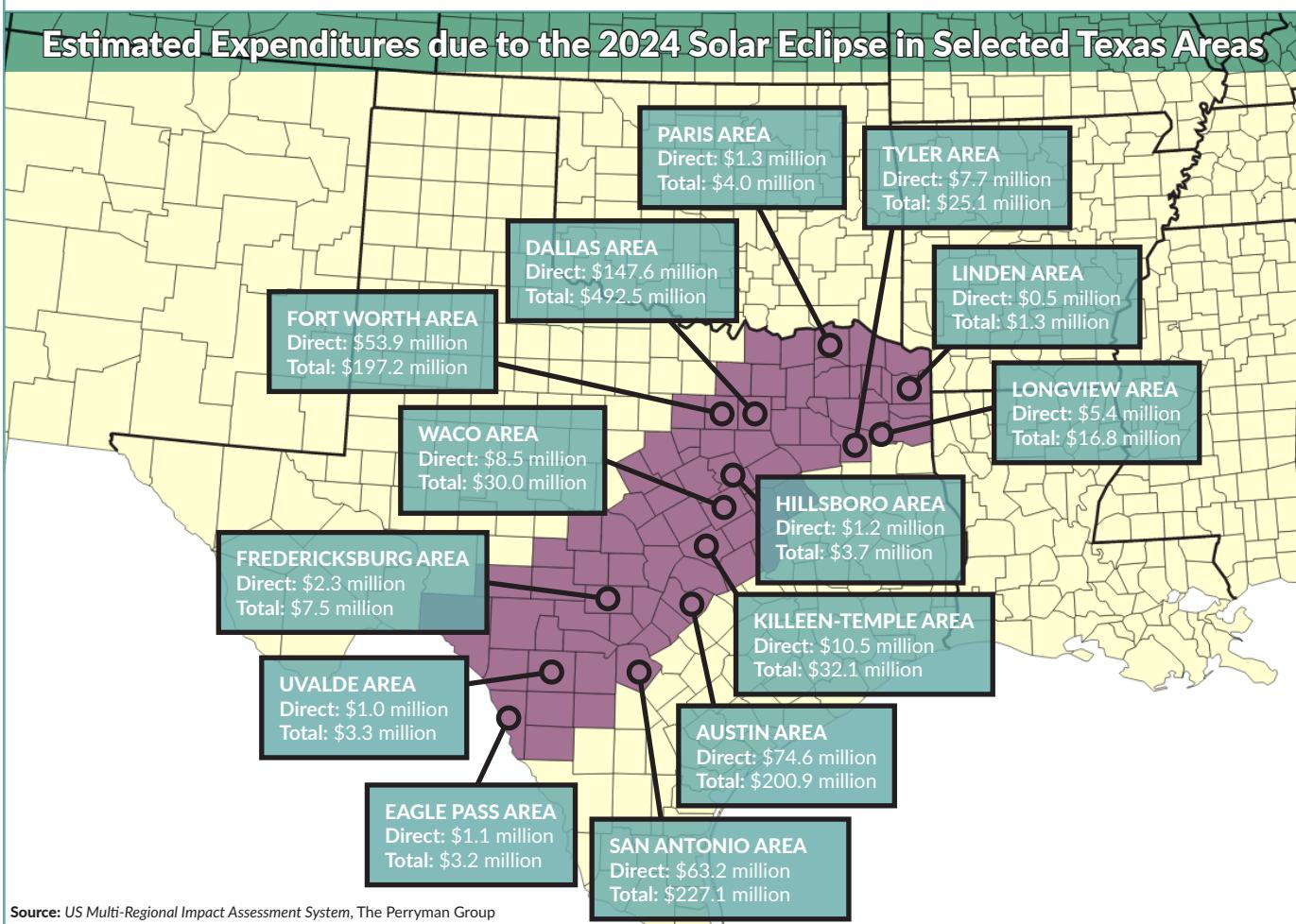
Texas residents. (Methods used are described on page 4.) Of these amounts, the total expenditures (including downstream/multiplier effects) in the restaurant industry group are expected to include \$179.8 million, with \$280.6 million in retail and \$221.8 million in short-term rentals and hotels.

Benefits will be concentrated in the largest metropolitan areas within the path of totality

due to the availability of hotel rooms and other needed infrastructure. Total spending (including multiplier effects) is projected to exceed \$307.9 million in Dallas County and \$152.2 million in Travis County. However, smaller areas are also likely to see notable gains in total spending, such as almost \$3.2 million in Eagle Pass (Maverick County) and \$7.5 million in Kerrville (Kerr County). Effects on other

counties along the route are included on page 3.)

While the eclipse is a one-day event, many cities are hoping that the influx of visitors from across the nation and beyond will lead to lasting benefits. Areas which rarely receive much in the way of national media coverage are likely to be featured, enhancing the prospects for future tourism as well as other developmental benefits.



## Estimated Economic Impact of the 2024 Solar Eclipse on Business Activity in Texas

Region (chronologically sorted with respect to the eclipse)	Direct Expenditures	Total Expenditures*	Gross Product*	Personal Income*
Del Rio Area (Val Verde County)	\$928,011	\$2,743,897	\$1,661,030	\$1,023,035
Kinney County	\$15,643	\$46,160	\$25,009	\$14,796
Eagle Pass Area (Maverick County)	\$1,053,674	\$3,199,157	\$1,809,113	\$1,104,154
Dimmit County	\$356,455	\$994,762	\$569,088	\$350,518
Sutton County	\$149,695	\$419,254	\$246,003	\$149,172
Edwards County	\$29,644	\$72,184	\$42,033	\$25,179
Real County	\$117,031	\$393,987	\$205,161	\$123,332
Uvalde County	\$986,696	\$3,267,124	\$1,820,016	\$1,110,902
Zavala County	\$111,374	\$244,321	\$147,581	\$92,198
Pearsall Area (Frio County)	\$313,741	\$1,005,375	\$532,916	\$319,667
Kimble County	\$202,057	\$679,878	\$348,121	\$206,758
Kerrville Area (Kerr County)	\$2,508,925	\$7,456,402	\$4,058,447	\$2,431,806
<b>San Antonio-New Braunfels Area Total</b>	<b>\$63,192,945</b>	<b>\$227,063,585</b>	<b>\$122,224,742</b>	<b>\$74,090,628</b>
Bandera County	\$411,692	\$1,254,119	\$665,791	\$399,373
Medina County	\$492,216	\$1,638,605	\$875,980	\$528,288
Bexar County	\$53,975,459	\$196,785,163	\$106,016,364	\$64,322,987
Kendall County	\$1,589,073	\$5,177,409	\$2,657,238	\$1,603,561
Comal County	\$6,724,505	\$22,208,289	\$12,009,369	\$7,236,419
Menard County	\$21,660	\$60,845	\$35,698	\$21,600
Mason County	\$68,434	\$219,530	\$120,426	\$72,684
Fredericksburg Area (Gillespie County)	\$2,338,258	\$7,544,717	\$4,008,667	\$2,432,397
McCulloch County	\$173,641	\$523,182	\$295,456	\$181,832
San Saba County	\$89,759	\$254,656	\$148,937	\$90,531
Llano County	\$1,049,037	\$3,369,706	\$1,840,141	\$1,112,873
Blanco County	\$359,344	\$1,127,971	\$603,630	\$364,028
<b>Austin-Round Rock-Georgetown Area Total</b>	<b>\$74,614,045</b>	<b>\$200,856,445</b>	<b>\$111,409,578</b>	<b>\$67,575,630</b>
Hays County	\$8,121,822	\$24,437,106	\$13,509,150	\$8,120,797
Travis County	\$54,486,439	\$152,179,488	\$84,336,633	\$51,143,322
Williamson County	\$12,005,784	\$24,239,851	\$13,563,795	\$8,311,510
Mills County	\$27,882	\$65,035	\$41,541	\$25,993
<b>Killeen-Temple Area Total</b>	<b>\$10,492,253</b>	<b>\$32,086,236</b>	<b>\$18,463,531</b>	<b>\$11,331,993</b>
Lampasas County	\$441,484	\$1,337,409	\$756,927	\$460,930
Coryell County	\$1,097,602	\$3,215,832	\$1,805,970	\$1,099,166
Bell County	\$8,953,167	\$27,532,995	\$15,900,635	\$9,771,896
Burnet County	\$2,120,041	\$7,166,933	\$3,886,435	\$2,351,353
Comanche County	\$148,598	\$438,564	\$243,271	\$148,635
Hamilton County	\$133,567	\$389,374	\$212,344	\$128,614
Milam County	\$218,658	\$531,611	\$299,337	\$185,093
Stephenville Area (Erath County)	\$1,356,642	\$3,842,250	\$2,216,907	\$1,366,639
Bosque County	\$249,844	\$712,124	\$391,845	\$240,390
<b>Waco Area Total</b>	<b>\$8,479,293</b>	<b>\$29,956,530</b>	<b>\$15,729,602</b>	<b>\$9,444,760</b>
McLennan County	\$8,376,553	\$29,656,831	\$15,560,793	\$9,341,186
Falls County	\$102,740	\$299,699	\$168,808	\$103,574
College Station-Bryan Area (Robertson County)	\$232,367	\$679,247	\$383,088	\$234,318
Granbury Area (Hood County)	\$1,437,220	\$4,538,270	\$2,388,205	\$1,448,140
Somervell County	\$384,210	\$644,025	\$324,082	\$200,411
<b>Fort Worth-Arlington-Grapevine Area Total</b>	<b>\$53,911,008</b>	<b>\$197,178,580</b>	<b>\$105,299,075</b>	<b>\$63,920,527</b>
Johnson County	\$2,971,077	\$9,527,630	\$5,230,237	\$3,206,179
Parker County	\$2,749,591	\$9,529,923	\$5,022,190	\$3,037,605
Tarrant County	\$48,190,339	\$178,121,026	\$95,046,648	\$57,676,743
Hillsboro Area (Hill County)	\$1,174,244	\$3,709,816	\$1,959,266	\$1,173,580
Limestone County	\$429,467	\$1,193,717	\$667,159	\$408,977
<b>Dallas-Plano-Irving Area Total</b>	<b>\$147,648,477</b>	<b>\$492,515,628</b>	<b>\$257,329,434</b>	<b>\$154,961,124</b>
Collin County	\$26,826,124	\$85,825,735	\$46,606,781	\$28,307,033
Denton County	\$20,671,130	\$74,646,647	\$38,403,480	\$23,049,237
Dallas County	\$92,413,528	\$307,873,037	\$159,344,863	\$95,751,230
Ellis County	\$4,082,105	\$13,096,559	\$6,900,102	\$4,162,765
Hunt County	\$1,664,760	\$4,935,525	\$2,783,051	\$1,697,739
Kaufman County	\$1,990,830	\$6,138,124	\$3,291,157	\$1,993,121
Corsicana Area (Navarro County)	\$814,932	\$2,775,630	\$1,494,204	\$915,393
Freestone County	\$269,855	\$767,061	\$432,802	\$262,122
Sherman-Denison Area (Grayson County)	\$3,778,685	\$11,117,712	\$6,267,453	\$3,816,173
Rockwall County	\$3,326,730	\$10,487,519	\$5,861,171	\$3,598,347
Athens Area (Henderson County)	\$1,095,629	\$3,551,686	\$1,882,624	\$1,135,837
Bonham Area (Fannin County)	\$397,461	\$1,211,724	\$666,649	\$405,281
Van Zandt County	\$1,038,127	\$2,898,260	\$1,749,745	\$1,080,240
Paris Area (Lamar County)	\$1,266,556	\$4,004,858	\$2,186,272	\$1,333,395
Delta County	\$16,030	\$35,785	\$20,197	\$12,690
Sulphur Springs Area (Hopkins County)	\$876,926	\$2,652,481	\$1,490,395	\$913,742
Rains County	\$96,604	\$278,705	\$148,316	\$88,684
Wood County	\$790,169	\$2,715,750	\$1,457,312	\$882,368
Tyler Area (Smith County)	\$7,681,474	\$25,112,628	\$13,243,240	\$7,933,894
Red River County	\$39,828	\$101,567	\$54,536	\$32,992
Franklin County	\$119,331	\$308,697	\$171,000	\$104,268
<b>Mount Pleasant Area Total</b>	<b>\$932,286</b>	<b>\$2,489,942</b>	<b>\$1,319,670</b>	<b>\$801,911</b>
Camp County	\$117,258	\$291,906	\$154,646	\$94,366
Titus County	\$815,028	\$2,198,036	\$1,165,024	\$707,546
Morris County	\$61,396	\$136,149	\$68,623	\$42,731
<b>Longview Area Total</b>	<b>\$5,372,673</b>	<b>\$16,833,383</b>	<b>\$9,477,428</b>	<b>\$5,822,795</b>
Harrison County	\$857,041	\$2,682,118	\$1,371,695	\$844,315
Gregg County	\$4,106,454	\$12,895,309	\$7,407,724	\$4,555,376
Upshur County	\$409,178	\$1,255,956	\$698,009	\$423,104
Texarkana Area (Bowie County)	\$2,939,939	\$9,054,475	\$5,197,564	\$3,194,669
Linden Area (Cass County)	\$476,830	\$1,340,796	\$757,441	\$464,445
Marion County	\$177,785	\$561,663	\$312,386	\$191,281
<b>Remaining Counties</b>	<b>\$18,986,917</b>	<b>\$62,050,108</b>	<b>\$33,275,098</b>	<b>\$20,139,273</b>
<b>State of Texas</b>	<b>\$427,680,000</b>	<b>\$1,397,677,662</b>	<b>\$749,521,038</b>	<b>\$453,636,796</b>

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Notes: Monetary values in 2024 US dollars. Total Expenditures, Gross Product, and Personal Income include downstream multiplier effects. For more information, see methodology on page 4.

## METHODS AND ASSUMPTIONS

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 incremental visitor spending associated with the eclipse. 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 increase in direct visitor spending. The direct outlays were based on projected visitors, daily spending patterns, and typical allocations by visitors among various categories of purchases. Gravity modeling was used to allocate spending across areas.

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.

## THE PERRYMAN GROUP



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### 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.

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