

Rocky Mountain Power
Exhibit RMP___(GWH-4)
Docket No. 16-035-__
Witness: Gary W. Hoogeveen

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF UTAH

ROCKY MOUNTAIN POWER

Exhibit Accompanying Direct Testimony of Gary W. Hoogeveen
Facebook's Forest City Data Center Economic and Fiscal Impact Analysis

June 2016



August 2014

Economic and Fiscal Impact Analysis Facebook's Forest City Data Center

Executive Summary



Prepared for—

Facebook, Inc.

1 Hacker Way
Menlo Park, CA 94025

Prepared by—

Zachary Oliver

RTI International
3040 E Cornwallis Rd
Research Triangle Park, NC 27709

AUGUST 2014

Economic and Fiscal Impact Analysis Facebook's Forest City Data Center

Executive Summary

Prepared for—

Facebook, Inc.

1 Hacker Way
Menlo Park, CA 94025

Prepared by—

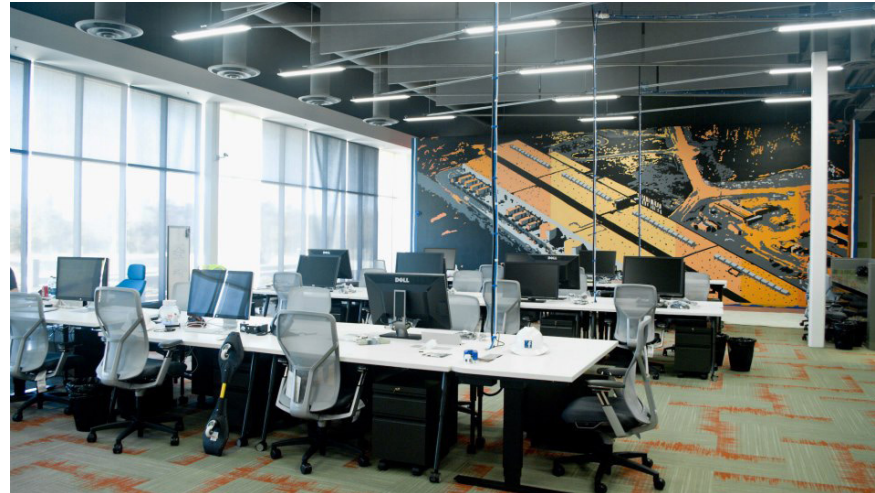
Zachary Oliver

RTI International
3040 E Cornwallis Rd
Research Triangle Park, NC 27709

Rocky Mountain Power Exhibit
RMP ___ (GWH-4) Page 2 of 7
Docket No. 16-035-___
Witness: Gary W. Hoogveen

Executive Summary

Facebook data centers are the foundation of a global infrastructure that connects more than 1.32 billion people every month. Facebook data centers are also important assets to the communities in which they are located. Since construction began on the Forest City Data Center in 2010, Facebook has had positive impacts on the local economy and state of North Carolina.



Workstation (Town Photography)

Forest City is located in the western part of the state in Rutherford County (see Figure 2). Facebook chose to locate in Forest City for several reasons, including an accessible, talented local workforce; access to fiber and power; and partnerships with the community and with local leaders.

The direct spending required to build and operate the facility has real impacts on the people and firms in the region as it circulates through the economy. This report estimates the impact of two categories of direct spending:

- **\$526 million on capital expenditures from 2011 to 2013.** This category of spending covers data center equipment and networking infrastructure, software, and construction costs.
- **\$22 million on operating expenditures in 2013.** These expenditures include payments for power, security, and other goods and services essential to the ongoing operations of the facility. Operating expenditures also include employee wages and compensation such as bonuses, stock, and medical insurance.

The additional economic impacts brought about by Facebook's direct spending are estimated for the entire state of North Carolina. Economic impact indicators were estimated using IMPLAN 2012 software and include (1) gross output, (2) value-added, and (3) jobs (see Figure 1).

The fiscal impacts associated with Forest City Data Center are measured in terms of direct payments that Facebook has made to state and local governments. RTI also estimated personal income taxes generated from Facebook's payroll and other on-site employees supported by third-party subcontractors.

Figure 1. Economic Impact Definitions

TYPES OF IMPACT	
Direct Effect	Direct data center spending (capital and operating expenditures) in North Carolina. Examples include purchases of construction services and materials.
Indirect Effect	As production increases as the result of new spending, businesses buy additional goods and services from their supply chains.
Induced Effect	New jobs provide people with incomes that are spent on local goods and services (e.g., restaurants, housing, or retail establishments).
Multiplier:	A ratio describing the total gross economic impact. It is calculated by dividing total effects (the sum of direct, indirect, and induced effects) by the direct effect.
ECONOMIC INDICATORS	
Output	Output provides an indicator of gross revenue from production activities (final and intermediate goods and services).
Value-Added (State Gross Domestic Product)	Value-added provides an indicator of the income generated from production activities. States use the indicator to describe the overall size of the economy.
Jobs	IMPLAN jobs consist of all full-time, part time, and temporary positions. As a result, when considering jobs over multiple years, jobs are typically reported as an annual average.

Figure 2. Forest City Data Center Location



Economic Impact Indicators

Over 3 years, the estimated total gross economic impact associated with the Forest City Data Center is

- \$707 million in output,
- \$350 million in value-added, and
- 5,000 jobs across North Carolina.¹

Capital Expenditures

Capital expenditures alone have had a total gross output impact of \$680 million and supported total gross value-added of \$332 million in the state from 2011 to 2013 (Table 1). Additionally, capital expenditures have supported approximately 4,700 jobs statewide.

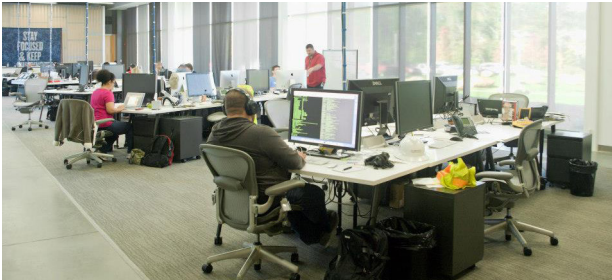
Direct data center spending leads to increases in several economic impact indicators. A common way to summarize the total economy-wide effect is to calculate expenditure and jobs multipliers:

- For every \$1 million of output resulting from direct capital expenditures, another \$700,000 in output is generated elsewhere in the state.
- For every \$1 million of value-added resulting from direct capital expenditures, another \$1.1 million is generated elsewhere in the state.
- For every 10 jobs resulting from direct capital expenditures, another 8 jobs are created elsewhere in the state.

¹ Over the 3-year period, the total gross jobs impact is equivalent to about 1,700 jobs per year.

Operating Expenditures

In 2013, operating expenditures (including payroll) had a total gross output impact of \$27 million and supported \$18 million in value-added statewide. Operating expenditures also supported approximately 310 jobs statewide in 2013. Similar impacts for output, value-added, and jobs can be expected in the future as the data center continues to operate.



Workstation (Town Photography)

Operating expenditures have the following multiplier effects:

- For every \$1 million of output resulting from direct operating expenditures, another \$600,000 in output is generated elsewhere in the state.
- For every \$1 million of value-added resulting from direct operating expenditures, another \$500,000 is generated elsewhere in the state.
- For every 10 jobs resulting from operating expenditures, another 3 jobs are created elsewhere in the state.

Table 1. Economic Impact Indicators Summary

	ECONOMIC INDICATOR			MULTIPLIERS		
	Output (Gross Revenue)	Value-added (State GDP)	Jobs	Output (Gross Revenue)	Value-added (State GDP)	Jobs
<i>Capital Expenditures</i>						
Direct	\$389 M	\$159 M	2,600	1.7	2.1	1.8
Indirect	\$149 M	\$83 M	900			
Induced	\$142 M	\$90 M	1,200			
Total	\$680 M	\$332 M	4,700			
<i>Operating Expenditures (including payroll)</i>						
Direct	\$17 M	\$12 M	230	1.6	1.5	1.3
Indirect	\$3 M	\$2 M	20			
Induced	\$7 M	\$5 M	60			
Total	\$27 M	\$18 M	310			

Note: numbers may not add to totals due to rounding.

Fiscal Impacts

Economic activity is typically associated with increased tax collections for state and local governments. The same is true for the Forest City Data Center. For example, Facebook directly paid the following taxes in 2013:

- Facebook added \$198,000 to local property tax collections (Rutherford County and Forest City).
- Facebook paid a gross receipts tax on electricity usage of approximately \$336,000 in 2013. This tax is collected by the state of North Carolina.
- Facebook paid \$194,000 in franchise taxes to the state of North Carolina.

Since franchise taxes, gross receipts taxes on electricity usage, and property taxes are levied on an ongoing basis, the Forest City Data Center will continue to strengthen state and local tax collections in the future.

Our estimates also show that Facebook directly supported approximately \$337,000 in state personal income tax collections in 2013 through the incomes of data center employees.

Other Impacts

In addition to the economic and fiscal impacts outlined above, Facebook is highly engaged in the local community:

- Facebook has distributed approximately \$450,000 community action grants and other community

assistance in Rutherford County to support local nonprofits and organizations that meet community needs.

- Facebook has donated 50 laptops to local schools and youth groups. The company has also donated \$25,000 in materials to the community including items such as picnic tables and shelters.
- Facebook has partnered with Isothermal Community College and donated time and resources to develop the curriculum for its Data Center Institute—a 3-week course at the school to help talented individuals from the region connect with data-related jobs.
- Facebook recently announced a partnership with the Town of Forest City, Rutherford County Schools, and PANGAEA Internet to launch a pilot program to provide free Wi-Fi access to students in 75 to 100 homes. Facebook plans to expand the program to cover more students in Rutherford County if the pilot program is successful.

Overall, Facebook has had substantial economic, fiscal, and community impacts in North Carolina from 2011 to 2013. Furthermore, Facebook will continue to generate ongoing impacts in North Carolina over the life of the Forest City Data Center.