

Customer Satisfaction Findings from the Advanced Technology Program's Survey of ATP Applicants 2002

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Table of Contents

Αl	ostract	V
Αd	cknowledgements	vii
Ex	ecutive Summary	ix
1	Introduction	1
2	Applicant Perceptions of the ATP Proposal Process	5
3	Applicant Views of the ATP Proposal Preparation Kit and Electronic Submission System (ESS)	9
4	Applicant Views of the Usefulness of ATP Information Sources	13
5	Applicant Satisfaction with ATP Staff	17
6	ATP Proposal Debriefing: Nonawardee Views	21
7	Time and Cost for ATP Proposal Preparation	25
ΑĮ	ppendix	29
Αl	bout the Authors	34
Αl	bout the Advanced Technology Program	back cover

Abstract

During the first part of 2004, the Advanced Technology Program (ATP) and Westat, a survey research firm under contract to ATP, conducted a survey of all applicants to the 2002 ATP competition. Seventeen of the survey questions addressed issues of customer satisfaction. Topics covered included perceptions of the ATP proposal process; tools, information and materials provided by ATP; satisfaction with staff; nonawardee views of the debriefings offered by ATP; and estimates of time and cost of proposal preparation. Surveying all applicants enables ATP to analyze and compare responses of both awardees and nonawardees. Overall, respondents viewed the ATP review and decision process as fair; found the ATP processes, information, tools and materials to be useful; and were satisfied with ATP staff. In general, awardees rated ATP higher on customer satisfaction questions than did nonawardees, although most nonawardees offered favorable ratings as well. Responses to customer satisfaction questions given by 2002 applicants were the same or very similar to responses to the same questions provided by applicants to the 2000 competition.

Acknowledgements

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At Westat, Kerry Levin offered insightful review of earlier drafts.

We would also like to extend our appreciation to the many applicants to the 2002 ATP competition who took the time to complete the survey.

Executive Summary

From January through July, 2004, ATP conducted a *Survey of ATP Applicants* to its 2002 competition. One section of the survey focused on customer satisfaction issues. ATP's direct customers are the organizations that ATP interacts with on a daily basis during the course of project selection and program management. This group of customers includes all applicants to ATP competitions, including both applicants who receive funding (awardees) from ATP and those who do not (nonawardees). Virtually all companies applying for funding in the year 2002 award competition were included in the survey.

The customer satisfaction questions addressed applicant perceptions and experience during the proposal preparation and review process. Topics covered include: applicant perceptions of the proposal process, views of the proposal preparation kit and electronic submission system, views of the usefulness of information sources, satisfaction with ATP staff, nonawardee views of the proposal debriefing and time and cost for proposal preparation.

Applicant Perceptions of the ATP Proposal Process

- Three-quarters of all applicants report that the proposal process is useful.
- Three-quarters of all applicants view the review and decision process as fair.

Applicant Views of the Proposal Preparation Kit and Electronic Submission System

- About 80% of applicants were satisfied with the ease of use, clarity and comprehensiveness
 of content of the ATP Proposal Kit.
- About two-thirds of applicants submitting proposals using the Electronic Submission System found it easy to use.

Applicant Views of the Usefulness of ATP Information Sources

- Three-fourths of applicants attending proposers' conferences found them useful.
- 85% of applicants found the ATP website useful.

Applicant Satisfaction with ATP Staff

• About 90% of applicants who contacted ATP staff were satisfied with the courtesy and promptness of staff.

ATP Proposal Debriefing: Nonawardee Views

• Over half of nonawardees were satisfied with the timeliness, clarity and comprehensiveness of the debriefing provided by ATP staff.

Time and Cost for ATP Proposal Preparation

• The median applicant devoted 200 staff hours and \$12,500 to preparing the proposal.

Introduction

Effective organizations monitor customer satisfaction, and the Advanced Technology Program (ATP) is no exception. ATP has several types of customers. Ultimately, ATP's customers are the U.S. taxpayers who enjoy the benefits of the innovative technologies that ATP funds. In addition, ATP's direct customers are the organizations that ATP interacts with on a daily basis during the course of project selection and program management. This group of customers includes all applicants to ATP competitions, including both applicants who receive funding from ATP and those who do not.

ATP is a partnership between government and industry that awards funding for the development of innovative, high-risk technologies that have the potential to create widespread social and economic benefits. ATP selects projects for funding in accordance with rigorous technical and economic criteria. ATP has held 44 competitions from 1990 through 2004, providing \$2.3 billion in awards, while industry has provided an additional \$2.1 billion as cost share, for a total of \$4.4 billion of high-risk research.

Companies apply to ATP in response to an announced competition. They may apply either as single company applicants or as joint ventures. Single applicants can receive up to \$2 million over three years, and joint ventures can receive ATP funding for up to five years, with no funding limitation other than the announced availability of funds. A joint venture must include at least two separately owned, for-profit companies and may also include universities, national research labs or non-profit organizations. Of the 768 projects awarded to date, 550 were to single company applicants and 218 were to joint ventures. More than 165 universities and 30 national laboratories participate in ATP projects either as subcontractors or as partners on joint ventures.

From January through July, 2004, ATP conducted a *Survey of ATP Applicants* to its 2002 competition. One section of the survey was devoted to customer satisfaction issues. The customer satisfaction questions addressed applicant perceptions and experience during the proposal preparation and review process. A total of 17 questions with 27 survey items covered the following topic areas:

- Applicant perceptions of the proposal process, including the ATP decision process;
- Satisfaction with the Proposal Preparation Kit provided by ATP and the newly introduced Electronic Submission System;
- The usefulness of information sources about ATP, such as the ATP website, proposers' conferences, information booths and industry or company colleagues;

- Courtesy, promptness and help received from ATP staff;
- Satisfaction with timeliness, clarity and comprehensiveness of the debriefing received by applicants who were not selected for an award;
- Company time and cost devoted to proposal preparation.

Staff from ATP and Westat, a survey research firm under contract to ATP, collaborated in developing the survey. The customer satisfaction survey incorporates questions from a 2001 customer satisfaction survey conducted for ATP by the U.S. Census Bureau and questions on applicant perceptions and time and cost for proposal preparation from the *Survey of ATP Applicants 2000*. The similarity of survey items in the 2002 and 2000 *Survey of ATP Applicants* enables comparison of survey results from the 2002 and 2000 competitions. Where such comparisons can be made, they are presented in this report. Results were the same or very similar between the two competition years.

Methodology

Virtually all companies applying for funding in the year 2002 award competition were included in the survey. A limited number of company applicants were considered ineligible (e.g., companies that submitted incomplete proposals, companies that withdrew from awarded projects, and those whose funding awards were delayed until May, 2004). Joint venture partners that were not for-profit companies (such as universities, national laboratories or non-profit organizations) were not included in the survey. Altogether, 891 applicants were eligible to respond to the survey, including 144 companies that were selected for an ATP award and 747 companies that were not selected for funding.

Proposals for the 2002 competition were accepted in three batches (June, August, and September). Proposals that did not meet the criteria for funding in the first two batches could be resubmitted in a later batch. In addition, some applicants submitted proposals for more than one project. Since we did not want to burden applicants by asking them to respond for multiple proposals, we developed the following rules for these situations:

- Awardees submitting more than one proposal (either due to resubmission or multiple projects) were asked to respond to the survey questions based on the proposal awarded funding;
- Nonawardees who submitted a proposal in more than one batch were asked to respond based on their most recent proposal;
- Nonawardees who submitted proposals for more than one project were asked to respond based on one proposal that was randomly selected.

Data Collection

Data collection was carried out from January 2004 through July 2004. The survey used a mixed-mode methodology that included web and mail surveys, followed up by telephone interviews with those companies that did not respond by web or mail. Following standard survey procedures, multiple contact attempts were made in order to maximize survey response rates. Advance letters describing the purpose of the survey were mailed to company contact persons who were responsible for the 2002 ATP project proposal. For the web survey, emails containing a link to the survey web site and unique login credentials were sent about one week after the advance letter. Additional emails were sent to nonresponding applicants about one and three weeks after the initial email. For the mail survey, questionnaires were mailed about one week after the advance letter, with a second mailing of the questionnaire to nonresponding applicants three weeks after the initial questionnaire mailing. For both modes, Westat eventually tried to contact nonresponding applicants by telephone to collect the survey data.

Of 891 applicants eligible to respond, a total of 587 responses were received, for an overall response rate of 66%. Among the 144 ATP awardees invited to respond, 129 responses were received (117 by web, 12 by phone interview), yielding a response rate of 90%. Of the 747 nonawardees, 458 responses were received (195 by web, 64 by mail, and 199 by phone interview), yielding a response rate of 61%.

The following sections of this report present customer satisfaction results from the *Survey* of *ATP Applicants 2002*. The results are presented by topic area: applicant perceptions of the proposal process, views of the proposal preparation kit and electronic submission system, views of the usefulness of information sources, satisfaction with ATP staff, nonawardee views of the proposal debriefing and time and cost for proposal preparation. The 27 customer satisfaction items that comprise this portion of the survey are reproduced in the appendix.

Applicant Perceptions of the ATP Proposal Process

The Advanced Technology Program (ATP) aims to make the proposal process useful to companies and ensures fair and equal treatment of all applicants. *The Survey of ATP Applicants 2002* collected information about applicants' perceptions of the proposal process.

Respondents were asked to indicate:

- how useful to their company was the process of preparing the ATP proposal
- how useful to their company was information received from ATP during the review process
- the extent to which they believed the ATP review and decision process was a fair process
- the likelihood that they will apply for ATP funding again.

Most applicants view the ATP proposal process as useful

- Preparing an ATP proposal may be useful to an applicant for a variety of reasons. It may catalyze discussion and planning, focus attention on specific R&D or business issues, or clarify management commitment.
- Three-quarters of all applicants report that the process of preparing an ATP proposal is useful (See Figure 2–1.)¹
- Just over two-thirds of all applicants regard the information received from ATP during the proposal process to be useful (See Figure 2–1.)

^{1.} We have combined the response categories "very useful" and "somewhat useful" for ease of reporting.

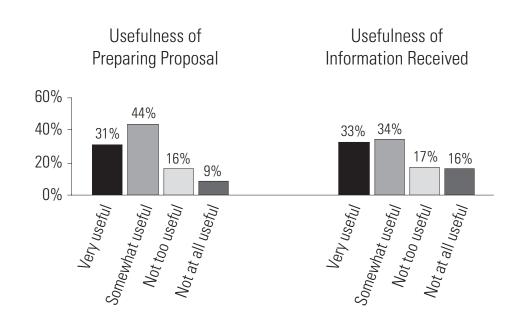


Figure 2–1. Usefulness to Company of the ATP Proposal Process

- ✓ During the proposal process, companies respond to questions from ATP in oral review regarding technical risk and business aspects of the project. In telephone debriefing of nonawardees, companies receive feedback on the strengths and weaknesses of their proposal against ATP criteria.
- The extent to which the 2002 applicants viewed the ATP proposal process as useful to their company is almost identical to that found for the year 2000 applicants.

Most applicants view the ATP proposal process as fair

- Three-quarters of all applicants report that the ATP review and decision process is a fair process. (See Figure 2–2.)² These findings for the 2002 applicants are comparable to what was found for the year 2000 applicants.
 - # ATP places great emphasis on ensuring the integrity and fairness of the proposal review
 and decision process. All proposals are peer-reviewed by technical and business special ists and evaluated according to clearly established criteria.³

^{2.} We have combined the response categories "large extent" and "moderate" for ease of reporting the portion of applicants that view the process as fair.

^{3.} Technical reviewers are government employees and business reviewers are private sector business specialists. All reviewers sign a strict nondisclosure agreement to ensure confidentiality of the information in the proposals.

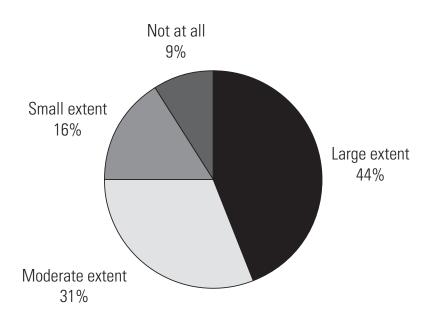


Figure 2–2. Beliefs that the ATP Review and Decision Process is Fair

Many applicants believe they will apply for funding again

• Two-thirds of the 2002 applicants say that they will apply for ATP funding again. (See Figure 2–3.)⁴

Both awardees and nonawardees view the ATP proposal process positively

- Not surprisingly, awardees view the ATP proposal process more favorably than non-awardees. (See Figure 2–4.)
- Still, most nonawardees view the ATP proposal process favorably, and are likely to apply for funding again.

^{4.} We have combined the response categories "very likely" and "somewhat likely" for ease of reporting.

Figure 2–3. Likelihood of Applying for ATP Funding Again

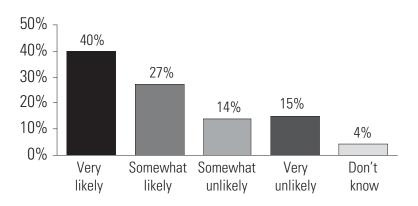
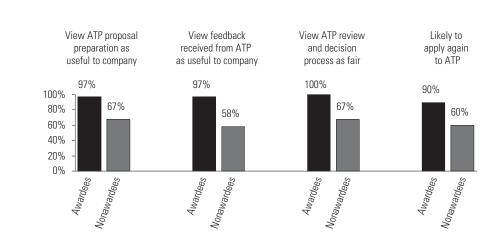


Figure 2–4. Awardee and Nonawardee Perceptions of the ATP Proposal Process



Applicant Views of the ATP Proposal Preparation Kit and Electronic Submission System (ESS)

The Advanced Technology Program (ATP) aims to make the proposal process a smooth one. For example, applicants are provided with the *ATP Proposal Preparation Kit*. Applicants are encouraged to submit their proposals securely over the internet using ATP's Electronic Submission System (ESS). The *Survey of ATP Applicants 2002* collected information about applicants' satisfaction with the proposal kit and use of the ESS.

Respondents were asked to indicate how satisfied they were with the following aspects of the April 2001 ATP Proposal Preparation Kit:

- Ease of use
- Clarity of content
- Comprehensiveness of content

Respondents were asked if receiving a CD version of the proposal kit, rather than a paper hardcopy version, would be a problem for them. They were also asked if they had submitted their proposal through the ESS, and to indicate how easy or difficult it was to use the system.

Most applicants were satisfied with the ATP Proposal Preparation Kit

- 78 percent of the applicants report being satisfied with the Kit in terms of its ease of use. (See Figure 3–1.)⁵
- 79 percent of applicants also say they were satisfied with the Kit's clarity of content. (See Figure 3–1.)

^{5.} We have combined the response categories "very satisfied" and "somewhat satisfied" for ease of reporting.

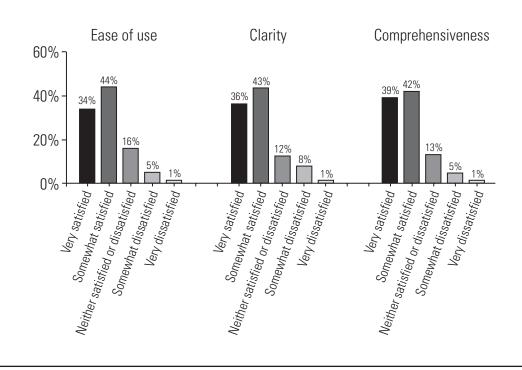


Figure 3–1. Satisfaction with ATP Proposal Preparation Kit

• 81% of applicants indicate being satisfied with the Kit's comprehensiveness of content. (See Figure 3–1.)

Both awardees and nonawardees express positive views of the ATP Proposal Preparation Kit

- Awardees view the Kit more favorably than nonawardees. In fact, nine out of ten awardees indicate being satisfied with the Kit on all three measures. (See Table 3–1.)
- Still, most nonawardees express satisfaction with the Kit.

The vast majority of applicants say that a CD version of the ATP Proposal Preparation Kit would not be a problem

- 91% report that receiving a CD version of the kit, rather than a paper hardcopy version, would not be a problem for them.
- Nonawardees were more likely than awardees to say that a CD version would be a problem (11% versus 5%, respectively).

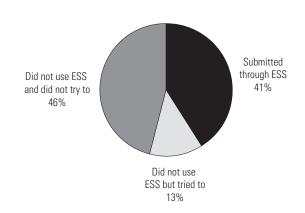


Figure 3–2. ATP Proposal Submission through the ESS

Applicants have mixed views about the Electronic Submission System (ESS)

• 2002 was the first year that ATP utilized the ESS. 41% of the 2002 applicants submitted their proposals through the ESS. Another 13% tried to use the system, yet did not submit their proposals this way. 46% did not try using the ESS. (See Figure 3–2.)

Table 3–1. Awardee and Nonawardee Satisfaction with ATP Proposal Preparation Kit		
ATP Proposal Preparation Kit's Awardees Nonawardees		
Ease of Use		
Very satisfied	53%	29%
Somewhat satisfied	35%	47%
Clarity of Content		
Very satisfied	55%	31%
Somewhat satisfied	35%	45%
Comprehensiveness of Content		
Very satisfied	55%	34%
Somewhat satisfied	33%	44%

- Applicants in the Electronics and Information Technology areas were more likely than those in Biotechnology and Materials and Chemistry to submit through the ESS. (See Figure 3–3).
- While most applicants submitting proposals through the ESS find it easy to use, about one-third report that it is difficult. (See Figure 3–4).

Figure 3-3. ATP Proposal Submission through ESS, by Technology Area

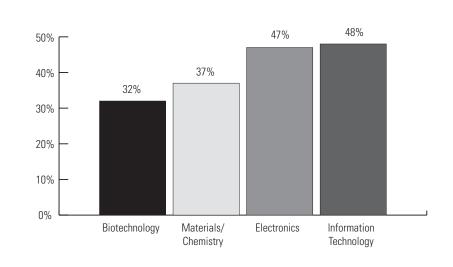
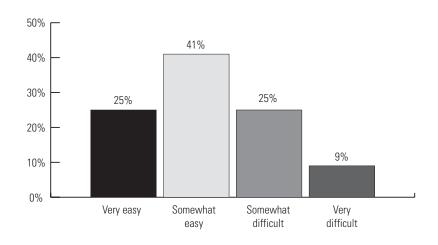


Figure 3–4. Ease or Difficulty of Using the ESS



Applicant Views of the Usefulness of ATP Information Sources

The Advanced Technology Program (ATP) aims to make the proposal process a smooth one for applicants, and utilizes a variety of outreach efforts. For example, ATP sponsors a website with detailed information, holds conferences for potential proposers, and operates information booths at a variety of professional meetings. Information about ATP also travels by "word of mouth" among researchers. The *Survey of ATP Applicants 2002* asked applicants how useful they view these information sources.

Respondents were asked to indicate how useful each of the following have been for them as an information source about ATP:

- ATP website
- ATP Proposers Conference
- ATP information booth at industry or trade association meetings
- Industry or company colleagues

Respondents were also asked to report any additional information sources about ATP which they found to be useful.

Applicants find the information sources about ATP to be useful

- 85% of the applicants say that the ATP website is useful to them. (See Figure 4–1.)⁶
- Half of all applicants report having no experience with ATP Proposers Conferences.
 While only 37% of applicants indicate that the Proposers Conferences are useful (see Figure 4–1), this represents over three-quarters of applicants who have experience with this source.
- The majority of applicants (72%) have no experience with the ATP information booths at professional meetings. But over half who do have experience with this source rate it as useful. (See Figure 4–1.)

^{6.} We have combined the response categories "very useful" and "somewhat useful" for ease of

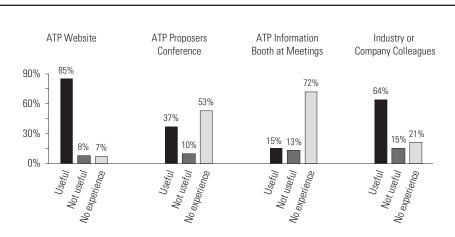
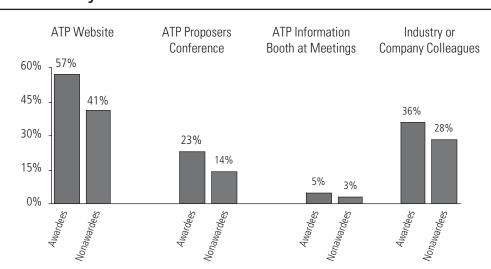


Figure 4–1. Applicant Views of the Usefulness of ATP Information Sources

- Two-thirds of applicants view industry or company colleagues to be useful sources of information about ATP. (See Figure 4–1.)
- The survey asked applicants to tell us of any other information sources about ATP which they had found useful. Sources they identified largely fell into the following three groups:
 - Mailings from ATP, including the ATP Proposal Preparation Kit;
 - Direct contact with ATP staff;
 - Previous experience with the ATP process.

Figure 4.2. Awardee and Nonawardee Views of ATP Information Sources as "Very Useful"



Awardees view the information sources as more useful than do nonawardees

- Overall, awardees were more likely than nonawardees to say they found the source to be "very useful." (See Figure 4–2.)
- If they have experience with these information sources, nonawardees are more likely to view them as useful than not useful. (Data not shown.)

Table 4–1. Applicant Views of ATP Information Sources, by Technology Area

	Materials and Biotechnology	Chemistry	Information Electronics	Technology
ATP Website				
Very useful	43%	39%	45%	53%
Somewhat useful	45%	46%	39%	30%
Not useful	8%	7%	7%	11%
No experience	4%	8%	9%	5%
ATP Proposers Conference	e			
Very useful	15%	19%	12%	19%
Somewhat useful	20%	25%	17%	20%
Not useful	7%	11%	10%	12%
No experience	58%	44%	60%	50%
ATP information booth				
at meetings				
Very useful	3%	4%	1%	5%
Somewhat useful	14%	16%	11%	5%
Not useful	12%	12%	14%	15%
No experience	71%	68%	73%	75%
Industry or				
company colleagues				
Very useful	32%	30%	32%	25%
Somewhat useful	31%	36%	36%	34%
Not useful	18%	12%	12%	19%
No experience	19%	22%	20%	22%

Across ATP technology areas, applicants differ in how useful they view the information sources

- Applicants in the Information Technology field were most likely to view the ATP website as being "very useful." (See Table 4–1.)
- Applicants in Materials and Chemistry were most likely to view the ATP Proposers Conference as useful. (See Table 4–1.)
- Applicants in the Biotechnology and Chemistry and Materials fields were most likely to view ATP information booths at meetings as being useful. (See Table 4–1.)
- Applicants in the four technology areas were similar in viewing industry or company colleagues as a useful source of information.

Applicants on Joint Venture proposals were more likely to view colleagues as useful information sources about ATP

 Four out of five applicants submitting Joint Venture proposals report that industry or company colleagues have been useful sources of information about ATP, compared to three out of five single applicants.

5

Applicant Satisfaction with ATP Staff

The Advanced Technology Program (ATP) aims to make the proposal process a smooth one for applicants. Applicants can contact ATP staff with questions about the process. The *Survey of ATP Applicants 2002* collected information about applicants' satisfaction with ATP staff responses to their questions.

Respondents were asked whether they had contacted ATP staff with questions about their application. Those who had contacted ATP were asked to indicate how satisfied they were with the:

- courtesy of the staff
- promptness of the service
- help in resolving problems or issues

Almost two-thirds of the 2002 applicants contacted ATP staff with questions about their application

- 59% of respondents reported having contacted ATP staff; 32% said they had not contacted the staff, and another 9% could not remember if they had done so.
- Awardees were more likely to have contacted ATP staff (65%) than were nonawardees (57%).

Most applicants contacting the ATP staff were satisfied with the courtesy they received

• 91% of the applicants who contacted ATP staff said they were satisfied with the courtesy of the staff. (See Figure 5–1.)⁷

^{7.} We have combined the response categories "very satisfied" and "somewhat satisfied" for ease of reporting.

Figure 5–1. Satisfaction with ATP Staff (Among Applicants who Contacted ATP Staff)

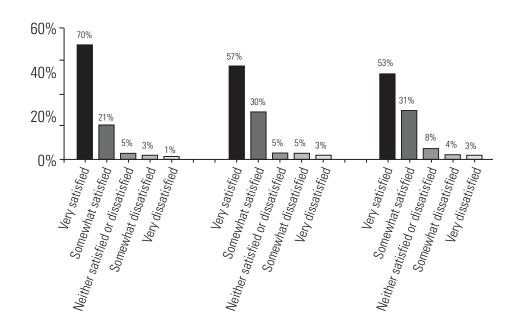


Table 5–1. Awardee and Nonawardee Satisfaction with ATP Staff (Among Applicants who Contacted ATP Staff) Nonawardees **Awardees Courtesy of Staff** Very satisfied 86% 65% Somewhat satisfied 12% 24% **Promptness of Service** Very satisfied 72% 52% Somewhat satisfied 27% 31% **Help in Resolving Problems or Issues** Very satisfied 71% 48% Somewhat satisfied 27% 32%

Most applicants contacting the ATP were satisfied with the promptness of their service

• 87% of the applicants who contacted ATP staff said they were satisfied with the promptness of their service. (See Figure 5–1.)

Most applicants contacting the ATP were satisfied with the help they received in resolving problems or issues

• 84% of the applicants who contacted ATP staff said they were satisfied with the help they received. (See Figure 5–1.)

Both awardees and nonawardees view ATP staff positively

- Awardees view their contact with ATP staff more favorably than nonawardees.
 (See Table 5–1.)
- Still, most nonawardees who contact ATP staff report being satisfied.

Applicants in different ATP technology areas are satisfied with their contacts with ATP staff

• Applicants across different technology areas report satisfaction with the courtesy, promptness and help provided by ATP staff. (See Table 5–2.)

Table 5–2. Satisfaction with ATP Staff by Technology Area (Among
Applicants who Contacted ATP Staff)

	Biotechnology	Materials and Chemistry	Electronics	Information Technology
Courtesy of Staff				
Very satisfied	63%	72%	71%	74%
Somewhat satisfied	24%	20%	20%	21%
Promptness of Service				
Very satisfied	40%	62%	61%	60%
Somewhat satisfied	46%	29%	21%	27%
Help in Resolving Problems or Issues				
Very satisfied	51%	59%	51%	52%
Somewhat satisfied	24%	30%	35%	34%

ATP Proposal Debriefing: Nonawardee Views

Applicants who are not awarded funding from the Advanced Technology Program (ATP) are provided a telephone debriefing on the strengths and weaknesses of their proposals vis a vis ATP selection criteria. The *Survey of ATP Applicants 2002* collected information from nonawardees about their views of the proposal debriefing.

Nonawardees were asked to indicate their level of satisfaction with the following aspects of the proposal debriefing:

- Timeliness
- Clarity of content
- Comprehensiveness of content

Nonawardees were also asked whether they would prefer oral or written formats for the proposal debriefing.

Nonawardees have mixed views of their ATP proposal debriefings

- Just over half of nonawardees were satisfied regarding the timeliness of their debriefing. (See Figure 6–1.)8
- Just over half of nonawardees were satisfied regarding their debriefing's *clarity of content*. (See Figure 6–1.)
- Just over half of nonawardees were satisfied regarding the *comprehensiveness of content* for their debriefing. (See Figure 6–1.)

^{8.} We have combined the response categories "very satisfied" and "somewhat satisfied" for ease of reporting.

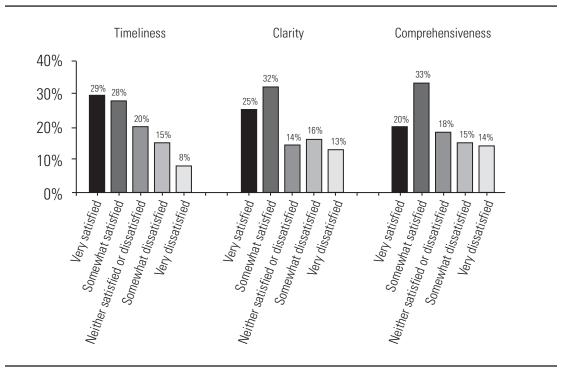
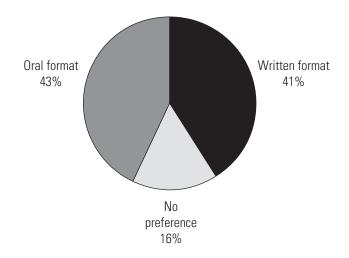


Figure 6.1. Applicant Satisfaction with Proposal Debriefing

Figure 6.2. Preferences for Format of Proposal Debriefing



Nonawardees prefer oral and written debriefing formats in equal degrees

• 43% of nonawardees would prefer an oral format for the proposal debriefing, while 41% say they would prefer a written format, and 16% report having no preference. (See Figure 6–2.)

Applicants across different ATP technology areas report some variation in satisfaction with debriefings

• Applicant satisfaction with the timeliness, clarity and comprehensiveness of debriefings varies somewhat by ATP technology area. (See Table 6–1.)

Table 6–1. Satisfaction with Proposal Debriefing, by Technology Area				
	Biotechnology	Materials and Chemistry	Electronics	Information Technology
Timeliness				
Very satisfied	30%	35%	25%	25%
Somewhat satisfied	28%	32%	22%	30%
Neither	19%	17%	25%	19%
Somewhat dissatisfied	14%	12%	19%	15%
Very dissatisfied	8%	5%	9%	10%
Clarity of Content				
Very satisfied	18%	27%	24%	29%
Somewhat satisfied	28%	43%	30%	23%
Neither	11%	9%	19%	18%
Somewhat dissatisfied	20%	10%	14%	21%
Very dissatisfied	22%	10%	13%	9%
Comprehensiveness				
of Content				
Very satisfied	15%	23%	17%	25%
Somewhat satisfied	26%	43%	33%	29%
Neither	16%	15%	23%	18%
Somewhat dissatisfied	21%	9%	12%	20%
Very dissatisfied	22%	10%	15%	9%

Time and Cost for ATP Proposal Preparation

The *Survey of ATP Applicants 2002* collected information on the amount of time and cost companies expended to prepare a proposal for the Advanced Technology Program (ATP).

Respondents indicated:

- the total number of staff hours used in preparing their ATP proposal
- the total cost to their company in preparing the proposal
- whether they prefer to submit proposals in a single stage that combines technical and business plans, or multiple stages.

Companies applying for an ATP award devote varying levels of resources to proposal preparation

- The median ATP applicant devoted 200 staff hours to their ATP proposal. The total company cost of preparing an ATP proposal for the median applicant was \$12,500.
- Figure 7–1 shows the distribution of total staff hours devoted to ATP proposal preparation. About three-quarters of all applicants devoted less than 240 hours of staff time to their proposal. The 2002 applicants devoted less staff time, on average, preparing their proposals than did the year 2000 applicants (for whom two-thirds devoted less than 240 hours).
- Figure 7–2 shows the distribution of cost to companies in preparing their ATP proposal. About three-quarters of all applicants spent less than \$20,000. The 2002 applicants spent less money, on average, than did the year 2000 applicants (for whom two-thirds spent less than \$20,000).

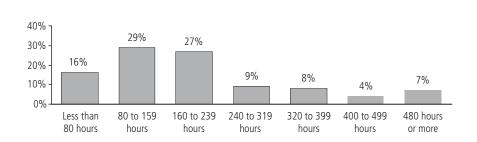


Figure 7.1. Total Staff Hours Used in Preparing ATP Proposal

Time and cost for ATP proposal preparation differs by applicant type

Joint Venture Companies and Single Companies

- Joint Venture lead companies devoted the largest amount of staff time to proposal preparation, followed by single companies. Joint Venture partner companies spent less time.

Table 7–1. Total Staff Hours and Cost in Preparities Companies Single Companies Companies Companies Small Companies Awardees Nonawardees			,— Nonawardees				
	Joint Lead	Join Con	Single	Larg	Small	AW	Non
Total Staff Hours							
75th Percentile	440	200	280	280	280	360	200
Median	280	120	200	200	200	200	200
25th Percentile	200	60	120	120	120	120	120
Total Cost							
75th Percentile Median 25th Percentile	\$62,500 \$35,000 \$12,500	\$17,500 \$12,500 \$7,500	\$25,000 \$12,500 \$7,500	\$35,000 \$17,500 \$7,500	\$25,000 \$12,500 \$7,500	\$35,000 \$17,500 \$7,500	\$17,500 \$12,500 \$7,500

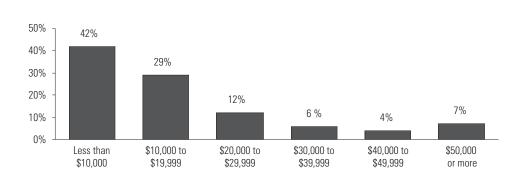


Figure 7.2. Total Cost of Preparing ATP Proposal

- Joint Venture lead companies experienced higher total costs in preparing an ATP proposal, relative to Joint Venture partner companies and single companies.
 - The median cost for Joint Venture lead companies was \$35,000. For Joint Venture partner companies and single companies the median cost was \$12,500. (See Table 7–1.)

Large Companies and Small Companies

- Large companies devoted more resources than Small companies to ATP proposal preparation.
 - Comparing total cost, the median for Large/Medium companies was \$17,500, and for Small companies it was \$12,500. (See Table 7–1.)

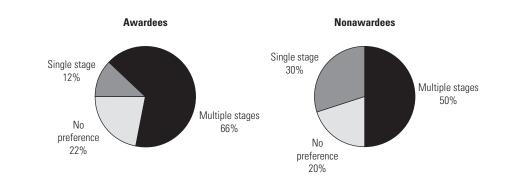
Awardees and Nonawardees

- ATP awardees devoted more effort to preparing proposals than nonawardees.
 - Comparing total cost of proposal, the median cost for awardees was \$17,500, compared to \$12,500 for nonawardees. (See Table 7–1.)

Applicants prefer a proposal submission process consisting of multiple stages, rather than a single stage

- Overall, applicants prefer multiple stages in the proposal submission process. Two-thirds of awardees and one-half of nonawardees prefer multiple stages. (See Figure 7–3.)
- About one-fifth of the applicants reported having no preference regarding the number of stages.
- However, one-third of nonawardees reported a preference for a single stage in the proposal submission process, while about one-tenth of awardees say that they prefer a single stage process.

Figure 7.3. Preferred Submission Process for Awardees and Nonawardees



Appendix

The ATP Customer Satisfaction Survey was a component of the *Survey of ATP Applicants 2002*. The 17 customer satisfaction questions (27 survey items) that comprised Section IV, "Proposal Preparation and Review," are shown in this appendix.

ATP Customer Satisfaction Survey 2002

(Excerpted from the Survey of ATP Applicants 2002)

IV. Proposal Preparation and Review

Now we have some questions about your experience during the proposal preparation and review process.

	r - Protesta
9.	How useful have each the following been for you as an information source about ATP?
9а.	ATP website
9b.	ATP Proposers Conference
Эс.	ATP information booth at industry or trade association meetings
9d.	Industry or company colleagues
	☐ Very useful
	☐ Somewhat useful
	☐ Not too useful
	☐ Not at all useful
	☐ No experience with this source
10.	If there were any other useful information sources about ATP please tell us:

11. Pleas	e rate your level of satisfaction with the ATP Proposal Preparation Kit in terms of:
11a. Ease	of use
11b. Clarit	ty of content
11c. Com	prehensiveness of content
☐ V	ery satisfied
☐ So	omewhat satisfied
□ N	either satisfied nor dissatisfied
☐ So	omewhat dissatisfied
☐ V	ery dissatisfied
	e ATP Proposal Preparation Kit were sent to you in a CD version instead of in a paper copy version, would this be a problem for you?
☐ Ye	es
□ N	0
-	ou submit your proposal electronically through ATP's Electronic Submission em (ESS)?
☐ Ye	es
□ N	o, but tried to do so
□ N	o, and did not try to (Go to #14)
13b. How	easy or difficult to use was the Electronic Submission System (ESS)?
☐ V	ery easy
☐ So	omewhat easy
☐ So	omewhat difficult
☐ V	ery difficult
14. Did y	ou contact ATP staff with questions regarding your application?
☐ Ye	es
□ N	o (Go to #16)
□ D	on't remember (Go to #16)

15.	When you contacted ATP staff, how satisfied were you with the following?
15a.	Courtesy of the staff
15b.	Promptness of the service
15c.	Help in resolving problems or issues
	☐ Very satisfied
	☐ Somewhat satisfied
	☐ Neither satisfied nor dissatisfied
	☐ Somewhat dissatisfied
	☐ Very dissatisfied
16.	Currently, applicants submit proposals in multiple stages instead of in a single stage that combines both technical and business plans. Please indicate your preferred proposal submission process.
	☐ Single stage
	☐ Multiple stages
	☐ No preference
17.	How many total hours of staff time did your company use in preparing your ATP proposal?
	□ None
	☐ Less than 40 hours
	☐ 40 to less than 80 hours
	■ 80 to less than 160 hours
	☐ 160 to less than 240 hours
	☐ 240 to less than 320 hours
	☐ 320 to less than 400 hours
	☐ 400 to less than 480 hours
	☐ 480 hours or more
	□ Don't know

18.	What was the total cost to your company in preparing the ATP proposal?
	□ None
	☐ Less than \$5,000
	□ \$5,000 to less than \$10,000
	□ \$10,000 to less than \$15,000
	□ \$15,000 to less than \$20,000
	□ \$20,000 to less than \$30,000
	□ \$30,000 to less than \$40,000
	□ \$40,000 to less than \$50,000
	□ \$50,000 to less than \$75,000
	□ \$75,000 or more
	□ Don't know
19.	Regardless of whether you received funding for the project, how useful was it for your company to go through the process of preparing the ATP proposal?
	□ Very useful
	☐ Somewhat useful
	☐ Not too useful
	☐ Not at all useful
20.	Overall, how useful to your company was the evaluative feedback you received from ATP during the review process, for example in oral review or proposal debriefing?
	☐ Very useful
	☐ Somewhat useful
	☐ Not too useful
	☐ Not at all useful
21.	Please indicate your level of satisfaction with the following aspects of the proposal debriefing:
21a.	. Timeliness
21b	. Clarity of content

21c.	Comprehensiveness of content
	☐ Very satisfied
	☐ Somewhat satisfied
	☐ Neither satisfied nor dissatisfied
	☐ Somewhat dissatisfied
	☐ Very dissatisfied
22.	Nould you prefer oral or written format for the proposal debriefing?
	☐ Oral
	☑ Written
	☐ No preference
23.	Regardless of the outcome of your proposal, to what extent do you believe the ATP reviewed decision process was a fair process?
	☐ Large extent
	☐ Moderate extent
	☐ Small extent
	Not at all
24.	f you have any other comments about the ATP application and review process, please them with us:
2.5	
25.	How likely is it that you will apply for funding again from ATP?
	Very likely
	☐ Somewhat likely
	■ Somewhat unlikely
	☐ Very unlikely
	☐ Don't know

About the Authors

Jeffrey Kerwin is a senior study director at Westat. Since joining Westat in 1993, he has conducted both qualitative and quantitative research on a variety of topics, often working to improve the methodology of data collection for federal government surveys. He managed the Survey of ATP Applicants 2002 on behalf of NIST. Dr. Kerwin worked at the National Center for Health Statistics before joining Westat. He obtained his Ph.D. in social psychology from the University of Georgia in 1991.

Andrew J. Wang is an economist with the ATP in the Economic Assessment Office (EAO). Andrew is interested in current research in a number of areas related to the economic evaluation mission of the EAO. He provides support to EAO-sponsored NBER economic research studies, and participates in supervision of economic studies conducted by other contract organizations as well.

Andrew received his B.A. degree in History and Economics from the University of California at Berkeley, graduating with Highest Distinction. He did his graduate work in economics at Harvard University, and was a recipient of an NSF Graduate Fellowship. He received his Ph.D. degree in Economics from Harvard University in 1997, with field specializations in Public Economics and International Economics, and a thesis on productivity analysis and measurement methods. Andrew joined the ATP in 1997 after receiving his Ph.D.

Stephen Campbell joined ATP in August 2001 and serves as an economist and data specialist for the Economic Assessment Office (EAO). He is interested in research that will contribute to EAO's mission of economic evaluation. He most recently served as chair of the Advanced Materials and Chemistry Selection and Evaluation Board. Stephen came to ATP from the U.S. Census Bureau where he was an economist/survey statistician with the Housing and Household Economics Statistics Division. He is ABD in economics from the Pennsylvania State University and is a member of both the American Economic Association and the American Statistical Association.

About the Advanced Technology Program

The Advanced Technology Program (ATP) is a partnership between government and private industry to conduct high-risk research to develop enabling technologies that promise significant commercial payoffs and widespread benefits for the economy. The ATP provides a mechanism for industry to extend its technological reach and push the envelope beyond what it otherwise would attempt.

Promising future technologies are the domain of ATP:

- Enabling technologies that are essential to the development of future new and substantially improved projects, processes, and services across diverse application areas;
- Technologies for which there are challenging technical issues standing in the way of success;
- Technologies whose development often involves complex "systems" problems requiring a collaborative effort by multiple organizations;
- Technologies which will go undeveloped and/or proceed too slowly to be competitive in global markets without ATP.

The ATP funds technical research, but it does not fund product development—that is the domain of the company partners. The ATP is industry driven, and that keeps it grounded in real-world needs. For-profit companies conceive, propose, co-fund, and execute all of the projects cost-shared by ATP.

Smaller firms working on single-company projects pay a minimum of all the indirect costs associated with the project. Large, "Fortune 500" companies participating as a single company pay at least 60 percent of total project costs. Joint ventures pay at least half of total project costs. Single-company projects can last up to three years; joint ventures can last as long as five years. Companies of all sizes participate in ATP-funded projects. To date, more than half of ATP awards have gone to individual small businesses or to joint ventures led by a small business.

Each project has specific goals, funding allocations, and completion dates established at the outset. Projects are monitored and can be terminated for cause before completion. All projects are selected in rigorous competitions which use peer review to identify those that score highest against technical and economic criteria.

Contact ATP for more information:

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