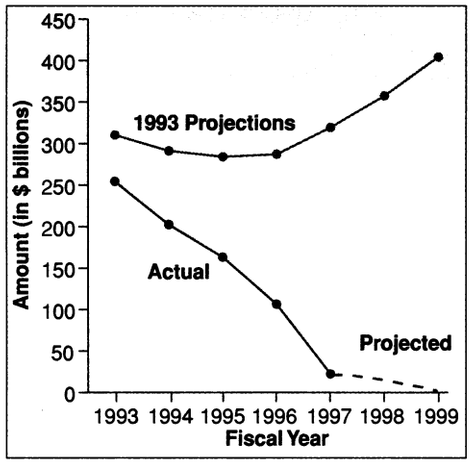
Sharing the surplus

Congressional generosity toward R&D depends in large part on whether the economy continues to boom, thereby boosting federal revenues, as well as on the ability of science advocates to make their case. Any surplus arising from a balanced budget is sure to set loose what Brown calls "powerful forces" eager to get a share of the expanding pie. Some Republicans will want tax cuts, some Democrats will back increases for social spending, and legislators from both parties will be eager to fund road and bridge projects in their districts and states.

Sensenbrenner is upbeat about the outcome of such a fight for science and technology, noting that "research is in a good position because we've taken the politics out of it." He notes that House Speaker Newt Gingrich (R–GA) has called for investing some of a potential surplus in R&D—as has Democrat Brown—and that senators from both parties have signed onto a bill introduced by Senator Phil Gramm (R–TX) to double civilian R&D spending over 10 years.

Other R&D advocates, while happy with the turn of events, are more cautious. "I don't want to depend on optimistic projections into the next century," says Representative Jerry Lewis (R–CA), who chairs the House appropriations panel that oversees the budgets for NASA and NSF. "We have to do more with less, and I see the overall budget shrinking, not growing." Adds Brown, "I'm not so optimistic about improving the role of R&D. It will be a tough struggle for dollars." Gibbons holds an even more skeptical view: "If Congress finds a new pot of gold, I would be delighted. But I'd like to know where it will come from."



SOURCE: CONGRESSIONAL BUDGET OFFICE

Falling down. A booming economy has invalidated earlier projections of an ever-expanding budget deficit.

Of course, not all agencies will share equally in any congressional pot of gold. For example, while praising Congress for its support of research, Lane cautions legislators against favoring some R&D agencies at the expense of others. In particular, he notes how the growth in NIH's budget has far outpaced the rate for other agencies. "If that trend continues," he told members of the science board last week, "there are some serious questions that could be raised about the proper balance among R&D agencies."

Despite such rumblings, lawmakers agree that one key to success will be the community's continued ability to maintain a united front. "There's no question the community did a very good job in the past 18 months—we stopped the pattern of one group fighting with the other over priorities," says Lewis. Adds Brown, a longtime friendly critic of researchers: "The science community has been more active and better organized in making the case for R&D in general." And he warns, "you can't rest on your laurels."

–Andrew Lawler

With reporting by Eliot Marshall and Jeffrey Mervis.

DATABASES

RaDiUS Draws a Bead on U.S. R&D

In the early 1990s, when the U.S. government decided to team up with the auto industry to build a "greener" car, it promised carmakers full access to relevant research at its vast network of national labs. But Rob Chapman, a former vice president of Allied Signal who joined the Commerce Department in 1993 to chair its technical task force on the Partnership for the Next Generation Vehicle, soon discovered that it was an empty promise. "Industry started with a simple question: What have you got that can help us?" he recalls. "But nobody had any good answers."

The problem, Chapman discovered, was the lack of a central repository of information on how the government spends its $70 billion a year R&D budget—who it was funding, and what they were doing. Fortunately for Chapman, the consortium was able to tap into a fledgling database called RaDiUS (Research and Development in the United States) developed by The RAND Corp. Today, that database has grown to cover 24 federal agencies, with information on more than 1500 programs and nearly 300,000 separate grants and contracts. And now it's available, at a price, to almost anyone in the scientific community.*

RaDiUS was developed for the Critical Technologies Institute (CTI), a small, federally funded think tank set up by Congress in 1991 that RAND manages. When the Clinton Administration created the National Science and Technology Council to oversee federal R&D, it asked CTI to help R&D managers find out quickly what their colleagues in other agencies were funding. The idea was to eliminate duplication, foster collaborations, and highlight gaps. Rather than work on the problem piecemeal, RAND officials decided to look at the big picture. The result was RaDiUS.

The database offers both a broad overview of R&D, using a range of categories that includes subject, year, geographic location, R&D performer, budget category, and funding mechanism, as well as detailed information on the work being performed both within and outside federal labs. Of course, the database is only as good as the data provided by federal agencies. And the quality varies widely. "Some agencies are very good at keeping track of and describing what they fund, while others have difficulty getting down to the level of individual awards," says RAND's Donna Fossum, who developed and manages the database. "But we're working with them."

As with any search, the choice of terms makes a big difference. A query about biodiversity, for example, yields a relatively small harvest given its prominence—11 agencies and 450 awards. But CTI staff members explain that such a term is so broad that it may not be mentioned in a description of programs related to the topic. A query about fuel cells or autism, they say, is more likely to ferret out the desired information.

It's too early to see the impact of RaDiUS on overall federal R&D spending patterns, says Fossum. But she says it has added another weapon to the arsenal of R&D managers looking to get the most for their money. "The federal government needs something like this," says Fenton Carey, who coordinates research and technology for the Department of Transportation. "It's a tool to make more informed decisions."

RaDiUS has been available to federal managers for the past 2 years. Now any institution with a federal contract can buy a license to use it for $7000 a year. "And I don't think there are too many universities or nonprofit organizations that don't have at least one federal contract," says Fossum.

–Jeffrey Mervis

* For more information, contact CTI at 202-842-5922, or check out a free demo on the Web, at www.rand.org/radius