Guide to Personal Property Demonstration Appraisal Report Writing
# Table of Contents

A Message to the PPS Candidate ........................................................................................................... v
Introduction ........................................................................................................................................ 1
Sources of Assistance ....................................................................................................................... 2
Originality of Work ........................................................................................................................... 2
Form ............................................................................................................................................... 3
Minimum Requirements .................................................................................................................. 4
Submission and Grading of Reports ............................................................................................... 5
The Grading Process ....................................................................................................................... 6
Grading Appeals Process .............................................................................................................. 6
General Instructions and Information ............................................................................................ 6
Report Outline and Requirements ................................................................................................. 6
  Title Page ..................................................................................................................................... 7
  Application for Appraisal Report Approval .............................................................................. 7
  Letter of Transmittal .................................................................................................................. 7
  Table of Contents ....................................................................................................................... 7
  Summary of Salient Facts and Conclusions ............................................................................. 7
  Body of the Report ....................................................................................................................... 8
  Appendices ................................................................................................................................. 8
Report Contents ............................................................................................................................ 9
  Locational or City Analysis ....................................................................................................... 9
  Business Personal Property Section ......................................................................................... 9
Major Classifications of Personal Property .................................................................................. 10
  Intangibles ............................................................................................................................... 10
  Inventory .................................................................................................................................. 10
  Fixed Assets ............................................................................................................................. 10
  Tools, Dies, Molds, Jigs, and Patterns ..................................................................................... 11
  Leased Equipment ..................................................................................................................... 11
Three Approaches to Value ........................................................................................................... 11
  Cost Approach ......................................................................................................................... 11
  Sales Comparison Approach ..................................................................................................... 12
  Income Approach ..................................................................................................................... 13
Reconciliation and Final Estimate of Value .................................................................................... 13
Certification ................................................................................................................................... 14
After Writing the Report ............................................................................................................... 14
# Appendices

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix 1</td>
<td>Personal Property Demonstration Appraisal Report Grading Sheet</td>
<td>16</td>
</tr>
<tr>
<td>Appendix 2</td>
<td>IAAO Application for Appraisal Report Approval</td>
<td>20</td>
</tr>
<tr>
<td>Appendix 3</td>
<td>Letter of Transmittal</td>
<td>21</td>
</tr>
<tr>
<td>Appendix 4</td>
<td>Table of Contents</td>
<td>22</td>
</tr>
<tr>
<td>Appendix 5</td>
<td>Summary of Salient Facts and Conclusions</td>
<td>23</td>
</tr>
<tr>
<td>Appendix 6</td>
<td>Calculations and Analyses</td>
<td>24</td>
</tr>
<tr>
<td>Appendix 7</td>
<td>Certification</td>
<td>28</td>
</tr>
<tr>
<td>Appendix 8</td>
<td>Writing Suggestions</td>
<td>29</td>
</tr>
<tr>
<td>Appendix 9</td>
<td>Notes of Authority</td>
<td>31</td>
</tr>
<tr>
<td>Appendix 10</td>
<td><em>USPAP</em> Standards 7, 8, 9, and 10</td>
<td>32</td>
</tr>
</tbody>
</table>
A Message to the PPS Candidate

Congratulations on your candidacy in the International Association of Assessing Officers (IAAO) Professional Designation Program.

The 1993 edition of the Guide to Personal Property Demonstration Appraisal Report Writing (Guide) was authored by Steve Sutterfield, PPS. This revised edition incorporates the changes approved in 1995 by the Professional Admissions Subcommittee.

Writing your personal property demonstration appraisal report can be one of the most rewarding experiences that an appraiser can have. This guide is intended to provide a step-by-step formula for writing an acceptable appraisal report. It includes information that your report should contain, together with useful examples. Please read this document carefully before you begin your appraisal. A copy of the Personal Property Appraisal Report Grading Sheet is included in appendix 1. It will show you what the grader and grading chair will look for and critique in your report.

Writing your appraisal report is an opportunity to illustrate your professionalism and your expertise. The Personal Property Specialist (PPS) designation was approved in 1991 by a vote of IAAO membership. There are hundreds of individuals who belong to the Personal Property Section of IAAO. Many of those individuals are also candidates for the PPS designation.

This Guide replaces and supersedes all previously published guides and is the official statement of policy with respect to the preparation and grading of demonstration appraisal reports on personal property.

The Professional Designations Subcommittee hopes this Guide not only helps candidates through the demonstration appraisal report-writing process, but also encourages them to complete all requirements of the designation program. The achievement of a professional designation is an honor not only to the person who earns one, but to the IAAO and the entire profession.

Please remember to consult with the IAAO for approval of your subject property and with your Professional Designation Advisor (PDA) for appraisal advice throughout the process. Best wishes to all of you reading this document.
Introduction

The most challenging and time-consuming requirement for attaining an IAAO professional designation is the writing of an acceptable demonstration appraisal report. Writing a demonstration appraisal report requires original research, intensive data gathering, a careful and systematic explanation of the appraisal problem, and clarity and originality of expression, combined with a painstaking organizational effort. From the perspective of candidate and grader alike, the demonstration appraisal report is much like a self-administered thesis or open book examination.

The Guide to Personal Property Demonstration Appraisal Report Writing (Guide) has been designed to acquaint the IAAO professional designation candidate with the requirements of form and content for the preparation of an acceptable IAAO personal property demonstration appraisal report. Each PPS candidate is provided with a copy of this Guide when he or she is accepted into candidacy. The candidate should retain the Guide and refer to it when writing the demonstration appraisal report. Strict adherence to this Guide ensures that the candidate will prepare a report meeting the requirements of the IAAO Professional Designation Program.

A demonstration appraisal report is a detailed, written presentation of the appraisal of personal property. A successful report includes the analysis of all relevant factors and data that leads to the conclusion of value. The report is an exhaustive version of a narrative appraisal report. It is used as a testing device and, therefore, should represent the appraiser's best effort.

Writing a demonstration appraisal report is a vital part of the education of any professional personal property appraiser or assessor. The estimation of value is a complex technical process. Although concepts can be learned in the classroom, an in-depth understanding of those concepts can only be gained by application of the process to a real-life situation. All who have successfully completed a report state emphatically that it enhanced their understanding of the process and yielded a self-confidence unequaled by the completion of any other course of instruction.

This Guide provides a step-by-step outline of the procedures and regulations that must be followed in writing and submitting the personal property demonstration appraisal report. A report grading sheet and various technical aids are included as appendices.

The successful report will be written so that a nonappraiser or layman can understand and follow the appraiser's reasoning. The theoretical basis of each approach to value, the sources and use of data, and the careful justification of each decision and conclusion must be set out and explained. Each adjustment, assumption, and conclusion and all comments must be substantiated by data and analysis in the report. Merely stating an opinion in the demonstration appraisal report is insufficient and contrary to the objectives of the report. The successful candidate will understand the difference between opinions and supportable conclusions drawn from the analysis of actual data contained the report.
Professional Designation Advisors

Many candidates feel the need for guidance and assistance in preparing their demonstration appraisal report. Professional Designation Advisors (PDAs) have been appointed to provide encouragement and assistance to candidates. PDAs are IAAO professional designees and others who have volunteered to assist candidates in the program. A list of advisors is published annually by the IAAO, and each candidate is put in contact with the PDA in his or her area. Candidates who encounter problems or questions in developing demonstration appraisal reports should contact the PDA for their area or should contact a PPS advisor. The IAAO headquarters can also provide other referrals.

Candidates’ Clubs

Candidates’ clubs are voluntary self-help groups formed to assist candidates in writing demonstration appraisal reports and in meeting other program requirements. Although the composition and programs of these clubs vary from area to area, all clubs offer peer support and group involvement. In addition, candidates’ clubs have access to many tools, such as instructional videotapes provided by the Jeff Hunt, CAE, Memorial Candidates Assistance Trust. If there is a club in your area, you will be notified when becoming a candidate. Candidates are encouraged to consider their local club or IAAO chapter as an invaluable source of support and assistance.

Jeff Hunt, CAE, Memorial Candidates Assistance Trust

For those candidates who demonstrate financial need, the Jeff Hunt, CAE, Memorial Candidates Assistance Trust will consider requests for grants-in-aid. These grants can be used for such items as the cost report preparation or data gathering, grading fees, or any other cost associated with completion of the designation program. Applications for grants can be obtained from the IAAO headquarters.

Originality of Work

When submitting a demonstration appraisal report for grading, a candidate must certify on the Application for Appraisal Report Approval that the report has been personally prepared in its entirety (exclusive of typing) by the candidate; that the appraisal and facts contained in the report are actual and not hypothetical; and that the appraisal is of existing personal property. This means what it says: The candidate must do original work. Copying from a published personal property demonstration appraisal report or from another’s report is unacceptable and may result in suspension from candidacy. This prohibition does not apply to the use of basic definitions such as “market value,” “highest and best use,” and similar terms when the sources for these definitions are cited in the report.

The candidate is further cautioned against relying on previously submitted “passing” reports as guides. No report is perfect, and the unwary candidate may compound errors or omissions contained in marginal reports, resulting in a failing submission.
A demonstration appraisal report is considered fraudulent if it does not represent original work or if it contains nonfactual or hypothetical data. Fraudulent work is grounds for an immediate suspension of the grading. A grader who suspects the use of fraudulent data will suspend the grading and return the report to the grading chairman with a written report of the problem and request for further investigation. Verified evidence of a fraudulent submission may result in a suspension from candidacy for at least one year, and perhaps permanently. The Professional Designations Subcommittee reviews all such cases to determine suspension periods and may recommend further action to the IAAO Ethics Committee.

Group work, through candidates' clubs or otherwise, is acceptable and encouraged, as long as the analyses are the candidate's own. Please note that most data, including comparables, may be shared, again with the requirement that verification, data extraction, and analysis be the original work of the candidate author.

The use of personal property that has already been used by another IAAO candidate for a demonstration appraisal report is prohibited, even if different comparables are used. If there is any question regarding the use of a particular subject property, it would be wise for the candidate to check with the IAAO headquarters before using it.

Form

The professional appearance, logical organization, and absence of grammatical and spelling errors are important to the report and to the impression the report makes on the grader. The following are four major criteria for proper form of the report.

1. **Organization.** A well-organized report flows logically within each section and throughout the entire report. Different readers will arrive at the same conclusions when they read the presentation of data and the analysis. A well-organized report follows the outline of the grading sheet (see appendix 1). All sections of the report should interrelate and not contradict each other.

2. **Grammar and Spelling.** Simplicity is the key. Any technical terms should be defined. Although typographical errors may be found in the best proofread report, they should be minimized by constant proofreading. For further assistance, writing suggestions have been included in appendix 8 of this Guide.

3. **Mathematics.** Nothing will damage a report's credibility more than a mathematical error at a key point. Mathematical calculations must be checked and rechecked constantly through to the preparation of the final copy. Then they should be checked again. The rounding of numbers should be consistent within each application.

4. **Appearance.** Plain white bond paper—8 ½ × 11, with no markings—must be used. Letterhead may be used for the Letter of Transmittal. (See
The report should be professionally typed. It should be bound in a spiral binding or other binding that will not come apart in handling. Loose-leaf binders are not acceptable. A good cover stock should be used. A professional report should contain clear, original color photographs of the property and all comparables. Maps and other addenda should be presented in a way that adds to the professional appearance of the report.

**Minimum Requirements**

Below is a checklist of the minimum requirements for all personal property reports submitted for IAAO demonstration appraisal report credit. The omission of any of these requirements will result in the immediate return of the report to the candidate. Although the return of a report does not constitute a grading, it obviously slows down the grading process.

1. The IAAO form, Application for Appraisal Report Approval, must be completed, signed by the applicant, and submitted with the report. (See appendix 2.)

2. The Letter of Transmittal must be dated, signed, and contain all items listed in the Letter of Transmittal. (See appendix 3.)

3. Only plain white bond paper may be used for the report.

4. The report must be professional in appearance. Although it is permissible to submit a photocopy of the report, the copy must be of high quality. Photocopies of photographs are not acceptable. Photographs of the subject property, rentals, rental sales, and comparable sales must be included in the report.

5. The date of appraisal of the subject property must be within five years of the date the report is submitted to the IAAO.

6. The report must contain a statement of certification signed by the candidate.

7. All facts and appraisal data contained in the report, including those of the subject property, all comparables, and sales and rental data, must be actual and verifiable, with the exception of a demonstration of a secondary form of obsolescence. Hypothetical data are unacceptable and are grounds for immediate rejection of the report. A source must be cited for all information used in this report. All reports are subject to a field check by the grading committee.

8. The final report must be certified to conform to the IAAO Code of Ethics and Standards of Professional Conduct and to the *Uniform Standards of Professional Appraisal Practice (USPAP)*.
Submission and Grading of Reports

Each report will be reviewed by IAAO headquarters personnel for compliance with these minimum standards before being forwarded to the grader.

The required demonstration appraisal report may be submitted at any time after official notification by the IAAO of an applicant’s acceptance into candidacy. The Professional Designations Subcommittee recommends that candidates complete the specified educational requirements before writing the report.

To submit a report for grading, the candidate must

1. Complete and sign the IAAO form, Application for Appraisal Report Approval, which must be submitted with the report.

2. Enter the file number and name of the Personal Property Demonstration Appraisal Report Grading Sheet provided with the candidacy acceptance and include it, unbound, with the report.

3. Remit proper payment for grading, and mail the report to the IAAO headquarters office.

4. Bind together in the report all pages that are part of the report. Loose-leaf pages or additions cannot be accepted.

The report will be screened at IAAO headquarters to ensure that it meets all minimum requirements for form, content, and procedure. Reports failing this review will be returned to the candidate, and the review will not constitute an official grading.

All submitted reports become the property of the IAAO. The candidate should keep a good copy of any submitted report.

After grading, a completed copy of the Personal Property Demonstration Appraisal Report Grading Sheet is sent to the candidate, along with the grader's and grading chairman's comments. The candidate is advised to review carefully the comments on reports not approved and consider them the minimum requirements for successful revision. Most required revisions can be made from and with the original data included in the report; candidates are cautioned against assuming that insufficient data for analysis will excuse required revisions. Additional grading fees are required when a revised report is submitted for a second grading.

When a report is resubmitted after a first grading, the second grader is not restricted in any way by the score or comments of the first grader. Therefore, the candidate is advised to review the entire report and not just the deficiencies noted in the first grading report. The second grading may or may not go to the same grader.

If the report is found unacceptable following a second grading, the candidate is so notified and again receives the report sheet and grader’s
comments. After a second disapproval of a report, no further revisions are allowed. The candidate must submit a new report on another subject property.

The Grading Process

After a successful screening and review by IAAO headquarters, the demonstration appraisal report is sent to an approved report grader. The grader utilizes the criteria outlined on the grading sheet and the Guide to Personal Property Demonstration Appraisal Report Writing, along with other resources, in grading the submitted report. The demonstration appraisal report grader is an IAAO designee who has received extensive training and guidance in how to review the demonstration appraisal report fairly and accurately. The graders and grading chairs are required by the Professional Designations Subcommittee to provide constructive comments on the report to assist the candidate in any required revisions.

The graded report is returned to the grading chairman for a final review and additional comments. The report is then returned to IAAO headquarters for candidate notification. The grading committee for personal property is composed of designated professional personal property appraisers, and the final test as to whether or not the demonstration report is acceptable rests with the personal property grading committee.

Grading Appeals Process

Any candidate who is aggrieved by the failure of his or her report on a second grading may ask the Professional Designations Subcommittee to review the grading file. Staff will inform the candidate of the process. The Professional Designations Subcommittee will render its decision after conducting a thorough review. (The appeal of a failed first grading is the second submittal.)

General Instructions and Information

The personal property demonstration appraisal report should be organized according to the order indicated on the report-grading sheet. The candidate should keep in mind that the grader is not necessarily giving equal weight to each category of a section on the report-grading sheet. Some categories are given greater emphasis than others. This is particularly true of those categories that require support, justification, or explanation of the rationale for applying or using particular data or a particular method or technique. In general, the candidate should keep in mind that thorough support and justification for the use and application of data are more important than simply the enumeration of those data.

Report Outline and Requirements

The format for a personal property appraisal report is not as clearly defined as the format for a real property demonstration appraisal report. The following outline is presented as a guide and sets out all the data necessary to support a valid conclusion. The committee recognizes that some degree of flexibility exists.
Title Page
The title page is the cover sheet of the demonstration appraisal report. It should include

1. The location of the personal property
2. The type of property and business (that is, retail, service organization, manufacturer, sales organization, or professional office)
3. The date of appraisal
4. The name and address of the appraiser

Application for Appraisal Report Approval
The properly completed Application for Appraisal Report Approval should follow the title page.

Letter of Transmittal
The letter of transmittal is a business letter to the Professional Designations Subcommittee and should follow the Application for Appraisal Report Approval. The letter should be in business letter form and should include the following:

1. Date
2. Name and address of candidate
3. Salutation
4. Identification of the personal property
5. Property rights appraised
6. Purpose of appraisal
7. Definition of "value" as estimated in the appraisal (see Property Appraisal and Assessment Administration [PAAA], p. 80)
8. Estimate of value
9. Date as of which the estimate applies
10. Statement of the number of pages in the report and the number of exhibits
11. Any other statements deemed desirable and pertinent by the appraiser
12. Signature of the appraiser

(An example of a letter of transmittal is included as appendix 3.)

Table of Contents
The letter of transmittal should be followed by a table of contents giving page references for each subject included in the body of the report as well as the appendices. (An example of a table of contents is included as appendix 4.)

Summary of Salient Facts and Conclusions
This one-page summary, to follow the table of contents, should include a brief statement for the following:
1. Purpose of the appraisal
2. Property rights appraised
3. Location and description of the property
4. Assessment and property tax information
5. Highest and best use of the property
6. Age and economic life (actual, effective, total, and remaining)
7. Estimates of value by the three approaches (cost, income, and sales comparison)
8. Final opinion of value
9. Date of appraisal

**Body of the Report**
The body of the report should address many areas in detail, including

1. Description of the subject property, including legal description or location and property type (see *PAAA*, p. 76)
2. Assessment and property tax analysis (see *PAAA*, p. 575, for information on personal property ratio studies)
3. Property rights appraised
4. Purpose of the appraisal
5. General assumptions, contingencies, and limiting conditions (such as environmentally impacted property)
6. Published appraisal data
7. Area analysis
8. Locational or city analysis, if appropriate
9. General information on the subject business
10. Business personal property listing and enumeration (if applicable)
   A. Inventory
   B. Fixed Assets
      (1) Machinery and equipment
      (2) Furniture and fixtures
      (3) Tools, dies, and other miscellaneous personality
      (4) Vehicles
11. Highest and best use analysis
12. Definition of the appropriate value (for example, value in use versus value in exchange) in the appraisal process
13. Application of the cost approach
14. Application of the income approach
15. Application of the sales comparison approach
16. Correlation and final determination of market value
17. Certification
18. Appraiser qualifications

**Appendices**
The candidate is expected to provide supporting addenda as necessary. Some addenda, such as photographs, are better placed with the sections descriptions that they support. Others, such as the qualifications of the appraiser (including employment, education, and experience), are better
placed at the end of the report. Wherever they appear, the candidate should remember to reference them accurately in the narrative portions of the report.

The following section provides more detailed suggestions about the content of the personal property demonstration appraisal report.

**Locational or City Analysis**

In the locational or city data section, include a brief description of the pertinent features of the city, region, or market area, pointing out significant trends in relation to future marketability of the subject property (see *PAAA*, p. 79).

Cover general business trends and outlook (such as a description of the type or charter of business, or both), economic trends and future outlook, local business conditions (positive, negative, or static), and population.

**Business Personal Property Section**

In this section, describe the business personal property or single item to be appraised, as to:

1. **General character, type, and class of property**
2. **Quantities**
3. **Age, name, and size of each unit within each class of property**
4. **Condition of each unit of the business personal property**
5. **Adequacy for the purpose intended**
6. **Functional capability**
7. **Physical deterioration**
8. **Remaining economic life and the reasoning behind this estimate**
9. **Manufacturer’s changes in design and utility pertinent to each class of equipment**

Appraisal of a single item of machinery or equipment is permissible, unless that item’s highest and best use is in conjunction with other items of personal property, in which case the entire assemblage must be appraised. (For example, a milling machine is a single item, but a laser printer must be used as part of an entire computer system.)

Vehicles will not be acceptable as a subject property. However, mobile equipment that has a highest and best use other than for transportation will be acceptable. (A pickup truck would not be allowed, but a portable crane would.)

The subject property must have a minimum historical cost of $5,000.00.
Generally personal property is classified in the general categories listed below. All subject property must be classified and described before valuation, unless the candidate is valuing a single item.

**Intangibles**
Intangible personal property should be included to the extent of demonstrating the types included in the subject business. Actual valuation of intangibles is optional.

**Inventory**
Those goods held for sale in the normal course of business, those goods in production, or those awaiting such utilization should be included in the report. The inventory should represent that of a typical ongoing business and not inventory liquidation.

For all inventory, the candidate must demonstrate

1. The methods applicable to the kind of business being appraised, whether retail, manufacturing, or service
2. Inventory cost using last in, first out (LIFO); first in, first out (FIFO); a weighted average; or other appropriate methods, if supported
3. Allowance for physical deterioration, functional obsolescence, or economic obsolescence
4. Appropriate level of trade

For manufacturer’s inventory, the candidate must demonstrate

1. Raw materials
2. Work in process
3. Finished goods

Processing costs should be included in the cost basis to illustrate the progression from raw materials through finished goods.

Special areas to demonstrate, if present, include floor-planned, consigned, and in-transit goods, even if they are not included in the property appraised.

For supplies, the appraiser must lists the various types contained in the subject property. These may include sales supplies; packaging, maintenance, cleaning, and manufacturing supplies; office supplies; and any other supplies present in the subject property. The supplies should be valued using one or more of the approaches to value used for other inventory above.

**Fixed Assets**
Describe the fixed assets (such as furniture, fixtures, machinery, and equipment), including
1. Character, type, and class of equipment
2. Number of units
3. Age and size of equipment
4. Physical deterioration and functional or economic obsolescence
5. Adequacy for purpose intended
6. Remaining economic life, supported by analysis
7. Manufacturer’s changes in utility and design pertinent to the class of equipment

**Tools, Dies, Molds, Jigs, and Patterns**
These items are frequently fully expensed on an annual basis instead of capitalized as fixed assets. If this is the case, it should be so noted and the underlying rationale explained. If applicable, these items must be described with regard to cost, age, anticipated life, frequency of use, and purpose.

**Leased Equipment**
If the subject property includes leased equipment, it should be so noted and valued separately from other fixed assets, using the appropriate approaches to value. If the subject business is in possession of property leased from someone else, it should be described but not valued.

Describe the leased property according to the following:

1. Character, type, and class of equipment
2. Number of units
3. Age and size of equipment
4. Condition of equipment as to physical deterioration and functional capabilities
5. Adequacy for purpose intended
6. Remaining economic life with reasons
7. Manufacturer’s changes in utility and design pertinent to this class of equipment
8. Terms of the lease

**The Three Approaches to Value**
All personal property included in the appraisal should be valued by the appropriate approaches to value. Each approach should be demonstrated separately by major class of property (including inventory; machinery and equipment; furniture and fixtures; and tools, dies, and jigs). For major classes of property not present in the subject, demonstrate the application of each approach. Do not use hypothetical data, simply explain how the property should (or why it cannot) be valued using each approach.

**Cost Approach**
1. List and justify reproduction cost new, either through trended historic cost or derivation from market.
2. Include all costs necessary to reflect highest and best use.
3. Estimate, define, and describe all forms of depreciation:
   A. Physical deterioration
(Curable and incurable physical depreciation must be demonstrated unless none was present at the time of appraisal. Should that be the case, the candidate must state it in the demonstration report and illustrate how curable physical depreciation would be quantified if present.)

(1) Condition of the property
(2) Effective age and actual age
(3) Remaining economic life (versus remaining physical life)
(4) Measure of total physical deterioration

B. Functional obsolescence (optional, unless economic obsolescence is not used)

(1) Cause (such as design and utility, technology, and inadequacy)
(2) Measure of value loss (supported by market or capitalization of income loss)

C. Economic obsolescence (optional, unless functional obsolescence is not used)

(1) Cause (such as economic forces)
(2) Measure of value loss (supported by market or capitalization of income loss)

(The candidate must explain how he or she would prove the form of obsolescence, whether functional or economic, when obsolescence is not demonstrated in the appraisal of the subject property.)

4. Describe other techniques for measuring depreciation.

5. Estimate the total loss in value from all causes.

6. Estimate the total depreciated value or replacement cost new less depreciation (RCNLD). Depreciation is one of the most difficult concepts to demonstrate. To earn the maximum points in the depreciation section, it is recommended that rather than using an overall age/life method of measuring physical deterioration, the candidate should apply the age/life method separately to the various components of the personal property to measure incurable physical deterioration. By necessity, depreciation may need to be applied by a cost center or some other asset grouping, rather than the more preferable itemized basis, particularly if published economic lives are used.

**Sales Comparison Approach**

1. List and describe sales of comparable equipment and machinery, identifying

   A. Source of sales
   B. Buyer and seller
   C. Selling price and date
   D. Characteristics to be used for adjustment of selling prices

2. Make adjustments to comparable properties (convert from value in exchange to value in use).
3. Select the most appropriate comparables and justify your selection.
4. Make a determination of value using the sales comparison approach.

**Income Approach**
Where appropriate,

1. Estimate economic rent.
2. Estimate all appropriate operating expenses (justify comparison to market and show reconciliation of income and expense statement).
3. Justify the method of capitalization, whether straight line, annuity, or sinking fund, with an explanation of each based on
   A. Class of business
   B. Nature of equipment
   C. Risk involved
4. Develop and justify capitalization rate components:
   A. Discount (interest) rate
   B. Recapture rate
   C. Effective tax rate
5. Make a determination of value, showing the capitalization process.

**Reconciliation and Final Estimate of Value**
This section requires extensive thought and effective communication by tying all data and theory together and developing a final estimate of value. This section should contain the following:

1. *Review of Developed Data.* The most relevant points contained in the body of the report, in the description sections, and in the application of the approaches to value should be reviewed point by point. This review should address the quantity, quality, and reliability of the data and conclusions in each section of the report.

2. *Analysis of Strength and Weakness of Each Approach.* Each approach to value has inherent strengths and weaknesses; some are more applicable to certain types of properties with certain characteristics. These strengths and weaknesses should be discussed thoroughly, first on a theoretical basis and then in relation to the subject property. Again, the quantity, quality, and reliability of data used in each approach should be discussed in relation to the confidence placed on the indicated value from each approach.

3. *Logical Selection of Final Value.* A logical conclusion as to the final value estimate for the subject property should be given and the reasoning behind it explained in detail. The date of appraisal should be included in the statement of the final value estimate.
Certification
A statement that certifies the following facts must be given and signed by the candidate:

1. The candidate inspected the subject property.
2. The candidate has no present or contemplated future interest in the subject property.
3. The statements of fact contained in the report are true and correct.
4. The candidate’s compensation is not contingent on the final value estimate or on reporting a predetermined value.
5. The report has been made in conformity with the Code of Ethics and Standards of Professional Conduct of the International Association of Assessing Officers and the Uniform Standards of Professional Appraisal Practice (USPAP) of The Appraisal Foundation. (See appendix 10, Standards Rule 8-3.)

The certification must be dated and signed by the candidate.

After Writing the Report
Aside from the obvious tasks of proofreading and checking the grammar and mathematical accuracy of the final draft, the candidate should review the report using a copy of the actual grading sheet (see appendix 1) to make sure that all sections have been covered. Also, ask someone to review the report. An IAAO PPS designee or your Professional Designation Advisor may be willing to critique the report.
Appendices
Appendix 1

PERSONAL PROPERTY DEMONSTRATION APPRAISAL
REPORT GRADING SHEET

Name of Candidate ________________________________ File Number ____________________________

Note: All items are required in each appraisal. The appraisal will be rejected if any item is deleted. Refer to the IAAO booklet Guide to Personal Property Demonstration Appraisal Report Writing for further instructions.

First grading ________________ Second grading ________________

Key to Rating
A - Satisfactory
B - Marginally satisfactory
C - Improvement needed
D - Unsatisfactory
E - Omitted

Part 1

A. Title Page
1. Address of subject property
2. Type of property
3. Date of appraisal
4. Name and address of appraiser
Maximum value of this section: 0.40

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

B. Letter of Transmittal
1. Identification of subject property
2. Rights appraised
3. Purpose of appraisal
4. Definition of value
5. Final value and date of appraisal
6. Signature of appraiser
Maximum value of this section: 0.60

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

C. Table of Contents
Maximum value of this section: 0.10

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

D. Summary of Salient Facts
1. Valuation conclusion
2. Approaches to value
3. Personal property data
4. Assessment and tax data
Maximum value of this section: 1.00

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Part 2**

**A. Body of the Report**
1. Type and identity of subject property
2. Legal description
3. Limiting conditions
4. Taxes and assessment
5. Definition of value
6. Purpose of appraisal
Maximum value of this section: 4.30

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**B. Legislative Provisions**
1. Types of taxable personality
2. Basis of value
3. Statutes
Maximum value of this section: 5.00

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**C. Area/City and Economic Analysis**
1. Market area description
2. Types of industry included
3. Economic analysis
Maximum value of this section: 5.00

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Part 3**

**A. Property Data**
1. Business history
2. Type of organization
3. Product lines
Maximum value of this section: 4.00

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**B. Listing Summary**
1. Property inventory
2. Age, condition, and life estimate
3. Functional adequacy
Maximum value of this section: 4.00

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**C. Definition of Value**
Maximum value of this section: 1.00

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**D. Highest and Best Use Analysis**
1. Definition and Source
2. Analysis and Support
Maximum value of this section: 5.85

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Part 4

## A. Cost Approach

1. Definition
2. Cost justification
3. Depreciation—explanation of and reasoning for:
   a. Physical
   b. Functional/Economic
4. Value
   Maximum value of this section: 18.00

## B. Income Approach

1. Definition
2. Justification of income and expenses
3. Justification of capitalization rates
4. Value
   Maximum value of this section: 18.00

## C. Sales Comparison Approach

1. Definition
2. Comparable property
3. Adjustments
4. Trade level
5. Value
   Maximum value of this section: 18.00

## D. Reconciliation of Values

1. Reliability of data
2. Relevancy of each approach
3. Final conclusion of value
4. Reason for selection
   Maximum value of this section: 18.00

## E. Certification

   Maximum value of this section: 1.00
Part 5
A. Appendices
1. Map(s) of city or area
2. Building layout or plot plan
3. Flow chart (where applicable)
4. Photographs
5. Appraiser’s qualifications
Maximum value of this section: 1.75

B. Structure
1. Neatness, grammar, punctuation, and spelling
2. General organization of the report
Maximum value of this section: 2.00

Grader
Approved _________ Rejected _________
Date ___________________________

Grading Chair
Approved _________ Rejected _________
Date ___________________________

19
Appendix 2

International Association of Assessing Officers
Application for Appraisal Report Approval

Name of Candidate

Address

City _______________ State / Province _______________ Postal/Zip Code _______________

Type of property

Part I
I herewith submit a demonstration appraisal report on the personal property known as __________________
located at __________________
to the Professional Designations Subcommittee of the International Association of Assessing Officers for the purpose of fulfilling part of the requirements for the PPS designation.

I hereby certify that I personally prepared this report in its entirety (exclusive of typing), including all work involved in its preparation, that the appraisal and facts contained herein are actual and not hypothetical, and that the appraisal is of existing personal property.

Signed ____________________________ Date __________________

Part II
I hereby certify the following:

1. This report meets the general requirements for preparation of narrative appraisal reports as set out in The Guide to Personal Property Demonstration Appraisal Report Writing as revised to date.
2. Each of the three approaches to value is applied to the subject property, and the correlation includes the three approaches.
3. The subject property suffers from physical deterioration, functional obsolescence (curable or incurable), or economic obsolescence.

I understand that if any of the above requirements are omitted or erroneously mislabeled to the degree that the candidate has not demonstrated a sufficient knowledge or awareness of appraisal principles, it will be cause for immediate rejection as a first grading. The appraisal will not be graded, and a grading sheet cannot be returned to the candidate.

Signed ____________________________ Date __________________
Appendix 3

Letter of Transmittal

A. Candidate
1234 Main Street
Anytown, Anywhere 99999

Date

IAAO Professional Designations Subcommittee
International Association of Assessing Officers
130 E. Randolph Street, Suite 850
Chicago, Illinois 60601-6217

Dear Subcommittee Members:

The following is an appraisal of the personal property of Acme Metalworks, Inc., located at 9999 State Street. The subject personal property is a tool and die factory that includes all personal property.

This personal property is appraised in fee simple, as though free and clear of liens and encumbrances.

This appraisal is for the purpose of determining market value of the personal property known as Acme Metalworks, Inc., and located in the taxing jurisdiction of Anytown, Any County, Anywhere.

Property Appraisal and Assessment Administration (PAAA), published by the International Association of Assessing Officers, defines market value as “the most probable price in cash that a property would bring in a competitive and open market, assuming that the buyer and seller are acting knowledgeably, sufficient time is allowed for the sale, and price is not affected by special influences.” Market value is also described in the PAAA as “the present value of future benefits,” arising from ownership of the asset, which is also appropriate for the subject as it is an income-producing property.

My opinion of value of the above described property, as of January 1, XXXX, is one million six hundred thousand dollars ($1,600,000).

This report contains ninety-three pages, of which ten are exhibits.

Please accept this appraisal report as one of the requirements of the Personal Property Specialist designation.

Sincerely,

[signature]

A Candidate
Appendix 4

Table of Contents

Summary of Salient Facts and Conclusions
Photographs of the Subject Property
Identification of the Subject Property
Legal Description/Location of Subject Property
Assessment and Property Tax Analysis
Property Rights Appraised
Purpose of the Appraisal
Definition of Value Sought
General Assumptions and Contingent and Limiting Conditions
Legislative Provisions
Area Analysis
City Analysis
General Information on Subject Business
Property Listing and Enumeration
  Inventory
  Fixed Assets
    Machinery and Equipment
    Furniture and Fixtures
    Tools, Dies, and Other Miscellaneous Personality
    Vehicles
Highest and Best Use Analysis
The Appraisal Process
Cost Approach
Comparable Sales Approach
Income Approach
Correlation and Estimation of Market Value
Certification and Appraiser Qualifications
Appendices
  Subject Photographs
  Area Maps
  Plot Plan
  Industry Data
Appendix 5  Summary of Salient Facts and Conclusions

Purpose of the appraisal: To estimate market value

Property rights appraised: Unencumbered fee simple interest and leases

Location of the subject property: 9999 Any St.,
Anytown, Anywhere 99999

Assessed valuation: $1,100,000

Personal property taxes: $9,500

Highest and best use (utility): Heavy industry

Actual age: 10 years

Estimated total economic life: 15 years

Effective age: 8 years

Remaining economic life: 7 years

Income and leases: $5,000 per month

Estimates of value:

Cost approach: $1,250,000
Income approach: $1,750,000
Sales comparison approach: $1,600,000

Final opinion of value: $1,600,000

Date of appraisal: January 1, 2001
Appendix 6  Calculations and Analyses
The following examples are intended to assist the candidate in preparing certain portions of the appraisal report. Specifically, they illustrate how to calculate or demonstrate such concepts as taxes, depreciation, sales, and rentals.

Tax and Assessment Analysis
A grid or chart indicating recent assessment history and taxes of the subject property should be included in the demonstration appraisal report. This data will also be used, in part, in development of an effective tax rate for application of the income approach.

If applicable, the candidate should also include a chart depicting how the assessment of the subject compares with that of other properties (comparables). From this information, an analysis of equity can be performed.

The following are examples of assessment history and analysis.

<table>
<thead>
<tr>
<th>Year</th>
<th>Market value</th>
<th>Assessment level</th>
<th>Tax rate</th>
<th>Personal property taxes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989</td>
<td>$152,000</td>
<td>30%</td>
<td>0 mills</td>
<td>$3,648.00</td>
</tr>
<tr>
<td>1990</td>
<td>$140,000</td>
<td>30%</td>
<td>82 mills</td>
<td>$3,444.00</td>
</tr>
<tr>
<td>1991</td>
<td>$128,000</td>
<td>30%</td>
<td>82 mills</td>
<td>$3,148.80</td>
</tr>
</tbody>
</table>

Equity Analysis

<table>
<thead>
<tr>
<th>Assessed value of fixed assets</th>
<th>Square footage of business</th>
<th>Assessed value per square foot</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject</td>
<td>1,200</td>
<td>$52.94</td>
</tr>
<tr>
<td>Comp. 1</td>
<td>1,350</td>
<td>$55.14</td>
</tr>
<tr>
<td>Comp. 2</td>
<td>1,400</td>
<td>$51.24</td>
</tr>
<tr>
<td>Comp. 3</td>
<td>1,260</td>
<td>$53.41</td>
</tr>
<tr>
<td>Comp. 4</td>
<td>1,150</td>
<td>$50.54</td>
</tr>
</tbody>
</table>

The above analysis of four comparable businesses indicates that their fixed assets are assessed within a range of $50.54 per square foot to $55.14 per square foot. The subject property assessment of $52.94 per square foot is well within this range, indicating that the assessment is equitable in relation to comparable properties.
Area/Economic Analysis

This section will vary somewhat according to the nature of the subject property, but should provide the reader with information regarding the economic influences affecting market value, including, but not limited to, physical, economic, governmental, and social forces. For example, an appraisal report for a retail or service business property should contain information about the immediate market area, including demographics, competition, and regulation. An industrial subject property, on the other hand, might be impacted by economic forces that are local, regional, national, or even worldwide in nature, as well as by environmental regulations.

Comparable Rental Analysis

This section will provide a basis for determining the economic rent for specific items. Although the income approach may not prove feasible for valuing all the fixed assets of a given business, every effort should be made to value the property to the extent possible. The subject property need not actually be leased if comparable rental information can be located.

<table>
<thead>
<tr>
<th></th>
<th>Subject</th>
<th>Comp. 1</th>
<th>Comp. 2</th>
<th>Comp. 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly rent</td>
<td>N/A</td>
<td>$495.00</td>
<td>$660.00</td>
<td>$500.00</td>
</tr>
<tr>
<td>Horsepower</td>
<td>55 hp</td>
<td>50 hp</td>
<td>65 hp</td>
<td>50 hp</td>
</tr>
<tr>
<td>Condition</td>
<td>average</td>
<td>average</td>
<td>average</td>
<td>average</td>
</tr>
<tr>
<td>Rent per hp</td>
<td>N/A</td>
<td>$9.90/hp</td>
<td>$10.15/hp</td>
<td>$10.00/hp</td>
</tr>
</tbody>
</table>

Analysis of available data indicates that, other characteristics being equal, machines of this type rent for approximately $10.00 per horsepower of operating capacity. Although the subject property is not rented, it is apparent that it should rent at the rate of $550.00 per month. This rent is economic and would serve as a basis for valuation using the income approach.

Comparable Sales Analysis

This section provides a basis for determining value in exchange for specific items. This value, together with costs necessary to bring an asset to productive capability, will result in an estimate of market value through the sales comparison approach.

<table>
<thead>
<tr>
<th>Property:</th>
<th>Subject</th>
<th>Comp. 1</th>
<th>Comp. 2</th>
<th>Comp. 3</th>
<th>Comp. 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales price</td>
<td>N/A</td>
<td>$15,000</td>
<td>$18,900</td>
<td>$12,400</td>
<td>$17,250</td>
</tr>
<tr>
<td>Horsepower (hp)</td>
<td>55</td>
<td>50</td>
<td>60</td>
<td>40</td>
<td>55</td>
</tr>
<tr>
<td>Condition</td>
<td>average</td>
<td>average</td>
<td>average</td>
<td>average</td>
<td>average</td>
</tr>
<tr>
<td>Sales price per hp</td>
<td>N/A</td>
<td>$300.00/hp</td>
<td>$315.00/hp</td>
<td>$310.00/hp</td>
<td>$313.64/hp</td>
</tr>
</tbody>
</table>
Analysis of available data indicates that, other characteristics being equal, machines of this type sell for $300.00–$315.00 per horsepower of operating capacity. This indicates that the subject machine should sell for $16,500.00–$17,325.00.

**Economic Life and Effective Age**

IAAO’s *Guide to Real Property Demonstration Appraisal Report Writing* contains an excellent example for development of estimates of effective age and economic life. Unfortunately, these methods may prove unworkable for fixed assets. Probably the most standardized method for estimation of total economic life is use of the engineering life, coupled with the age/life method of calculating depreciation. Although less desirable than estimation by the engineering life, it is acceptable to use economic lives obtained from commercial publications such as Marshall & Swift, Boeck, and Hunnicutt. If available, government publications of this type might be used, provided the rationale for their appropriate application is explained and provided the data represent market data.

In estimating effective age, bear in mind the “prudent business” concept, which suggests a business will exercise a level of maintenance to keep assets productive. In most cases, typical maintenance should result in assets exhibiting average condition, and subsequent effective ages equivalent to actual ages. If evidence suggests better or worse than average condition, actual ages should be adjusted accordingly.

**Depreciation**

**Curable Physical Deterioration**

Curable physical deterioration is often referred to as deferred maintenance. It is the repair or replacement of short-lived components considered economically feasible to cure as of the date of appraisal and is measured by the cost to cure.

**Functional or Economic Obsolescence**

Functional obsolescence is likely to be present in any large group of fixed assets, typically because of technological innovation. Economic obsolescence is somewhat more rare in personal property because it most frequently results from locational influences. However, it can occur in personal property as a result of marketwide influences. Either form of obsolescence may be measured through comparable sales.

In the above example, electronic controls contribute $2,900 to the selling price of a five-year-old drill press with electronic controls and a 10 horsepower motor. If the replacement cost new of a five-year-old, 10 horsepower subject represents one with electronic controls, a $2,900 deduction from replacement cost new should be made for functional obsolescence.

or
A machine was leased five years ago for a net annual rate of $60,000. Due to improvements in later models, the machine now generates $40,000 net annual income. This loss in income can be capitalized to measure economic or functional obsolescence. (The following example assumes a capitalization rate of 32 percent.)

Loss in net annual income: $20,000  
Divided by capitalization rate: .32  
Measure of obsolescence: $62,500

The loss of $62,500 would then be subtracted from replacement cost new less physical deterioration to provide an estimate of market value under the cost approach.

<table>
<thead>
<tr>
<th>Item</th>
<th>Reproduction cost new</th>
<th>Cost to cure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repainting machine housings</td>
<td>$1,250</td>
<td>$1,100</td>
</tr>
<tr>
<td>Replace broken controls</td>
<td>350</td>
<td>300</td>
</tr>
<tr>
<td>Total</td>
<td>$1,600</td>
<td>$1,400</td>
</tr>
</tbody>
</table>

Incurable Physical Deterioration

<table>
<thead>
<tr>
<th>Cost center or item:</th>
<th>Effective age</th>
<th>Economic life</th>
<th>Depreciation (in percent)</th>
<th>Replacement cost new</th>
<th>Incurable physical deterioration (in dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance</td>
<td>6</td>
<td>12</td>
<td>50%</td>
<td>$14,000</td>
<td>$7,000</td>
</tr>
<tr>
<td>Production</td>
<td>8</td>
<td>20</td>
<td>40%</td>
<td>860,000</td>
<td>344,000</td>
</tr>
<tr>
<td>Office</td>
<td>3</td>
<td>10</td>
<td>30%</td>
<td>60,000</td>
<td>18,000</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>$934,000</td>
<td>$369,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>Characteristics</th>
<th>Age</th>
<th>Sale price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drill press</td>
<td>Comparable 1, Electronic controls, 10hp motor</td>
<td>5</td>
<td>$9,400</td>
</tr>
<tr>
<td>Drill press</td>
<td>Comparable 2, Manual controls, 10hp motor</td>
<td>5</td>
<td>$6,500</td>
</tr>
<tr>
<td>Drill press</td>
<td>Subject, Manual controls, 10hp motor</td>
<td>5</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Appendix 7

Certification

The following is an example of statements of certification. This must be included in any written appraisal report in compliance with Standards Rule 8-3 of the Uniform Standards of Professional Appraisal Practice.

I hereby certify that the statements of fact contained in this appraisal report are, to the best of my knowledge, true and correct. All analyses, opinions, conclusions, and any other statements not directly based on fact are based on my unbiased, professional judgment and are limited to the extent reported in the statement of assumptions and limiting conditions.

I have no personal interest, present or prospective, in the subject property of this appraisal report. Neither do I have any personal interest or bias with respect to the parties involved.

My compensation for preparation of this report is in no way contingent on the results of my analyses, opinions, or conclusions. This appraisal report has been prepared in compliance with the Uniform Standards of Professional Appraisal Practice, especially Standards 7, 8, 9, and 10.

I have made a personal inspection of the subject property of this report. The analyses, opinions, and conclusions contained in this report are my own, and I did not receive significant professional assistance unless specifically noted. If so noted, the name of any individual providing professional assistance has been provided.

__________________________
Signature and Date
Appendix 8
Writing Suggestions

Although it may seem irrelevant to the purpose of a demonstration appraisal, an emphasis on proper writing style, grammar, punctuation, and form serves to remind the candidate that these considerations, and the professional appearance of the report, impact the impression a report makes on the grading committee. Content has been covered in detail in this Guide. This appendix provides some discussion of proper writing style.

Good writing style is necessary to a successful report. Poor writing style will detract from what may otherwise be a good report and may work to the candidate’s detriment. The grading committee often comments on the poor quality of a writing style.

Technical writing may be bothersome and boring to read. A professional report dealing with technical procedures and data avoids the boredom by the writer’s conscious attempt at making the narrative both informative and interesting. The considerations noted below may be regarded as tips to keep the narrative moving and interesting while accomplishing all the requirements of the personal property demonstration report.

Form

Most decisions regarding the format of the report have been made for you by the structured format suggested in the Guide. The outline and heading suggested in the structured format follow those of the program section requirements. If the basic outline as presented is to be supplemented or modified, the same general scheme should be followed.

Clarity

The need for consistency throughout the report has already been emphasized in the Guide. All sections must complement each other, and the report must not contradict itself. The narrative should be organized into short, succinct paragraphs containing simple, single-topic sentences.

All technical terms used should be defined when they first appear. Jargon should be avoided, and the buzz words of the trade should not be capitalized in the content of the narrative. For example, “The Market Value of the property through the application of the Cost Approach is...” is incorrect; the correct presentation is “the market value of the property through the application of the cost approach is...”

Abbreviation such as GRM should be used only after being presented in full followed by the abbreviation in parenthesis: “The calculation of the gross rent multiplier (GRM) is presented below.”

The narrative should be written so that even a person who is unfamiliar with the technical aspects being covered can follow the logic of the report and understand what is being done throughout.
Punctuation
The grading committee does not focus on nor grade the report for punctuation or grammar except as it detracts from the report’s professionalism. Candidates should avoid punctuation mistakes, as well as spelling and mathematical errors.

Numerical Presentations
The presentation of numbers in a technical report is an item of concern. In tabular presentations, ensure that the columns and rows line up. Label all numbers by using dollar signs, percentage signs, and so forth. Numbers under 100 should be spelled out in the narrative of the report. All numbers appearing in tables should appear as numerals.

The candidate must keep in mind that simplicity in presentation is the key to clear, concise, and effective technical writing. If this general philosophy is followed, occasional lapses in grammar, punctuation, and style will not detract from the report.
Appendix 9  

Notes of Authority

Two items are emphasized in the Guide—originality of work and support for all statements, assumptions, and conclusions. In following these important considerations, it will be necessary for the candidate to offer support through a definition or statement published in another’s work. Whenever this occurs, a footnote or endnote fully citing the work must be presented. It makes no difference if a footnote (an immediate citation of the authority placed within the text) or an endnote (a gathering of all citations in an addendum to the report) is used, as long as consistency is maintained. Sources for all data presented from other published or unpublished works must also be given. Although use of the proper form for footnotes and endnotes is required, the grading committee will not penalize the candidate so long as the form does not detract from the professional appearance of the report.

Footnotes or endnotes will contain the following information:

1. Name of the person or organization responsible for the work
2. Full title of the work, with book titles italicized, and magazines and journals enclosed in quotation marks
3. Description of the work, including volume number, edition number, and other descriptive information
4. Place of publication, publisher, and date of publication
5. Exact page or pages being cited
Appendix 10  

**USPAP Standards 7, 8, 9, and 10**  
Following are the standards and rules pertaining to personal property under the *Uniform Standards of Professional Appraisal Practice*, published by The Appraisal Foundation. Please see the published standards for additional comments on these rules. (The Appraisal Foundation, 1029 Vermont Ave., NW, Suite 900, Washington, DC 20005.) The *USPAP* edition applicable as the date of appraisal should be used for the report.

**Standard 7 Personal Property Appraisal, Development**  
In developing a personal property appraisal, an appraiser must identify the problem to be solved and the scope of work necessary to solve the problem and correctly complete research and analysis necessary to produce a credible appraisal.

**Standards Rule 7-1**  
In developing a personal property appraisal, an appraiser must:

a. be aware of, understand, and correctly employ those recognized methods and techniques that are necessary to produce a credible appraisal;

b. not commit a substantial error of omission or commission that significantly affects an appraisal; and

c. not render appraisal services in a careless or negligent manner, such as by making a series of errors that, although individually might not significantly affect the results of an appraisal, in the aggregate affect the credibility of those results.

**Standards Rule 7-2**  
In developing a personal property appraisal, an appraiser must:

a. identify the client and other intended users;

b. identify the intended use of the appraiser’s opinions and conclusions;

c. identify the purpose of the assignment (the type and definition of the value to be developed); and, if the value opinion to be developed is a market value, ascertain whether the value is to be the most probable price:

i. in terms of cash, or

ii. in terms of financial arrangements equivalent to cash; or

iii. in other precisely defined terms; and

iv. if the opinion of value is to be based on nonmarket financing or financing with unusual conditions or incentives, the terms of such financing must be clearly identified and the appraiser’s opinion of their contributions to or negative influence on value must be developed by analysis of relevant market data.
d. identify the effective date of the appraiser's opinions and conclusions;

e. identify the characteristics of the property that are relevant to the purpose and intended use of the appraisal, including:

   i. sufficient characteristics to establish the identity of the item including the method of identification;
   ii. sufficient characteristics to establish the relative quality of the item (and its component parts, where applicable) within its type;
   iii. all other physical and economic attributes with a material effect on value;
   iv. the ownership interest to be valued;
   v. any known restrictions, encumbrances, leases, covenants, contracts, declarations, special assessments, ordinances, or other items of a similar nature; and
   vi. any real property or intangible items that are not personal property but which are included in the appraisal.

f. identify the scope of work necessary to complete the assignment;

g. identify any extraordinary assumptions necessary in the assignment; and

h. identify any hypothetical conditions necessary in the assignment.

**Standards Rule 7-3**
In developing a personal property appraisal, an appraiser must collect, verify, analyze, and reconcile all information pertinent to the appraisal problem, given the scope of work identified in accordance with Standards Rule 7-2(f).

a. Where applicable, identify the effect of highest and best use by measuring and analyzing the current use and alternative uses to encompass what is profitable, legal, and physically possible, as relevant to the purpose and intended use of the appraisal.

b. Personal property has several measurable marketplaces; therefore, the appraiser must define and analyze the appropriate market consistent with the purpose of the appraisal.

c. Analyze the relevant economic conditions at the time of the valuation, including market acceptability of the property and supply, demand, scarcity, or rarity.

**Standards Rule 7-4**
In developing a personal property appraisal, an appraiser must collect, verify, and analyze all information applicable to the appraisal problem and the type of property, given the scope of work identified in accordance with Standards Rule 7-2(f).
a. When a sales comparison approach is applicable, an appraiser must analyze such comparable sales data as are available to indicate a value conclusion.

b. When a cost approach is applicable, an appraiser must:

   i. analyze such comparable cost data as are available to estimate the cost new of the property; and
   ii. analyze such comparable data as are available to estimate the difference between cost new and the present worth of the property (accrued depreciation).

c. When an income approach is applicable, an appraiser must:

   i. analyze such comparable data as are available to estimate the market income of the property;
   ii. analyze such comparable operating expense data as are available to estimate the operating expenses of the property;
   iii. analyze such comparable data as are available to estimate rates of capitalization and/or rates of discount; and
   iv. base projections of future income and expenses on reasonably clear and appropriate evidence.

d. When developing an opinion of the value of a lease or leased property, an appraiser must analyze the effect on value, if any, of the terms and conditions of the lease(s).

e. An appraiser must analyze the effect on value, if any, of the assemblage of the various component parts of a property and refrain from valuing the whole solely by adding together the individual values of the various component parts.

f. An appraiser must analyze the effect of value, if any, of anticipated modifications to the subject property, to the extent that market actions reflect such anticipated modifications as of the effective appraisal date.

g. An appraiser must analyze the effect on value of any real property or intangible items that are not personal property but are included in the appraisal.

h. When appraising proposed modifications, an appraiser must examine and have available for future examination:

   i. plans, specifications, or other documentation sufficient to identify the scope and character of the proposed modifications;
   ii. evidence indicating the probable time of completion of the proposed modifications; and
iii. reasonably clear and appropriate evidence supporting implementation costs, anticipated earnings, and output, as applicable.

**Standard 7-5**
In developing a personal property appraisal, an appraiser must:

(a) analyze any current agreement of sale; validated offer or third party offer to sell; option; or listing of the property, if such information is available to the appraiser in the normal course of business;

(b) analyze any prior sales of property that occurred within a reasonable and applicable time period, given the purpose of the assignment and the type of property involved; and

(c) reconcile the quality and quantity of data available and analyzed within the approaches used and the applicability or suitability of the approaches used.

**Standard 8 Personal Property Appraisal, Reporting**
In reporting the results of personal property appraisal, an appraiser must communicate each analysis, opinion, and conclusion in a manner that is not misleading.

**Standards Rule 8-1**
Each written or oral personal property appraisal report must:

(a) clearly and accurately set forth the appraisal in a manner that will not be misleading;

(b) contain sufficient information to enable the intended users of the appraisal to understand the report properly; and

(c) clearly and accurately disclose any extraordinary assumption, hypothetical condition, or limiting condition that directly affects the appraisal and indicate its impact on value.

**Standards Rule 8-2**
Each written personal property appraisal report must be prepared under one of the following three options and prominently state which option is used: Self-Contained Appraisal Report, Summary Appraisal Report, or Restricted Use Appraisal Report.

(a) The content of a Self-Contained Appraisal Report must be consistent with the intended use of the appraisal and, at a minimum:

   i. state the identity of the client and any intended users, by name or type;
   ii. state the intended use of the appraisal;
iii. describe information sufficient to identify the property involved
in the appraisal, including the physical and economic property
characteristics relevant to the assignment;
iv. state the property interest appraised;
v. state the purpose of the appraisal (the type and definition of
value) and its source;
vi. state the effective date of the appraisal and the date of the report;
vii. describe sufficient information to disclose to the client and any
intended users of the appraisal the scope of work used to de
velop the appraisal;
viii. state all assumptions, hypothetical conditions, and limiting
conditions that affected the analyses, opinions, and conclusions;
ix. describe the information analyzed, the appraisal procedures
followed, and the reasoning that supports the analyses, opinions,
and conclusions;
x. state, as appropriate to the class of personal property involved,
the use of the property existing as of the date of value and the
use of the property reflected in the appraisal; and, when the
purpose of the assignment is a market value, describe the
support and rationale for the appraiser’s opinion of the highest
and best use of the property;
xi. state and explain any permitted departures from specific require-
ments of STANDARD 7 and the reason for excluding any of the
usual valuation approaches; and
xii. include a signed certification in accordance with Standards Rule
8-3.

(b) The content of a Summary Appraisal Report must be consistent with the
intended use of the appraisal and, at a minimum:

i. state the identity of the client and any intended users, by name or
type;
ii. state the intended use of the appraisal;
iii. summarize information sufficient to identify the property involved
in the appraisal, including the physical and economic property
characteristics relevant to the assignment;
iv. state the property interest appraised;
v. state the purpose of the appraisal (the type and definition of value)
and its source;
vi. state the effective date of the appraisal and the date of the report;
vii. summarize sufficient information to disclose to the client and any
intended users of the appraisal the scope of work used to develop
the appraisal;
viii. state all assumptions, hypothetical conditions, and limiting condi-
tions that affected the analyses, opinions, and conclusions;
ix. summarize the information analyzed, the appraisal procedures
followed, and the reasoning that supports the analyses, opinions,
and conclusions;
x. state, as appropriate to the class of personal property involved, the use of the property existing as of the date of value and the use of the property reflected in the appraisal; and, when the purpose of the assignment is a market value, summarize the support and rationale for the appraiser’s opinion of the highest and best use of the property;

xi. state and explain any permitted departures from specific requirements of STANDARD 7, and the reason for excluding any of the usual valuation approaches; and

xii. include a signed certification in accordance with Standards Rule 8-3.

(c) The content of a Restricted Use Appraisal Report must be consistent with the intended use of the appraisal and, at a minimum:

i. state the identity of the client, by name or type;

ii. state the intended use of the appraisal;

iii. state information sufficient to identify the property involved in the appraisal;

iv. state the ownership interest appraised;

v. state the purpose of the appraisal, including the type of value, and refer to the definition of value pertinent to the purpose of the assignment;

vi. state the effective date of the appraisal and the date of the report;

vii. state the extent of the process of collecting, confirming, and reporting data or refer to an assignment agreement retained in the appraiser’s workfile, which describes the scope of work to be performed;

viii. state all assumptions, hypothetical conditions, and limiting conditions that affect the analyses, opinions, and conclusions;

ix. state the appraisal procedures followed, state the value opinion(s) and conclusion(s) reached, and reference the workfile;

x. state, as appropriate to the class of personal property involved, the use of the property existing as of the date of value and the use of the property reflected in the appraisal; and, when the purpose of the assignment is a market value, state the appraiser’s opinion of the highest and best use of the property;

xi. state and explain any permitted departures from applicable specific requirements of STANDARD 7; state the exclusion of any of the usual valuation approaches; and state a prominent use restriction that limits use of the report to the client and warns that the appraiser’s opinions and conclusions set forth in the report cannot be understood properly without additional information in the appraiser’s workfile; and

xii. include a signed certification in accordance with Standards Rule 8-3.

**Standards Rule 8-3**

Each written personal property appraisal report must contain a signed certification that is similar in content to the following form:
I certify that, to the best of my knowledge and belief:

- the statements of fact contained in this report are true and correct.
- the reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions and are my personal, impartial, and unbiased professional analyses, opinions, and conclusions. I have no (or the specified) present or prospective interest with respect in the property that is the subject of this report and no (or the specified) personal interest with respect to the parties involved.
- I have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.
- my engagement in this assignment was not contingent upon developing or reporting predetermined results.
- my compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
- my analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with Uniform Standards of Professional Appraisal Practice.
- I have (or have not) made a personal inspection of the property that is the subject of this report. (If more than one person signs this certification, the certification must clearly specify which individuals did and which individuals did not make a personal inspection of the appraised property.)
- no one provided significant personal property appraisal assistance to the person signing this certification. (If there are exceptions, the name of each individual providing significant personal property appraisal assistance must be stated.)

**Standard Rule 8-4**
An oral personal property appraisal report must, at a minimum, address the substantive matters set forth in Standards Rule 8-2(b).

**Standard 9 Business Appraisal, Development**
In developing a business or intangible asset appraisal, an appraiser must identify the problem to be solved and the scope of work necessary to solve the problem and correctly complete the research and analysis steps necessary to produce a credible appraisal.

**Standards Rule 9-1**
In developing a business or intangible asset appraisal, an appraiser must:

(a) be aware of, understand, and correctly employ those recognized methods and procedures that are necessary to produce a credible appraisal;
(b) not commit a substantial error of omission or commission that significantly affects an appraisal; and

c) not render appraisal services in a careless or negligent manner, such as
by making a series of errors that, although individually might not
significantly affect the results of an appraisal, in the aggregate affect the
credibility of those results.

**Standards Rule 9-2**
In developing a business or intangible asset appraisal, an appraiser must identify:

(a) the client and any other intended users of the appraisal and the client’s
intended use of the appraiser’s opinions and conclusions;

(b) the purpose of the assignment, including the standard of value (definition) to be developed;

(c) the effective date of the appraisal;

(d) the business enterprises, assets, or equity to be valued; and

   i. identify any buy-sell agreements, investment letter stock
      restrictions, restrictive corporate charter or partnership agree-
      ment clauses, and any similar features or factors that may have
      an influence on value;

   ii. ascertain the extent to which the interests contain elements of
       ownership control.

(e) the scope of work that will be necessary to complete the assignment;

(f) any extraordinary assumptions necessary in the assignment; and

(g) any hypothetical conditions necessary in the assignment.

**Standards Rule 9-3**
In developing a business or intangible asset appraisal relating to an equity
interest with the ability to cause liquidation of the enterprise, an appraiser
must investigate the possibility that the business enterprise may have a
higher value by liquidation of all or part of the enterprise than by continued
operation as is. If liquidation of all or part of the enterprise is the indicated
basis of valuation, an appraisal of any real estate or personal property to be
liquidated may be appropriate.

**Standards Rule 9-4**
In developing a business or intangible asset appraisal, an appraiser must
collect and analyze all information pertinent to the appraisal problem, given
the scope of work identified in accordance with Standards Rule 9-2(e).
(a) An appraiser must develop value opinion(s) and conclusion(s) by use of one or more approaches that apply to the specific appraisal assignment;

(b) include in the analyses, when relevant, data regarding:

i. the nature and history of the business;
ii. financial and economic conditions affecting the business enterprises, its industry, and the general economy;
iii. past results, current operations, and future prospects of the business enterprise;
iv. past sales of capital stock or other ownership interests in the business enterprise being appraised;
v. sales of similar businesses or capital stock of publicly held similar businesses;
vi. prices, terms, and conditions affecting past sales of similar business equity; and
vii. economic benefit of intangible assets.

**Standards Rule 9-5**
In developing a business or intangible asset appraisal, an appraiser must reconcile the indications of value resulting from the various approaches to arrive at the value conclusion.

**Standard 10 Business Appraisal, Reporting**
In reporting the results of a business or intangible asset appraisal, an appraiser must communicate each analysis, opinion, and conclusion in a manner that is not misleading.

**Standards Rule 10-1**
Each written or oral business or intangible asset appraisal report must:

(a) clearly and accurately set forth the appraisal in a manner that will not be misleading;

(b) contain sufficient information to enable the intended user(s) to understand it and note any specific limiting conditions concerning information;

(c) clearly and accurately disclose any extraordinary assumption or hypothetical condition that directly affects the appraisal and indicate its impact on value.

**Standards Rule 10-2**
Each written business valuation or intangible asset appraisal report must be prepared in accordance with one of the following options and prominently state which option is used: Appraisal Report or Restricted Use Appraisal Report.
(a) The content of an Appraisal Report must be consistent with the intended use of the appraisal and, at a minimum:

i. state the identity of the client and any intended users, by name or type;

ii. state the intended use of the appraisal;

iii. summarize information sufficient to identify the business or intangible asset appraised;

iv. state as relevant to the assignment, the extent to which the business interest or the interest in the intangible asset appraised contains elements of ownership control, including the basis for the determination;

v. state the purpose of the appraisal, including the standard of value (definition) and its source;

vi. state the effective date of the appraisal and the date of the report;

vii. summarize sufficient information to disclose to the client and any intended users of the appraisal the scope of work used to develop the appraisal;

viii. state all assumptions, hypothetical conditions, and limiting conditions that affected the analyses, opinions, and conclusions;

ix. summarize the information analyzed, the appraisal procedures followed, and the reasoning that supports the analyses, opinions, and conclusions;

x. state and explain any permitted departures from specific requirements of STANDARD 9 and the reason for excluding any of the usual valuation approaches;

xi. include a signed certification in accordance with Standards Rule 10-3.

(b) The content of a Restricted Use Appraisal Report must be for client use only and consistent with the intended use of the appraisal and, at a minimum:

i. state the identity of the client;

ii. state the intended use of the appraisal;

iii. state information sufficient to identify the business or intangible asset appraised;

iv. state as relevant to the assignment, the extent to which the business interest or the interest in the intangible asset appraised contains elements of ownership control, including the basis for that determination;

v. state the purpose of the appraisal, including the standard of value (definition) and its source;

vi. state the effective date of the appraisal and the date of the report;

vii. state the extent of the process of collecting, confirming, and
reporting data or refer to an assignment agreement retained in the appraiser’s workfile that describes the scope of work to be performed;

viii. state all assumptions, hypothetical conditions, and limiting conditions that affect the analyses, opinions, and conclusions;

ix. state the appraisal procedures followed, state the value opinion(s) and conclusions(s) reached, and reference the workfile;

x. state and explain any permitted departures from applicable specific requirements of STANDARD 9; state the exclusion of any of the usual valuation approaches; and state a prominent use restriction that limits use of the report to the client and warns that the appraiser’s opinions and conclusions set forth in the report cannot be understood properly without additional information in the appraiser’s workfile; and

xi. include a signed certification in accordance with Standards Rule 10-3.

**Standards Rule 10-3**

Each written business or intangible asset appraisal report must contain a signed certification that is similar in content to the following:

I certify that, to the best of my knowledge and belief:

- the statements of fact contained in this report are true and correct.
- the reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions and are my personal, impartial, and unbiased professional analyses, opinions, and conclusions.
- I have no (or the specified) present or prospective interest in the property that is the subject of this report, and I have no (or the specified) personal interest with respect to the parties involved.
- I have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.
- my engagement in this assignment was not contingent upon developing or reporting predetermined results.
- my compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
- my analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the *Uniform Standards of Professional Appraisal Practice*.
- no one provided significant business valuation assistance to the person signing this certification. (If there are exceptions, the name of each and the significant business valuation assistance must be stated.)
Standards Rule 10-4
An oral business or intangible asset appraisal report must, at a minimum, address the substantive matters set forth in Standards Rule 10-2(a).