

September 2014

**The Economic Cost of Deployment:  
An Analysis of the Effects of National Guard Troop  
Deployment on the Lower Rio Grande Valley and Texas**

*An Analysis Provided as a Public Service by*

**THE PERRYMAN GROUP**

510 N. Valley Mills Dr.  
Suite 300  
Waco, TX 76710  
ph. 254.751.9595  
fax 254.751.7855  
*info@perrymangroup.com*  
*www.perrymangroup.com*





## Table of Contents

<b>Introduction.....</b>	<b>1</b>
<b>Economic Costs of Deployment .....</b>	<b>2</b>
<b>Conclusion .....</b>	<b>5</b>
<b>APPENDIX: Detailed Sectoral Results.....</b>	<b>6</b>

## Introduction

In July, National Guard troops were deployed to the US-Mexico border by Texas Governor Rick Perry in order to reinforce ongoing efforts by the Texas Department of Public Safety to combat criminal activity in the region. While troops have been sent to the area on various occasions in the past, the deployment has raised concern among some area residents and community leaders who fear that it could take a toll on the regional economy. Local officials also question the efficacy of this measure given the limited authority accorded to the National Guard for this purpose. If the deployment increases feelings of uncertainty about the area's stability, for example, it could discourage business investment, tourism, and other desirable economic activity. Moreover, the presence of troops has historically impacted shoppers and employees in a variety of sectors, discouraging them from full participation in their normal activities.

In order to provide a perspective on the potential economic effects of the presence of the National Guard troops, The Perryman Group (TPG) analyzed the historic patterns in the regional economy during prior periods when troops were sent to the area and found that, even after adjusting for myriad other factors, **the regional economy tends to be adversely affected during periods of deployment.**

Results of this assessment (which was conducted as a public service) are summarized in this report.

## Economic Costs of Deployment

In order to measure the economic effects of the current deployment, The Perryman Group first established a baseline for comparison. This task was accomplished by comparing the performance of the Lower Rio Grande Valley economy during two prior deployments (in 2006-2008 and 2010) with that in other periods before and after the deployments. After accounting for various external factors (as described below), the economic effects observed during prior deployments were then calculated through a simulation of the relevant submodel of the Texas Econometric Model<sup>1</sup> both with and without the deployment.

Total economic costs were quantified for key measures of business activity.

- **Total expenditures** (or total spending) measure the dollars changing hands as a result of the economic stimulus (whether positive or negative).
- **Gross product** (or output) is production of goods and services foregone 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.
- **Job losses** would occur over time and persist during the period of the deployment.

---

<sup>1</sup> The Perryman Group developed the Texas Econometric Model more than 30 years ago and has consistently maintained and updated it since that time. The Model is the basis for the firm's subscription forecast service and has been in use in the Lower Rio Grande Valley for 30 years. It is also used to perform specialized forecasts for the firm's clients across a spectrum of industries and geographic areas.

**During periods when troops are deployed, economic performance is significantly worse.** The Perryman Group found that the total losses in business activity stemming from this weaker performance include **more than \$541.9 million in gross product in the Lower Rio Grande Valley each year as well as 7,830 jobs.** For Texas as a whole (including losses within the Lower Rio Grande Valley), costs were found to be **\$650.0 million** in annual gross product and **8,680 jobs**. These amounts represent **approximately 2.5% of total local activity.**

<b>The Annual Economic Cost of Troop Deployments to the US-Mexico Border: Losses in Business Activity in the Lower Rio Grande Valley and Texas</b> (Monetary Values in Millions of Constant 2013 Dollars)		
	Lower Rio Grande Valley	Texas
Total Expenditures	<b>\$923.9</b>	<b>\$1,203.2</b>
Gross Product	<b>\$541.9</b>	<b>\$650.0</b>
Personal Income	<b>\$353.0</b>	<b>\$415.1</b>
Retail Sales	<b>\$126.2</b>	<b>\$132.5</b>
Employment	<b>7,830</b>	<b>8,680</b>
Note: Based on relative performance during prior deployments fully adjusted for changes in overall economic conditions and exchange rates as well as the offsetting benefits associated with additional people assigned to the area. Source: The Perryman Group		

As noted, these results are based on an analysis designed to isolate the impact of the deployments from other causes of variation in economic growth patterns. External factors that would influence absolute performance were accounted for by evaluating

economic performance in the Lower Rio Grande Valley relative to overall state and national performance in each period on an industrial basis. Because of the proximity of the area to Mexico and its dependence on border trade, production, and commerce, performance was also adjusted for fluctuations in the exchange rate between the Mexican Peso and the US Dollar, with appropriate consideration of the relevant elasticities of demand. The relative size and anticipated duration of the current deployment was also considered.

The simulation assumed a one-year deployment period. It should be noted that, because this methodology is based on actual data from prior deployments, the measured impacts are determined on a "net" basis, meaning that they fully account for any offsetting benefits associated with the deployment. As an element of conservatism in the analysis, the impacts from the less costly of the two prior deployments were incorporated, thus understating the potential effects.

Once the impacts were isolated, they were assigned across various industries and measures of activity using the direct requirements coefficients from the Lower Rio Grande Valley submodel of the US Multi-Regional Impact Assessment System.<sup>2</sup> The results for Texas involved interactive simulations of the Texas and regional models to capture relevant spillover effects. Because the approach yields overall outcomes with and without the deployment, the "multiplier" (indirect and induced) effects were implicitly captured; as a result, no such calculations were performed. All monetary values are given in constant (2013) dollars to eliminate the effects of inflation.

---

<sup>2</sup> The US Multi-Regional Impact Assessment System was developed by The Perryman Group more than 30 years ago and has been consistently updated and refined since that time.

## Conclusion

If historical patterns hold true, deploying National Guard troops to the US-Mexico border will lead to significant losses in business activity in the Lower Rio Grande Valley. The Perryman Group estimates that losses for each year of the deployment would total more than **\$541.9 million in gross product each year and 7,830 jobs in the Lower Rio Grande Valley.** For the state as a whole, the reduction in business activity was found to be **\$650.0 million** in gross product each year and **8,680 jobs.**

While border security is an important issue, it should be recognized that economic performance is dampened during times when troops are deployed. Less intrusive and more effective measures are worthy of consideration.

## **APPENDIX: Detailed Sectoral Results**

<b>The Estimated Annual Net Impact of Deployment Along the Border on Business Activity in the Lower Rio Grande Valley*</b>				
<b>Sector</b>	<b>Total Expenditures</b>	<b>Real Gross Product</b>	<b>Personal Income</b>	<b>Employment</b>
	<i>(2013 Dollars)</i>	<i>(2013 Dollars)</i>	<i>(2013 Dollars)</i>	<i>Jobs</i>
Agriculture	(\$29,654,482)	(\$13,178,911)	(\$7,381,694)	(203)
Mining	(\$39,926,966)	(\$16,465,180)	(\$7,110,518)	(66)
Construction	(\$47,503,499)	(\$25,845,658)	(\$20,157,191)	(293)
Nondurable Manufacturing	(\$60,422,377)	(\$16,747,068)	(\$8,863,242)	(141)
Durable Manufacturing	(\$39,913,557)	(\$16,727,516)	(\$11,657,929)	(178)
Transportation and Utilities	(\$83,022,748)	(\$39,067,942)	(\$25,585,889)	(329)
Information	(\$18,239,296)	(\$12,833,291)	(\$5,907,173)	(79)
Wholesale Trade	(\$47,004,116)	(\$37,364,288)	(\$21,914,211)	(294)
Retail Trade	(\$126,192,132)	(\$103,606,273)	(\$61,456,043)	(2,096)
Finance, Insurance, and Real Estate	(\$172,662,844)	(\$71,149,337)	(\$25,054,242)	(391)
Business Services	(\$58,434,624)	(\$43,458,672)	(\$37,611,932)	(689)
Health Services	(\$117,624,967)	(\$99,987,323)	(\$82,384,520)	(1,957)
Other Services	(\$83,317,716)	(\$45,488,789)	(\$37,866,958)	(1,113)
<b>TOTAL</b>	<b>(\$923,919,324)</b>	<b>(\$541,920,246)</b>	<b>(\$352,951,542)</b>	<b>(7,830)</b>
Source: US Multi-Regional Impact Assessment System, The Perryman Group				
*Note: Based on relative performance during prior deployments fully adjusted for changes in overall economic conditions and exchange rates as well as the offsetting benefits associated with additional people assigned to the area.				

<b>The Estimated Annual Net Impact of Deployment Along the Border on Business Activity in Texas*</b>				
<b>Sector</b>	<b>Total Expenditures</b>	<b>Real Gross Product</b>	<b>Personal Income</b>	<b>Employment</b>
	<i>(2013 Dollars)</i>	<i>(2013 Dollars)</i>	<i>(2013 Dollars)</i>	<i>Jobs</i>
Agriculture	(\$30,115,500)	(\$13,364,574)	(\$7,487,780)	(205)
Mining	(\$60,282,787)	(\$24,230,528)	(\$11,056,505)	(105)
Construction	(\$48,573,638)	(\$26,572,750)	(\$20,724,255)	(301)
Nondurable Manufacturing	(\$181,251,916)	(\$49,754,326)	(\$25,929,077)	(213)
Durable Manufacturing	(\$60,013,587)	(\$24,481,919)	(\$17,677,312)	(260)
Transportation and Utilities	(\$106,280,999)	(\$44,345,983)	(\$28,181,921)	(352)
Information	(\$23,762,444)	(\$16,756,415)	(\$7,689,576)	(101)
Wholesale Trade	(\$54,507,830)	(\$43,328,629)	(\$25,412,306)	(341)
Retail Trade	(\$132,541,885)	(\$108,842,581)	(\$64,565,489)	(2,201)
Finance, Insurance, and Real Estate	(\$218,500,925)	(\$88,782,829)	(\$30,834,822)	(496)
Business Services	(\$81,224,366)	(\$60,737,565)	(\$52,566,198)	(963)
Health Services	(\$119,807,238)	(\$101,902,152)	(\$83,962,243)	(1,995)
Other Services	(\$86,382,172)	(\$46,934,237)	(\$39,040,078)	(1,145)
<b>TOTAL</b>	<b>(\$1,203,245,286)</b>	<b>(\$650,034,490)</b>	<b>(\$415,127,562)</b>	<b>(8,680)</b>
Source: US Multi-Regional Impact Assessment System, The Perryman Group				
*Note: Based on relative performance during prior deployments fully adjusted for changes in overall economic conditions and exchange rates as well as the offsetting benefits associated with additional people assigned to the area.				