

University of Mississippi

eGrove

Newsletters

American Institute of Certified Public
Accountants (AICPA) Historical Collection

1993

Providing litigation services; Consulting services practice aid, 93-4

Peter B. Frank

Michael S. Wagner

American Institute of Certified Public Accountants. Management Consulting Services Division

Follow this and additional works at: https://egrove.olemiss.edu/aicpa_news



Part of the [Accounting Commons](#), and the [Taxation Commons](#)

Recommended Citation

Frank, Peter B.; Wagner, Michael S.; and American Institute of Certified Public Accountants. Management Consulting Services Division, "Providing litigation services; Consulting services practice aid, 93-4" (1993). *Newsletters*. 158.

https://egrove.olemiss.edu/aicpa_news/158

This Book is brought to you for free and open access by the American Institute of Certified Public Accountants (AICPA) Historical Collection at eGrove. It has been accepted for inclusion in Newsletters by an authorized administrator of eGrove. For more information, please contact egrove@olemiss.edu.

AICPA

**CONSULTING SERVICES
PRACTICE AID 93-4**

Technical Consulting

***Providing
Litigation Services***

Management Consulting Services Division

AMERICAN

INSTITUTE OF

CERTIFIED

PUBLIC

ACCOUNTANTS

NOTICE TO READERS

This practice aid is designed as educational and reference material for Institute members and others who provide *consulting services* as defined in the Statement on Standards for Consulting Services issued by the AICPA. It does not establish standards or preferred practices.

Consulting Services Practice Aids continue the series of MAS Practice Aids. The change in the numbering system of these series reflects the change of the division name from Management Advisory Services (MAS) to Management Consulting Services (MCS), rather than the discounting of any publications in a series.

Various members of the 1991-1993 AICPA MCS Litigation Services Subcommittee were involved in the preparation of this practice aid. The members of the subcommittee are listed below.

Peter B. Frank, *Chairman*
Darell V. Arne
Michael A. Crain
Melinda M. Harper
Seymour Jones
Vincent J. Love, Jr.

Edward J. O'Grady
Thomas W. Rimerman
Roger B. Shlonsky
Marvin L. Stone
Michael G. Ueltzen

The principal authors of this aid are Peter B. Frank, National Chairman, Litigation and Reorganization Services, Price Waterhouse, Los Angeles, CA and Michael S. Wagner, Managing Director, Putnam, Hayes & Bartlett, Portland, OR.

John F. Hudson, *Vice President*
Technical Standards and Services

Monte N. Kaplan, *Technical Manager*
Management Consulting Services

Steven E. Sacks, *Technical Manager*
Management Consulting Services

William J. Moran *Editor/Coordinator*
Management Consulting Services

AICPA

Technical Consulting

**CONSULTING SERVICES
PRACTICE AID 93-4**

Providing Litigation Services

*Peter B. Frank, CPA
Michael S. Wagner, CPA, JD*

AMERICAN

INSTITUTE OF

CERTIFIED

PUBLIC

ACCOUNTANTS

Management Consulting Services Division

Copyright © 1993 by
American Institute of Certified Public Accountants, Inc.,
New York, NY 10036-8775

All rights reserved. Requests for permission to make copies of any
part of this work for redistribution or for inclusion in another
document or manuscript should be mailed to Permissions Department,
AICPA, Harborside Financial Center, 201 Plaza Three, Jersey City,
NJ 07311-3881.

1 2 3 4 5 6 7 8 9 0 MCS 9 9 8 7 6 5 4 3

PREFACE

This practice aid is one in a series intended to assist practitioners in applying their knowledge of organizational functions and technical disciplines in the course of providing consulting services. Although these practice aids often deal with aspects of consulting services knowledge in the context of a consulting engagement, they are also intended to be useful to practitioners who provide advice on the same subjects in the form of a consultation. Consulting services engagements and consultations are defined in the Statement on Standards for Consulting Services (SSCS), *Consulting Services: Definitions and Standards*, issued by the AICPA.

This series of technical consulting practice aids should be particularly helpful to practitioners who use the expertise of others while remaining responsible for the work performed. It may also prove useful to members in industry and government in providing advice and assistance to management.

Technical consulting practice aids do not purport to include everything a practitioner needs to know or do to undertake a specific type of service. Furthermore, engagement circumstances differ and therefore the practitioner's professional judgment may cause him or her to conclude that an approach described in a particular practice aid is inappropriate.

CONTENTS

70/105 Scope of This Practice Aid	70/100-1
70/110 Definitions	70/100-1
70/115 Types of Engagements	70/100-2
Developing Damages Studies	70/100-4
Determining Facts to Support Liability Arguments	70/100-5
Assisting in Criminal Litigation	70/100-6
Developing Automated Document-Retrieval Systems	70/100-6
Providing Bankruptcy and Reorganization Services	70/100-7
70/120 Engagement Acceptance Considerations	70/100-7
The CPA's Role	70/100-7
The Client-Practitioner Relationship	70/100-8
Conflict of Interest	70/100-9
Timetables	70/100-10
Fees	70/100-10
Staffing	70/100-11
Merit	70/100-11
Inconsistent Opinions	70/100-11
70/125 Engagement Objectives and Client Benefits	70/100-11
70/130 Engagement Scope	70/100-12
Changeable Environment	70/100-12
Lack of Familiarity With Data	70/100-12
The Attorney's Role	70/100-13
The CPA's Role	70/100-13
Engagement Letters	70/100-14
Documentation	70/100-14
Professional Standards	70/100-14
70/135 Engagement Approach	70/100-15
Assistance With Case Strategy	70/100-15
Assistance With Discovery	70/100-16
Analysis	70/100-20
Expert Opinion	70/100-25
Use of Staff	70/100-26
Presentation of Results	70/100-26
Effective Testimony Techniques	70/100-28
70/140 Conclusion	70/100-30
Appendix 70/A—Illustrative Materials	70/100-31
Exhibit 70A-1—Sample Engagement Letter 1	70/100-31
Exhibit 70A-2—Sample Engagement Letter 2	70/100-33

Appendix 70/B—Case Study: Lost-Profits Damages Study for Vending Operator, Inc. vs. State	70/100-35
Exhibit 70B-1—Sample Lost-Profits Damages Study	70/100-40
Exhibit 70B-1.1—Lost-Profits Model Prepared by Vending Operator’s Expert	70/100-40
Exhibit 70B-1.2—Vending Operator’s Pro Forma Income Statement	70/100-41
Exhibit 70B-1.3—Vending Operator’s Pro Forma Cash Flow by Year	70/100-43
Exhibit 70B-1.4—Vending Operator’s Summary of Interest Based on New Debt Amounts	70/100-44
Exhibit 70B-1.5—Summary of Required Personnel and Salaries	70/100-45
Exhibit 70B-1.6—Vending Operator’s Summary of Asset Additions and Depreciation	70/100-46
Exhibit 70B-1.7—Sample Projection of Vending Operator’s Pretax Profit	70/100-47
Exhibit 70B-1.8—Sample Projection of Vending Operator’s Cash Flow From Operations	70/100-48
Exhibit 70B-1.9—Sample Percentage Breakdown of Vending Operator’s Sales	70/100-49
Exhibit 70B-2—Sample Request for Production of Documents	70/100-50
Exhibit 70B-3—Sample Deposition—Cross-Examination Questions	70/100-51
 Glossary of Legal Terms	 70/100-55
 Bibliography	 70/100-57

70/100

PROVIDING LITIGATION SERVICES

70/105 SCOPE OF THIS PRACTICE AID

.01 Civil litigation involves disputes between entities, governments, or individuals. This practice aid defines and explains the CPA's functions in the civil litigation process. When engaged to participate in the process, CPAs analyze what actually happened, develop assumptions about what would have happened *but for* certain circumstances, and explain these facts and assumptions in the form of an opinion. CPAs exercise these functions in either of two roles. As consultants, they explain their findings to the attorney who hired them. As expert witnesses, they explain them to the trier of fact (for example, a judge, jury, arbitrator, or mediator).

.02 Frequently, one or more parties to a litigation seek the assistance of a CPA on the issue of damages, which can be either out-of-pocket losses or a claim of lost profits. The plaintiff may enlist a CPA to compute damages, or the defendant may ask a CPA to study and possibly rebut the plaintiff's computation of damages. This practice aid focuses on such engagements.

.03 CPAs work predominantly in civil litigation, and therefore this guide focuses on such engagements. However, criminal cases may also require CPA services (for example, tax evasion, bid rigging, and price-fixing). Many of the comments in this guide are equally applicable to criminal litigation.

70/110 DEFINITIONS

.01 The following terms are defined as they are used in this practice aid.

.02 *Consultant.* As consultants, CPAs are hired strictly to advise the attorney about the facts and issues of the case and will not be called to testify about their work or opinion. This status generally provides a *work-product privilege*, which protects all work performed for the attorney; that is, the efforts, opinions, advice, work product, and involvement of the CPA will not be disclosed to the opposing side.

.03 *Expert opinion.* Testimony by a person qualified to speak authoritatively because of special training, skill, study, experience, observation, practice, or familiarity with the subject matter is expert opinion. It is expert knowledge not possessed by lay or inexperienced persons. The scope and nature of expert opinion testimony are defined within the applicable state or federal rules of evidence. Expert opinion testimony on accounting issues is given by an individual and not by an accounting firm. An expert opinion is not an attest opinion as the term is used in reference to a set or specified elements of financial statements. On rare occasions,

though, an expert opinion may relate to an examination of a financial presentation or to a judgment on whether financial statements are presented in accordance with generally accepted accounting principles (GAAP).

.04 *Expert witness.* Expert witnesses are retained to render an expert opinion at trial. CPAs are identified to the opposing party as expert witnesses by the attorney who retained them. When retained as expert witnesses, CPAs need to conduct the engagement from the outset with the assumption that all work performed is discoverable by the opposing party.

.05 *Forensic accounting.* The application of accounting principles, theories, and discipline to facts or hypotheses at issue in a legal dispute is called forensic accounting. It includes every branch of accounting knowledge.

.06 *Litigation services.* As used in this practice aid, litigation services refers to any professional assistance nonlawyers provide to lawyers in the litigation process. CPAs' assistance can include quantifying damages, analyzing of business facts, and providing expert testimony. More extensive listings of services are provided in sections 70/115, "Types of Engagements," 70/125, "Engagement Objectives and Client Benefits," and 70/135, "Engagement Approach." The provision of management support in the litigation process, such as document management, computer selection and setup assistance, and case planning and administration, may be included in the range of services offered by CPAs. This support, however, is not discussed in detail in this practice aid.

70/115 TYPES OF ENGAGEMENTS

.01 Litigation services engagements in which a CPA provides advice and assistance can be categorized as follows:

.02 **Damages**

- Lost profits
- Lost value
- Extra cost
- Lost cash flow
- Lost revenue
- Mitigation

.03 **Antitrust Analyses**

- Price-fixing
- Market share, market definition

- Pricing below cost
- Dumping and other price discrimination
- Anticompetition actions
- Monopolization

.04 Accounting

- CPA malpractice
- Bankruptcy and reorganization
- Family law
- Tracing
- Contract cost and claims
- Regulated industries
- Frauds, civil and criminal
- Historical analyses

.05 Analyses

- Tax bases
- Cost allocations
- Tax treatment of specific transactions

.06 Valuation

- Businesses and professional practices
- Pensions
- Intangibles
- Property

.07 General Consulting

- Statistical analyses
- Actuarial analyses
- Projections
- Industrial engineering
- Computer consulting
- Market analyses
- Industry practices

.08 This practice aid describes the following typical assignments:

- a. Developing damages studies to prove the cause of damages or the amount of damages
- b. Determining the facts to support liability arguments
- c. Assisting in criminal litigation
- d. Developing automated document-retrieval systems
- e. Providing bankruptcy and reorganization services

The focus of this practice aid is on developing damages studies.

Developing Damages Studies

.09 Proving the Cause of Damages. In order to be awarded damages in litigation, the plaintiff must prove two things: (a) the defendant violated a legal right of the plaintiff and (b) this violation harmed the plaintiff. Proving the cause of damages deals with the second issue. CPAs are experts at interpreting facts in business litigation and accordingly can offer insight and expert opinions to help determine whether the legal violation caused the plaintiff's damages.

.10 Causation can be obvious. For example, when a wage earner is physically injured and is unable to work for a period of time, it is relatively easy to prove that the loss of wages was caused by the physical injury. At the other end of the spectrum, however, a complicated antitrust case may involve legal violations that seem to be several steps removed from the plaintiff's injury as well as several other factors that may have contributed to the plaintiff's injury. For example, a plaintiff may allege that a defendant engaged in predatory acts, such as below-cost pricing, that caused bankruptcy. However, the plaintiff's failure could also be explained by other factors such as negative economic trends, negative industry trends, high interest rates, mismanagement by the plaintiff, and normal competitive responses.

.11 To prove the cause of damages in securities litigation, the CPA can assist by performing statistical analyses of a security's price movements and returns. If the CPA determines that a change in the defendant company's stock price was statistically significant when some information was disclosed or some misstatement was corrected, the relationship tends to prove the cause of damages. If the CPA cannot establish a relationship between the stock's price movement and a disclosure or correction, the cause of damages may not be proven.

.12 Only after the cause of damages has been established does the third issue, the amount of damages, become relevant.

.13 Proving the Amount of Damages. Engagements that involve proving the amount of damages are usually for a client currently in litigation or for an attorney seeking either a consultant or an expert witness. The most common objectives of such engagements are (a) to prepare or review a damages study for the plaintiff and (b) to rebut a plaintiff's damages study for the defendant. Frequently, the defendant also requires an independent computation of damages as alternative evidence for the trier of fact to consider. These types of engagements are referred to as proving the amount of damages.

.14 The plaintiff's loss can take many forms, depending on the facts of each case. Some of the more common types of damages claimed in civil litigations are—

- Increased costs (for example, interest, general and administrative costs, product development costs, and extra expenses).
- Loss of business goodwill.
- Lost earning capacity.
- Lost profits (past, prospective, or both).
- Lost revenues.
- Personal injury.
- Property damages.
- Lost sales value of a company.

.15 Appendix 70/B presents a sample engagement in a case study involving a plaintiff's loss of future profits when a state government prematurely terminates a contract with the plaintiff, a vending operator, to operate vending machines at rest stops on highways within the state.

Determining Facts to Support Liability Arguments

.16 The CPA as an auditor and a consultant to business entities is uniquely qualified to assist in determining certain economic, statistical, or commercial facts necessary to establish liability. The attorney uses these facts to develop the legal arguments and theories of the case.

However, no matter how ingenious or appealing the legal arguments are in a case, they are no stronger than the facts underlying the attorney's arguments.

.17 Collecting facts on the relevant industry and market shares is among the types of activities often undertaken by CPAs. Organizing and analyzing bidding patterns, for example, may assist in proving or disproving a bid-rigging charge.

.18 In securities litigation, the issues of whether financial statements were prepared in accordance with generally accepted accounting principles (GAAP) or whether an auditor followed generally accepted auditing standards (GAAS) are often crucial in establishing the liability of the defendant company, officers, directors, or independent accountants. Obviously, few except CPAs-auditors have the expertise to evaluate and opine on the application of GAAP and GAAS.

.19 Other facts that CPAs often explain at trial include common industry practices and the way certain transactions pertinent to the case were structured and implemented.

Assisting in Criminal Litigation

.20 CPAs are occasionally engaged to assist lawyers in criminal cases, usually by lawyers representing defendants. In tax evasion cases, for example, CPAs commonly—

- Analyze government figures for mathematical accuracy, substantiation, and omissions or misstatements.
- Seek offsets to government claims (for example, unclaimed deductions or credits, over-reported income).
- Assist lawyers in developing a theory of defense.

.21 The CPA must be or become thoroughly familiar with the defendant's record-keeping practices in order to further the defense lawyer's understanding of the facts. Since a guilty finding requires affirmative knowledge and intent on the part of the defendant, the CPA also seeks evidence that the defendant neither knew nor participated in the accounting decisions or transactions that are the basis of the indictment.

.22 The government's final witness in a tax evasion case usually summarizes the evidence submitted by the prosecution and computes the alleged tax deficiency. CPAs occasionally serve as the defense counterpart by summarizing the defense evidence and computing the tax effects of applying the defendant's theory of the case.

Developing Automated Document-Retrieval Systems

.23 CPAs are frequently experts on management information systems and computer systems. Such CPAs are uniquely qualified to help attorneys in collecting, organizing, and summarizing the large volume of documents often used in a case.

.24 Every litigation situation requires a document-retrieval system, whether manual or automated. CPAs can offer assistance in this area as an integral part of litigation services. Attorneys frequently seek CPAs' advice when deciding whether to use an automated or manual document-retrieval system. This is especially true when an attorney whose first case involves numerous documents lacks the experience to properly evaluate the alternatives. Even attorneys experienced in using automated retrieval systems need help with unique types of business records. CPAs can assist in planning and setting up such system-and-processing groups; in formatting the input coding sheets; in explaining to the attorneys and the document coders what information is relevant and needs to be extracted from the documents; and in establishing appropriate procedures and controls.

Providing Bankruptcy and Reorganization Services

.25 Aspects of bankruptcy and reorganization services are areas of specialization within the litigation services area. There are unique issues in bankruptcy practice that do not exist in other types of litigation services engagements. Among these issues are the applicability of standards in out-of-court restructuring situations, pre-packaged Chapter 11 cases, and cases involving assistance to the court in preparation of monthly operating reports, determination of solvency of the debtor, and analysis of prospective financial information.

70/120 ENGAGEMENT ACCEPTANCE CONSIDERATIONS

The CPA's Role

.01 The CPA's decision to become involved in litigation may depend on whether the attorney is seeking an expert witness or a consultant. As an expert witness, the CPA presents opinions publicly in an objective fashion, but as a consultant, the CPA advises and assists the attorney or client in private. In the private consultant role, the CPA provides assistance more like that of an advocate to help the attorney identify the case's strengths and weaknesses or to develop strategy against the opposition.

.02 When acting as an expert witness, CPAs need to make clear to the attorney and client that the CPA's role is not to become the client's advocate. Client advocacy is a proper role for lawyers, but not for CPAs who will provide expert testimony. The CPA's role is to form an objective professional opinion based on either facts or hypotheses. As expert witnesses, CPAs need to maintain objectivity at all times in a litigation services assignment. Of course, they also need to present and defend their position with strength and conviction.

.03 An attorney or client who restricts the CPA's investigation by limiting access to the facts or by trying to influence the CPA's judgment endangers the CPA's reputation and the ultimate success of the case. The CPA needs a fair amount of freedom in determining the scope of the engagement after the duties have been established.

.04 The CPA should be wary of the attorney or client who seeks expert testimony but is unwilling to provide the necessary time and resources to properly prepare a professional

opinion. If the attorney or client is unwilling to disclose all relevant facts about the litigation or to provide sufficient preparatory time, it is appropriate for the CPA to consider declining or withdrawing from the engagement.

.05 In some situations, however, an attorney's limited presentation of the facts to a CPA could be considered appropriate. This would apply if the attorney wants the CPA's contribution limited to testimony addressing a hypothetical construct presented at trial and the trier of fact is aware of the limitations.

.06 Few engagements are as demanding as those requiring CPAs to be expert witnesses at trial. Their every word, either in a deposition or on the stand at trial, will be scrutinized by intelligent and experienced attorneys and opposing experts. Any weakness or inconsistency in testimony will likely be caught and turned against the expert witnesses. Therefore, CPAs review their testimony given in previous engagements to be sure it is consistent with the testimony expected in the prospective engagement. CPAs who have no previous testimonial experience consider whether their background is appropriate for the prospective engagement and whether this litigation is a proper one for their first experience.

.07 CPAs consider whether the position they are to testify on is consistent or inconsistent with the position of the client. It can be extremely embarrassing to the CPA to give testimony that contradicts the client's positions, especially if it concurs with the opposition's news, and then to have the inconsistency disclosed by the opposition.

The Client-Practitioner Relationship

.08 The CPA determines whether the client is the attorney or the attorney's client. If the client is the attorney, then the CPA's work is usually protected from discovery by the opposing side as long as the CPA does not give expert testimony at trial. In the role of consultant, the CPA may help develop the strategy of the case, assist in preparing other experts to testify, develop cross-examination material for use against the opposing experts, and explore the strengths and weaknesses of each party's case. The protection from discovery is based on the attorney's work-product privilege. However, if the CPA's client is the attorney's client, then the attorney's work-product privilege may not protect the CPA's work from discovery by the opposing side. Regardless of who the client is, if the CPA is disclosed as an expert witness, the opposing party will probably be permitted to discover the work performed by the CPA expert witness.

.09 If the attorney's client and the CPA have an existing attest relationship, the CPA and the attorney (and perhaps the client) should consider what effects this will have. No ethical restriction prevents the CPA from performing attest services and litigation services for the same client. But in providing litigation services, the CPA should be satisfied that any information developed will not require an opinion about the financial statements. Although the requirement

is unlikely, the CPA needs to consider the possibility of such negative consequences as the following:

.10 For the Attorney

- *Appearances.* The existing audit relationship may raise questions about appearances of objectivity.

.11 For the CPA.

- *Successful litigation against a client.* Successful litigation proceedings could have a material impact on a business, and if the CPA is identified with attorneys and other experts in a losing case, the attest relationship may suffer.
- *Perceived bias.* The CPA can be cross-examined on the stand about the attest relationship, including how large the attest fees are, in an attempt to demonstrate bias because of the continuing business relationship between the CPA and the client.
- *Opinion.* The CPA may determine that information gained in the litigation effort requires a change or a supplement to the attest opinion.

Conflict of Interest

.12 The CPA inquires about any possible conflict of interest before accepting a litigation services engagement. This is the most important engagement acceptance consideration. All parties to the litigation would be checked to determine if they are existing or past clients of the practitioner or the CPA firm and whether the CPA has any confidential information that would impose a duty to a client. Even when no conflict of interest exists, the CPA may not wish to accept an engagement that is directly contrary to the interests of another existing client. Civil litigation frequently names many persons and entities as defendants. In such a case, an attorney for one of the defendants may approach the CPA for assistance. Although no conflict of interest may exist with the plaintiff, one of the other defendants may be a client. A problem may arise if the plaintiff proves damages, because the defendants, once united in trying to defeat the plaintiff, may begin complaining about each other in an attempt to escape the ultimate payment of damages. At this point, the CPA could be placed in the embarrassing position of assisting an entity adverse to another current client.

.13 Determining whether it is a conflict of interest to accept a litigation services engagement against a former client can best be resolved on a case-by-case basis. Factors to consider include the length of time *since* the party was a client, the length of the time that the party *was* a client, the confidential information the CPA possesses that may become an issue in the litigation, and the issues of the case.

.14 CPAs consider if what they will be asked to do in a litigation services engagement is inconsistent with what they currently do for other clients. (That is, will it be a practice in accordance with GAAP?) For example, in a typical securities fraud case, the plaintiff wants to prove that the practices of the company's CPA contributed to nondisclosure or fraudulent

disclosure in the financial statements. CPAs who are deciding whether to work for the plaintiff need to consider if the practices of the defendant's CPA represent conduct that they themselves engage in.

.15 To the lawyer retaining them, CPAs disclose, subject to the obligation of confidentiality, all current and former relationships with all parties to the litigation, even when they have concluded there is no conflict of interest. The lawyer and the client have the right to make their own determination about whether a conflict exists.

.16 A more detailed discussion of the issues of conflicts of interest in litigation services engagements is provided in Consulting Services Special Report 93-2, *Conflicts of Interest in Litigation Services Engagements* (New York: AICPA, 1993).

Timetables

.17 The CPA considers the required timetable for delivery of services in a litigation services engagement. Frequently, attorneys wait until the last few days before trial to retain experts. Once the trial starts, it is important that work be completed on schedule. If the CPA needs information or guidance from the attorney to continue the work, it often means waiting for the end of a trial day when the attorney returns from court.

.18 The litigation process is usually lengthy, and its progress is often determined more by the court calendar and occasionally the opposing side rather than by the attorney or client who hired the CPA. In accepting a litigation services engagement, therefore, the CPA needs to be prepared to provide services continuously or sporadically. Before accepting the assignment, the CPA considers the impact these inherent scheduling uncertainties will have on services to other clients.

Fees

.19 The CPA inquires whether the attorney or the client will ultimately pay the fees. The CPA then determines whether this party will be able to make payment if the litigation is unsuccessful. If not, the engagement might be viewed as one involving a contingency fee. A contingency fee arrangement for an attorney is entirely proper although the AICPA now permits a CPA to receive contingent fees. However, a number of states still prohibit contingent fees. Furthermore, most canons of the bar make it improper for an expert witness to be part of a contingency fee arrangement. The CPA needs to consider the adverse effect that such an arrangement has on the testifying expert's credibility. It is difficult to explain that a contingency fee arrangement does not bias the expert's opinion. Thus, a CPA should not accept an engagement that may require expert testimony on a contingency fee basis.

.20 The CPA may need to inquire about the billing-and-payment schedule. If an insurance company is funding the defense of a lawsuit, payment can be extremely slow; appropriate contract terms (such as late charges for slow payments) should be agreed to in advance. Typically, litigation engagements involve providing services one time for a particular litigant, and the CPA may often find collection of the final bill difficult, especially if the litigation is

unsuccessful. The CPA may therefore consider obtaining a retainer to be applied against the final bill.

.21 Fixed fees are a problem in litigation services engagements. It is very common that additional work is required as new facts are obtained during the discovery process, and as legal theories evolve that enlarge the attorney's views of what should be done. The CPA who is working under a fixed-fee arrangement should sign written change orders before beginning new work. This fixed-fee arrangement may prove to be unworkable in the last stages of a litigation when it is most likely that the extra work will be asked for.

Staffing

.22 Litigation services engagements may require top-heavy staffing because of the complex nature of the work. In addition, attorneys usually demand significant involvement by the person who will be the expert witness. Therefore, CPAs need to closely supervise the staff and be ready to testify that all work, exhibits, analyses, and the like were prepared under their direct supervision and control. CPAs who cannot devote substantial time to a litigation services engagement because of involvement in other assignments would do best to decline the engagement.

Merit

.23 CPAs try to determine the merits of a case before accepting a litigation services engagement. This is extremely difficult to do in most instances, but if CPAs determine that the potential client's case lacks merit or that the testimony they are asked to present is groundless, it is best to decline the engagement.

Inconsistent Opinions

.24 At the outset of litigation, CPAs usually cannot know what their ultimate opinions will be. Only after a careful evaluation and analysis of the facts can they form opinions. An opinion could be harmful to the client. When CPAs draw conclusions inconsistent with the theories pursued by the client in the case, they consider how the client will view a withdrawal from the engagement. CPAs who believe they will not be paid for the services rendered if they withdraw from an engagement should carefully consider whether to accept the engagement.

70/125 ENGAGEMENT OBJECTIVES AND CLIENT BENEFITS

.01 Engagement objectives in litigation services depend on the role the CPA will play. If the CPA is retained as an expert witness, the objectives are to form an expert opinion and to testify about it in a deposition or at trial. If the CPA is retained as a consultant to the attorney, the objectives are to advise the attorney about the facts and issues of the case and possibly to help the attorney develop case strategy.

.02 In either role, the CPA could also assist in the cross-examining of the opposing party's fact and expert witnesses, in proving or disproving liability, or in proving or disproving the cause of damages and the amount of damages.

70/130 ENGAGEMENT SCOPE

.01 The scope of litigation services engagements is generally more difficult to establish at the outset than the scope of other types of consulting engagements. The more significant reasons for this difficulty are explained in the following paragraphs.

Changeable Environment

.02 Litigation is a fluid and ever-changing environment. When the CPA is first retained, the attorney may have a fairly well-conceived idea about the CPA's role in the case. However, over time the focus of the litigation may shift because of the discovery of additional facts, the winning or losing of legal motions prior to trial, or merely a better understanding of the real facts at issue. Any of these can alter the CPA's role and methodology.

Lack of Familiarity With Data

.03 When first retained in a litigation services engagement, the CPA generally does not know what documents and data are available to perform the analysis, nor does the attorney. If discovery is still open, the CPA can assist in identifying the types of documents and data necessary for analysis. However, the amount of effort required to obtain the documents and data is unknown, as is the specific information that eventually will be produced.

.04 The approach in a litigation engagement is generally inductive (that is, conclusions are drawn from particular facts or individual cases). Therefore, the CPA's methodology and analyses depend on the facts uncovered and the scenarios developed. Since these are usually unknown at the outset, the CPA cannot immediately determine the work steps after the initial fact-finding. Thus, a comprehensive and detailed work plan is nearly impossible to prepare at the beginning of a case.

.05 Uncertainty about the data available and the analyses to perform make developing a work plan difficult and potentially harmful to the client's interest. The opposing party can discover the work plan of the CPA designated as an expert witness. Furthermore, the steps in the work plan could prove impossible to complete, or the CPA may choose not to complete them because they do not make sense based on subsequent data, a lack of data, or facts later identified. A skillful lawyer for the other party might embarrass or even discredit the CPA by highlighting the uncompleted work steps and by confounding the rationales for a revised work plan.

The Attorney's Role

.06 The attorney may expand the scope of the CPA's engagement after becoming familiar with the special skills and insights the CPA brings to the litigation effort. After the CPA's expertise is established, the attorney may use the CPA to test legal arguments and theories and to help develop case strategy.

The CPA's Role

.07 Acting as Expert Witness or Consultant. The CPA's role as either an expert witness or a consultant affects the engagement's scope. If the CPA's role shifts during the engagement, the scope changes too.

.08 An attorney often keeps a CPA retained as an expert witness separated from other experts and from theories of the case that are irrelevant to the CPA's eventual testimony. This separation ensures that the CPA cannot be used to effectively contradict or refute other theories and experts retained by the client or the attorney. If the CPA expert witness has not exchanged information about testimony with any other witnesses, then the attorney may be able to block any inquiry into other witnesses' testimony during the CPA's testimony.

.09 A CPA hired as a consultant to the attorney can play quite a broad role. The CPA can explore many different theories and approaches to proving a point because the attorney's work-product privilege protects any potentially harmful disclosures from discovery by the other side. Although this privilege is not absolute, a judge rarely overturns it.

.10 The CPA consultant is used by the attorney in the same way as paralegals and consulting attorneys are used: The CPA will sit in on strategy sessions and help develop the attorney's approach to proving the case.

.11 Preparing or Rebutting Studies. The scope of the engagement will differ depending on whether a CPA is retained to prepare a damages study or to rebut or discredit such a study. The CPA who prepares a damages study for a plaintiff acts as a creator by collecting and interpreting sufficient facts, testing assumptions for reasonableness, developing a model of what would have happened *but for* the defendant's actions, and drawing conclusions about the appropriateness and reasonableness of the study. In contrast, the CPA who rebuts or tries to discredit a damages study for a defendant acts as a critic by testing the correctness of the facts and then determining if all other steps undertaken by the expert who prepared the damages study were reasonable.

.12 The CPA who has been asked to criticize the damages study would not prepare a counterdamages study, unless asked to do so. Many defense attorneys believe that the burden of proof is on the plaintiff, and they do not want to perform this task for the plaintiff. If the plaintiff has not adequately "proved" damages, which is the reason the defense attorney retained an expert to criticize the plaintiff's proof, then the defense attorney may want the plaintiff to bring a new trial to prove damages.

.13 Other defense attorneys, however, do not want the trier of fact to consider only one damages study when making a decision. They prefer to present their own alternate theories and calculations of damages to modify a possibly adverse decision. If the CPA is retained by this type of defense attorney, then the engagement's scope will include not only criticizing the plaintiff's study but also preparing a counterdamages study.

Engagement Letters

.14 Using engagement letters in litigation services engagements presents special problems. The CPA often feels a need for protection by issuing a letter that specifies the engagement's purpose, the tasks to be performed, and the terms of compensation. However, conflicting with this need is the fact that, if the CPA is identified as an expert witness, the opposing party can discover the engagement letter. Furthermore, if tasks enumerated in the engagement letter are not completed, or worse, are completed with adverse consequences to the CPA's client, an effective lawyer for the opposition may use this information to imply that the CPA's opinion is defective. The opposing side will have ample opportunity to question the CPA about the engagement letter at a deposition or trial. Although the CPA may have many good reasons for not undertaking or completing the tasks originally specified in the engagement letter, a good cross-examiner may confuse the issue and give the trier of fact the impression that the CPA did not perform all the analyses required to substantiate the conclusions presented.

.15 All things considered, engagement letters are appropriate for litigation services engagements. However, it would seem better not to issue overly detailed engagement letters in litigation services engagements because the nature of the engagement may change frequently. Sample engagement letters are provided in appendix 70/A.

Documentation

.16 A very important engagement consideration relates to the CPA's practices for documentation preparation and retention. All materials prepared, accumulated, or referred to by a CPA acting as an expert witness in a case might be made available to his client's opponent. Thus, it is critical that at the outset the attorney and CPA develop a clear understanding of exactly what the CPA will be preparing and retaining for the engagement. If the CPA receives a subpoena and has materials and files unseen by the lawyer that are possibly harmful to the case, the CPA-lawyer relationship and possibly the case can be seriously damaged.

Professional Standards

.17 **AICPA Pronouncements.** Litigation services are considered in several AICPA professional standards. In addition, the applicability of professional standards to litigation services is discussed in Consulting Services Special Report 93-1, *Application of AICPA Professional Standards in the Performance of Litigation Services* (New York: AICPA, 1993).

.18 In general, litigation services engagements are considered to be a form of consulting services as defined by the AICPA. Therefore, the Statements on Standards for Consulting

Services (SSCS) must be followed in a litigation services engagement. These standards include the general standards of the accounting profession on professional competence, due professional care, planning and supervision, and sufficient relevant data as set forth in rule 201 of the Professional Code of Conduct. In addition, the SSCS includes standards dealing with client interest, the understanding with the client, and communication with the client.

.19 Litigation services are generally exempt from the Statements on Standards for Attestation Engagements (SSAEs) and from the Statements on Standards for Accounting and Review Services (SSARS).¹ These exemptions do not apply, however, when the CPA performs an audit engagement or a compilation or review in connection with a litigation services engagement.

.20 AICPA Litigation Services Subcommittee. The Executive Committee of the Management Consulting Services Division of the AICPA has established a standing Litigation Services Subcommittee to assist in setting standards for and to provide advice and guidance to CPAs who provide litigation services and to monitor other standards promulgated by AICPA bodies that may have an impact on litigation services.

70/135 ENGAGEMENT APPROACH

Assistance With Case Strategy

.01 Both the lawyer and client in civil litigation are advocates for their position, and their advocacy influences how they view the facts of a case. One of the principal services a CPA offers them is an objective professional review of the facts. In addition, if the lawyer is unfamiliar with business, the CPA can help by explaining the business facts relevant to the legal theories of the case.

.02 The CPA can suggest several different ways to prove facts or make points, such as using the following three common methods to compute lost profits:

- *Before-and-after approach.* The CPA uses the periods before or after the period of the alleged violation or both periods to estimate what the plaintiff's performance would have been during the period of the alleged violation.
- *Yardstick approach.* The CPA studies a similar company, industry, or market that was unaffected by the alleged violation in order to estimate what the plaintiff's performance should have been during the period of the alleged violation.

¹ See "Attestation Standards: Attestation Engagement Interpretations of Section 100" (AICPA, *Professional Standards*, vol. 2, AT sec. 9100) and "Compilation and Review of Financial Statements: Accounting and Review Services Interpretations of Section 100" (AICPA, *Professional Standards*, vol. 1, AR sec. 9100.20).

- *Sales projections (hypothetical profits).* The CPA creates a model of the impacted business by making assumptions based on how the plaintiff would have performed *but for* the alleged violation.

.03 If a cost-benefit analysis is feasible, the CPA can also assist in determining which approach is most cost-effective by putting the various approaches in proper perspective. For example, if the objective was to determine the number of exceptions in a given population (such as the number of invoices paid without documentation of approval) or to compute the defendant's market share, possible approaches include reviewing the entire population, a statistical sample at various confidence levels, or a judgmental sample. The CPA can also advise on the costs and benefits of the alternative sources of market share information — expert opinion, primary research, secondary sources, econometric models, or detailed surveys.

Assistance With Discovery

.04 Discovery takes place in the time between filing the original pleadings (the complaint and answer) and beginning the trial. Discovery is the attempt to find out what the other parties' facts and theories are. Most of the CPA's work is performed during this period of discovery. The CPA collects all necessary facts, analyzes the facts, develops any assumptions, and reaches all conclusions.

.05 Various legal tools are used in discovery; the CPA may suggest the use of any or all of them as aids in performing services. The major discovery tools and their uses are described in the following pages.

.06 Interrogatories. Interrogatories are often the first discovery device used. They are written questions put forward by one party and served on the opposing party, who must answer the questions in writing, under oath. Interrogatories serve as an excellent tool to obtain information, when little, if anything, is known about the opposing party. The CPA's special knowledge of business or a particular industry can help in constructing questions to develop a thorough understanding of an organization's systems, documentation, and structure. For example, the nature and extent of the opposing party's financial reporting and management information systems are possible areas of inquiry. The names and titles of officers or principals in the business can also be obtained for further discovery of their files.

.07 Requests for Production of Documents. A request for production of documents requires one party to provide the opposing party with documents in its possession that are relevant to the issues in the case. These requests usually follow the interrogatories. The requests must be very specific or the opposing party may not produce the documents, even when exactly what information is sought is apparent. Therefore, each party needs to request exact titles of reports, which can be culled from the information already obtained through interrogatories or depositions.

.08 The party responding to the request for production of documents does not usually copy the documents and send them to the requesting party. Instead, the documents are made available at the responding party's business or its attorney's offices. The requesting party is

then given the opportunity to review the documents and decide which ones to copy at its own expense.

.09 The requesting party's attorney will often want the CPA to assist in reviewing financial and other business documents produced by the opposing party. The CPA can be extremely helpful in identifying the relevant documents and in ensuring that they are copied and the irrelevant documents are not. This is important because, besides copying costs, the time needed by the CPA and the attorney to review all documents copied will depend on the number of documents discovered. A knowledgeable CPA can significantly reduce unnecessary copying and subsequent review by identifying the types of financial and business records that are necessary to prove the issues. Exhibit 70B-2 in appendix 70/B is a sample request for production of documents.

.10 Depositions. A deposition is the oral testimony of a witness questioned under oath by an attorney. The questions and answers are transcribed by a court reporter who records the testimony in a written document that can be used in a court. In a litigation services engagement, the CPA may give the deposition or assist the attorney in taking the deposition.

.11 *The CPA giving a deposition.* The opposition's attorney usually takes the deposition of a CPA who is retained as an expert witness in a civil case (depositions generally are not given in criminal matters). The attorney does this to fully understand the CPA's background and the reasoning and opinions about the case. Often the deposition affords the only opportunity prior to trial for the attorney to question the expert in-depth. The attorney uses the deposition to evaluate the CPA's strengths and weaknesses as a trial witness and develop a comprehensive understanding of this expert's opinions, studies, and analyses. However, some experienced attorneys prefer not to question an expert in depth at a deposition because it allows the expert to thoroughly test theories and approaches and then correct them as needed for the trial. Questions at the deposition usually cover all work performed by the CPA, including rejected analyses, blind alleys, and unused information. In addition, the deposition can be used to narrow the scope of the CPA's testimony at the trial, because anything said at the deposition can be used to impeach the CPA's credibility at the trial. Therefore, the CPA's testimony in the deposition needs to be consistent with the testimony at the trial.

.12 During a deposition, the CPA should answer questions honestly without volunteering additional information. The CPA should read the deposition transcript carefully before signing and again before testifying at trial, since it often will serve as a script for the cross-examination by opposing counsel.

.13 Depositions of experts in federal cases are covered by the federal rules of evidence and civil procedure [FRCP §26(b)(4)] and are not an absolute right of the opposing party. Usually, agreement by both sides or the direction of the court is required to obtain an expert's deposition.

.14 *The CPA helping an attorney take a deposition.* Although the only person who can ask questions at a deposition is the attorney, a CPA can provide extremely valuable assistance to the attorney during the examination of business people, particularly those in the financial or accounting areas. Most frequently the attorney asks the CPA to assist at a deposition in examining the opposition's expert. The CPA knows the language of business, including state-

of-the-art terminology, and can usually detect a witness's uninformative answer or a sign of weakness that the attorney might miss. The CPA can suggest additional questions to the attorney by passing notes or at meetings during breaks in the deposition. In this way the CPA can help identify an inconsistency or expose a flaw in testimony.

.15 Even an attorney who does not request the CPA's presence at the deposition will often ask the CPA to draft questions to ask. These questions have two aims: (a) to clarify the opposing expert's analysis and (b) to point out problems, inconsistencies, and errors in the analysis.

.16 Again, lawyers differ in approach. Some believe it is unwise to make the witness aware of analytical flaws at the deposition. They prefer to withhold this information for use at the trial. Others believe that the deposition can be used to point out the weaknesses in their opponent's case, thus encouraging settlement or, at a minimum, getting the expert to correct a presentation for use at the trial. Exhibit 70B-3 in appendix 70/B provides a sample list of possible deposition or cross-examination questions in response to exhibit 70B-1, the sample damages study.

.17 Subpoenas. A subpoena commands a person to appear in court. The subpoena *ad testificandum* commands a person to appear and testify as a witness. The subpoena *duces tecum* commands a person to produce documents in court that are then designated as evidence.

.18 The subpoena is frequently the only method of obtaining information from third parties not related to the litigation. The recipient of a subpoena who refuses to cooperate can be found in contempt of court and jailed until agreeing to cooperate.

.19 A party, including the CPA hired for the case, may file an objection to a subpoena with the court, thus requiring a hearing on the relevance and propriety of materials demanded. This practice is not recommended because it might create a conflict between the CPA and client, delay the trial, and generate costly legal fees. Occasionally, however, it may be necessary for the CPA to object if a subpoena requests irrelevant documents or materials related to other clients. Often the opposing attorneys can reach a compromise agreement on how much they will try to discover about the CPA experts and thereby avoid issuing subpoenas or filing objections.

.20 The opposing counsel may wish to go on a fishing expedition in the records of other nonparty clients of the CPA through the subpoena and deposition process. CPAs need to be careful not to violate rule 301 of the AICPA Rules of Professional Conduct, which requires the CPA to maintain client confidentiality. The CPA has a duty to comply with only a validly issued subpoena and therefore may find it necessary to test and verify the subpoena's validity before revealing confidential client information.

.21 Requests for Admissions. A request for admission is used to obtain the opposing party's verification of information as fact. The request must be relevant to the litigation. Verifying the information as fact is usually adverse to the interest of the party making the admission.

.22 Requests for admissions help narrow the factual issues to be litigated at trial. Any facts that can be agreed on by both parties prior to trial do not have to be proved at trial. This can greatly decrease the time it takes to try a case and is therefore favored by the judiciary. The CPA can suggest the types of facts that the opposing party could admit prior to a civil litigation trial. The CPA can also assist the attorney in developing arguments about why certain business facts should or should not be admitted prior to trial.

.23 Other Discovery Issues. Documents or data obtained through the discovery process need to be organized. The CPA can help in categorizing the information, developing or maintaining a retrieval system for it, and summarizing it for testimony.

.24 Discovery includes obtaining third-party documents and data, which usually take the form of industry, competitive, or economic information. If the information is obtained from another client without the other client's express consent to use it for litigation or from a source that will not allow its disclosure, then it probably cannot be used to support an opinion at trial.

.25 Economic and financial data are frequently available from computerized data bases. To use this information effectively, the CPA needs to understand how the data are input into the data bases as well as how the people who maintain the data bases can manipulate the information. All documents or information from data bases that is collected and supports the CPA's assumptions, conclusions, or opinions needs to be properly organized and referenced in workpapers. Extraneous material is removed because it can only lead to needless cross-examination and confusion. However, removed material is a proper area of examination at the deposition or trial.

.26 Normally, a proper foundation must be established for all testimony and documentary evidence submitted during a trial. Typically, witnesses cannot testify about information told to them by a third party. All documents submitted as evidence must be authenticated by their authors, recipients, or custodians. Otherwise, the testimony or written evidence may be classified as hearsay or lacking a proper foundation and may be excluded from the trial.

.27 However, several exceptions to the hearsay rule may affect CPAs acting as expert witnesses. Under the federal rules of evidence, expert witnesses are allowed wide latitude in what they may rely on to formulate an opinion. An expert, in *forming an opinion*, may rely on information that otherwise would be deemed hearsay if admitted to *prove* something. Such items include research and academic literature available in the expert's field, as well as consultations with other experts and interviews with parties who have relevant information. The testimony may be based on all of the expert's research, interviews, and conversations.

.28 Another important exception to the hearsay rule relates to business records, which include journals, ledgers, files, correspondence, financial statements, and other records created or maintained in the normal course of business. The CPA expert witness may rely on such records without auditing them. Of course, if the opposing side shows any inaccuracies or deficiencies in such records during cross-examination or surrebuttal, the disclosure may have an impact on how the trier of fact weighs the expert's opinion.

Analysis

.29 Analysis is, of course, the best use of the CPA's expertise. It involves making assumptions and calculations to form opinions and prepare testimony. Analysis may have a broad or narrow focus, depending on the case.

.30 Since the opposing party's examination of the CPA will focus primarily on this work, it needs to be well thought out, based on thorough study, and properly supported and documented. In many instances, formal written documentation may be appropriate. In other situations, the CPA needs to be fully prepared to orally defend his or her sources and rationales. The CPA who uses computer models and programs needs to be prepared to explain in detail the logical relationships and calculations contained in these models.

.31 The CPA's work for the plaintiff in a litigation services engagement very often involves creating financial projections for a lost-profits damages study. Obviously such a task entails a significant degree of uncertainty because it projects profits the plaintiff would have earned over some time period if the defendant had not interfered in some manner. Over the years the federal courts have come to recognize the difficulties plaintiffs face in damages studies and, in many cases, have accepted the concept that once the fact of damages is proven, the amount of damages may be proven with much less certainty and precision. The courts have reasoned that the defendant should not benefit from the very activities that the plaintiff alleges not only caused the damages, but also made it difficult to calculate. Thus, experts are generally given significant latitude in proving the amount of damages as long as they use reasonable assumptions and the best information available in constructing the damages estimate.

.32 Appendix 70/B provides a case study of litigation for which a CPA developed a sample lost-profits damages study. The following discussion of the factors that are analyzed to compute lost-profits damages will help to explain the calculations in the exhibits of appendix 70/B.

.33 **Defining Relevant Markets and Computing Market Share.** The size and composition of a market may have a direct impact on a plaintiff's sales potential. Basically, the CPA evaluates two factors, geography and competition, to determine the extent and nature of the market for the products or services in question.

.34 A market's geographic range influences how lost profits are calculated. For example, a vendor in a local market could claim it had plans to expand to national or even international distribution. The CPA needs to determine the feasibility of this claim by asking such questions as the following:

- Is there demand for the product or service on the national and international level?
- Do extrinsic factors, such as prohibitive transportation costs, limit expansion?
- Did the vendor try to expand in the past and fail because of its own poor planning?

.35 The number and kind of competitors also affect potential profitability. Questions the CPA might ask include:

- How many competitors are there in the given market?
- Does one large competitor dominate the market or do numerous small competitors constantly jockey for position?
- If the plaintiff is a relatively new vendor, is its chosen market difficult to enter? What has been the actual history of entry and exit to this market? Are there significant capital requirements or other barriers to entry?
- Do any of the competitors possess advantages, such as patent protection, copyrights, trade secrets, name recognition, or head starts?

.36 The relevant market for a product or service might include the markets for *similar* products or services. For example, the ballpoint pen market might include the felt-tip pen market because both meet the need for writing instruments.

.37 The CPA considers whether to include other products or services in defining the market. In addition, the CPA considers the effect that a change in the price of one product or service will have on the sales of a substitute product or service.

.38 After determining who the competitors are, the CPA can attempt to calculate the market share of each and whether market shares have remained constant or fluctuated over time. By using the but-for model, the CPA can then determine whether the defendant's allegedly improper acts altered the number of competitors and their market shares.

.39 **Restating or Reconstructing Financial Records.** The civil judicial system is relatively slow in bringing cases to trial, and as a result, many years can pass between the time alleged injuries occur and the time experts are retained to prove damages or reconstruct what actually happened. Even in well-managed businesses, old records can be misplaced or destroyed because very few managers put a high value on them. The information that managers need and want generally deals with the present and the future. Therefore, records prepared in the normal course of business are sometimes unavailable or have gaps by the time the CPA identifies the types of documents relevant to proving or disproving damages.

.40 Cases involving multiproduct-line companies, in which the alleged injury does not affect the entire company, present additional challenges. The financial statements of the entire company, although relevant and helpful, may not be useful to prove damages to only one product line. Ideally, the plaintiff company has product-line financial records and a well-documented accounting system that allocates common costs among the different product lines. Frequently, however, this is not the case.

.41 New or fast-growing companies often do not have accounting systems that have kept pace with the company's needs. In these situations, a CPA reconstructs or creates accounting records by making reasonable assumptions and by using cost accounting theory to prove the losses suffered by the plaintiff.

.42 When a CPA is retained to analyze financial records that have not been compiled, reviewed, or audited by another CPA, there may be concerns that the financial statements are not in accordance with generally accepted accounting principles. The CPA may wish to reconstruct or restate these financial records to conform to GAAP or to another appropriate basis. However, it is not incumbent on the CPA to audit the records.

.43 Calculating Actual Losses. A lost-profits claim is usually computed as either the incremental damages or the difference between what actually happened and what should have happened. The incremental-damages approach requires calculating lost incremental profits related only to the units that would have been sold but for the defendant's actions. The other approach requires computing the plaintiff's actual total profits for the product line on which the defendant's actions or inactions had an impact.

.44 The difference between the two methods is illustrated in the case of a plaintiff that actually sold two hundred units and claims it would have sold an additional one hundred if the defendant had not interfered. The plaintiff's CPA computes incremental damages by considering only what the profits would have been on the additional one hundred units. Using the other method, which involves determining the difference between actual and but-for profits, the CPA subtracts the profits on the two hundred units actually sold from the estimated but-for profits on the three hundred units that would have been sold.

.45 If successfully adjudicated, a lost-profits damages claim is normally taxable to the plaintiff. Therefore, the relevant loss to the plaintiff is the difference between actual pretax profits or cash flow and the projected pretax profits or cash flow the plaintiff would have earned but for the defendant's conduct. If the damages period lasts a long time, during which tax rates have changed, the CPA needs to consider calculating lost profits after tax for each of the years during the damages period. The CPA would then gross up the after-tax damages to a pre-tax figure using current tax rates.

.46 If the defendant's behavior caused a reduction in the plaintiff's sales volume, actual total profits may be used to model what would have happened but for the defendant's alleged violations. Using cost-volume relationships developed from actual transactions to determine fixed and variable costs, the CPA computes the profitability of the incremental lost sales. This is accomplished by subtracting the variable costs from the revenue produced by the incremental sales, assuming the relevant range of the fixed costs has not been exceeded.

.47 Another remedy often sought by plaintiffs is restitution, particularly through rescission of a contract. Restitution is the restoration of anything to its rightful owner and the return of both parties to their original condition. To restore the plaintiff's original condition requires calculating actual losses suffered.

.48 Although economists, non-CPA consultants, and business professors can be retained to perform damages quantification in litigation, computation of the plaintiff's actual losses is often given to the CPA to perform. The reason is the CPA has the training, education, and experience to expertly calculate what actually happened.

.49 Developing Profit and Cost Relationships. Analyzing profit and cost relationships is essential to making assumptions about what these relationships would have been but-for the

defendant's action. This analysis may be of the profit and cost relationships of the plaintiff or of other organizations that the CPA believes would have had relationships similar to the plaintiff's organization.

.50 The CPA may conclude that some of the plaintiff's actual profit and cost relationships would remain the same in the but-for model, whereas other relationships were affected by the defendant's behavior. Isolating the impact of the defendant's behavior on the plaintiff is difficult and requires a reasonable effort to consider other factors that could have affected the plaintiff's profitability in the but-for model. By using actual relationships, the CPA can consider the effects of factors unrelated to the problems allegedly caused by the defendant. For example, if the plaintiff had incompetent management, high turnover of employees, a strike, a fire, a bad financing arrangement, or any other problem unrelated to the defendant's actions, then the impact of these problems would be included in the but-for model.

.51 To compute lost profits, the CPA needs to compute the amount of revenues lost. However, different approaches exist to calculate the lost profitability. The CPA can determine the relationship of profit to revenue without a detailed analysis of costs. (Regression analysis and other econometric tools may be useful here.) The CPA can also model each cost element necessary to generate the lost revenue in a cost-buildup approach. Using a third method, the CPA can model significant cost groupings of units (for example, cost of goods sold; operating expenses; sales, general and administrative expenses; or other income and expenses). Any of these approaches is valid, and the method chosen depends on the facts of each case and the availability of data.

.52 Developing Pro Forma Financial Statements. In a lost-profits damages study, pro forma financial statements are developed with the assumption that the defendant violated a legal right of the plaintiff and that this violation caused financial harm to the plaintiff. The statements can be based on either historical financial information or projected calculations or both. The plaintiff must show what financial performance would have been but for the defendant's violations.

.53 The CPA engaged in preparing expert testimony may develop pro forma financial statements. Pro forma financial statements prepared in litigation services engagements are not subject to the AICPA's authoritative statement on prospective financial statements, *Financial Forecasts and Projections*, issued in October 1985. Paragraph 3 of this statement states:

This Statement does not provide standards or procedures for engagements involving prospective financial statements used solely in connection with litigation support services, although it provides helpful guidance for many aspects of such engagements and may be referred to as useful guidance in such engagements. *Litigation support services* are engagements involving pending or potential formal legal proceedings before a "trier of fact" in connection with the resolution of a dispute between two or more parties, for example, in circumstances where an accountant acts as expert witness. This exception is provided because, among other things, the accountant's work in such proceedings is ordinarily subject to detailed analysis and challenge by each party to the dispute. This exception does not apply, however, if the prospective financial statements are for use by third parties who, under the rules of the

proceedings, do not have the opportunity for such analysis and challenge. For example, creditors may not have such opportunities when prospective financial statements are submitted to them to secure their agreement to a plan of reorganization.

.54 The statement generally deals with the CPA as a reviewer of prospective financial statements made by a client and excludes pro forma statements. In litigation services, the CPA frequently prepares assumptions for pro forma financial statements. In these cases, the CPA is not reviewing the assumptions of someone else, but is responsible for the reasonableness of the assumptions. The CPA uses experience, judgment, and analytical abilities to establish assumptions for the pro forma financial statements. The CPA's opinion is probably the only evidence on pro forma damages statements that the trier of fact is interested in hearing. Although not binding, paragraphs 9 through 11 of appendix C in *Financial Forecasts and Projections* provide excellent guidelines dealing with the CPA's consideration of assumptions when preparing a pro forma financial statement.²

.55 CPAs who are not qualified by experience to make a particular assumption can rely on another expert or on the party they are representing to make the assumption. Their pro forma financial statements will then be based in part on the assumptions of others. Typically, these other people would testify about the assumptions they have provided.

.56 Understanding the bases for all the assumptions included in a damages study usually requires taking the deposition of the expert preparing the pro forma analysis. No standard of disclosure for assumptions in a lost-profits damages study exists, nor can one be formulated. Different experts, in consultation with attorneys and clients, will often vary in the extent that they explain the assumptions accompanying their pro forma financial statements used to calculate lost profits.

.57 Preparing But-For Lost-Profits Models. A damages model represents the expected financial performance of the plaintiff *but for* the defendant's alleged violations. The model usually shows the difference between what actually happened and what would have happened except for the defendant's allegedly improper conduct. The model may also take the form of an incremental calculation, which ignores what actually happened and simply focuses on the profitability of additional sales that would have occurred had the defendant not interfered as the plaintiff claims it did.

.58 A damages model is simply the framework used to quantify the plaintiff's damages, given the assumptions underlying the damages study. The model can be prepared either manually or with a computer. Computer modeling gives the CPA a greater range of sophisticated approaches to consider before choosing a final approach in calculating damages. Microcomputer software permits consideration of econometric and statistical approaches to

² See Statement on Standards for Accountants' Services on Prospective Financial Information, *Financial Forecasts and Projections* (New York: AICPA, 1985). The *Guide for Prospective Financial Statements* (New York: AICPA, 1986) also contains useful guidelines dealing with the CPA's consideration of assumptions when preparing pro forma financial statements.

calculating damages cost-effectively. Financial modeling languages, once available only through expensive time-sharing services, are now also available for microcomputers.

.59 Spreadsheet software is extremely useful in damages-claim modeling. The ability to change assumptions and recalculate the model quickly and inexpensively is a tremendous advantage over manually created models. The sensitivity of the damages to changes in assumptions can be easily tested, along with the reasonableness of the assumptions, given the end result. (Of course, the opposing party may rightfully query the CPA about each run or analysis prepared for the study.)

.60 A spreadsheet program's logic must be understood in order to understand the model it generates. The logic consists of the mathematical relationships among the data that are put into the cells of the spreadsheet. Therefore, the defendant needs to obtain the program's logic description during discovery.

Expert Opinion

.61 To testify at trial an expert witness must be *qualified* as an expert in the particular field that will be the subject of testimony. Qualification consists of establishing the witness's expertise in a particular field. To qualify a witness, the attorney who has called the expert asks a series of questions about such matters as academic degrees, academic honors, professional licenses, positions held, publications, speeches, membership and positions in professional societies, previous experience, and other cases in which the witness provided testimony.

.62 CPAs are commonly used as experts in proving damages.³ A CPA may be an expert in a particular industry based on the types of clients served. The CPA may also be an expert in the application of certain accounting, financial, statistical, or econometric techniques relevant to issues in a case.

.63 The opposing side may challenge the expertise of a particular witness. In such a case, the opposing attorney may ask to examine the witness under *voir dire* at the outset of direct testimony, to determine expertise or lack of it. After completing the questioning, the opposing attorney may move to have the witness designated as not qualified to express an expert opinion. If the opposing attorney succeeds, the judge will not permit the potential expert to testify. However, if the CPA presenting damages testimony has practiced for several years and has done professional work, it would be extremely unusual for such testimony to be excluded based on the CPA's lack of expertise.

.64 Under federal rules of evidence, an expert can testify about the *ultimate issues* of a case, which are issues on which the trier of fact must make a decision. Guilt or innocence, the cause of damages, and the amount of damages are all ultimate issues. Although it is the responsibility

³ For citations of legal cases that have so held, see Robert L. Dunn, *Recovery of Damages for Lost Profits*, 3d ed. (Tiburon, Calif.: Lawpress Corp., 1987), p. 343.

of the trier of fact to make the decisions on these issues, an expert witness can give an opinion on them. This means a credible expert witness may have a major impact on the outcome of the litigation.

.65 Expert opinion is the opinion of the individual testifying. A CPA firm cannot testify, only an individual CPA. The opposing party has the right to cross-examine the expert under oath. Obviously, a CPA firm cannot be cross-examined; only a member of the firm can be cross-examined.

Use of Staff

.66 A CPA who testifies from a report needs to supervise and control the preparation of the report. Preparation includes accumulating and analyzing the data, and drafting the report. This supervision is important because unless the work is performed under the CPA's direction and control, there may be a challenge to the admissibility of the report. If the CPA does not oversee the work, someone else may have to testify about the methods and data sources used in order for the evidence to survive a hearsay objection.

Presentation of Results

.67 **Oral Testimony by Expert Witnesses.** In most litigation services engagements, experts present results to the trier of fact as testimony covering findings, conclusions, and opinions. Most commonly, testimony is oral and consists of answers to questions asked by the attorney who retained the CPA. These questions and answers are known as direct examination, which is slow and deliberate and normally takes many pages of a transcript to complete.

.68 After the conclusion of direct examination, an attorney representing the other party examines the CPA by asking questions that must be answered. This is known as cross-examination. The next phase, redirect, follows cross-examination. The attorney who offered the CPA as an expert has the right to ask more questions limited to issues raised during cross examination. Finally, in the phase known as re-cross, the opposing party's attorney has the right to ask questions limited to issues raised during redirect. The expert is under oath during all these phases.

.69 The expert witness may introduce exhibits to support or illustrate the opinion during testimony. The expert witness also gives opinions about facts or hypotheses. Neither the oral testimony nor the exhibits need to be documented in the form of a formal written report.

.70 **Written Reports by Expert Witnesses.** Testimony, especially that of experts, may be written at times as a result of stipulation by the parties or a judge's request for trial efficiency. Under these circumstances, the CPA may render testimony as a written report, which can vary from only a written statement of the expert's opinion to an extensive report with detailed assumptions and supporting schedules showing all computations. For example, the sample lost-profits damages study in appendix 70/B could be an exhibit supporting the expert's opinion, or it could be submitted without testimony as the expert's conclusions.

.71 Another variation occurs when there is no direct oral examination. Instead of an oral direct examination, the expert submits the direct testimony in writing, which is read to the judge or jury, and only the cross-examination, redirect, and re-cross are oral. This method speeds up the presentation of expert testimony, although it may not be as easy for the trier of fact to comprehend.

.72 There are no specific guidelines for reports in litigation services engagements, because the form and content depend on the facts in the case and the preferences of the lawyer retaining the CPA. However, the CPA would insist that conclusions and analyses not be misrepresented by the form or content of the presentation.

.73 **Written or Oral Reports by Consultants.** The CPA who is engaged as a consultant to the attorney normally produces either written or oral reports. The written reports can take any form desired by the attorney. Common written forms include questions for interrogatories, a list of documents to be produced (see exhibit 70B-2 in appendix 70/B), questions for depositions or cross-examination (see exhibit 70B-3), and handwritten notes to an attorney during the deposition of an opposing party's witness. Common oral forms include a discussion of the CPA's findings or conclusions related to sufficiency of evidence and the CPA's opinions about appropriate strategies to take in settling litigation.

.74 Some lawyers do not want a written report, even when the CPA's work is protected by the attorney work-product privilege. There are two reasons for this. First, the attorney work-product privilege is not absolute. By showing undue hardship, the opposing party can obtain a judge's order exempting an expert's work from the attorney work-product privilege. Therefore, there is a slight chance that a written report, which may include possible negative implications for a client's case, may be turned over to the opposing party. A risk-averse attorney will avoid even this slight risk.

.75 Second, the attorney may later designate the CPA who was previously retained as a consultant as an expert witness. The attorney may then be forced to turn over the CPA's report to the other side because it may no longer have the protection of the attorney work-product privilege. However, the CPA, having prepared the report under that privilege and assuming it was confidential, may have included statements that are adverse to the client's interests.

.76 **Exhibits.** A CPA's testimony about damages usually requires explaining a great many numbers and mathematical formulas along with accounting and economic theories. Most triers of fact, especially juries, consider this type of testimony extremely dry and difficult to comprehend. Therefore, whenever possible, the CPA should use diagrams or other visual aids rather than a table or schedule of numbers to explain a difficult concept or relationship.

.77 Three sample exhibits prepared for the illustrative lost-profits damages study are provided in appendix 70/B. Exhibit 70B-1.7, which the plaintiff may want to introduce, is a bar chart showing the expected pattern of pretax profit to be received over the twelve years of the damages study.

.78 Exhibit 70B-1.8, a bar chart that presents yearly cash flows assumed in the study, shows a *cumulative negative* cash flow for the first six years. A defendant may want to use such a chart to raise doubts about the plaintiff's case in the mind of the trier of fact. For example, the

defendant may suggest that the plaintiff could not have survived long enough to realize the positive cash flows generated in years 7 through 12. Exhibit 70B-1.8 also shows that all the profits in the damages study are still in the future. They are thus arguably more speculative and, of course, the amounts represented must be discounted to present value.

.79 Exhibit 70B-1.9 is a pie chart showing the relationship of a various major cost elements to total sales. Exhibits 70B-1.7, 70B-1.8, and 70B-1.9 are the kind of graphic material that either a plaintiff or a defendant might use.

.80 Affidavits and Declarations. In some instances testimony may be given either by affidavit or declaration. An affidavit is a written statement made under oath. It is normally used during trial. A declaration is a witness's unsworn written statement, but it is normally accompanied by another statement that it would be the same if made under oath. Because a declaration is unsworn, it is normally used to support pretrial motions.

.81 Workpapers. Workpapers supporting the CPA's opinion may or may not be introduced as exhibits at trial. Normally they are not, because the trier of fact usually has neither the inclination nor the ability to review the CPA's work papers. However, if the work papers support opinions contrary to those offered by the CPA or if the opposing party discovers errors and inconsistencies in them, the opposing party may introduce the work papers as evidence of the carelessness of its opponent's CPA or the fallacy of the CPA's conclusions.

.82 To protect against such use of work papers, the CPA carefully controls the content of the work papers and avoids collecting any irrelevant materials. All work papers supporting the expert's opinion should be retained and properly organized so that the expert can find the source materials that are the bases for the opinion. The CPA cannot remove anything after receiving a subpoena. Any relevant documents prepared by the CPA, whether or not they support the CPA's opinion, must be produced in response to a subpoena. If the work papers are introduced into evidence, the CPA loses custody of them because they become the property of the court.

Effective Testimony Techniques

.83 When testifying, the CPA strives to be listened to and believed and to present an opinion that is accepted by the judge and jury. The accomplishment of these aims requires adequate preparation, including rehearsal of both direct testimony and likely cross-examination. An advance visit to the courtroom to plan the placement of visual aids generally improves the CPA's comfort level.

.84 Demeanor in or Near the Courtroom. The CPA should minimize contact with the lawyers while the jury is present. The CPA should also be guarded in conversations anywhere in or near the courthouse, particularly in the presence of jurors. While in the courtroom, the CPA should strive to maximize the confidence of the judge and jury by dressing conservatively and by maintaining a professional appearance. On the witness stand, the CPA should be neither unduly humble nor pompously arrogant.

.85 Direct Testimony. The CPA's aim during direct testimony is to deliver a professional opinion clearly, concisely, and believably. This result is best achieved by crisp, concise

testimony delivered in brief statements rather than in a long lecture. By maintaining eye contact with the judge and jury, the CPA increases the likelihood that his or her testimony will be absorbed. The CPA should avoid jargon, but speak in simple language using examples and analogies that are familiar to the lay persons on the jury. The use of visual aids such as flip charts or a blackboard not only makes the CPA's testimony more understandable, but also permits the CPA to move about the courtroom (subject to the judge's permission), which helps to hold the jury's attention. The CPA should devise examples before taking the witness stand because examples improvised on the spur of the moment are frequently ill-constructed.

.86 The CPA should bring only essential documents to the witness stand because opposing counsel has the right to inspect anything to which the CPA refers during testimony. If the CPA expects to move about the courtroom during direct testimony, such logistical questions as the manner in which the CPA may refer to notes require advance planning.

.87 Structure of Typical Direct Testimony. A CPA's direct testimony normally commences with responses to a series of questions concerning professional qualifications. Occasionally, particularly in lawsuits tried without a jury, the CPA's qualifications are introduced in a written resume of professional background. Laying a foundation of the CPA's qualifications is essential, since opinion testimony can only be presented by a witness who has satisfied the judge as to his or her special knowledge or training. During or after testimony concerning the CPA's qualifications, opposing counsel often interrupts the direct testimony to challenge the CPA's qualifications or perhaps to limit the scope of the CPA's expert testimony. These questions by opposing counsel, called *voir dire*, are sometimes followed by a plea to the judge that the CPA is not qualified to offer expert testimony or that some of the subjects expected to be included in direct testimony are outside the CPA's area of expertise.

.88 Assuming that the judge allows the CPA to proceed, the CPA will normally then be asked to describe the tasks undertaken and the methods used to accomplish them. Most attorneys then bring up the CPA's fee arrangement including the hourly rate charged as well as the total fees received. Finally, the CPA is asked to offer opinions on the subjects scrutinized and the facts, analyses, or authorities on which those opinions are based.

.89 Cross-examination. The intent of cross-examination by opposing counsel is to discredit witnesses and diminish the impact of their testimony. While the questions during direct testimony will solicit the CPA's opinions and permit an expansion upon the CPA's views, questions by a cross-examiner will be much more restrictive. Opposing counsel will try to encourage contradiction, limit the breadth of the testimony's application, diminish the scope of the CPA's expertise, and generally rattle the witness.

.90 In order to minimize the effects of the cross-examiner's technique, the CPA should be sure to understand each question. If not, the CPA should ask to have the question repeated. The CPA should then respond slowly and deliberately. If the cross-examiner requests a yes or no answer, the CPA may refuse if such an answer seems to be impossible. The CPA should not argue with the cross-examiner but, instead, should maintain the appearance of a disinterested expert rather than an advocate.

.91 Visual Aids. Most matters about which a CPA will testify concern numbers. Numeric concepts are difficult to grasp when presented orally. Consequently, the CPA should normally

augment testimony with some sort of visual depiction of the data. Media normally used to portray testimony include blackboards, overhead projectors, flip charts, photographic blowups, slide projectors, and laser disk with television. The CPA should seek to use those media that permit the maintenance of eye contact with the judge and jury and preferably do not require dimming of lights. The data portrayed should be clearly discernible by the judge and jury. The exhibit must be readable and understandable from a distance so the CPA should always consider using less information than more on a particular exhibit.

70/140 CONCLUSION

.01 Regardless of its form, the CPA's testimony communicates findings, conclusions, and opinions to the trier of fact in concise and simple terms. The effective expert witness will convince the trier of fact through intelligence, experience, objectivity, and sincerity, keeping in mind the need to explain technical terms. The CPA who possesses and uses these attributes in a litigation services engagement will be a credit to the client and the profession.

.02 These same qualities are also necessary when the CPA serves as a consultant to the lawyer. The lawyer needs someone to use as a sounding board for ideas and understanding of the facts and strategies. The CPA does not just echo the positions of the lawyer but needs to give sound advice from an independent perspective.

APPENDIX 70/A

ILLUSTRATIVE MATERIALS

Exhibit 70A-1

Sample Engagement Letter 1

CPA & Company
Anytown, USA

September 4, 19XX

John A. Smith, Esq.
Smith, Smith & Jones
100 Courthouse Way
Anytown, USA

Dear Mr. Smith:

You have asked me to read and analyze certain documents relating to a lawsuit brought against your client, XYZ Company. You have also asked that I be available to testify at the time of trial should you decide to use me as an expert witness. Any written reports or other documents that I prepare are to be used only for the purpose of this litigation and may not be published or used for any other purpose without my written consent.

Irrespective of the outcome of this matter, I understand that you will compensate me at my standard hourly rate (currently \$___) for all time spent, including travel, whether or not the engagement is completed or its results are used. You will also compensate me for any out-of-pocket costs that I may incur. I will submit bills monthly, which are due and payable on receipt and in all events prior to the commencement of my testimony.

[Optional sentence: Before commencing work on this engagement, I would like a retainer of \$___ which will be applied to final billing on this engagement or refunded to the extent that it exceeds such billing.]

Any controversy or claim arising out of or relating to this contract, or the breach thereof, shall be settled by binding arbitration, in *[insert desired venue]*, in accordance with the Commercial Arbitration Rules of the American Arbitration Association, and judgement upon the award rendered by the arbitrator may be entered in any court having jurisdiction thereof.

70/100-32

I look forward to assisting you in this matter and hope that my services will be beneficial. If you approve of the engagement terms described above, I would appreciate your signing the enclosed copy of this letter and returning it to me.

Sincerely yours,

Accepted:

John Jones, CPA

Name of attorney's firm

Sample Engagement Letter 2**[Optional additions are bracketed]**CPA & Company
Anytown, USA

September 4, 19XX

John A. Smith, Esq.
Smith, Smith & Jones
100 Courthouse Way
Anytown, USA

Dear Mr. Smith:

The purpose of this letter is to summarize our understanding of the assistance that CPA & Company will provide to you and your client, XYZ, Inc. in the matter of XYZ, Inc. v. ABC Corporation et al. before the Superior Court of the State of California, County of Los Angeles, which matter is Case No. XXXXXX.

You have requested that we assist you with analysis and consultation with regard to the XYZ litigation matter as you may direct. I would also be prepared to provide testimony at deposition and trial should you decide that to be appropriate.

I will be responsible for the performance of our engagement with you and your client. My hourly billing rate is \$XXX. From time to time, if necessary, other professionals may also assist when appropriate and needed. The hourly rates for our professionals are in the following ranges: Senior managers and managers — \$XXX to \$XXX; senior accountants and senior consultants — \$XXX to \$XXX; and consultants — \$XXX to \$XXX. *[Our hourly rates are subject to change from time to time. We will advise you immediately if the rates are being adjusted by our firm.]*

Fees for our services are based upon the actual time expended on the engagement at the standard hourly rates for the individuals assigned. In addition to our professional fees, we are reimbursed at cost for any travel and out-of-pocket expenses. Bills are rendered and are payable monthly as work progresses. *[We reserve the right to defer rendering further services until payment is received on past due invoices.]*

[Our normal practice is to obtain a retainer, and we herewith request such a retainer in the amount of \$XX,XXX. This retainer is not intended to represent an estimate of the total cost of the work to be performed. The retainer will be held against the final invoice for the engagement; any unused retainer will be refunded.]

We are certain that you recognize that it is difficult to estimate the amount of time that this engagement may require. The time involved depends upon the extent and nature of available information, as well as the developments that may occur as work progresses. It is our intention to work closely with you to structure our work so that the appropriate personnel from our staff are assigned to the various tasks in order to keep fees at a minimum.

[Furthermore, you, your client and I, all agree that any dispute over fees charged by our firm in this engagement will be submitted for resolution by arbitration in accordance with the rules of the American Arbitration Association. Such arbitration is limited only to the issue of fees charged and shall be binding and final. In agreeing to arbitration, we each acknowledge that in the event of a dispute over fees, each of us is giving up the right to have the dispute decided in a court of law before a judge or jury and instead are accepting the use of arbitration for resolution.]

[You or your law firm or the court itself will advise us (with sufficient notice) of the work to be performed by us and the requirement for appearance in court. If there is a substitution or change in the association of attorneys involved in this litigation, we reserve the right to withdraw from this engagement.]

If the arrangements described in this letter are acceptable to you and the services outlined are in accordance with your requirements, please sign and return a copy of this letter. We look forward to working with you in this matter. If I can provide you with any additional information, please do not hesitate to call me at (555) 123-4567.

The proposed terms of this letter are subject to change if not accepted within 60 days of the date of this letter.

Very truly yours,

(Name and Title)
CPA & Company

The services described in this letter are in accordance with our requirements and are acceptable to me and my client.

Accepted:

John A. Smith, Esq.
Smith, Smith & Jones

Date

APPENDIX 70/B

CASE STUDY: LOST-PROFITS DAMAGES STUDY FOR VENDING OPERATOR, INC. vs. STATE**Background**

The case of Vending Operator, Inc. vs. State involves State's contract with Vending Operator to install and operate vending machines at roadside rest stops. State had developed several roadside rest stops along its intrastate and interstate highways. As a further convenience to motorists, State decided to put vending machines at the rest stops to dispense food, drinks, and sundries. Before committing to a statewide program, State decided to try a test program that placed vending machines at five roadside rest stops for two years. State sent out a request for proposal (RFP) soliciting bids to install and operate vending machines at the five test sites.

Only one company, Vending Operator, responded to the RFP. Since Vending Operator appeared to be qualified, State awarded the contract to it. Vending Operator, to protect its investment in starting up the test program, required State to give it two consecutive options to operate vending machines at the roadside rest stops after the test period, if the test was successful. Each option period would run for five years (that is, from years 3 through 12 of the program). State agreed to this and entered into a contract with Vending Operator.

The contract stipulated that Vending Operator was to install and operate the vending machines, which would require designing and erecting buildings at each of the rest stops to house the vending machines, all at the expense of Vending Operator. State would supply the land rent-free and provide all necessary utilities.

Vending Operator was to sell items in the vending machines at the prevailing price in the given locality. State would receive a royalty of 2 percent of sales in the first year and 3 percent in the second year of the test program. If Vending Operator exercised its first five-year option after the test period, the royalty percentage would be renegotiated at that time.

Vending Operator was to provide State with monthly statements detailing the revenues and expenses of operating the five test sites. State had the right to audit these statements.

As conditions of the contract, Vending Operator was responsible for maintaining the cleanliness and safety of the area around the vending machines as well as for the timely payment of all state taxes.

At the beginning of the test period, State had ninety-one operational rest stops along its highways. Of those, forty were along intrastate highways and fifty-one were along interstate highways. During the first year of the test, two additional rest stops were completed, both along interstate highways. State had plans for building a total of 160 roadside rest stops.

This plan was being reconsidered because of State's limited funds and a lack of federal assistance, but no new plan had been submitted to the legislature at the beginning of the program. In addition, federal law prohibited the operation of vending machines along federal highways when the test was begun. However, this law was changed in the program's sixth year, thus permitting the installation of vending machines along federal highways.

Vending Operator built the five structures and installed the vending machines. But after a full year of operation, State was unhappy with Vending Operator's performance. State asserted that royalties were below the projected amount, royalty and sales tax payments were consistently late, and maintenance of the vending machines was substandard. After consulting its attorney general, State notified Vending Operator that it was not going to continue the vending machine program after the test period.

Vending Operator, which had lost money in the first year, immediately stopped operating the five test sites and filed a breach-of-contract action in the state courts. Vending Operator sued State for the lost profits projected for the twelve-year contract (the two-year test program plus both five-year options).

Both sides retained CPAs. Vending Operator asked its CPA to prepare a lost-profits damages study and testify about it at the trial. State asked its CPA to analyze the lost-profits damages study and help State's attorneys cross-examine Vending Operator's CPA at both the deposition and the trial.

Vending Operator, Inc. and the State set the following objectives for each CPA in expectation of the following benefits.

Objectives

For the CPA Retained as an Expert Witness by the Plaintiff (Vending Operator)

1. To prepare a lost-profits damages study for Vending Operator.
2. To testify about lost-profits damages as an expert witness at the deposition.
3. To testify about lost-profits damages as an expert witness at trial.

For the CPA Retained as a Consultant by the Defendant (State)

1. To analyze the weaknesses and errors in the lost-profits damages study prepared by the plaintiff's expert.
2. To prepare deposition questions to challenge the plaintiff's damages expert by pointing out errors and weaknesses in the lost-profits damages study.
3. To prepare cross-examination questions to challenge the expertise of plaintiff's damages expert and to point out errors and weaknesses in the lost profits damages study.

Expected Benefits

For the CPA Retained as an Expert Witness by the Plaintiff (Vending Operator)

1. To obtain a practical settlement by convincing the defendant, the defendant's attorney, and the defendant's experts that the damages computed for plaintiff were caused by the defendant's actions and that the amount computed is reasonable. (The more convincing the plaintiff's expert can be, the easier it may be to obtain a pretrial settlement satisfactory to the plaintiff.)

2. If the litigation is not settled before trial, to persuade the trier of fact that damages computed for the plaintiff were caused by the defendant's action, that the amount computed is reasonable, and that it is based on the best evidence available.

For the CPA Retained as a Consultant the Defendant (State)

1. To obtain a pretrial settlement by convincing the plaintiff, the plaintiff's attorney, and the plaintiff's experts that the damages computed for the plaintiff were either not caused by the defendant's actions or that the amount computed is overstated.
2. If the litigation is not settled before trial, to persuade the trier of fact that the damages computed for the plaintiff are speculative and cannot serve as the basis for awarding damages to the plaintiff.

Factors Analyzed to Produce a Lost-Profits Damages Study

Market Definition

Geographic definition. The market in this case can be broadly defined as motorists who purchase food, drinks, and sundry items while traveling in State. Based on the terms of the contract, the market could be narrowed geographically to all existing and potential highway rest areas in State during the term specified.

Vending Operator desires a broader definition of the geographic market than the physical boundaries of State. It argues that if the test period had been successful, profitable vending operations would have been started at roadside rest areas in other states. State wants a narrow geographic definition of the market that includes only existing highway rest areas in State. It explains that any proposed new locations are too speculative to be a basis for computing lost profits.

Competitive definition. Vending Operator claims it has 100 percent of the market, a head start over any other potential competitor, and a legal monopoly from State because the contract assumes Vending Operator has the exclusive right to install vending machines at highway rest areas in State during the term specified.

State argues that it did not have the legal right to grant a monopoly to Vending Operator even if it could be assumed from the contract, because other vending operators in State would compete for available highway rest areas if the program proved profitable. State also wants to define the market broadly in the context of supply available to meet the motoring public's demand for food and sundry items by including competition from vending machines at gas stations, fast-food outlets, and other food sources not located along State's highways.

Financial Records

Vending Operator has only one year of actual operating experience. The first year's financial statements were compiled by a CPA. No statement of changes in financial position was prepared. The CPAs of both Vending Operator and State will evaluate Vending Operator's accounting records to ensure that no other relevant violations of GAAP occurred.

Actual Losses

Vending Operator, in business for only one year, claims that State's actions caused it to lose more money than it should have in this one year. It is attempting to prove this incremental loss as additional damages. In exhibit 70B-1, the damages study, the total actual loss in year 1 is added to the computation of damages. This combining of the amounts is based on the assumption that Vending Operator would have broken even in year 1 but-for State's action.

The CPA retained by Vending Operator asked about Vending Operator's expectations for the profitability of first-year operations in any projections made before the start-up of the business. To determine if any of the factors cited as contributors to a loss actually caused either a decline in revenue or an increase in any costs, the CPA analyzed Vending Operator's first year revenues and costs in relation to the factors. The CPA retained by State made the same determinations about causation and formed an opinion on the reasonableness of Vending Operator's allegation about any loss in year 1.

Profit and Cost Relationships

Vending Operator's CPA used the principal assumptions listed in exhibits 70B-1.1 and 70B-1.2 to prepare the rest of the damages study. The CPA then modeled sales on Vending Operator's actual sales history in its one year of operation and modeled each of the twenty-four expense categories in the income statement, including cost of sales, separately. (The actual income statement for year 1 and the projected income statements for years 2 through 12 are included in exhibit 70B-1.2.) Ten categories were modeled on Vending Operator's actual experience in year 1. These categories are depreciation, dues and subscriptions, outside services, rent, repairs and maintenance, security, taxes and licenses, payroll taxes, sales taxes, and utilities. The remaining fourteen expense categories were modeled independently of Vending Operator's actual experience because the CPA believed that the company's actual experience did not properly indicate how these costs would behave in the but-for world.

State's CPA analyzed the assumptions and relationships developed by Vending Operator's expert and determined whether they are reasonable. State's CPA was not asked to recalculate the damages based on reasonable assumptions and relationships. Instead, the CPA was instructed to point out any unreasonable assumptions in Vending Operator's damages study so that the judge and jury would conclude that Vending Operator had not proved the alleged damages. State's CPA also prepared a list of questions for the deposition of Vending Operator's expert. These questions (exhibit 70B-3 in appendix 70/B) sought additional information about the reasoning for some of the assumptions or pointed out errors or weak assumptions.

Pro Forma Financial Statements

The sample damages study covers both past and future years. The trial took place in year 7 of the damages study. The CPA made sure that assumptions used in the past years were consistent with actual events that the defendant's violations had no impact on, for example, the general rate of inflation, interest rates, or the effects of a recession.

The assumptions necessary to generate the pro forma income and cash flow statements in exhibits 70B-1.2 and 70B-1.3 are contained in exhibits 70B-1.1, 70B-1.4, 70B-1.5, and 70B-1.6. The assumptions are both explicitly stated in the notes in exhibits 70B-1.1 and 70B-1.2 and are implicit in the schedules in exhibits 70B-1.4, 70B-1.5, and 70B-1.6. The explicit assumptions include the sales per unit and their increases from year to year, the cost of sales, and the number and cost of trucks needed in each

year of the projection. Implicit assumptions include the amount of borrowing necessary to finance the business, the rate of payback on the borrowed money, the method of calculating interest expense, and the method of handling investment tax credit.

But-For Lost-Profits Model

The CPA prepared the sample damages study by using a popular spreadsheet program available for most microcomputers. The program calculated Vending Operator's projected income statement in exhibit 70B-1.2 (as well as the data in exhibits 70B-1.3, 70B-1.4, 70B-1.5, and 70B-1.6) by using the assumptions in exhibits 70B-1.1 and 70B-1.2. For example, sales in year 1, listed in exhibit 70B-1.2 totaled \$272,100. This figure is the product of the number of stations, 5, multiplied by the sales per unit, \$54,420, which are both assumptions in the notes to these exhibits. The logic that multiplies these assumptions exists in the cell in exhibit 70B-1.2 beneath the number \$272,100.

Sample Lost-Profits Damages Study

Lost-Profits Model Prepared by Vending Operator's Expert

Assumptions	Year 1 ¹	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Number of stations	5	20	50	50	70	90	100	120	140	160	160
Cost per unit ²	\$16,000	\$34,000	\$36,040	\$38,202	\$40,494	\$42,494	\$45,499	\$48,229	\$51,123	\$54,190	\$57,441
Replacement units,											
Cost of	\$ 8,000	\$17,000	\$18,000	\$19,101	\$20,247	\$21,462	\$22,750	\$24,115	\$25,562	\$27,096	\$28,722
Loan-interest rate	12.00%	14.00%	16.00%	18.00%	16.00%	14.00%	14.00%	14.00%	14.00%	14.00%	14.00%
Trucks, number of ³	3	3	4	4	4	5	5	7	8	10	10
Replacement/new	3	3	1	1	3	1	1	2	3	3	1
Purchase price	\$ 4,000	\$10,000	\$10,600	\$11,236	\$11,910	\$12,625	\$13,383	\$14,186	\$15,037	\$15,939	\$16,895
Operating cost	\$ 1,500	\$ 1,590	\$ 1,685	\$ 1,786	\$ 1,893	\$ 2,007	\$ 2,127	\$ 2,255	\$ 2,390	\$ 2,533	\$ 2,685
Sales per unit	\$54,420	\$57,685	\$61,146	\$64,815	\$68,704	\$72,826	\$77,196	\$81,827	\$86,737	\$91,941	\$97,457
Cost of sales	67.00%	47.00%	47.00%	47.00%	47.00%	47.00%	47.00%	47.00%	47.00%	47.00%	47.00%
Insurance	\$ 5,377	\$ 7,500	\$10,000	\$12,500	\$15,000	\$17,500	\$20,000	\$22,500	\$25,000	\$27,500	\$30,000
Repairs per unit	\$ 450	\$ 477	\$ 506	\$ 536	\$ 568	\$ 602	\$ 638	\$ 676	\$ 717	\$ 760	\$ 806
Taxes											
Payroll	12.50%	12.50%	12.50%	12.50%	12.50%	12.50%	12.50%	12.50%	12.50%	12.50%	12.50%
Sales	4.00%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%

Notes

- Year 1 shows actual operating results for vending operator's five test sites.
- The units are estimated to cost \$34,000 (increasing by 6 percent per year) for both machines and buildings. For year 1 units were rented. The buildings are estimated to last twenty years and the machines ten years. The forecast assumes the opening of ten to twenty units per year.
- The number of trucks required are one for each repairman per office and one route truck for each twenty-five locations. The trucks are estimated to last five years with an average cost of \$10,000, increasing by 6 percent per year for additional trucks.

Exhibit 70B-1.2

Vending Operator's Pro Forma Income Statement

Assumptions	Year 1'	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Total
Sales ¹	\$272,100	\$721,065	\$1,834,389	\$2,916,679	\$4,122,240	\$5,826,099	\$7,333,602	\$9,001,031	\$11,275,838	\$13,791,217	\$15,593,269	\$16,528,865	\$89,216,394
Cost of sales ²	<u>182,307</u>	<u>338,901</u>	<u>862,163</u>	<u>1,370,839</u>	<u>1,937,453</u>	<u>2,738,267</u>	<u>3,446,793</u>	<u>4,230,485</u>	<u>5,299,644</u>	<u>6,481,872</u>	<u>7,328,836</u>	<u>7,768,567</u>	<u>41,986,127</u>
Gross profit	\$ 89,793	\$382,164	\$ 972,226	\$1,545,840	\$2,184,787	\$3,087,832	\$3,886,809	\$4,770,546	\$5,976,194	\$7,309,345	\$8,264,433	\$ 8,760,298	\$47,230,267
Other expenses													
Salaries ³	\$ 72,049	\$153,064	\$ 258,091	\$ 384,936	\$ 507,011	\$ 685,171	\$ 958,635	\$1,220,797	\$ 1,449,924	\$ 1,681,032	\$ 1,847,089	\$ 1,957,905	\$11,175,695
Commissions to State ⁴	19,047	50,475	128,407	204,168	288,557	407,827	513,352	630,072	789,309	965,385	1,091,529	1,157,021	6,245,148
Accounting	9,481	5,000	5,000	10,000	10,000	10,000	10,000	10,000	15,000	15,900	16,854	17,865	135,100
Advertising	17	0	0	0	0	0	0	0	0	0	0	0	17
Truck expense ⁵	11,631	4,770	6,742	7,146	7,575	10,037	10,639	15,788	19,126	25,342	26,863	28,474	174,133
Burglary	3,722	0	0	0	0	0	0	0	0	0	0	0	3,722
Depreciation ⁶	24,388	122,000	269,693	342,098	515,986	672,358	665,818	712,124	851,041	944,399	855,040	882,721	6,857,667
Dues & Subscrip- tions	114	121	128	136	272	288	305	600	636	674	715	757	4,745
Equipment rentals	3,148	1,000	1,060	1,124	1,191	1,262	1,338	1,419	1,504	1,594	1,689	1,791	18,120
Insurance	5,377	7,500	10,000	12,500	15,000	17,500	20,000	22,500	25,000	27,500	30,000	31,800	224,677
Interest ⁷	8,800	84,000	174,400	192,600	197,600	165,900	95,900	46,900	0	0	0	0	966,100
Office expense	1,968	500	500	1,000	1,100	1,150	1,600	1,696	1,798	1,906	2,020	2,141	17,379
Outside services	1,558	1,651	1,751	1,856	1,967	2,085	2,210	2,343	2,483	2,632	2,790	2,958	26,283
Rent ⁸	3,300	3,498	3,708	7,000	7,420	7,865	12,500	13,250	14,045	14,888	15,781	16,728	119,983
Repair & mainte- nance ⁹	3,603	9,540	20,225	26,798	39,768	54,190	63,833	81,196	100,412	121,642	128,941	136,677	786,835
Security ¹⁰	350	1,113	1,573	834	1,767	1,874	993	2,105	2,231	2,365	0	0	15,183
Shop supplies	1,456	1,000	1,060	1,124	1,191	1,262	1,338	1,419	1,504	1,594	1,689	1,791	16,428
Taxes & licenses	1,011	1,072	1,136	1,204	1,276	1,353	1,434	1,520	1,611	1,708	1,811	1,919	17,056
Taxes, payroll ¹¹	9,006	19,133	32,261	48,117	63,376	85,646	119,829	152,600	181,241	210,129	230,885	244,738	1,396,962
Taxes, sales ¹²	12,245	32,448	82,548	131,251	185,501	262,174	330,012	405,046	507,413	620,605	701,697	743,799	4,014,738
Telephone	4,552	2,000	2,120	2,247	4,400	4,664	4,944	9,000	9,540	10,112	10,719	11,362	75,661
Utilities	625	663	702	744	789	836	887	940	996	1,056	1,119	1,186	10,344
Miscellaneous	2,174	500	530	562	596	631	669	709	752	797	845	895	9,560
Total expenses	<u>\$184,396</u>	<u>\$501,047</u>	<u>\$1,001,635</u>	<u>\$1,377,443</u>	<u>\$1,852,343</u>	<u>\$2,394,083</u>	<u>\$2,816,238</u>	<u>\$3,332,023</u>	<u>\$3,975,564</u>	<u>\$4,651,260</u>	<u>\$4,968,068</u>	<u>\$5,242,530</u>	<u>\$32,296,630</u>
Net income (loss) before income taxes	(94,603)	(118,886)	(29,409)	168,397	332,444	693,749	1,070,571	1,438,523	2,000,630	2,658,085	3,296,365	3,517,768	14,933,637
Income taxes (assume 50%)	(47,302)	(59,441)	(14,705)	84,199	166,222	346,875	535,286	719,262	1,000,315	1,329,043	1,648,183	1,758,884	7,466,820
	<u>(\$47,301)</u>	<u>(\$59,441)</u>	<u>(\$ 14,704)</u>	<u>\$ 84,198</u>	<u>\$ 166,222</u>	<u>\$ 346,874</u>	<u>\$ 535,285</u>	<u>\$ 719,261</u>	<u>\$ 1,000,315</u>	<u>\$ 1,329,042</u>	<u>\$ 1,648,182</u>	<u>\$ 1,758,884</u>	<u>\$ 7,466,817</u>

(continued)

Exhibit 70B-1.2 (continued)

Notes

1. Sales are based on \$54,420 per unit per year, increasing by 6 percent per year. Cost of sales are based on 47 percent of sales (national average).
2. Salaries are based on the table in exhibit 70B-1.5 with yearly increases of 6 percent. After year 1 new employees are assumed to be hired at midyear.
3. Commissions are 7 percent of sales (based on the contract with State).
4. Truck expense is assumed at \$1,500 per year per truck with 6 percent increases per year.
5. Depreciation is computed using the straight-line method.
6. Interest is computed on the funds necessary for operations at an interest rate of 12 percent to 18 percent.
7. Rent is computed at \$3,300 per year, increasing by 6 percent per year. Two additional offices are projected to be opened, one in year 4 (at a reduced rate in the first year) and one in year 7.
8. Repairs are based on \$450 per unit per year, increasing by 6 percent per year.
9. Security is a one-time charge for the units and is estimated to be \$70 per unit, increasing by 6 percent per year for additions.
10. Payroll taxes are based on 12.5 percent salaries.
11. Sales tax is based on 4.5 percent of sales.
- 12.

Prepared by CPA, To Be Used Solely With Testimony In This Case

Exhibit 70B-1.3

Vending Operator's Pro Forma Cash Flow by Year

Assumptions	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Beginning cash balance	\$ 0	\$ 34,087	\$ 35,645	\$ 48,234	\$ 71,506	\$ 72,093	\$169,217	\$400,941	\$ 488,363	\$ 936,142	\$1,941,474	\$3,995,984
Net income	(47,301)	(59,442)	(14,704)	84,198	166,222	346,875	535,285	719,261	1,000,315	1,329,042	1,648,182	1,758,884
Less cash expenditures	93,000	511,000	732,400	383,024	846,621	872,109	469,379	993,963	1,068,577	1,268,109	448,712	645,705
Items not affecting cash flow:												
depreciation	24,388	122,000	269,693	342,098	515,986	672,358	665,818	712,124	851,041	944,399	855,040	882,721
Cash flow from operations	(\$115,913)	(\$414,355)	(\$441,766)	\$ 91,506	\$ 92,907	\$219,217	\$900,941	\$838,363	\$1,271,142	\$1,941,474	\$3,995,984	\$5,991,884
Funds borrowed	150,000	450,000	490,000	0	165,000	0	0	0	0	0	0	0
Loan repayment	0	0	0	20,000	0	50,000	500,000	350,000	335,000	0	0	0
Net cash flow	\$ 34,087	\$ 35,645	\$ 48,234	\$ 71,506	\$ 72,093	\$169,217	\$400,941	\$488,363	\$ 936,142	\$1,941,474	\$3,995,984	\$5,991,884

Exhibit 70B-1.4

Vending Operator's Summary of Interest Based on New Debt Amounts

Assumptions	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Beginning loan balance	\$ 0	\$150,000	\$ 600,000	\$1,090,000	\$1,070,000	\$1,235,000	\$1,185,000	\$685,000	\$335,000	\$ 0	\$ 0	\$ 0
Payments on loan	\$ 0	\$ 0	\$ 0	\$ 20,000	\$ 0	\$ 50,000	\$ 500,000	\$350,000	\$335,000	\$ 0	\$ 0	\$ 0
Additional funds needed to finance operations	\$150,000	\$450,000	\$ 490,000	\$ 0	\$ 165,000	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Total debt	\$150,000	\$600,000	\$1,090,000	\$1,070,000	\$1,235,000	\$1,185,000	\$ 685,000	\$335,000	\$ 0	\$ 0	\$ 0	\$ 0
Interest rate	12.00%	14.00%	16.00%	18.00%	16.00%	14.00%	14.00%	14.00%	14.00%	14.00%	14.00%	14.00%
Total interest expense	\$ 18,000	\$ 84,000	\$ 174,400	\$ 192,600	\$ 197,600	\$ 165,900	\$ 95,900	\$ 46,900	\$ 0	\$ 0	\$ 0	\$ 0

Summary of Required Personnel and Salaries

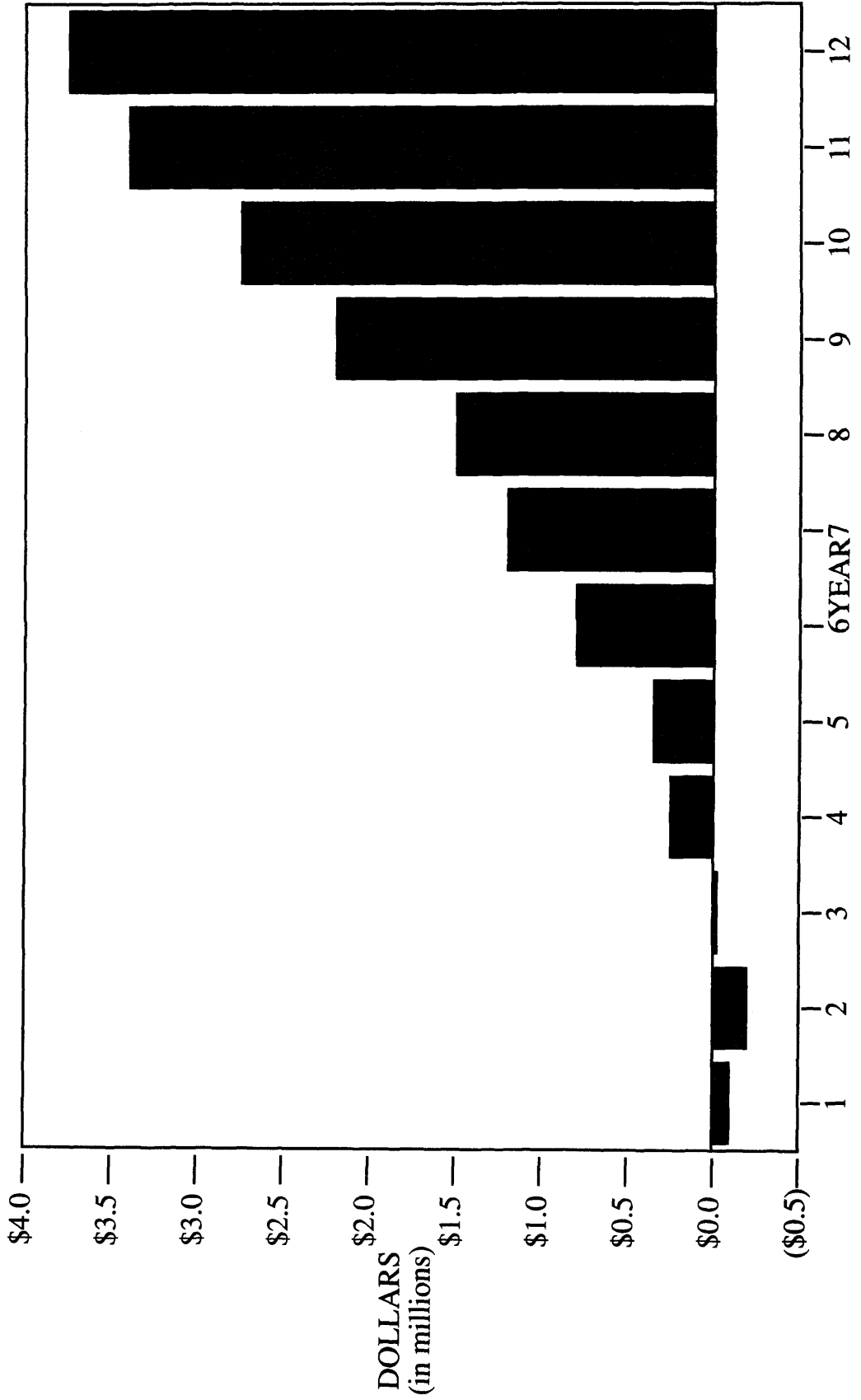
Assumptions	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Types of employees												
General manager	1	1	1	2	2	1	1	1	1	1	1	1
Manager	2	2	3	3	3	2	3	3	3	3	3	3
Drivers	1	1	1	2	2	4	5	6	7	7	7	7
Repairman	1	1	1	2	2	2	3	3	3	3	3	3
Services personnel	14	14	28	34	47	63	70	84	98	112	112	112
Buyer							1	1	1	1	1	1
Bookkeeper							1	1	1	1	1	1
Secretary							1	1	1	1	1	1
Annual salary												
General manager	\$45,000	\$ 47,700	\$ 50,562	\$ 53,596	\$ 56,812	\$ 60,221	\$ 63,834	\$ 67,664	\$ 71,724	\$ 76,027	\$ 80,589	\$ 85,424
Manager	30,000	31,800	33,708	35,730	37,874	40,147	42,556	45,109	47,815	50,684	53,725	56,949
Driver	25,000	26,500	28,090	29,775	31,562	33,456	35,463	37,591	39,846	42,237	44,771	47,457
Repairman	28,000	29,680	31,461	33,348	35,349	37,470	39,719	42,102	44,628	47,305	50,144	53,152
Services personnel	5,200	5,512	5,843	6,193	6,565	6,959	7,376	7,819	8,288	8,785	9,312	9,871
Buyer	23,000	24,380	25,843	27,393	29,037	30,779	32,626	34,583	36,659	38,858	41,189	43,661
Bookkeeper	16,000	16,960	17,978	19,056	20,200	21,412	22,696	24,058	25,502	27,032	28,654	30,373
Secretary	16,000	16,960	17,978	19,056	20,200	21,412	22,696	24,058	25,502	27,032	28,654	30,373
Total annual salary	\$69,000	\$191,648	\$313,035	\$438,056	\$549,682	\$787,680	\$1,082,330	\$1,294,325	\$1,527,863	\$1,742,529	\$1,847,080	\$1,957,905
Less 1/2 first year	\$72,049	(38,584)	(54,944)	(53,119)	(42,672)	(102,508)	(123,692)	(73,528)	(77,959)	(61,497)	0	0
		\$153,064	\$258,091	\$384,936	\$507,011	\$685,171	\$958,635	\$1,220,797	\$1,449,924	\$1,681,032	\$1,847,080	\$1,957,905

Exhibit 70B-1.6

Vending Operator's Summary of Asset Additions and Depreciation

Assumptions	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Asset additions												
Trucks	\$12,000	\$ 0	\$ 10,600	\$ 0	\$ 35,730	\$ 12,625	\$ 13,382	\$ 28,370	\$ 45,108	\$ 47,814	\$ 16,895	\$ 35,816
Units	80,000	510,000	720,800	382,020	809,891	858,484	454,997	964,593	1,022,469	1,219,294	430,817	608,888
Miscellaneous	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Total of current year's additions	93,000	511,000	732,400	383,020	846,621	872,109	469,379	993,963	1,068,578	1,268,109	448,712	645,705
Plus prior year's balance	0	93,000	604,000	1,336,400	1,719,424	2,566,045	3,438,154	3,907,533	4,901,496	5,970,074	7,238,183	7,686,895
Total cumulative assets	93,000	604,000	1,336,400	1,719,420	2,566,045	3,438,154	3,907,533	4,901,496	5,970,074	7,238,183	7,686,895	8,332,600
Depreciation of—												
Three properties	4,000	4,000	7,533	3,533	15,443	16,118	20,579	18,126	28,954	40,432	36,606	33,509
Five properties	16,000	118,000	262,160	338,565	500,543	656,240	645,239	693,998	822,087	903,967	818,434	849,212
Current year's depreciation	20,000	122,000	269,693	342,098	515,986	672,358	665,818	712,124	851,041	944,399	855,040	882,721
Prior year's depreciation		20,000	142,000	411,693	753,791	1,269,778	1,942,136	2,607,955	3,320,078	4,171,119	5,115,518	5,970,558
Total accumulated depreciation	20,000	142,000	411,693	753,791	1,269,778	1,942,136	2,607,954	3,320,078	4,171,119	5,115,518	5,970,558	6,853,279
Net assets	\$73,000	\$462,000	\$ 924,707	\$ 965,629	\$1,296,267	\$1,496,018	\$1,299,579	\$1,581,418	\$1,798,955	\$2,122,665	\$1,716,337	\$1,479,322

Sample Projection of Vending Operator's Pretax Profit



Sample Projection of Vending Operator's Cash Flow From Operations

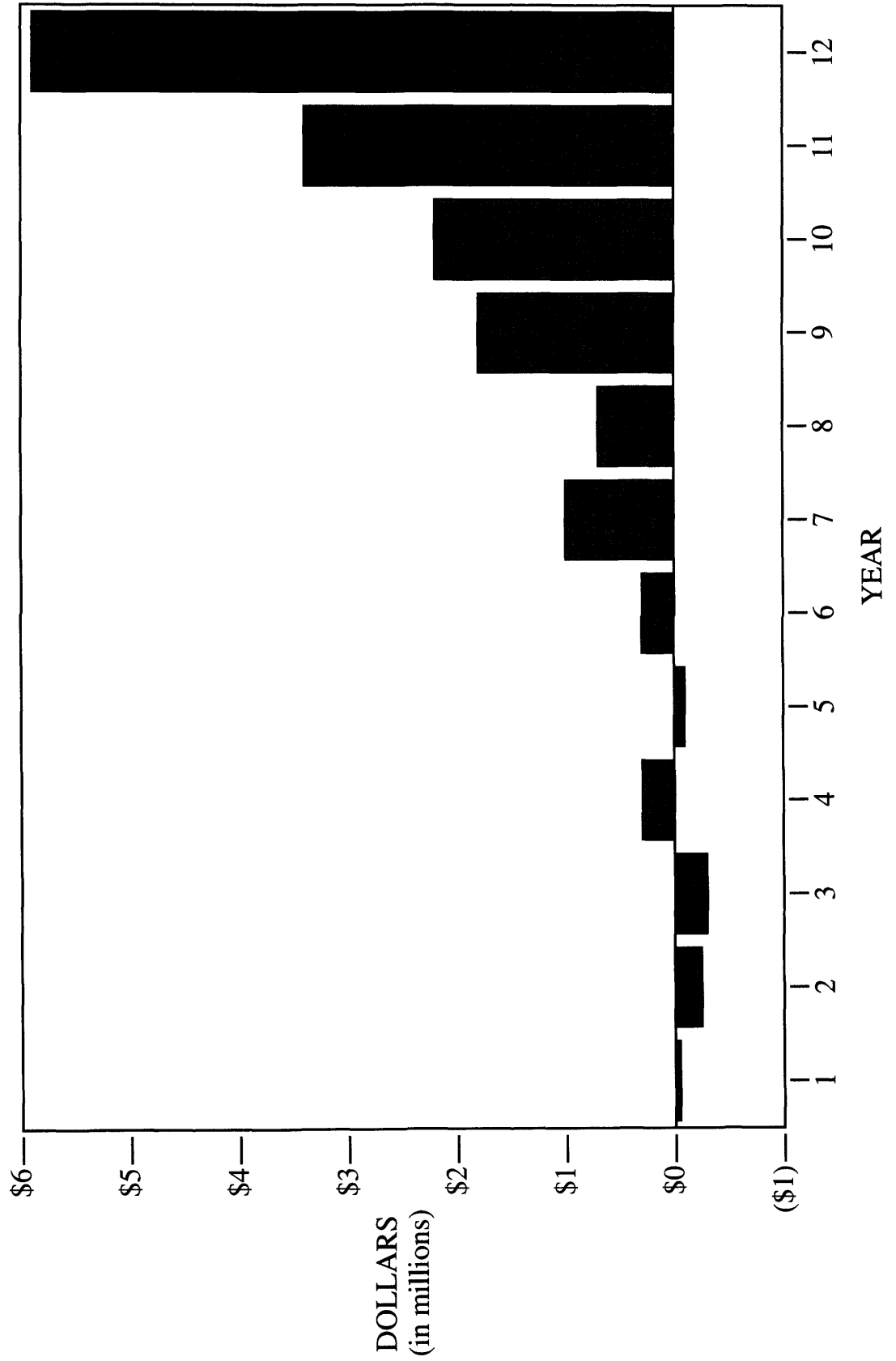
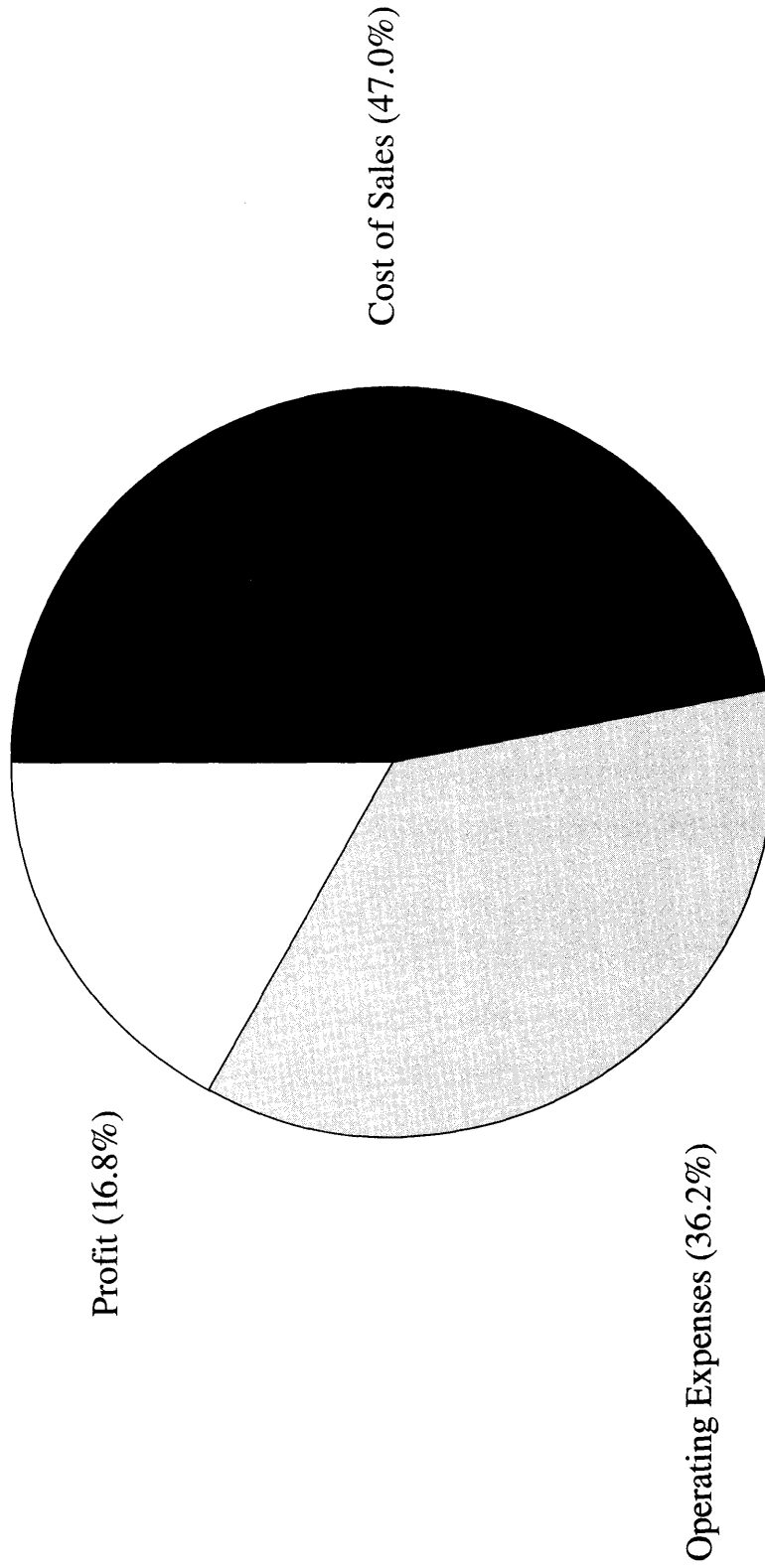


Exhibit 70B-1.9

Sample Percentage Breakdown of Vending Operator's Sales



Sample Request for Production of Documents

The request is from the defendant, State, to the plaintiff, Vending Operator.

1. Chart of accounts
2. General ledger
3. Cash receipts journal
4. Cash disbursements journal
5. Sales journal
6. Accounts payable subsidiary ledger
7. Monthly financial statements transmitted to State
8. Audited financial statements
9. Business forecasts or projections
10. Cash flow statements
11. Bank statements
12. Sales tax statements filed with State
13. Federal and state income tax returns
14. Minutes of the board of directors meetings
15. Correspondence with suppliers
16. Contracts with suppliers
17. Loan agreements with banks
18. Budgets and management reports
19. Studies that predict market size prepared by Vending Operator or any outside consultant
20. Construction cost records or studies related to the building of sites
21. Maintenance logs and service records
22. Payroll journals or records
23. Subcontractor contracts and correspondence

Sample Deposition – Cross-Examination Questions

The attorney for the defendant, State, would address these questions to the expert for the plaintiff, Vending Operator.

1. Note 1 (in exhibit 70B-1.2) in the damages study states that the revenue projection is based on annual sales of \$54,420 per unit. What is the basis of this assumption? Is it based on the average revenue actually received from the five test sites that were operating?
2. Is revenue per unit based on the amount of traffic that passes the unit during the year? In other words, would a unit with ten thousand cars a day passing it generate more revenue than a unit with only five thousand cars passing it? Everything else being equal, would the former unit generate twice the revenue as the latter unit?
3. Does the damages study assume the same average traffic would pass each of the projected 160 units as the average traffic that passed the 5 units that were actually operating?
4. What was the average yearly traffic that passed the roadside rest stops in State on (a) intrastate highways and (b) interstate highways?
5. In which year does the damages study assume that Vending Operator could have started putting units on interstate rest stops?
6. In what year did the federal government actually allow vending machines at rest stops on interstate highways?
7. Identify by location and year of installation each of the 160 units that Vending Operator would have operated in State.
8. Does the damages study assume that Vending Operator is the only vending machine operator at roadside rest stops in State during the entire period of the study?
9. If the answer to question 8 is yes, why is this a reasonable assumption? Did Vending Operator's contract with State grant an exclusive right to set up vending machines at State's roadside rest stops? Where in the contract did it state this?
10. If the answer to question 8 is no, who are the competitors? How many vending sites do they have and in what locations?
11. If this market opportunity was as good as projected in the damages study, why did no one else except Vending Operator bid on the pilot project? Why, out of more than one hundred requests for proposals mailed, was Vending Operator the only one to recognize this as a profitable opportunity?
12. A 47-percent cost-of-sales assumption is used after year 1 in the damages study. On what did you base this percentage? If the answer is a published survey, do you know which companies

were included in the survey? Do you know what time period the survey covered? Identify the study by date and author, and specify where you obtained a copy.

13. During the one-year period when Vending Operator actually operated the five test sites, do you know what the actual cost of sales was as a percent of sales? Was it 67 percent?
14. Why do you believe that Vending Operator could have lowered cost of sales from 67 percent in year 1 to 47 percent in year 2?
15. From whom would Vending Operator have purchased products after year 1?
16. How did you estimate the number of employees that Vending Operator would have needed to do the business projected in the damages study?
17. Do you believe that Vending Operator would not have needed a bookkeeper until year 7, when it would have had one hundred units? Who would have maintained the books prior to year 7? If the answer is that the cost is included in Accounting Expense in the income statement, then why doesn't that expense decrease in year 7?
18. The damages study assumes that the accounting staff would never rise above one person for a business with over \$16 million in sales by year 12. Is this reasonable? Why?
19. The damages study assumes only seven drivers are needed to service 160 units. This is an average of twenty-three units per driver. How often must a driver visit each unit? What is the average distance between units for each driver?
20. No buyer of supplies is projected until year 7. Who would have done the buying before year 7? Why do you believe this person, a part-time buyer, could have obtained at least average costs for the products sold?
21. No secretarial staff is projected until year 7, and only one secretary is projected through year 12. Why is this a reasonable assumption?
22. How did you calculate the salaries for each class of employee considered necessary to run the projected business?
23. Did you assume that any of the employees would be unionized?
24. What benefits did you assume for each class of employee? In which expense line on the damages study's income statement are these benefits recorded?
25. How can Vending Operator pay services personnel only \$5,200 a year (\$433 a month) in year 1?
26. You used a national average to project cost of sales. How did you estimate 7-percent commissions to State after year 2? What is the average commission rate that vending machine operators pay public entities?

27. Why is the accounting expense in year 2 nearly half of the year 1 expense? Although there may have been start-up accounting expenses, sales nearly tripled between year 1 and year 2. Therefore a higher accounting expense, rather than the stated lower one, seems logical.
28. How did you estimate the average annual truck expense of \$1,500 (increasing by 6 percent a year)? What is included in the truck expense? Why is it so much larger in year 1?
29. Why did you assume no burglaries after the first year? Does the insurance cover 100 percent of the losses from burglary and vandalism? If yes, how was the amount of the insurance expense estimated?
30. Is tax or book depreciation used in the damages study?
31. On what is the estimated cost of equipment rental based? For example, what type of equipment would have been rented and for what purpose? Why does the amount decline by two-thirds between year 1 and year 2, when more units would have been built and sales volume would have increased?
32. What types of coverage are included in the insurance expense line of the income statement? If property insurance is included, why doesn't it rise in proportion to the growing number of units and trucks? (It appears to increase only a nominal amount each year in relation to the business's growth.)
33. You estimated that \$1,090,000 would have been borrowed through year 3. During this period Vending Operator's losses are projected at \$121,447. How could Vending Operator have borrowed over \$1 million with this history of losses? Which financial institute would have loaned Vending Operator the money?
34. What is the basis for the interest-rate assumptions? Would these loans have been at the prime rate or prime plus some points?
35. The amounts for office expense, telephone expense, and miscellaneous expense drop dramatically between years 1 and 2. Can you explain why, when the business is expanding so rapidly?
36. New offices are projected to be opened in years 4 and 7. Where would these offices be located? Why wouldn't secretaries or bookkeepers be necessary in these offices?
37. On what do you base the 6-percent yearly increase in rent?
38. What is the one-time security charge of \$70 per unit?
39. What is included in shop supplies? Why does the cost of shop supplies increase by only 6 percent a year? Shouldn't it be a function of the number of units in operation? If not, why not?
40. Why doesn't the expense for taxes and licenses increase whenever a new truck is bought?
41. What is the basis for the payroll taxes of 12.5 percent?

42. Why are sales tax
43. On what did you base the construction-cost estimate of \$34,000 a unit?
44. On what did you base the estimate of a twenty-year life for the buildings used to house the vending machines?
45. Does the damages study assume that the vending machines would be rented or purchased? From whom would the vending machines have been rented or purchased?
46. Where would Vending Operator have warehoused the products to supply 160 units all around the State? Have these costs been included in the damages study? Where?
47. Costs in the damages study are modeled on actual experience in year 1, when 5 units operated in a small area. But the study also assumes 160 units operating all across the State. How did you model the greater costs of running this larger business over a greatly increased area?
48. How does proximity to cities affect sales? Are roadside rest stops close to cities likely to have greater or lesser sales volume than those far from cities?
49. How would the expected expansion of cities and metropolitan areas in the State affect the buying patterns of motorists? Have you factored this into the damages study?
50. Why didn't you discount the alleged lost future cash flows (or profits) to present value? If you were to discount the lost future cash flows to the time of trial, what discount rate would you use?
51. Now that Vending Operator's principals are not spending time on the vending program for the State, what other business ventures are they spending time on? What will they do between now and year 12? How much money do you estimate they will make in these business ventures? Since they would not have had time to pursue these other ventures if they were still working with the State, shouldn't you subtract the profits from these other ventures from the damages study lost profits?
52. How many business projections have you done in the past?

GLOSSARY OF LEGAL TERMS

admission The voluntary acknowledgment by a party to the litigation that certain facts exist. Admissions are normally adverse to a party's interests and are made only after a formal request for admissions is served on the party.

affidavit A written declaration or statement of facts made by a witness under oath before an officer having authority to administer such an oath.

answer The pleading by which the defendant either denies or admits the allegations in a complaint.

appeal A request to a superior court to review an inferior court's decision. It is the remedy available to a losing party that is trying to win reversal of a lower court's decision.

collateral estoppel The conclusiveness of a judgment in a prior suit used to prove the same set of facts in a subsequent suit with a different cause of action.

complaint The pleading that begins a lawsuit and sets forth the facts and allegations that the plaintiff relies on to support the claim against the defendant.

declaration An unsworn statement of facts made out of court by a party to the transaction, or by one who has an interest in the existence of the facts.

defendant (1) The person or organization defending a lawsuit. (2) The person or organization against which a complaint or indictment has been filed in a court of law.

deposition The oral testimony of a witness taken under oath out of court and put in writing by a court reporter. The witness is examined by attorneys for all the parties. The transcript of the deposition can be used in court for various purposes.

directed verdict A verdict ordered by the judge as a matter of law when he or she rules that the party with the burden of proof has failed to present a *prima facie* case and so is not entitled to any relief.

discovery The legal procedures by which one party obtains information from the other party to a litigation. Discovery normally precedes a trial and is the period during which one party learns as much as possible about the other party's case.

evidence Any offer of proof legally presented at trial to convince the trier of fact about the offering party's facts and allegations.

expert witness (1) A person who has special knowledge or training not possessed by ordinary persons. (2) One skilled in a particular profession or trade through experience, education, or training.

forensic Belonging to or having application to courts of law.

hearsay Evidence that is based, not on the personal knowledge of the witness, but on the mere repetition of what the witness heard others say.

impeachment Questioning a witness's veracity by offering proof that he or she is not worth believing.

interrogatories Questions prepared by one party to a litigation and served on another party that must answer them under oath.

liability The condition of being actually or potentially subject to a legal obligation. A common form of liability is responsibility for a loss suffered by another.

mitigation of damages (doctrine of) The duty of an injured party to use reasonable effort to reduce or minimize the loss caused by another party to the litigation.

plaintiff (1) A person or organization that files a complaint and sues another person or organization. (2) One who complains.

pleadings The formal written statements of the parties to a litigation wherein they set forth their complaints and defenses. The most common pleadings are the complaint and the answer.

prima facie Proof sufficient to require the opposing party to answer the proof or lose the issue.

proximate cause That which produces an injury with no intervention by another event that the law recognizes as breaking the chain of causation.

rebuttal (1) The act of explaining or contradicting evidence already offered at trial. (2) The stage of the trial when rebuttal testimony is offered.

rescission of contract The unmaking of a contract that requires a complete repudiation of the contract and a return by the parties to their positions prior to entering into the contract.

restitution The act of restoring both parties to their original condition on the rescission of a contract.

subpoena A court order commanding a witness to appear.

summary judgment An official decision of a court at any stage of litigation either before or during trial, based on the belief that no triable issues of fact exist.

surrebuttal (1) The act of explaining or contradicting rebuttal testimony. (2) The stage of the trial when surrebuttal testimony is offered.

voir dire The preliminary examination of a potential witness or juror in court to determine competency or lack of bias.

BIBLIOGRAPHY

- Black, Henry C. *Black's Law Dictionary*. 5th ed. St. Paul: West Publishing Co., 1979.
- Cushman, Robert F., and David A. Carpenter. *Proving and Pricing Construction Claims*. New York: John Wiley & Sons, 1990.
- Cushman, Robert F., Kenneth M. Cushman, and Stephen B. Cook. *Construction Litigation: Representing the Owner*. 2nd ed. New York: John Wiley & Sons, 1990.
- Dunn, Robert L. *Recovery of Damages for Lost Profits*. 3rd ed. Tiburon, Calif.: Lawpress Corporation, 1987.
- Dykeman, Francis C. *Forensic Accounting: The Accountant as Expert Witness*. New York: John Wiley & Sons, 1982.
- Frank, Peter B., Michael J. Wagner, and Roman L. Weil. *Litigation Services Handbook: The Role of the Accountant as Expert Witness*. New York: John Wiley & Sons, 1990.
- Haynes, Stephen L. *Computers and Litigation Support*. New York: Harcourt Brace Jovanovich, 1981.
- Itzkoff, Norman J. *Dealing with Damages*. New York: Practising Law Institute, 1983.
- Knapp, Charles L. *Commercial Damages: A Guide to Remedies in Business Litigation*. New York: Matthew Bender, 1991.
- Kraft, Melvin D. *Using Experts in Civil Cases*. New York: Practising Law Institute, 1977.
- McCarthy, John C. *Recovery of Damages for Bad Faith*. 5th ed. Kentfield, Calif.: Lawpress Corporation, 1990.
- Morrison, Robert M., Alan G. Miller, and Stephen J. Paris. *Business Interruption Insurance, Its Theory and Practice*. Cincinnati: The National Underwriters Company, 1987.
- Sheppard, Howard R. *Litigation Services Resource Directory for 1992*. New York: John Wiley & Sons, 1992.
- Speiser, Stuart M. *Recovery for Wrongful Death and Injury, Economic Handbook*. Rochester: The Lawyers Co-Operative Publishing Co., 1988.
- Vinson, Donald E. *Jury Trials, The Psychology of Winning Strategy*. Charlottesville: The Michie Company, 1986.
- Wellman, Francis L. *The Art of Cross-Examination*. New York: Dorset Press, 1986.

CONSULTING SERVICES PUBLICATIONS

<i>Title</i>	<i>Product Number</i>
Small Business Consulting Practice Aids Series	
<i>Assisting Small Business Clients in Obtaining Funds</i>	055018
<i>Identifying Client Problems: A Diagnostic Review Technique</i>	055253
<i>Assisting Clients in Maximizing Profits: A Diagnostic Approach</i>	055268
<i>Effective Inventory Management for Small Manufacturing Clients</i>	055272
<i>Assisting Clients in Determining Pricing for Manufactured Products</i>	055287
<i>Business Planning</i>	055291
<i>Personal Financial Planning: The Team Approach</i>	055304
<i>Diagnosing Management Information Problems</i>	055323
<i>Developing a Budget</i>	055338
<i>Cash Management</i>	055342
<i>Evaluating and Starting a New Business</i>	055357
<i>Assessing Franchise Opportunities</i>	055361
<i>Assisting Professional Clients in Pricing Services Using Budgeting Techniques</i>	055376
<i>Developing Management Incentive Programs</i>	055377
<i>Improving Organizational Structure</i>	055378
<i>Developing and Improving Clients' Recruitment, Selection, and Orientation Programs</i>	055133
<i>Assisting Closely Held Businesses to Plan for Succession</i>	055134
<i>Assisting a Financially Troubled Business</i>	055140
<i>Assisting Clients to Establish an Outside Advisory Board</i>	055141
<i>Conducting a Valuation of a Closely Held Business</i>	055148
Technical Consulting Practice Aids Series	
<i>EDP Engagement: Systems Planning and General Design</i>	055022
<i>Financial Ratio Analysis</i>	055041
<i>EDP Engagement: Software Package Evaluation and Selection</i>	055056
<i>EDP Engagement: Assisting Clients in Software Contract Negotiations</i>	055060
<i>Assisting Clients in the Selection and Implementation of Dedicated Word Processing Systems</i>	055075
<i>Mergers, Acquisitions, and Sales</i>	055094
<i>Improving Productivity Through Work Measurement: A Cooperative Approach</i>	055107
<i>EDP Engagement: Implementation of Data Processing Systems Using Mainframes or Minicomputers</i>	055111
<i>Conversion to a Microcomputer-Based Accounting System</i>	055126
<i>Assisting Clients in Developing an Employee Handbook</i>	055127
<i>Microcomputer Security</i>	055128
<i>Microcomputer Training</i>	055129
<i>Disaster Recovery Planning</i>	055130
<i>Automating Small and Medium-Sized Businesses in Selected Industries</i>	055136
<i>Preparing Financial Models</i>	055137
<i>Selecting a Telecommunications System</i>	055138
<i>Providing Litigation Services</i>	055145

(continued)

Title

Product Number

Practice Administration Aids Series

<i>Developing an MAS Engagement Control Program</i>	055802
<i>Cooperative Engagements and Referrals</i>	055906
<i>Written Communication of Results in MAS Engagements</i>	055910
<i>Starting and Developing an MAS Practice</i>	055925
<i>Communicating With Clients About MAS Engagement Understandings</i>	055930
<i>Human Resources Planning and Management for an MAS Practice</i>	055131
<i>Managing Consulting Services: A Focus on Profitability</i>	055144

Industry Consulting Practice Aids Series

<i>Restaurants and Food-Service Establishments</i>	055132
<i>Law Firms</i>	055135
<i>Voluntary Health and Welfare Organizations</i>	055142

Special Reports

<i>Operational Audit Engagements</i>	029193
<i>Introduction to Local Area Network Concepts and Terminology</i>	048456
<i>Study of MAS Practice and Knowledge</i>	048550
<i>An Introduction to Artificial Intelligence and Expert Systems</i>	048570
<i>Comparing Attest and Management Advisory Services: A Guide for the Practitioner</i>	048599
<i>Introduction to Natural Language Processing</i>	048560
<i>Using Graphics to Enhance MAS Presentations</i>	048561
<i>Mass Storage Technology</i>	048600
<i>Application of AICPA Professional Standards in the Performance of Litigation Services</i>	048562
<i>Conflicts of Interest in Litigation Services Engagements</i>	048563

Software (running on WordPerfect 5.1)

<i>Small Business Consulting Tool: Diagnostic Review Checklist for Maximizing Profits</i>	055010
---	---------------

To obtain any of these publications, call the AICPA Order Department at 800-862-4272, or order via fax at 800-362-5066.

055145