

Guide to Real Property Demonstration Appraisal Report Writing: Residential Property



Professional Designation Program

International Association of Assessing Officers

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314 West 10th St., Kansas City, MO 64105-1616

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A Message to the Candidate from the Professional Designations Subcommittee

We wish to compliment and congratulate you for your commitment to IAAO's Professional Designation Program and your candidacy.

This 2014 edition of the *Guide to Real Property Demonstration Appraisal Report Writing (Guide)*, published fifty-nine years after the first Certified Assessment Evaluator (CAE) designations were awarded, represents the continuing professional growth of IAAO's Professional Designation Program. IAAO's designations are widely regarded as the standards of excellence in ad valorem appraisal and assessment administration.

It is the Professional Designations Subcommittee's belief that publication of this *Guide* will aid candidates by supplying them with prerequisites and guidelines essential for the successful completion of a demonstration appraisal report. It is one of the principal documents the IAAO has published to help you meet program requirements and earn a professional real property designation. This *Guide* is used by all IAAO graders as an outline for grading real property demonstration reports.

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 real 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 IAAO and the entire profession.

Introduction

The most challenging and time-consuming requirement for attaining an IAAO professional designation is writing an acceptable demonstration appraisal report. Writing a demonstration appraisal report requires original research, extensive 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 Real Property Demonstration Appraisal Report Writing* has been designed to acquaint the IAAO professional designation candidate with the requirements of form and content for the preparation of an acceptable real property demonstration appraisal report. Each candidate is provided with a copy of this *Guide* when 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 valuation of a real property. A successful report includes the analysis of all relevant factors and data that lead to the conclusion of value. The report is an exhaustive narrative and testing device representing the appraiser's best effort.

Writing a demonstration appraisal report is a vital part of the education of any professional appraiser, assessor, or property tax administrator. Estimation of value is a complex technical process. Although concepts can be learned

in the classroom, an in-depth understanding of these concepts can only be gained by an application of the process to a real-life situation. All who have successfully completed a demonstration report state emphatically that it increased their understanding of the process and yielded 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 real property demonstration appraisal report. A report grading sheet is included in the back of this *Guide*.

A successful report is written so that a non-appraiser or layperson 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 presented and explained in the report. **Every adjustment, assumption, conclusion, and all comments must be substantiated by documented 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 in the report.

Sources of Assistance

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 who have volunteered to assist candidates in the program. A list of advisors is published annually by IAAO, and each candidate is put in contact with the PDA in his or her area. Candidates who encounter problems or questions in developing their demonstration appraisal reports should contact the PDA for their area or the Professional Designations Subcommittee. IAAO headquarters may assist with additional referrals.

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. These funds can be used to pay any of the costs associated with completion of the designation program, such as report preparation, data gathering, or grading fees. Applications for grants can be obtained from the IAAO.

Originality of Work

When submitting a demonstration appraisal report for grading, candidates must certify on the Application for Appraisal Report Approval that:

1. The report has been personally prepared in its entirety, exclusive of typing, by the candidate
2. The appraisal and facts contained in the report are actual and not hypothetical, although hypothetical analyses are required for types of obsolescence not found in the subject property
3. The appraisal is of an existing parcel of real property

The candidate must do original work. Copying from another's report is unacceptable and will result in suspension from candidacy. This prohibition does not apply to the use of basic definitions of terms such as market value and highest and best use 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. The unwary candidate may compound errors or omissions contained in such 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 unacceptable 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 a request for further investigation. Verified evidence of a fraudulent submission will 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 is acceptable and encouraged as long as the composition, analyses, and conclusions are the candidate's own. Please note that most data, including comparables, may be shared; however, verification, data extraction, and analysis must be the original work of the candidate author.

The use of a subject property with the knowledge that it has already been used by another IAAO candidate for a demonstration appraisal report is prohibited, even though different comparables are used. If there is any question regarding the use of a particular subject property, it would be advisable 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. The sections of the report will interrelate and not contradict each other.
2. *Grammar and Spelling.* Simplicity is the key. All technical terms should be defined using the *PAV* textbook or the most recent edition of *USPAP*. Although typographical errors may be found in the best proofread report, they should be minimized by constant proofreading and by use of word-processing software's tools for checking grammar and spelling.
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 the preparation of the final copy. Then they should be checked again. Rounding should be consistent within each application.
4. *Appearance.* No letterhead, printed names, or logos may be used except for the Letter of Transmittal. The report should contain clear, original color photographs of the subject property and all comparables. Maps and other addenda should be presented in a way that adds to the professional appearance of the report.

Selecting the Subject Property

The selection of a subject property is a critical step in the preparation of a demonstration appraisal report. For either single-family or commercial property, the candidate should be careful to select a subject that exhibits the following characteristics:

1. The subject should be old enough to have suffered from the required forms of depreciation, as detailed in the Minimum Requirements section of this *Guide*.
2. The subject should permit the thorough demonstration of all three approaches to value.
3. The subject's highest and best use should be such that the application of the three approaches to value can be demonstrated correctly and completely.

The residential demonstration appraisal report must be of a single-family residence. Single-family attached residences are acceptable; however, duplex and condominium residences are not. The candidate is advised to review the market thoroughly before selecting a subject property, thereby ensuring that sufficient market data are available on comparable properties. Candidates may consider gathering comparables first, and then choosing the subject property based on the available comparable sales.

Candidates should not choose a complex property. The grader is concerned with evaluating demonstrated knowledge of appraisal principles, not with the application of specialized knowledge. A review of the grading sheet at the end of this *Guide* will give the candidate a picture of the items of major concern to the grader.

The primary reason candidates do not write a successful demonstration report is that they fail to adequately analyze the subject property and its similarities and dissimilarities to comparable properties, in accordance with the market. All too often, a candidate will make an adjustment based on opinion and without documentation, support, or justification, even though the comparable sales used in the report would have supported such an adjustment. It cannot be over-emphasized that every comment, adjustment, or conclusion must be supported by appropriate, demonstrated analysis of the report data.

Minimum Requirements

Demonstration appraisal reports submitted to IAAO for grading and credit must meet minimum requirements. The omission of any of the following 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.
2. The appraisal report must be in a narrative, Appraisal Report format.
3. The Letter of Transmittal must be dated, signed, and contain all items referenced in this *Guide*.
4. The report must be submitted electronically, preferably in a searchable PDF format.
5. The report must be professional in appearance. Photographs of the subject property, land sales, rentals, rental sales, and comparable sales must be included in the report.

6. The report must be accompanied by a completed Data Verification Form.
7. The subject should permit the thorough demonstration of all three approaches to value.
8. The breakdown method of depreciation must be demonstrated in the cost approach. There are three types of depreciation, with two types having curable and incurable subcategories. They are:
 - a. Physical deterioration
 - i. Curable
 - ii. Incurable
 - b. Functional obsolescence
 - i. Curable
 - ii. Incurable
 - c. External obsolescence

The subject must be of sufficient age and condition to allow the actual demonstration of physical curable, physical incurable, and at least one additional form of depreciation. Any form of depreciation that is not present in the subject must be explained by a hypothetical example of how the candidate would identify and calculate the depreciation if it were present.

For example, if the subject property exhibits physical curable, physical incurable, and functional incurable depreciation, the candidate would identify and measure those forms of depreciation. The candidate would then provide a hypothetical example of the proper treatment of functional curable and external obsolescence to demonstrate his or her understanding of all forms of depreciation. *These are the only hypothetical data that are allowed in the demonstration appraisal report.*

9. The date of appraisal of the subject property must be within five years of the date the report is submitted to IAAO.
10. The report must contain a statement of certification **signed** by the candidate.
11. All facts and appraisal data contained in the report including those pertaining to the subject property and all comparables, sales, and rentals, must be actual and verifiable. Except as noted in item 8 above, hypothetical data are unacceptable and their use is grounds for immediate rejection of the report. All reports are subject to a field check by the grading committee.
12. All property sales information must include the book and page number where the recorded data can be found. The names of the grantee and grantor must be included. Sale information must include the source of the sale's verification and terms of sale.
13. The candidate must certify that the final report conforms to the IAAO Code of Ethics and Standards of Professional Conduct and to the *Uniform Standards of Professional Appraisal Practice*.

Each report will be given a cursory, preliminary review for compliance with these minimum standards before being forwarded to the grader.

Submission and Grading of Reports

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

To submit a report for grading, the candidate must:

1. Submit a completed and signed IAAO Application for Appraisal Report Approval with the report
2. Submit a completed Data Verification Form with each report
3. Submit the report and proper payment for grading to the IAAO headquarters office

The report will be reviewed 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 that go through a full, official grading become the property of IAAO. The candidate should keep a good copy of any report submitted for future reference or use.

After grading, a completed copy of the Real Property Demonstration Appraisal Report Grading Sheet is sent to the candidate, along with the grader's and grading chairman's comments. The candidate should review the comments on rejected reports carefully and use them as 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. An additional grading fee is required when a revised report is submitted for second grading.

When a report is resubmitted after disapproval on the first grading, the second grader is not restricted in any way by the score or comments of the first grader. The candidate is advised to review the entire report, 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 on a second grading, the candidate is 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

The grader uses the criteria outlined in the grading sheet, the *Guide to Real Property Demonstration Appraisal Report Writing*, the IAAO textbook *Property Assessment Valuation (PAV)*, third edition, along with other resources, in grading submitted reports. The demonstration appraisal report grader is an IAAO designee who has received extensive training and guidance in how to review demonstration appraisal reports fairly and accurately. The graders and grading chairs are required by the Professional Designations Subcommittee to provide constructive comments on the reports. These comments are designed to point out strengths and weaknesses to the candidate and provide help in the event a revision is necessary.

Appeal of Grading

Any candidate aggrieved by the failure of his or her report on a second grading may ask the Professional Designations Subcommittee to review the report and the subcommittee will conduct a thorough examination and render a written decision.

Demonstration Appraisal Report Outline and Requirements

The purpose of this *Guide* is to help the candidate write an acceptable demonstration appraisal report and to stress to the candidate items of the report that need close attention. The candidate should refer to the grading sheet and use this grading sheet as an outline in preparing the demonstration report.

It is recommended sections of the report be presented in the same order as outlined on the grading sheet, and photographs should be included in the section of the report to which they refer, rather than grouped together in an appendix. Page references are from the textbook *Property Assessment Valuation*, Third Edition. All technical terms should be defined using the *PAV* textbook or the most recent edition of *USPAP*.

Part 1 Introduction

A. Title Page

The title page should include:

- Identification of the report as an appraisal
- Property type
- Subject property address
- Effective date of appraisal
- Date of the report
- Name and address of the appraiser
- Name and address of the client and intended user (IAAO Professional Designations Subcommittee)

B. Letter of Transmittal

A letter of transmittal is a business letter to the Professional Designations Subcommittee that accompanies the report. Sign and date the letter and include the conclusions of the report and other important items. The body of the letter should include:

- Date of letter (date of report)
- Identification of the subject property by address and legal description

- Property type
- Purpose, intended use and intended user(s) of the appraisal
- Property rights appraised
- Definition of value and its source
- Final opinion of value, written and numerical
- Effective appraisal date
- The perspective of the appraiser (prospective, current, or retrospective) and appraisal report format
- Statement that the letter is accompanied by a complete appraisal report
- Appraiser's signature

C. Table of Contents

The table of contents gives page references for the main headings of the report and should refer to all major sections and to the appendices or addenda at the end of the report. The numbering the pages should begin after the table of contents.

D. Summary of Important Facts and Conclusions

This section should be a summary of the important data and conclusions of the report. The reader should be able to read this page and learn the significant information contained in the report. Brief statements should be given for the following:

- Purpose of the appraisal
- Property rights appraised
- Address of property
- Description of the improvements including square footage and date of construction
- Description of the site, including zoning
- Assessed valuation and tax data
- Highest and best use of the site as if vacant and of the property as presently improved (two separate opinions)
- Actual age, effective age, total economic life, and remaining economic life of the improvement
- Separate valuation estimates (cost approach, with separate values for land and improvements; income approach; and sales comparison approach)
- Final valuation opinion and effective valuation date
- Report date—same as the date of the letter of transmittal
- Any other information considered important by the appraiser

Part 2 Appraisal Problem and Scope of Work

A. Type of Appraisal and Report

State the type of appraisal (prospective, current, or retrospective) and report format, including definitions.

B. Identification of the Client

Define and state the identity of the client (IAAO Professional Designations Subcommittee).

C. Intended Use of the Appraisal and Intended User(s) (PAV, p.65)

The intended use of the appraisal should be to satisfy the demonstration appraisal report requirement for an IAAO professional designation, either the RES or CAE. The intended user will be the same as the client, the IAAO Professional Designations Subcommittee.

D. Identification of the Subject Property (PAV, p.64)

Provide a brief narrative description of the subject property, including:

- Property type and location
- Street address, legal description, and any other method of description (such as a tax parcel number) so that the subject property is fully identified
- Owner and ownership type
- Front, rear, and side color photographs of the subject property in this section will help the reader visualize the appraisal problem.

E. Property Rights Appraised (PAV, p.12 and p.64)

The rights to the subject property that are being appraised must be identified and defined. These rights will be for fee simple ownership assuming no encumbrances.

F. Purpose of the Appraisal (PAV, p.65)

The purpose of the appraisal is to estimate the market value of the defined rights in the subject property as of a given date.

G. Definition of Value and Date of Value Opinion (PAV, p.65)

Provide a definition of market value and give its source in a footnote. The conditions implicit in the market value definition should be included, one of which must be reasonable exposure time. The effective date of the value estimate must be stated in the report. The effective date of appraisal must be within five years of the date the report is submitted to IAAO.

H. General Assumptions and Limiting Conditions

Following are assumptions and limiting conditions typically found in appraisal reports:

This appraisal has been made with the following general assumptions:

- The final estimate of value developed in this report is as of _____. The use of this property at that time determined the distribution of the valuation between land and improvements. Any change in the present use of the property or the date of valuation may or may not affect the final conclusion of value that is stated in this report.
- It is assumed that the legal description, status of title, and other matters legal in nature are correct. No responsibility is assumed by the appraiser for such legal matters, and this appraisal should not be construed as an opinion on such legal matters. Title to the property is assumed to be good and marketable unless otherwise stated.
- In the course of completing this appraisal, information was obtained from public records and from other

individuals. Such information is presumed to be correct and reliable. No responsibility is assumed for any errors or omissions in such data.

- The descriptions and analysis of the land and improvements in this report are based upon visual inspection of the property. It is assumed that there are no hidden or unapparent conditions of the property, subsoil, or structures that render it more or less valuable. No responsibility is assumed for such conditions or for obtaining the engineering studies that may be required to discover them.
- Building sketches, plot plans, photographs, and other such exhibits are included in this report only to aid in visualizing the property. No survey of the property was completed, and drawings may not be to the correct scale. No liability is assumed for any errors or omissions in such exhibits.
- The existence of hazardous material, which may or may not be present on the property, was not observed by the appraiser. The appraiser has no knowledge of the existence of such materials on or in the property and is not qualified to detect such substances. The value estimate is predicated on the assumption that there is no such material on or in the property that would cause a loss in value. No responsibility is assumed for any such conditions or for any expertise or engineering knowledge required to discover them.
- The appraiser does not agree to any appearance or the giving of testimony in any court, hearings, or conference unless proper prior arrangements have been made.
- Unless otherwise stated in the report, the property is appraised free and clear of any or all liens or encumbrances.
- Unless nonconformity has been described in the appraisal report, it is assumed that the property conforms to all applicable zoning and use regulations and restrictions.
- The appraiser assumed the use of the land and improvements is confined within the boundaries or property lines of the property described and that there is no encroachment or trespass unless otherwise noted in the report.
- The forecasts and projections contained in this report are based on current market conditions, anticipated short-term supply and demand factors, and a continued stable economy. These forecasts are subject to changes with future conditions.

This appraisal has been made with the following general limiting conditions:

- The distribution of the total value estimated between the land and the improvements in this report is applicable only under the stated program of utilization. The values allocated to the land and buildings are not to be used in conjunction with any other appraisal and are invalid if they are.
- The intended use of this appraisal report is _____. The client is the sole intended user. This appraisal may not be appropriate for other uses or users.

I. Extraordinary Assumptions and Hypothetical Conditions

Define extraordinary assumptions and hypothetical conditions and cite the source. If the value opinion is subject to an extraordinary assumption, the assumption must be disclosed along with a statement that its use might have affected the value conclusion. With the exception noted on p.5 of this *Guide*, hypothetical conditions are not acceptable for demonstration report purposes.

J. Scope of Work (PAV, p.65)

Include a description of the extent of the process of collecting, confirming, and reporting the data. The extent of the appraisal must comply with the requirements of the *Uniform Standards of Professional Appraisal Practice*. The scope of work defines the type and intent of research and analysis that an appraiser must complete in order to develop credible appraisal assignment results and includes, but is not limited to:

- the extent to which the property is identified
- the extent to which tangible property is inspected
- the type and extent of data researched
- the type and extent of analyses applied to arrive at opinions or conclusions

Part 3 Presentation of Data

A. History of the Subject Property

Provide and analyze a detailed history of the subject property. The candidate must consider and analyze (1) all agreements of sale, options, or listings of the subject property current as of the effective date of the appraisal and (2) all sales of the subject property that occurred within three (3) years prior to the effective date of the appraisal. All available, relevant information should be included, such as: original construction costs, acquisition costs, additions and/or remodeling costs, financial data, transfers of ownership, etc.

B. City (or Area) Analysis (PAV pp. 40-43 and pp.73-77)

The subject property is influenced by physical, economic, governmental, and social factors that shape and determine value. These forces are to be examined and analyzed on a broad regional basis to determine this influence. If the property is located within a city, generally this is a broad enough basis on which to perform the analysis. If not, a county, township, area, or regional basis may be applicable. Only data relevant to the subject property should be discussed and analyzed. A map locating the city (or area) with the boundaries clearly delineated should be included in the appendix. Some of the factors that should be considered and analyzed include:

- Physical Factors
 - Geographical location along with the location of the subject property within the market area
 - History of the area
 - Climate
 - Topography
 - Soil and subsoil conditions
 - Location of support services
- Economic Factors
 - Lender attitudes and monetary policies
 - Mortgage interest rates
 - Income (median family income trends)
 - Ownership – tenancy ratios
 - Price and rental levels
 - Employment (major employers and their stability, potential new employers, and unemployment rates)
 - New construction
 - Housing (supply and demand and a broad overview of housing characteristics)
- Governmental Factors

- Governmental services
- Governmental regulations
- Transportation systems
- Social Factors
 - Demographics (population trends over several decades, population projections, and breakdown of population by age and income)
 - Education levels
 - Crime

The candidate should also discuss both positive and negative factors and should be sure that the data analyzed and presented are relevant to the subject property. The important factors will differ depending on the typical market behavior in the area and the type of property.

The primary emphasis of the analysis should be the influence of the four forces on the type of property being appraised. The conclusion should discuss the probable future of the area and the probable direction of property values, relating these future conditions to the subject property. Is the area growing, declining, or stable? What are the prospects for the future for values of properties similar to the subject property? What will be the effects on the value of the subject property?

C. Neighborhood Analysis (PAV pp.40-43 and pp.77-83)

The purpose of this analysis is to identify, analyze, and discuss the various market forces influencing the subject neighborhood and, in turn, the subject property. This section should build on the trends and conclusions presented in the city (area) analysis section. Begin this section with a definition of a neighborhood and cite its source. Describe and support the neighborhood boundaries, and locate the subject property within the neighborhood. The boundaries, which may be man-made, political, or natural, should be clearly delineated and described in detail, and the reasons why they form the boundaries should be explained. A map locating the neighborhood with the boundaries clearly delineated should be included in the appendix. Neighborhood characteristics to be considered and analyzed in the report include, but are not limited to, the following:

1. History of the neighborhood
2. Appearance including conformity of houses
3. Typical size, shape, and area of lots
4. Typical age, condition, and type of improvements in the neighborhood in terms of quality and type of construction - discuss the conformity or lack of conformity of the subject property
5. Range of property values and the range of rental amounts within the neighborhood
6. Owner-tenant ratios and turnover in ownership rates
7. Vacancy/occupancy rates
8. Typical financing and interest rates, including sources

9. Population and demographic data, including income levels, age levels, marital status of residents, typical family size, typical educational background of the occupants, and similar data
10. Availability of utilities
11. The neighborhood's proximity to employment centers, shopping, churches, schools, recreation facilities, main transportation routes, and other locational factors relevant to property values
12. The life stage of the neighborhood including the extent to which the neighborhood is built up
13. New construction activity and amount of vacant land
14. Employment and economic factors
15. Street patterns
16. Topography
17. Climate
18. Land use patterns, planning, zoning, building codes, and development regulations
19. Taxes and special assessments
20. All positive and negative influences within the neighborhood
21. Support for estimating remaining economic life expectancy and effective age of the subject property should be presented here

In this section, compare each of the above neighborhood characteristics with those for the city and area/region as a whole, being sure that the presence or absence of any forces that may cause economic obsolescence in the subject property are detailed and that all information correlates logically to information in other sections of the report, such as site description and improvement description sections. Finally, summarize all conclusions regarding the forces affecting the neighborhood. The conclusion should discuss the probable future of the neighborhood, relating these future conditions to the subject property and other similar properties. Data presented and analyzed must be relevant to the subject property and consistent with other data in the report.

D. Site Description (PAV pp.172-174)

In this section specific data are used to accurately describe the subject site. This is needed in order to properly analyze the highest and best use as though vacant and to select comparable site sales. A graphic and detailed description of the subject site from which the reader can form a clear mental picture of the site should be presented. This description of the subject site must include all supporting data used in the site value conclusion, such as:

1. Location
2. Frontage, depth, width, area, and shape
3. Topography
4. Soil and subsoil conditions

5. Availability and adequacy of utilities
6. Access
7. On-site improvements (structure being appraised, driveways, landscaping, etc.)
8. Off-site improvements (streets, sidewalks, lighting, traffic patterns, etc.)
9. Flood zone and map reference
10. Any relevant easements, encroachments, and/or covenants
11. Zoning designation and explanation
12. Permitted uses within the zoning district
13. Discussion on the conformity or nonconformity of the subject site (it is recommended a nonconforming property not be used as the subject property for a demonstration report)

Draw a conclusion on how the previously described data affect the utility of the site. All locational factors relating to external obsolescence (if present) that affect the subject site must be presented. Also, present and analyze all supporting data used in the site valuation conclusion, as well as any relating to the site's highest and best use. The appropriate flood map should be included in the appendix with a reference in this section. Include a plot plan in the appendix and reference in this section. The plot plan should include a drawing of the site with site dimensions, road frontages, the location of all improvements, and other characteristics that help describe the site. In addition, if applicable, include a zoning map with the location of the subject site and a copy of the zoning ordinance in the appendix and reference the page numbers in this section.

E. Improvement Description (PAV pp.233-234)

This section should contain a graphic, detailed, and complete description of all improvements on the site from which the reader can form a clear mental picture. Although it is not necessary to do a complete "bricks and mortar" analysis of each item, this section should provide

- Sufficient detail for the calculation of reproduction cost new in the cost approach
- Sufficient detail to support depreciation analysis
- Sufficient detail for market comparisons used in the sales comparison and income approaches
- Data to support the highest and best use analysis

All supporting data used in the valuation conclusions must be discussed in this section. Items discussed should include, but not be limited to, the following:

1. A physical description of all major components and building size
 - Overall quality
 - Current use
 - Type and quality of construction
 - Dimensions and area
 - Exterior
 - i. Substructure (footings; slabs; columns; beams; foundation walls; etc.)
 - ii. Superstructure (framing; insulation; ventilation; exterior walls and doors; windows, screens, storm windows; roof type, pitch, cover, gutter, and eaves; chimneys and vents; special features)
 - Interior
 - i. Interior layout/floor plan

- a. Number of rooms, bedrooms, bathrooms, closets
 - ii. Interior walls and doors
 - iii. Interior beams/columns, flooring system, ceilings
 - iv. Wall and ceiling finish, floor covering, molding and trim
 - v. Basement size, height, finished/unfinished
 - vi. Fireplaces
 - vii. Special features
 - Mechanical equipment
 - i. Plumbing type, grade, piping, fixtures, hot water heater, condition
 - ii. Heating air-conditioning system, grade and condition
 - iii. Electrical system and fixtures, grade and condition
 - Attached improvements
 - Site improvements
2. A discussion of architectural style and design and how these elements fit the character of the neighborhood, including a reference to the principle of conformity
 3. An analysis with supporting data, market observations, and definition of terms of the property's
 - a. Actual age
 - b. Effective age
 - c. Remaining economic life
 - d. Total economic life
 4. Since the breakdown method of depreciation must be used in the cost approach, this analysis should include an age and condition analysis of the dwelling components.
 5. The functional utility/inutility of the building, especially as it relates to possible functional obsolescence as measured in the cost approach, should be discussed and analyzed.

A scaled floor plan showing the interior layout and exterior dimensions of the dwelling must be included in the appendix and referenced in this section.

F. Assessment and Tax Analysis

Assessment and tax analysis is an important aspect of the report, and assessors are expected to analyze tax situations better than fee appraisers. Explain in detail the particular assessment and taxation system applicable to the subject property and present all pertinent assessment and taxation data, including all applicable exemptions. List and analyze current values and taxes, as well as those for the past three to five years. Conduct a cursory assessment ratio study using the comparable sales included in the report to allow the actual assessment level to be determined and analyzed. The appraiser should include a grid or chart depicting how the assessment level of the subject property compares with those of similar properties in the subject area and other areas. From this information, an analysis of equalization can be performed. The assessment and tax data must also be analyzed to determine if and how property taxes affect the subject property's market value. The candidate must be objective in all analyses and discuss the pros and cons of each of the following as they relate to the subject property:

1. How the assessment level and taxes on the subject property compare with those of similar properties in the subject area and competing areas
2. What trends can be observed and how likely it is that there will be a significant change in assessment and taxes
3. How the market in general, and specifically for the subject property, will react to changes

Include a grid or chart indicating the recent assessment history and real estate taxes of the subject property in the report.

Part 4 Data Analyses and Conclusions

A. Highest and Best Use Analysis (PAV pp.27-61)

This section draws supporting data from all preceding sections, particularly the sections on neighborhood analysis, site description, and improvement description. If the candidate has correctly selected the subject property, the highest and best use will be its present use. However, even if the conclusion is obvious, it is necessary for the candidate to demonstrate a proper highest and best use analysis.

Begin this section by defining highest and best use including the source. The candidate should then proceed with separate analyses of the site as if vacant and as improved. Each of these analyses should examine the legally permitted, the physically possible, the economically feasible, and the most profitable uses. It is important that both analyses be performed using these four criteria. The objectives of each analysis are as follows:

Site as if Vacant

- Legally permissible – the first test identifies all legally permitted uses:
 - State the current zoning designation
 - List all allowable uses under the current zoning
 - Describe all the applicable zoning requirements/restrictions, i.e., setbacks, minimum lot sizes, maximum story heights, etc
 - Discuss any applicable deed restrictions, subdivision regulations and restrictions, and private restrictions
 - Discuss the likelihood of any change in the subject’s zoning
- Physically possible – the second test eliminates those legally permitted uses which are not physically possible on the subject site by looking at the subject’s:
 - Frontage and depth
 - Size
 - Shape
 - Topography
 - Soil and subsoil conditions
 - Location
 - Access
 - Utilities
 - Any other relevant physical attribute related to the subject site
- Financially feasible – of those uses that are both legally permissible and physically possible, the third test identifies which are financially feasible by analyzing:
 - Supply and demand for each potential use in the neighborhood and market area
 - Market rent versus feasibility rent for each potential use if income producing
 - Market value versus development cost for each potential use if not income producing
 - Timing for each potential use
- Maximally productive – of the uses that passed the legally permissible, physically possible, and financially feasible tests, the most profitable use is the highest and best use as though vacant
 - The conclusion should state the highest and best use as though vacant and the “ideal improvement” that represents the highest and best use of the land as though vacant
 - What type of improvement would be built on this site?

- What size? Style? Number of stories?
 - Number of bathrooms, bedrooms, garage type and size, basement size and finish, etc.?
 - Quality? Price range?
- *Property as Presently Improved.* The candidate must follow the same steps used in the analysis of the site as if vacant. Begin the analysis by comparing the “ideal improvement” as stated above with the site’s present improvements, identifying any obsolescence and deficiencies in the subject property. Investigate scenarios:
 - Demolish the improvements and redevelop the site
 - Continue the existing use
 - Modify the existing use, such as remodeling, adding living area, etc.

By analyzing the four criteria for highest and best use for all scenarios, the use that is maximally productive should be established. The highest and best use conclusion should include curing any curable deficiencies, renovating the improvements, and making repairs. The four criteria can also be used to determine whether functional obsolescence is curable or incurable.

This section should draw heavily on the valuation principles explaining the highest and best use of the property. (PAV pp.15-25)

B. The Valuation Process (PAV pp.203-204; 230-233)

This section is included in order to:

1. Define the approaches to value in the report (include definitions and their sources)
2. Describe the underlying economic principles and how they apply to each approach
3. Discuss the theory of each approach and outline the step-by-step procedures
4. Finish with a discussion on the reconciliation process

This section can be a separate section or it can be addressed at the beginning of each approach.

C. Cost Approach (PAV pp.167-201; 227-302)

The candidate should complete this section of the report first to establish the land value for use in the approaches that follow. Further, any physical, functional, or economic conditions affecting the subject property can be fully analyzed at the outset and referred to later in the report.

This section is very important and technically challenging. The candidate is advised to cover this approach thoroughly, because major errors can easily occur. A detailed discussion of each subsection of the cost approach follows.

- **Introduction** The introduction should define the cost approach and state how the cost approach is applied, the principles involved, and the steps used in applying the approach.
- **Site Valuation (PAV pp.167-201)** In this subsection, the candidate should discuss briefly the six methods for valuing the site as if vacant. Outline the method selected and the reasons for its selection and discuss how this method will be applied. The subject property selected must have supporting market data sufficient for extracting the site value through the application of the direct sales comparison approach. The candidate must analyze and support this valuation section. Reliance on rules of thumb, such as 4-3-2-1 and 65-35, or on unsupported opinions is unacceptable.

The presentation and analysis of valuation data should include:

- A description of each comparable sale, at a minimum, must include the following:
 - All recordation data
 - Sale price
 - Date of sale
 - Deed type
 - Grantor
 - Grantee
 - Sources of verification
 - Financing
 - Parcel identification
 - Physical characteristics
 - Size
 - Dimensions
 - Zoning
 - Utilities
 - Access
 - Topography
 - Amenities
 - Location
 - Highest and best use
 - Notation of any unusual situations

It is important to include attributes relevant to the site being valued. For example, if the subject property suffers from external obsolescence, the description of each comparable site must note the absence or presence of this economic deficiency.

A photograph of each sale must be included in this section.

- A discussion of the units of comparison that may apply in valuing the subject site: front foot, site, square foot, acre, allowable units, and so on. Using market support, estimate the appropriate unit of comparison. Once the appropriate unit of comparison is identified and selected, all adjustments or applications of the conclusions

from the analysis must be made to or with this unit value.

- A list and discussion of the recognized elements of comparison for which adjustments may be performed:
 - Property rights conveyed
 - Financing terms
 - Conditions of sale
 - Market conditions
 - Location
 - Physical characteristics
- Elements of comparison differ from units of comparison in that the units of comparison analysis attempts to find the unit of value important to buyers and sellers in the market for property such as the subject. An analysis of the elements of comparison isolates the differences in the components of the subject property and the comparable properties so that proper adjustments can be made for those components.
- An analysis of the comparable sales, including adjustments, grids, and charts showing the application of adjustments. It is advisable to use two sets of grids: one comparing relevant property characteristics of the sale comparables, as well as those of the subject property, and another summarizing the various adjustments. The candidate must justify all adjustments, comments, and conclusions. Adjustments must be market-derived, not based on cost. The candidate must demonstrate market-derived support for at least two adjustments. A conclusion that no adjustment is warranted counts as an adjustment as long as it is supported with market data.
- A summary subsection giving the final conclusion of value for the site as of the appraisal date. This summary must discuss the logic that led to the final value conclusion.

A map that locates the comparable sites and the subject should be included in the appendix and referenced by page number at this point in the narrative.

- **Estimate of Cost New (PAV pp.227-255)** This subsection covers the estimate of the cost new of the subject improvement as of the date of appraisal. The candidate should begin with a discussion, including definitions, on the four elements of cost: direct costs, indirect costs, entrepreneurial profit, and entrepreneurial incentive. Before performing actual mathematical analysis, the candidate should distinguish between reproduction cost new and replacement cost new, including not only the two definitions, but also a discussion of which cost concept is being selected and the reasons for its selection. The cost concept selected will affect how depreciation is calculated. It is highly recommended that reproduction cost new be used so the candidate can clearly demonstrate competency in identifying and estimating functional obsolescence. Most cost manuals list replacement cost, not reproduction cost. Therefore, the candidate must exercise caution in the use and application of such material. Some cost manuals permit upgrading of cost items to reflect reproduction cost rather than replacement cost.

The four methods of estimating cost new are quantity survey, unit-in-place, comparative unit, and trended original cost. The candidate should define and discuss each of these methods and must select one method and state the reasons for selecting it. It is strongly recommended the unit-in-place method be used in order to facilitate the breakdown method for estimating accrued depreciation.

The estimated cost new includes all improvements, even minor structures and site improvements. When cost manuals are used, all relevant adjustments for time, shape, size, and location must be applied and all calculations must be demonstrated.

The candidate should compare the developed cost new with the cost experiences of recent construction in the area to note any significant similarity or difference. A signed, documented contractor's cost estimate will satisfy this requirement.

- **Depreciation Analysis (PAV pp.257-302)** This subsection should begin with an introductory discussion, complete with definitions, that will explain and define depreciation, identify and discuss the three types of depreciation, and distinguish between curable and incurable depreciation. Direct and indirect methods commonly used to estimate depreciation should be identified along with reasons for the selection of the appropriate method. The observed condition breakdown method of measuring accrued depreciation is required for a demonstration appraisal report because it demands the separation of the elements of depreciation (**see PAV pp.275-299**).

Where the subject property suffers from a particular type of depreciation, its effect on value should be examined. Physical deterioration, curable and incurable, must be present in the subject property. At least one form of obsolescence must also be present. Any functional obsolescence must be tested for curability vs. incurability. If it is determined the property does not suffer from a particular form of obsolescence, that fact must be stated. The candidate must then develop a hypothetical example demonstrating how to recognize and reconcile such obsolescence.

There are two basic rules to follow in analyzing depreciation:

1. The candidate must analyze every component of the structure for all forms of depreciation. In the physical deterioration component, the candidate must account for every dollar of cost new. For the other forms of depreciation, support must be drawn from all other sections of the report so the depreciation can be accurately calculated and justified.
2. No item can be depreciated unless it is included in the cost new. A common error is for a candidate to claim that a residence suffers a functional deficiency because of the lack of an item and then to charge the entire cost of the item as functional curable obsolescence.

Other common errors are as follows:

1. Assuming incorrectly that the cost to cure physical curable depreciation is equal to reproduction cost new. The cost of removal of old items or cost of retrofitting is not included in cost new.
2. Deducting depreciation instead of cost of the physical curable and short-lived items to develop the cost new of the long-lived items.
3. Failing to test calculated functional obsolescence against conclusions developed in the sales comparison and income approaches. In order for functional obsolescence to be curable, the cost to correct the problem must be less than or equal to the contributory value of the feature. The candidate must remember that for functional obsolescence to be curable, it must be legally possible, physically possible, and financially feasible to affect the cure.

This subsection is generally the most difficult and the grade for this section is heavily weighted. Great care should be taken to avoid incomplete or improper analyses. The candidate should thoroughly review the material on depreciation in the *PAV* before completing this section of the report.

- **Summary of the Cost Approach** In this subsection, the candidate should make a well-organized presentation of the analysis and mathematical conclusions of the cost approach that begins with a statement of the total cost new and enumerates details of each form of depreciation, the total accrued depreciation, and the depreciated value of improvements. The depreciated value of paving and other site improvements, as well as the site value previously derived, will be added to this final figure to yield the market value indicated from application of the cost approach.

This mathematical summary should be followed by a short concluding paragraph giving the date of the value estimate and the appraiser's final conclusion of the property's indicated market value from application of the cost approach.

D. Income Approach

In this subsection, the candidate must demonstrate proper application of the income approach to valuing a one- or two-family residential property. This is accomplished through a gross rent multiplier analysis. The most difficult aspect of this approach is finding and gathering the data necessary for supporting and calculating the gross rent multiplier. Understandably, a lack of data can make the task difficult. In the section-by-section guidelines that follow, alternative procedures are suggested to alleviate some of the difficulties.

- **Introduction** The introduction should define the income approach as applied to one- or two-family residences, as well as the steps to be taken in its application. Be sure that both the definition given and the steps enumerated truly apply to one- to two-family residences. For example, the candidate should not use net income analysis or capitalization rate analysis, which applies more directly to investment property. The steps in the income approach for residential property are:
 1. Estimate market rent on a monthly basis for the subject property
 2. Estimate an appropriate gross rent multiplier (GRM)
 3. Calculate a value indication $V = I \times F$

Development of Market Rent The market rent estimate is based on a comparison of the subject property with comparable properties in the market that are being rented. Often, there will not be enough market data for clear support or justification of adjustments to rent for a single-family property. To compensate for the lack of such supporting data, the candidate must thoroughly analyze the rentals. Monthly rent should be examined for several units of comparison, including rent per dwelling unit, per square foot, and per room, and should be displayed in a grid or chart. A well-reasoned conclusion about the proper unit of comparison and the unit rental should evolve from this analysis. The final step should be the application of this unit rental to the subject property for a determination of its gross monthly rent. List and discuss elements of comparison and, with actual market data, support and justify any adjustments to rents for differences between the comparables and the subject property. The comparable rentals selected must allow candidates to demonstrate market derived support for at least two adjustments. This would include a conclusion where no adjustment is required, as long as it is based on market data.

- Reconcile the adjusted rents of the comparable properties to arrive at an opinion on the market rent for the subject property.

In describing the comparable rentals, the candidate should explain the lease conditions in addition to giving a physical description of each comparable. It is important to include all characteristics whose contributory rental values may be derived in the adjustment process. Address considerations such as lease dates, utilities, and furnishings. The candidate should reference (by page number) the comparable rentals map in the appendix.

- **Development of Gross Rent Multiplier** Comparable properties that have recently sold and were rented at the time of sale are used to develop the gross rent multiplier. Dividing the sale price by the monthly rent derives a

gross rent multiplier. This section should begin with a description of the comparable properties that have been both rented and sold. Include all pertinent information regarding the terms of sale, recordation data, sale price, date of sale, type of deed, grantor, grantee, source of verification, financing, parcel identification, monthly rent, gross rent multiplier, and description of property. At this point, the candidate should reference (by page number) the gross rent multiplier rental/sales map in the appendix.

The market data requirements of this portion of the report are probably the most difficult for the candidate to meet. Several ways to approach this problem are suggested below, ordered from most to least appropriate.

1. The best support of a gross rent multiplier is to find highly comparable, recently sold properties that were leased at market rent at the time of sale or immediately after. The report should contain at least one such property.
2. Assuming that highly comparable, recently sold rental properties are scarce, sales of other single-family properties, not necessarily highly comparable to the subject, that were rented at the time of sale may be used.
3. Properties that are currently rented and listed for sale or those listed for sale with an option to rent may be used.
4. If data are still needed, the combination of a rental with a separate but highly comparable sale may be used. For example, one might combine a single-family property that is rented with a highly comparable property next door that recently sold.

The same property can be used to support both the determination of market rent and the proper gross rent multiplier if the property meets criteria for both analyses. A comparison grid giving the salient features of the properties used, their rents, and their selling prices should be provided for both market rent and gross rent multiplier analysis.

This analysis should end with a paragraph indicating the candidate's conclusion as to the proper gross rent multiplier for the subject property.

- **Summary of the Income Approach** In this subsection, the candidate should make a well-organized presentation of the analysis and mathematical conclusions of the income approach, converting the rental income into a value estimate. A narrative explanation of the process should be given as well as the mathematical application. State the final indicated value along with the appraisal date for which the value estimate applies.

E. Sales Comparison Approach (PAV pp.203-225)

In this approach, an estimate of market value is produced by comparing the subject property with similar properties that have recently sold.

Comparable properties are selected for similarities to the subject property, and their sale prices are then adjusted for any dissimilarity from the subject. An elements of comparison analysis (explained later in this section) is employed to determine which factors or components affect value.

- **Introduction** This introduction should define the sales comparison approach as applied to the subject property and should provide a brief description of the subject property as well as the steps in the sales comparison approach. At this point, the candidate should reference (by page number) the comparable sales map in the appendix.
- **Description of Comparable Sales** Begin this subsection with a description of each comparable sale, including

terms of sale, recordation data, sale price, date of sale, type of deed, grantor, grantee, sources of verification, financing, parcel identification, and description of property. A photograph of each sale must be included in this section.

- A description of each comparable sale, at a minimum, must include the following:
 - All recordation data
 - Sale price
 - Date of sale
 - Deed type
 - Grantor
 - Grantee
 - Sources of verification
 - Financing
 - Parcel identification
 - Physical characteristics
 - Size
 - Dimensions
 - Zoning
 - Utilities
 - Access
 - Topography
 - Amenities
 - Location
 - Highest and best use
 - Notation of any unusual situations

It is important to include attributes relevant to the property being valued. For example, if the subject property suffers from external obsolescence, the description of each comparable site must note the absence or presence of this economic deficiency.

Compare the attributes (physical characteristics, obsolescence, location, condition, zoning, and so on) of the

comparables with those of the subject property. It is important to include all characteristics whose contributory values may be derived in the adjustment process.

Present a grid or chart comparing the main features of the subject property with the comparables.

- **Units of Comparison Analysis** A key decision in the application of the sales comparison approach is the selection and development of proper units of comparison. All units of comparison appropriate for the subject property should be discussed and used later in the analysis of sales data. The description of the subject and comparable properties should include the units of comparison relevant to application of this approach; these units should also be displayed in the comparison grid or chart. If more than one unit of comparison is analyzed, separate adjustments must be performed for each.
- **Elements of Comparison Analysis** Elements of comparison differ from units of comparison in that the analysis of units of comparison attempts to find the unit of value important to buyers and sellers in the market for property such as the subject. An analysis of the elements of comparison isolates the differences in the components of the subject property and the comparable properties so that proper adjustments can be made for those components. The elements of comparison relevant to the subject property should be fully discussed and analyzed.
- **Market Adjustment Analysis** The application of this approach involves adjusting the comparable sales for differences between these properties and the subject property.

The properties selected must differ enough for this adjustment process to be adequately demonstrated. All adjustments should be developed from and supported by market data. Too often a candidate will base adjustments on cost, which is incorrect. The correct method is the sales comparison approach. The search for a proper adjustment factor is a search for the proper contributing value of a component. Cost does not always equal value. The comparable sales selected must allow the candidate to demonstrate market derived support for at least two adjustments. This may include a conclusion where no adjustment is required, as long as it is based on market-derived support.

The sequence of adjustments typically followed is:

- property rights conveyed
- financing
- conditions of sale
- location
- physical features

In the development and support of adjustments, the candidate can use properties other than the comparable sales described above. Where additional sales data are required solely for the purpose of developing an adjustment factor, a thorough description of those additional properties and their characteristics should be presented. Avoid using properties sold with atypical financing as comparables. If atypical financing is present, however, show all calculations for the adjustments.

If regression analysis, adaptive estimation (feedback), or an artificial intelligence program is used to help determine market adjustments, document the process fully. Describe the database used (including the relationship of the subject to the database), the technique employed, and how to interpret and apply the resulting coefficients. Describe specifically the application of the adjustment indicated by the model to the comparable properties.

Proper application of the adjustment process is essential. An adjustment chart or grid showing the application of each adjustment and the final adjusted value for each comparable is required. Check all calculations!

- **Summary of the Sales Comparison Approach** Apply the unit values selected for the subject property to the characteristics of the subject property. State in the final summary paragraph the indicated value from the sales comparison approach and the date to which this estimate applies. The final indicated value should not be an average of the individual indicated values.

F. Reconciliation and Final Estimate of Value

In this section, the candidate demonstrates keen 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.* Review, point by point, the most relevant data contained in the body of the report, in the description sections, and in the application of the approaches to value. This review should address the quantity, quality, and reliability of the data and conclusions in each section of the report.
2. *Analysis of Strengths and Weaknesses 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.* State a logical conclusion as to the final value estimate for the subject property and explain in detail the reasoning behind the value estimate. Include the date of appraisal in the statement of the final value estimate.

G. Exposure Time

Reasonable exposure time should be one of a series of conditions in the market value definition used for the demonstration appraisal. The candidate must define and develop an opinion of reasonable exposure time linked to the value opinion.

H. Certification

Each real property demonstration 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 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 performed no (or the specified) services, as an appraiser or in any other capacity, regarding the property that is the subject of this report within the three-year period immediately preceding acceptance of this assignment.
- 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 development or reporting 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 Code of Ethics and Standards of Professional Conduct of the International Association of Assessing Officers and the *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 real property appraisal assistance to the person signing this certification. (If there are exceptions, the name of each individual providing significant real property appraisal assistance must be stated.)

The certification must be signed by the appraiser and include the date signed.

Part 5 Addenda

The candidate is expected to provide supporting addenda as necessary. Some required addenda, such as photographs, are better placed with the sections and descriptions that they support. Others, such as maps, are better placed at the end of the report. For orientation purposes, all maps in the appendix should include arrows indicating north. Wherever addenda appear, the candidate should remember to reference them accurately in the narrative portions of the report.

Minimum required addenda are:

1. Maps of the area and city showing the location of the subject property
2. Map of the neighborhood, with neighborhood boundaries drawn, showing the subject property's actual location and zoning
3. Maps showing location and zoning of all comparable sales, rentals, and gross rent multiplier rentals/sales, as well as the subject property
4. Plot plan, with all dimensions and areas related to the narrative portion of the report
5. Building layout or floor plan sketch, with all dimensions and areas related to the narrative portions of the report
6. Qualifications of the appraiser, including employment, education, and experience

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 to make sure that all sections have been covered. Also, ask someone to review the report. An IAAO designee or Professional Designation Advisor may be willing to critique the report.

Appendices

Appendix 1

Writing Guide

Proper writing style, grammar, punctuation, and form are essential to impressing the reader that a report is professionally done. This appendix does not allow for in-depth coverage of these topics but discusses a few basic principles and pinpoints common violations of proper style and form. The goal is to help you avoid common errors that detract from the report as a whole.

Sources of Help

Many tools are available to help you produce a flawless report. Books and Internet resources are listed at the end of this appendix. Sophisticated word-processing programs, such as Microsoft Word or WordPerfect, help identify errors in spelling and grammar and can be set to hyphenate words properly at the end of lines. Even if you have excellent writing skills, use the word-processing program's tools for checking grammar and spelling to help you spot typographical and careless errors. Dictionaries not only help you spell and hyphenate words correctly, but can alert you to the connotations of synonymous words and point to the right one for the context.

Basic Principles

Consistency

Choose a style and stick to it. Before you start writing, make decisions about the style of headings, footnotes or endnotes, punctuation, capitalization, form of technical terms, and treatment of numbers. Create a style sheet to record your decisions so you can refer to it as you write. A written style sheet will save you time and help keep the report consistent during the weeks or months of writing.

Headings

The purpose of headings is to make the structure of your report clearer to the reader. The various levels of headings indicate the level of importance or generalization you assign to each topic and display for the reader your idea of the relationships among topics. The headings should follow your outline of the report. The structured format has made some of those decisions for you, but you may want to modify the scheme presented to fit your own needs.

Set up a style for three or four levels of headings (or heads, as they are called by editors). A major, or primary, section head is called an A-head; a secondary head is called a B-head; the next level, a C-head; and so on. Decide on the distinguishing features of each level of head: type style (roman, bold, or italics, underlined or not), size (the same size or different sizes), different font or the same as the type in the body of the report, position (centered, indented, or run into the text), capitalization (all letters capitalized, first letter of each word capitalized, or only the first word capitalized), and spacing after the head.

Word-processing programs allow you to choose a font for some of your heads that distinguishes them from the body of the report. For example, using Helvetica (a sans-serif font) for the A-heads and B-heads makes a nice contrast with Times Roman (a serif font). However, more than two type-faces in your report will make it look amateurish. The next page shows two sample heading schemes.

Appendix 1 continued

Samples of Heading Schemes

DATA ANALYSIS (A-head)

Status of Data (B-head)

Data Collection (C-head)

Sales data. (D-head) For the sales comparison approach....

DATA ANALYSIS (A-head)

Status of Data (B-head)

Data Collection (C-head)

Sales Data. (D-head) For the sales comparison approach....

Footnotes and Endnotes

Decide whether your sources will be recognized in footnotes or endnotes. Use a style manual (see list at the end of this appendix) to choose a particular style for your references. Add to your style sheet examples of the style you choose—one for periodical articles, one for books, one for unpublished material, and so on. The style you choose does not matter, as long as you apply it consistently. Pay attention to how your examples use capitalization, punctuation, italics, and so on. Footnotes and endnotes are discussed in more detail in appendix 2.

Punctuation

The purpose of punctuation is to make a writer's meaning clear. Most punctuation follows strict rules, but some punctuation is optional. You can choose, for example, whether to place a comma before *and* in a series:

Appraisal theory, data analysis, and research....

Appraisal theory, data analysis and research....

Both are correct, but once you choose a style, apply it consistently—always place the comma before the *and* or always leave it out.

Some specific rules of punctuation are covered later in this appendix.

Capitalization

Rules about capitalization can be boiled down to the following: Capitalize infrequently, and do not use capitalization as a device for emphasis. Observe the following rules for capitalizing in ordinary text (heads and table heads have their own rules).

Appendix 1 continued

1. Capitalize proper names of cities, states, countries, streets, bodies of water, organizations, and institutions. Do not capitalize city, state, street, association, and like words unless they are part of the proper name.

Massachusetts; the state of Massachusetts*; the state

Omaha; the city of Omaha*; the city

Lincoln Park; the park

4146 Grand Avenue; the avenue Lake

Huron; the lake

International Association of Assessing Officers; the association Bureau of Census;
the bureau

Oklahoma State University; the university

*When formal reference to the government entity is intended, it may be correct to use City of Omaha and State of Massachusetts.

2. Do not capitalize titles of individuals except when used in direct address: Mr. Jones is

Grant County assessor.

Mr. Jones is the assessor of Grant County.

I believe that President Jones has arrived.

Mr. Jones is the president of the university.

3. Do not capitalize technical terms such as cost approach, gross rentmultiplier, or correlation. When an acronym is used for a term (geo-graphic information system—GIS), there is no need to capitalize thewritten-out term.

4. Do not capitalize references to pages, chapters, tables, addenda, andso forth.

See page 6

This is explained in section 3

See table 1 in the addenda Compare

sale 6 with sale 5

Form of Technical Terms

Many acceptable variants of technical terms are used—*sales comparison approach* v. *comparative sales approach* v. *market approach*. Decide which variant you will use and then use it consistently. For example, if the term *incurable functional obsolescence* is used in one part of the depreciation section, the terms *functional incurable obsolescence* or *incurable obsolescence*, *functional*, should not be used in another part of the section. Use the glossary or index in your textbooks to identify the variants preferred by the IAAO. Similarly, if the word *data* is plural (the data are useful) in the beginning of a report, it should not become singular later (the data is useful). (Note: *Data* as a plural is correct; the singular is *datum*. Use of *data* in the singular is recognized by many authorities, however.)

Define technical terms when they first appear. If you use an abbreviation for a technical term, introduce it in parentheses after the first use of the term: *computer-assisted mass appraisal (CAMA)* system. Avoid sprinkling your report with abbreviations and stick to abbreviations that are well known. Abbreviations acceptable in informal situations should be avoided in a formal report: *capitalization rate*, not *cap rate*; *effective gross income*, not *effective gross*.

Appendix 1 continued

Treatment of Numbers

Decide when you will use numerals and when you will use words to represent numbers. According to some manuals, whole numbers from one through ninety-nine are always written out; according to others, only whole numbers from one to nine are written out. In general, the following rules apply.

1. In nonscientific text matter, whole numbers of less than one hundred should be spelled out, and numbers of one hundred or more should be expressed in figures:

The appraiser used ten comparables.

There were 325 sales in the subject neighborhood last year.

Note: An exception to this rule is made for references to parts of a book or report:

The comparables are listed in chapter 10, page 8.

2. Numbers applicable to the same category should be treated the same way in a paragraph; numerals should not be used for some numbers and words for others. If the largest number contains three or more digits, use numerals for all. If one number is a decimal, use numerals for whole numbers of other items in the same category:

There were 25 properties in this neighborhood and 116 properties in the other.

In the past five years, a 101-story building and two buildings of 20 and 30 stories were built.

Comparable A had 2.5 bathrooms, comparable B had 2, and the subject property had 3.

3. Notwithstanding any other rules, at the beginning of a sentence all numbers should be written out:

Three hundred sales and 105 comparables were found.

4. In sections of the narrative appraisal report dealing with valuation discussions, numbers may be expressed as figures, in accordance with rules for scientific usage:

The subject property has 4 rooms per unit. Sale 4 has 4.5 and appears to be the most comparable. Using the price for sale 4 as an estimate, we have

$45 \text{ apartments} \times \$8,067 \text{ per apartment} = \$363,015.$

5. Use the word *percent* within the text of a report instead of the sign %: The adjustment was 10 percent.

Because mathematical formulas and equations are used extensively in demonstration appraisal reports, it is important to follow consistently established conventions in their representation. There are different conventions for representing mathematical relationships ($2 \div 1$ or $2/1$). Choose one style, add the choice to your style sheet, and use it consistently. Also pay careful attention to consistent internal logic within an equation or formula. Following are some points to bear in mind:

Appendix 1 continued

1. Decimal fractions should always be preceded by a zero if the quantity expressed can equal or exceed 1.00. If the quantity cannot, in practice, equal or exceed 1.00, the zero is omitted:

The capitalization rate is .10. The probability is less than .05. The level of appraisal is 0.90.

2. Avoid using percentages within equations. Decimals are preferred. In either case, do not use decimals in equations sometimes and percent-ages at other times:

$$\$2,500 \times .25 + .10 \times \$300 = \$655,$$

not $\$2,500 \times .25 + 10\% \times \$300 = \$655.$

3. Do not express statements or headings that occur outside a formula or equation as if they were part of one. For example, the following heading is poor form, unless it is part of a formula:

Vacancy and credit loss for the subject property = 4 percent.

The proper form for this heading is

Vacancy and credit loss for the subject property: 4 percent.

The equals sign denotes that what follows is a result of a calculation, when in fact what is being expressed is that the vacancy and credit loss *is* 4 percent.

4. Use either symbols expressing mathematical relationships or use words represented by the symbols, but not both in the same expression. It is poor form to write:

$$\$280,500 \text{ divided by } 0.28 = \$1,001,786,$$

or

$$\$280,500/0.28 \text{ equals } \$1,001,786.$$

5. Punctuate equations at the end as though they were sentences or parts of sentences.
6. Within the same category, round decimals to the same number of places.
7. In tables and calculations, be sure numbers are properly aligned. Using the tab key rather than the space bar is one way to achieve proper alignment.

Clarity and Coherence

Clarity and coherence are inseparable in good writing. Clear writing expresses meaning precisely and unambiguously. Coherence in its literal sense means sticking together; in technical writing, it means that parts large and small are logically connected and congruous with one another. Consistency is an important tool in clear, coherent writing. Everything from the choice of words to sentence structure to paragraph structure to the grand outline of the whole contributes to both clarity and coherence. This section focuses on writing clear, coherent sentences and clear, coherent paragraphs.

Appendix 1 continued

Clear Sentences

Wordiness, lack of parallelism, double meanings, and overly complex sentences get in the way of clear expression of ideas.

Omit needless words.

- Avoid expressions containing “the fact that.” *Due to the fact that* can be replaced by *Because*.
- Use apposition instead of *which is* or *who are*: Instead of *The building, which is the oldest in the neighborhood*, write, *The building, the oldest in the neighborhood,....*
- Avoid constructions requiring *that*.

Property that is typical of that business type
Property typical of that business type

It might be that a quick phone call can remedy the situation.
A quick phone call might remedy the situation.

- Avoid *a period of* and *a time frame of*

For a period of a few years
For a few years

Sales from a time frame of two years
Sales from two years

Avoid the passive voice, extraneous ideas, and big words when the active voice and smaller words will communicate your meaning. Instead of, *The base home approach was developed to be used as a communication tool that will facilitate the understanding and interpretation of assessments by taxpayers*, write, *The base home approach is a tool to help taxpayers understand and interpret assessments*. If the reason behind development of the base home approach is important, write, *The base home approach was developed as a tool to help taxpayers understand and interpret assessments*.

Writing is often cluttered by repetition of phrases that are clear from the context. Examine each sentence you write to see if it contains ideas that are already implied by the context. For example, in the following sentence, is *in the cost approach* necessary? *To analyze physical depreciation in the cost approach....* If you are writing a section on the cost approach, it’s already understood.

Make parallel ideas parallel in structure. In the following list, *how old the building is* should be replaced by *age*:

Elements of comparison include the following:

- overall quality
- architectural attractiveness
- how old the building is
- size

Avoid ambiguity.

Appendix 1 continued

- For example, consider the following sentence: *The property was appraised as a whole, owned in fee simple title, and free of any encumbrance.* It is unclear whether the property was appraised as (if) owned in a fee simple title or whether the property was actually owned in fee simple title. Is *property* the subject of the passive verb *was owned* or is *owned* a participle modifying *whole*?
- Dangling modifiers may not completely obscure meaning, but disrupt the flow of thought. Consider, *Subtracting the accrued depreciation, the present value of the property was \$180,000.* Clearly the present value did not subtract the accrued depreciation. However, meaning in the following is not clear: *I used comparable sales from a period of two years to construct a sales comparison grid, which proved to be successful.* What was successful—using sales from two years or constructing a grid?
- Avoid overly complex sentences. Consider this sentence: *Adjust the indicated value of the property for any personal property (such as fixtures, furniture, and equipment) that may be included in the cost estimate and, if necessary, adjust this value, which reflects the value of the fee simple interest, for the property interest being appraised to arrive at the indicated value of the specified interest in the property.* It is difficult to discern the meaning. Possibly, the following is meant: *Adjust the indicated value of the property for personal property included in the cost estimate. The result reflects the value of the fee simple interest. If a partial interest is being appraised, adjust the value of the fee simple interest to obtain the value of the specified interest.*

Coherent Paragraphs

A paragraph is a group of sentences developing either a single topic or a specific part of a larger topic. Begin each paragraph with a sentence that states the topic or, occasionally, with a sentence that makes a transition from the previous paragraph. Reread each paragraph you have written to see if each sentence develops the topic of the paragraph. If you start another topic mid-paragraph, divide the paragraph and develop a new topic sentence or move material that does not belong to an appropriate place.

Some Rules of Punctuation

The Period

The period is used primarily to indicate the end of a declarative sentence. Rules for using periods in lists and with parentheses often cause confusion.

1. In vertical lists, do not use periods (or any end punctuation) unless one of the items is a complete sentence:
 1. sinking-fund method
 2. mortgage-equity method
 3. annuity method

Note: As in the above example, numbers in vertical lists are followed by a period; within a paragraph, numbers in a list are enclosed in parentheses: (1) sinking-fund method, (2) mortgage-equity method, and (3) annuity method.

Appendix 1 continued

2. Periods are placed *within* the parentheses used to enclose an independent sentence. Periods are placed *outside* the parentheses if the enclosed matter is part of an including sentence:

The result of my calculation is \$24,250. (I multiplied \$12,125 by 2.)

The result of my calculation is \$24,250 (derived by multiplying \$12,125 by 2).

The Comma

The comma indicates a small interruption in the continuity of a thought or sentence. One source of confusion is the compound sentence v. the compound predicate.

1. Clauses of a compound sentence (a sentence in which each clause has a different subject) are generally divided by a comma:

The income approach suggests one value estimate, but the cost approach gives another.

The land value is estimated first, and then the building value is considered.

2. A comma is *not* used in a sentence with a compound predicate (two or more verbs with the same subject):

The income approach gives a value estimate and acts as a check against the other approaches.

The land value is estimated first but bears no relationship to the building value.

3. A dependent clause preceding an independent clause is usually set off by a comma:

If the city data were useful, I would incorporate it in the report.

Although there is little market data to support such a conclusion, it can be supported in other ways.

4. A comma is used in full dates but not with simply the month and year. April 1, 1999
April 1999

The Semicolon

The semicolon indicates a more marked interruption in a sentence than does a comma. Following are a few common rules for its use.

1. A semicolon is used to separate the two parts of a compound sentence when unconnected by a conjunction:

The subject city has six parks; two are located in the subject neighborhood.

2. When used between clauses of a compound sentence, the following words should be preceded by a semicolon: then, however, thus, hence, yet, so:

Appendix 1 continued

No items of curable functional obsolescence could be found; hence, the amount is zero.

This amount is difficult to verify in the market; however, it is deemed an appropriate amount.

3. For clarity, a semicolon should be used to divide clauses of a compound sentence or items in a series subdivided by commas:

The cost of improvements, such as walks, driveways, and stoops; the cost of plans, including permits, fees, and insurance; and the market value of the land are all discussed in this section.

The gross rent multipliers are as follows: sale 1, 7.5; sale 2, 6.1; and sale 3, 7.2.

The Hyphen and the Dash

Hyphens are used within words to separate parts of a compound word or to indicate a word break at the end of a line. Questions about the appropriate use of hyphens may be resolved by the dictionary or a style guide. Over time, words such as *data base* become hyphenated, and then become a single word, *database*, and some authorities accept the unbroken compound more quickly than others. Some compounds are temporary—two or more related modifiers are hyphenated to prevent ambiguity.

It is an eight-unit apartment building of masonry construction.

The house has a 12-foot ceiling.

The property was of brick-and-mortar construction. The appraiser used the straight-line method.

The Chicago Manual of Style, 16th Ed. has a useful table of compounds and their treatment. (See Table 1 at the end of chapter 7.)

Dashes are marks of punctuation. Typesetters distinguish the en dash, which is longer than a hyphen, and the em dash, which is twice the length of the en dash. The two kinds of dashes have different functions. On a type-writer, the em dash is indicated by two hyphens closed up to the words around them. Some word processing programs can be set to insert the en or em dash using a symbol font or special characters menu.

En dashes are used most frequently to indicate inclusive numbers or dates: 1994–96

April–June 1999

However, if you use *from*, be consistent and pair it with a *to*: from 1994 to 1996, *not* from 1994–96.

An em dash is used in two ways: (1) to emphasize a thought and (2) to indicate a parenthetical element or a break in thought that would disrupt the sentence structure.

The appraiser finds data in the market—not a cost manual.

The appraiser estimated the reproduction cost—the cost of reproducing an exact replica of the building—as \$12 million.

Appendix 1 continued

Reference Materials for Style

Books

A classic resource and a wonderful book for tuning your ear to good writing is Strunk and White, *The Elements of Style*. This slim book can be found in any number of editions and even on line (see web resources below). Strunk and White sets forth elementary rules of usage and principles of style with an abundance of examples.

For more specific help with questions of usage, try Copperud's *American Usage and Style: The Consensus*, last revised and updated in 1980 and now out of print. Copperud compares the judgments of nine authorities on a variety of expressions and usages, such as the difference between *infer* and *imply*. The book is arranged alphabetically, which makes it easy to use.

Fowler's Dictionary of Modern English Usage, edited by Jeremy Butterfield, is also arranged alphabetically and is not as strict on many issues as previous editions and pays more attention to differences between British and American English.

The Chicago Manual of Style, referenced at the end of appendix 2, is a complex and sometimes confusing book. It will not teach you how to write well, but it is thorough in its treatment of the details of punctuation, capitalization, references, numbers, and so on. The book is well indexed and cross-referenced.

Web Resources

The world wide web contains an abundance of information on usage and style—from resources for esoteric grammatical questions to basic tutorials on English sentence structure. A few of these resources are listed below, and they can lead you to more.

Guide to Grammar and Writing—contains helpful hints on basic concepts

<http://grammar.ccc.commnet.edu/grammar/> or
<http://grammar.ccc.commnet.edu/grammar/index2.htm>

A structured course produced by the University of Ottawa

<http://www.uottawa.ca/academic/arts/writcent/hypergrammar>

A searchable on-line version of Strunk and White

<http://www.bartleby.com/141>

Common errors in English—lists and explains errors in usage, such as confusion between accept and except

<http://public.wsu.edu/~brians/errors/errors.html>

Grammar Girl's Guide to the English Language—a collection of the author's pet peeves gleaned from her years of experience as a technical editor with many useful tips, as well as links to other sites on grammar

<http://www.quickanddirtytips.com/grammar-girl>

Footnotes and Endnotes—Citation of Authorities

Throughout the *Guide to Real Property Demonstration Appraisal Report Writing* there are reminders to authors of demonstration appraisal reports that each step in the appraisal process must be explained and substantiated. The authority for a statement in the text of the report is often a written work, published or unpublished. Authors may wish to use written sources as authorities for definitions, explanations of techniques, or facts. Notes are used to cite authorities for statements in the text of the report.

Footnotes or Endnotes?

Notes can be either footnotes or endnotes, but not both in the same text. Footnotes are placed on the same page as the material they document. Endnotes are gathered at the end of the section with the heading “Notes.” Footnotes have the clear advantage of requiring no leafing back and forth between statement and documentation. They no longer suffer from the disadvantage of making typing of a page difficult. Word-processing programs make preparation of footnotes or endnotes easy. The program numbers and arranges the notes automatically. Footnotes may be used to comment on, to expand, and to qualify material in the text, and to acknowledge personal help. Because of their physical separation from the text, endnotes are less suited for these purposes.

By these criteria, the author whose notes are exclusively references to pages in one or more books or articles, each of which is cited infrequently, may decide to use endnotes. However, the author who wishes to comment on discrepancies between census data and city planning data in describing a neighborhood, to comment on reasons for favoring a particular method of capitalizing income, or to name authors in the text while giving page numbers in the notes should choose footnotes as the appropriate format.

Form and Content of Notes

Whether you choose footnotes or endnotes, you must present them in a standard form. Notes are numbered consecutively through the report in Arabic numbers, beginning with 1. A word-processing program will treat the numbers of the notes as superscripts. In the text, these numbers are placed after all punctuation marks (except a dash) at the end of a quotation or a sentence or, if necessary for clarity, at the end of a clause. A note prepared as commentary should be written as a single paragraph beginning with a capital letter immediately after the reference number. A note written to cite the authority for a statement begins immediately after the reference number with the initial letter capitalized.

The purpose of notes is to provide enough information for the reader to find the work cited for themselves. The arrangement of the note’s content varies according to the style chosen but should always be the same within that style. The following information should be included:

Appendix 2 continued

- Full name of author or authors (sometimes an institution rather than a person)
- Full title of work (include any subtitle)
- Editor if there is one (sometimes the editor is used in place of the author if no author is listed)
- Edition (unless it is the first)
- Title of larger work of which this is part
- Volume number or series title
- Publisher
- City of publication
- State or province if not clear (use two-letter abbreviation)
- Date of publication
- Page numbers or volume, issue, and page number
- URL of source if referenced from the Internet

Examples

The following examples have been chosen from the kinds of works that candidates might wish to cite. Numbers in parentheses refer to the notes below, which illustrate the form of citations for a variety of source materials. Other styles for notes are acceptable as long as the style is self-consistent.

The name of the person or group responsible for the work is entered in its usual order as given on the title page of the work cited. Responsibility may lie with one or more persons (1–4), an association (5–7), or a governmental agency (8–10). The person or group responsible for the work may not be an author but may be an editor or compiler (11–13). When it is not clear where responsibility lies, this element is omitted (14).

The title is transcribed in full as it appears on the title page, not the book's cover or spine (1,12). The title of the larger work is italicized; that of the smaller work (an article or a chapter) is enclosed in quotation marks (2–4).

The description of the larger work includes series number, edition number, volume number, and editor for books; it should include volume number for magazines and journals. Not all publications have all these characteristics (1–14).

The facts of publication are presented as: (place: publisher, date). The place must be distinguished from any other place with that name (1, 2, 8, 13), although if the state is clear, the state abbreviation may be omitted (9). The publisher may be a commercial firm, an organization (and one of its divisions, as in 12), or a government agency. The date is the publication date taken from the book's title page or cover. For magazines and journals appearing at regular intervals (and for annual volume, if desired) place and publisher are omitted; only the date of issue is inside the parentheses.

The final element is the exact page or pages being cited. For books, this element is preceded by a comma; for magazines, journals, and serial volumes it is preceded by a colon.

¹. William N. Kinnard, Jr., *Income Property Valuation: Principles and Techniques of Appraising Income-Producing Real Estate* (Lexington, MA: Heath Lexington Books, 1971), 107–8.

². Thomas H. Hall III, "Hotel and Motel Valuation," in *Encyclopedia of Real Estate Appraising*, 3rd ed., ed. Edith J. Friedman (Englewood Cliffs, NJ: Prentice-Hall, 1978), 635.

Appendix 2 continued

3. Bernice T. Dowell, "Hotel Investment Analysis: In Search of Business Value," *Proceedings of the Sixty-second Annual International Conference on Assessment Administration* (Chicago: International Association of Assessing Officers, 1996): 200.
4. Richard R. Simonds, "Accuracy of the Yield and Direct Capitalization Methods: A Twenty-Year Empirical Study of the Electric Utility Industry," *Assessment Journal* 6(4) (July/August 1999): 53.
5. International Association of Assessing Officers, *Property Assessment Valuation*, 2nd ed. (Chicago: International Association of Assessing Officers, 1996), 19–23.
6. International Association of Assessing Officers, Technical Standards Subcommittee, *Standard on Ratio Studies* (Chicago: International Association of Assessing Officers, 1999), 4.
7. Appraisal Institute, *The Appraisal of Real Estate*, 11th ed. (Chicago: Appraisal Institute, 1996), 100–104.
8. U.S. Bureau of the Census, *Taxable Property Values*, vol. 2, of *1992 Census of Governments* (Washington, DC: Government Printing Office, 1994), 143–45.
9. California, State Board of Equalization, *1997–98 Annual Report* (Sacramento: State Board of Equalization, 1999), 19.
10. Washington County, Oregon, Department of Assessment and Taxation, *Summary of Assessment and Tax Roll, Fiscal Year 1999–2000* (Hillsboro: Department of Assessment and Taxation, 1999), 54.
11. Edith J. Friedman, ed., *Encyclopedia of Real Estate Appraising*, 3rd ed. (Englewood Cliffs, NJ: Prentice-Hall, 1978), 1.
12. Robert M. Clatanoff, comp., *The Valuation of Utility and Transportation Property: A Classified Annotated Bibliography*, Bibliographic Series, no. 5 (Chicago: International Association of Assessing Officers, Research and Technical Services Department, 1983), 16.
13. Byrl N. Boyce, comp. and ed., *Real Estate Appraisal Terminology*, rev. ed. (Cambridge, MA: Ballinger, 1981), 42.
14. *Webster's Third New International Dictionary*, s.v. "market value."

Note: For *well-known* reference books the facts of publication are omitted, but the edition (if not the first) is specified. Page numbers are not used; the item is given, preceded by "s.v." (*sub verbo*, "under the word").

Abbreviated References

After the first full reference in a note, subsequent references to a particular source give author, short title, and page (for example, Kinnard, *Income Property Valuation*, 34).

Notes to Tables and Charts

Notes to tables and charts are numbered separately for each table and chart (not in the sequence of notes to the text) and are placed at the end of the particular table or chart.

Appendix 2 continued

References for Style of Notes

Many style manuals—some tied to specific professions—have been published. The IAAO favors *The Chicago Manual of Style*. The Associated Press also publishes a well-regarded manual, *The Associated Press Stylebook*. A visit to a library or a bookstore (physical or on-line) will give you a good idea of what is available.

The following two resources should serve most purposes.

- *The Chicago Manual of Style*, 16th ed. (Chicago: University of Chicago Press, 2010).
- Kate L. Turabian, John Grossman, and Alice Bennett, *A Manual for Writers of Term Papers, Theses, and Dissertations*, 8th ed. (Chicago: University of Chicago Press, 2013).

Appendix 3

Suggested Authorities and Materials for Review

The *Guide* is built upon and referenced to the IAAO textbook, *Property Assessment Valuation*. This source should suffice for most of the needs of the candidate. However, no one authoritative work is so complete that others may not be needed. The works listed below have been used by others for demonstration appraisal reports. They are also excellent sources for review of concepts that will be helpful to the candidate as the report is developed and written.

Student reference manuals for all IAAO courses, particularly:

Course 101: Fundamentals of Real Property Appraisal

Course 102: Income Approach to Valuation

Course 112: Income Approach to Valuation II

Course 311: Residential Modeling Concepts

Course 312: Commercial/Industrial Modeling Concepts

The Appraisal of Real Estate. Latest edition. Chicago: Appraisal Institute.

Fundamentals of Mass Appraisal. Latest edition. Chicago: International Association of Assessing Officers.

Mass Appraisal of Real Property. Latest edition. Chicago: International Association of Assessing Officers.

Property Appraisal and Assessment Administration. Latest edition. Chicago: International Association of Assessing Officers.

Appendix 4

REAL PROPERTY DEMONSTRATION APPRAISAL REPORT GRADING SHEET RESIDENTIAL

Name of Candidate _____

File Number _____

First Submission _____

Revised Submission _____

Column

- A** **100%** Satisfactory
- B** **75%** Marginally Satisfactory
- C** **50%** Improvement Needed
- D** **25%** Unsatisfactory
- E** **0%** Omitted

PART 1 INTRODUCTION

- A. Title Page
- B. Letter of Transmittal
- C. Table of Contents
- D. Summary of Salient Facts and Conclusions

A	B	C	D	E	SCORE

Maximum Value Part 1

2.00					
Final Score Part 1					

PART 2 APPRAISAL PROBLEM AND SCOPE OF WORK

- A. Type of Appraisal and Report
- B. Identification of Client
- C. Intended Use and Intended User(s)
- D. Identification of the Subject Property
- E. Property Rights Appraised
- F. Purpose of the Appraisal
- G. Definition of Value and Date of Value Opinion
- H. General Assumptions and Limiting Conditions
- I. Extraordinary Assumptions and Hypothetical Conditions
- J. Scope of Work

A	B	C	D	E	

Maximum Value Part 2

2.80					
Final Score Part 2					

PART 3 PRESENTATION OF DATA

A. History of Subject Property
 Maximum Value of this Section

A	B	C	D	E	
0.20					
Final Score of this Section					

B. City (or Area) Analysis
 1. Physical Factors
 2. Economic Factors
 3. Governmental Factors
 4. Social Factors
 5. Analysis and Conclusions Relative to Subject
 Maximum Value of this Section

4.00					
Final Score of this Section					

C. Neighborhood Analysis
 1. Definition and Source
 2. Description and Support of Boundaries
 3. Neighborhood Factors
 4. Analysis and Conclusions Relative to Subject
 Maximum Value of this Section

6.00					
Final Score of this Section					

D. Site Description
 1. Site Identification
 2. Utility Description and Availability
 3. Zoning and Restrictions
 4. Location Factors
 5. Conclusion Relating to the Utility of the Site
 Maximum Value of this Section

4.00					
Final Score of this Section					

E. Improvement Description
 1. Description of Improvement Characteristics
 2. Age/Condition Analysis of Short-lived Items
 3. Economic Life Analysis
 4. Functional Utility Description
 Maximum Value of this Section

4.75					
Final Score of this Section					

F. Assessment and Tax Analysis
 Maximum Value of this Section

2.50					
Final Score of this Section					

Maximum Value Part 3

21.45					
Final Score Part 3					

PART 4 DATA ANALYSIS AND CONCLUSIONS

A. Highest and Best Use Analysis

1. Definition and Source
2. Analysis and Support of Site as if Vacant
 - a. Legally Permissible
 - b. Physically Possible
 - c. Financially Feasible
 - d. Maximally Productive
 - e. Conclusion "as if vacant"
3. Analysis and Support of Property as Improved
 - a. Comparison of Ideal Improvement with Present Improvement
 - b. Analysis of Alternative Scenarios
 - c. Conclusions and Support for Obsolescence
 - d. Highest and Best Use Conclusion

A	B	C	D	E	

7.00					

Maximum Value of this Section

Final Score of this Section

B. Appraisal Process

1. Definition of Approaches to Value
2. Description of Principles
3. Procedures of Each Approach

Maximum Value of this Section

1.00					

Final Score of this Section

C. Cost Approach

Site Valuation

1. Explanation and Selection of Valuation
2. Description of Comparable Sales
3. Units of Comparison Analysis
4. Elements of Comparison Analysis
5. Market Adjustment Analysis
6. Logical Selection of Site Value

Building Cost and Justification

7. Distinction between Reproduction Cost and Replacement Cost and Reasoning
8. Explanation and Selection of Cost Method Used
9. Source and Development of Cost New

Depreciation Analysis

10. Explanation and Selection of Depreciation Method Used
11. Physical Curable and Incurable
12. Functional Obsolescence
13. Economic Obsolescence
14. Summary of Cost Approach

20.00					

Maximum Value of this Section

Final Score of this Section

PART 5 ADDENDA

A. Addenda

1. Map of City
2. Maps of Neighborhood and Comparable Sales
3. Plot Plan
4. Building Sketch
5. Photographs (Subject and All Comparables)
6. Qualifications of Appraiser

Maximum Value of this Section

1.75					
Final Score of this Section					

B. Structure

1. Neatness, Grammar, Punctuation, and Spelling
2. General Organization of the Report

Maximum Value of this Section

2.00					
Final Score of this Section					

Maximum Value Part 5

3.75					
Final Score Part 5					

Grader

Approved _____ Rejected _____

Graded by _____

Date _____

Grading Chairman

Approved _____ Rejected _____

Reviewed by _____

Date _____