



**Public Service Commission Report to the Legislature**

**Energy Efficiency and Renewable Resource Program  
Activities in Wisconsin**

**Calendar Year 2012**

**TABLE OF CONTENTS**  
2012 Report (January–December 2012)

- **Focus on Energy Program Summary**
- **Program History**
- **2012 Energy Savings Summary**
  - **Total Portfolio Results – 2012 contract period**
    - Life-cycle kilowatt hour and therm savings
    - Annual kilowatt savings
    - Number of program participants
    - Life-cycle energy savings
    - Expenditures
- **Economic and Environmental Benefits of the Focus on Energy Program**
  - **Non-Residential Program Impacts**
    - Life-cycle kilowatt hour and therm savings
    - Annual kilowatt savings
    - Business program expenditures
  - **Residential Program Impacts**
    - Life-cycle kilowatt hour and therm savings
    - Annual kilowatt savings
    - Residential program expenditures
  - **Renewable Program Impacts**
    - Life-cycle kilowatt hour and therm savings
    - Annual kilowatt savings
    - Renewable program expenditures
  - **Environmental and Economic Research and Development Program**
- **2012 Financial Summary**
  - Administrative costs
  - Financial sheet
- **Municipal and Electric Cooperative Energy Savings**

# **WISCONSIN UTILITIES' ENERGY EFFICIENCY AND RENEWABLE RESOURCES PROGRAM SUMMARY (FOCUS ON ENERGY)**

Focus on Energy (Focus) works with eligible Wisconsin residents and businesses to install cost-effective energy efficiency and renewable energy projects. Focus technical assistance and financial incentives help implement projects that otherwise would not be completed, or to complete projects sooner than scheduled. Its efforts help Wisconsin residents and businesses control the state's growing demand for electricity and natural gas, manage rising energy costs, promote in-state economic development, and protect our environment.

Additional information regarding Focus can be found at [www.focusonenergy.com](http://www.focusonenergy.com).

## **HISTORY**

Originally formed by the Wisconsin Legislature in 1999 and funded by the Utility Public Benefits fund, Focus delivers energy efficiency and renewable energy services for [residential](#) and [business](#) customers throughout the state. In 2001, the Department of Administration rolled out the *Focus on Energy Program* statewide. In partnership with consumers, utilities, businesses, nonprofit organizations, and all government levels, the programs help residents and businesses make smart energy choices.

Under [2005 Wisconsin Act 141](#) (Act 141), oversight of Focus transferred to the Public Service Commission (Commission). Under Act 141, investor-owned electric and natural gas utilities to contribute 1.2 percent of their annual gross operating revenues to fund Focus on Energy. All of the Focus funds are administered by a third party contractor. Act 141 also requires municipal utilities and retail electric cooperatives to collect an average of \$8 per meter to fund energy efficiency programs. Municipal utilities and retail electric cooperatives can collect the dollars and participate in the Focus program or can elect to operate their own Commitment to Community programs.

Per Act 141, Focus aims to:

- Reduce the amount of energy used per unit of production in Wisconsin, while improving energy reliability.
- Enhance economic development and make Wisconsin firms more competitive.
- Reduce the environmental impacts of energy use.
- Expand the ability of markets to deliver energy efficient and renewable energy goods and services to consumers and businesses.
- Deliver quantified financial returns on public investments in energy improvements.

## **2012 PROGRAM YEAR**

In 2011 numerous and significant changes in program structure, administration, and implementation followed the engagement of a new Program Administrator, Shaw Environmental

and Infrastructure.<sup>1</sup> Calendar Year 2012 saw newly redesigned Residential and Business programs launched between January and May.

## FOCUS ON ENERGY – ENERGY SAVINGS – PORTFOLIO RESULTS

An award-winning, nationally recognized program, Focus works with both public and private sectors and encourages Wisconsin residents and businesses to make informed energy decisions. By providing incentives, technical resources, and information, Focus aids residents in lowering their cost of living and businesses in improving their bottom lines. This drives millions of dollars in energy savings, and helps to improve our state’s environmental health and preserve our natural resources.

### Life-cycle Energy Savings<sup>2</sup>: January 1–December 31, 2012

	Participants	Verified Gross kWh*	Verified Gross kW*	Verified Gross Therms*	Benefit Cost Ratio
Non- Residential Programs	6,404	5,390,366,110	65,522	273,269,275	3.07
Residential Programs	1,011,259 <sup>+</sup>	1,578,656,352	28,697	80,249,406	2.41
<b>FOCUS TOTAL</b>	<b>1,017,663</b>	<b>6,969,022,462</b>	<b>94,219</b>	<b>353,518,681</b>	<b>2.89</b>

<sup>+</sup> Estimated. Most participants in residential programs are customers that purchase light bulbs directly from retail stores, which only create a record of the number of bulbs purchased, not the number of unique customers who purchased the bulbs. In 2012, more than 4.2 million Focus on Energy-discounted light bulbs were purchased, an increase of more than 3 million from 2011. The best data available suggest each customer purchases an average of 4.5 bulbs, resulting in an estimate of approximately 925,700 retail-based participants.

<sup>\*</sup> Verified gross savings numbers are savings that have gone through an engineering review by evaluators to determine whether the reported gross savings were reasonable.

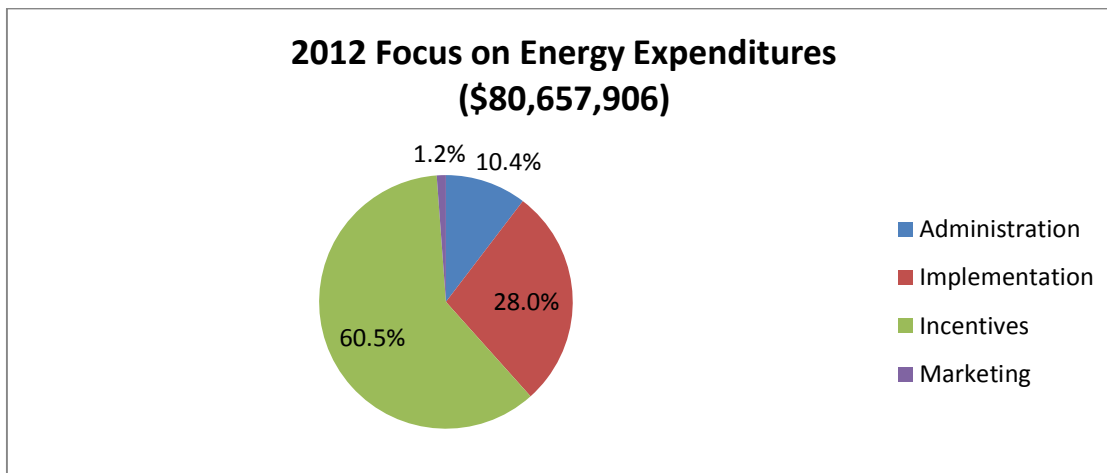
## Expenditures

The chart on page 3 illustrates expenditures for the Focus program as a whole. Expenditures are divided into four categories: Administration, Implementation, Marketing, and Incentives. Administration refers to the expenses associated with overall portfolio management and planning. Administration includes: 1) managing implementer contracts (implementers deliver the programs to customers); 2) financial management of the overall Focus budget for the Targeted Markets, Mass Markets and Research Portfolios; 3) incentive payment management (this includes approval of applications, review of custom applications, confirmation of energy savings estimates and incentive check processing); 4) quality assurance and quality control; 5) tracking and reporting program results; and 6) utility coordination.

<sup>1</sup> Please note that on February 13, 2013, Chicago Bridge and Iron (CB&I) announced that it had completed its acquisition of The Shaw Group. The Shaw Group name was not retained and as of February 13, Shaw began referring to itself as CB&I. The exception is the contract with SEERA, where the name Shaw Environmental and Infrastructure will remain until further notice.

<sup>2</sup> Life-cycle savings represent the savings that will be achieved by the measures installed during CY 2012 over their useful lifetimes. Previous reports listed annual savings or savings by measure for one year. The Commission determined in the Quadrennial Planning Process to report life-cycle savings since it represents future savings which is more useful for planning purposes.

The implementation or delivery costs, by contrast, are the labor and direct costs associated with a specific program. This includes time spent meeting with customers to provide information and technical assistance, and assisting customers with incentive applications. In sum, implementation includes the time and materials required to operate the program, excluding marketing costs and incentives.



## **Economic and Environmental Benefits from Focus on Energy Program**

The Focus program achieved an overall benefit/cost ratio of 2.89 for the 2012 contract period. That is, for every dollar spent on the program, the state achieved \$2.89 in societal benefits due to energy savings. This number includes both financial benefits and environmental benefits, such as the prevention of the following emissions:

- 4,801,890 tons of carbon dioxide
- 6,940 tons of nitrogen oxide
- 4,627 tons of sulfur dioxide

## **NON-RESIDENTIAL ENERGY EFFICIENCY PROGRAMS**

All types of businesses, large and small, can benefit from Focus's energy efficiency expertise. Focus works with eligible Wisconsin businesses to install cost-effective energy efficiency and renewable energy projects. For the first quarter of 2012, Focus's non-residential programs served the following market segments:

- Agriculture and rural businesses;
- Commercial businesses (including healthcare, hospitality, food service, grocery);
- Industrial businesses (pulp/paper, plastics, metals, wastewater, food processing);
- Schools and government facilities

Newly designed non-residential programs were launched in April 2012 and were organized by type of business delivery method which is more closely aligned with utility customer classes. This makes it easier to target customer classes using utility data. The newly designed programs include:

- Large Energy Users;
- Chain Stores and Franchises;
- Business Incentive Program;
- Small Business Program;
- Design Assistance Program (New Construction); and
- Retro Commissioning

With both the old and new program designs, Focus helped Wisconsin businesses by:

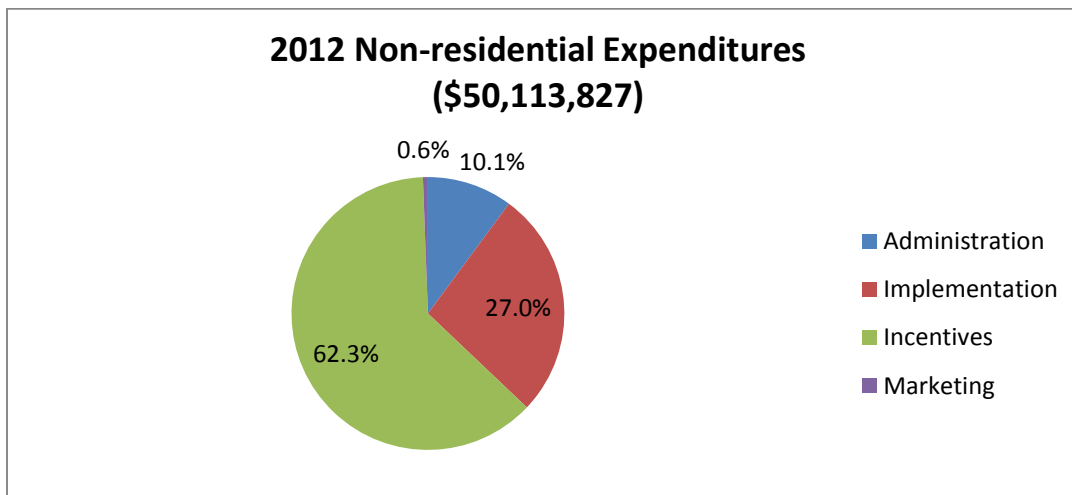
- Demonstrating practical ways to implement energy strategies;
- Rewarding businesses with financial incentives for these strategies;
- Providing no-cost or low-cost energy tips;
- Offering training opportunities on energy efficiency; and
- Applying for federal grants from the U.S. Department of Energy and in some cases using Focus incentives as match.

### 2012 Life-cycle Non-residential Savings (with Renewables)

	Participants	Verified Gross kWh	Verified Gross kW*	Verified Gross Therms	Benefit/Cost Ratio
Non-Residential Programs	6,404	5,390,366,110	65,522	273,269,275	3.07

### Expenditures

Non-Residential expenditures were 62 percent of total Focus program expenditures in 2012. Expenditures by category are shown below.



## RESIDENTIAL ENERGY EFFICIENCY PROGRAMS

Focus launched new Residential programs beginning January 1, 2012 with the last “new” program beginning in May. Similar to previous programs, the new programs continued to help residents save energy and money by providing information and incentives necessary to prompt smart energy choices. However, there were new programs such as Appliance Recycling and Express Energy Efficiency that covered new market opportunities. Whether residents purchased ENERGY STAR<sup>®</sup> qualified compact fluorescent light bulbs, made efficiency upgrades to an existing home, or built an energy efficient new home, Focus experts offered the insight, technical assistance, and financial incentives to get them started. The following new programs were offered in the Residential sector during the 2012 contract period:

- Express Energy Efficiency;
- Appliance Recycling;
- Home Performance with ENERGY STAR<sup>®</sup>;
- Residential Rewards;
- Residential Lighting and Appliances program;
- New Homes;
- Multifamily Direct Install;
- Multifamily Energy Savings;
- Assisted Home Performance with ENERGY STAR<sup>®</sup>;
- Enhanced Rewards; and
- Residential Renewables

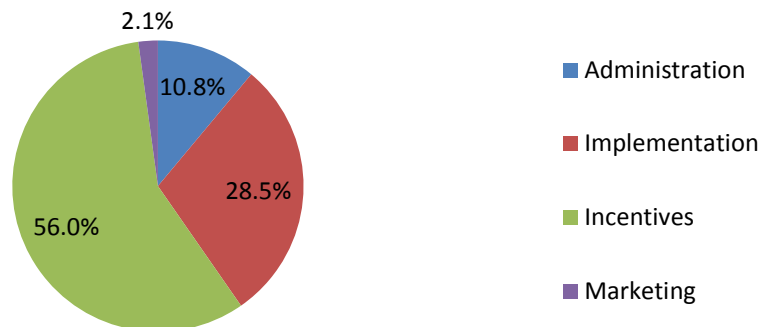
### 2012 Life-cycle Residential Savings (with Renewables)

	Participants	Verified Gross kWh	Verified Gross kW*	Verified Gross Therms	Benefit/Cost Ratio
Residential Programs	1,011,259	1,578,656,352	28,697	80,249,406	2.41

### Expenditures

Residential expenditures were 38 percent of total Focus program expenditures in 2012. Expenditures by category are shown below.

## 2012 Mass Markets Program Expenditures (\$30,544,079)



### RENEWABLE PROGRAMS

Act 141 requires that the statewide program include renewable resource programs for business and residential end-use customers. In 2010, renewable energy technologies were integrated into the Residential programs for more efficient delivery of renewable incentives to customers.

When Shaw became Program Administrator in May 2011, it reviewed the pace of spending for renewable incentives and determined that it needed to suspend accepting applications for non-residential renewable projects beginning July 1, 2011. Incentives for residential renewable projects continued through December 2011. Shaw projected that if renewable incentive spending for the remainder of 2011 continued at the same pace as in the first four months, the Focus program as a whole might not meet its cost-effectiveness requirement. The Commission ordered Shaw to make a detailed examination of the costs and benefits of renewable technologies and report back in the spring of 2012. On April 26, 2012, the Commission issued an Order regarding renewable energy that required that the annual renewable energy incentive level for 2012, 2013, and 2014 not exceed \$10 million in a given year. In addition, for program years 2013 and 2014, the Order requires 75 percent of total incentives be allocated to the more cost-effective Group 1 Technologies (biomass, biogas, and geothermal) and 25 percent of total incentives be allocated to the less cost-effective Group 2 Technologies (solar photovoltaic, solar thermal, and wind). That Order also stipulated that renewable energy incentive funding is contingent upon Focus on Energy's overall benefit-to-cost ratio being at least 2.3 (inclusive of renewables) and requires that the inclusion of renewable energy technology incentives cannot reduce energy savings by more than 7.5 percent in comparison to an efficiency-only program. The table below shows renewable energy impacts for 2012 by sector with the overall benefit/cost ratio for renewable projects.

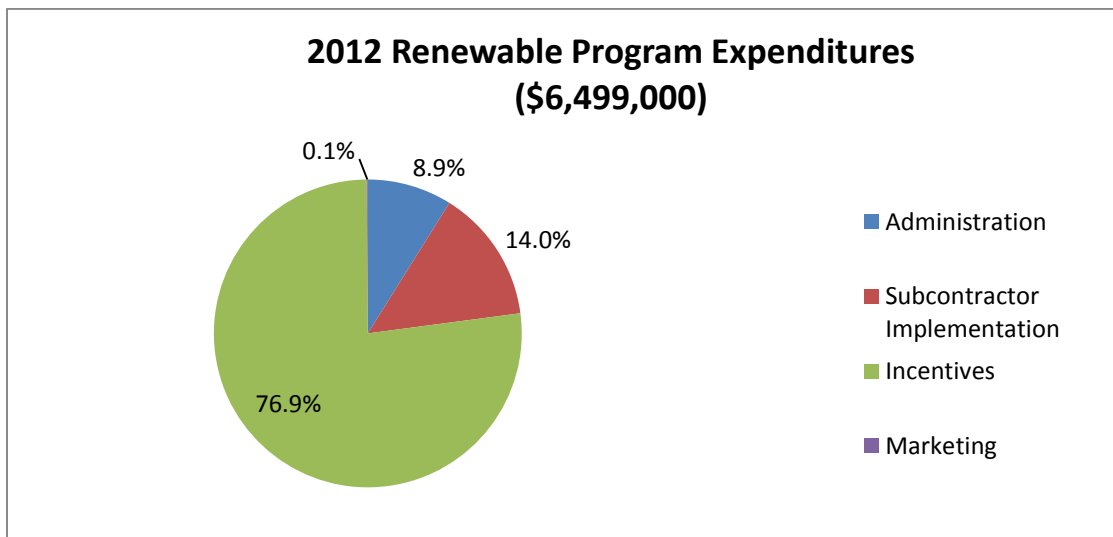


## 2012 Life-cycle Renewable Impacts

	Participant s	Verified Gross kWh	Verified Gross kW	Verified Gross Therms	Benefit/ Cost Ratio
Non-residential Renewables	95	418,834,818	59,138	355,653	
Residential Renewables	286	24,016,792	7,461	250,978	
<b>TOTAL</b>	<b>381</b>	<b>442,851,610</b>	<b>66,599</b>	<b>606,631</b>	<b>0.82</b>

## Expenditures

When separating renewable expenditures from energy efficiency expenditures, renewables were 8 percent of total Focus program expenditures in 2012. Expenditures by category are shown below.



## RESEARCH PORTFOLIO

In 2012, the Focus on Energy Research Portfolio, including the Environmental and Economic Research and Development Program (EERD) and other research initiatives, incorporated a new research priority and broadened funding sources. Per a January 2012 ruling by the Commission, EERD was directed to focus on research that informs program design and delivery rather than contributing practical and useful knowledge for planning the state's energy future. At the time of that ruling, the PSC also reduced the annual EERD budget from \$1,900,000 to \$100,000 per year through 2014. Additionally, \$1,620,075 were available for existing and new projects due to

funds carried over from previous years. There was no change to the mechanism for soliciting new research projects; as before, the EERD program solicited new projects through a competitive procurement process.

An RFP was issued in June 2012 and closed in August 2012. Thirteen proposals were submitted by 10 different organizations from five states. With input from a volunteer advisory committee, the Program Administrator selected two projects for funding: 1). Opinion Dynamics Corporation, Research on the Retrofit Market for Business Lighting, and 2) Sustainable Energy Group, LLC, variable refrigerant volume/flow systems and displacement ventilation, radiant cooling and heating.

New in 2012, the Program Administrator secured an additional \$125,000 in foundation funding to support research initiatives. This funding is supporting a partnership with Lawrence Berkeley Laboratory focused on investigating mechanisms to leverage capital and improve program delivery to the affordable housing sector.

## **FOCUS ON ENERGY – 2012 FINANCIAL SUMMARY**

During the 2012 contract period, the Focus program provided technical assistance and incentives and offered energy efficiency and renewable energy information to an estimated 1,017,663 non-residential and residential customers in Wisconsin. This resulted in life-cycle savings of 6,969,022,462 kWh of electricity and more than 353 million therms of natural gas. Annual kW savings were 94,219.

### **Administrative Costs**

The Public Service Commission reported administrative costs totaling \$368,878 for four staff to oversee the Focus program during the 2012 contract period. SEERA had miscellaneous administrative expenses totaling \$8,400 in 2012.

During the calendar 2012 period, Shaw reported total administrative costs of \$ 8,367,621 for the 2012 contract period, which represents approximately 10.4 percent of the total program budget. Administrative costs are \$ 5,074,648 for non-residential programs, and \$3,292,973 for residential programs. Administrative costs refer to expenses associated with overall portfolio management and planning. This includes setting up and monitoring subcontracts; responding to data requests; expenses associated with monthly program meetings; meetings with SEERA and individual utilities; Commission staff; and other administrative tasks that are not associated with implementing a particular program. Administrative costs for the EERD program were \$315,043 in 2012 which included managing existing grant agreements, research into a new structure and managing the RFP process for new projects.

The Financial Sheet below summarizes revenue, expenditures and Focus obligations for the 2012 contract period. Please note that the expenses for both the Residential and Business Programs include renewable resource program expenditures in addition to the energy efficiency program expenditures. In any given program year, not all dollars contributed are budgeted to programs in

order to cover contractual obligations to be paid the following year. Additionally, in 2012 dollars were not budgeted to programs to create a three-month reserve to manage spikes in monthly incentive check payments.

## 2012 Financial Sheet<sup>1</sup>

<b>REVENUE:</b>	
Investor Owned Utilities	\$100,147,404
Municipal Electric Providers/Electric Cooperatives	\$3,423,718
<b>TOTAL REVENUE</b>	<b>\$103,571,122</b>
<b>EXPENSES:</b>	
Residential Programs	\$30,544,079
Non-Residential Programs	\$50,113,827
Environmental and Economic Research and Development	\$1,030,156
Evaluation	\$ 2,448,997
Other Program Support <sup>2</sup>	\$ 1,649,006
<b>TOTAL EXPENSES</b>	<b>\$85,786,065</b>
Carry-Over Funds <sup>3</sup>	\$18,261,824
Focus on Energy Contractual Obligations <sup>4</sup>	\$ 11,446,094

<sup>1</sup> Taken from the SEERA *Expense Report, Expenses through December 31, 2012*

<sup>2</sup> Includes Fiscal Agent; Compliance Agent; PSC, SEERA; consulting services; software; SPECTRUM development and maintenance; and depreciation

<sup>3</sup> Carry-Over funds are funds remaining at the end of the contract period which were obligated into the 2013 calendar year.

<sup>4</sup> Contractual Obligations refer to contracts with customers for the receipt of incentives when a project is installed/completed. Large projects can take up to 16 months from start to finish and therefore span from one calendar year to the next. This amount is taken from the January 31, 2012 Financial Position Report.

## MUNICIPAL ELECTRIC AND RETAIL ELECTRIC COOPERATIVE REPORTING FOR COMMITMENT TO COMMUNITY PROGRAMS (CTC)

Act 141 requires municipal utilities and retail electric cooperatives to collect an annual average of \$8 per meter for energy efficiency programs. The monthly fee may not exceed 1.5 percent of the total of every other charge for which the customer or member is billed for that month or \$375 per month, whichever is less. Each municipal utility or retail electric cooperative can choose to send the dollars collected to the Focus fund or keep them and operate its own Commitment to Community (CTC) programs. Although Act 141 excludes load management from the definition of energy efficiency, it allows municipals and retail electric cooperatives to include load management in their CTC program offerings.

Act 141 requires that an electric cooperative or municipal utility operating its own CTC program file a report that includes the following: 1) an accounting of fees charged to customers or members in the year, 2) expenditures on CTC programs, 3) a description of CTC programs established for the year, and 4) the effectiveness of the CTC programs in reducing demand for electricity by customers or members.

During the 2012 contract period, all 41 WPPI Energy (WPPI) municipal electric utilities and all 41 non-WPPI municipal utilities participated in Focus. As for retail electric cooperatives, 11 reported CTC activities in 2011 with 13 sending their dollars to Focus. The table below summarizes energy savings and expenditures for the retail electric cooperatives. It should be noted that CTC retail electric cooperative energy savings estimates are calculated by the cooperatives and are not subject to the same measurement, verification, and evaluation as are the Focus savings. As a result, Commission staff cannot verify these CTC energy savings claims and does not recommend adding these savings to the Focus savings for the purposes of calculating statewide energy savings.

### **2012 Retail Electric Cooperative CTC Summary**

	<b>kW (with Load Mgt.)</b>	<b>kWh (with Load Mgt.)</b>	<b>Program Admin.</b>	<b>Program Delivery</b>	<b>Incentives</b>	<b>General marketing</b>	<b>Load Mgt. Costs</b>	<b>Wholesale Supplier Credit</b>
<b>Coop CTC Totals</b>	3,411	13,492,244	\$60,333	\$155,699	\$610,089	\$114,100	\$685,784	\$490,423