



Guide to the Assessment Administration Specialist Designation



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A Message to the AAS Candidate from the Professional Development Committee

We wish to congratulate you for taking this major step in your career by choosing to earn a professional designation from the world's premier property appraisal and assessment administration organization. You have our encouragement, and that of all other professional designees, as well as our assistance to achieve this professional recognition. Your choice raises the level of professionalism for the entire profession.

This inaugural edition of the Guide to the Assessment Administration Specialist (AAS) Designation is designed to help you attain this designation while being a part of a very demanding profession. The Professional Development Committee designed this guide to provide the essential information needed to achieve an AAS designation.

As the Professional Designations Program continues to evolve and change, the Professional Development Committee is committed to revising and updating this material as necessary and seeks the input of all who read this *Guide* to help improve it. This inaugural edition of the *Guide* was completed under the direction of the 2000–2001 Professional Designations Subcommittee, composed of Chairperson, Ralph F. Difebo, CAE; Immediate-past Chairperson, Marion R. Johnson, CAE; Diane M. Ange, CAE; John C. Crissey, Jr., CAE; David B. Jackson, AAS; and Lillian R. Johnson, CAE. Special thanks for the development of this publication go to the Ad Hoc AAS Guide Subcommittee.

The Ad Hoc Subcommittee was composed of Chairperson David B. Jackson, AAS; Frederick M. Chmura, AAS; Alan S. Dornfest, AAS; Jeanette A. Duncan, AAS; David M. Gardner, AAS; Robert P. Graham, AAS; Asha V. Greene-Griffin, AAS; and John M. Yeatman, AAS. We are also thankful for the support and assistance of the IAAO Professional Development Committee, the IAAO Executive Board, and the IAAO staff.

The Professional Development Committee hopes this *Guide* not only helps you but also encourages you to persist in attaining the AAS designation. Achievement of the AAS is an honor for you and for the entire profession.

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Introduction

Earning a professional designation is a time-consuming and challenging task. The purpose of the AAS designation is to recognize professionalism and competency in administration of a variety of functions for property tax purposes. The AAS designation is intended for more experienced professionals, such as those involved at a supervisory or policy level, and assessment administrators with practical and theoretical experience who are routinely involved in managing activities, such as revaluations. These groups are the most likely to succeed in achieving the AAS designation.

Assessors, assessment administrators, personal property administrators, research analysts, policy analysts, assessment or appraisal supervisors, mapping and geographic information systems administrators, and information technology administrators (and those seeking such positions) that have three years of experience in the assessment field are encouraged to seek this designation. To be successful, a candidate must be willing to meet all of the requirements contained in this *Guide*.

This *Guide* is designed to provide a step-by-step procedure for completing the AAS designation requirements. Throughout this process, bear in mind that other professionals and laypersons can improve their understanding of this profession from what you know, have specifically learned through this process, and will continue to learn.

Designation Requirements

To qualify for the AAS designation, the following general requirements must be fulfilled by the date of sitting for the master examination:

- A. The candidate must be an IAAO member and candidate in good standing in the AAS program.
- B. The candidate must have at least three years of experience in the assessment field.
- C. The candidate must have credit for the following six educational offerings or their equivalents before the date of sitting for the master examination: (For courses 101, 102, 400, and 402, you may satisfy the requirement by challenging the examination for the course or workshop. You must attend Workshop 151; you may not challenge the examination.)
 1. IAAO Course 101—Fundamentals of Real Property Appraisal.
 2. IAAO Course 102—Income Approach to Valuation
 3. IAAO Course 400—Assessment Administration
 4. IAAO Course 402—Tax Policy
 5. IAAO Workshop 151—National USPAP
 6. At least thirty credit hours of elective courses or workshops relating to mass appraisal or public administration.
- D. The candidate must have satisfactorily completed **one** of the following requirements:
 1. An assessment administration case study examination.
 2. An evaluation of a jurisdiction's assessment practices.
 3. An assessment administration research project.

If the project submitted or the examination is failed twice, the candidate must select a different requirement.
- E. The candidate must pass a four-hour AAS master examination. This examination can be taken only after all other requirements have been met.
- F. Upon successfully completing the AAS master examination; the candidate must submit an affidavit attesting to experience before the designation can be conferred.
- G. The candidate must be a high school graduate or the equivalent.

Sources of Assistance

All candidates are encouraged to read this *Guide* thoroughly and fully utilize the IAAO's Paul V. Corusy Memorial Library, the IAAO website (www.iaao.org), and the following textbooks:

Property Appraisal and Assessment Administration (IAAO 1990)

Property Assessment Valuation, 2nd ed. (IAAO 1996)

Mass Appraisal of Real Property (IAAO 1999)

Glossary for Property Appraisal and Assessment (IAAO 1997)

Professional Designation Advisors

Professional Designation Advisors (PDAs) are professional designees who have volunteered to share their expertise and knowledge of the program with candidates. A PDA will be assigned to you when you become a candidate.

PDAs play a vital role in guiding, informing, and leading candidates through the designation process. PDAs may call a candidate to check progress or offer assistance. Members of the Professional Development Committee communicate frequently with PDAs and may also provide help to candidates.

Financial Assistance

The IAAO has three funds that can provide financial assistance to those who demonstrate a need. To obtain applications, call 312/819-6100.

Norman Register Scholarship Fund

The Norman Register Fund was established in 1970 to help qualified IAAO members further their education by enrolling in IAAO courses and enrolling in IAAO programmed instruction correspondence courses. The fund was named in honor of Norman Register, CAE, IAAO president, 1957–58.

Jeff Hunt, CAE, Memorial Candidates Assistance Trust

This trust was established to help candidates complete the requirements of the Professional Designation Program. The trust awards grants on the basis of need for such items as report grading fees, examination fees, and attendance at required courses. Grants will be awarded to IAAO members who demonstrate financial need and who intend to use the funds for purposes that support the association's goals and objectives. For administrative purposes, applicants are requested to submit completed grant application forms sixty days before the event or project that they wish to have funded.

Timothy N. Hagemann Memorial Membership Trust

The Timothy N. Hagemann Memorial Membership Trust helps assessing officers from smaller, rural jurisdictions become members of the IAAO, maintain their

membership in the IAAO, and take the IAAO's educational offerings. The trust also supports improved assessment in rural areas through direct grants for research projects, rewards for publication of technical articles on rural issues, and support of the activities of the IAAO's Rural or Small Jurisdictions Issues Section. Preference is given to assessing officials who exhibit financial need (both personally and in terms of their jurisdiction's resources), who work in jurisdictions with less than 7,500 parcels, and who work in rural jurisdictions. Individuals are not required to be IAAO members to apply. Any individual (or a group in the case of certain research, publication, or section assistance efforts) who works full- or part-time in the public sector may apply for a grant.

Selecting Your Designation Project

Each AAS candidate must select and complete one of the following: eight-hour case study examination, evaluation of a jurisdiction's assessment practices, or one property appraisal and assessment administration research project. Descriptions or guidelines for each requirement appear later in this *Guide*.

Eight-Hour Case Study Examination

The case study examination tests the candidate's ability to manage an assessment office and implement a revaluation. Emphasis will be on material covered in the IAAO 400-series courses. Most candidates choose this option.

Evaluation of a Jurisdiction's Assessment Practices

This project requires the candidate to complete a detailed report on the assessment practices of an assessment jurisdiction using the *Assessment Practices Self Evaluation Guide*. Please note that this project may not be completed for a jurisdiction that has been, in the past three years, the subject of a successfully completed designation project by any other candidate.

Property Appraisal and Assessment Administration Research Project

This project is most suitable to those who research or write papers for publication routinely. Approval of a project must be obtained from the IAAO Professional Development Department.

Assessment Administration Case Study Examination

The case study examination on assessment administration places the candidate in the role of an assessor of a hypothetical jurisdiction undergoing a reappraisal. The candidate is given data about the jurisdiction's parcels, staff, budget, ratio study results, individual properties, and policies, goals, and objectives.

The examination has two parts, each consisting of 50 multiple-choice questions, for a total of 100 questions. The candidate will have a maximum of eight hours to complete the examination. Successful completion of the examination requires a minimum passing score of 70 percent (thirty-five questions answered correctly) on each part. Failure of one part requires the candidate to retake the entire examination.

Part 1 of the examination requires the candidate to interpret the data about the jurisdiction. Part 2 requires the candidate to make administrative decisions after the governing board makes changes to the reappraisal budget. The candidate answers the questions by referencing the data about the jurisdiction and the reappraisal and applying his or her knowledge of all aspects of assessment administration.

The following are examples of the format of questions asked on the examination:

Example 1.

Which of the following is a correct statement regarding two strategic plans for the jurisdiction?

- A. It spells out specific operational details.
- B. It has no effect on events several years in the future.
- C. It is a narrow scale plan for accomplishing short-range goals.
- D. It provides a general framework for the goals of the reappraisal.

Example 2.

In reviewing the single-family sales ratio report for Neighborhood #3, you note the mean ratio is .853 while the weighted mean ratio is .720. This would indicate:

- A. There is insignificant variation in sale prices.
- B. All of the sales are low-dollar prices.
- C. There are high-dollar sales prices affecting the weighted mean.
- D. There are low-dollar sales prices affecting the weighted mean.

Example 3.

Based upon the income statement submitted by the taxpayer/appellant after you have reconstructed it, the indicated value for the example commercial property is:

A. \$750,000

B. \$800,000

C. \$850,000

D. \$900,000

Example 4.

How many staff appraisers will be required to field canvass all the single-family properties in Neighborhood #2?

A. 2

B. 3

C. 4

D. 5

Obviously, some of these questions can be answered only by extensively consulting the background data, which are contained in the examination booklet.

In general, the examination addresses all aspects of administration and appraisal taught in the courses required for the AAS designation and discussed in *Property Appraisal and Assessment Administration* (IAAO 1990). The candidate is strongly urged to review *all* required courses and the *entire* textbook before attempting the examination.

Evaluation of a Jurisdiction's Assessment Practices

General Guidelines

Writing an evaluation report requires original research, extensive data gathering, careful and systematic explanation of the method used, and originality of expression, combined with a painstaking organizational effort. From the perspective of candidate and grader alike, the evaluation report is much like a self-administered thesis or open-book examination.

A report that evaluates a jurisdiction's assessment practices is a detailed, written presentation of the assessment administration practices of a specific jurisdiction. A successful report includes the analysis of all relevant factors and data that lead to a conclusion about the jurisdiction's compliance or noncompliance with IAAO assessment standards. The report is an exhaustive narrative and testing device representing the candidate's best effort. This *Guide* provides an overview of the procedures and regulations that must be followed in writing and submitting the evaluation report. Your report should include answers to all questions asked in the *Guide*.

A successful report is written so that a nonadministrator or layperson can understand and follow the candidate's reasoning. Documented data and analysis in the report must substantiate the actual assessment practices of the jurisdiction, the

sources of data, the careful justification for each conclusion, and all comments. Merely stating an opinion in the evaluation 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.

The purpose of an evaluation report on assessment practices is twofold:

1. It provides a learning tool to help the candidate understand more fully what is required to have a first-class professional assessment office.
2. It provides the candidate with a better understanding of the strengths and areas needing improvement in the jurisdiction being evaluated.

A candidate choosing to evaluate his or her own assessment jurisdiction will not only have a great sense of self-accomplishment but also a working document to support change within the office. This is strongly encouraged by the Professional Development Committee.

The reader or grader of the assessment practices report should find a totally self-contained document that provides an understanding of the chosen jurisdiction's current operations and proposals for changes. The *Assessment Practices Self-Evaluation Guide* is the reference guide for developing the demonstration report. The report must be structured in three parts.

Part 1: Part 1 should provide an overview (executive summary) of the report. It will include the identification of the subject jurisdiction, type of jurisdiction, person performing the evaluation, date of the evaluation, and final determination of the strengths and weaknesses.

Part 2: Part 2 should be written to educate the reader/grader on the background of the jurisdiction and give the underlying conditions of the evaluation. It will contain the legal requirements of the assessment system, tax and assessment history, types of government and services provided, economic base and market conditions, purpose of the evaluation, and assumptions and limiting conditions of the report.

Part 3: Part 3 should contain a detailed narrative explanation on the analysis of assessment practices in the subject jurisdiction. It will contain explanations of all of the jurisdiction's systems and practices with references to supporting documentation included in the addendum. It will also contain the candidate's conclusions of the evaluation and recommendations for changes where necessary. In addition, *the evaluation answer form must be included and completed.*

It is important that the executive summary in Part 1 is documented by the analysis in Part 3. If conclusions stated in Part 1 are not supported by Part 3, the report will not receive a passing grade. It is also necessary for the evaluation to reference the appropriate addenda in the narrative portion of the report.

If sections of the *Assessment Practices Self-Evaluation Guide* do not apply to the subject jurisdiction, that fact must be clearly stated in the report.

Whenever actual assessment practices in the subject jurisdiction are contrary to suggestions in the *Assessment Practices Self-Evaluation Guide* or are not in compliance with IAAO's standards on assessment practice, the candidate must state recommendations for change. The candidate must identify at least *three* areas of assessment practice out of the ten given in the *Assessment Practices Self-Evaluation Guide* that require improvement, and have recommendations for change in those areas.

The successful candidate must obtain a minimum of seventy points on the report with at least sixty points in Part 3. Failure by a candidate to address a specific section, drawing faulty conclusions, or making inappropriate recommendations will cause the report to fail.

Originality of Work

When submitting an evaluation report for grading, candidates must certify the following:

1. The report has been personally prepared in its entirety, exclusive of typing, by the candidate.
2. The analysis and facts contained in the report are actual and not hypothetical. (Only the treatment of personal property assessment in a jurisdiction that does not assess personal property may be hypothetical, and this must be clearly noted.)
3. The evaluation is of an existing assessment jurisdiction.

The candidate must do original work. Copying from a published evaluation report or 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 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.

An evaluation 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. Verification of a fraudulent submission will result in a suspension from candidacy for at least one year, and perhaps permanently. The Professional Development Committee reviews all such cases to determine suspension periods and may recommend further action to the IAAO Ethics Committee.

Group work, through candidates' clubs or otherwise, is acceptable and encouraged, as long as the composition, analyses, and conclusions are the candidate's own.

The use of a jurisdiction that has been used by another IAAO candidate for an evaluation report within the last three years is prohibited. It is advisable for the candidate to check with IAAO's Department of Professional Development before beginning analysis of a particular jurisdiction.

Form

Professional appearance, logical organization, and absence of grammatical and spelling errors are important to the report and to the impression that 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 one another.
2. *Grammar and Spelling.* Simplicity is the key. Any technical terms should be defined. Although typographical errors may be found in the most thoroughly proofread report, they should be minimized by constant proofreading and by using word-processing software tools for checking grammar and spelling. Writing suggestions have been included in the appendix of this *Guide* (see appendix 1).
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.
4. *Appearance.* Plain white bond paper (8½'' × 11'') without letterhead, printed names, or logos must be used. Letterhead may be used for the Letter of Transmittal. The report should be professionally typed and must be bound in a spiral binding or other binding that will not come apart in handling. Loose-leaf binders are not acceptable. Any pamphlets or photographs included should be clear originals—not photocopies. Maps and other addenda should be presented in a way that adds to the professional appearance of the report.

Minimum Requirements

Evaluation reports submitted to the 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 AAS Designation Project Selection Form must be completed, signed by the applicant, and submitted with the report.

2. The Letter of Transmittal (see appendix 5A) must be dated, signed, and contain all items referenced in this *Guide*.
3. Plain white bond paper must be used for the report.
4. The report must be professional in appearance. Although it is permissible to submit a photocopy of the report, the copy must be of high quality. Photocopies of pamphlets and photographs are not acceptable.
5. The date of evaluation of the assessment jurisdiction must be within three years of the date the report is submitted to IAAO.
6. The report must contain a statement of certification signed by the candidate.
7. The report must be structured in three parts.
8. The evaluation answer form must be completed and included.
9. The candidate must certify that the final report conforms to the IAAO Code of Ethics and Standards of Professional Conduct.
10. The candidate must clearly identify at least *three* areas of assessment practice out of the ten given in the *Assessment Practices Self-Evaluation Guide* that require improvement, and have practical, detailed recommendations for change in those areas.

Staff Review

The research report will first be reviewed by IAAO staff for adherence to the guidelines. Any report failing to meet the guidelines will be returned to the candidate with comments and suggestions. If a completely inadequate report is submitted, it may be returned without specific comments and with a suggestion to the candidate to consider the selection of one of the other options. The staff review will not count as a “grading” of the report.

Evaluation and Grading

After the staff approves the report it will be sent to qualified graders. This is a peer evaluation process. The Department of Professional Development will select a grader. The grader will evaluate the report and issue a “pass/fail” grade. If the report is failed, it will be returned to the candidate with comments and suggestions. The candidate may revise and resubmit the evaluation report one time. If not accepted the second time, the candidate must choose one of the other two designation project options.

Property Appraisal and Assessment Administration Research Project

The candidate selecting the assessment administration research project option will conduct original research in a specific area of assessment administration and write a comprehensive report covering all aspects of the research. The purpose is to demonstrate the candidate's knowledge and ability in the field of property tax administration. Although this option is available to any candidate for the designation, it is generally most appropriate for policy-level administrators and administrators involved in technical areas such as ratio studies, economic analysis, or CAMA program administration. Candidates who have not conducted research or written research reports are not encouraged to attempt this option. As original research, the project should contribute to increasing the body of knowledge in property tax administration and stimulate additional inquiry.

Project Selection

The project must be related to property tax administration. Potential topics include, but are not limited to, policy and legal issues, tax burden analysis, development or criticism of assessment methods, administrative program evaluation or implementation, and administrative or tax structure analysis. The project can address current issues or take a historical perspective. It can have immediate practical application or examine issues in a highly theoretical manner. It can cover local, state, national, or international topics.

The project cannot be a position paper or an essay. For example, the most impassioned, literate, and well-reasoned argument in favor of initiating a public relations program will not be acceptable. However, an examination of a public relations program with cost-benefit analysis and other analytically derived observations and conclusions will be acceptable. Statistical compendiums or statements of fact without analysis and conclusions are not acceptable. Neither is a simple recounting of what happened in a jurisdiction ("this is what we did").

The project cannot be a general office administration or management topic unrelated to property tax administration. However, if an assessor's office is the subject of the research and if the applicability of the topic to assessment administration is demonstrated (including the ultimate impact on assessment quality), such a topic *may* be approved.

The project may be based on previously completed research conducted by the candidate. If so, any out-of-date research must be updated, and the report must be prepared in the appropriate format. Jointly conducted prior research is not acceptable in itself as a project. However, this research *may* be suitable as a

foundation for additional work to be conducted by the candidate. If so, proper acknowledgments and citations must be included in the report.

The research project may be conducted, in whole or in part, as a function of the candidate's job. If so, the candidate must do the planning and analysis, draw conclusions and make recommendations, and actually write the entire report. The only acceptable role for others is data collection, technical handling of data, typing, or clerical support. The candidate's project may be part of a larger research project involving others. If so, an explanation must be included in the research proposal, and proper acknowledgment must be given in the research report.

Project Proposal

The candidate must submit a project proposal in writing to the Department of Professional Development. The proposal will contain a general explanation of the topic, explain its relevance to assessment administration, and present an outline of the research strategy. The reasons for selecting the project should be stated, and the anticipated benefits of the project should be explained.

The research proposal should be submitted before beginning work on the topic. However, if some work has been completed (or is in progress), an explanation must be given. An explanation should be provided if the project is to be undertaken as part of the candidate's job. If so, any mandated deadlines or other constraints should be stated. If anyone else will be involved in the project, a thorough explanation must be given (and the guidelines presented under "Project Selection" must be followed).

The Department of Professional Development may refer the candidate to someone else (a PDA, Professional Development Committee member, AAS designee, or someone working in the area of the proposed research) for discussion of the topic. The director may request the candidate to revise and resubmit the proposal. The director's approval of the proposal must be obtained in writing.

The following are the general guidelines that the Department of Professional Development may use when considering approval of a project:

1. The candidate is the principal author and initiator of the project, i.e., the project would not have occurred without inception by the candidate. If a jurisdiction institutes a reappraisal of commercial property, the research project could be outcome-oriented, looking at long-term analysis of commercial property taxes, uniformity, and determining the tax equity history and consequences for residential vs. commercial property in the jurisdiction. An analysis that merely states the resources used or internal efficiencies gained from an internal reorganization designed to improve the number of appraisals that can be done would not qualify.
2. The project should involve policy-level analysis. The topic being studied should have broad or at least demonstrable effects on segments of the taxpaying public. For example, this could include contrasting neighboring

states' ratio studies or equalization systems with those in one's own jurisdiction to determine the degree of tax shifting or equity that occurs with different systems, long-term analysis of the effects of pollution control exemptions on quality of appraisal of affected industrial groups, in-depth analysis of senior citizen tax relief programs and comparison between counties or regions, and the like.

3. The project must have results that are of interest to and broadly, at least regionally, applicable to the assessment profession. For example, a California assessor may do a study of one jurisdiction to show the effects over time of Proposition 13. Although very specific, this could have meaning to many assessing officers in California and elsewhere where assessors are faced with defending the current system against proposals like Proposition 13.
4. The candidate can receive assistance and should be encouraged to extract information prepared by others but must identify the types of assistance received and the parts of the project completed by others. Other than for references, assistance in the form of data compilation is an example of acceptable involvement.
5. Every research project should include the following components:
 - a. Identification of the problem and the need for the analysis.
 - b. Identification of goals and objectives.
 - c. Identification of information sources.
 - d. A description of analytical methods to be employed.
 - e. Actual analysis and results and conclusions drawn based on the results.
 - f. Documentation including all references consulted.

Research Design and Method

These guidelines are not intended to instruct the candidate on how to conduct research or write a research report. It is assumed that the candidate choosing this option knows how to do both. Instead, they provide the philosophical basis for the project, offer suggestions on suitable topics, and explain the administrative procedures to be followed by the candidate.

Because assessment administration is multidisciplinary, the candidate's research should follow accepted practices used in academic research in the corresponding field. For example, the research design and method may be adopted from business or public administration, economics, history, law, political science, statistics, or a variety of other disciplines.

Depending on the nature of the project, it may or may not be necessary to conduct a thorough review of the literature. For example, a research project on

ratio study methods would probably require a comprehensive review of prior publications. A research project on the impact of a state's constitutional and statutory property tax rate structure on local government financing, however, might require significant documentation but only a very limited literature review.

Project Report

The report is to be a full accounting of the research project. It is not a summary. It must include any accessory material (to be placed in an appendix) and must always cite any use of the work of others, including unpublished works.

1. *Length:* The length of the report will depend on the nature of the research project. There is no minimum or maximum number of pages or words.
2. *Grammar and Spelling:* The report must be well-organized and professionally written, with proper grammar, spelling, and sentence and paragraph structure. If the report includes mathematical data, calculations must be error-free and rounding must be consistent. Statistical analysis, symbology, and research method must be consistent with accepted practices.
3. *Appearance:* The report must be professionally typed, double-spaced or space and a half, with 1½" left margin and 1" top, bottom, and right margins. Right margins may be justified. Plain, white 8½" × 11" bond paper must be used. Unless otherwise specified, subheadings, references, and other points of style or format should conform to IAAO's "Guidelines for Authors" (see appendix 3). The candidate should also refer to the style and format used in the *Assessment Journal*.
4. *Page Numbering:* Pages must be numbered with small roman numerals for the preliminary matter and arabic numerals for the text beginning with the first page and running consecutively to the end of the report. The appendix must be numbered separately and consecutively beginning with A-1. The report must be bound in a binding that will not come apart in handling. Loose-leaf binders are not acceptable. The original and two copies must be submitted.
5. *Preliminary Matter:* The preliminary matter must include a title page indicating that the material is copyrighted to IAAO (see the sample title page in appendix 5), table of contents, list of illustrations, and acknowledgments (if appropriate). The body of the report must be divided into chapters, beginning with the introduction. The introductory chapter should present a statement of the research problem, explain the importance and validity of the research, and describe the theoretical framework (including basic assumptions) within which the research was conducted. Depending on the nature of the project, hypotheses may be stated or the research problem may be posed in the form of questions or issues.
6. *Literature Review:* If the research includes a significant literature review, it should be the second chapter. However, it may be preferable (depending on

the nature of the project) to incorporate references into the body of the report wherever they fit rather than having a separate chapter devoted to the literature.

7. *Study Design:* If the report is based on the collection of empirical data, the next chapter should cover the design of the investigation. This should include the research method, description of the data, and the procedures followed in gathering and analyzing the data. If the report is based on critical or philosophical analysis rather than empirical research, the next chapter may begin the presentation of the issue, with appropriate background, documentation, and analysis.
8. *Chapters:* An empirically based research report should contain one or more chapters in which the results of the investigation are presented and analyzed. The chapters in the body of the report may vary according to the nature of the study and should in all cases be designed to enhance the clarity and logical presentation of the author's goal to communicate with the reader.
9. *Exhibits:* Exhibits (tables, figures, charts, and so on) should be used when appropriate. Exhibits should be placed on separate pages but included (and numbered) within the body of the text.
10. *Conclusions:* The final chapter of the report should be devoted to conclusions, and possibly recommendations. This chapter may also include any limitations of the study, suggestions for practical application of the findings, or comments about further research.
11. *Appendices:* If appropriate, an appendix should be included. The pages of the appendix must be numbered separately and consecutively beginning with A-1. The appendix is used for materials that supplement the text but are not suitable for inclusion in the text. The material in the appendix may be subdivided according to logical classifications. If so, each appendix should be identified with a letter and title and listed in the table of contents.
12. *References:* The final part of the report should be the list of references.
13. *Abstract:* The candidate will also prepare and submit a double-spaced abstract of the research report with each copy of the report. The abstract should not exceed 350 words and should not be bound with the report or numbered as part of the report.
14. *Cover Letter:* The candidate must submit a cover letter to the Department of Professional Development stating that the research project is the candidate's original work and that the candidate followed all requirements of the guidelines in coordinating research and writing the report (see sample in appendix 5).

Publication of Research

The abstract of the research report will be published in IAAO's *Assessment Journal* or *Fair & Equitable*. The complete research report will be maintained as a reference document in the IAAO library. The philosophy of the research project is that it should be shared with IAAO members and anyone else desiring to use it for further research or for practical application.

The designee *must* convert the report into a paper for presentation at the annual IAAO conference (and inclusion in the proceedings) or at another conference or professional meeting, or for publication in *Assessment Journal* or another professional journal. The conversion process is one of distillation, summation, and exclusion of noncritical material. For example, an eight-page paper with two illustrations may result from a fifty-page research report with fifteen illustrations and a thirty-page appendix. However, citation of the research report as a reference in the paper will enable other researchers or users to obtain a copy of the full report.

Comprehensive Examination

The written comprehensive examination for AAS designation tests competence—the candidate's knowledge of the specific subject. Detailed instructions regarding form and content of the examination are provided to the candidate before the examination. The examination is given only after all other requirements have been satisfactorily completed.

The examination may be administered by a proctor at any location and on any date; it is preferred that the proctor be an AAS or CAE designee. However, the Professional Development Committee may authorize a nondesignee to proctor the examination. Proctors cannot be related to the candidate; also, they may not proctor if there is any potential conflict of interest. An oral examination may be required at the discretion of the Professional Development Committee.

A candidate failing a comprehensive examination is permitted to retake it after thirty days.

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 to checking grammar and spelling which will 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 that you assign to each topic and show 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

Appendix 1 continued

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 typefaces in your report will make it look amateurish. Here are two sample heading schemes.

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.

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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).

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 rent multiplier, or correlation. When an acronym is used for a term (geographic information system—GIS), there is no need to capitalize the written-out term.
4. Do not capitalize references to pages, chapters, tables, addenda, and so 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

Appendix 1 continued

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*.

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 apartments \times \$8,067 per apartment = \$363,015.

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

The adjustment was 10 percent.

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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:

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 percentages at other times:

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

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

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.
8. When unfamiliar symbols or Greek letters are used, context-related definitions must be provided.

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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.

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*

Appendix 1 continued

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.

- 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.

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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.

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.

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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:
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 twelve-foot ceiling.

The property was of brick-and-mortar construction.

The appraiser used the straight-line method.

The Chicago Manual of Style has a useful table of compounds and their treatment. (See table 6.1 at the end of chapter 6.)

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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 typewriter, 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.

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 *Modern English Usage* is also arranged alphabetically. The latest edition (the third, published in 1996) is edited by R. W. Burchfield 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

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more. Please note that web addresses change frequently. If you cannot find one of these, something similar is sure to be available.

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

<http://go.to/grammar/> *or*

<http://webster.commnet.edu/HP/pages/darling/grammar.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>

On-line English grammar—specialized tutorials for business English with alphabetical index

<http://www.edunet.com/english/grammar/index.cfm>

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

<http://www.wsu.edu:8080/~brians/errors/index.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://webwitch.dreamhost.com/grammar.girl/index.html>

Appendix 2

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 in a library. 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:

- Full name of author or authors (sometimes an institution rather than a person)
- Full title of work (include any subtitle)

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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 numbers

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 (indicated by underlining if you are working on a typewriter); 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.

Appendix 2 continued

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.
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”).

Appendix 2 continued

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.

References for Style of Notes

Many style manuals—some tied to specific professions—have been published. The IAAO favors *The Chicago Manual of Style*, which is undergoing revision for a fifteenth edition. The Associated Press publishes a well-regarded manual (the latest edition published in 2000). 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, 14th ed. (Chicago: University of Chicago Press, 1993).

Kate L. Turabian, John Grossman, and Alice Bennett, *A Manual for Writers of Term Papers, Theses, and Dissertations*, 6th ed. (Chicago: University of Chicago Press, 1996).

Appendix 3

Guidelines for the Submission of Articles to *Assessment Journal*

The *Assessment Journal* publishes scholarly and practical articles on assessment administration, tax policy, and appraisal. Brief tips, legislative news, and position statements are also accepted.

Submission and Review

Feature articles for the *Assessment Journal* are reviewed by members of IAAO's editorial board. For review, one original and three dark photocopies should be submitted to

Assessment Journal
International Association of Assessing Officers
130 East Randolph Street, Suite 850
Chicago, Illinois 60601
Phone: 312/819-6109
Email: aj@iaao.org

An accompanying letter should include the author's name, address, telephone number, fax number, and email address. The letter should state that the manuscript has not been published elsewhere and is not being considered for publication elsewhere. Authors are usually notified within four to six months of acceptance or rejection.

Acceptance

Upon acceptance, the author must submit one manuscript copy and one copy on a diskette or as an e-mail attachment, with the article in a wordprocessing file, preferably Microsoft Word or Rich Text Format (RTF). The disk should be labeled with the file name, author's name, and type of software used to create the file.

Copyright will be retained by IAAO, and articles will be edited copy before publication.

Format

Manuscripts should be typed with wide margins on 8 1/2" x 11" paper. Keep text as simple as possible. Text boxes, equation boxes, and linked text create problems in editing. Any added formatting creates extra steps in the transition from word-processed text to typeset text. Number pages consecutively. Do not justify right margins. Do not indent paragraphs. Do not insert returns at the ends of lines, except at the ends of paragraphs. Because the review process is blind, the author's name should not appear on anything but the title page.

Appendix 3 continued

Title Page

The title page should contain the title, author's name, and place of work as follows:

A Study of Assessment Uniformity

Hugh R. Author

Hugh R. Author is deputy appraiser

Elsewhere County, Some City, Any State

Heads

Primary (a-level) heads should be flush left with initial capitals on a separate line.

Secondary (b-level) heads should be indented with initial capitals on a separate line.

Tertiary (c-level) heads should be italicized and appear on a separate line. Do not use all capitals, bold, or numbers for heads.

Footnotes, Endnotes, and References

We do not publish footnotes (except for brief acknowledgements) or endnotes. If you submit a paper with footnotes and endnotes, on acceptance you will be asked to incorporate them in the text or delete them.

References, listed alphabetically by author, should be typed at the end of the article. Any entry in the reference list should have a corresponding reference within the text. Use the author-date system of documentation. In the text, cite the author's last name and the date of publication in one of the following forms:

- (Arnold 1998)
- Arnold (1998) argues...
- (Smith and Jones 1993)
- Smith and Jones (1993) present...
- (James, Taylor, and Peters 1994)
- James, Taylor, and Peters (1994)
describe...

There is no punctuation between the author's name and the date. A specific page or section of the work cited follows the date and is preceded by a comma:

(Johnson 1998, 23).

For more than three authors, use the name of the first author followed by et al.:

(Samuelson et al. 1998)

Two or more references given together should be separated by semicolons:

(Arnold 1998; Johnson 1989)

Appendix 3 continued

Two or more references by the same author are cited by their dates separated by commas:

(James 1998, 1999)

If the work cited is published by an organization and no author is given, the name of the organization should serve as the author's name. Acronyms may be used after the first reference to the organization:

(International Association of Assessing Officers [IAAO] 1982)

Within the text, citations of legal cases should use the name of the case in italics and the year. In the reference list, use the complete citation (see below).

Reference List

For all journal articles, provide inclusive pages. Note that the titles, except for journal titles, have only the first word and the first word following a colon capitalized.

Journal Article

Amick, R.J., and J.C. Percell. 1962. An application of residual analysis for determining relationships between selected variables and unit cost. *Journal of Farm Economics* 44:1423–25. (Use inclusive page numbers.)

Amick, R.J. and J.C. Percell. 1962. An application of residual analysis for determining relationships between selected variables an unit cost. *Journal of Farm Economics* 44(1):1423-25. (Use this format for including both volume and issue numbers.)

Book

Dasso, J. 1973. *Computerized assessment administration*. Chicago: International Association of Assessing Officers.

Chapter in a Book

Englebert, E.A. 1979. Political aspects of real estate taxation in relation to metropolitan growth and planning. In *Land and building taxes: Their effect on economic development*, ed. Arthur P. Becker. Madison, WI: University of Wisconsin Press.

Legal References

United States v. Smith, 182 F. 2d 305 (2d Cir. 1953).

For more information on the form of references, consult *The Chicago Manual of Style*. 14th ed. Chicago: University of Chicago Press, chapter 16.

Appendix 3 continued

Tables and Figures

Type all tables and figures in a separate file, one to a page, and place at the end of the manuscript. Tables should be as simple as possible. Do not link tables or figures from other programs. Tables and figures linked from other programs can be edited only in the source file. Supply figures in clear, dark camera-ready copy in addition to the electronic file. If the electronic file cannot be accessed, the figure can be scanned.

The table (figure) should be headed Table (Figure) followed by an arabic numeral (1, 2, and so on). The title of the table (figure) should be typed with initial capitals (for example, Assessed Value Totals). In column and row headings, capitalize only the first word of each heading. In the text, type on a separate line, at the end of the first paragraph referring to the table (figure),

////Insert table (figure) # here////

Any Questions?

If you have any questions about formatting or submitting articles for publication, please call the Publications and Marketing Department at 312/819-6109 or send email to aj@iaao.org.

Appendix 4 Suggested Authorities and Materials for Review

The *Guide* is built upon and referenced to the IAAO textbook, *Property Appraisal and Assessment Administration (1990)*. 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 to satisfy the AAS requirements. They are also excellent sources for review of concepts that will be helpful to the candidate as the report is developed and written or in reviewing for the case study examination.

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
- Course 400: Assessment Administration
- Course 402: Tax Policy
- Course 500: Personal Property

Workshop 151: Standards of Practice and Professional Ethics

Improving Real Property Assessment. Chicago: International Association of Assessing Officers, 1978.

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

Mass Appraisal of Real Property. Chicago: International Association of Assessing Officers, 1999.

Appendix 5A Letter of Transmittal

A. Candidate
1234 Main Street
Anytown, Anywhere 99999

Date

Director of Professional Development
International Association of Assessing Officers
130 East Randolph Street, Suite 850
Chicago, IL 60601

Re: Letter of Transmittal—AAS Project: Guilderland Assessment Practices
Evaluation Report

Dear [Director of Professional Development]:

The attached Assessment Practices Evaluation Report completes my analysis of the assessing practices in the Anytown, Anywhere. This evaluation report is being submitted for evaluation by the Professional Designation Program in partial fulfillment of the requirements for the International Association of Assessing Officers' Assessment Administration Specialist (AAS) professional designation.

This report, containing ### pages and an addenda of ### exhibits, is presented as a demonstration of my knowledge of, ability to evaluate, and ability to make recommendations for improvement, if necessary, in the assessment administration procedures of an actual assessment jurisdiction. The report documents the findings and supports my conclusions based on assessing practices culminating in the ##### assessment roll. The information was gathered from MONTH/YEAR through MONTH/YEAR. Thus, the effective date of evaluation was as of the ##### assessment roll, MONTH/DATE, YEAR.

Effective assessment administration practices are demonstrated when there are fair appraisals of property and the laws of the applicable state are employed in accordance with the legislative intent. Of the ten components of assessment administration evaluated to measure effectiveness, this municipality, in my opinion, needs to improve assessment practices in ## of the ten components.

Sincerely,

A Candidate

Appendix 5B Research Report Title Page

THE IMPACT OF CITIZEN ADVOCACY

ON PROPERTY TAX REFORM IN ANYWHERE

A research report submitted in partial fulfillment of the requirements for the Assessment Administration Specialist (AAS) professional designation of the International Association of Assessing Officers

By

A.B. Candidate
Property Tax Analyst
Ad Valorem Division
Anywhere Revenue Department
Anytown, Anywhere 99999

Appendix 5C CERTIFICATION AND LIMITING CONDITIONS

I hereby certify that, except as otherwise noted in this report:

All work and analysis performed in conjunction with this report was conducted in compliance with the International Association of Assessing Officers' Code of Ethics and Standards of Professional Conduct, and IAAO Standards.

This report is intended to demonstrate the author's knowledge of the assessment process and ability to apply assessment standards and procedures to an actual jurisdiction as partial fulfillment of the requirements for an IAAO professional designation. Disclosure or dissemination of this report, provided as a professional courtesy to the {Municipality} for their cooperation and assistance, could lead to improper interpretation of its contents.

I am a member in good standing of the International Association of Assessing Officers (IAAO) [AND OTHER ORGANIZATIONS]. I have completed the educational requirements for the International Association of Assessing Officers' (IAAO) Assessment Administration Specialist (AAS) [AND OTHER PROFESSIONAL DESIGNATIONS].

I have no personal interest [OTHER THAN BEING AN EMPLOYEE OF THE MUNICIPALITY] or bias with respect to the subject matter of this evaluation report or the parties involved.

My employment or compensation is not dependent on the reporting of a predetermined conclusion or recommendation from the contents or conclusions contained within this report.

All opinions and conclusions expressed in this report are the sole responsibility of the undersigned and are not meant to represent the opinions of the International Association of Assessing Officers [OR ANY OTHER ORGANIZATION THE CANDIDATE IS ASSOCIATED WITH].

No one other than the undersigned conducted interviews, obtained information, or prepared the analyses, conclusions, and opinions concerning the assessing practices in the [MUNICIPALITY] that are set forth in this report.

The most pertinent information is reported in this Assessment Practices Evaluation Report. Every effort was made to verify the authenticity of information from public records and personal interviews. To the best of my knowledge and belief, the statements of fact contained in this report, upon which the analyses, conclusions, and opinions expressed herein are based, are true and correct. I assume no responsibility for invalid data or misinformation provided to me.

Information contained in this report was based solely on the practices and results of the ##### assessment roll and cannot be used to make implications relative to any other time period or assessment roll.

CANDIDATE'S PRINTED NAME

Appendix 6 AAS Designation Project Selection Form

AAS DESIGNATION PROJECT SELECTION FORM

***Please specify which of the following projects you intend to complete by checking the appropriate box. If applicable, complete the information requested for the project chosen.*

OPTION #1: ASSESSMENT ADMINISTRATION CASE STUDY EXAMINATION

This case study examination places the candidate in the role of an assessor in a jurisdiction. The examination gives the candidate data on the jurisdiction's parcels, office personnel, budget, assessment ratio study results, individual property data, and policies/goals/objectives. The candidate is asked to respond to questions about administering the assessor's office based upon the data given.

Note: This project can be completed at any time during the candidacy period; however it is highly recommended that the student complete all required courses prior to attempting this project.

OPTION #2: ASSESSMENT ADMINISTRATION RESEARCH PROJECT

The candidate choosing this option will be required to conduct original research in a specific area of assessment administration and write a comprehensive report covering all aspects of the research.

Note: Although this option is available to any candidate for the AAS designation, it is generally most appropriate for policy-level administrators and administrators involved in technical areas such as ratio studies, economic analysis, or CAMA program administration.

OPTION #3: EVALUATION OF A JURISDICTION'S ASSESSMENT PRACTICES

The candidate choosing this option will be required to undertake an evaluation of the assessment practices in an actual jurisdiction following the *Assessment Practices Self-Evaluation Guide* published by the IAAO. The candidate will report the findings of the evaluation in a narrative format.

Note: Candidates electing this option need to reference the *Assessment Practices Self-Evaluation Guide*. If you need to purchase this guide, please enclose a check or money order made out to the IAAO for the amount of \$35.00 (US) when returning this form.

Jurisdiction to be evaluated: _____

Signature: _____

Date: _____

Candidacy File Number: _____

