

Economic Impact Report

The Economic & Fiscal Impact on Maine of the Poland Spring Company

**For: Nestlé Waters North America dba
The Poland Spring Company**

**From: Charles Lawton, Ph.D.
Consulting Economist
York, Maine 03909**

December 4, 2017

Table of Contents

A.	Executive Summary	p. 3
B.	A Brief History of the Poland Spring Company	p. 5
C.	Economic Impact on Maine of Poland Spring in 2016	p. 6
	1. Impact of Operations	p. 6
	2. Impact of Capital Investments	p. 12
	3. Impact on Maine's Transportation Network	p. 13
	4. Indirect Impacts & Total Impact	p. 15
D.	Potential for Future Growth	p. 17

A. Executive Summary

The Poland Spring Company was founded in 1845 to source, bottle and sell spring water. Since its humble beginnings, the company has grown to become the top-selling brand of spring water sold in the United States. While not generally recognized as such, Poland Spring has also grown to become one of Maine's most significant, renewable natural resource-based companies, comparable in its way to the State's iconic forest products, agriculture and fishing industries.

Poland Spring sources its water from eight different natural springs in Maine, operates three bottling plants in Maine and ships its products primarily to the Boston and New York metro areas. In doing this, the company turns a clean and rapidly renewable Maine natural resource into a valuable product providing jobs for Maine workers and sales for Maine businesses. It is a perfect example of how traded jobs bring wealth into Maine.

In 2016, the company sourced over 900 million gallons of water to meet the growing national demand for bottled water. Its operations supported 861 good paying jobs with benefits for residents of 124 Maine cities and towns located in 11 of Maine's 16 counties.¹ It provided over \$136 million in sales for 261 Maine-based vendors located in 83 cities and towns all across the state. It paid \$7.7 million in state and local sales, income, property and other taxes. Over the past decade, the Company has invested nearly \$170 million upgrading its buildings, equipment, vehicles and technological capabilities. Both the Company's operational spending and its capital spending has substantial upstream, supply-chain and employee spending impacts that flow through the Maine economy. Incorporating these indirect impacts, Poland Spring's total economic impact on the State of Maine in 2016 amounted to more than \$390 million in sales for Maine companies supporting the full-time equivalent of over 2,300 jobs earning incomes totaling nearly \$120 million. Collectively, these activities generated over \$21 million in tax and fee revenue for Maine state and local governments.² In addition, the company contributed nearly \$475,000 to 115 separate community organizations located in more than 25 Maine municipalities, and donated

¹ The economic impact calculations in this report are derived from company spending in 2016. Distribution of Maine employees is based on a payroll report generated in November 2017.

² The company data used in this report came from Poland Spring's corporate headquarters. The author is responsible for analysis of the data including using the IMPLAN model for Maine to estimate indirect impacts. Additional data sources are cited where used.

thousands of cases of bottled water to help citizens all across the country cope with natural disasters.

Table 1 summarizes these impacts.

Table 1 Total Economic Impact on Maine of Poland Spring, 2016

Impact Item	Spending/Sales	Jobs	Earnings
<i>Operational Spending Total</i>	<i>\$186,000,000</i>	<i>861</i>	<i>\$49,500,000</i>
<i>Capital Spending</i>	<i>\$15,600,000</i>	<i>130</i>	<i>\$5,800,000</i>
Total Direct Impact	\$201,600,000	990	\$55,300,000
Indirect (Supply Chain) Impact	\$154,500,000	920	\$46,900,000
Induced (Worker Spending) Impact	\$35,300,000	440	\$17,700,000
Total Economic Impact	\$391,400,000	2,351	\$119,900,000
State & Local Taxes & Fees included in Total Impact	\$21,000,000	n.a.	n.a.

Sources: Direct impact includes Poland Springs' operational and capital spending in 2016; data from Poland Spring; the 130 jobs listed under capital spending are not Poland Spring employees, but the employees of the construction contractors used to execute the Company's capital improvement plans; indirect impact refers to the sales to Maine companies (and its resulting Maine employment) flowing from Poland Spring's non-payroll operational spending; induced impact refers to the sales to Maine companies (and its resulting Maine employment) flowing from the spending in Maine of both Poland Spring employees and the employees of all the vendor companies who receive some revenue from Poland Spring operations; operational spending and fiscal data from author's use of IMPLAN model of the Maine economy; Some portion of the \$391.4 million in total impact goes to Maine state and local governments in the form of sales, income, property, fuel and other taxes and fees; based on the IMPLAN analysis this amounted to just over \$21 million in 2016; this amounts to the fiscal portion of Poland Spring's total impact in 2016.

The purpose of this report is to explain and quantify the components of these impacts on the State of Maine and on the regions where the Company's operations are located.

B. A Brief History of the Poland Spring Company

The Poland Spring Company was founded in 1845 by the Ricker family to source, bottle and sell spring water. This business and the resort the Rickers built nearby survived under family ownership into the 1930's. Over the next four decades, ownership changed and the business continued, but by the late 1970's sales were only \$4 million, employment was 24 and the company was near bankruptcy.

In 1980, a group of New England entrepreneurs with experience in the soda bottling and distribution business facilitated purchase of the Poland Spring Company by Perrier, the French company that had pioneered development of the mineral water business in Europe. Perrier hoped to expand its bottled water business in the United States. The combination of local leadership with knowledge and commitment to the region and international investors with capital and knowledge of the bottled water business made this expansion strategy successful. Perrier invested over \$60 million in a complete renovation and expansion of the company's bottling plant in Poland, Maine and sales expanded to \$80 million in 1987 supporting creation of hundreds of new jobs.

In the 1990's, the popularity of bottled waters expanded rapidly, and major European food & beverage as well as U.S. based soft drink companies bought small spring water companies all over the U.S. This increase in international competition and rapid expansion in the scale of production increased the need for investment capital. Resulting consolidation of the global food and beverage industry led, in 1992, to the purchase of Perrier for \$2.6 billion by Nestlé.

Following this purchase, Poland Spring began an extensive search for new sources of spring water and a site for a new bottling plant. The company ultimately settled on Hollis where it invested over \$100 million in the late 1990's in a state-of-the art bottling plant. By 2000, Poland Spring had become the number one bottled water seller in the U.S., with sales of more than \$400 million. The Hollis plant has continued to expand. Between its original construction and 2016, it has received total capital improvements totaling more than \$300 million. It is, today, one of the largest bottling plants in North America, employing approximately 400 people.

Since 2000, the demand for bottled water has continued to grow, and Poland Spring has continued its search for more sites for springs and bottling plants. From 2004 to 2009, the Company worked with the Town of Kingfield to permit, site and build a spring operation and bottling plant. It has invested nearly \$62

million to build a plant that in 2016 employed 66 people. The Company is now engaged in a \$40 million investment to expand this plant and create more jobs for local residents.

C. The Economic Impact of the Poland Spring Company in 2016

1. Operational Impact

The economic impact of Poland Spring's operations in Maine occur through four flows of money into the regional and state economy:

- the flow of payroll spending provided to its Maine employees;
- the flow of payments to its Maine-based vendors;
- the flow of tax and fee payments to state and local governments; and
- the flow of charitable donations the company makes to community organizations.

As of June 2016, the Poland Spring Company employed 861 people in Maine, making it the 45th largest private employer in Maine and the 5th largest manufacturing employer in the state. This represented an increase of over 200 jobs since 2005.

Table 2 Poland Spring Employment in Maine by Location, 2005-16

Location	June, 2005	June, 2016	2005-16
Poland Spring	375	349	-26
Hollis	231	393	162
Kingfield	0	66	66
Other	54	53	-1
Total	660	861	201

Source: Poland Spring.

Among the state's manufacturers, only The Bath Iron Works, the Pratt & Whitney Aircraft Group, S.D. Warren Paper, IDEXX Laboratories and New Balance Shoe employ more people. Perhaps even more significant is the Company's standing in the counties where it does business:

- ✓ in Androscoggin County, Poland Spring's plant in Poland is the 12th largest employer overall and the 3rd largest manufacturer, behind only Pioneer Plastics and Tambrands;
- ✓ in Franklin County, the Company's plant in Kingfield is the 20th largest employer overall and the 4th largest manufacturer, behind only Verso

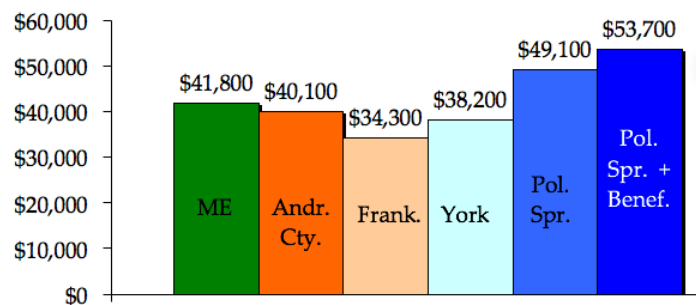
Paper, Jarden Plastics and Maine Wood Turning;

- ✓ in York County, the Company's plant in Hollis is the 9th largest employer overall and the 2nd largest manufacturer, behind only Pratt & Whitney and just ahead of Corning Medical Products

These facts underline the nature of the transformation that has changed Maine's (especially rural Maine's) economic structure over the past thirty years. They also illustrate why continued growth of Poland Spring is so critical to the communities where the Company does business. Except for BIW, the days of multi-thousand job mills providing an economic backbone for rural Maine are gone. The growth of entrepreneurial, export-based companies like Poland Spring are increasingly important for the state's rural economy so badly hurt by the decline and closure of so many of its traditional industries.

For the year ending June 30, 2016, Poland Spring paid over \$49 million in salary and benefits to 843 full- and part-time Maine-resident employees.³ This equates to an average annual wage of over \$49,000 and a wage and benefits total of nearly \$54,000. The average wage alone far exceeds the state all-industry average wage of \$41,800 and compares favorably with the state all-manufacturing average wage of \$53,700.⁴ Including benefits, Poland Spring jobs provide the means to a comfortable standard of living. This fact is particularly evident when considering where the Company's Maine employees reside. Figure 1 compares the average wages paid by Poland Spring in 2016 with the average pay for Maine and the counties where Poland Spring operates, and Table 2 below provides a list of the cities and towns in Maine from which the Company attracts its workers.

Figure 1 Poland Spring Wages Compared to State & Regional Averages, 2016

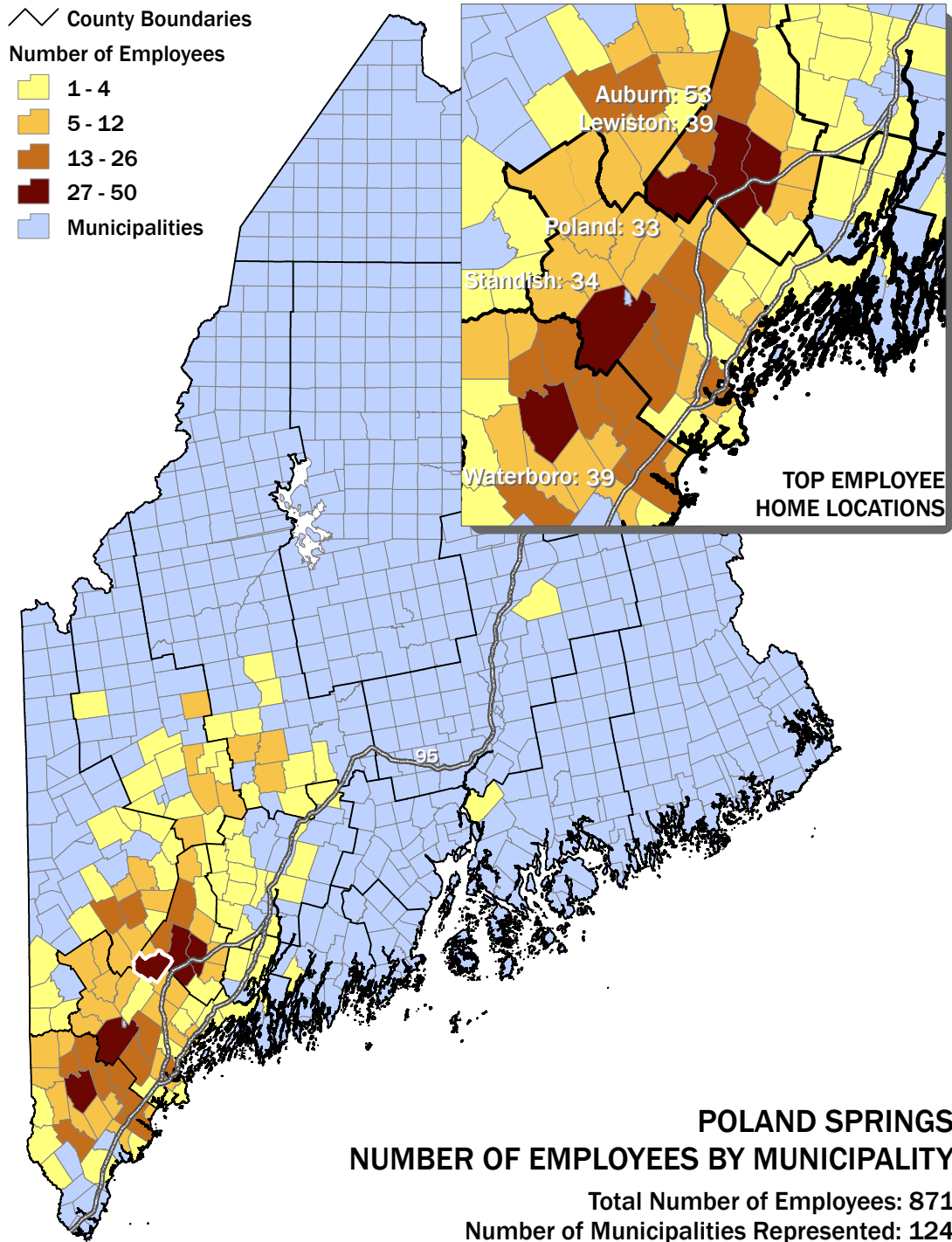


Sources: Poland Spring Company and Maine Department of Labor.

³ The 843 employees reported here refer to the number included in the fiscal year payroll ending June 30, 2016. The 861 reported in Table 1 refer to the total paid in calendar year 2016.

⁴ State wage data from Maine Department of Labor, <http://www.maine.gov/labor/cwri/qcew>.

Figure 2 Distribution of Poland Spring Employees by Town, 2017

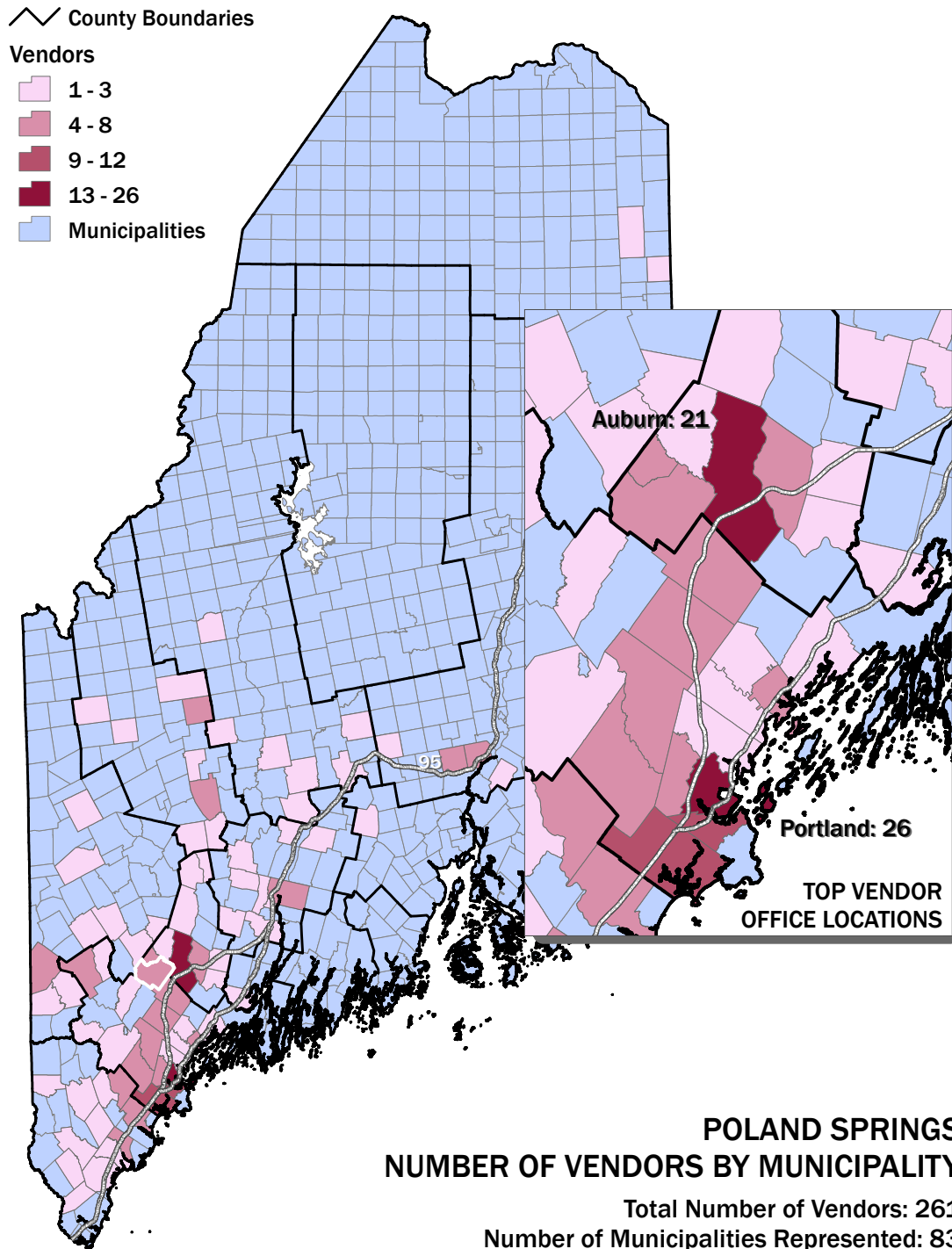


Beyond simply offering jobs, Poland Spring is improving the quality of its jobs. Recognizing the increasing challenge of finding and retaining employees in rural Maine, the company has raised starting salaries and has increased the proportion of its workers employed on a full-time basis. Between 2012 and 2016, the average monthly earnings for new hires in all industries in the Androscoggin County and rural Maine non-metro areas increased by 8%. For new hires in the beverage manufacturing sector, average monthly wages rose nearly 20%. In short, not just Poland Spring, but all the businesses in this growing manufacturing sector in Maine's rural areas are leading the way in increasing wages for new workers. Only in this way can the State's rural areas hope to attract the talent they need both to replace existing workers who will retire and to fuel future growth.⁵

The second source of Poland Spring's operational impact on Maine flows from the money it spends on Maine-based vendors who provide many of the materials and services it needs to turn Maine spring water into a product sold into the broader northeastern market. In 2016, this upstream vendor supply chain impact amounted to over \$136 million. Through these connections, the revenue from Poland Spring's sales beyond Maine became sales to 261 Maine businesses located in 83 communities across the state. These vendors range from several trucking companies and the International Paper corrugated container plant in Auburn earning millions of dollars of annual revenue to scores of small businesses and individual contractors earning hundreds of dollars in revenue. All of these vendors, in turn, spend money in Maine to hire their own employees and buy their own materials, thus further spreading the indirect impact of Poland Spring throughout the Maine economy.

⁵ Maine Department of Labor <https://qwiexplorer.ces.census.gov/static/explore.html#x=0&g=0>.

Figure 3 Distribution of Poland Spring Vendors by Town, 2016



The other operational impacts of Poland Spring flow from the money it pays in taxes and fees to Maine state and local governments (not including payments for water made to various municipal water districts that are included as vendor payments) and the money it donates to various non-profit organizations. In 2016, the company contributed nearly \$475,000 to 115 separate community organizations located in more than 25 Maine municipalities and paid \$7.7 million in income, property and payroll taxes in Maine.⁶

Finally, the Company has a substantial non-financial impact on Maine through its branding and marketing effort. Through its product labeling and shipment advertising in 2016, the Company put its “Proudly from Maine” message into the hands, eyes and consciousness of millions of customers on a daily basis. While it is impossible to give a financial value to such reputation and quality of place building, it is nevertheless valuable in reminding potential visitors and business investors about Maine and associating the State with the clean, fresh water they are drinking.

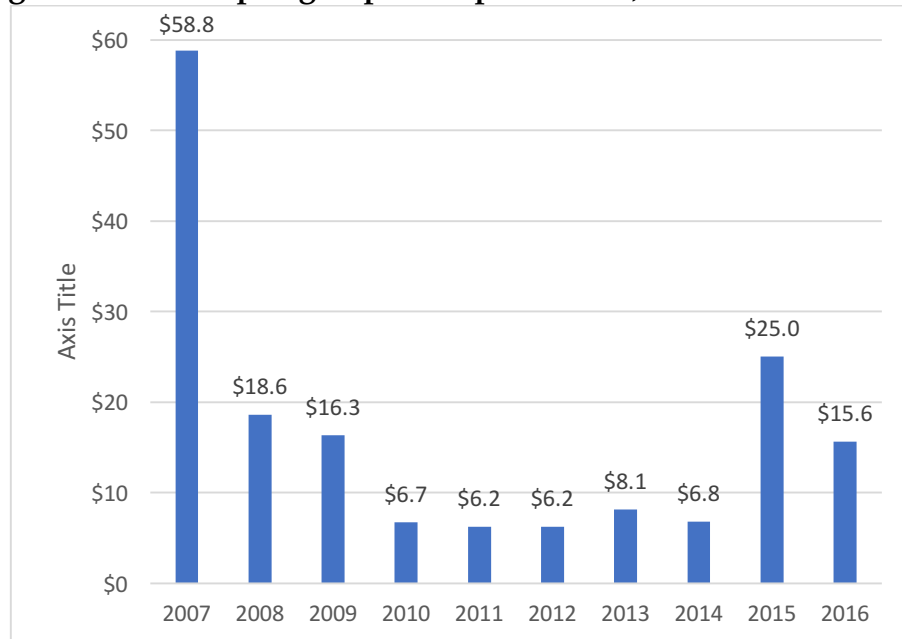
⁶ Information provided by Poland Spring. In addition to these financial commitments, Poland Spring every year donates thousands of cases of water to communities in need because of natural disasters and to U.S. Military forces engaged in famine and refugee relief efforts.

2. Capital Investment Impact

Poland Spring is the steward of 24 parcels of land encompassing over 5,600 acres from which it sources water for its bottling plants. In addition, the Company owns bottling facilities in Hollis, Poland and Kingfield and leases space in Westbrook. Together these facilities total over 1.5 million square feet of space. In 2016, the total assessed value of this land and property amounted to nearly \$191 million and generated nearly \$2.6 million in property tax payments for the thirteen municipalities where these properties were located.

Over the past decade, the Poland Spring has spent over \$168 million improving its land, expanding its production facilities and upgrading its equipment. This investment illustrates the Company's commitment to its future growth in Maine.

Figure 4 Poland Spring Capital Expenditures, 2007-2016 (\$ million)



Source: data provided by Poland Spring; 2007 reflects major investment in Kingfield plant; 2015 and 2016 data reflect expansion of Kingfield plant.

This investment underlines the Company's confidence in its future prospects and its commitment to its workers and to Maine. It also represents a significant source of income for Maine architects, engineers, contractors and trades people as well as for equipment and building maintenance vendors across the state.

3. Impacts on Maine's Transportation System

For most of its history, Poland Spring has transported truckloads of its bottled water from its bottling plants in Maine to wholesale distribution centers in Massachusetts where it is redistributed for shipment to final customers. In 2016, the company began a pilot program with Pan American Railways whereby some of that road traffic was diverted to rail transport. Instead of trucking all pallets of bottled water from plants in Hollis and Kingfield, Maine to a wholesale distribution center in Clinton, Massachusetts, certain pallets from the Kingfield plant were diverted to the rail depot in Waterville, and certain pallets from the Hollis plant to the rail depot in Portland. These pallets were then shipped by rail to the rail depot in Ayer, Massachusetts, then trucked the much shorter distance from Ayer to Clinton.

This diversion has a number of advantages:

- a. comparing the weight and fuel differential between truck and rail transport for the 4,125 loads shipped in this fashion indicated a reduction of 542,700 miles with a carbon (CO₂) emission reduction of 4,960 metric tons; using an Environmental Protection Agency (EPA) methodology for calculating the social cost of carbon emissions⁷, this reduction has a value in 2016 of \$183,000—a value that will clearly increase if Poland Spring's use of this rail option expands in the future;
- b. the drive from Maine to Clinton, Massachusetts often required Maine drivers to return home empty—a 50% loss in paid miles; such deadhead jobs are therefore often taken by non-Maine-based cross country drivers for whom an empty trip to Maine with a return load to Clinton followed by a full load from Clinton to destinations to the south and west was proportionally a far smaller revenue loss than for a Maine driver; by comparison virtually all trips from Poland Spring plants to rail depots in Waterville and Portland go to Maine truckers; thus this rail diversion program holds the potential to actually create more jobs for Maine truckers;
- c. by increasing business at Maine rail yards in Waterville and Portland, Poland Spring is (at least if this pilot program continues) helping other Maine shippers who may consider rail shipments if there are more trains with more regular departures; and

⁷ <https://www.whitehouse.gov/sites/default/files/omb/inforeg/scc-tsd-final-july-2015.pdf>.

- d. perhaps most importantly, more certain rail transport options give Poland Spring greater freedom to consider expansion to sites in Maine further west and north of the Company's existing plants as ways to further serve the growing national market without the added cost of longer and longer truck transport requirements; this possibility is particularly true if the Company can commit sufficient volumes to obtain more dedicated — Poland Spring only — trains as they now have on Fridays and Saturdays from Waterville.

4. Indirect Impacts

All of this Poland Spring originated spending—from both operational activities and from capital investments—ripples out into the larger Maine economy. Much of it becomes, in subsequent rounds of spending, sales to truckers, the railroad, materials suppliers, maintenance and repair vendors, fuel suppliers, equipment vendors, snow plow operators, auto dealers, banks, insurance agents, architects, construction trades workers, advertising agencies, electricity, heating oil and telephone companies as well as state and local governments. Each of these enterprises in subsequent rounds of spending buys from other Maine businesses in ever smaller but ever widening ripples of indirect economic impacts up the Company's various supply chains.

The same ripple effects apply to the consumer spending of Poland Spring's employees and of the employees of the vendors noted above. All of this Poland Spring-generated consumer spending also spreads in multiple rounds of subsequent spending and becomes sales to hundreds of Maine businesses all across the state.

Attempting to measure all these business to business and consumer to business effects individually would be virtually impossible. There are no officially available statistics such as Department of Labor employment data that measure such inter-industry relationships at the local level. Short of exhaustive direct business surveys, there is no direct way to obtain an accurate measurement of these economic "ripple" effects. The only way to measure an industry's total impact is to use an input-output model explicitly designed to capture those interconnections. The inter-industry impact estimates in this report are based on the IMPLAN model of the State of Maine⁸

The total value of these vendor supply chain effects (called indirect impacts) and employee spending effects (called induced impacts) attributable to Poland Spring in 2016, amounted to approximately \$189 million in sales for Maine businesses, supporting the full-time equivalent of more than 1,300 jobs in Maine earning pay of approximately \$64 million. Table 1 (repeated here) summarizes these impacts

⁸ IMPLAN (IMpact Analysis for PLANing) is a widely-used input-output modeling program. It contains a mathematical representation of the purchasing patterns that take place between sectors of an economy. Built into the IMPLAN files are all the industry sales, employment and payroll data for each sector of the Maine economy. IMPLAN uses these data along with national purchasing patterns to create state models. Data presented here are rounded to avoid the appearance of unwarranted precision. For more information see implan.com.

and presents the total economic impact of Poland Spring on Maine in 2016.

Table 1 Total Economic Impact on Maine of Poland Spring, 2016

Impact Item	Spending/Sales	Jobs	Earnings
<i>Operational Spending Total</i>	<i>\$186,000,000</i>	<i>861</i>	<i>\$49,500,000</i>
<i>Capital Spending</i>	<i>\$15,600,000</i>	<i>130</i>	<i>\$5,800,000</i>
Total Direct Impact	\$201,600,000	991	\$55,300,000
Indirect (Supply Chain) Impact	\$154,500,000	920	\$46,900,000
Induced (Worker Spending) Impact	\$35,300,000	440	\$17,700,000
Total Economic Impact	\$391,400,000	2,351	\$119,900,000
State & Local Taxes & Fees included in Total Impact	\$21,000,000	n.a.	n.a.

Sources: Poland Spring and IMPLAN model for Maine.

Adding Poland Spring's total payroll, its non-labor Maine vendor spending and its 2016 capital investment spending brings its total spending impact to just over \$200 million. This spending supports 861 Poland Spring jobs earning pay and benefits of just over \$49 million and (using the IMPLAN model of construction of manufacturing facilities) 130 construction jobs earning approximately \$5.8 million. These figures bring the Company's total impact to just over \$200 million supporting approximately 991 jobs earning over \$55 million.

Combining Poland Spring's own Maine vendor spending total of \$136 million with an estimate of these vendors' own Maine supply-chain connections brings the total indirect (supply chain) impact to \$154 million supporting approximately 920 jobs earning \$46.9 million. Using the IMPLAN model to estimate the induced (employee spending) impact generated by the in-Maine spending of both Poland Spring's employees and the spending of all the Maine vendors connected to Poland Spring generates an induced impact of \$35.3 million supporting 440 jobs earning \$17.7 million.

The total economic impact of Poland Spring on the Maine economy in 2016, therefore amounted to sales for Maine companies of over \$390 million supporting over 2,300 jobs earning nearly \$120 million in pay and benefits.

Through the various sales, income, fuel, property and other taxes levied on all of this activity, Poland Spring generated spending lead in 2016 to state and local tax and fee revenues of approximately \$21 million.⁹

⁹ derived from IMPLAN model estimates.

D. The Impact of Poland Spring's Future Growth

All of the information presented in section C above refers to 2016. Poland Spring faces a growing national market and is actively exploring for more sites from which to draw spring water and places to locate additional bottling plants. The successful operation of its initial pilot project for shipping more of its product by rail has greatly expanded the range of sites that could pass market cost feasibility criteria. While no formal investment commitment has been made beyond completion of the Kingfield expansion, the company does have the financial capacity and strategic commitment to further invest in Maine.

Figure 5 Poland Spring Capital Expenditures, actual and projected (\$ million)



Source: Poland Spring; dotted line from 2017 forward represent future estimates.

Strategic estimates of capital expenditures required to meet future production goals show increases for four of the next five years and a total investment over the next five years of more than \$200 million. Much like Sappi's recent announcement of plans to invest \$165 million to upgrade its paper mill in Skowhegan, Poland Spring's plans for Maine represent an expression of confidence in the future of its operations in Maine and thus an opportunity for the state to see growth not just in the jobs at Poland Spring but in the entire range of indirect, induced and fiscal impacts that constitute the Company's overall economic impact on Ma