

**PROPOSED NATURAL GAS
EXPANSION INTO FRANKLIN
COUNTY, NY
ECONOMIC AND FISCAL IMPACTS TO NEW
YORK STATE, AND FRANKLIN AND ST.
LAWRENCE COUNTIES**

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FRANKLIN AND ST. LAWRENCE COUNTIES
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SUMMARY

The economic and fiscal impacts of the proposed gas line extension by St. Lawrence Gas Co., Inc. into Franklin County should be considered in two parts:

- ❖ Impacts resulting from construction and cost savings to customers can be reasonably estimated. Both construction spending and customer savings pump dollars into the New York State economy as well as the local economy. However, this predictable impact is only a small part of the anticipated effect on the Franklin County economy.
- ❖ An important consequence of the gas line extension is the retention and attraction of jobs to this rural, relatively poor, portion of the State of New York. While adding natural gas service—an element of public infrastructure taken for granted in most of the rest of New York State—will reduce the cost of doing business across all sectors and reduce the cost of living for individuals, any estimates of employment and earnings increases as a result of those lower business costs would be purely speculative.

❖ From 2000 to 2006 Franklin County added fewer than 400 jobs, about 2% over the period.
❖ Median household income in Franklin County in 1999 was \$31,517; ranking behind only one other county in New York.
❖ Nearly a third of the population over age 15 in Franklin County (28.9%) was in poverty in 1999.

Given the uncertainty attached to the attraction and retention of jobs, CGR has adopted a “threshold” approach to this assessment: First, we estimate the economic impact of elements of the project that are either known or are reasonably easy to forecast. We provide economic impact estimates for New York State (NYS) as a whole as well as for the local region (Franklin and St. Lawrence Counties). In general, the results indicate:

- ❖ The NPV of earnings over five years from the construction phase of the project are around \$7.9 million for NYS and \$5.8 million for the local region.
- ❖ The NPV of earnings over 20 years from the customer savings (residential, commercial, and industrial) of the natural gas line expansion are over \$32 million for NYS and approximately \$10.6 million for the local region.
- ❖ The NPV of the fiscal impact of the earnings from the construction and customer savings (over 20 years) is roughly \$1.7 million for NYS and \$.3 million for the local region.
- ❖ The NPV of the savings to customers (residential, commercial, and industrial) as a result of the conversion (over 20 years) is estimated at approximately \$60 million.
- ❖ Additional savings can be created with the expansion of existing businesses or the creation of current businesses.

Second, we ask what magnitude of additional impacts would be required to justify a public expenditure of about seven million dollars.

- ❖ If the gas line expansion were to create or retain 19 jobs per year (anywhere in NYS) for 20 years, the investment of New York State would be paid back in full.

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Staff Team

Kent Gardner and Rochelle Ruffer performed the analysis and wrote the report.

INTRODUCTION

St. Lawrence Gas (SLG) Company, Inc. engaged the Center for Governmental Research (CGR) to explore the economic and fiscal impact of the extension of a natural gas line for 48 miles into Franklin County. CGR has estimated the economic and fiscal impact to New York State of the construction and customer savings of the gas line extension. We also estimate the economic impact for the local region, St. Lawrence and Franklin Counties. While we include both counties in the local region, given the distribution of customers, the majority of that regional impact is to Franklin County. In addition, we consider New York State's potential return on investment of an initial outlay of \$6.8 million. We then consider the characteristics of Franklin County and provide comments on the economic value that this project might have on the rural region of Franklin County.

CENTER FOR GOVERNMENTAL RESEARCH

CGR was founded in 1915 by Kodak's George Eastman to serve the public interest through nonpartisan research and management consulting. By developing objective perspectives on issues facing communities, CGR provides a unique professional resource empowering government, business and non-profit leaders to make informed decisions. With a diverse team of government and management experts, CGR seeks to integrate facts and professional judgment into practical recommendations, working with county and other local governments, community stakeholders, nonprofit organizations and New York State agencies to achieve more effective and efficient public service.

CGR's experience with economic impact assessment spans a wide variety of industries and encompasses the full range of New York's diverse geography.

BARRIERS TO INFRASTRUCTURE DEVELOPMENT IN RURAL NEW YORK

A longstanding role of the public sector has been the development and maintenance of a physical infrastructure within which private development can flourish. The dividing line between what should be the responsibility of the taxpayer versus private business is often difficult to draw. In the early history of public transportation it was private capital that developed subways, only to be brought together under a public umbrella—the MTA in New York City—when it became clear that public transit could not be efficiently provided by private enterprise. When electricity was new, private firms strung competing networks along the same city streets. Regulated utilities were the solution to this problem, thus delegating provision and management to the private sector, but under the watchful eye of public sector regulators. In other instances—the Tennessee Valley Authority, Bonneville Power Administration and the Power Authority of New York—public provision was deemed the solution to both the problem of monopoly provision and the seemingly insurmountable capital requirements of very large public works projects.

Rural areas have posed a particular challenge to the problem of infrastructure. Rural communities lack sufficient population density to assure a profit to private providers for services that are easily financed in urban areas. The Rural Electrification Administration and Essential Air Service subsidies for selected airports are examples of public programs targeting the infrastructure needs of rural areas. New York State is addressing a similar problem in its efforts to ensure cellphone coverage on the Adirondack Northway. Similar conversations address access to Internet broadband in sparsely populated regions of New York.

The proposed natural gas expansion does not show signs of profitability in the first five years of existence. Thus, this service is another situation where New York State must consider its role in

helping this rural community have access to natural gas. The benefits of natural gas to this community will be discussed below as we outline the economic and impact of the construction phase, the customer savings, and the potential investment opportunities that might come to fruition as a result of potential developers and businesses having access to affordable energy.

ECONOMIC & FISCAL IMPACT ASSESSMENT OF GAS LINE EXTENSION

The economic and fiscal impacts of the proposed gas line extension are considered here in two parts: we consider both the construction phase of the project (five years) as well as the customer savings that will result as conversion from either fuel oil or propane to natural gas occurs. Customers are defined as residential households, commercial customers, and industrial customers. CGR used IMPLAN to perform the economic impact analysis. The economic impact is estimated for the entire state of New York as well as the local region of St. Lawrence and Franklin Counties.

Direct and Spillover Impacts

The economic impact is measured in two major ways: the number of jobs (employment) that is generated as a result of the project and the labor income that results from those jobs being created. For each of these measures, economists make a distinction between direct impact and spillover.* Direct impacts are those that occur when the construction firm or consumer is directly involved with the transaction. For example, any employees the construction firm hires as a result of building and installing the pipeline are direct impacts. The impact of the spending of any energy savings by both commercial and residential customers is direct impact.

* Spillover includes both indirect and induced.

Spillover effects involve the spending by businesses or consumers affected by the first round of spending. For example, if the residents of Franklin County were to spend all their energy cost savings at a particular restaurant, the spending by those residents is direct impact. The purchases of the restaurant, as a result of the additional household spending, are considered spillover impact. Additionally, the spending of the restaurant's employees is an additional spillover impact. The relationship between the size of spillover compared to the direct impact is called the multiplier. CGR uses IMPLAN* to generate the multipliers.

Economic Impact of Construction

The construction phase of the project is expected to last five years. A majority of the work will be conducted in year one, which is when the high pressure main will be installed. CGR assumes 57% of the labor on the construction project will be local.† We anticipate most of the materials will be purchased outside of New York State and thus have chosen to concentrate on the impact of the labor component of the construction project only. To the extent that some material in the construction process may be bought locally or in New York State, the estimated impact is conservative.

Valuing Savings to New St. Lawrence Gas Company Customers

For heating and many process applications, natural gas is demonstrably less expensive than the alternatives, fuel oil and liquefied natural gas (propane). St. Lawrence Gas can reasonably expect that a large proportion of businesses and households that can be serviced by the new line will choose to convert. Conversion is likely to be rapid for high volume users such as the major business firms and public sector institutions (e.g. three of Franklin County's State prisons) along the proposed route. Since it is difficult to forecast with certainty future prices of energy, CGR used the average price of the appropriate energy for the past

* IMPLAN is a input-output analysis program widely used in economic impact studies. For more information, see www.implan.com.

† The estimate of local labor was provided by SLG.

12 months to estimate savings from conversion. We have not assumed any changes in price over the 20 year time span. If the costs of fuel oil or propane were to increase at a greater proportionate rate than the price of natural gas, then the savings to customers would be larger than what is calculated for this report.

We calculate customer savings for residents, commercial businesses, and seven large industrial and public sector users (prisons, schools, and McCadam Cheese). We assume that half of the major industrial and public sector users located directly on the gas line will be connected to the system in the first year and that the remainder will connect by the second year.

Households and small commercial customers will be slower to convert. An individual's decision will depend on the age and efficiency of his or her furnace and financial situation. While the payback for an individual dwelling or small business may be five years or less, the initial outlay is considerable. CGR assumes 80% of those households and commercial users on the natural gas line will switch before the end of that 20-year period. Using data from the 2000 Census on house heating sources in Franklin County, CGR assumes that 95% of residential consumers are currently fuel oil users and 5% are propane users.* We assume that all commercial and small business users are currently using fuel oil.

Using data gathered by St. Lawrence Gas and audited by CGR, plus other sources of information, CGR estimated the savings to individuals, business firms and state entities from a reduction in fuel cost. For the New York State analysis, we made the assumption that the savings to a firm's "bottom line" flowed to

* While we consider some of the initial conversions may be for water heaters only, we assume the same distribution of energy sources for water heaters. Given the cost of electricity, the cost savings could be greater if the original water heaters are electric.

owners and eventually became income to New York residents*. In the case of public facilities—particularly the prisons—we assumed that the savings would either reduce taxes to New York State residents or otherwise increase spending by New York State residents. For the analysis of the impact to the local region, we did not include any impacts from savings to industrial customers since it is not possible to make assumptions about the local distribution of the industrial customer’s savings. Thus, we were unable to assume that the savings would necessarily flow to Franklin or St. Lawrence County residents.

Overall, Customer savings results in increased consumer spending, thus increasing employment, earnings and tax revenue.

Fiscal Impact

The fiscal impact for NYS is calculated for two major areas: the income tax generated to NYS as a result of the additional labor income generated from both the construction phase and the customer savings. We also consider the sales tax that is generated for NYS as a result of the spending of those earning the income. The fiscal impact of the local region is based on the sales tax that is generated for St. Lawrence and Franklin Counties as a result of those earning the income generated from both construction and customer savings.

Results

NYS Results (millions of dollars)	
NPV- Earnings of Construction Phase (5 year)	\$7.9
NPV- Earnings from Customer Savings (20 year)	\$32.3
NPV- Fiscal Impact from Construction and Customer Savings (20 year)	\$1.7
NPV- Customer Savings (20 year)	\$60.0

The table to the left summarizes the estimated economic and fiscal impact to NYS, in terms of potential earnings generated, as a result of both the construction phase and customer savings. The customer savings to residential, commercial, and industrial customers is estimated to equal \$60 million. Earnings from that customer savings will generate an additional \$32 million

* North Lawrence Dairy is an additional large industrial customer along the pipeline. CGR assumed that savings would eventually benefit shareholders. Given we did not know what share of total North Lawrence Dairy equity is held by New York State residents, we chose to exclude them from the calculations of cost reductions.

statewide. The statewide impact of the construction is a little less than \$8 million.

The tables on page twelve of our report provide a more detailed look at the earnings forecast, fiscal impact, and employment forecast of the construction period and savings to customers for New York State. They show the annual impacts in the first five years and last six years of the project. The first table on page twelve looks at the earnings forecast of both phases of the project: construction and the savings to customers. The fiscal impact of that earnings forecast is also provided.

The second table on page twelve shows the employment forecast of both parts of the impact. The largest annual impact occurs in the first year of the construction phase. After that, on average, over the additional 19 years of the project, it is estimated that the natural gas line expansion will generate approximately 70 additional jobs.

The table to the left provides estimates of the economic impact on

Franklin and St. Lawrence Counties - Results (millions of dollars)	
NPV- Earnings of Construction Phase (5 year)	\$5.8
NPV- Earnings from Customer Savings (20 year)	\$10.6
NPV- Fiscal Impact from Construction and Customer Savings (20 year)	\$0.3
NPV- Customer Savings (20 year)	\$60.0

the local region – St. Lawrence and Franklin Counties. Since all residential, commercial, and industrial customers are located in either Franklin or St. Lawrence County, the customer savings is the same statewide and locally at \$60 million. The earnings generated from the local expenditure of those savings are equal to \$10.6 million. The fiscal impact includes the sales tax revenue generated from the local expenditure of the earnings generated from both the construction period as well as customer savings. Savings from industrial customers were not considered due to the uncertainty of the

local distribution of savings. While there is sure to be additional impact, it is difficult to determine without more knowledge about the way in which industrial customers will share the savings with local customers.

As with New York State, the largest annual local impact occurs in

the first year of the construction phase with an estimated creation of 85 local jobs. After that, on average, over the additional 19 years of the project, it is estimated that the natural gas line expansion will generate approximately 31 additional local jobs.

NYS RETURN ON INVESTMENT

This project should be considered both on strict investment criteria and also as an economic development initiative for Franklin County. We first consider the project much as an investor would approach the question: Can New York State expect to earn a positive return on investment (ROI) on an investment in this gas line extension? In particular, we ask what magnitude of additional impacts would be required to justify a public expenditure of nearly seven million dollars and consider the likelihood that these additional impacts would occur.

In order to do this, CGR uses the estimated fiscal impact from the analysis above. Thus, we feel confident saying that the natural gas line extension will generate approximately \$1.7 million in tax revenue for NYS if no other impacts were to occur other than from the construction and customer savings components of the project described above. This is assumed to occur along with the proposed scenarios discussed below.

CGR considers potential scenarios of job retention or creation as a result of the natural gas line expansion into Franklin County and assesses the ROI as a result of our assumptions. The table to the left provides the assumptions we use in our analysis. These assumptions were generated using data from the New York State Department of Taxation and Finance, IMPLAN, and the New York State Department of Labor.

Assumptions	
Sales Tax Rate	4.0%
NYS Effective Income Tax	3.4%
Salary per job	\$32,336
Spillover employment multiplier	0.43
Discount rate	3%

Our analysis combines the present discounted value of the

Results (financial returns in thousand dollars)	
Assumption: Jobs	
Created/Retained Annually	19
NPV Cumulative Payroll	\$77,590
Project Cost to NYS	\$6,800
Fiscal Return to Project (NPV, 20 yr)	
<i>NYS Income Tax</i>	<i>\$3,696</i>
<i>NYS Sales Tax</i>	<i>\$3,104</i>
Total Fiscal Return on Investment	\$6,800
Net Cost to NYS	\$0

forecasted fiscal impact from the previous analysis with the present discounted value of the fiscal impact from hypothesized job creation or retention as a result of the natural gas expansion. The table on the next page provides the scenario that would have to occur for NYS to get all of the \$6.8 million in investment back after a 20 year period. If the expansion of the natural gas line into Franklin County were to create or retain 19 jobs per year, the net cost to New York State of a \$6.8 million investment would be \$0.*

CGR also considers two alternative scenarios which would generate a positive ROI on investment at the end of 20 years. Using the same assumptions as above, we report the results of two different scenarios in the tables below. If the project were to generate job retention or creation of 25 jobs annually, then NYS would actually make approximately \$1.9 million on their initial \$6.8 million investment. Alternatively, if the project were to

Results (financial returns in thousand dollars)	
Assumption: Jobs	
Created/Retained Annually	25
NPV Cumulative Payroll	\$103,484
Project Cost to NYS	\$6,800
Fiscal Return to Project (NPV, 20 yr)	
<i>NYS Income Tax</i>	<i>\$4,567</i>
<i>NYS Sales Tax</i>	<i>\$4,139</i>
Total Fiscal Return on Investment	\$8,707
Net Cost to NYS	(\$1,907)

Results (financial returns in thousand dollars)	
Assumption: Jobs	
Created/Retained Annually	35
NPV Cumulative Payroll	\$143,881
Project Cost to NYS	\$6,800
Fiscal Return to Project (NPV, 20 yr)	
<i>NYS Income Tax</i>	<i>\$5,926</i>
<i>NYS Sales Tax</i>	<i>\$5,755</i>
Total Fiscal Return on Investment	\$11,681
Net Cost to NYS	(\$4,881)

* While CGR is not suggesting that NYS should necessarily consider ROI when making decisions about economic development opportunities, it is interesting to note the rather small threshold needed in order for the State to break even on their investment.

generate 35 new or retained jobs annually, then NYS would actually earn almost \$5 million.

ECONOMIC DEVELOPMENT VALUE

A more conventional way to view this project is as a stimulus to Franklin County economic development.

An Economic Picture of Franklin County

Franklin County is one of the poorest counties in New York State. According to the Rural County Economic Development Index created by the Northeast Regional Center for Rural Development out of Penn State University,* Franklin County ranks in the fourth quartile of 148 non-metropolitan counties in New England, New York, Pennsylvania, Maryland, and West Virginia. Twenty-four counties in New York State were included in the index. Franklin County is one of three New York counties in the fourth quartile and ranks the lowest of all 24 New York counties considered. Census data confirm the economic situation in Franklin County. The median income in Franklin County in 1999 was \$31,517. Only Bronx County ranks lower in median income in New York State. Finally, almost 30% of the population of Franklin County over the age of 15 was living in poverty in 1999.

Savings to Current and New Businesses

Although it is impossible to accurately estimate the effect of the gas line on the county's economy, the gas line will significantly reduce the cost of doing business for a number of potential private sector investment alternatives. In particular, McCadam Cheese sees natural gas availability as pivotal to their success of winning a bid for a "whey" dryer at their site. This potential infrastructure would create another twelve to fifteen jobs in Franklin County.

In addition, there are a number of developments currently underway that will benefit from the cost savings attributed to

* For more information on the Rural County Economic Development Index (CEDI), see http://www.nercrd.psu.edu/Publications/rdppapers/Cedi_final.pdf.

natural gas expansion. These projects have not been considered in estimating the customer cost savings in this report since they are currently in the development or building phase. The County of Franklin Industrial Development Agency provided a list of additional future customers who would benefit from the savings of using natural gas. These include Tarbell Group Hotel, the expansion by Valco Furniture, the Flanagan Hotel in Malone Village, and an expansion by Asept Pak.

There are some additional prospects that would most certainly benefit from the lower cost of natural gas energy if they were to come to fruition. The availability of natural gas creates a new benefit for those considering Franklin County.

CONCLUSION

While it is difficult to predict the future, CGR has provided conservative estimates of the economic and fiscal impact of a proposed natural gas line extension into Franklin County, New York. In doing so, we have considered the potential job retention or creation as a result of the project. There are realistic scenarios under which New York State could “break even” given an initial \$6.8 million investment. The natural gas line extension provides an opportunity for existing businesses to become more competitive as well as potential incoming investment opportunities to take advantage of the lower cost of natural gas.

TABLES OF EARNINGS FORECAST, FISCAL IMPACT, AND EMPLOYMENT FORECAST – ESTIMATES FOR NEW YORK STATE

Earnings Forecast (\$1000)	Year 1	Year 2	Year 3	Year 4	Year 5	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
Construction Period											
Direct	\$4,805	\$950	\$611	\$350	\$353	\$0	\$0	\$0	\$0	\$0	\$0
Spillover	\$826	\$163	\$105	\$60	\$61	\$0	\$0	\$0	\$0	\$0	\$0
Earnings Stimulated by Savings to Customers											
Direct	(\$383)	\$141	\$811	\$1,005	\$1,123	\$1,560	\$1,587	\$1,614	\$1,640	\$1,667	\$1,693
Spillover	(\$145)	\$53	\$306	\$379	\$423	\$589	\$599	\$609	\$619	\$629	\$639
Total Earnings	\$5,103	\$1,308	\$1,833	\$1,793	\$1,960	\$2,149	\$2,186	\$2,222	\$2,259	\$2,295	\$2,332

Fiscal Impact: NYS (\$1000)	Year 1	Year 2	Year 3	Year 4	Year 5	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
Income Tax	\$172	\$44	\$62	\$60	\$66	\$72	\$74	\$75	\$76	\$77	\$78
Sales Tax	\$90	\$23	\$32	\$32	\$35	\$38	\$39	\$39	\$40	\$40	\$41
Total Fiscal Impact	\$262	\$67	\$94	\$92	\$100	\$110	\$112	\$114	\$116	\$118	\$120

Note: Table excludes years 6-14 for presentation purposes.

Employment Forecast	Year 1	Year 2	Year 3	Year 4	Year 5	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
Construction Period											
Direct	127	25	16	9	9	0	0	0	0	0	0
Spillover	22	4	3	2	2	0	0	0	0	0	0
Employment Stimulated by Savings to Customers											
Direct	(13)	5	28	35	39	54	55	56	57	58	59
Spillover	(5)	2	11	14	16	22	22	23	23	24	24
	130	36	59	60	66	76	78	79	80	81	83