Throughout human history, societies have relied upon family members to care for and support those with specific needs. For much of that time, virtually all assistance to the elderly was provided in that manner. One of the byproducts of this approach tended to be very large families. This phenomenon continues to exist in many emerging nations.

Over the past century, income maintenance and other sustaining programs (such as Social Security and Medicare in the US) have addressed many of these issues and have been implemented in most advanced societies, a major factor in reducing birth rates. While such programs address many of the needs that occur on a broad scale, those with other challenges continue to be served by unpaid caregivers. This group constitutes a large segment of population (about one in six adults) and is likely to expand significantly in the future as the Baby Boom generation, now ranging between their mid-50s and mid-70s, continues to age.

These unpaid caregivers function largely outside the normal market system, and their choices are governed more by practical necessity than economic incentives. Because the process functions primarily outside the typical channels of business activity, the burden falls primarily on the affected families in a manner that is inconsistent with the proper allocation of resources. Moreover, minority and economically disadvantaged households are disproportionately affected, thus exacerbating other social disparities.

The system of providing this essential service brings substantial social benefits and costs. Consequently, it represents a situation in which public investment can be appropriately and effectively used to generate more efficient and equitable outcomes.

The Perryman Group (TPG) recently examined the overall economic impact of the unpaid caregiver system on both the United States and the State of Texas in a comprehensive manner. This analysis builds on the excellent prior work that has measured and quantified many of the direct magnitudes of these efforts and uses TPG's extensive modeling capabilities to examine aggregate effects and properly frame the policy discussion.

### REDUCED BURDEN ON THE HEALTHCARE SYSTEM

The initial and most obvious social benefit of unpaid caregivers is the provision of the care itself, thus removing much of this task from an overburdened healthcare complex. Based upon estimates

#### The Net Annual Impact Resulting from the Efforts of Family Caregivers

	Total Expenditures	Gross Product	Personal Income	Employment
United States				
Incremental Spending	+\$1029.493 b	+\$490.088 b	+\$310.836 b	+5,703,174
Incremental Losses	-\$663.917 b	-\$300.255 b	-\$182.509 b	-2,930,756
Net	+\$365.576 b	+\$189.833 b	+\$128.327 b	+2,772,417
State of Texas				
Incremental Spending	+\$77.827 b	+\$38.860 b	+\$24.894 b	+462,456
Incremental Losses	-\$56.964 b	-\$26.074 b	-\$15.725 b	-249,207
Net	+\$20.863 b	+\$12.786 b	+\$9.169 b	+213,249

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

Notes: Monetary values given in billions of 2021 US dollars on an annualized basis. Components may not sum due to rounding.

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of the direct labor costs that would be incurred if these services were obtained through standard providers, TPG estimates that the resources needed in 2021 would be about \$815.2 billion, thus requiring this segment of the economy to be about 19.3% larger. For Texas, the corresponding values are approximately \$62.2 billion or an expansion of 19.8%. Because unpaid family care occurs outside of the traditional marketplace, no multiplier effects are attached to this activity.

Due to the severe capacity constraints and cost pressures presently facing the healthcare system, such an increase would be difficult if not impossible to achieve. Given the distribution of the affected population, much of this additional care would likely be uncompensated, thus further complicating the response.

**INCREASED SPENDING BY CAREGIVERS** 

a substantial and growing Another major area of segment of the population benefit to the economy is and generates enormous the spending by caregivers for necessary goods and sernet social benefits. At the vices to support their efforts. The outlays span a wide variety of categories, significant costs in a manner ranging from residential renovations to medical supplies to basic living requirements. Based on available research, disproportionately affects TPG estimates that, as

of 2021, approximately

\$301.6 billion in direct

purchases of this nature will occur, bringing overall benefits of \$490.1 billion in Gross Domestic Product (GDP), \$310.8 billion in Personal Income, and 5.7 million jobs. The corresponding gains for Texas include \$25.9 billion in direct spending, \$38.9 billion in output, \$24.9 billion in income, and over 460,000 jobs.

As noted, this stimulus to the overall economy comes largely at the expense of the family caregivers, who in turn are among the least able to afford it. Moreover, much of the labor devoted to unpaid family care involves direct earnings losses to the

caregivers due to lost work time or even separation from their jobs resulting from necessity rather than incentive-based choices. These patterns create a substantial misalignment between social costs and benefits.

#### COSTS TO EMPLOYERS

"The unpaid caregiver

same time, it imposes

that is misaligned with

those who benefit and

system directly impacts

The unpaid caregiver system imposes substantial social costs on employers due to lost workers, reduced productivity, and absenteeism among those managing caregiving responsibilities. These losses work their way through the entire supply and expenditure chains. Using available information regarding this phenomenon, TPG estimates the overall current losses to the US economy to be \$300.3 billion in GDP, \$182.5 billion in income,

> and about 2.9 million jobs. For Texas, the losses total \$26.1 billion in gross product, \$15.7 billion in income, and almost 250,000 jobs.

It should be noted that, focusing only on the portions of activity that enter the expenditure stream (benefits of spending by caregivers and costs to employers), the activity associated with unpaid caregivers currently yields a net economic benefit to the US of \$198.8 billion in gross product (about 0.8% of overall national output) and almost 2.8 million jobs

economically disadvantaged families." (more than 1.7% of aggregate employment). The net gains in Texas are about \$12.8 billion in output and about 213,000 jobs. This net contribution is over and above the advantages discussed above with regard to easing pressures on the healthcare system.

### CONCLUSION

Although it largely functions outside the market system and often goes relatively unnoticed, the unpaid caregiver system directly impacts a sub-

The Perryman Group Copyright 2021 stantial and growing segment of the population and generates enormous net social benefits. At the same time, it imposes significant costs in a manner that is misaligned with those who benefit and disproportionately affects economically disadvantaged families. This finding, as demonstrated in this report, creates a compelling case for both public and private investments in programs to ease the strain on those affected. Such programs would also

reduce the losses to employers, thus increasing the net advantages of the system to the economy as a whole.

In essence, family caregiving represents a public good for which the social benefits far exceed the private benefits. As such, there is a valid public purpose in fostering programs which better align costs and benefits and allow it to function in a more efficient and equitable manner.

#### **METHODOLOGY**

Using extensive information, data, and research obtained from the National Academy of Medicine, the Family Caregiver Alliance, the Aspen Institute, the AARP Public Policy Institute, the National Alliance for Caregiving, the US Census Bureau, and the Texas Health and Human Services Commission, The Perryman Group determined direct values for (1) hours devoted to providing unpaid family care, (2) value of foregone earnings, (3) expenditures to support the caregiving function, and (4) losses to businesses for both the US and Texas. These values were then updated to 2021, fully incorporating the effects of COVID-19, using data from the Census Bureau, the Bureau of Labor Statistics, and the Bureau of Economic Analysis.

Once these values were finalized, TPG determined the potential cost to the health care system of adsorbing this function using the direct requirements coefficients from the US Multi-Regional Impact Assessment System (USMRIAS), which is more fully described below. This model was also used the determine the indirect (supply chain) and induced (compensation) effects of the supporting spending and business losses. The direct spending was allocated across various categories of spending based

on information obtained from prior research, as well as spending patterns as determined by the Consumer Expenditure Survey of the Bureau of Labor Statistics and the Cost of Living Index compiled by the Center for Community and Economic Research. Finally, the direct losses to employers were allocated based on the composition of the affected workers across more than 500 industrial sectors based on data from the USMRIAS data base.

Any economic stimulus, whether positive or negative, generates multiplier effects throughout the economy. In this instance, family caregiving results in both positive and negative stimuli which then generates dynamic responses across the economy. The Perryman Group's dynamic input-output assessment system (the USMRIAS) was developed by the firm about 40 years ago and has been consistently maintained and updated since that time. The model 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 process allows for estimation of the total economic impact (including multiplier effects) of the proposed development. The models used in the current analysis reflect the specific industrial composition and characteristics of the US and Texas economies.

Total economic effects are quantified for several key measures of business activity. Total expenditures (or total spending) measure 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 in the area as a result of the activity. This measure is parallel to the gross domestic product numbers commonly reported by various media outlets and is a subset of total expenditures. 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. Employment effects represent job gains. These measures may also be expressed in negative terms for phenomena that reduce business activity. Monetary values were quantified on a constant (2021) basis to eliminate the effects of inflation.

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# The Aggregate Annual Impact of Incremental Spending Resulting from the Efforts of Family Caregivers

Results as of 2021

	Total Expenditures	Gross Product	Personal Income	Employment
Jnited States				
Agriculture	+\$19.305 b	+\$5.655 b	+\$3.648 b	+52,661
Mining	+\$14.309 b	+\$3.369 b	+\$1.991 b	+10,990
Utilities	+\$67.809 b	+\$15.285 b	+\$6.670 b	+26,638
Construction	+\$20.763 b	+\$10.735 b	+\$8.846 b	+114,25
Manufacturing	+\$202.349 b	+\$57.938 b	+\$31.433 b	+463,674
Wholesale Trade	+\$29.379 b	+\$19.879 b	+\$11.462 b	+119,77
Retail Trade (includes Restaurants)	+\$213.796 b	+\$160.829 b	+\$93.576 b	+2,627,69
Transportation & Warehousing	+\$30.321 b	+\$20.900 b	+\$13.822 b	+173,239
Information	+\$24.614 b	+\$15.201 b	+\$6.490 b	+53,500
Finance, Insurance, & Real Estate	+\$167.285 b	+\$33.087 b	+\$12.665 b	+122,194
Business Services	+\$35.414 b	+\$21.123 b	+\$17.231 b	+192,82
Health Services	+\$93.308 b	+\$65.416 b	+\$55.310 b	+840,24
Other Services	+\$110.841 b	+\$60.671 b	+\$47.691 b	+905,484
Total, United States	+\$1029.493 b	+\$490.088 b	+\$310.836 b	+5,703,174
tate of Texas				
Agriculture	+\$1.434 b	+\$0.410 b	+\$0.268 b	+3,889
Mining	+\$1.182 b	+\$0.275 b	+\$0.157 b	+85
Utilities	+\$4.779 b	+\$1.077 b	+\$0.470 b	+1,87
Construction	+\$1.692 b	+\$0.875 b	+\$0.721 b	+9,31
Manufacturing	+\$9.534 b	+\$2.957 b	+\$1.646 b	+24,16
Wholesale Trade	+\$2.448 b	+\$1.656 b	+\$0.955 b	+9,97
Retail Trade (includes Restaurants)	+\$18.008 b	+\$13.553 b	+\$7.887 b	+221,29
Transportation & Warehousing	+\$2.374 b	+\$1.637 b	+\$1.083 b	+13,57
Information	+\$2.038 b	+\$1.258 b	+\$0.537 b	+4,42
Finance, Insurance, & Real Estate	+\$14.169 b	+\$2.736 b	+\$1.026 b	+9,89
Business Services	+\$2.933 b	+\$1.749 b	+\$1.427 b	+15,97
Health Services	+\$7.962 b	+\$5.582 b	+\$4.719 b	+71,69
Other Services	+\$9.274 b	+\$5.094 b	+\$3.998 b	+75,52
Total, State of Texas	+\$77.827 b	+\$38.860 b	+\$24.894 b	+462.45

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

Notes: Monetary values given in billions of 2021 US dollars on an annualized basis. Components may not sum due to rounding.

## The Aggregate Annual Impact of Incremental Losses in Productivity from the Efforts of Family Caregivers

Results as of 2021

	Total Expenditures	Gross Product	Personal Income	Employment
Jnited States				
Agriculture	-\$17.039 b	-\$4.894 b	-\$3.201 b	-46,383
Mining	-\$14.761 b	-\$3.628 b	-\$2.031 b	-12,142
Utilities	-\$43.091 b	-\$9.704 b	-\$4.234 b	-16,923
Construction	-\$22.451 b	-\$11.214 b	-\$9.241 b	-119,38
Manufacturing	-\$171.847 b	-\$52.289 b	-\$29.244 b	-401,158
Wholesale Trade	-\$28.138 b	-\$19.037 b	-\$10.977 b	-114,65
Retail Trade (includes Restaurants)	-\$80.619 b	-\$59.859 b	-\$34.691 b	-993,844
Transportation & Warehousing	-\$24.834 b	-\$16.701 b	-\$11.046 b	-138,447
Information	-\$17.017 b	-\$10.488 b	-\$4.478 b	-36,892
Finance, Insurance, & Real Estate	-\$125.880 b	-\$41.022 b	-\$14.903 b	-139,232
Business Services	-\$46.705 b	-\$29.646 b	-\$24.184 b	-270,60
Health Services	-\$27.786 b	-\$19.026 b	-\$16.087 b	-244,394
Other Services	-\$43.749 b	-\$22.746 b	-\$18.193 b	-396,700
Total, United States	-\$663.917 b	-\$300.255 b	-\$182.509 b	-2,930,756
State of Texas				
Agriculture	-\$1.167 b	-\$0.335 b	-\$0.221 b	-3,207
Mining	-\$3.794 b	-\$0.865 b	-\$0.427 b	-2,229
Utilities	-\$3.402 b	-\$0.765 b	-\$0.334 b	-1,334
Construction	-\$2.299 b	-\$1.149 b	-\$0.946 b	-12,22
Manufacturing	-\$10.151 b	-\$3.197 b	-\$1.822 b	-24,34
Wholesale Trade	-\$2.697 b	-\$1.824 b	-\$1.052 b	-10,98
Retail Trade (includes Restaurants)	-\$7.219 b	-\$5.369 b	-\$3.113 b	-88,95
Transportation & Warehousing	-\$2.205 b	-\$1.455 b	-\$0.962 b	-12,06
Information	-\$1.490 b	-\$0.920 b	-\$0.393 b	-3,23
Finance, Insurance, & Real Estate	-\$12.384 b	-\$4.040 b	-\$1.412 b	-13,11
Business Services	-\$4.212 b	-\$2.672 b	-\$2.180 b	-24,38
Health Services	-\$2.411 b	-\$1.660 b	-\$1.403 b	-21,319
Other Services	-\$3.533 b	-\$1.824 b	-\$1.460 b	-31,799
Total, State of Texas	-\$56.964 b	-\$26.074 b	-\$15.725 b	-249,207

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

Notes: Monetary values given in billions of 2021 US dollars on an annualized basis. Components may not sum due to rounding.

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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,

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