Lessons Learned from the State Energy Efficient Appliance Rebate Program

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ABSTRACT

The American Recovery and Reinvestment Act of 2009 (ARRA) funded a U.S. Department of Energy (DOE) grant program to all 56 states and territories to provide rebates to consumers for energy-efficient replacement appliances. The State Energy Efficient Appliance Rebate Program (SEEARP) allowed the State Energy Office (SEO) of each state and territory to design its own program for delivering rebates to its residents. These rebate programs ran between December 2009 and February 2012. This paper explores the program designs and delivery methods used by the states and territories during SEEARP and provides lessons learned about specific program models and best practices for states, utilities, and energy efficiency organizations to use in designing rebate programs. This information is drawn from weekly DOE meetings with program administrators, state reports, and the wealth of communication between contractor state account representatives and SEOS. Topics include setting program goals, selecting products, determining eligibility requirements, setting rebate levels, developing a timeline, establishing the rebate infrastructure, implementing the program, communicating with consumers and the media, closing the program, and lessons for working with the retail supply chain, utilities, and rebate processors.

Introduction

On February 17, 2009, President Barack Obama signed into law the American Recovery and Reinvestment Act of 2009 (ARRA) in response to the economic downturn. The primary goals of the $787 billion stimulus included creating new jobs and saving existing ones, spurring economic activity and investing in long-term growth, and fostering unprecedented levels of accountability and transparency in government spending.

With funding provided by ARRA, the U.S. Department of Energy (DOE) developed the State Energy Efficient Appliance Rebate Program (SEEARP). The $300 million program focused on spurring economic activity and investing in long-term energy savings by helping consumers replace inefficient appliances with new, efficient models. SEEARP was the first national appliance rebate program for residential consumers. Accordingly, DOE and its partners designed and built the program from scratch, reaching out to inform, excite, and engage key stakeholders—56 U.S. states and territories, manufacturers of 14 major appliance, water heater, and heating, ventilation, and air conditioning (HVAC) equipment types, retailers, trade associations, and recyclers—to inform and encourage consumers to invest in higher-efficiency products.

1 As used in this report, the term “States” refers to the 50 U.S. states, the District of Columbia, and the territories of American Samoa, Guam, Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands.
DOE gave the states flexibility in designing their own programs, resulting in 56 unique approaches to an appliance rebate program. Table 1 summarizes the scale and variety of state program offerings.

<table>
<thead>
<tr>
<th>State Programs</th>
<th>56</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eligible Product Categories</td>
<td>24</td>
</tr>
<tr>
<td>Rebates Options Offered</td>
<td>691</td>
</tr>
<tr>
<td>Total Product Rebate Payments</td>
<td>$264 million</td>
</tr>
<tr>
<td>Total Product Rebates Issued</td>
<td>1,783,425</td>
</tr>
<tr>
<td>Total Recycling Rebates Issued</td>
<td>177,029</td>
</tr>
<tr>
<td>Total Rebate Program Changes</td>
<td>436</td>
</tr>
</tbody>
</table>

The experience with SEEARP offers valuable lessons for large-scale program design, implementation, and tracking. This paper explores the successes and challenges faced by program administrators during the planning, implementation, and closing phases of their programs, highlighting best practices for each step of the process. This paper is intended to guide program administrators through key decisions in designing appliance rebate programs.

### Rebate Program Design

#### Establishing Program Goals

In addition to the overall SEEARP goal of creating economic stimulus through appliance replacement, state rebate programs were designed to accomplish a variety of goals, including saving energy and water, reducing carbon dioxide emissions, providing assistance to low-income households, and providing recovery assistance to victims of natural disasters. Many states that struggled with their programs during SEEARP did not have clearly articulated goals. Establishing program goals early and keeping them in mind when making decisions about product selection, eligibility and program requirements, rebate levels, program length, and rebate infrastructure contribute to program success.

#### Selecting Products

Because SEEARP was a stimulus program, its main goal was to get money into the hands of consumers to help them purchase new, more-efficient appliances. Some states had additional goals of saving energy and/or water, but their product selections did not always reflect those goals, which reduced their programs’ efficacy. To ensure that program goals are met, program administrators should select products that match the program goals. For example, if the program’s goal is energy savings, consider targeting HVAC equipment and water heaters, which offer the highest per-unit energy savings. A program designed to promote water savings, on the other hand, should consider rebates on dishwashers and clothes washers. Restricting eligibility to products manufactured in the U.S. can augment a stimulus program’s effects on the economy.
Regardless of the goal, programs with simple product eligibility requirements tended to be more successful. Many states offered rebates based on ENERGY STAR qualification, making it relatively easy for consumers and retailers to determine which models were eligible. In an effort to get greater energy savings, some states selected higher criteria levels than ENERGY STAR, opting for Consortium for Energy Efficiency (CEE) tiers or Federal Tax Credit efficiency tiers. While those tiers offered higher per-unit energy savings, they also led to more complicated programs that required additional education for consumers, retailers, and installers about program eligibility requirements. Programs using tiers also encountered additional problems with the supply chain, as many retailers had a limited stock of eligible products. Consumers found tiers to be confusing, which resulted in purchases of ineligible appliances and higher rates of rebate application rejection. Setting rebate eligibility based on tiers makes a program more complicated, so program administrators should adopt this approach with caution, unless it is implemented on a broad geographic scale with an extensive marketing program.

Selecting products that already have high market share may limit results. For example, during SEEARP, many states offered rebates on refrigerators. Because ENERGY STAR already accounts for such a large share of installed refrigerators, they have relatively low per-unit energy savings. Cost-effectiveness was not an issue during SEEARP—because it was a stimulus program—but it is an important consideration for most utility programs.

**Determining Eligibility Requirements**

Eligibility requirements need to be connected to program goals. SEEARP program administrators had the flexibility to decide whether the program would be open to all state residents, or whether to restrict participation to low-income residents, residents with disabilities, year-round residents, or single-family households. Many state programs were open to all state residents. A few states limited eligibility to low-income or disabled residents and some provided rebates only to residents of owner-occupied housing. States offering disaster relief programs typically limited participation to residents of FEMA-declared disaster areas or to uninsured households affected by the disaster. Restricting rebates to these groups can help target assistance, but also led to cases of lower participation rates, so program administrators should determine whether this would conflict with overall program goals.

**Setting Rebate Levels**

States offered rebates as a set amount per eligible appliance or a percentage of the purchase price – up to the full price of the appliance. Full-price rebates were typically limited to programs targeting low-income consumers or uninsured victims of natural disasters. During SEEARP, states offered a very wide range of rebate amounts, as illustrated in Table 2. Not surprisingly, consumers prefer programs with higher rebates. However, programs need to balance the importance of setting rebate levels high enough to incentivize consumers to make purchases with the reality that high rebate levels reduce the number of consumers who can participate in the program.

Table 2 presents the rebate levels and average product price during SEEARP.
Table 2. Rebate levels by product category

<table>
<thead>
<tr>
<th>Products</th>
<th>Number of rebates and percent of total</th>
<th>Range of rebates low-high (average)</th>
<th>Average product price</th>
<th>Average rebate vs price (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Room air conditioners</td>
<td>26,933 (1%)</td>
<td>$20-$400 ($73)</td>
<td>$269</td>
<td>27%</td>
</tr>
<tr>
<td>Clothes washers</td>
<td>586,740 (33%)</td>
<td>$35-$600 ($108)</td>
<td>$560</td>
<td>19%</td>
</tr>
<tr>
<td>Dishwashers</td>
<td>316,065 (17%)</td>
<td>$25-$600 ($85)</td>
<td>$502</td>
<td>17%</td>
</tr>
<tr>
<td>Freezers</td>
<td>24,473 (1%)</td>
<td>$25-$1,000 ($100)</td>
<td>$444</td>
<td>22%</td>
</tr>
<tr>
<td>Refrigerators</td>
<td>621,195 (36%)</td>
<td>$50-$1,000 ($129)</td>
<td>$891</td>
<td>14%</td>
</tr>
<tr>
<td>Central air conditioners</td>
<td>46,963 (3%)</td>
<td>$75-$1,500 ($517)</td>
<td>$6,129</td>
<td>8%</td>
</tr>
<tr>
<td>Boilers</td>
<td>7,678 (0%)</td>
<td>$100-$1,200 ($527)</td>
<td>$3,226</td>
<td>16%</td>
</tr>
<tr>
<td>Furnaces</td>
<td>74,465 (4%)</td>
<td>$99-$1,500 ($400)</td>
<td>$3,328</td>
<td>12%</td>
</tr>
<tr>
<td>Heat pumps</td>
<td>48,797 (3%)</td>
<td>$75-$1,600 ($506)</td>
<td>$6,021</td>
<td>8%</td>
</tr>
<tr>
<td>Water heaters</td>
<td>30,116 (2%)</td>
<td>$25-$2,000 ($228)</td>
<td>$1,305</td>
<td>17%</td>
</tr>
</tbody>
</table>

Developing a Program Timeline

The program timeline should reflect program goals. Because SEEARP was a stimulus program, many state programs aimed for short operational timeframes that spurred a large volume of sales quickly. On the other hand, programs that also targeted energy savings tended to require longer timeframes to allow sustained retailer outreach efforts and give consumers ample time to make purchasing decisions. Disaster recovery programs, like stimulus programs, require shorter timeframes to help consumers quickly replace lost or damaged appliances.

Allowing sufficient time to perform necessary administrative tasks was integral to program success. States that did not allot enough time for program planning and setup were forced to delay their program launches. The following administrative tasks typically took a significant amount of time:

- **Hiring rebate processors.** Some administrators did not have experience with requests for proposals (RFPs) and would have benefited from additional time for drafting the RFPs and evaluating the incoming proposals.
Finalizing contracts. Some program administrators did not allow enough time to negotiate and finalize agreements with retailers, rebate processors, contractors, and recyclers.

Constructing product databases. A sophisticated product database takes time to design, build, and troubleshoot. Allowing enough time to create a database, including conversion charts for retailers that use stock keeping units (SKUs) instead of model numbers, helps ensure a smooth program launch and reduces reporting errors.

Contacting stakeholders. Stakeholders, especially retailers and distributors, need to prepare for rebate programs. Giving them enough time to develop promotional materials, train staff, and order stock sets the stage for program success.

Rebate Infrastructure

In SEEARP, the majority of states had consumers submit their rebate applications by mail. This made rebate submittal available to all consumers statewide, enabled each consumer to interact directly with the SEO, utility, or rebate processor, and put the burden of completing applications on the consumer. Some states chose to use other rebate models, which were more or less effective depending on the program goals and the size of the target population.

- Reservations. In SEEARP reservation models, consumers reserved rebates by telephone or on the Internet before making purchases. This model worked best for states with smaller populations that had low to moderate demand and when products were hard to find or out of stock. However, states using reservation models often had high breakage rates – where consumers reserved rebates and then did not make purchases. Giving consumers a short window (15-30 days) in which to make purchases after making reservations helps reduce breakage rates, improves the SEO’s ability to respond to unredeemed rebates, and enables the SEO to offer additional rebates once unclaimed ones have expired. Waiting lists can help SEOs ensure that they issue as many rebates as possible.

- Point-of-sale. Point-of-sale (POS) SEEARP rebates – in which the consumer received the rebate at the time of purchase – were the most convenient for consumers, but they transferred the bulk of the administrative burden to retailers, who had to train staff and modify store computing systems. POS systems also made it difficult for SEEARP program administrators to track remaining program funds in real time and placed most of the risk on retailers, who paid rebates to the consumer with the possibility of not getting reimbursed if the rebates were obtained fraudulently.

- First-come, first-served. Otherwise known as “buy-then-apply,” the first-come, first-served SEEARP model had relatively low administrative costs but required clear communication to consumers that rebates would be paid only as long as there were sufficient funds. The main drawback of this model was that it was susceptible to oversubscription and some consumers who purchased eligible products did not receive rebates. Some states reserved funds to address application overages.

- Vouchers. SEEARP voucher rebate programs distributed vouchers to qualified residents which could be redeemed at the point of purchase. Vouchers typically worked best with small target populations – such as low-income households or residents of island
territories – with low rates of Internet accessibility and easy access to a small number of voucher distribution sites. However, voucher programs were very susceptible to favoritism and corruption.

Many consumers had difficulty with the application process and submitted incomplete forms, were confused by the program requirements, or had difficulty locating applications. Providing rebate applications online, at retailers, and at selected state government offices makes it easier for consumers to obtain them. Easy access to the application, a list of what information must be included, and clear instructions to guide the consumer through the process of completing and submitting the application will reduce consumer confusion and the number of incomplete or incorrect applications.

For some states, additional requirements – such as proof of installation for HVAC equipment – opened consumers to the risk of losing out on rebates if the installation wasn’t completed quickly enough. Rebate programs typically require only proof of purchase for most products, but if products are out of stock, proof of installation helps ensure that consumers have not cancelled orders and kept the rebate. Programs with a proof of installation requirement need to be sure to give consumers enough time to submit their applications.

Some state programs required consumers to submit proof of recycling or haul-away, which sometimes took the form of a signed self-certification that the old appliance was recycled according the program guidelines. Programs targeting energy or water savings especially benefited from haul-away and/or recycling requirements, as they ensured that older products were taken off the grid rather than resold or retained as secondary units. SEEARP programs designed to help with recovery after tornadoes and tsunamis waived these requirements, as many appliances were lost in those natural disasters.

Setting rebate application deadlines appropriately was also an important factor in the success of SEEARP programs. Of course, consumers need enough time to submit their rebate applications, but states that gave consumers too much time between purchasing appliances and submitting rebate applications encountered more problems with consumers failing to complete applications or with applications being submitted after the deadlines. In general, a rebate application deadline of 30 days after delivery/installation gave consumers adequate time to complete and submit application, while giving states the opportunity to address broken or unredeemed rebates.

Program Implementation

Designing a Program Website

Program administrators found that a program website was an easy and effective method to communicate with consumers, the media, and stakeholders about rebate programs. The best program websites included information about primary program goals, disclaimers about funding availability, explanations of consumer eligibility and product criteria, lists of covered products and models, answers to frequently asked questions, downloadable rebate application forms, links to information about recycling and proper disposal, and lists of participating retailers. Some SEOs launched their websites right before the program start or did not conduct sufficient testing on the website, which led to problems with traffic crashing their sites. The most successful websites were launched well in advance of the program start, enabling consumers to familiarize
themselves with the program before the eligibility window began and reducing the risk of traffic overloading the system. Keeping websites independent of customer service phone systems minimizes the risk of heavy traffic causing both systems to crash at once.

Communicating with Consumers and the Media

Having a media relations plan for relaying information quickly and effectively supports program advertising. Press conferences, including one the day before program launch, helped spread the word and stir up excitement about state SEEARP programs. Providing the media with key information, including program goals, important dates and deadlines, eligible products and rebate amounts, eligible consumers, the application process, and contact information, was also an important part of educating consumers. States that did not provide this information to the media often had to expend more effort and spend more money to advertise their programs.

Many SEOs also gave the media and consumers details about tax credits and complementary rebates from utilities or other sources, as well as information about how program participation would save money, save energy and/or water, and create jobs. Some SEOs also provided a story angle, such as how the program would solve a state-specific problem, anecdotes about local consumers who benefited from the program, or other benefits, such as noise reduction, increased comfort, or improved reliability, all with the aim of increasing participation.

The media and consumers also appreciated facts about potential savings that they could relate to everyday expenses. Consumers do not always respond to abstract numbers, but presenting savings information in a way that is accessible and applicable to their everyday lives drums up excitement for the program and increases participation rates. One such example from SEEARP is that over 5 years, the savings from replacing a pre-1993 refrigerator with an ENERGY STAR qualified model would be the equivalent of the cost of 96 12-packs of soft drinks, a computer, or a 32” television.

Lessons Learned from Retailers and Manufacturers

Most program administrators did not coordinate with neighboring states when designing and launching their programs, which led to problems when states in the same region launched around the same time. Regional coordination would have allowed supply chain market actors (retailers, distributors, and manufacturers) to develop, design, and implement marketing plans more efficiently and on a larger scale. Coordination would have also ensured adequate product supply and availability, and manufacturers would have been better able to shift inventory or ramp up production. The retailers and manufacturers suggested that coordination implemented at the national level, through 5 or 6 regional rebate program models, would improve their ability to meet the demands of the program.

Supply chain market actors also requested more time to meet program requirements. In post-program interviews and meetings, supply chain market actors indicated that they would have liked to have at least the following:

- A minimum of 90 days to review the outline of the program (not subject to change), formulate marketing strategies and tactics, develop materials such as circulars and radio
and television advertising, and prepare production and stocking to meet increased demand for selected products.

- At least 60 days to implement marketing strategies and train sales and delivery staff.
- At least 30 days to address operational needs, such as setting up a system for processing reservations or point-of-sale rebates.

Lessons Learned about Working with Utilities

When SEOs partnered with utilities, the programs that worked with a limited number of utilities tended to be the most successful. For the most part, these utilities had prior experience with rebate programs, as well as relationships with retailers, an understanding of the market, and established marketing channels that SEOs were able to leverage. Some state programs encountered problems in working with utilities. Utilities offered the following suggestions for improving on SEEARP program models:

- Administrators and utilities should work together to align program goals. Because so many elements of a program are designed to support the program goals, a coordinated program with common goals is more likely to be successful.
- Administrators should enter into a separate contract with a rebate processor, instead of joining an established agreement between a utility and a rebate processor. In some cases, SEOs that entered into the same agreement with utilities and rebate processors had higher administrative costs than if they had entered into a separate agreement. Using the same processor as the utility can be an advantage if the state program covers the same products as a current or previous utility program, as the processor already has experience processing rebates for those products.
- Use a single application. Some consumers were confused when state and utility rebate programs had separate applications. A single, unified application form available on the state and utility websites would have reduced consumer confusion.

Lessons Learned about Working with Rebate Processors

In many cases, working with rebate processors reduced administrative costs associated with SEEARP programs. A rebate processor who has experience with consumer and retailer rebates can be a valuable resource, and program administrators should communicate with the rebate processor and get its input during program design and implementation. Other lessons from SEEARP about working with rebate processors included the following:

- Select only one rebate processor. SEOs working with multiple processors found that it led to consumer confusion, as well as complicated and costly administrative processes.
- Use a rebate processor with experience working with SEOs. Some program administrators found it difficult to work with rebate processors who did not have prior experience working with SEOs, making contracting, program design, and program implementation more difficult and time consuming.
- Negotiate contracts based on flat fees rather than hourly rates. Unexpected delays, consumer complaints, issues with rebates, and suspected fraud took time to resolve.
Administrative costs rose when rebate processors were paid by the hour, which effectively reduced funds available for rebates.

- **Ensure that rebate processor uses U.S.-based labor.** During SEEARP, some SEOs used rebate processors that relied on overseas labor, which resulted in some consumer complaints and a negative perception of the program. SEOs could have increased the stimulus benefits of the program by using rebate processors that relied solely on U.S. labor, which would have created additional domestic jobs.

**Lessons Learned about Recycling Requirements**

Many SEEARP programs had recycling requirements to keep old appliances off the grid and out of landfills; those programs had much higher rates of recycling than programs without such requirements. Recycling added additional complications for SEOs as some program administrators lacked knowledge of how proper appliance recycling differed from appliance disposal. Furthermore, some retailers and utilities refurbished old appliances and sold them, which was not only inconsistent with DOE’s definition of proper disposal, but contrary to the program’s goal of product replacement.

Recycling requirements posed challenges for retailers, utilities, and vendors without the necessary infrastructure. Some retailers waived their customary recycling fees during the program eligibility period, which improved recycling rates. Recommendations for a successful program with a recycling requirement include the following:

- **Require formal proof of recycling.** Recyclers provided proof of recycling as part of their service. This documentation allows SEOs to definitively know that certain products were recycled.
- **Form partnerships with retailers, local recycling organizations, the state Department of Environmental Protection, recycling service providers, and local solid waste departments.** These organizations have experience with recycling programs and working with them can reduce administrative costs and shed valuable insight on the recycling process.
- **Offer additional incentives for recycling old appliances.** Recycling incentives provide consumers with an additional financial benefit for recycling their products. In SEEARP, the increased payments helped induce some consumers to participate in the rebate program, though they increased costs and reduced the number of available rebates.

**Closing the Program**

**Performing Pre-Close out Accounting**

Before closing out their programs, SEOs needed to do careful accounting to verify that administrative costs did not exceed the budget and to ensure that there were enough funds remaining for the final steps. Under SEEARP, states were required to develop and submit a variety of progress reports and a budget to assess program progress and results. Pre-close out accounting also gave program administrators information about reservation breakage rates to
determine if enough funds were left provide rebates to consumers on the waiting list. In some cases, administrators discovered that remaining funding made a program re-launch necessary.

Re-launching the Program

With SEEARP, DOE required that programs with at least 20 percent of their initial funding remaining consider a re-launch. Program administrators found that stakeholders needed re-launch lead times similar to those for initial program launch; stakeholders benefited from learning about requirements for the new program at least 90 days before the re-launch, even if the deadlines were the only thing that changed. Best practices for program administrators conducting a re-launch include the following:

- **Inform all stakeholders of the intent to re-launch the program.** In SEEARP, the most successful re-launches treated the second phase of the program like the first, giving all participants ample time to prepare for their new roles, prepare updated marketing materials, and extend or revise participation agreements.

- **Renegotiate contracts with rebate processors.** If the original rebate processing contract was based on a flat fee, program administrators needed to negotiate a new contract or extend the old one. If the contract was based on an hourly rate, the dates of performance may need to be revised. Depending on the complexity of the revisions, renegotiating contracts may increase administrative costs and reduce the pool of funds left for rebates.

- **Redesign the program.** The more successful re-launches covered different products than in the initial program phase or had different consumer eligibility requirements (such as including HVAC in a program that had previously covered only household appliances or targeting disaster victims or low-income families).

- **Draft and distribute new participation agreements.** When program requirements change, program administrators need to alter participation agreements to ensure that stakeholders enforce the new requirements. For SEEARP, in some cases, the second phase covered a completely different set of products, so administrators had to reach out to other distributors, contractors, or additional retailers.

- **Update applications.** Applications need to reflect updated deadlines and revised eligibility requirements. The website should clearly outline any changes to eligibility requirements to avoid consumer confusion.

Overall, SEEARP programs that did not have to re-launch were more successful. Re-launching the program increased administrative costs and required additional time and coordination that sidelined programs. Program administrators found that the best way to avoid having to re-launch their programs was to offer rebates on popular products, particularly white goods and HVAC equipment; keep the list of eligible appliances relatively short to avoid consumer confusion; determine program eligibility time frames that reflect seasonal demand, including offering rebates on air conditioners in the warmer months; and publicize the program with enough advance notice to give consumers time to make purchasing decisions.
Preventing and Identifying Fraud

Rebate processors had a variety of fraud prevention tactics in place, but SEOs benefitted from double-checking suspected cases of fraud. Some strategies program administrators used to reduce fraud included checking whether rebates sent to P.O. boxes were associated with valid street addresses, verifying that (when prohibited by program rules) there were no duplications in the same product category for the same household, confirming with retailers that purchases were made at physical store locations in the state, confirming with retailers that receipts had not been modified, and requesting that rebates be returned if purchases were exchanged for ineligible products. In cases where fraud was suspected, SEOs were referred to the appropriate state Attorney General for assistance with investigation and resolution.

Feedback from SEOs indicated that the majority of identified returns were exchanged for eligible products and that consumers who did not replace rebated products with eligible ones were willing to return rebates. Only a small number of consumers did not respond to SEOs’ requests and those cases were typically referred to the relevant state Attorney General.

Program Impacts and Final Reporting

SEEARP required program administrators to compile and submit detailed final reports including the number of products rebated in each product category, purchase dates, product model numbers, Air-Conditioning, Heating and Refrigeration Institute (AHRI)-certified reference numbers for split system and central air conditioners, Solar Rating and Certification Corporation (SRCC) certification numbers for solar water heaters, pre-tax purchase prices, amount of each rebate payment, products recycled or hauled away, any additional recycling rebates paid, energy and water saved annually and over the lifetime of products, estimated number of jobs created, total administrative funds spent and funds spent on specific administrative activities, and in-kind contributions from stakeholders. Program administrators who required purchase dates, purchase prices, and model numbers on applications and kept track of this information were better able to identify program impacts, trends in consumer spending, and benefits to consumers, the state, and the appliance industry. Developing the final narrative report about the program helped program administrators identify program successes and failures and gave them a better idea of how to conduct successful programs in the future. These reports were also helpful for other SEOs looking to replicate or build on past programs.

The data collected by program administrators made detailed analysis of many aspects of the rebate programs possible, including the following:

- **Timing.** How long consumers took to make purchases after making reservations, how long consumers took to submit applications after making purchases, and how long after submitting applications consumers received rebates.
- **Geographic.** The distribution of rebates across urban, suburban, and rural areas, popularity of specific appliances by geography, and the distribution of rebates by region.
- **Sales data.** Quarterly analyses of sales before, during, and after the program to determine the effect of programs on state and local economies.
• Recycling data. The share of rebate applicants who took advantage of recycling rebates when they were available, what types of products were recycled, and the amount of various materials kept out of landfills.

• Product analysis. The distribution of products sold by category, by brand, and by efficiency level.

Conclusion

While SEEARP was envisioned to be a stimulus program, it also provided states with a vehicle to incentivize consumers to purchase more efficient products and affect consumer purchasing decisions. Because states were given flexibility in designing their own programs, and most state programs were designed in isolation, DOE was able to observe the results of 56 different approaches to an appliance rebate program. The lessons learned by SEOs and Program Administrators during SEEARP offer valuable insights into how to design, implement, and close future rebate programs that maximize available funding and leverage state-specific goals relating to energy-efficiency, water conservation, and economic stimulus.

Key lessons for program administrators from SEEARP include the following:

• Establish program goals early, and keep them mind when:
  o Selecting products to be rebated
  o Setting rebate amounts
  o Determining product criteria
  o Setting eligibility requirements
  o Establishing program length
  o Determining rebate application process and infrastructure

• Keep your program simple

• Establish a program timeline that allows adequate preparation time for:
  o Hiring rebate processors
  o Developing the application process
  o Communicating and collaborating with stakeholders

• Build relationships with key stakeholders, including:
  o Manufacturers
  o Distributors
  o Retailers
  o Trade organizations
  o Local utilities

• Maintain communication to ensure all parties are aware of the following:
  o Program plan
  o Program launch
  o Program changes
  o Program closure