What can encourage more scrap to enter the recycling stream? What is the relationship among scrap supply, prices, and demand? What are the potential uses of automobile shredder residue? More than 40 years ago, scrap industry leaders realized that the future of the industry might rely on its ability to answer fundamental questions such as these. They established what’s now the Recycling Research Foundation, the research and education arm of ISRI, to do just that.

The mission of RRF, a 501(c)(3) nonprofit, is to “promote the art and science of scrap processing and recycling through research, sponsorships, technical assistance, and educational programs for the purpose of advancing the industry.” RRF also administers the financial side of the academic scholarship programs some ISRI chapters sponsor. By funding research projects on priority subjects and providing academic scholarships, the foundation raises the profile of the industry today and supports future generations in scrap.

A FOUNDATION IS BORN
RRF’s origins are in the Institute of Scrap Iron and Steel, an ISRI predecessor association. At that group’s 1967 convention, ISIS President I.D. Shapiro of United Iron & Metal Co. (Baltimore) announced the founding of a scrap research foundation “to help explore new preparation methods and quality improvement,” among other topics. At that time, the federal government had taken “a great deal of interest in scrap research,” and the industry needed an organization to spearhead such efforts, he noted, so ISIS founded the Metal Scrap Research and Education Foundation.

The organization completed one of its first projects, the report “Identification of Opportunities for Increased Recycling of Ferrous Solid Waste,” in August 1971. The study reviewed the major obstacles at the time to the recycling of ferrous scrap and opportunities for expanding that niche. Among other observations, the study concluded that “the key to achieving recycling success is increased profitable demand for iron and steel scrap.”

Another major research project received MSREF funding in 1974, during a period of high ferrous scrap demand, after some U.S. scrap consumers had petitioned the government for export controls to combat what they claimed was a domestic scrap shortage. To address those assertions, the three-phase study MSREF commissioned sought answers to three questions:

- What was the processing capacity of the U.S. ferrous scrap industry in 1974?
and what was its projected capacity by 1980?

- How large was the U.S. reservoir of ferrous scrap that was not being recycled?
- At what price would the reservoir material move from its source to scrap processing operations for preparation?

The foundation began work on the first phase of the study in late 1975, releasing its report in August 1976. The report noted that in 1974, the U.S. ferrous scrap industry processed about 52 million net tons of iron and steel scrap and had a maximum capacity to produce around 100 million net tons. By 1980 the industry’s overall capacity was expected to reach 133 million net tons. In sum, the study stated, the “U.S. ferrous scrap industry has a processing capacity far beyond the conceivable demands of scrap consumers.”

The study’s second phase investigated the size of the U.S. ferrous scrap reservoir. Released in August 1977, the report identified a 636 million-ton reservoir of ferrous scrap at the end of 1975, “enough to blanket all of Washington, D.C., with nearly 100 feet of iron and steel discards.” (The foundation updated this study three times in subsequent years, with the final report—published at the end of 1981—finding an inventory of almost 683 million tons of ferrous scrap.)

The report from phase three of the study, “Price-Volume Relationships for the Supply of Scrap Iron and Steel: A Study of the Price Elasticity of Supply,” appeared in January 1979. It concluded with the simple economic truth that “higher prices bring out more scrap.”

ISRF merged with the National Association of Recycling Industries in 1987 and dissolved MSREF in 1988. The group’s mission was too important to disappear forever, though, so the newly merged association—ISRI—established the Metal Scrap Research Foundation in March 1990. Later that year, MSRF created a shredder industry task force to pursue research concerning alternative uses for automobile shredder residue. In July 1991, the task force agreed to fund a shredder residue characterization study, the report of which came out in 1992.

In October 1991, MSRF voted to change its name to the Recycling Research Foundation, expanding its scope as well as its moniker beyond metal scrap. Of course, it continued to fund research studies, completing one titled “Analysis of Regulatory Scenarios Affecting Metal Scrap Recycling Industries” in October 1993.

**SCHOLARSHIP SUPPORT**

Also in 1991, the foundation took its first major step to expand its mission beyond research, passing a motion to create “tax-exempt scholarship accounts for chapters desiring to fund such a program.” These programs award scholarships to the children of employees of chapter member companies, who can use them for college or university tuition. Each chapter establishes the qualification criteria and amount of its scholarships, and each selects its own recipients. In 2007, 10 chapters—Gulf Coast, Michigan, Mid-Atlantic, Northern Ohio, Ohio Valley, Pacific Northwest, Paper Stock Industries, Pittsburgh, Rocky Mountain, and New Southern—awarded 60 scholarships totaling $70,500. Two additional chapters—Chicago and Empire—have scholarship programs but did not make any awards through RRF last year.

**INSIDE RRF**

A 24-member board of directors governs RRF. Half of the board members, including the president and vice president, are appointed by the ISRI chair and confirmed by the ISRI board of directors. These appointed board members serve a two-year term that coincides with the term of the ISRI chair who selects them. The other half of RRF’s board consists of the presidents of ISRI chapters whose scholarship funds RRF administers. They serve a two-year term that matches their term as chapter president. In addition, ISRI’s president and vice president of finance serve in ex officio, nonvoting positions as the foundation’s secretary and treasurer, respectively.

RRF’s funding comes from individual and corporate contributions. When companies join ISRI or renew their membership, they have the opportunity to contribute to the foundation by checking a box on their membership form and adding a donation amount to their annual dues. Companies and individuals also can make contributions to the group as part of their corporate or personal philanthropic efforts. Sales of foundation publications, such as “Beneficial Use of Automotive Shredder Residue (ASR) in Landfills,” also provide revenue to the foundation. (That report, which is $250, is available in the ISRI Store at www.isri.org.) As of Sept. 30, 2007, RRF had about $149,000 in unrestricted funds available for research projects and about $102,400 in restricted funds for scholarships.

**WHAT’S IN STORE?**

In recent years, RRF board members have brainstormed ways to raise more unrestricted funds. At its October 2007 meeting, for instance, RRF President Manny Bodner of Bodner Metal & Iron Corp. (Houston) proposed that a small group of RRF board members take the lead in fund raising, encouraging families and individuals to include RRF in their annual philanthropic giving. At the same meeting, a Bank of America representative described various “planned giving” options and opportunities the foundation could offer. “ISRI members have not been given a mechanism to leave a legacy within the association for the long term,” notes RRF board member Randy Goodman of Carolinas Recycling Group (Spartanburg, S.C.). “There are different programs, such as a charitable remainder trusts,
that we are exploring.”

Bodner praises RRF for having a “very involved board” that’s working to raise awareness of this traditionally low-profile group and considering a variety of potential future projects, such as endowing a university chair or creating a degree program dedicated to recycling. RRF’s directors acknowledge that such programs would be expensive, which explains their focus on finding new sources of funds.

The foundation also has several goals related to the ISRI chapter scholarship programs it administers. First, says RRF Vice President David Borsuk of Sadoff & Rudoy Industries (Fond du Lac, Wis.), is simply to “increase the awareness of the foundation as a scholarship program.” Further, Borsuk says, the foundation would like to encourage the chapters that have scholarship programs to increase the number of scholarships they award annually and to motivate chapters that do not have scholarship programs to establish them. Though 12 of ISRI’s 21 chapters have scholarship programs, Bodner has spent his two-year term, which expires this April, encouraging the remaining chapters to launch their own programs. “They have all expressed support” for the idea, he says. Borsuk expects RRF will strive to “maintain the momentum” on this issue under the next chair.

Another RRF priority, Borsuk says, is “to work with the industry to identify appropriate research and development programs RRF can facilitate for the benefit of the industry in total.” It’s a challenge, however, to decide which topics merit a full-fledged research project and which have the greatest application to and benefit for the whole industry, he notes. One potential research project, Borsuk suggests, is a study on stormwater compliance documentation and evaluation. Stormwater permitting is the one regulatory area that “affects the greatest percentage of ISRI members,” Borsuk says, thus he expects “the interest in such a project would be huge.” Such a study could “examine how the quality of stormwater discharges from the industry’s facilities has changed over time,” explains David Wagger, ISRI’s director of environmental management. The study also “could examine the relationship between discharge quality and the use of stormwater best management practices” to create “reliable statistics for the efficiency of BMPs used to manage stormwater-discharge quality.”

Whether it pursues this stormwater study or research on something entirely different, RRF will continue to stand—after 41 years—as an invaluable support for the scrap industry, the association, and those chapters with scholarship programs. “RRF is worthwhile and important to our industry,” Borsuk says. Going forward, he sees RRF growing to become “more than just a research foundation, but an educational foundation as well.”

Jim Fowler is retired publisher and editorial director of Scrap.

Publisher’s note: To learn more about the Recycling Research Foundation, attend the group’s meeting Sunday, April 6, from 4:30 to 6 p.m. at Mandalay Bay in Las Vegas, before the start of the ISRI convention. RRF meetings are open to all ISRI members. For more information, visit www.isri.org and click the RRF menu button on the home page.