# The Keystone/Gulf Coast Pipeline System: A Catalyst for American Jobs and Energy Security

Prepared for Consumer Energy Alliance

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## Introduction

In just the past decade, the North American energy industry has undergone a rapid transformation. Thanks to technological advances in hydraulic fracturing and horizontal drilling, oil and gas production has surged from previously untapped U.S. shale rock formations. By 2016, the IEA projects that the U.S. will overtake Saudi Arabia to become the world's top producer of oil.[1] In Canada, relatively high oil prices and new technology has enabled the profitable extraction of crude bitumen from the Athabasca oil sands in Alberta. Alberta's oil sands are estimated to contain the second largest crude oil reserves in the world, behind only Saudi Arabia. Increasingly, this unconventional oil from Canada can wean North America off of its dependence on Middle Eastern oil.

In December 2013, in an effort to address the declines of its domestic oil production, the Mexican government enacted constitutional reforms that ended the 75-year monopoly of Petroleós Mexicanos (PEMEX), the state-owned oil company. By opening up the country's oil industry, international oil companies will finally be able to share in the profits from the sale of Mexican oil. These companies will bring advanced technologies to Mexico's shale plays and offshore territories, reversing the decline in oil production that has plagued Mexico since 2005.[2] Mexican production declined from 3.38 million barrels per day (bpd) in 2004 to 2.52 million bpd in 2013.[3]

Together, these developments have given rise to the possibility of North America becoming a world energy superpower. Not only can the region achieve energy security by

[1] http://www.cnbc.com/id/101190132
[2] http://www.eia.gov/countries/analysisbriefs/Mexico/Mexico.pdf
[3] http://www.reuters.com/article/2014/04/26/mexico-reforms-idUSL2N0NI01F20140426

eliminating dependence on OPEC oil, but it can also became a net exporter of hydrocarbons to developing countries in Asia and Latin America. Global demand for energy is expected to rise 35% by 2035 as economies in both developed and emerging countries continue to grow and the standard of living improves in the developing world.[4] As North America weans itself off of expensive foreign oil, consumers will also benefit from lower gasoline prices at the pump. However, for this boom to continue, and for energy security to become a reality, the pipeline infrastructure to support North American oil and gas production must be expanded.

The pipeline capacity needed to support the North American energy boom does not currently exist. Because of the shale boom and limited pipeline capacity to move crude oil, shipments of oil by railroad from Alberta and the Bakken have grown 25-fold since 2008. According to the North Dakota state Pipeline Authority, about 75% of Bakken oil left North Dakota on trains in April 2013.[5] Shipments by rail are likely to continue to rise if Keystone XL is not built. However, railroads are neither the most efficient nor the safest means of transporting oil. When a freight train hauling crude oil in tank cars jumps the rails, the damage can be devastating — as was the case with the tragic accident in Quebec in July 2013. By comparison, decades of use have proved that pipelines overall are overwhelmingly safe and reliable. Pipelines carry far more crude and have fewer leaks per mile. And when a spill occurs, repair and cleanup are relatively easy. According to the American Petroleum Institute, over the past 30 years the "spill

[4] http://www.capp.ca/library/statistics/basic/Pages/default.aspx
[5] Dan Murtaugh, "North Dakota's Bakken Hits Record Oil Production Level in April," *Bloomberg.com*, June 14, 2013, http://www.bloomberg.com/news/2013-06-14/north-dakota-s-bakken-hits-record-oil-production-level-in-april.html.

rate" for pipelines has been only 38 gallons per billion gallons transported. For rail tank cars, the spill rate is 80.[6]

Simply put, North America must build more pipelines. Despite environmental concerns, a pipeline is the safest and most efficient way to transport oil and gas. One of the most vital pieces of this transportation infrastructure is TransCanada's Keystone Pipeline System. TransCanada is meeting the growing demand for energy across North America — and maximizing America's pipeline infrastructure — through innovative and strategic pipeline solutions that will transport Canadian crude oil, as well as U.S. domestic crude oil, to key U.S. markets in the Midwest and U.S. Gulf Coast. Three phases of the Keystone Pipeline system have been completed. The fourth phase, the northern portion of Keystone XL, is awaiting approval by the White House. The Keystone Pipeline System means that more of the oil that U.S. refineries need will come from U.S. and Canadian sources, instead of from politically unstable countries in the Middle East and Venezuela.

**The Keystone Pipeline System**

The Keystone Pipeline System is a 2,639-mile (4,247-kilometre) pipeline system that transports crude oil from Hardisty, Alberta, to markets in the American Midwest and the U.S. Gulf Coast. The Canadian portion of the pipeline runs from Hardisty east into Manitoba where it turns south and crosses the border into North Dakota. From North Dakota, the pipeline runs south through South Dakota and Nebraska.

[6] Ask Dr. Weinstein about this statistic

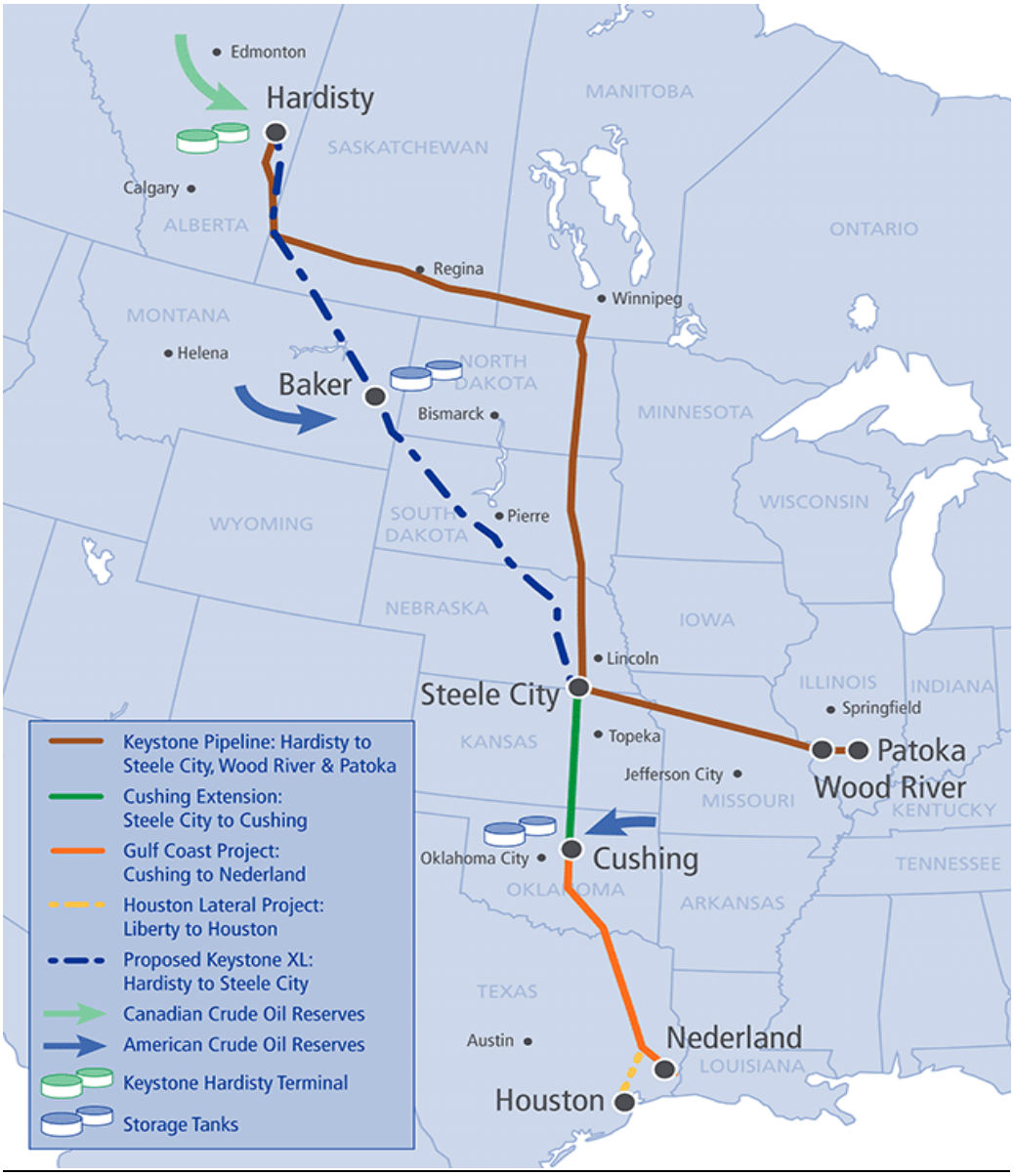
At Steele City, Nebraska, one arm of the pipeline runs east through Missouri for deliveries into Wood River and Patoka, Illinois; another arm runs south through Oklahoma for deliveries into Cushing and continues south for deliveries into Port Arthur, Texas (the Gulf Coast Project).

Deliveries to Wood River and Patoka began in the summer of 2010, and deliveries to Cushing began in February of 2011. Crude oil transportation service to the Gulf Coast started in January 2014. In addition to the synthetic crude oil (syncrude) and diluted bitumen (dilbit) from the oil sands of Canada, the Keystone Pipeline System carries light crude oil from the Williston Basin (Bakken) region in Montana and North Dakota. TransCanada Corporation, a major North American energy company based in Calgary, Alberta, Canada, is the sole owner of the Keystone Pipeline System.

Three phases of the Keystone Pipeline project are in operation, and the fourth is awaiting U.S. government approval—the Keystone XL that would provide a direct connection between Hardisty and Steele City. Upon completion, the Keystone Pipeline System will consist of the completed Keystone Pipeline (Phases I and II), Keystone Gulf Coast Expansion (Phase III), and the proposed Keystone XL Pipeline Project (Phase IV). Phase I, delivering oil from Hardisty, Alberta, to Steele City, Wood River, and Patoka, was completed in the summer of 2010. This pipeline has safely delivered almost 490 million barrels of oil, and employed 8,969 people to build the pipeline and its related facilities. Phase II, the Keystone-Cushing extension, was completed in February 2011 with the pipeline running from Steele City to storage and distribution facilities at

Cushing, Oklahoma. Phase III, the Gulf Coast Extension, was opened in January 2014 and has the capacity to deliver up to 830,000 barrels per day from Cushing to refineries along the Texas Gulf Coast. The proposed Phase IV, the Keystone XL Pipeline Project, would begin in Hardisty, Alberta and extend to Steele City, Nebraska.

**Exhibit 1: The Keystone Pipeline System**



**The Gulf Coast Project – A Success Story**

Phase III of the Keystone Pipeline System, known as the Gulf Coast Extension or the Gulf Coast Project, opened on January 22, 2014. The Gulf Coast Pipeline Project is an approximate 485-mile (780-kilometre), 36-inch crude oil pipeline beginning in Cushing, Oklahoma and extending south to Nederland, Texas. The Gulf Coast Project is designed to carry crude from Cushing to the Gulf Coast refinery marketplace. The 48-mile (77-kilometre) Houston Lateral Project is an additional project to transport oil specifically to refineries in the Houston area.

Construction of the Gulf Coast Pipeline commenced in August 2012. The Gulf Coast Project will have the initial capacity to transport 700,000 barrels of oil per day from underground storage tanks in Cushing to Gulf Coast refineries. With the expected completion of the Houston Lateral project in the fourth quarter of 2014, this number is expected to rise to 830,000 b/d.[7] By way of reference, 830,000 barrels represents roughly 4% of daily U.S. oil consumption.

The Gulf Coast Project will transport growing supplies of U.S. and Canadian oil to meet refinery demand. The pipeline provides Gulf Coast refineries with access to lower cost North American production and reduces the U.S. reliance on OPEC sources of crude oil. The project will also help relieve the glut of crude oil that has been sitting in storage at Cushing for the past few years. Because of the lack of transportation

[7] http://www.gulf-coast-pipeline.com/about/the-projects/

infrastructure, refiners on the Gulf Coast have been forced to buy higher priced foreign oil. Since the opening of the Gulf Coast Project, North American oil has finally begun to make its way from Cushing to refineries on the Gulf Coast.

Construction of the Gulf Coast Pipeline Project required:

- **US$2.3 billion in private-sector investment**
- **Six modern pump stations**
- **More than 11 million hours of labor completed by 4,844 workers in the United States of America** - heavy equipment operators, welders, laborers, transportation operators and supervisory personnel (including environment, safety and quality control inspectors)
- **More than 50 contracts with U.S. manufacturers and companies** building the pipeline and equipment in locations that include: Arkansas, California, Georgia, Indiana, Kansas, Louisiana, Maryland, Michigan, Minnesota, Missouri, New York, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina and Texas
- **The manufacturing of more than 485 miles of high-strength, advanced oil pipeline** (36-inch diameter); hundreds of large valves; thousands of fittings; thousands of pieces of equipment used to build transformers, meters, electric motors, cabling and electrical equipment; and piping assembling and structural steel for supports
- About **2.25 million barrels of new oil storage capacity** at Cushing, Oklahoma. [8]

[8] http://www.transcanada.com/news-releases-article.html?id=1770390

TransCanada voluntarily agreed to implement 57 special conditions for the construction, operation, and maintenance of the Gulf Coast project. These conditions promise to make the Gulf Coast project safer than typical pipelines built in the U.S.[9]

**Community Impact of the Gulf Coast Project**

Local restaurants, hotels, and businesses experienced a significant boost thanks to construction of the Gulf Coast Project. Business owners in Texas and Oklahoma reported large increases in volume due to the construction of the pipeline. During construction, TransCanada spent roughly $6 million each month directly with local businesses in Texas and Oklahoma.[10]

For instance, Clifford Bryant, a local entrepreneur in Prague, Oklahoma, reports that construction of the pipeline "doubled our city sales tax receipts." Clifford bought a mobile RV and trailer park when he heard that TransCanada would be bringing a construction yard to town for its Gulf Coast Pipeline Project. Previously, only 11 of the 57 spots in the park were occupied. Once construction began, all 57 were occupied.[11] Clifford notes that a full RV park contributes as much as $8,000 a month in electricity fees alone to the municipal utility.

In the Southeast Texas town of Kountze, Jeremy Kunk's Ready Ice Company sold approximately 30,000 pounds of ice per week to pipeline construction sites in its area.

[9] http://www.gulf-coast-pipeline.com/about/the-projects/
[10] http://blog.transcanada.com/one-cool-customer/
[11] http://www.gulf-coast-pipeline.com/about/the-projects/

The ice improved safety by keeping workers cool and hydrated. Kunk expects that the economic boost supplied by pipeline projects will be long-lasting. "Pipeline construction such as TransCanada's Gulf Coast Pipeline Project is going to feed our refineries more product and keep us hopping for the next five, 10 years at least."[12]

Joe Penland is another Texas business owner who benefited from TransCanada's pipeline construction.[13] Joe owns Quality Mat Company in Southeast Texas. His company partnered with TransCanada to make the Gulf Coast Project safer. With a patented concept, Penland fabricates more than 250,000 mats per year in his facility inside the Beaumont city limits. He leased the mats to TransCanada during construction of the Gulf Coast Pipeline in Oklahoma and Texas.

When Quality Mat makes a dollar in profit, 30 to 33 cents goes back into the community, much of it in women's health programs. According to Joe, "TransCanada — without TransCanada knowing — funded several hundred thousand dollars' worth of free mammograms, free prostate checks, getting people through some local institutions here, navigating them through surgery, navigating them through treatments and extending some people's lives."

Construction of the pipelines and crude storage tanks created jobs and generated tax revenue for communities that were used to improve education, local infrastructure, and public services (see detailed economic impact discussion below). Now that the

[12] http://blog.transcanada.com/opportunities-knock-in-prague-okla/
[13] See more at: http://keystone-xl.com/gulf-coast-project-delivering-energy-security/#sthash.tyPL9fwp.dpuf

pipeline is flowing, neighboring communities will continue to benefit from the surplus tax revenues accumulated during construction and the spending associated with ongoing operations and maintenance as well as property taxes levied on the pipelines and ancillary equipment.

## A Profile of Counties Affected by the Gulf Coast Project

Running from Cushing (OK) to Nederland (TX), the Gulf Coast Project pipeline traverses 24 counties—8 in Oklahoma and 16 in Texas. With the exception of Smith and Jefferson Counties in Texas, these are rural areas with relatively small populations (see Table 1). What's more, population growth in most of these counties has trailed the state average.

For example, among the Oklahoma counties crossed by the pipeline, only Bryan County, at 21 percent, grew at a faster clip than the 12 percent population growth statewide between 2000 and 2013. Three of the counties—Hughes, Coal and Atoka—recorded zero or negative population change. The story is similar in Texas, where all 16 affected counties, with the exception of Smith County (24 percent), recorded population growth rates well below the state average of 27 percent.

An examination of per capita income growth in the Gulf Coast Project counties between 2000 and 2012, the latest year for which data are available, is a more positive story. In Oklahoma, six of the eight affected counties recorded per capita income growth faster than the state average of 65 percent (see Table 2). In Texas, 11 of the 16 counties posted per capita income growth above the state average between 2000 and 2012. But

despite these gains, per capita income in all of the Oklahoma and Texas counties along the Gulf Coast Project alignment remained below the statewide averages, in some cases more than 30 percent below.

Against this backdrop of slow population growth and below-average per capita income, the Gulf Coast Project has become an important contributor to the economic health of many of the 24 affected counties. In what follows, we detail the county level and statewide economic and fiscal impacts from construction of the Gulf Coast Project pipeline.

Table 1

**Population of Counties Affected by Gulf Coast Project, Source: U.S. Census**

| Counties | 2000 Census | July 1, 2013 Estimate (ACS) | Percent Change | Absolute Change |
|---|---|---|---|---|
| **Oklahoma** | **3,450,654** | **3,850,568** | **12%** | **399,914** |
| Lincoln | 32,080 | 34,351 | 7% | 2,271 |
| Creek | 67,367 | 70,470 | 5% | 3,103 |
| Okfuskee | 11,814 | 12,377 | 5% | 563 |
| Seminole | 24,894 | 25,426 | 2% | 532 |
| Hughes | 14,154 | 13,823 | -2% | -331 |
| Coal | 6,031 | 5,867 | -3% | -164 |
| Atoka | 13,879 | 13,898 | 0% | 19 |
| Bryan | 36,534 | 44,244 | 21% | 7,710 |
| **Average of Counties** | **25,844** | **27,557** | **4.4%** | **1,713** |
| **Texas** | **20,851,820** | **26,448,193** | **27%** | **5,596,373** |
| Fannin | 31,242 | 33,659 | 8% | 2,417 |
| Lamar | 48,499 | 49,426 | 2% | 927 |
| Delta | 5,327 | 5,238 | -2% | -89 |
| Hopkins | 31,960 | 35,565 | 11% | 3,605 |
| Franklin | 9,458 | 10,660 | 13% | 1,202 |
| Wood | 36,752 | 42,306 | 15% | 5,554 |
| Upshur | 35,291 | 39,884 | 13% | 4,593 |
| Smith | 174,706 | 216,080 | 24% | 41,374 |
| Rusk | 47,372 | 53,622 | 13% | 6,250 |
| Cherokee | 46,659 | 50,878 | 9% | 4,219 |
| Nacogdoches | 59,203 | 65,330 | 10% | 6,127 |
| Angelina | 80,130 | 87,441 | 9% | 7,311 |
| Polk | 41,133 | 45,790 | 11% | 4,657 |
| Liberty | 70,154 | 76,907 | 10% | 6,753 |
| Hardin | 48,073 | 55,417 | 15% | 7,344 |
| Jefferson | 252,051 | 252,358 | 0% | 307 |
| **Average of Counties** | **63,626** | **70,035** | **10.1%** | **6,409** |

Table 2

**Per Capita Personal Income in Counties Affected by Gulf Coast Project**
**(Thousands of Dollars)**
**Source: U.S. Bureau of Economic Analysis (BEA)**

| Counties | 2000 | 2012 | Percent Change | County PCI as a Percentage of State PCI 2012 |
|---|---|---|---|---|
| **Oklahoma** | **$24,602** | **$40,620** | **65%** | |
| Lincoln | 19,316 | 32,633 | 69% | 80% |
| Creek | 21,357 | 34,619 | 62% | 85% |
| Okfuskee | 14,722 | 25,514 | 73% | 63% |
| Seminole | 17,306 | 33,577 | 94% | 83% |
| Hughes | 16,208 | 31,049 | 92% | 76% |
| Coal | 15,521 | 30,041 | 94% | 74% |
| Atoka | 15,778 | 28,191 | 79% | 69% |
| Bryan | 19,194 | 30,434 | 59% | 75% |
| **Average of Counties** | **$17,425** | **$30,757** | **78%** | 76% |
| **Texas** | **$28,506** | **$42,638** | **50%** | |
| Fannin | 20,150 | 31,371 | 56% | 74% |
| Lamar | 22,217 | 35,140 | 58% | 82% |
| Delta | 19,071 | 31,536 | 65% | 74% |
| Hopkins | 23,050 | 33,821 | 47% | 79% |
| Franklin | 24,128 | 35,877 | 49% | 84% |
| Wood | 19,675 | 32,866 | 67% | 77% |
| Upshur | 21,515 | 38,508 | 79% | 90% |
| Smith | 28,165 | 41,379 | 47% | 97% |
| Rusk | 21,074 | 33,117 | 57% | 78% |
| Cherokee | 21,523 | 30,479 | 42% | 71% |
| Nacogdoches | 20,148 | 29,531 | 47% | 69% |
| Angelina | 22,457 | 34,373 | 53% | 81% |
| Polk | 24,308 | 38,905 | 60% | 91% |
| Liberty | 21,195 | 35,067 | 65% | 82% |
| Hardin | 22,765 | 40,099 | 76% | 94% |
| Jefferson | 24,672 | 38,357 | 55% | 90% |
| **Average of Counties** | **$22,257** | **$35,027** | **58%** | 82% |

**The State and Local Economic and Fiscal Impacts from Constructing the Gulf Coast Project Pipeline**

In order to calculate these impacts, we have utilized the IMPLAN input-output model developed by the Minnesota IMPLAN Group. Input-output models track how spending flows through a regional, state, or national economy. The estimates include direct, indirect, and induced impacts. Direct impacts are the result of TransCanada procuring goods and services in the local community. For example, the company will purchase an array of goods and services ranging from equipment and tools to office supplies from local vendors. These vendors, in turn, purchase goods and services to support their local operations. For example, the firm providing pipe hires employees, utilizes inventory-counting services, and engages other professional service providers such as accountants—activity that is captured as indirect impacts. Induced impacts track the economic and fiscal effects of TransCanada employees, contractors and vendors spending a portion of their earnings in the local economy for goods and services.

Each of these impacts is adjusted to account only for purchases from local entities. For example, to the best of our knowledge there are no manufacturers of the heavy equipment used to dig trenches for pipelines located along the Gulf Coast Project alignment; therefore, these purchases have little impact on the local economy. Still, when added together the sum of all the activity from direct, indirect, and induced impacts is greater than the local proportion of TransCanada spending. This is known as the "multiplier effect." The fiscal impacts estimated in this analysis include indirect business

taxes such as state and local sales and use taxes, property taxes, and government revenue from permit fees and licenses.

In what follows, we have disaggregated the economic and fiscal impacts from the Gulf Coast Project for each of the 24 affected counties. We have also calculated the total economic and fiscal impacts on the states of Oklahoma and Texas as a whole. All of the expenditure input data were provided by TransCanada.

***Total state impacts:***

The first two tables summarize the total economic and fiscal impacts in the states of Oklahoma and Texas from construction of the Gulf Coast Project pipeline. For Oklahoma as a whole, outlays by TransCanada during the construction process boosted economic activity by about $2.1 billion. Salaries, wages and benefits were enhanced by more than $1 billion during the construction period while almost 16,000 person-years of direct and indirect employment can be attributed to the pipeline. State and local governments collected more than $72 million as a result of pipeline construction.

In Texas, pipeline construction generated $3.6 billion in economic activity that, in turn, enhanced labor income by almost $1.7 billion. Outlays by TransCanada supported nearly 27,000 person-years of employment while state and local taxes were boosted by almost $145 million during the construction period.

**State of Oklahoma Pipeline Impacts**

| | Total Impacts |
|---|---|
| Total Economic Activity | $2,143,364,856 |
| Labor Income | $1,041,174,418 |
| Employment (person years) | 15,852 |
| Total Taxes | $72,384,852 |
| Indirect Business Taxes | $50,339,639 |
| Direct Business Taxes | $22,045,213 |

**State of Texas Pipeline Impacts**

| | Total Impacts |
|---|---|
| Total Economic Activity | $3,638,561,905 |
| Labor Income | $1,696,054,834 |
| Employment (person years) | 26,924 |
| Total Taxes | $144,992,343 |
| Indirect Business Taxes | $112,533,584 |
| Direct Business Taxes | $32,458,759 |

***Individual county impacts:***

In the following tables, we have used the IMPLAN input-output model to calculate the economic and fiscal impacts from construction of the Gulf Coast Project on each of the 24 affected counties. Data on outlays by county were provided by TransCanada.

**Atoka Co OK Pipeline Impacts**

| | Total Impacts |
|---|---|
| Total Economic Activity | $108,674,377 |
| Labor Income | $54,557,601 |
| Employment (person years) | 2,328 |
| Total Taxes | $4,384,805 |
| Indirect Business Taxes | $2,782,827 |
| Direct Business Taxes | $1,601,978 |

**Bryan Co OK Pipeline Impacts**

| | Total Impacts |
|---|---|
| Total Economic Activity | $290,180,460 |
| Labor Income | $131,486,014 |
| Employment (person years) | 2,972 |
| Total Taxes | $9,726,399 |
| Indirect Business Taxes | $6,148,295 |
| Direct Business Taxes | $3,578,104 |

**Coal Co OK Pipeline Impacts**

| | Total Impacts |
|---|---|
| Total Economic Activity | $132,255,757 |
| Labor Income | $63,209,316 |
| Employment (person years) | 1,123 |
| Total Taxes | $4,481,889 |
| Indirect Business Taxes | $2,380,393 |
| Direct Business Taxes | $2,101,496 |

**Creek Co OK Pipeline Impacts**

| | Total Impacts |
|---|---|
| Total Economic Activity | $31,407,432 |
| Labor Income | $15,023,335 |
| Employment (person years) | 275 |
| Total Taxes | $1,044,987 |
| Indirect Business Taxes | $585,461 |
| Direct Business Taxes | $459,526 |

**Hughes Co OK Pipeline Impacts**

| | Total Impacts |
|---|---|
| Total Economic Activity | $133,019,258 |
| Labor Income | $66,108,030 |
| Employment (person years) | 1,188 |
| Total Taxes | $5,110,230 |
| Indirect Business Taxes | $2,892,837 |
| Direct Business Taxes | $2,217,393 |

**Lincoln Co OK Pipeline Impacts**

| | Total Impacts |
|---|---|
| Total Economic Activity | $470,110,040 |
| Labor Income | $260,415,926 |
| Employment (person years) | 4,755 |
| Total Taxes | $17,097,939 |
| Indirect Business Taxes | $9,659,608 |
| Direct Business Taxes | $7,438,331 |

**Okfuskee Co OK Pipeline Impacts**

| | Total Impacts |
|---|---|
| Total Economic Activity | $70,112,447 |
| Labor Income | $34,182,806 |
| Employment (person years) | 612 |
| Total Taxes | $2,572,891 |
| Indirect Business Taxes | $1,325,258 |
| Direct Business Taxes | $1,247,633 |

**Seminole Co OK Pipeline Impacts**

| | Total Impacts |
|---|---|
| Total Economic Activity | $230,692,167 |
| Labor Income | $113,988,477 |
| Employment (person years) | 2,001 |
| Total Taxes | $9,033,374 |
| Indirect Business Taxes | $5,632,622 |
| Direct Business Taxes | $3,400,752 |

**Delta Co TX Pipeline Impacts**

| | Total Impacts |
|---|---|
| Total Economic Activity | $52,780,601 |
| Labor Income | $23,933,901 |
| Employment (person years) | 561 |
| Total Taxes | $2,124,142 |
| Indirect Business Taxes | $1,234,844 |
| Direct Business Taxes | $889,298 |

**Fannin Co TX Pipeline Impacts**

| | Total Impacts |
|---|---|
| Total Economic Activity | $35,872,639 |
| Labor Income | $18,808,285 |
| Employment (person years) | 396 |
| Total Taxes | $1,527,901 |
| Indirect Business Taxes | $1,018,832 |
| Direct Business Taxes | $509,069 |

**Hopkins Co TX Pipeline Impacts**

| | Total Impacts |
|---|---|
| Total Economic Activity | $120,025,111 |
| Labor Income | $56,640,617 |
| Employment (person years) | 1,321 |
| Total Taxes | $5,421,975 |
| Indirect Business Taxes | $3,755,916 |
| Direct Business Taxes | $1,666,059 |

**Lamar Co TX Pipeline Impacts**

| | Total Impacts |
|---|---|
| Total Economic Activity | $177,534,800 |
| Labor Income | $97,454,741 |
| Employment (person years) | 1,694 |
| Total Taxes | $7,630,506 |
| Indirect Business Taxes | $5,356,334 |
| Direct Business Taxes | $2,274,172 |

**Upshur Co TX Pipeline Impacts**

| | Total Impacts |
|---|---|
| Total Economic Activity | $32,921,217 |
| Labor Income | $16,803,360 |
| Employment (person years) | 325 |
| Total Taxes | $1,407,124 |
| Indirect Business Taxes | $923,198 |
| Direct Business Taxes | $483,926 |

**Smith Co TX Pipeline Impacts**

| | Total Impacts |
|---|---|
| Total Economic Activity | $215,496,332 |
| Labor Income | $105,793,825 |
| Employment (person years) | 1,991 |
| Total Taxes | $8,984,256 |
| Indirect Business Taxes | $6,604,639 |
| Direct Business Taxes | $2,379,617 |

**Rusk Co TX Pipeline Impacts**

| | Total Impacts |
|---|---|
| Total Economic Activity | $74,888,282 |
| Labor Income | $36,837,634 |
| Employment (person years) | 647 |
| Total Taxes | $3,098,684 |
| Indirect Business Taxes | $2,000,676 |
| Direct Business Taxes | $1,098,008 |

**Polk Co TX Pipeline Impacts**

| | Total Impacts |
|---|---|
| Total Economic Activity | $277,785,728 |
| Labor Income | $138,727,240 |
| Employment (person years) | 3,087 |
| Total Taxes | $12,119,342 |
| Indirect Business Taxes | $8,355,530 |
| Direct Business Taxes | $3,763,812 |

**Nacogdoches Co TX Pipeline Impacts**

| | Total Impacts |
|---|---|
| Total Economic Activity | $117,146,873 |
| Labor Income | $55,186,358 |
| Employment (person years) | 1,153 |
| Total Taxes | $5,057,296 |
| Indirect Business Taxes | $3,500,184 |
| Direct Business Taxes | $1,557,112 |

**Liberty Co TX Pipeline Impacts**

| | Total Impacts |
|---|---|
| Total Economic Activity | $268,364,448 |
| Labor Income | $136,883,630 |
| Employment (person years) | 2,907 |
| Total Taxes | $11,750,408 |
| Indirect Business Taxes | $8,028,991 |
| Direct Business Taxes | $3,721,417 |

**Jefferson Co TX Pipeline Impacts**

| | Total Impacts |
|---|---|
| Total Economic Activity | $255,467,034 |
| Labor Income | $134,294,673 |
| Employment (person years) | 2,033 |
| Total Taxes | $9,927,763 |
| Indirect Business Taxes | $6,414,313 |
| Direct Business Taxes | $3,513,450 |

**Hardin Co TX Pipeline Impacts**

| | Total Impacts |
|---|---|
| Total Economic Activity | $66,270,340 |
| Labor Income | $32,453,997 |
| Employment (person years) | 699 |
| Total Taxes | $2,745,214 |
| Indirect Business Taxes | $1,811,512 |
| Direct Business Taxes | $933,702 |

**Franklin Co TX Pipeline Impacts**

| | Total Impacts |
|---|---|
| Total Economic Activity | $59,190,668 |
| Labor Income | $29,616,752 |
| Employment (person years) | 787 |
| Total Taxes | $2,639,547 |
| Indirect Business Taxes | $1,787,990 |
| Direct Business Taxes | $851,557 |

**Cherokee Co TX Pipeline Impacts**

| | Total Impacts |
|---|---|
| Total Economic Activity | $234,589,577 |
| Labor Income | $108,833,677 |
| Employment (person years) | 2,639 |
| Total Taxes | $10,275,898 |
| Indirect Business Taxes | $7,367,067 |
| Direct Business Taxes | $2,908,831 |

**Angelina Co TX Pipeline Impacts**

| | Total Impacts |
|---|---|
| Total Economic Activity | $189,879,305 |
| Labor Income | $94,782,412 |
| Employment (person years) | 1,857 |
| Total Taxes | $8,088,853 |
| Indirect Business Taxes | $5,896,658 |
| Direct Business Taxes | $2,192,195 |

**Wood Co TX Pipeline Impacts**

| | Total Impacts |
|---|---|
| Total Economic Activity | $290,128,984 |
| Labor Income | $136,815,833 |
| Employment (person years) | 3,083.83 |
| Total Taxes | $12,333,982 |
| Indirect Business Taxes | $8,617,448 |
| Direct Business Taxes | $3,716,534 |

***Pipeline-related economic activity as a percent of personal income:***

An alternative approach to evaluating the economic impacts of the Gulf Coast Project on the states of Oklahoma and Texas, as well as the individual counties, is to calculate the impact of construction expenditures as a percent of personal income (see Table 3). At the state level, the impacts are quite modest. In Oklahoma, pipeline construction impacts were equivalent to 1.4 percent of the state's 2012 personal income.

In Texas, a much larger state, economic activity associated with pipeline construction amounted to a mere 0.3 percent of statewide personal income.

At the county level, however, economic activity associated with construction of the Gulf Coast Project represented a sizeable portion of income in most cases. This was especially true in Oklahoma, where pipeline activities averaged 31 percent of personal income and in one case, Coal County, 74 percent. The average for the affected Texas counties was considerably less at 9.9 percent, though in two cases—Delta and Wood—pipeline construction impacts were greater than 20 percent of 2012 personal income.

In sum, the Gulf Coast Project pipeline contributed substantially to the economic health of most of the affected counties during the 2012-2014 construction period. In the years ahead, recurring expenditures for operations and maintenance of the pipeline will continue to support jobs while generating income and tax revenues for Oklahoma, Texas and the 24 affected counties.

Table 3

**"Economic Activity" From Pipeline Construction for Counties Affected by Gulf Coast Project as a Percent of 2012 Personal Income (in Dollars)**
**Source: U.S. Bureau of Economic Analysis (BEA)**

| State / County | Total Personal Income 2012 | Pipeline Construction Economic Impact | Pipeline Activity as a Percent of Personal Income |
|---|---|---|---|
| **Oklahoma** | **$154,958,271,000** | **$2,143,364,856** | **1.4%** |
| Lincoln | 1,115,684,000 | 470,110,040 | 42.1% |
| Creek | 2,445,846,000 | 31,407,432 | 1.3% |
| Okfuskee | 315,307,000 | 70,112,447 | 22.2% |
| Seminole | 854,543,000 | 230,692,167 | 27.0% |
| Hughes | 429,589,000 | 133,019,258 | 31.0% |
| Coal | 179,136,000 | 132,255,757 | 73.8% |
| Atoka | 394,865,000 | 108,674,377 | 27.5% |
| Bryan | 1,320,792,000 | 290,180,460 | 22.0% |
| **Average of Counties** | **$881,970,250** | **$183,306,492** | **30.9%** |
| **Texas** | **$1,111,110,166,000** | **$3,638,561,905** | **0.3%** |
| Fannin | 1,061,316,000 | 35,872,639 | 3.4% |
| Lamar | 1,750,363,000 | 177,534,800 | 10.1% |
| Delta | 168,055,000 | 52,780,601 | 31.4% |
| Hopkins | 1,199,580,000 | 120,025,111 | 10.0% |
| Franklin | 381,729,000 | 59,190,668 | 15.5% |
| Wood | 1,381,097,000 | 290,128,984 | 21.0% |
| Upshur | 1,540,129,000 | 32,921,217 | 2.1% |
| Smith | 8,889,117,000 | 215,496,332 | 2.4% |
| Rusk | 1,789,175,000 | 74,888,282 | 4.2% |
| Cherokee | 1,560,724,000 | 234,589,577 | 15.0% |
| Nacogdoches | 1,950,059,000 | 117,146,873 | 6.0% |
| Angelina | 3,010,988,000 | 189,879,305 | 6.3% |
| Polk | 1,776,251,000 | 277,785,728 | 15.6% |
| Liberty | 2,685,134,000 | 268,364,448 | 10.0% |
| Hardin | 2,213,049,000 | 66,270,340 | 3.0% |
| Jefferson | 9,658,735,000 | 255,467,034 | 2.6% |
| **Average of Counties** | **$2,563,468,813** | **$154,271,371** | **9.9%** |

## APPENDIX A

### Keystone XL Pipeline – A Potential Economic Boon for America

The fourth and final phase of the Keystone pipeline system is known as Keystone XL. The Keystone XL Pipeline is a proposed 1,179-mile (1,897 km), 36-inch-diameter crude oil pipeline beginning in Hardisty, Alberta and extending south to Steele City, Nebraska.[14] This pipeline is a critical infrastructure project for the energy security of the United States and for strengthening the American economy. Along with transporting crude oil from Canada, the Keystone XL Pipeline will also support the significant growth of crude oil production in the United States from producers in the Bakken region of Montana and North Dakota. This pipeline will allow Canadian and American oil producers more access to the large refining markets found in the American Midwest and along the U.S. Gulf Coast.[15] Gulf Coast refineries were specifically built to process heavy crude, the likes of which is produced from the Canadian oil sands. Canadian crude will help replace heavy crude imports from unstable and unfriendly countries like Venezuela. The Keystone XL pipeline would have the capacity to transport 830,000 barrels of oil per day to Gulf Coast and Midwest refineries.

The Keystone XL pipeline is a "shovel-ready" project that would provide tremendous economic benefits for American communities. Approving the estimated $5.3 billion project would create approximately 9,000 construction jobs. When combined with

[14] http://keystone-xl.com/about/the-keystone-xl-oil-pipeline-project/
[15] http://www.transcanada.com/keystone.html

the southern portion of the Keystone pipeline (the Gulf Coast Project), it is estimated that the total $7 billion pipeline would create 20,000 jobs: 13,000 in construction and 7,000 in manufacturing. When both direct and indirect effects are considered, the project could add close to $20 billion to U.S. GDP and pay over $5 billion in taxes to local counties over its lifetime.[16] The State Department estimates that Keystone XL and the Gulf Coast Project could create 42,000 direct and indirect jobs. Furthermore, the United States receives 89 cents back from every dollar spent on Canadian goods and services compared to 29 cents on every dollar from Venezuela and the Middle East. This makes the benefits of Keystone XL even more compelling.[17] The spinoff activity from Canadian oil sands projects is expected to reach $45 billion dollars per year while supporting nearly 465,000 jobs in the United States by 2035.[18]

Despite its immense potential benefits, Keystone XL has been the subject of vehement political debate since it was announced in 2008. The Keystone XL proposal has faced criticism from environmentalists and some members of the U.S. Congress. Unlike the Gulf Coast Project, the Keystone XL pipeline must receive approval from the U.S. Department of State because it crosses the international border between Canada and the U.S. In January 2012, President Barack Obama rejected the application amid protests about the pipeline's impact on Nebraska's environmentally sensitive Sand Hills region and the Ogallala Aquifer. TransCanada Corporation changed the original proposed route of Keystone XL to minimize "disturbance of land, water resources and special areas."

[16] http://oilsandsfactcheck.org/wp-content/uploads/2012/12/KXL_jobs_economy.pdf
[17] http://keystone-xl.com/pipelines-creating-jobs-and-opportunities/
[18] http://keystone-xl.com/pipelines-creating-jobs-and-opportunities/

Nebraska Governor Dave Heineman approved the new route in January 2013. On April 18, 2014 the Obama administration announced that its review of the controversial Keystone XL pipeline has been extended indefinitely, until at least after the November 4, 2014 mid-term U.S. elections. The department cites an ongoing Nebraska court battle over the state law used to approve the route as reason to lengthen its review. TransCanada's attorneys are continuing to negotiate with U.S. Department of State officials over what effect Keystone XL would have on sensitive wildlife areas and water supplies in states between Oklahoma and Canada.

In an interview with Bloomberg, TransCanada CEO Russ Girling says that even if President Obama approves the pipeline in 2014, it will not be operational until 2016. North America needs an energy delivery infrastructure that transports crude oil from the Canadian province of Alberta and the Bakken Shale in North Dakota to refineries along the Gulf Coast. But right now, the pipeline does not have regulatory approval. Though opponents of the pipeline claim their concern is with a possible spill that could contaminate groundwater, their ultimate goal is to stymie oil production in the Canadian oil sands as well as the Bakken. Concern over possible accidents is legitimate. However, the answer isn't to stop building pipelines but rather to build newer and safer ones, such as the proposed Keystone XL.

Criticism of the Gulf Coast Project

After years of legal and regulatory fights, the Gulf Coast project successfully began commercial operations in January 2014. However, TransCanada continues to face pushback from both environmentalists and landowners. During construction, TransCanada faced protests and difficulties securing land through eminent domain. Although operations have begun, landowners continue to challenge the company's right to take their land in court. In response to concerns, TransCanada is committed to developing fair and honest relationships with landowners by establishing and maintaining open communication. The company is also committed to negotiating in good faith and paying fair value for the land rights needed for the pipeline project. Finally, TransCanada designs, operates and maintains the Gulf Coast Project in a way that respects the needs of landowners and the environment.[19]

Many who live along the path of the pipeline also fear that a leak could contaminate land and waterways. To combat these fears, TransCanada says that the pipeline is the safest ever built. It was built with some of the strongest steel that exists, is buried deeper than most other pipelines, and has more automated shut-off valves than a typical pipeline. The pipeline also uses advanced technology such as satellite imagery that is refreshed every five seconds and can quickly pinpoint problems.[20] Finally, routes for the pipeline were selected to minimize impacts to the land, environment and landowners.

[19] http://www.gulf-coast-pipeline.com/community-engagement/landowners/
[20] TransCanada spokesman Shawn Howard, quoted in Fort Worth Star Telegram

Environmentalists have also protested against the Keystone Pipeline, imploring the government to shut down the pipeline and discourage the use of fossil fuels. On multiple occasions, the U.S. Department of State has concluded that the Keystone Pipeline poses "no significant environmental impact on climate change." However, environmentalists deeply opposed to all hydrocarbons have threatened to withhold financial support to politicians who favor the operation of the Gulf Coast Project and the construction of the northern portion of Keystone XL. This continues to create controversy surrounding the pipeline, leading to delays and fostering negative public perception. However, opponents must realize that crude oil will still get to market, even if it has to continue to travel by railroad. Even if the U.S. refused to buy crude from Canada, Canada would simply sell the oil to other countries, where it would still be consumed just as in the U.S. By delaying the approval of the Keystone Pipeline, opponents are only serving to block the safest and most effective way to transport oil. They are also hampering North America's progress toward energy security.