

**Andy Black**  
**Association of Oil Pipe Lines**  
**Answers to Questions for the Record**  
**Subcommittee on Energy & Power Hearing March 6, 2014**

**The Honorable Ed Whitfield**

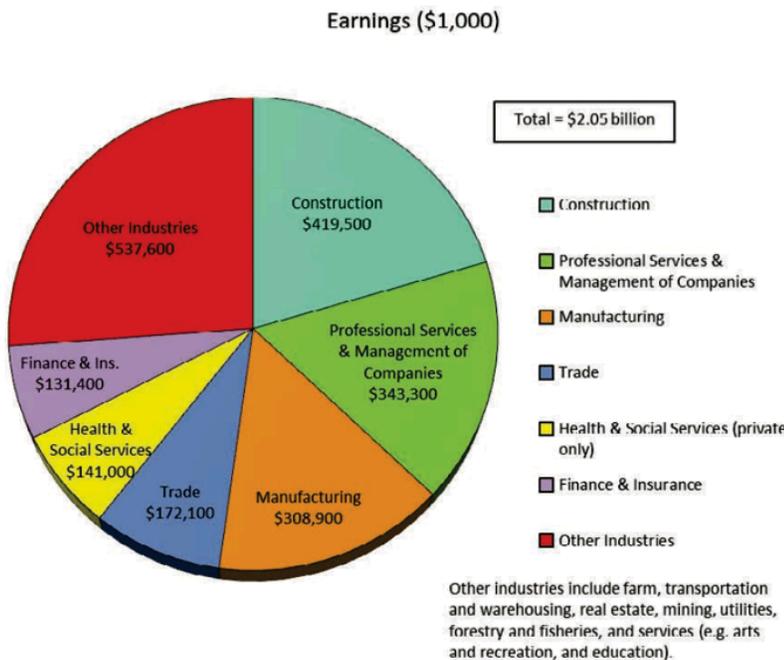
**1. What are the jobs benefits of the proposed Keystone XL pipeline, the total number of direct, indirect and induced jobs their types, locations, economic benefits to workers, and overall economic benefits?**

A. The proposed Keystone XL pipeline is expected to support approximately 42,100 direct, indirect and induced jobs with over \$2 billion in worker earnings, according to economic analysis completed for the U.S. State Department’s Final Supplemental Environmental Impact Statement (FSEIS) for the project.

Approximately 16,100 come directly from firms that are awarded contracts for goods and services, including construction, directly by the project sponsor. A further 26,000 would result from indirect and induced spending, consisting of goods and services purchased by the construction contractors and spending by employees working for either a construction contractor or for any supplier of goods and services required in the construction process.

Workers across the nation will benefit from Keystone XL-related jobs. While residents of the project area in Montana, South Dakota, Nebraska and Kansas would hold approximately 12,000 of the jobs associated with Keystone XL, residents in the rest of the United States would hold 30,000 Keystone XL jobs.

Furthermore, while Keystone XL will benefit construction workers, it will also benefit workers in good-paying jobs from manufacturing to service professions. Figure 1.10.1-2 from the FSEIS, copied below, breaks out worker earnings expected from the project. Not



only will Keystone XL provide about \$420 million in construction trade earnings, it will provide \$309 million in manufacturing earnings, and \$343 million in professional services and management earnings. Table 4.10-5 of the FSEIS, on the next page, describes in detail how Keystone XL will support 6,800 construction jobs, 4,600 manufacturing jobs, 5,100 professional services and management jobs, 5,700 jobs in accommodations and food services, 2,700 health and social services jobs, as well as numerous other trades and professions.

**Table 4.10-5 Total U.S. Employment and Earnings by Industry Supported by Construction of the Proposed Project**

Industry	Employment (average annual jobs)			Earnings (thousands of 2010 dollars) <sup>a</sup>		
	Current (2010)	Total Effects of Proposed Project <sup>a</sup>		Current (2010)	Total Effects of Proposed Project <sup>a</sup>	
	Jobs <sup>b</sup>	Jobs <sup>b</sup>	Share of 2010 Total	\$1,000 <sup>c</sup>	\$1,000 <sup>c</sup>	Share of 2010 Total
Farm	2,665,000	300	0.01%	77,215,000	7,400	0.01%
Forestry, Fisheries, & Support, including Farm Support	835,800	100	0.01%	22,548,000	3,800	0.02%
Mining	1,185,500	300	0.02%	83,081,000	28,300	0.03%
Utilities	579,000	100	0.02%	73,306,000	18,400	0.03%
Construction	8,914,200	6,800	0.08%	479,541,000	419,500	0.09%
Manufacturing	12,206,900	4,600	0.04%	891,607,000	308,900	0.03%
Trade	23,808,200	4,400	0.02%	1,009,713,000	172,100	0.02%
Transportation & Warehousing	5,504,400	2,000	0.04%	295,408,000	110,400	0.04%
Information	3,210,700	600	0.02%	294,252,000	40,100	0.01%
Finance & Insurance	9,651,300	2,200	0.02%	647,655,000	131,400	0.02%
Real Estate & Rental	7,459,200	1,600	0.02%	148,119,000	31,200	0.02%
Professional Services & Management of Companies	13,765,700	5,100	0.04%	1,110,322,000	343,300	0.03%
Administrative & Waste Services (private only)	10,478,800	2,300	0.02%	353,648,000	71,100	0.02%
Educational Services (private only)	4,076,600	500	0.01%	146,724,000	18,000	0.01%
Health & Social Services (private only)	19,062,300	2,700	0.01%	1,000,258,000	141,000	0.01%
Arts, Entertainment & Recreation Services	3,777,100	600	0.02%	100,953,000	13,600	0.01%
Accommodations & Food Services	12,048,000	5,700	0.05%	278,844,000	103,300	0.04%
Other Services	9,858,700	1,800	0.02%	330,361,000	62,100	0.02%
Government & Government Enterprises	24,680,000	400	< 0.01%	1,642,674,000	29,900	< 0.01%
<b>Total</b>	<b>173,767,400</b>	<b>42,100</b>	<b>0.02%</b>	<b>8,986,229,000</b>	<b>2,053,800</b>	<b>0.02%</b>

<sup>a</sup> Time period for realizing all effects is uncertain.

<sup>b</sup> Includes direct, indirect, and induced full-time and part-time jobs by place of work.

<sup>c</sup> Labor earnings by place of work

With current national policy debates over a federal minimum wage and income inequality, it is important to note the good-paying jobs and wages Keystone XL workers will receive. Factoring the number of expected jobs into the total expected earnings yields \$67,152 in earnings per manufacturing job, \$67,313 in earnings per professional services and management job, and \$61,691 per construction job.

**2. What is needed to encourage or ensure there is sufficient pipeline infrastructure development to meet the nation's energy needs?**

- A. Prompt review and permitting of pipeline projects, certainty as to the rates that pipelines will be able to charge to shippers, and commitment by shippers to use proposed pipeline projects are all needed to encourage pipeline infrastructure development.

Delayed government review and approval of pipeline construction projects can slow pipeline development. The most prominent example of increased permit delay is the Keystone XL project. The federal government issued a presidential permit for the largely similar Alberta Clipper project in a little over 2 years ending in 2010. However, total review time for the Keystone XL project has now stretched to over 5 years. Even a simple review, consisting of a change in the corporate name of a presidential permit holder, is facing a multi-year review.

Review of previously straight-forward nationwide permit (NWP) authorizations by the Corps of Engineers also seems to be slowing. Reports are growing of greater review times after a recent court challenge to the nationwide permit program and its application to the Gulf Coast pipeline from Cushing, OK to the Gulf Coast, even though that challenge was unsuccessful. There is also concern that limited Corps staff to review NWP authorizations is slowing processing times.

In order for project sponsors to construct pipeline infrastructure, they need certainty as to the rates that may be charged to shippers. Traditionally, project sponsors seek contractual commitments from potential shippers wishing to ship product on a proposed pipeline to ensure there is demand for the proposed pipeline and a commitment to pay the agreed upon rate and use the line over time. The project sponsor makes its investment and obtains financing for the project based upon these contractual commitments, and typically files a petition with the U.S. Federal Energy Regulatory Commission (FERC) seeking assurance that FERC will honor the sanctity of these contract commitments. Last year, a recommended decision issued by a FERC Administrative Law Judge (ALJ) hearing a rate case departed from established policy and found that the rates agreed upon in such shipper contractual commitments could be challenged and rejected. AOPL and others argued for FERC to reject the ALJ's recommendation, which it did. Continued preservation of this system of shipper commitments is vital to ensuring future financing of pipeline construction projects.

Lastly, shipper demand is necessary to ensure pipeline construction. Pipeline operators and project developers are eager to build new pipelines. However, demand from shippers wishing to commit to using the new line over time is necessary to justify the projects and obtain project financing. Demand for a specific project is contingent on many factors. Geographic location of supply and potential shippers, alternative modes of transportation, and projections of commodity pricing and demand in the future are some of the key factors that play into decision making. Regional production increases may indicate the potential for a new pipeline servicing that area. However, the right combination of specific pipeline route, competition from other modes of transportation, and alternative supply sources in the receiving markets are necessary for a proposal to go from the drawing board to construction.

**3. To what degree will reversal of liquid pipelines currently servicing the Midwest impact regional propane deliveries?**

- A. Liquid pipelines operate in dynamic markets that are experiencing geographic shifts in supply and demand. These vastly changing market dynamics are causing changes in regional delivery patterns with respect to propane and other energy liquids. Pipelines are responding to these changes by not only constructing new facilities, but also by making efficient investments to increase capacity and reverse flows on existing systems to meet customer demand.

Historic propane pipeline usage patterns and available future space both indicate reversal of liquid pipelines in the Midwest will not have a material impact on propane deliveries over the long-term, and that market dynamics are driving the need for changes in pipeline flows. In the case of the Cochin line previously delivering propane from Alberta, Canada to the U.S. Midwest, that line was underused by propane shippers due to a precipitous decline in demand for propane shipments from Canada for over a decade. Increased oil and gas production in the U.S. has resulted in increased U.S. domestic production of propane, a natural byproduct of oil and gas production. Consequently, U.S. propane marketers are importing less Canadian propane and taking advantage of the abundant U.S. production. Reports put Cochin operating at only one-third of its total capacity. (Kinder Plans Cochin Pipeline Reversal, Calgary Herald, Apr. 24, 2012) Operators of Cochin made the decision to reverse Cochin because of Cochin's underutilization and strong market support to put the line to better use delivering other products.

Similarly, the development of the Marcellus Shale production region of Pennsylvania and Ohio is resulting in increased local supply of propane for Midwestern markets. This is reducing the need to transport propane from the Gulf Coast to the Midwest via the TEPPCO line owned by Enterprise Products Partners. TEPPCO, which includes two parallel pipelines, proposed retaining one of the lines to continue delivering natural gas liquids, including propane, from the Gulf Coast to the Midwest, and reversing the flow direction of the second line to carry new production from the Marcellus to Gulf Coast manufacturing markets. There was a concern voiced at the hearing that the new configuration would leave insufficient capacity for propane deliveries to the Midwest on the remaining TEPPCO line. As part of the regulatory process to allow the offering of southbound service on one of the two TEPPCO lines, TEPPCO analyzed the usage and capacity of the remaining northbound TEPPCO line. (FERC Docket No. OR13-20-000, p. 15) That analysis of the remaining northbound line demonstrated projected volumes of propane and other similar liquids at that time would represent only 74% of the capacity available to such products from the Gulf Coast to southern Illinois, and only 56% of the available capacity from southern Illinois to southern Indiana.

There is projected to be enough pipeline capacity to transport propane supplies where they are needed. Propane shippers can prepare for periods of high demand, like experienced this past winter, by shipping on pipelines to consuming areas and injecting these supplies into storage in advance.

## The Honorable Pete Olson

1. **My home state of Texas is crisscrossed by pipelines. Ever since the early 1900s, they have been a fact of life for Texans. Modern pipelines mean quick and reliable access to affordable energy. They also have meant good-paying jobs for the men and women across even rural parts of this state.**

**However, it is becoming clear that we need even more pipelines. The Eagle Ford shale is booming. Production has spiked in just the last few years from 200,000 barrels of oil per day up to beyond 1.2 million. While that is great news, we have seen that some regions grow so quickly that they move faster than their infrastructure allows.**

- a. **Mr. Black, can you tell me some of the deciding factors when a company looks at a region and determines whether to build new pipelines?**

The decision to build a new pipeline is based on many factors, including the availability and volume of supply at a proposed project's starting point and the demand for supply at its terminus, the desire of shippers to contract for usage of the pipeline, the cost to construct the pipeline, competing modes of transportation to deliver that product to market, and other siting, permitting and logistical challenges facing the potential pipeline. Projects must demonstrate their viability over the longer term to pay off construction financing and attract capital. This means customers must commit to use a proposed pipeline over the long term, and the return on investment must be adequate. Projections of customer demand, commodity prices, the cost of shipping product with alternative modes of transportation such as truck, rail and waterborne transportation, and customer desire for flexibility to change delivery volumes or locations, may all factor into whether a pipeline project gains the support to go forward.

- b. **What are some of the safety improvements that we see on pipelines compared to a decade or two ago?**

Pipelines are the safest way to transport crude oil and petroleum products. A barrel of oil delivered by pipeline has a 99.999% chance of reaching its destination safely. Over the last 10 years, the overall number of pipeline releases are down over 60 percent, and volumes released are down over 40 percent. Specific causes of pipeline incidents, such as corrosion and 3<sup>rd</sup> party damage, are down almost 80%.

That said, pipeline incidents do happen on rare occasions. This drives the pipeline industry's goal of zero pipeline incidents. To that end, pipeline operators spent over \$1.6 billion in 2012 evaluating, inspecting and performing maintenance on their pipelines. In 2014, the pipeline industry launched the *Pipeline Safety Excellence*<sup>TM</sup> initiative reflecting the shared values and commitment of pipeline operators to building and operating pipelines. The initiative includes jointly held industry-wide pipeline safety principles such as zero incidents, promoting safety culture, organization-wide commitment to safety, continuous improvement, and learning safety lessons from experience. Pipeline operators engage in a range of

industry-wide pipeline safety efforts, devoting personnel and resources to developing new pipeline standards and recommended practices, sharing safety lessons, and improving pipeline safety across the entire industry.

In 2014, the pipeline industry released its first annual pipeline safety performance report, sharing with the public in one place a range of pipeline safety data, reflecting both safety successes and areas needing improvement. Coupled with that, pipeline operators released a 2014 strategic plan containing seven different strategic initiatives to improve industry-wide pipeline safety. Over the next year, pipeline operators will improve pipeline inspection technology, develop industry-wide recommended practices to fight pipeline cracks, detect pipeline leaks, and respond to emergencies. Pipeline operators will also develop ways to better integrate data needed to keep pipeline safe, share, incorporate and measure safety learning, and implement comprehensive safety management programs.