



Public Service Commission Report to the Legislature

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

Calendar Year 2017

TABLE OF CONTENTS
2017 Report (January-December 2017)

- **Focus on Energy Program Summary**
- **Program History**
- **2017 Energy Savings Summary**
 - **Total Portfolio Results**
 - Lifecycle kilowatt hour and therm savings
 - Annual kilowatt savings
 - Number of program participants
 - Lifecycle energy savings
 - Expenditures
- **Economic and Environmental Benefits of the Focus on Energy Program**
 - **Non-Residential Program Impacts**
 - Lifecycle kilowatt hour and therm savings
 - Annual kilowatt savings
 - Business program expenditures
 - **Residential Program Impacts**
 - Lifecycle kilowatt hour and therm savings
 - Annual kilowatt savings
 - Residential program expenditures
 - **Renewable Program Impacts**
 - Lifecycle kilowatt hour and therm savings
 - Annual kilowatt savings
 - Renewable program expenditures
 - **Environmental and Economic Research and Development Program**
 - **Rural Broadband Programs**
- **2017 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 to implement projects that otherwise would not be completed, or to complete projects sooner than scheduled. Focus 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.

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, non-profit organizations, and all government levels, the Focus programs help residents and businesses make smart energy choices and reduce energy waste.

Under [2005 Wisconsin Act 141](#), codified as Wis. Stat. § 196.374, oversight of Focus was transferred to the Public Service Commission (Commission). Wisconsin Stat. § 196.374(3)(b)2. requires investor-owned electric and natural gas utilities to spend 1.2 percent of their annual gross operating revenues on energy efficiency and renewable resource programs. The utilities formed a non-profit board called the Statewide Energy Efficiency and Renewables Administration (SEERA) to fulfill their obligations under the statutes. Wisconsin Stat. § 196.374(7)(a) 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.

Under Wis. Stat. § 196.374(2)(a), 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; and,
- Deliver quantified financial returns on public investments in energy improvements.

2017 FOCUS 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 helps residents lower their cost of living and businesses to improve their bottom lines by reducing energy waste. This drives millions of dollars in energy savings, and helps to improve our state’s environmental health and preserves our natural resources. Some of the highlights for 2017 include:

- For every dollar invested in energy efficiency, Focus provided \$4.07 in economic and non-economic benefits; and,
- Over 992,000 homeowners and businesses participated in 16 statewide programs.

Verified Gross Life Cycle Energy Savings: January 1-December 31, 2017

Portfolio	Participants	Verified Gross kWh*	Verified Gross kW*	Verified Gross Therms*	MMBtu	Benefit/Cost Ratio
Non-Residential Programs	5,133	7,204,857,056	65,410	210,997,437	45,551,206	4.60
Residential Programs	987,138+	4,503,849,482	30,921	81,880,883	23,537,736	3.13
Pilots	155	10,558,641	1,020	1,489,966	185,023	-
FOCUS TOTAL	992,426	11,719,265,179	97,351	292,878,320	69,273,965	4.07

+ For CY 2017, the Evaluation Team determined participation for light bulbs using data from the CY 2015 residential general population survey. The survey collected data on the number of bulbs purchased annually by 609 Wisconsin residents. Using the average number of bulbs purchased annually per household (5.8 LEDs) and the total number of bulbs purchased from the Program Implementer’s tracking system, the Evaluation Team estimated the number of households that participated in the program in CY 2017 to be 873,660.

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

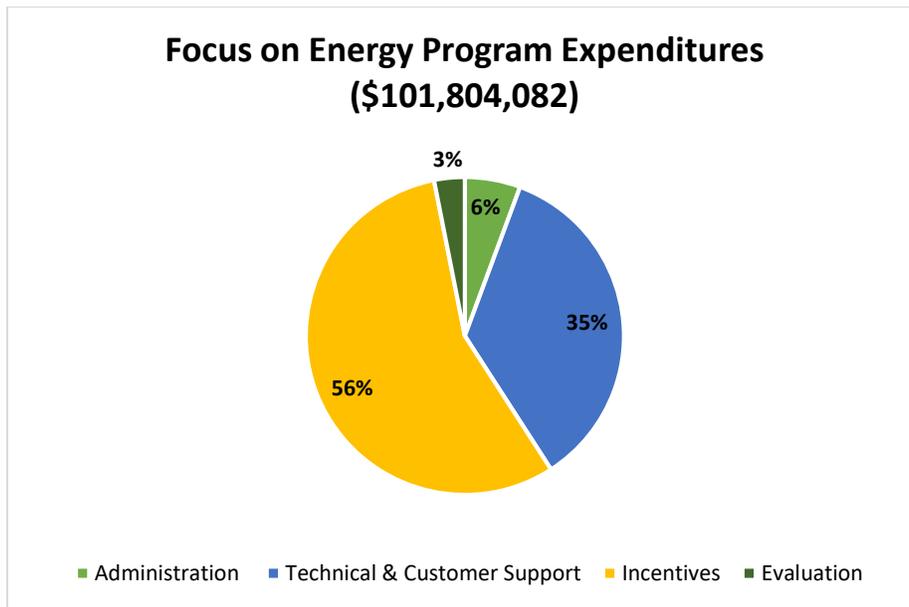
Expenditures

Expenditure categories were revised in 2016 to provide clarity and more accurately reflect program costs. The four categories include: Administrative; Technical & Customer Support; Incentives; and Evaluation and the definitions are as follows:

- **Administrative** costs are the costs not directly associated with a specific program activity but which are necessary to the development and administration of programs, including record keeping, payroll, accounting, auditing, billing, business management, budgeting and related activities, overhead allocation and other costs necessary to direct the organization of the program, but do not include program evaluation.
- **Technical & Customer Support** costs are those associated with project identification, engineering calculation & modeling, inspection of installed projects, trade ally contractor outreach, technical training, and customer service.

- **Incentives** costs are cash incentives payable to Customers & Trade Allies and instant discounts received at point of purchase at participating retail locations.
- **Evaluation** costs are those associated with independently verifying program energy savings and supporting continuous program improvement through analysis of markets, technologies and program operations.

The chart below illustrates expenditures for the Focus program as a whole in 2017.



Economic and Environmental Benefits from the Focus Program

The Focus program achieved an overall benefit/cost ratio of 4.07 to 1.00 for the 2017 period. That is, for every dollar of spending associated with the program, the state achieved \$4.07 in economic and non-economic benefits. Non-economic benefits include the prevention of the following emissions:

- 7,873,158 tons of carbon dioxide;
- 5,273 tons of nitrogen oxide; and,
- 11,299 tons of sulfur dioxide.

Non-Residential Business Energy Efficiency Programs

All types of businesses, large and small, can benefit from the energy efficiency expertise provided by Focus staff. Focus works with eligible Wisconsin businesses to install cost-effective energy efficiency and renewable energy projects. Its efforts help businesses reduce energy waste, protect our environment, control the state’s growing demand for electricity and natural gas, and promote in-state economic development. Programs are 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. Programs include:

- Large Energy Users;
- Business Incentive Program;
- Agriculture, Schools and Government;
- Small Business Program;
- Design Assistance Program (New Construction);
- Renewable Energy Competitive Incentive Program; and,
- Renewable Rewards

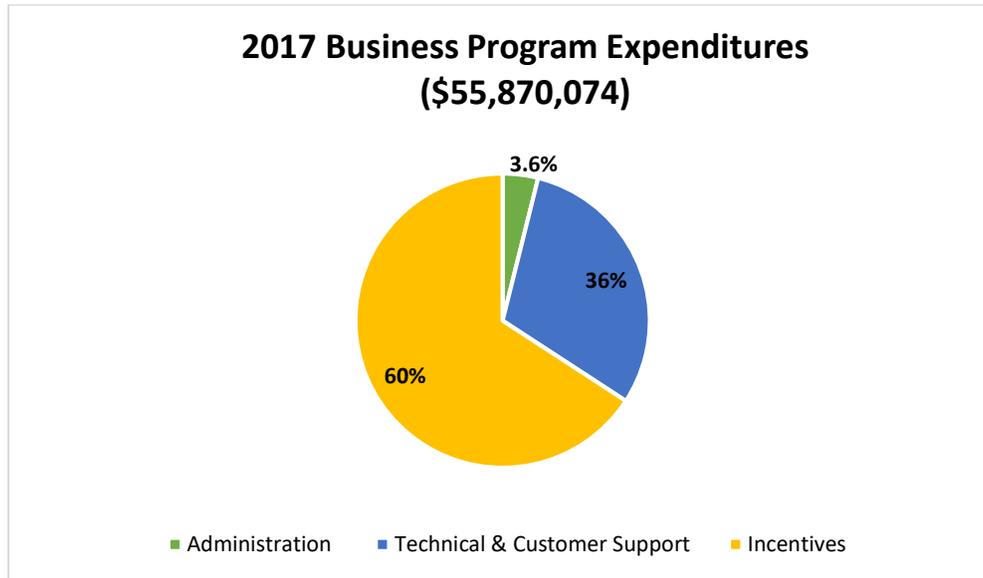
These Focus programs help Wisconsin businesses by:

- 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 a funding match.

2017 Verified Gross Life Cycle Non-residential Savings (with Renewables)

	Participants	Verified Gross kWh	Verified Gross kW*	Verified Gross Therms	MMBtutu	Benefit/Cost Ratio
Non-Residential Programs	5,133	7,204,857,056	65,410	209,682,335	45,551,206	4.60

Expenditures



RESIDENTIAL ENERGY EFFICIENCY PROGRAMS

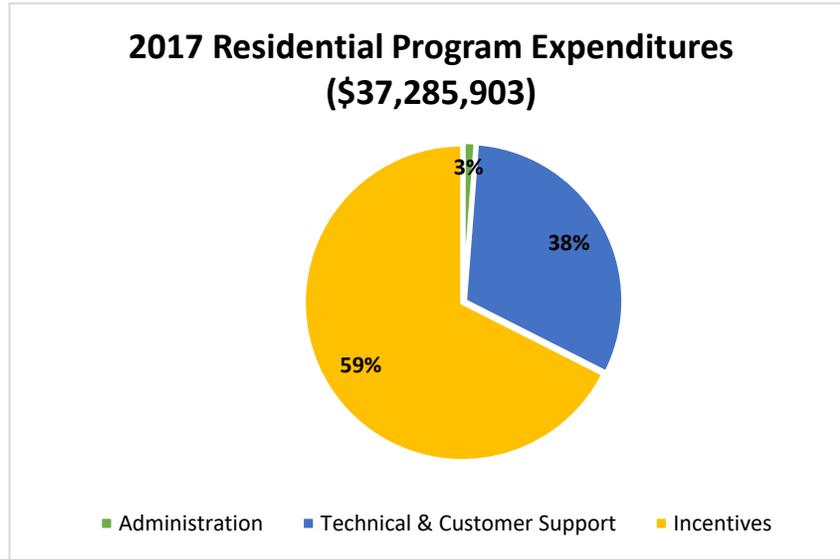
In 2017, demand for the broader portfolio of Residential programs continued to rise, helping residents reduce energy waste and save money by providing information and incentives necessary to prompt smart energy choices. Whether residents purchased ENERGY STAR[®] qualified LED bulbs, made efficiency upgrades to an existing home, or requested a Simple Energy Efficiency kit, Focus experts offered the insight, technical assistance, and financial incentives to get them started. The following programs were offered in the Residential sector during 2017:

- Appliance Recycling
- Simple Energy Efficiency (Single Family and Renters)
- Home Performance with ENERGY STAR[®];
- Retail Lighting and Appliances program;
- New Homes;
- Multifamily Energy Savings;
- Residential Renewables;
- Design Assistance Program(Multifamily)

2017 Verified Gross Life Cycle Residential Savings (with Renewables)

	Participants	Verified Gross kWh	Verified Gross kW*	Verified Gross Therms	MMBtu	Benefit/Cost Ratio
Residential Programs	873,660	4,503,849,482	30,921	81,706,019	23,537,736	3.13

Expenditures



RENEWABLE PROGRAMS

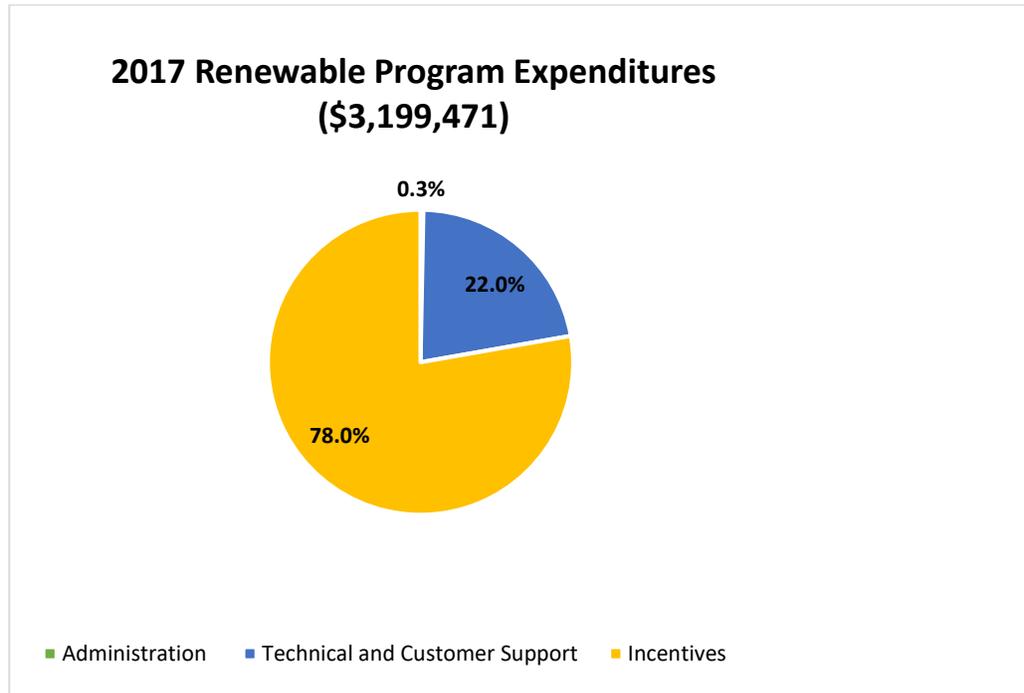
Wisconsin Stat. § 196.374 requires that the statewide program (Focus) includes renewable resource programs for Business and Residential end-use customers.

In its Final Decision issued on December 20, 2016, the Commission determined that the estimated balance of the Renewable Loan Fund (\$7,734,140 as of October 2016) should be used for incentives in 2017 and 2018. The Commission allocated \$1.1 million in residential incentives in both 2017 and 2018, \$2.1 million in business incentives in 2017, and \$3.4 million in business incentives for 2018. The Commission also capped solar photovoltaic incentives for 2017 and 2018 at 12 percent of total system costs. Finally, the Commission increased the capacity cap for business prescriptive solar photovoltaic incentives from 4 kilowatts (kW) to 8 kW. ([PSC REF#: 295733.](#))

2017 Verified Gross Life Cycle Renewable Impacts

	Participants	Verified Gross kWh	Verified Gross kW	Verified Gross Therms	Benefit/Cost Ratio
Non-residential Renewables	106	134,937,357	3,031	0	1.37
Residential Renewables	502	4,281,434	1,545	0	
TOTAL	608	139,218,791	4,576	0	

Expenditures



RESEARCH PORTFOLIO

In January 2012, the Commission directed the Environmental and Economic Research and Development Program (EERD) to focus research on the more immediate goal of Focus program design and delivery rather than the long term goal of planning for the state’s energy future. At the time of that decision, the Commission also reduced the annual EERD budget from \$1,900,000 to \$100,000 per year through 2014. The \$100,000 annual budget was then approved for the 2015-2018 program period during the second Quadrennial Planning Process. There was no change to the mechanism for soliciting new research projects; therefore, the EERD program continued to solicit new projects through a competitive procurement process.

In 2017, Focus solicited research topic ideas from implementers and utility staff. The evaluation committee selected eight topics of interest and issued a call for proposals in September 2017. Sixteen proposals were received in November and the evaluation committee selected two projects for funding:

- *Characterizing the Renewable Energy Landscape in Wisconsin*, by Tetra Tech, with a budget of \$78,400.
- *Light Level Analysis in Buildings*, by Seventhwave, with a budget of \$69,694.

Both of these projects have concluded and can be found on the Focus website using this link: <https://focusonenergy.com/about/research>.

RURAL BROADBAND PROGRAM

In the fall of 2016, the Commission opened docket 5-FE-102 to investigate the improvement of access to Focus programs by customers in rural areas of the state (for background, please see [PSC REF#: 295733](#)). As part of the investigation, the Commission identified 582 zip codes in Wisconsin that are considered rural by the census bureau and/or include a significant share of census blocks that are eligible for federal grants to address broadband underservice. When comparing Focus participation in these zip codes to more urban zip codes, the Commission determined they were underserved. As a result, the Commission determined that \$27.7 million should be allocated to a two-year pilot in 2017 and 2018 for specialized programs designed to serve customers in those zip codes. It also determined that the rural programs would be included with the other core Focus business and residential programs for evaluation purposes. The Commission approved the following programs and funding allocations:

Program	Description	Budget
Connected Device Kit Program	Aims to increase demand of residential customers in rural areas to establish or upgrade broadband service	\$16 Million
Communications Provider Initiative	Works with broadband service providers to upgrade their facilities to be more energy efficiency	\$ 4 Million
Community Small Business Offering	Dedicated staff provide community-based outreach to work with utilities, public service organizations or local governments to encourage rural small businesses to participate	\$3.17 Million
Direct-mail Home Energy Assessments	Reaches seniors and low-income residents that are unlikely to have access to broadband. Sends them via direct mail, a paper based assessment of their home to complete, mail back, and receive recommendations on how to improve their home efficiency	\$283,000
Rural Home Performance	Using the results from the direct-mail assessments, aims to deliver air sealing and insulation improvements to rural customers. Can also receive incentives for high-efficiency heating and cooling equipment.	\$1.1 Million
Online Analytics Platform	Empowers business customers by communicating energy consumption data through an online energy analytics platform.	\$580,000
Rural Customer Outreach	Dedicated outreach campaign aimed at increasing the awareness of Focus with rural customers using online and traditional media channels (print, t.v., newspapers.)	\$867,000

FOCUS 2017 FINANCIAL SUMMARY

During 2017, the Focus program provided technical assistance, incentives, and energy efficiency and renewable energy information to over 992,000 business and residential customers in Wisconsin. This resulted in life cycle savings of 11,719,265,179 kWh of electricity and more than 292 million therms of natural gas. Annual kW savings were 97,351.

Administrative Costs

The chart below summarizes the administrative costs for the Focus program in 2017, which accounts for approximately six percent of total spending.

Compliance Agent	\$248,911
SPECTRUM (Focus enterprise system)	\$1,205,363
Fiscal Agent	\$422,681
PSC Staff Oversight	\$408,392
SEERA Expenses	\$276
APTIM Administrative Costs	\$2,268,176
Implementer Administrative Costs	\$1,159,095
TOTAL	\$5,712,895

The Financial Sheet below summarizes revenue, expenditures and Focus obligations for the 2017 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.

2017 Focus Financial Sheet¹

REVENUE	
Investor Owned Utilities	\$97,419,696
Municipal Electric Providers/Electric Cooperatives	\$3,312,296
Education and Training Revenue	\$24,616
TOTAL REVENUE	\$100,756,608
EXPENSES	
Residential Programs	\$37,285,903
Non-Residential Programs	\$55,870,074
Environmental and Economic Research and Development	\$188,890
Rural Broadband Programs	\$3,023,903
Evaluation	\$3,149,688
Other Program Support ²	\$2,285,622
TOTAL EXPENSES	\$101,804,082
Carry-Over Funds ³	\$6,282,093
Focus Contractual Obligations ⁴	\$15,473,550

¹ Taken from the SEERA *Expense Report, Expenses through December 31, 2017*.

² Includes Fiscal Agent; Compliance Agent; Commission; SEERA; consulting services; software; SPECTRUM development and maintenance; bank fees and depreciation.

³ Carry-Over funds are funds remaining at the end of the contract period which were obligated into the 2018 calendar year.

⁴ 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 SPECTRUM.

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

Wisconsin Stat. § 196.374(7)(a) 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 Wis. Stat. § 196.374(1)(d) excludes load management from the definition of energy efficiency, Wis. Stat. § 196.374(7)(c) allows municipals and retail electric cooperatives to include load management in their CTC program offerings.

Wisconsin Stat. § 196.374(7)(e) 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.

In 2017, CTC programs were operated by 13 retail electric cooperatives. The other 11 cooperatives, all 41 WPPI Energy (WPPI) municipal electric utilities, and all 41 non-WPPI municipal utilities sent their energy efficiency funds to Focus. The table below summarizes energy savings and expenditures for all 13 CTC programs operated by cooperatives. It should be noted that the energy savings estimates are calculated by the cooperatives and are not subject to the same evaluation procedures as the Focus savings. As a result, the Commission 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.

2017 Retail Electric Cooperative CTC Summary

	kW (with Load Mgt.)	Annual kWh (with Load Mgt.)	Program Admin.	Program Delivery	Incentives	General marketing	Load Mgt. Costs	Wholesale Supplier Credit
Coop CTC Totals	3,202	23,191,231	\$40,610	\$103,200	\$1,157,035	\$134,170	\$786,291	\$304,297

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