



RECYCLING GRANTED

LOOKING TO BOOST RECYCLING CAPACITY AND CREATE JOBS AS PART OF THE BARGAIN? A SPECIALIST FROM A PROGRAM IN THE TAR HEEL STATE SHOWS THE TRACK RECORD AND POTENTIAL OF GRANT EFFORTS THAT DO JUST THAT.

BY SHERRY YARKOSKY

What happens when a state recycling program decides to use grant funding to help private recycling firms? A number of states have chosen to do so, with the intent of building necessary private infrastructure vital to the success of recycling in general. New data from an analysis of North Carolina Recycling Business Development Grants shows the track record and potential of efforts to boost recycling capacity in the private sector.

The N.C. Recycling Business Assistance Center (RBAC) is a part of the Community and Business Assistance Section of the state's Department of Environment and Natural Resources' Division of Environmental Assistance and Outreach. To aid in its mission to support and grow the recycling industry, RBAC offers, through a competitive request-for-proposal process, Recycling Business Development Grants (RBDG) for private and non profit recycling businesses in North Carolina.

Why make grants available to private businesses?

Recycling grant-making in North Carolina began with the passage of the 1989 Solid Waste Management Act (Senate Bill 111) and the creation of the Solid Waste Trust Fund, funded by advanced disposal fees on white goods and tires and, beginning in 2009, a landfill tip-fee surcharge. Initially, grants were given solely to the state's municipalities and counties, who were subject to the bulk of mandates in SB111 designed to help North Carolina reach its waste reduction goals. After initial improvement in materials recovered by local government recycling programs, recovered material recovery rates began to stagnate. It became clear that further increases in recycling from local government programs could only be achieved if the markets, infrastructure and processing capacity were developed on the private side.

In recognition that the growth of private infrastructure is im-

portant to the future of recycling in N.C., private recycling business development grants were started in 2003. Each fiscal year, between \$600,000-\$750,000 is allocated to the grant program. Since the first day, every grant cycle consistently received more requests for funding than was available, underscoring the strong need for the type of assistance the grants offer. The grant projects have translated into new market opportunities for local government recycling programs and waste generators of all kinds. With the recent economic downturn, and the tightening of commercial lending, the RBDGs have also become a critically-important funding source for machinery and equipment upgrades that are necessary for the ongoing expansion of recycling industry in the state.

What types of projects are funded?

The RBDG program supports projects involving the collection, processing, or end use of materials in the solid waste stream. The money funds investments in equipment and capital projects to increase the capacity of a recycling business to divert more materials from disposal and into economic use. Maximum grant awards are in the range of \$30,000-\$50,000 and actual grant awards are typically between \$4,000 to \$50,000.

Typically, bonus points are awarded for

grant proposals addressing recent solid waste legislation or a component of the waste stream needing further recycling development. For example, grant rounds in the past few years gave special consideration and bonus points for projects recycling materials recently banned from disposal, including wooden pallets, rigid plastic containers, electronics and oil filters. In this way, the RBDGs support the implementation of state recycling policy. The grant program has also given preference to projects that address construction and demolition debris recycling (C&D) and food scrap collection and composting, two growth areas affecting very large disposed waste streams.

Table 1 | RBDG summary results

RBDG summary results FY07 - FY11

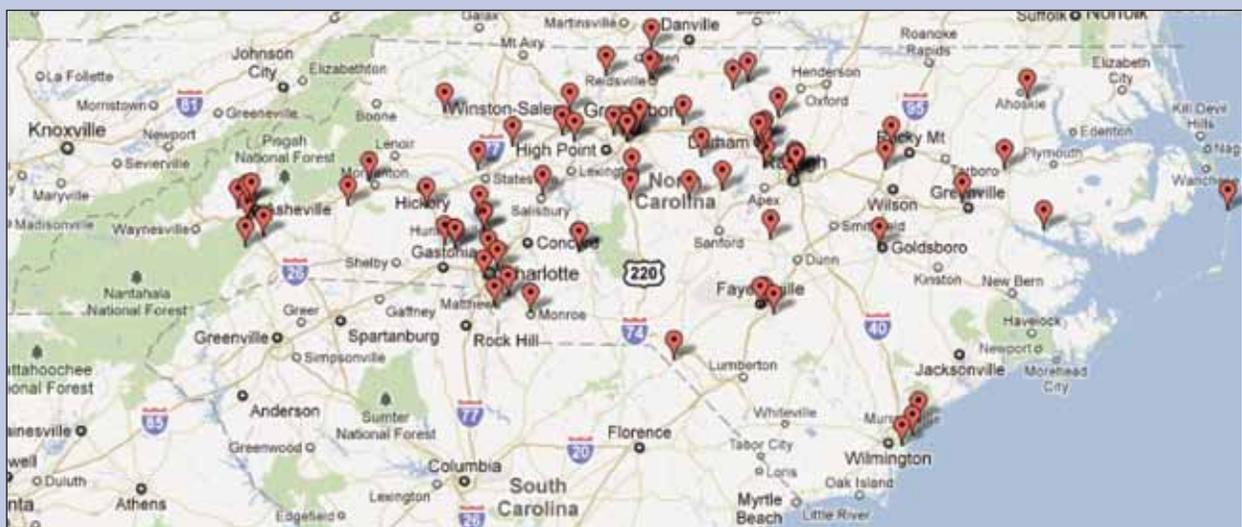
Total grant proposals	211
Total grant funding request	\$7,013,359
Grant funding awarded	\$2,044,900
Number of grants fully funded	10
Number of grants partially funded	91
Total number of grants funded	101

Source: The N.C. Recycling Business Assistance Center, 2011

What is the impact of the RBDG program?

In response to a request from the office of Gov. Bev Perdue, RBAC recently analyzed the RBDG program performance from fiscal year 2007 to fiscal year 2011. This analysis yielded interesting insights on the ability of small private sector state grants to create recycling capacity and jobs. During the five-year period, 211 grant proposals were received with \$7,013,359 in total grant funding requested. The total number of projects funded and completed totaled 101, or slightly less than half of the total proposals submitted. Grant money awarded was 29 percent of

Figure 1 | Geographic distribution of recycling business development grants 2007-2011



Source: The N.C. Recycling Business Assistance Center, 2011, map created by BatchGeo.com

the total amount requested, or \$2,044,900 for the 101 grants funded and completed.

To stretch available resources and fund additional well-planned projects, the selection committee often reduces the amount of the grant award requested in the proposal. Typically, businesses will accept the reduced award or modify the scope of the project to meet the reduced funding amount. As can be seen from Table 1, only 10 out of the total 101 projects received the maximum grant award.

The program has been effective in reaching its intended goal of increasing recycling capacity. More than 348,000 tons of materials have been recovered and have entered back into the economy. The state invested \$5.88 per ton diverted, six times less than the average tipping fee of \$37 per ton at municipal solid waste and C&D landfills in North Carolina. Although the program does not have a job development focus (in some cases, grant projects eliminate jobs through automation), overall, it fostered the creation of 241 jobs in North Carolina for a ratio of 1,444 tons diverted per job created.

Businesses are committed to contributing at least a 50-percent cash match to the grant project giving them a financial stake in the outcome. As can be seen in Table 2, in total, businesses have well exceeded the 50-percent cash match requirement. Total project money spent was \$8,817,536 and the private sector cash match was 331 percent of the state's grant award.

Effort is made to select grants representing all areas of North Carolina. Figure

Table 2 | RBDG funded project summary results

RBDG results FY 07-11	
Number of grants funded	101
Grant money awarded	\$2,044,900
Private business cash match	\$6,772,636
Total project money spent	\$8,817,536
Tons diverted	348,043
Jobs created	241
N.C. investment/ton diverted	\$5.88
Tons diverted/job created	1,444

Source: The N.C. Recycling Business Assistance Center, 2011)

1 shows the distribution of grants awarded and completed from 2007-2011.

Examples of funded RBDG projects

The grants have funded a wide variety of projects. In some cases, state funding was only a fraction of a very large investment. In others, state funding was the major source of capital, helping smaller recycling firms make a major equipment purchase.

Clear Path Recycling, a joint venture between Shaw Industries Group, Inc. and DAK Americas LLC, received a \$50,000 RBDG to assist with the purchase of processing equipment to produce clean flake from post-consumer PET bottles. The proposal was submitted in a grant round supporting a landfill ban on rigid plastic

bottles. The money spent on this portion of the project was \$200,000 as part of the total \$70 million plant investment. Approximately 80 jobs and 160 million pounds of annual PET processing capacity were created during the initial phase of the facility, which will be the largest PET recycling operation in North America once it is fully developed.

Hatteras Recycle LLC received a \$25,000 grant to purchase an additional recycling truck and roll-carts to collect curbside recyclables. Located on the remote Outer Banks, Hatteras Recycle has made recycling available in an area that is severely underserved for recycling collection services. The grant helped the company expand its service area to cover all of Hatteras Island, including vacation rental homes and permanent residents and businesses. With a

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total investment of \$37,590, the company diverted 100 tons of curbside recyclables and created five jobs in the first year of the project. Hatteras Recycle now has nine employees and continues to grow with the initial state investment. Hatteras currently provides collection service to 1,000 rental homes, 200 private residences and 10 restaurants and businesses.

Wellmark Plastics, a producer of post-industrial and post-consumer recycled plastic, received a \$20,000 RBDG in 2007 toward a total investment of \$76,000 to help install an extruder, grinder and storage silos. The project increased annual recycled plastic processing capacity by 1300 tons and added two new employees.

As a follow-up to the 2007 grant, in 2012 Wellmark received a \$40,000 grant toward a \$550,000 expansion of a production line capable of separating the material components within bales of discarded plastic apparel hangers from a national retailer. The metal and paper will be sold off to other recycling companies and the three grades of plastic will be extruded at Wellmark into high-quality pellets for injection molding of new hangers and other products. The new hangers will be sold back to the original retailer for resale as a consumer product. It is estimated that Wellmark will create 20 new jobs and recover 500 tons of plastic, paper and metal with this project.

Handle Safe Systems LLC received a \$15,000 grant to purchase and install a vibrating screen and auger feed conveyor to improve the tear-off shingle processing line at its existing C&D transfer facility. The proposal was submitted in a grant round with a special emphasis on increasing C&D recycling. The total grant project investment was \$71,500. As a result of the project, two employees were added and asphalt shingle recovery increased to 2,600 tons, annually. The asphalt shingles recovered and processed are sold to a paver for use in hot-mix asphalt production.

Reflective Recycling Inc., a processor of post-consumer and industrial glass, received a \$50,000 RBDG towards a \$162,000 total project investment to assist with the purchase and installation of a truck scale and glass storage bunkers to increase recycling capacity of glass and other post-consumer beverage containers. The proposal was submitted in a grant round giving special consideration to projects addressing legislation taking effect in 2008 requiring ABC (Alcoholic Beverage Control) permit holders to recycle beverage containers. As a

result of the RBDG project, two employees were added and annual glass beverage container recovery increased 26,000 tons.

Conclusion

An important aspect of many RDBGs is that they build market capacity that in turn supports local government recycling programs, in some cases tying directly to recycling grants also made to cities and counties. For example, grants to private processors of tear-off shingles are creating opportunities for local governments to collect shingles for recycling, as has been fostered in three 2010-11 community

grants. Two grants to a regional hauler, Benfield Sanitation, to help fund collection equipment and a new MRF directly supported start-up of two local cart-based and grant-funded curbside collection programs. In general, RDBGs expand the "demand" for recyclable materials in North Carolina and that in turn helps the "supply" produced by local governments. RR

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