REPORT OF

COMMITTEE TO STUDY AND REPORT ON ASSESSMENT PRACTICES, PROCEDURES AND POLICIES IN ALLEGHENY COUNTY

Prepared At

The Request Of

The Board of County Commissioners County of Allegheny

- II. Sub-Committee to Study Long-Range Solutions to Property Assessment Problems.
 - A. Gordon L. Mulleneaux, Chairman Director of County Department of Administration.
 - B. Richard L. Longini, Ph.D. Professor of Electrical Engineering and Urban Affairs at Carnegie-Mellon University.
 - C. Edward L. Ivory, Realtor Former President of the Greater Pittsburgh Board of Realtors.
- IIT. Sub-Committee to Study Legislative Solutions to Property Assessment Problems.
 - A. John E. McAllister, Chairman Former Executive Assistant to County Commissioner Jim Flaherty.
 - B. Robert Gaitens Administrative Assistant to County Commissioner Thomas J. Foerster.
 - C. Emerson G. Hess, Esq. Solicitor for the Borough of Crafton, which is one of the plaintiffs in a pending case, testing the constitutionality of certain sections of the Second Class County Assessment Law.

C.7

1

ι, C

As the result of these sub-divisions, two separate Sub-Committee reports have been compiled and form a major part of the Study Committee's Report - one being the Sub-Committee's report on Short-Range Solutions and the other being the Sub-Committee's report on Long-Range Solutions. Since the Sub-Committee on Legislative Solutions could not realistically prepare any report until the completion of the other two Sub-Committee's reports, it has not compiled any separate report, but instead, participated fully in the formulation of the Study Committee's Findings, Conclusions and Recommendations, particularly with respect to those provisions of a legislative nature.

During the course of this Study, many hours were spent in investigating the present property assessment system, in holding meetings and in writing reports. Some of the persons formally interviewed were Dr. Raymond L. Richmond, Dr. Robert Carbone, Dr. D.J.M. Muffett, Kenneth E. Christoff, J. Craig Kuhn, Esq., George Shankey, John L. McManus and various members of the County Board of Property Assessment, Appeals and Review. The results of this Study clearly indicate a pressing need for prompt and immediate reform in the operation of the real property assessment system. Some of the Study Committee's recommendations will require legislative action while others may only require administrative or policy changes. The Board of County Commissioners is urged to use the full force of its weight, power and influence to implement these recommendations as soon as possible.

-3-

In submitting this Report, it has not been the intention of the Study Committee to disparage any person or entity, including the Board of Property Assessment, Appeals and Review, whose members and employees have cooperated fully throughout this Study. Moreover, this Study makes no reference to personal property assessments nor to any property exemptions but sticks solely to the current practices, procedures and policies in the administration of real estate property assessments and taxation.

I wish to commend the staff of the Western Division of the Pennsylvania Economy League, Inc. for their constant aid. Particular appreciation must be directed to Mr. J. Paul Riden whose efforts and abilities insured the preparation of this Report.

The experience in preparing this Report has been unique and refreshing in that it has brought nine individuals with somewhat strong divergent ideas to focus on a common problem. Nevertheless these individuals have unanimously joined together, as indicated below, in making sundry recommendations which we hope would tend to solve both the shortrange and long-range problems in the real property assessment system as presently practiced in Allegheny County.

Very truly yours,

alefander A. Do

ALEXANDER J. JAFFURS Study Committee Chairman

AJJ/ph

oseph D

Gaitens

John ter

Edward L. Ivory

JOINDER

Esq. Donald Lee.

· • • •

Gordon L. Mulleneaux

Emerson G. Hess, Esq

TABLE OF CONTENTS

1

LETTER OF TRANSMITTAL

PART	I	-	FINDINGS, CONCLUSIONS AND RECOMMENDATIONS	1
PART	п	~	SHORT RANGE SUBCOMMITTEE REPORT	14
			Introduction	14
			Board of Property Assessment, Appeals and Review	18
			Appointment and Qualifications; General Powers and Duties; Salaries of Board Members; Organization; Personnel	
• ·	-		Assessment Process	23
		_	Property Record Cards; Determining Pro- perty Assessments; Source Records; Sales Data; Training and Supervision; Assignment of Territories; Building Permits; Recording of Deeds	
			Appeal Process	36
			Notice of Change of Assessment; Appeal Filing; Review of Assessments; Appeal Hearings	
			Deed and Assessment Registry Office	40
			Function; Organization; Bureau Duties and Responsibilities	
			Bureau of Systems and Computer Services	45

PART I

FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

The Committee to Study and Report on Assessment Practices,

Procedures and Policies in Allegheny County has reached the conclusion,

as a result of its study into the assessment practices and procedures, that

the following findings have contributed to the inability to establish credibility

and uniformity in the assessment system in Allegheny County.

1. The Board of Property Assessment, Appeals and Review does not function as an independent and autonomous Board.

5.4

- 1

- Based upon information supplied to the Committee, the ratio of assessment to market valuation of individual properties varies widely. (See pages 26 and 27 and Exhibit V.)
- 3. The Board of Property Assessment, Appeals and Review has a dual responsibility for the supervision of the administrative process of establishing the assessments as well as the hearing of appeals.
- 4. Each of six members of the Board of Property Assessment, Appeals and Review supervises the assessment process in six separate geographic areas of Allegheny County without uniform procedures.
- 5. There is no single chief executive officer with authority to direct the overall administrative and assessment process.
- 6. The triennial assessment as administered in Allegheny County (1/3 of the County each year) results in an inequitable distribution of the County tax burden.
- 7. There has not been adequate funding to establish an improved assessment records system and obtain needed and adequate equipment.

- 8. There are inadequate and incomplete property records and there is insufficient data on the variables which influence actual market value of real property recorded on the property records.
- 9. There is no centralized source of assessment information available to the public or assessors on the information which does exist.
- 10. There is no merit or incentive system to encourage and recognize assessors who avail themselves of in-service training and educational programs.

Recommendations for Improving Assessment Procedures Through Administrative Action

The Board of Property Assessment, Appeals and Review should cease to function in its dual capacity as administrators and appeal board and turn over the administration of all assessment and general office functions to a chief executive officer. The Board of Property Assessment, Appeals and Review should

continue to:

- Perform the appeal function;
- Exercise supervisory responsibilities over the chief executive officer;
- Take formal actions required of the Board of Property Assessment, Appeals and Review in its legal capacity.

The Board of Property Assessment, Appeals and Review should

cease to supervise the actual assessment process and should not be assigned

to geographic areas of the County.

Therefore, it is recommended that:

- 2 -

- 1. The Allegheny County Salary Board create the position of Director of Assessments and that the Board of Property Assessment, Appeals and Review appoint the Director of Assessments and grant to the position, by Board resolution, the authority to carry out the following duties:
 - A. Make or supervise the making of all assessments and valuations of property for tax purposes in Allegheny County.
 - B. Direct and supervise the activities of assessors and other employees except the members of the Board of Property Assessments, Appeals and Review and its Legal Counsel.
 - C. Establish and maintain on a current basis a permanent records system which shall consist of:
 - (1) Tax maps;
 - (2) Property records cards arranged geographically according to location of property on tax maps. The cards shall set forth the location and description thereof, the acreage or dimensions, description of improvements, if any, the owner's name, address and date of acquisition, the purchase price, if any, set forth in the deed of acquisition, the actual market value and assessed valuation established, and the identifying lot and block or pseudo number shown on the tax map;
 - (3) Property owner's index consisting of an alphabetical listing of all property owners, setting forth brief descriptions of each parcel or lot owned and cross-indexed with the property record cards and tax map.
 - D. Disclose to the owner of any assessed property, on request, the method of valuing that property and the specific calculation and reasons used to arrive at the actual market value and assessed valuation.
 - E. Recommend for approval by the Board of Property Assessment, Appeals and Review the hiring, promotions, dismissals and demotions of all employees.

- F. Develop and maintain personnel rules and regulations including a merit system and personnel qualifications.
- G. Develop and maintain rules and procedures for the assessment of real property.
- H. Develop an organizational structure that permits the carrying out of the assessment function in an efficient and effective manner, taking into consideration at all times the need for full disclosure of assessment information in order that credibility may be established.

The Committee believes that it is desirable for the purpose of achieving equitable assessments that the staggered triennial assessment system be abolished and in its place there be an annual County-wide assessment of real estate for tax purposes.

- It is, therefore, recommended that:
 - 2. The Board of Property Assessment, Appeals and Review and the Director of Assessments move to establish an annual County-wide assessment as soon as possible but no later than January 1, 1979.

In the event that, in the opinion of the Legal Counsel for the Board

of Property Assessment, Appeals and Review, an annual County-wide assess-

ment is not permissible under present assessment laws governing second

class counties, it is recommended that:

3. Legislation be sought which will permit counties of the second class to make an annual county-wide assessment.

The Committee does not recommend a moratorium or freeze of current assessments.^{*} Until such time as annual assessments are implemented either by administrative or legislative action, the assessment

- 4 -

^{*}This statement may be affected by Act No. 100 of 1976, House Bill No. 361, Printer's No. 3402, which Governor Shapp signed on June 24, 1976, effective immediately.

officers should continue triennial assessments and in addition adjust assessments in neighborhoods or municipalities which do not fall within what may be considered normal deviation from the formally established assessment ratio. ¹

The Committee is of the opinion, as a result of its investigation, that the average ratio of assessed valuation to actual market value in Allegheny County is closer to 33-1/3 percent than it is to 50 percent.

Therefore, it is recommended that:

4. The ratio of assessed value to actual market value be formally established by the Board of Property Assessment, Appeals and Review at or near 33-1/3 percent and that the percentage established be applied no later than January 1, 1977.

The Committee concludes that the assessment records should be centralized for the convenience of the general public and for more efficient use by the assessors. Ideally, the assessment records should all be located on one floor.

Therefore, it is recommended that:

5. The activities of the Deed and Assessment Registry Office that relate to and are a necessary part of the assessment function be transferred to the Board of Property Assessment, Appeals and Review.

¹"The assessors shall also, between the triennial assessments in all cases where it is apparent that any assessment is not in accord with the generality or uniform standard of assessments, revise and correct the same by increasing or decreasing the same where the value of the property or subjects of taxation assessed do not conform to the generality or uniform standard of assessments." 72 P.S. 5452.13.

- 6. The Director of Assessments move to establish a centralized assessment records system which provides for access by the general public to the information contained in the assessment records.
- 7. The Director of Assessments develop and maintain a system whereby copies of tax maps, which include the assessed value of each property on the maps, can be made available to the public upon request and copies be furnished at a nominal charge.

The Committee's findings indicate that present assessment records are inadequate and incomplete. The Committee is also of the opinion that very specific recommendations on goals relating to data acquisition and a new assessment system are called for. This is necessary as the Committee has the very strong impression that the Board of Property Assessment, Appeals and Review is not inclined in these directions. For example, data may be secured in ways that greatly reduce costs, advance the time of implementation of more sophisticated systems, and involve the taxpayer constructively.

Property owners participation systems have been used very successfully in other places, such as New Orleans and in Pierce County, Washington (The Taxpayer Assisted Property Evaluation System - TAPES). The techniques should be compatible with information acquisition and updating procedures proposed by the County's Bureau of Systems and Computer Services which is detailed in Part III - Long Range Subcommittee Report.

Comparisons must also be made between automated systems and those which utilize computers to assist assessors.

- 6 -

Therefore, it is recommended that:

8. Studies and tests involving property owner participation for data acquisition should be made and implemented.

Equity involves the basic ideas of: assessments based upon updated information applied simultaneously throughout the County; means of obtaining comparable properties with value corrections for neighborhood, size and structural differences; minimization of percent error rather than absolute error; and that any change from direct use of the formula should be <u>care-</u> fully documented to avoid the appearance of preferential treatment.

Therefore, the Committee also recommends that:

- 9. Any new assessment system should be designed on the basis of equity.
- 10. That the various completely automated computer assessment systems be tested and the system best meeting the equity requirements be adopted.
- 11. There be established an internal control system for continuous monitoring.

In order to improve the credibility of the assessment process and

to assist the general public in its understanding of the assessment on which

taxes are based, it is recommended that:

- 12. Public forums and seminars should be conducted to explain the criteria and the assessment process.
- 13. Two sets of assessment books be prepared by the Bureau of Systems and Computer Services to be used for public inspection; one set to be an alphabetical listing by owner's name and the second set to be a listing by the street address of the assessed property and that both sets be made available in each respective municipality.

- 14. A notice be published and news releases prepared for Allegheny County news media stating that the assessment information will be available for public inspection at specific locations and at specified times.
- 15. The Notice of Change in Assessments and the tax bills show the actual market value and the assessed value established by the Director of Assessments together with the assessment ratio formally adopted by the Board of Property Assessment, Appeals and Review.
- 16. The Director of Assessments establish a system within the administrative process whereby taxpayer inquiries and complaints on assessments and related matters can be heard and errors corrected prior to a hearing before the Board.
 - 17. Conferences be scheduled regularly in municipalities wherein property owners can meet with the appropriate assessor.
- In order to improve the capabilities of the assessors and to improve

the administration of assessment personnel, the Committee recommends

that:

- 18. Formal training be required for various classes of assessors.
- 19. Greater control and accountability of assessors' activities in the performance of their duties be required.
- 20. A program audit be conducted annually by an outside source.
- In addition to the above, the Committee recommends that:
- 21. The contract with Real Estate Statistical Service to provide information on the transfers of real estate and for the preparation of the sales/assessment report for the State Tax Equalization Board be terminated as of December 31, 1976.

- 22. Effective January 1, 1977, the Bureau of Systems and Computer Services prepare the monthly report of transfers of real estate for the State Tax Equalization Board and for the use of the Director of Assessments' Office.
- 23. Signed receipts be obtained when delivering bulk Notices of Change in Assessments to municipalities and school districts.

The Committee believes that the Director of Assessments and the

Board of Property Assessment, Appeals and Review need, from time to time, advice and counsel from the general public and experts in the field on: real estate appraisal techniques; market conditions; administrative practices; and public viewpoints. In addition, it is important to the general public that a citizens group be involved in and be knowledgeable of the general assessment procedures.

- It is, therefore, recommended that:
- 24. A citizen advisory board be established and appointed by the Board of County Commissioners.

Recommendations for Improving the Appeals Process Through Administrative Changes

The Committee believes that the credibility of the appeal process

could be improved by the adoption of the following recommendations.

- 25. That at least three members of the Board of Property Assessment, Appeals and Review shall sit as an appeal panel to hear appeals from assessments placed on property by the Director of Assessments.
- 26. That the three members hearing the appeal shall hear presentation of facts and testimony from the Director of Assessments and/or assessor and the appellant and/or his representative. That a transcript or recording of the hearing may be made.

27. That the three members hearing the appeal shall render the final decision on the appeal. The Board of Property Assessment, Appeals and Review should, thereafter, issue an order affirming, vacating or modifying the assessment appealed from and should serve a copy of the order on the party or parties affected and the political subdivisions within ten days after the hearing.

The Committee also believes that the appeal process should be

simplified for both the appellant and the affected political subdivisions.

- It is, therefore, recommended that:
 - 28. Appeal hearings be scheduled to be heard in the municipalities in which the property is located as well as the County Office Building and that hearings be held in the evenings, if necessary, to accommodate the appellant.
 - 29. The municipalities and school districts should be notified of applications of appeals which are filed with the Board of Property Assessment, Appeals and Review and scheduled appeal hearings on assessments in excess of certain dollar amounts.
 - 30. The Court of Common Pleas should amend its rules so that appeals from decisions of the Board of Property Assessment, Appeals and Review can be taken by merely filing a photocopy of the Board's order with the Prothonotary and paying a filing fee of two (\$2.00) dollars.
 - 31. The property owner should be given the right to appeal a property assessment in any year in which the property owner feels that the assessment placed on the property is improper for whatever reason.
 - 32. The burden of proof that the assessment is uniform and equitable in any assessment appeal proceedings should require the Director of Assessments and/or assessor to supply supporting data in addition to the assessment.

In the event that the Legal Counsel for the Board of Property

Assessment, Appeals and Review is of the opinion that Committee Recommendations 27 and 32 cannot be accomplished by administrative action In addition to the organization changes, the Committee recommends that the following legislation be enacted in order that the administration of the assessment and appeal functions can be improved.

- 39. That notice of the availability of the assessment books at specific locations and on specific dates for the public's inspection be advertised in the news media.
- 40. That every political subdivision issuing building permits shall keep a record of each building permit issued and, on or before the first Monday of each month, shall file the record or a copy thereof in the Office of the Director of Assessments of the county in which the political subdivision is located.
- 41. That physical improvements to a property be exempt from assessment for the first year following completion of the improvement.
- 42. That persons engaged in the establishment of or the review of assessments become Certified Pennsylvania Evaluators (see page 32 for explanation) within a specified period of time from the date of employment or the effective date of the act, whichever is later.

Finally, the Committee recommends that:

43. The proposal entitled "A Start on Implementation of Some Ideas on Real Estate Assessment Quality Control, Data Collection and Automation" from Carbone, Ivory and Longini should be the basis of a pilot program in selected municipalities.

PART II

SHORT RANGE SUBCOMMITTEE REPORT

PRESENT PRACTICES AND PROCEDURES

INTRODUCTION

The assessment of real estate for tax purposes in Allegheny County, a second class county, is governed by the General County Assessment Law and the Second Class County Assessment Law as amended.

In Allegheny County, the overall responsibility of the function rests with the Board of Property Assessment, Appeals and Review, with certain specific services carried out by the Deed and Assessment Registry Office and the Bureau of Systems and Computer Services (BSCS), both of which are responsible directly to the Board of County Commissioners.

The laws relating to the assessment function in counties of the second class indicate that it was the legislative intent that the Board of Property Assessment, Appeals and Review should be an independent Board. The Board of County Commissioners is required to: appoint the members of the Board of Property Assessment, Appeals and Review; appropriate the funds for the operation of the Board of Property Assessment, Appeals and Review; and fix the salaries of all employees of the Board by Salary Board action.

In practice, however, the Board of Property Assessment, Appeals and Review has functioned as a department under the direction and control of the County Commissioners.

- 14 -

Allegheny County chose to make their triennial assessments under this permissive legislation and divided the County into three districts known as Pittsburgh, Southern and Northern Districts. (See Exhibit I.)

It is the Subcommittee's opinion that the triennial assessment by district leads to portions of the County bearing an unequal burden of County taxes during any one tax year.

The market value of real estate is continually changing as a result of various factors, such as: costs in the construction industry; supply and demand of residential housing; inflation; and social factors.

The actual² market value established on the real estate in the Southern District of the County during 1975 for the 1976-1977-1978 triennial reflects a higher market value than the actual market value of comparable real estate established in 1973 for the 1974-1975-1976 triennial in the Northern District, or that established in 1974 for the 1975-1976-1977 triennial in the Pittsburgh District. Thus, real estate in the Southern portion of the County will bear an unequal burden of County taxes in 1976 when compared to comparable real estate in the Pittsburgh or Northern Districts.

If County tax rates are changed during periods of rising or declining market values the unequal burden is even greater. Under the present triennial system an equal distribution of the tax burden, based upon uniform

²Actual market value as defined by case law is the price which a purchaser willing but not obliged to pay would pay an owner willing but not obliged to sell, taking into consideration all uses to which the property is adapted. The sales price of a property may not be its "actual market value".

assessment procedures, is only possible if the market value of real estate does not fluctuate from year to year.

Example of Unequal County Tax Burden

A contractor builds two identical houses, one located in the Northern District and one in the Southern District. Both houses were sold for \$25,000 in 1974 and in both areas this was considered to be the actual market value and was assessed by the County Board of Property Assessment, Appeals and Review at \$12,500. In both cases the owners would have paid County tax amounting to \$193.75 (\$12,500 times 15-1/2 mills) in 1975.

During 1975, all property in the Southern District was revalued for the triennial period 1976-1977-1978. It was determined by the assessor that because of increases in the cost of construction, inflation and current sales of real estate, that the actual market value of this house was \$30,000 and the assessed valuation was increased to \$15,000. Because the other house, located in the Northern District, is not due for revaluation until 1976 for the 1977-1978-1979 triennial period, the assessed value would remain at \$12,500 for 1976 tax purposes even though it is assumed that its actual market value also increased to \$30,000.

As a result, in 1976, one owner would pay \$232.50 in County tax compared to \$193.75 for the other, a difference of \$38.25. If the County had also increased the tax rate from 15-1/2 to 16-1/2 mills for 1976, one owner would have paid \$247.50 compared to \$206.25 for the other, a difference of \$41.25.

- 17 -

BOARD OF PROPERTY ASSESSMENT, APPEALS AND REVIEW

Appointment and Qualifications

The Assessment Law³ applicable to second class counties states that the Board of Property Assessment, Appeals and Review shall consist of seven (7) members. The members shall be appointed by the Board of County Commissioners for a staggered six (6) year term.

The members shall have been residents of the County for at least ten (10) years next prior to his appointment and:

- a. Four of whom shall have not less than five years' practical experience as a registered real estate broker or real estate appraiser or assessor;
- b. One of whom shall have not less than five years' practical experience in securities transactions, necessitating a knowledge of the value of stocks, bonds and other securities;
- c. One of whom shall have not less than five years! practical experience as a building construction engineer or civil engineer or general contractor or assessor;
- d. One of whom shall have not less than five years' experience as a practicing attorney at law or registered real estate broker, or real estate appraiser or assessor.

The Subcommittee did not, as a part of its study, investigate the qualifications of the current officers and members of the Board of Property Assessment, Appeals and Review to determine if they qualify under the statute.

³72 P.S. 5452.1.

The law also states that the members of the Board shall devote sufficient time to the duties of their office to fully discharge such duties, but may hold other office or employment or may engage in any business outside their positions as members of the Board; except, that no member or employee of the Board shall engage in the real estate or insurance business or hold an office or position of employment in any such business.

General Powers and Duties

The Board of Property Assessment, Appeals and Review shall have power and its duty shall be:

- a. To make and supervise the making of all assessments and valuations of all subjects of taxation in the County as required by existing law;
 - b. To revise and equalize all such assessment and valuations;
 - c. To hear all cases of appeals from assessments, and all complaints as to assessments, errors, exonerations and refunds;
 - d. To pass upon and determine the amount of property of any organization or institution which is under the provisions of existing law entitled to exemption from taxation;
 - e. To establish and maintain in its office records of cubical contents of buildings, surveys, maps, sales and assessments and with the exception of the cubical contents, records and sales records, to permit inspection thereof by the public at all times during office hours.

In practice, the Board of Property Assessment, Appeals and Review is presently acting as administrators of the assessment process; they administer the clerical functions of the office; and hear appeals.

Salaries of Board Members

The Second Class County Assessment Law⁴ states that the Chairman of the Board shall receive an annual salary of eight thousand dollars (\$8,000); the Vice-Chairman shall receive an annual salary of seven thousand dollars (\$7,000); and each of the other members shall receive an annual salary of six thousand dollars (\$6,000).

Currently, the annual salaries of the Board members are: Chairman \$25,065; Vice-Chairman \$21,070 and other members \$17,567. The Subcommittee has been advised that the legal authority for the payment of the salaries at the current level comes from the laws governing the establishment and operation of the County Salary Board⁵ which states that "The salaries and compensation of all appointed officers and employees who are paid from the county treasury shall be fixed by the salary board..." The legislation relating to the establishment and authority of the County Salary Board was passed subsequent to the Second Class County Assessment Law.

Organization

The overall responsibilities of the Board of Property Assessment, Appeals and Review appear to break down into three major functional areas.

1. The actual valuation of property in the three triennial districts;

⁴72 P.S. 5452.2 (d). ⁵16 P.S. 4820.

- 2. The hearing of appeals resulting in the establishment of valuations;
- 3. The clerical functions which support the valuation of property, the appeal function and the general administrative functions of the Board.

The function of placing valuations on property is under the direct supervision of six (6) of the seven (7) Board members. The County is divided into six areas with a Board member in charge of each area. (See Exhibit II for area assignments.) The Chairman of the Board is not assigned an area; however, in the event of a vacancy on the Board, the Chairman supervises that area until an appointment is made.

For the greatest majority of cases, appeals are heard by the Board member under whose supervision the valuation is determined. In cases where it is a large property, the appeal may be heard by several Board members. Board members have stated that the reason for this procedure is the large number of appeals heard each year, making it impossible for a full Board hearing on each appeal. Secondly, the Board member who is responsible for the area is more likely to be familiar with the area and presumably more knowledgeable about the property and the neighborhood in which the property is located, and therefore better able to render judgement on the merits of the appeal. A full discussion of the entire appeal process is presented later in the report.

The clerical functions which support the valuation of property; the appeal process; and general Board functions break down into two general areas: (1) Assessors' office clerical duties; and (2) Board's general office duties.

- 21 -

Assessors' Office Clerical Duties - The functions which support the valuation responsibilities are assigned to what is known as the Assessors' Office which is headed by an office manager. These clerical functions include:

- 1. Assessors' time records;
- 2. Distribution and collection of transfer records, separations and change orders;
- 3. Assessors' supplies and requisitions.

Board's General Office Functions - The general office clerical functions were, in previous years, supervised by an Executive Director. This position became vacant in 1972 and has since remained unfilled. The position has recently been eliminated by Salary Board action and the supervision and direction of the employees is unclear. Interviews with Board members indicate that these functions are supervised by the entire Board. Other interviews indicate that supervision is being provided by the Board Chairman. Included in what is considered to be general Board clerical functions are:

1. Implementation of Board actions;

- 2. Personnel records;
- 3. Payroll;
- 4. Appeal processing;
- 5. Orders for exonerations and refunds;

6. Exemptions;

7. Assessment estimates and notification;

8. Supplies and requisitions.

- 22 -

Personnel

There is a total of approximately 210 persons employed under the Board of Property Assessment, Appeals and Review. Approximately 180 are regular County employees and 30 are funded through Manpower. Of the 180 regular County employees, approximately 125 are classified as assessors and supervising assessors, and of the 30 Manpower people, approximately 18 are classified as assistant assessors. (See Exhibit III for personnel position assignments.)

ASSESSMENT PROCESS

Property Record Cards

There are two property record cards in use. There is the property record card known as the Rl form which has been in use for a number of years. (See Exhibit IV.) Assessors indicate that Rl forms exist for each property; however, all forms are not complete with information on the condition and description of buildings. These forms are filed in the Assessors' Office and are used by the assessors along with the assessors' field books. The Rl form is to be eventually replaced by a new property record form designed for computer use.

The new property record card was designed by BSCS (See Exhibit IV-A) and is preprinted by the computer for each property. The new property record card for each property in Pittsburgh and the Southern District has been in use for the past two triennials and is presently being used in the current triennial in the Northern District. The use of the new property record cards is in the initial stage and the portion of the card which provides for detailed land and building information has not been completed. In addition, the cards do not show any sales data. The assessor must use the new property record card in conjunction with the Rl form and field book in order to obtain information regarding the property and when making triennial assessments.

- The new property record cards are filed in the Records Office located in the offices of the Board of Property Assessment, Appeals and Review. The supervision of this office is handled by a person whose position title is "assessor" and who acts as liaison between BSCS and the Board of Property Assessment, Appeals and Review. Property record cards which, are preprinted by BSCS contain general code information which indentifies the property as to location within the computer file, field book, municipality and school district. It also contains the address of the property, the name of the owner, name and address of the agent or owner's address, whichever is applicable, and a brief description of the property and valuations. These cards are filed in red folders with approximately 200 cards per folder and within each folder they are filed by assessor's field book numbers.

During the triennial assessment process, the assessors take out one folder of 200 property record cards at a time. When these cards are returned, they are checked by the clerical staff in the Records Office and are then sent to BSCS for correction of computer data.

- 24 -

Only changes which affect: (1) field book number; (2) property location; (3) valuation change; (4) description change; (5) additions to existing buildings; or (6) removal or addition of "unfinished" from the description are made into the computer record direct from the property record card. All other changes require the assessor to prepare a handwritten "Assessor's Change Order"⁶, i.e., lot/block number correction; municipality name or code correction; owner or agent's mailing address change; new building on lot; or lot description change.

The reason for the difference in the process is that copies of the "Assessor's Change Order" must go to the Deed Registry Office for correction of the blotter⁷ and coding before it is sent to BSCS. The data changes which go direct to BSCS on the Property Record Card are not maintained on a current basis on the blotter. The Deed Registry Office receives these changes as well as all other changes when new blotters are prepared by BSCS each year.

Reportedly, after assessment appeals cases were decided by the Pennsylvania Supreme Court beginning in 1965, the then County Solicitor advised the Board of Property Assessment, Appeals and Review to determine and announce a ratio of assessed to market value. This ratio was

⁷Blotter - A properly certified duplicate of the last adjusted valuation of all real estate, personal property made taxable for county purposes, stating the name of each taxable valuation, description and kind of property.

⁶Assessor's Change Order - A form which shows changes that have occurred in ownership; property description or location; and authorizes the various assessment records to be changed.

established at 50 percent by the Board of Property Assessment, Appeals and Review and was first announced and applied to the 1969-1970-1971 triennial for the City of Pittsburgh. According to the Board of Property Assessment, Appeals and Review, the 50 percent figure represented the ratio around which most of the assessments clustered in 1968. In support of this figure, the Board cited figures of the Pennsylvania State Tax Equalization Board as demonstrating that the average assessment in Allegheny County for the ten years previous to 1968 was slightly in excess of 50 percent of the State Tax Equalization Board's established market value for Allegheny County.

Current Ratios - The 1974 market value established by the Pennsylvania State Tax Equalization Board (STEB) and certified June 30, 1975, show Allegheny County's County-wide ratio at 52.3 percent with individual municipalities ranging from 42.8 percent to 62.4 percent. It should be noted, however, that the State Tax Equalization Board's market value does not reflect current market value in that STEB uses a five-year moving average in its determination of market values. Therefore, the ratios established by STEB are higher than the actual ratio of assessed values to current market values.

Allegheny County's Bureau of Systems and Computer Services did a sales ratio study in 1975 based upon 11,475 sales⁸ that occurred in 1974. The report shows the County-wide ratio of assessments to sales prices at

⁸Extreme high and low ratios were eliminated from the final report as not representing true assessment ratios to the fair market value of the property sold.

34.61 percent with individual municipalities ranging from 2 low of 17.53 percent to a high of 49.68 percent. The Bureau's 1976 report, based upon 13,173 sales that occurred in 1975, shows the County-wide ratio of assessments to sales prices at 32.61 percent with individual municipalities ranging from a low of 15.45 percent to a high of 49.73 percent. (See Exhibits V and V-A for a complete listing of municipalities, number of sales and ratios, 1975 and 1974, as well as analyses by triennial district, type of municipality and supervisory area.)

In the opinion of the Subcommittee, the above data indicated that a ratio of 50 percent is not being used in the assessment procedure and that a uniform assessment ratio is not being uniformly applied throughout Allegheny County. Further, it was stated by certain members of the Board of Property Assessment, Appeals and Review that although the declared ratio is 50 percent, in actuality it runs between 30 percent and 70 percent.

The previous findings indicate that there should be an immediate and concerted effort to redesign and monitor the assessment procedure to insure that the judically-mandated common level ratio is applied uniformly and consistently throughout Allegheny County.

Source Records

The R1 form of property record card, previously described in the report, together with the assessors' field books; copies of sales information; lot and block maps; and W.P.A. descriptions of property constitute the source data which the assessors utilize in determining the actual market value of real estate. Unfortunately, there is no single source data which is complete for the entire County.

R1 Forms - R1 forms do not exist for every assessed parcel of real estate and the forms which do exist are not all complete with the extension of information regarding details on the improvements. (See Exhibit IV for type of detail information presently required.) The forms are loose leaf and are filed in manila folders in the Assessors' Office. This procedure makes them very easily misplaced, lost or destroyed.

Field Books - The assessors' field books are considered to be the one source which is most complete. A recent survey was conducted by the members of the Board of Property Assessment, Appeals and Review, as a result of questions by the Study Committee at the April 9, 1976 meeting. This survey shows that only 81 percent of the descriptions on homes in the County are complete in even the limited descriptive information which is required on the field book sheets.

	、	No. of Homes	Number With Information	Percent Complete
Area ∦l	Louis H. Artuso	42,192	27,018	64.3%
Area #2	Samuel Rudick	59,550	51,197	85.9
Area #3	Glen C. Jones	77,021	63,039	81.8
Area #4	John J. Fallon	65,839	52,973	80.4
Area #5	Joseph E. Feledick	74,900	60,131	80.2
Area #6	John R. O'Connell	54,990	49,535	90.0
		374,492	303,893	81.1%

REPORT ON NUMBER OF HOMES WITH INFORMATION⁹

⁹Data supplied by Board of Property Assessment, Appeals and Review.

Each assessor has his own methods and procedures in keeping and maintaining his records, the use of sales data, records of notice of change, appeal information and determining actual market values. There is no uniformity within assessment areas under the direction of a Board member or among Board members.

Lot and Block Maps - The Controller's Office has completed only 96 of the 129 municipalities on the lot and block system. Each assessor has a complete set of maps for his area. However, they are not revised as changes occur. Maps are maintained on a current basis in the Deed Registry Office.

W.P.A. Records - During the middle Thirties, W.P.A. prepared sketches of buildings showing dimensions and detailed information regarding the type and construction. These records were very well done but were only complete for the urban areas (cities and boroughs). The records have become outdated over the years as the result of remodeling, demolition and new construction.

Sales Data

Information on sales of property is necessary for three different purposes. First, the Board of Property Assessment, Appeals and Review must submit monthly a report to the State Tax Equalization Board showing all real estate transfers, the sales price as shown by the deed and Pennsylvania tax stamps and the assessed valuation. Secondly, the assessors need sales data in order to determine market values and market conditions for

- 29 -

their assigned territory. Thirdly, BSCS needs the information in order to maintain up-to-date computer records on new owners, agents, and owner or agent's address for tax billing purposes.

At the present time, sales information is being supplied from two different sources, thus, duplication. The Deed Registry Office receives copies of all deeds from the Recorder of Deeds Office. Information from the_deed, including the sales price, is coded on forms and sent to BSCS. From this data, BSCS updates the computer file and also prepares an assessment/sales ratio report.

The Board of Property Assessment, Appeals and Review has a contract with Real Estate Statistical Service at the current annual rate of \$1,968 for which they receive data on all sales of property which are recorded in the Office of the Recorder of Deeds on a duplicate form. The information received contains:

- 1. Property address and Lot/Block number;
- 2. Brief description of the property;
- 3. Name of Grantee and Grantor;
- 4. Dollar consideration and amount of Pennsylvania tax stamps;
- 5. Date of deed and date recorded.

This information is turned over to the assessor who records the sales information on his records and inserts the assessed valuation of the property on a copy of the form which is then returned to Real Estate Statistical Service. Real Estate Statistical Service in turn prepares the monthly report for the Board of Property Assessment, Appeals and Review to be sent to the State Tax Equalization Board.

The Board of Property Assessment, Appeals and Review receives from the State Tax Equalization Board ten cents (\$.10) for each transfer; therefore, it receives more than the costs of the annual contract with Real Estate Statistical Service.

Investigation and discussion with the various offices involved indicate that the entire process could be handled by BSCS and consideration has been given to it by BSCS. However, until 1976, it has received a low priority compared to other new programs and systems being developed for other County needs. It is the Subcommittee's understanding that beginning in January 1977, BSCS will prepare the STEB report and the contract with Real Estate Statistical Service will no longer be necessary.

The sales information supplied by Real Estate Statistical Service or the sales ratio reports prepared by BSCS are not used as an audit on the effectiveness of the performance of the assessment function. However, some of the Board members do utilize sales information for their own areas to determine market conditions and to check on the performance of assessors under their supervision.

Training and Supervision

All assessors are encouraged to take courses in assessment and appraisal procedures. However, the assessors are not reimbursed for this expense. In 1972, all assessors attended a 20-session course consisting of eighteen sessions of course work, one session of review and one session for the examination. This course was funded by Allegheny County and was held at Duquesne University with the American Institute of Real Estate Appraisers and the Society of Real Estate Appraisers furnishing the instructors.

In addition, the assessors are urged to take the International Association of Assessing Officers (I. A. A. O.) course which consists of six parts and is conducted by the Pennsylvania Assessors' Association. When all six courses have been taken, the assessor is then qualified to take an examination and if he passes, he is then a Certified Pennsylvania Evaluator. These courses are all taken at the expense of the assessor and he receives no reimbursement from the County. At the present time, approximately 80 percent of the assessors have completed the first five courses. Only 21 assessors have not taken any of the courses.

The Board of Property Assessment, Appeals and Review Office maintains records on all course work taken by each assessor as well as the assessors' educational background.

Other than the materials received through course studies, seminars attended and published articles, there are no written general rules and regulations established by the Board for the assessment process which the assessor is expected to follow in Allegheny County. This lack of written general rules and procedures results in each Board member and each assessor proceeding in his own way with varying degrees of effectiveness.

- 32 -

For example, some assessors utilize cubical content and others use square feet as a basis for market value comparisons.

Assignment of Territories

Every field assessor is assigned to a territory. A territory may contain several wards and/or one or more municipalities. Each supervising assessor supervises a group of assessors. Assessors report into the offices of the Board of Property Assessment, Appeals and Review approximately once every two weeks. Therefore, there is no direct day-to-day supervision of their work. Supervising assessors have stated that they know where the assessors are working each day, and in some cases, indicated that they have a place where they meet with the assessors in the morning. On the surface, this appears to be a very loose arrangement for the supervision of some 120 assessors and assistant assessors. On the other hand, having them all come into the office every day before sending them out to various parts of the County would be also a considerable waste of time, and expensive from a mileage reimbursement standpoint.

Presently, each supervising assessor prepares a bi-weekly report covering the activities of the assessors under his supervision.

The only way the present system can work satisfactorily is to make sure that the supervising assessor is a responsible, conscientious, dedicated supervisor capable of supervising employees and with the means of obtaining disciplinary action against employees who fail to perform according to the rules and regulations established by the Board.

- 33 -

The assessors are unionized and when a vacancy occurs in a territory, the assessors have the right to bid on the vacant territory. The Board Chairman has indicated that, to date, this has not presented a problem. However, such a system of assignment of territories does not permit the flexibility of utilizing the best talents most effectively.

On the other hand, assignment of territories does provide the opportunity for the assessor to become thoroughly familiar with his assigned area. As a result, he should be better able to make the value judgements that are necessary in obtaining uniformity based upon the market value of property.

Building Permits

Building permits are not required by every municipality in the County. In those municipalities which do require building permits, there is no requirement that a report of permits issued be filed with the Board of Property Assessment, Appeals and Review. As a result, in municipalities where permits are issued, the assessor must go to the offices of the municipality and hand-copy the information from the permit. Some municipalities provide the assessor with a copy of the permit which eliminates his copying the information. Such data is necessary as an aid to the assessor in locating new construction and additions for assessment purposes.

The Fourth to Eighth Class County Assessment Law¹⁰ requires the office issuing building permits in every political subdivision of each

¹⁰72 P.S. 5453.602b.

- 34 -

county shall keep a daily record, separate and apart from all other records, of every building permit issued, which shall set forth the following information:

- 1. Date of issuance;
- Name and address of person owning and a description sufficient to identify the property for which the permit was issued;
- 3. Nature of the improvements and amount in dollars in which issued.

On or before the first Monday of each month, the office shall file the daily record in the office of the chief assessor of the county. The office shall collect from each person to whom a building permit is issued the sum one dollar (\$1.00)* of Mitcen Cents (\$1.00) which shall be full compensation for its services to the county.

In addition, this same section of the Fourth to Eighth Class County Assessment Law requires that whenever a person makes improvements other than painting of or normal repairs to a building of \$1,000 or less in value annually and he is not required to obtain a building permit by any political subdivision, he must within 30 days of commencing the improvements furnish similar data to the office of the chief assessor.

At the present time, assessors in municipalities which do not require building permits are unaware of improvements. Therefore, assessment changes resulting from such improvements are dependent upon the assessors picking them up during the triennial assessment.

* amended 1968

- 35 -

Recording of Deeds

At the present time, there is no law which requires the owner of a property to record the deed in the Office of the Recorder of Deeds, and therefore, it is possible that not all transfers of property are recorded in the assessment records and tax bills would be sent to the previous owner. It has been indicated, however, that there does not appear to be a serious problem in that deeds are generally recorded.

The Fourth to Eighth Class County Assessment Law¹¹ requires that it is the duty of every grantee of real property to register the deed in the office of the chief assessor for the county in which the land or the greater portion of it is situated, within 30 days of the date of conveyance. unless such deed shall have been previously recorded in the Office of the Recorder of Deeds.

APPEAL PROCESS

Notice of Change of Assessment

A cut-off date is established annually to enable BSCS to prepare, en masse, Notices of Change in Assessment in the triennial area for all new taxable accounts, and any existing taxable account having a change in assessment of whatever amount. These notices are turned over to the Board of Property Assessment, Appeals and Review for mailing. A listing of changes is also produced for each municipality and school district. These are also

- 36 -

¹¹72 P.S. 5453.605a.

turned over to the Board and are usually hand delivered by the assessor because of their bulk.

Notices of Change in Assessment which occur after the cut-off date as well as Notices of Change in Assessment in the inter-triennial areas are handwritten by the assessor. Copies of these individual notices are mailed to the municipalities and school districts. (See Exhibits VI and_VI-A.)

At the completion of the triennial assessment, BSCS produces two sets of assessment books. One is used for display in the municipality and one for display in the offices of the Board of Property Assessment, Appeals and Review. For the City of Pittsburgh triennial, only one set of assessment books is prepared for display.

Appeal Filing

Following the close of the triennial and the printing of the assessment books, property owners are advised by public notice that they may view the assessment book and press releases are prepared which state that the assessors will be available to answer questions at such times or places as listed.

An application for appeal must be filed within 30 days from the date of the official notice of change. It should be noted that an appeal from an assessment of a property located in the triennial area which has not been changed may also be filed. Regarding appeals on property located in inter-triennial areas, the Board has stated that the County Law

- 37 -

Department rendered an informal opinion that an appeal could not be accepted during the inter-triennial period unless the property met the conditions which are set forth in the Second Class County Assessment Law.¹² In summary, the conditions are interpreted to mean that some physical change in the improvements or adjacent thereto or in the vicinity must occur; otherwise, the appeal is not accepted.

Applications for appeal are available from the assessor when he is sitting in the municipality or from the offices of the Board of Property Assessment, Appeals and Review. (See Exhibits VII and VII-A.) If the property is an income producing property, an Income and Expense Statement form, which is furnished by the Board, must be completed and filed with the appeal application. (See Exhibit VIII.)

Rules and regulations governing appeals from the triennial assessment are printed and published in the newspaper and the Legal Journal. They are also available at offices of the Board of Property Assessment, Appeals and Review. These rules and regulations cover the dates the assessment books at the Board are open for inspection, who may appeal, appeal applications, intervention, hearing, postponements, witnesses, etc. The published rules and regulations are silent on the right and conditions under which an appeal may be taken during the inter-triennial period.

¹²72 P.S. 5452.13 and 5452.14.

- 38 -

Review of Assessment

Copies of all filed appeal applications are sent to the supervising assessor in whose territory the property is located. Copies of filed appeal applications are not sent to the municipalities and school districts in which the property is located. Every property on which an appeal is filed is reportedly reviewed, usually by two assessors, and a report with the assessors' recommendations is prepared.

As a result of the review and with the agreement of the supervising assessor and a Board member, a correction in the assessment may be agreed upon, and in such cases, a two-part post card is sent to the appellant indicating the revised assessment. If the appellant agrees to the revised assessment, he merely signs the card and mails it back to the Board. If he does not agree, the appellant does not return the card and appears for a hearing at the date and time indicated on the card.

In all cases where the assessment is sustained by the reviewing assessors, notices of the date and time of hearing are mailed to the appellant.

Appeal Hearings

Appeals from assessments are usually heard by one Board member because of the number of appeals to be heard. For example, there are approximately 8,500 appeals to be heard in 1976. This means that each Board member will hear approximately 1,400 appeals. In addition to the Board member, the supervising assessor and assessor attend the hearings.

- 39 -

At the weekly meetings of the Board of Property Assessment, Appeals and Review, reports of Board members' hearings are submitted with recommendations which are acted upon by the entire Board. The report consists of a listing of the name of owner, current assessment and new assessment. The Board members present at the weekly meeting make the final decision without hearing or knowing the facts of the case. The action taken is then transmitted to the appellant who then has sixty (60) days in which to appeal the decision of the Board to the Court of Common Pleas.

DEED AND ASSESSMENT REGISTRY OFFICE

Function

The functions of the Deed and Assessment Registry Office which relate to the maintenance of assessment records are as follows:

The maintenance of the lot and block system as prepared by the Controller's Office and certified as completed by the Court of Common Pleas; recording changes in ownership as evidenced by various official documents; recording changes in valuations, improvements and descriptions as submitted by the Board of Property Assessment, Appeals and Review; maintaining a control on the total assessed valuation of real property in each municipality; assembling and binding the tax duplicate blotters for municipalities, school districts, County Treasurer and the Board of Property Assessment, Appeals and Review.

Organization

The Deed and Assessment Registry Office is organized into three bureaus: drafting; deed tranfer; and transcribing. As of March 21, 1976, there were 82 positions in this department (see Exhibit IX for organizational chart) broken down by position title as follows:

- 1 Director;
- 1 Administrative Assistant;
 - 1 Secretary;
 - 3 Supervisors;
 - 2 Assistant Supervisors;
 - 8 Supervising Clerks;
 - 8 Draftsmen;
 - 6 Deed Transfer Clerks;
 - 3 Clerk Typists;
 - 1 Typist;
 - 48 Clerks
 - 82 Total Positions

Bureau Duties and Responsibilities

Drafting Bureau - The Drafting Bureau maintains approximately 22,000 map sheets covering the entire County. This includes maps prepared under the lot and block system by the County Controller's Office and then turned over to the Deed and Assessment Registry Office covering 96 municipalities, and existing County maps covering the remaining 33 municipalities. Up to the present time, two sets of maps were maintained; the original maps and a copy which is made available for public use. The maps for public use are in the process of being eliminated. All maps have been microfilmed and a microfilm for each map placed on an index card which can be viewed in microfilm readers. Two card indexes are also maintained, one of which is filed by municipality and lot and block number and one alphabetically by owner. These cards contain general property location; property description; owner's name; deed book and page number of recorded deed and date of recording. In areas where lot and block maps have not been completed by the Controller's Office, a pseudo lot and block number has been assigned.

The present card index system is being changed to a microfiche system. This system consists of a 4 x 6 microfilm which contains indexes by owner's name, by lot and block number and by street address. Each microfilm will contain approximately 18,000 listings. When this system has been completed and installed, the present alphabetical card index will be eliminated. However, the lot and block card index will continue to be maintained because the card contains additional information.

In addition, this bureau serves and assists the public in obtaining the available information including the reproducing of map sheets. Public inquiries average approximately 300 per day.

- 42 -

Deed Transfer Bureau - The Deed Transfer Bureau processes all changes of real estate ownership as evidenced by deeds from the Recorder's Office (average 30,000 per year); deeds from Sheriff's Office (average 750 per year); probated wills; court orders; ordinances; declarations of takings, etc.

The process includes noting changes on the Deed Registry blotters and index cards and typing the official change order in triplicate, the original and one copy of which is forwarded to the Transcribing Bureau.

Transcribing Bureau - The Transcribing Bureau consists of four sections: Transfer Section; Coding Section; Assessor's Change Order and Control Section; AE (Additional and Exonerations) Section.

The Transfer Section receives official change orders and correction slips from the Deed Transfer Bureau in two lots: Straight transfers or whole taking which are properties transferred in their entirety; and split transfers where only part of the original is transferred to a new owner or a property is broken up and transferred to two or more owners. Notations are made in the blotter and straight transfer data changes are typed on Optical Character Reader forms with Selectric typewriters. These forms are then sent to BSCS and are read by the Optical Character Reader which automatically changes the computer data. On split transfers the original and second copies are forwarded to the Board of Property Assessment, Appeals and Review for new valuations. The assessors retain the second copy, and the original copy with the new valuations is returned to the Transfer Section where the additional notations are made on the records

- 43 -

and then forwarded to the Coding Section for processing. Split transfers comprise approximately 25 percent of all transfers.

Assessors Change Order and Control Section receives all Assessors Change Orders from the Board of Property Assessment, Appeals and Review. These change orders reflect changes made in valuations, addition or deletion of improvements, changes in description, etc. The clerks in this section add code and line numbers, check the addition or subtraction of valuations and note changes in the blotters. The Assessors Change Orders are then forwarded to the Coding Section for processing. Approximately 60,000 Assessors Change Orders are processed each year. In the peak triennial years of 1970 and 1971, there were approximately 110,000 to 120,000 Assessors Change Orders processed.

The Assessors Change Order and Control Section also maintains the assessed valuation control sheets for each municipality, which is balanced with the offices of the County Controller and County Treasurer. All additions and exonerations, which can affect previous tax years as well as the current year, are posted to the control sheets. The certified valuation balance is made to the County Controller every month. Balanced valuation report sheets are certified with the County Controller's Office, County Treasurer's Office and the Board of Property Assessment, Appeals and Review for each municipality. These reports show total real estate valuations, total real estate taxable valuations, total real estate exempt valuations, and gross total County tax.

- 44 -

The Coding Section receives all official change orders which are not handled by Optical Character Reader forms and all Assessors Change Order forms. Changes are coded and sent to BSCS for key punching and updating the computer record.

BUREAU OF SYSTEMS AND COMPUTER SERVICES

The Bureau of Systems and Computer Services maintains a land tax file.¹³ This file contains information on each account (parcel or contiguous parcels) and provides the following information on all properties within Allegheny County.

- 1. Lot and block number;
- Control number (used to identify location of property record on the computer);
- 3. Municipality and ward;
- 4. School district;
- 5. Taxable or exempt;
- 6. Street name and address;
- 7. Owner's name;
- 8. Mailing address of agent or property owner;
- 9: Current assessment on land and improvements shown separately and in total.

¹³ A computer tape containing data on each piece of property.

From the information contained in the land tax file, the follow-

ing forms and reports are prepared.

- 1. Two sets of blotters for display purposes prior to close of appeal period, one for display by the assessor at the municipality and one for display at the Board of Property Assessment, Appeals and Review Office.
- Five sets of final assessment blotters are produced and distributed as follows: One for Board of Property Assessment, Appeals and Review; one for County Treasurer; two for Deed Registry and one for municipal and school tax purposes.
- 3. Notices of change in assessment are produced, en masse, at the end of the triennial and are submitted to the appeals bureau. Changes made after designated cut-off date and in the inter-triennial areas are prepared by the assessor and submitted to the appeals bureau.
- 4. Listings of notices of change in assessments are "prepared for:
 - a. Municipality;
 - b. School District;
 - c. Appeal Bureau;
 - d. Assessors.
- 5. Sales ratio reports are to be prepared annually.
- 6. Property record cards are prepared annually for triennial area.

Property Record Card

Property record cards designed for computer purposes were first used for the Pittsburgh triennial in 1974 and then for the southern Allegheny County triennial in 1975. Upon receipt of forms, the cards will be printed for the northern triennial area for 1976. These property record cards are not designed as a permanent record but are used as source information for the computer record of the property. The system is designed to print a new property record for the area in which a triennial assessment is to be undertaken. The property record cards are then turned over to the Records Office which is in charge of the property record cards and is located in the offices of the Board of Property Assessment, Appeals and Review.

The property record card was designed to contain numerous factors which describe the exterior and interior of buildings as well as various factors which are believed to influence the value of the land, and previous sales information. These sections of the cards are not being used at the present time.

LOT AND BLOCK SYSTEM

Legislative Background

The Second Class County Code, 16 P.S. 3701 - 3707, dated July 1953, empowers the County Commissioners to establish, in the office of the County Controller, the lot and block system (tax maps) for the registration of land titles, for the accumulation of County tax liens, and for the enumeration of the parcels of real estate to be assessed for County, city, borough, township and school purposes.

The Code further authorizes the County Commissioners to use current tax revenues or issue general obligation bonds to defray the cost of expense of establishing the lot and block system.

- 47 -

When the County Controller has certified to the County Commissioners that the system has been completed for one or more municipalities, the plats and plat books (maps) are turned over to the Deed Registry Office for upkeep.

Completions to Date

In 1945, the County Commissioners proceeded to establish a lot and block system and issued \$150,000 in 20-year bonds to begin the work.

As of January 1, 1976, a total of \$7,470,000 in bonds has been issued (see Exhibit X) for the establishment of the lot and block system and 96 of the 129 municipalities have been completed and turned over to the Deed Registry Office. A list of the completed municipalities and years certified to Deed Registry is shown in Exhibit XI.

It is anticipated that three municipalities: Robinson Township and Liberty and Lincoln Boroughs will be completed in 1976 and turned over to Deed Registry by January 1, 1977.

Estimated Completion

The balance of the 30 municipalities are in various stages of completion and it has been estimated by the Mapping Section of the Controller's Office that with the present work force it will take at least an additional five to six years to complete the work.

Conclusion

The fact that the lot and block system is not completed does not present problems to the short or long-range objectives of assessment

- 4,8 -

procedures and practices because a pseudo number has been assigned by the Deed Registry Department to identify properties on the County maps of the 33 uncompleted municipalities. As municipalities are completed, the pseudo number will be changed to the official lot and block number.

Submitted by:

Alexander J. Jaffurs, Chairman Donald J. Lee Joseph D'Anna J. Paul Riden, Research Staff

PART III

LONG RANGE SUBCOMMITTEE REPORT

If any one work could summarize the long range solution to the problem of property assessments in Allegheny County the word would be acceptance--acceptance by the public of the system based on their perception that it is a fair and equitable system imposed on them. Clearly, that perception does not exist today.

Assessments, by their nature, are complex. The whole theory of property taxation dates back to the time when only a few owned property and the assessor was a visible person who rendered his judgments based on criteria he could uniformly apply throughout the taxing district.

Today, with over 100 assessors of varying degrees of training and competence and over 500,000 property accounts, assessments have become a great puzzle, which can be manipulated only by the large sophisticated property owner and, to some extent, by elected officials.

It is the Subcommittee's belief that obtaining public acceptance of the assessment process lies in the eventual development of an automated system. Such a system, as demonstrated in the attached report by Subcommittee member Dr. Richard Longini, must achieve four basic goals: A reliable data base with continuous updating, equity, credibility and public access to information. A discussion of these goals follows.

I. An Accurate and Reliable Data Base with Continuous Updating

The basic problem of the assessor, or even a private appraiser, is the assembling, study and analysis of data concerning recent sales in arriving at an estimate of value. The better the facts, the better the conclusion.

The data base now in use, the property card, may or may not be complete or accurate depending on the assessor who made the initial entry and the amount of updating performed. Any long range improvement in the assessment system will require that all such property information cards be accurate and reliable.

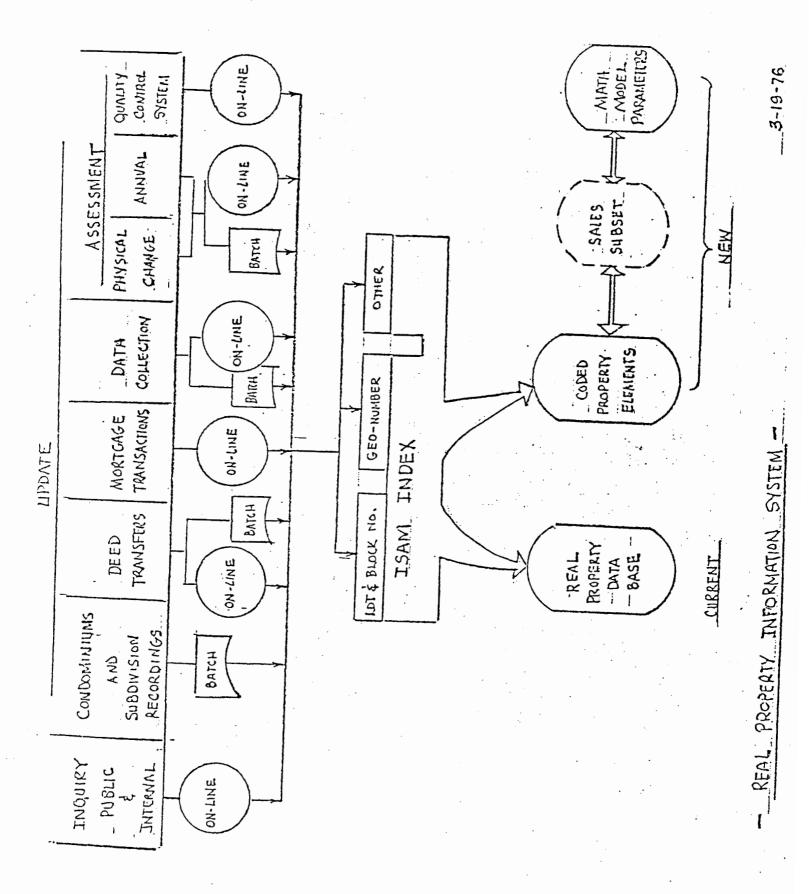
Essentially, there are three methods to secure the initial data:

- Relying on the present assessment staff to check accuracy of present cards and development of those not in existence or working order.
- 2. Employment of a private appraisal firm to cover all properties in the County for initial data entry. Such an appraisal is particularly suited to a period in which reassessments are "frozen".
- 3. Request each property owner to supply basic information in a simplified format.

Each approach has cost implications. Approach #2 is particularly costly although verification costs would be minimal. Approach #1 would produce the least "added" cost although the present staff might be unable to perform the function within a specified time limit. Approach #3 would have a minimal initial cost although certification and "no report assessments" would likely be a continual and costly problem.

In addition to these three approaches, there is currently available at minimal cost "appraisal reference cards" through a service which provides data on properties viewed by professional appraisers. In any of the approaches, data obtained from the service could be used in lieu of individual searches or as a verification mechanism.

Once the data is in a reliable and comprehensible form a process of continual updating must be instituted. The updating process should be viewed as one component of the property information system already being developed by the County. This system is represented in the following chart:



- 52 -

The proposed configuration builds on the existing data base, which is already on direct-access, to include the acquisition of new data elements and the orderly handling as the data is being collected; and with continual maintenance.

The integrated system includes batch, batch-and-forward, and on-line inputs for updating the data base, based on the type of transaction and the economics thereof. On-line access would be provided for a Quality Control System and Inquiry.

Access to the data base would be made through an Index Sequential Access Method file using the lot-and-block number or a geographical parcel code as the key. For a single transaction, or en-masse, the Real Property Data Base, or the Coded Elements Data Base, or both data bases would be accessed directly.

In this way the Real Property Data Base could be updated for owner, agent, address and descriptive data in conjunction, or independently, of updating the Coded Elements Data Base. The status of the Coded Elements Data Base would be maintained in the ISAM file so that it would always be related accurately to the Real Property Data Base.

Provision would be made for a land use code in the ISAM file with additional codes as needed for property classification by lot and building within the Coded Elements Data Base.

A Sales Subset of the Coded Property Elements Data Base would be used for maintenance of the parameters of the mathematical models. The mathematical models would be part of an on-line quality control system to calculate a predicted market value based on the coded elements contained in the Coded Elements Data Base for each property. The land use code and other codes would be used to select the appropriate model for calculation of the market value. Comparable property analysis, uniformity reviews, and other modules would be included in the on-line quality control system for public and internal use.

II. Equity

The basic reason for going through a major reform of an assessment process is, of course, to achieve some degree of equity, and especially perceived equity, on the part of the taxpayer. Whether the final system relies on automation or an overhaul of the manual system, all of the following elements must be built into the system in order to achieve some degree of equity:

- A. All values should be as of one particular date; if a mechanical system is developed, then a revision should be made of all properties simultaneously as the model is updated; on a mechanical system, continuous assessing can go on but new values must be applied simultaneously.
- B. Comparable properties that have been transacted should be shown where possible. Corrections for neighborhood, size and structural differences should be shown.
- C. The system should treat all economic levels equally. Any reasonable system minimizes error but the system should specify the minimizing of the percent error rather than the absolute error.
- D. Any change in base criteria, whether in a mechanical model or a manual should be carefully documented to avoid the appearance of preferential treatment.
- E. Development of a mechanism to separate land values from improvement values will greatly assist the taxpayer in perceiving some degree of equity as is mandated for municipalities. in the County.

The Subcommittee wishes to point out that the development of a totally equitable system, especially an automated one, denies the practice of an assessor applying subjective judgements to properties whose owners, due to social conditions or others, find themselves unable to meet increasing real property taxes.

If it is the desire of public officials to provide tax "relief" to the elderly, handicapped, unemployed, etc., then some "circuit breaker scheme" designed to reimburse property owners or pay taxes directly should be legislated. It is the Committee's belief that using the assessment function to provide such relief would be difficult and only further perceptions of inequality. Should municipalities be expected to provide direct relief through reduced assessments, however, then some scheme for "flagging" these properties must be built into the automated system.

III. Credibility

Perhaps the chief complaint about assessment systems in Allegheny County, and all over the nation, is that they are exceedingly complex and based on criteria, formulas and procedures understandable to professional assessors and appraisers, but not to the general public. This lack of understanding leads the property owner to believe, often with justification, that criteria are not uniformly applied throughout the taxing district. Such beliefs are enhanced by nonprofessional assessment offices as well as superficial news coverage and political abuse of the system.

In considering long range improvements to the Allegheny County assessment process a vital element is the development of a credible system wherein the property owner has access to information on how the assessor and/or mechanical system arrived at the valuation.

Such a system requires the following:

- A. A set of measurable criteria on which the assessor can base his evaluations.
- B. The application of the criteria must be uniform and be physically reflected on a property card or data sheet, which is available to the taxpayer.
- C. Periodically, the taxpayer should be brought up-to-date on his assessment and what it means either by mailing a summary of the property card data with tax bills and/or, at the very least, include an explanation of what criteria have changed when the assessment is increased or reduced.
- D. Public forums and seminars should be held to explain the criteria and the process.

- E. Establishment of regularly scheduled municipal hearings should be held wherein property owners can meet with the appropriate assessor.
- F. Presently, the Board of Property Assessment acts not only as the "tax court" for assessment appeals but also as the administrative arm of County government for producing assessments. This dual role inappropriately rejects the separation of powers in government and leads taxpayers to a sense of frustration over an unbeatable system.

Perhaps the most important measure to take in establishing the credibility of the process is the professionalization of the Assessment Office. In addition, the taxpayer must feel that the assessment process is an open one. This concern is covered under the information access section of the committee report.

IV. Public Access to Assessment Information

Access to information is often not as dependent on the storage medium, whether computer tape, hard copy, etc., as on the efforts that are taken to make the organization of the system comprehensible to the layman and to increase the ease of getting to it. These efforts are most often not a function of cost, but simply a matter of accepting and acting on the goal that the public should know more about and be more involved in governmental decisions that affect its welfare.

Specifically, in reference to property assessment, the public should have ready and easy access to information about:

- -- Amounts assessed for any and all properties.
- -- Past amounts assessed.
- -- Effect of assessment charges on tax bills.
- -- Methods for determining assessed values.
- -- The appeals process.

The following modifications to the present system would increase the public's access to information about assessments. Similar approaches would be applicable to any new assessment system.

- A. Place all public records of present and recently past assessments in the County in a single clearly identified place (room).
- B. Organize the room with public service as the goal, i.e., with a pleasant and knowledgeable receptionist, easy physical access to records, work space, chairs, etc.
- C. Prepare a very short brochure or slide presentation on assessment, available assessment records and their use.
- D. Publish assessments by street address as well as by owner's name.
- E. Place copies of each respective municipality's assessments on public display in each municipal building or center. Require that these be open for public inspection.
- F. Advertise the availability of information at the time reassessments and tax bills are mailed. Send advertisements to property owners as well as mort-gagees where applicable.
- G. Set up and advertise an assessment hotline to answer questions about assessments and appeals.
- H. Simplify information regarding the appeals process and refer citizens to professionals (Neighborhood Legal Services) who will give assistance where needed.
- I. Require mortgage institutions to notify property owners within three days of receipt of assessment change.

- 57 -

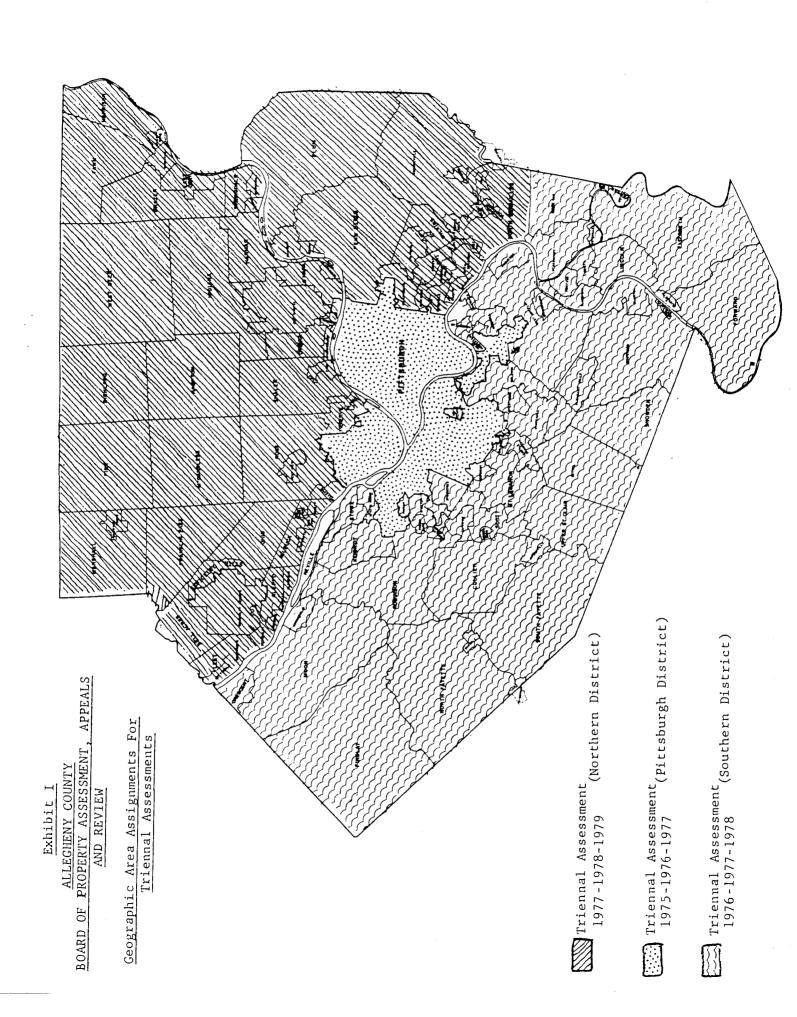
Submitted by:

Gordon L. Mulleneaux, Chairperson Professor Richard L. Longini Edward Ivory Fred LaPointe, Advisor Dr. Evan Stoddard, Advisor

LIST OF EXHIBITS

EXHIBIT

- I Geographic Area Assignments For Triennial Assessments
- II Areas Assigned to Board Members For Assessment Supervision
- III Position Assignments
- IV Property Record Card
- IV-A Allegheny County Property Card
 - V Ranking of Municipalities by Sales/Assessment Ratio For 1975 Compared to 1974 Ratio
- V-A 1975 Sales/Assessment Ratio Analysis
 - VI Notice of Inter-Triennial Assessment Change
- VI-A Notice of Triennial Assessment Change
 - VII Triennial Appeal Application
- VII-A Inter-Triennial Appeal Application
 - VIII Income and Expense Statement
 - IX Deed and Assessment Registry Department -Organization Chart
 - X Lot and Block System Bonds Issued for Establishment
 - XI Municipalities and Year Lot and Block Maps Completed



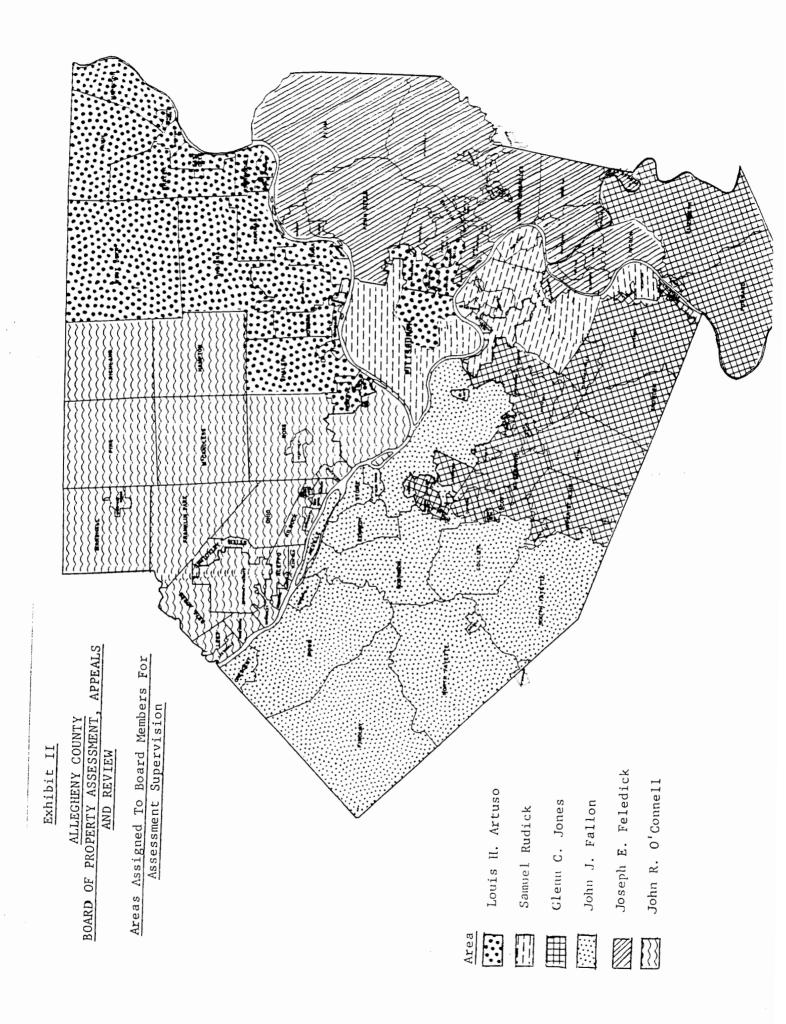


EXHIBIT III

and and the

··· ---

POSITION ASSIGNMENTS

Property Assessment

Assessors Office

- 1 Office Manager
- 14 Clerical Positions (11 regular, 3 Manpower)
- 1 Messenger

Louis H. Artuso, Vice Chairman

Personal Property

- 1 Superintendent
- 26 Clerical Positions (21 regular, 5 Manpower)

Assessment Function (Area #1)

- 2 Supervising Assessors
- 19 Assessors

Samuel Rudick, Board Member

Records Section

- 1 Assessor
- 5 Clerical Positions (Manpower)

Building Section

2 Assessors

Assessment Function (Area #2)

- 3 Supervising Assessors
- 14 Assessors
 - 2 Assistant Assessors (Manpower)

Glenn C. Jones, Board Member

Assessment Function (Area #3)

- 2 Supervising Assessors
- 18 Assessors
- 4 Assistant Assessors (Manpower)

EXHIBIT III, (Continued)

POSITION ASSIGNMENTS

John J. Fallon, Board Member

Land Section

6 Assessors

Assessment Function (Area #4)

- 2 Supervising Assessors
- 18 Assessors
- 3 Assistant Assessors (Manpower)

Joseph E. Feledick, Board Member

Assessment Function (Area #5)

- 2 Supervising Assessor
- 16 Assessors
- 5 Assistant Assessors (Manpower)

John R. O'Connell, Board Member

Assessment Function (Area #6)

- 2 Supervising Assessors
- 18 Assessors
- 4 Assistant Assessors (Manpower)

General Offices

19 Clerical Positions (15 regular, 4 Manpower)

BOROUGH	ÚR.	TOWNSHIP

LOCATION

BLOTTER RECORD-LAND SKETCH

EXHIBIT IV

PROPERTY RECORD CARD

	-1		bb	OPERTY RE	COD					SHEET	
	-			ALLEGHEN			D			L.& B.	<u> </u>
	<u> </u>	RECOR	D OF OV	VNERSHIP				occu	PATION	DATE	STAMPS C SALE PRIC
NAME								 			JALL FRIC
MAILING			<u> </u>					┨			
ADDRESS		,* 									
NAME											
MÁILING ADDRESS]			
NAME											
MAILING Address											
NAME		<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>		· · · · · · · · · · · · · · · · · · ·							
MAILING ADDRESS											
		<u></u>		LAND VAL	UE CO	MPUTAT	ION	L		· <u> </u>	<u> </u>
FRONTAGE	DEPTH	REAR	FRONTA					CTING IN	BASE	FINAL	TOTAL
CALCULAT	10N									,,,,,	
	<u> </u>										
IMPROVE	MENTS	LAND		RROPERTY. CLASSIFICA			 t	ASSES	SMENT REC	ORD	
EARTH I	TREET	LEVEL		ZONING		YEAR	L	AND	BUILDI	IGS	TOTAL
CINDERS		HIGH		RESIDENTIAL							·····
PAVED		LOW		SUBURBAN							
CURB		ROLLING		RESORT							
SIDEWALK		HILLY		IMPROVED							
WATER		8WAMP		VACANT			<u> </u>				
BEWER		LANDSCAPED		CHURCH			1				
GAS ELE	CTRIC	1	1 1	SCHOOL							

SHEET

-

	H 1 17/16.19/20 28/29 31/3233	34 36(37)38 40(41 43)44 45	
	EXHIBIT IV-	ACO/AE SUBMITTED	
	AGENT.		FAIR MARKET VALUE
	MAIL ADDRESS.	FIELD BOOK	ASSESSATENT RATIO TO FMV:
	GL (OW HSE F. AIGH HSE F.		
	02 223334 380940 443146	DESCRIPTION CHG.	AbjustMent 53
	34 37 38 39 42 43 31 32 60 1 16 15 63	FROM	
	LOT NO MARY HO. CURRENT ASSESSMENT NEW CONTROL	PRIMARY	
		TEAR	
		6 YEAR HOUSE 38 31	
	20 10 13	37 39 60 2 2	90 70
	34 37 38 39 42 43 31 32 60 DELETE 01 63		
	101 MO MURY NO CURRENT ASSESSMENT CONTROL RECEVENTION OF MURINISHED 62 CONTROL		APHY Ar
		0 	ROAD I 1 5 6 H 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
		 	
W H <td></td> <td>X R X X R X 35 36 37 38 39 40 41 42 43</td> <td>0 E F F F F</td>		X R X X R X 35 36 37 38 39 40 41 42 43	0 E F F F F
Other Lumbrand District District <thdistrict< th=""> District <th< td=""><td>34 37 36 39 42 43 51 32 60 Diterte 61 63</td><td></td><td></td></th<></thdistrict<>	34 37 36 39 42 43 51 32 60 Diterte 61 63		
Control Contro Control Control <th< td=""><td>LOT NO IMPRV. NO CURRENT ASSESSMENT</td><td>TREND</td><td>BRIVEWAY TYPE OTHER FEATURES</td></th<>	LOT NO IMPRV. NO CURRENT ASSESSMENT	TREND	BRIVEWAY TYPE OTHER FEATURES
Color Color <t< td=""><td></td><td>1 00151ANDING 1 6000 2</td><td>100</td></t<>		1 00151ANDING 1 6000 2	100
OFCLUNKG Image: Sign for the state in the		2 AVERAGE 3	-
Col Main REATING ACE REATING		3 POOR 5	
		59 COL	61 COL 62 63
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			
1 1	COUR NO OLOTY AVIS TO AVIS	The second secon	A Contraction of the second se
	32 34 35 36 37 36 37 36 40 41 42 43 44 45 46 47 46 50 51 52	55 56 77 58 59 50 61	01 24 65 65 01 57
Image: Second	09 IF DEFACHED GARAGE REGIN AT COL 42 OF CARD 11 BELOW IF APPURE REGIN AT COL 47 OF CARD 09 THIS TINE		
		IAL	stauction waterial
10 <	:		
		2.0	
	1 2 2 7 4 75 76 77 78 2 2 3 3 4 2 37 37 38 37 37 38 37 37 38 40 40 41 42 43 44 40 50 51 57 4	55 56 57 58 2 50 60 51 62 61 54 55	62 98 30 50 51 51 51 51 51 51 51 51 51 51 51 51 51

EXHIBIT V

RANKING OF MUNICIPALITIESBY SALES/ASSESSMENT RATIO FOR 1975COMPARED TO 1974 RATIO

	1975		1974	
Municipality	No. of Sales	Ratio	No. of Sales	Ratio
McKeesport - 2nd Ward	1	.4973	3	.4968
McKeesport - 3rd Ward	6	.4739	5	.3211
Pittsburgh – 21st Ward	9	.4681	8	.3842
Pittsburgh - 3rd Ward	9	.4362	5	.3865
Duquesne - 2nd Ward	22	.4202	16	.4251
Pittsburgh - 23rd Ward	19	.4145	11	.4340
Pittsburgh - 25th Ward	34	.4092	25	.4124
Duquesne – 1st Ward	18	.4062	13	.3976
Pittsburgh – 1st Ward	9	.4061	4	.4654
McKeesport - 10th Ward	14	.4005	9	.4082
Pittsburgh - 2nd Ward	6	.3956	2	.4032
East Pittsburgh	15	.3908	10	.3778
McKeesport - 6th Ward	14	.3883	10	.4294
Clairton - 1st Ward	30	.3817	27	.4205
Pittsburgh - 17th Ward	40	.3813	44	.3935
Crafton	80	.3807	58	.3563
Duquesne - 3rd Ward	16	.3804	17	.3967
Wilkinsburg	271	.3767	223	.4057
Glassport	36	.3763	22	.3943
McKeesport - 9th Ward	35	.3759	22	.3942
McKeesport - 8th Ward	47	.3750	22	.3613
Mt. Oliver	38	.3738	22	.3943
Pittsburgh - 16th Ward	70	.3733	39	.4079
Pittsburgh - 4th Ward	79	.3730	58	.3574
Clairton - 2nd Ward	47	.3704	39	.3621
Bethel Park	488	.3691	466	.3726
Ingram	47	.3675	39	.3595
Pittsburgh - 6th Ward	30	.3674	27	.3904
McKeesport - 11th Ward	18	.3672	22	.4063
Upper St. Clair	377	.3642	391	.3770
Pittsburgh - 24th Ward	51	.3637	34	.3755
McKeesport - 7th Ward	93	.3621	70	.4021
Braddock	23	.3616	24	.4075
McKeesport - 12th Ward	27	.3611	14	.3644
Homestead	40	.3605	24	.3674
Mt. Lebanon	568	.3583	579	.3554
Versailles	14	.3565	14	.3952
Pittsburgh - 18th Ward	81	.3563	62	.3646
Collier	27	.3558	20	.3219
Pittsburgh - 5th Ward	34	.3555	33	.3580

. ·

RANKING OF MUNICIPALITIES BY SALES/ASSESSMENT RATIO FOR 1975 COMPARED TO 1974 RATIO

	1975		1974	
Municipality	No. of Sales	Ratio	No. of Sales	Ratio
Oakmont	73	.3546	44	.3827
Edgewood	52	.3544	51	.3791
West Homestead	26	.3542	19	.3717
Tarentum	60	.3530	34	.3642
Neville	14	.3517	9	.3717
Pittsburgh - 15th Ward	128	.3505	79	.3755
Pittsburgh - 26th Ward	154	.3504	107	.3739
West Elizabeth	9	.3488	3	.4547
Pittsburgh - 10th Ward	170	.3485	121	.3634
Carnegie	92	.3479	64	.3138
Etna	45	.3477	36	.3309
Scott	211	.3477	192	.3339
McKees Rocks	69	.3472	41	.3681
Thornburg	4	.3472	6	.2357
Churchill	53	.3468	47	.3734
Pittsburgh - 8th Ward	65	.3463	69 ^{~*}	.3553
Kennedy	51	.3458	22	.2979
Dravosburg	24	.3455	11	.3402
Pleasant Hills	134	.3434	119	.3429
Pittsburgh - 22nd Ward	19	.3432	15	.3703
Braddock Hills	14	.3407	13	.3029
Rankin	6	.3402	4	.4337
Turtle Creek	42	.3401	38	.3446
Pittsburgh - 27th Ward	105	.3397	84	.3697
Leetsdale	22	.3394	11	.3800
Sharpsburg	36	.3391	20	.3948
Springdale Township	11	.3356	35	.3571
Moon	248	.3333	206	.3374
North Braddock	68	.3329	46	.3464
Pittsburgh - 14th Ward	350	.3326	313	.3843
Pittsburgh - 11th Ward	119	.3322	115	.3789
Wilmerding	18	.3300	19	.3714
Munhall	125	.3287	115	.3424
Green Tree	67	.3285	68	.3339
Heidelberg	17	.3285	7	,2859
Pittsburgh - 12th Ward	72	.3283	64	.3474
Stowe	48	.3278	51	.3159
Castle Shannon	79	.3276	64	.3507
Millvale	63	,3268	51	.3784
Pittsburgh - 13th Ward	57	.3265	47	.3297

- 2 -

RANKING OF MUNICIPALITIES BY SALES/ASSESSMENT RATIO FOR 1975 COMPARED TO 1974 RATIO

	1975		1974	
Municipality	No. of Sales	Ratio	No. of Sales	Ratio
Blawnox	7	.3265	15	.3133
Pittsburgh - 20th Ward	153	.3253	131	.3547
Pittsburgh - 7th Ward	103	.3247	71	.3547
Pittsburgh - 30th Ward	39	.3233	44	.3606
Swissvale	92	. 3230	90	.3638
Pittsburgh - 19th Ward	318	.3227	245	.3383
Dormont	138	.3216	111	.3431
East McKeesport	21	.3208	18	.3718
Pittsburgh - 9th Ward	39	.3200	31	.3462
South Fayette	35	.3198	25	.3281
White Oak	82	.3197	80	.3488
Liberty	28	.3195	24	.3274
Penn Hills	656	.3192	655	.3575
Forest Hills	105	.3186	78	.3569
Port Vue	42	.3181	31	.3221
Harrison	132	.3179	102	.3463
West Mifflin	159	.3175	135	.3326
Wilkins	87	.3175	97	.3548
Frazer	7	.3174	7	.3068
Brentwood	128	.3173	127	.3489
Pitcairn	32	.3170	20	.3273
Springdale Borough	33	.3169	35	.3571
Fox Chapel	81	.3167	60	.3410
Elizabeth Borough	11	.3152	12	.3770
North Versailles	93	.3151	88	.3446
Monroeville	396	.3150	353	.3500
Chalfant	9	.3147	12	.3329
Wall	7	.3136	6	.3727
Reserve	32	.3132	35	. 3584
Cheswick	16	.3131	17	. 3114
Baldwin Township	44	.3129	32	.3441
Baldwin Borough	196	.3113	171	.3262
South Park	151	.3106	107	.3425
Franklin Park	64	.3101	55	.3032
Brackenridge	38	.3093	31	.3625
Findlay	27	.3080	18	.2912
O'Hara	132	.3077	103	.3487
Coraopolis	90	.3074	64	.3295
Plum	275	.3073	253	.3331
Whitaker	9	.3071	13	.3730
			15	. 37 30

RANKING OF MUNICIPALITIES BY SALES/ASSESSMENT RATIO FOR 1975 COMPARED TO 1974 RATIO

	1975		1974	
Municipality	No. of Sales	Ratio	No. of Sales	Ratio
Rosslyn Farms	5	.3065	7	.3465
Aspinwall	35	.3056	42	.3457
Sewickley Hills Borough	3	.3056	3	.2524
Whitehall	165	.3054	146	.3245
Indiana	48	.3049	53	.3271
Pittsburgh = 28th Ward	91	. 3047	74	.3544
Verona	19	.3047	24	.3684
Ben Avon Heights	5	.3038	2	.3540
Hampton	167	.3032	129	.3360
Robinson	70	.3026	63	.2934
Oakdale	20	.3017	15	.2819
McCandless	345	.2997	329	.3259
Richland	104	.2991	61	.3197
West View	121	.2976	77	.3333
Pittsburgh - 32nd Ward	63	.2964	65	.3121
Edgeworth	38	.2962	31	.3151
Harmar	16	.2947	15	.3512
Jefferson	66	.2942	67	.3360
Elizabeth Township	134	.2908	107	.3035
Bellevue	105	.2903	95	.3143
Bell Acres	9.	.2843	14	.2972
Ben Avon	43	.2841	31	.3281
Ohio	22	.2819	23	.3190
Leet	32	.2818	33	.2946
Aleppo	8	.2802	9	.2667
Pittsburgh - 31st Ward	60	.2799	46	.2948
Bridgeville	75	.2791	43	.3218
Avalon	51	.2787	54	.3328
Fawn	13	.2786	22	.3177
South Versailles	. 7	.2785	3	.1735
Ross	419	.2769	428	.3055
Emsworth	24	.2760	21	.3071
Glenfield	3	.2752	2	.3036
Pittsburgh - 29th Ward	112	.2746	84	.3124
West Deer	66	.2741	67	.3072
Osborne	4	.2687	10	.3268
Forward	16	.2685	17	.2548
Sewickley Borough	37	.2681	38	.2997
Crescent	30	.2653	31	.3005
Shaler	344	.2597	370	.2865

ì

- 4 -

· · 1 - 4

RANKING OF MUNICIPALITIES BY SALES/ASSES SMENT RATIO FOR 1975 COMPARED TO 1974 RATIO

	1975	1975 1		
Municipality	No. of Sales	Ratio	No. of Sales	Ratio
Marshall	18	.2578	20	.2646
Sewickley Heights Borough	9	.2556	3	.2524
Bradford Woods	17	.2517	17	.2509
East Deer	12	.2511	8	.2689
North Fayette	41	.2505	33	.2520
Pine -	48	.2498	48	.2830
Lincoln	5	.2477	8	.3182
Kilbuck	16	.2469	11	.3213
McDonald	2	.2186	2	.1866
Trafford	<u> </u>	.1545		
Countywide Average	13,173	.3261	11,475	.3461

- 5 -

EXHIBIT V-A

1975 SALES/ASSESSMENT RATIO ANALYSIS

Sales/Assessment Ratios by Triennial Assessment Districts

City of Pittsburgh	.3521%
Southern District	.3296
Northern District	. 3056

Sales/Assessment Ratios by Type of Municipality

-	Cities	.3656%
	Boroughs	.3220
	Townships	.3018

Sales/Assessment Ratios by Board Member Supervisory Areas

Area Area Area Area Area	#2 #3 #4 #5	Louis H. Artuso Samuel Rudick Glen C. Jones JohnJ. Fallon Joseph E. Feledick John B. O'Connell	.3168% .3516 .3283 .3171 .3319 2819	~*
Area	#6	John R. O'Connell	.2819	

EXHIBIT VI

NOTICE OF INTER-TRIENNIAL ASSESSMENT CHANGE BOARD OF PROPERTY ASSESSMENT, APPEALS AND REVIEW, ALLEGHENY COUNTY

	NOTICE OF INTER-TRIENNIAL ASSESSMENT CHA	NGE	
BOARD O	PF PROPERTY ASSESSMENT, APPEALS AND REVIEW, A 329 County Office Building, Pittsburgh, Pa. 15219	LLEGHENY COUNTY	,
Notice is hereby given that the Real Es	tate Assessment of the following described PROPERTY has been chonged, as shown	below for the	
yeor 19	City Boro		
Property Located At	Twp If, in your opinion, this new assessment is satisfactory, i Appeal or appear for o hearing. Should you desire to appeal t so at the time and place stated in this notice. If Appellant is "Power of Attorney" must be presented at the time of filing th your Agent, not appear at the scheduled time, your assessment wi	his assessment, you may do represented by an Agent e Appeal. Should you, o	o ,
<u>To</u>	Mailed_	Appeal may be filed at Office Building, Rass St Pittsburgh, Pa. 15219, 9:30 LAST DAY TO FI	. and Forbes Ave., A. M. ta 4:00 P. M.
		VALUATION FROM	REVISED TO
	TOTAL VALUATION		
			· · · · · · · · · · · · · · · · · · ·
			, <u> </u>
<i>p</i>			

VALUATION OF PROPERTY-Act of 1933, P. L. 853, Section 402 provides:

"It shall be the duty of the several elected and appointed Assessors to assess, rate and value all subjects of taxation, whether for County, City, Township, Town, School, Poor ar Borough purposes, according to the Actual Value thereof."

NOTICE OF CHANGE AT ANY TRIENNIAL ASSESSMENT, OR BETWEEN TRIENNIAL ASSESSMENTS: Act of 1943, Act No. 40, Page 65, Section 15 provides "At least thirty (30) days written notice shall be given to any taxable person whose assessment shall be changed at any triennial assessment, o between triennial assessments, in a manner which would mean an increase in the taxes on such reol estate if the same tax rate should prevail; setting forth any change which has been made and the time and place set for hearing objections thereto."

Board of Property Assessment, Appeals and Review

EXHIBIT VI-A

NOTICE OF TRIENNIAL ASSESSMENT CHANGE BOARD OF PROPERTY ASSESSMENT, APPEALS AND REVIEW, ALLEGHENY COUNTY

Form 13 - PGH. BOA	ARD OF PROPERTY	ICE OF TRIENNIAL ASSE ASSESSMENT, APPEALS	AND REVIEW,			
		29 County Office Building, Pitt				
		e following described PROPERTY ho	s been changed, as sho	wn below for the		
year 1919 Property Located At			City Boro Twp			Word
Notice	If, in Appeal or c so at the tid ''Power of A	n your opinion, this new assess appear for a hearing. Should y me and place stated in this no Attorney'' must be presented c not appear at the scheduled tin	ment is satisfactory, ou desire to appeal btice. If Appellant it the time of filing	this assessment is represented the Appeal. S	, you may do by an Agent, hould you, ar	
		/	Maileo	Appeal may Office Build Pittsburgh, Po	ing, Ross St.	Roam 329, County and Forbes Ave., A. M. to 4:00 P. M. E APPEAL
					JATION ROM	REVISED TO
	TOTAL	VALUATION				
						27.1.27.,
				· · · · ·		
H						······································
FOI	R INFORMATION of CI	TY of PITTSBURGH TAXPA	(ERS	1		
TOTAL LAND VALUATION From	m		To			
		, 				
1						

"It shall be the duty of the several elected and appointed Assessors to assess, rate and value all subjects of taxation, whether for County, City,

Township, Town, School, Poor or Borough purposes, according to the Actual Value thereof." NOTICE OF CHANGE AT ANY TRIENNIAL ASSESSMENT, OR BETWEEN TRIENNIAL ASSESSMENTS: Act of 1943, Act No. 40, Page 65, Section 15 provides: "At least thirty (30) days written notice shall be given to ony taxable person whose assessment shall be changed at any triennial assessment, or between triennial assessments, in a manner which would mean an increase in the taxes on such real estate if the same tax rate should prevail; setting forth any change which has been made and the time and place set for hearing objections thereto."

Board of Property Assessment, Appeals and Review

EXHIBIT XI

MUNICIPALITIES AND YEAR LOT AND BLOCK MAPS COMPLETED

			· ·
1950	Mt. Oliver Borough	1960	Baldwin Borough Blawnox Borough
1951	City of Pittsburgh		O'Hara Township
1952	Edgewood Borough Wilkinsburg Borough	1961	Fox Chapel Borough Scott Township
1953	Braddock Borough Braddock Hills Borough Churchill Borough	1962	Bethel Park Borough Heidelberg Borough
-	Dormont Borough Forest Hills Borough Ingram Borough	1963	Mt. Lebanon Township City of Duquesne
	McKees Rocks Borough Rankin Borough Swissvale Borough	1964	Dravosburg Borough West Elízabeth Borough West Mifflin Borough
1954	Aspinwall Borough Chalfant Borough Crafton Borough East Pittsburgh Borough	1965	Bridgeville Borough Pleasant Hills Borough Shaler Township
	Homestead Borough North Braddock Borough Sharpsburg Borough Thornburg Borough	1966	Upper St. Clair Township Cheswick Borough City of Clairton
1 05 5	West Homestead Borough	1967	Springdale Borough Harmar Township South Park Township
1955	Avalon Borough Bellevue Borough	1068	-
	Etna Borough Munhall Borough Rosslyn Farms Borough Whitaker Borough	1968	East Deer Township Jefferson Borough Springdale Township
	Whiteker borough	1969	Tarentum Borough
1956	Ben Avon Borough Ben Avon Heights Borough		West View Borough
	Brentwood Borough Green Tree Borough	1970	Brackenridge Borough Neville Township
	Millvale Borough		Ross Township
1957	Emsworth Borough Whitehall Borough	1971	East McKeesport Borough Glenfield Borough Haysville Borough
1958	Carnegie Borough Castle Shannon Borough		Kilbuck Township Osborne Borough Wall Borough
1959	Baldwin Township Turtle Creek Borough Reserve Township Wilkins Township	1972	North Versailles Township Harrison Township
			,

•

EXHIBIT XI (Continued)

MUNICIPALITIES AND YEAR LOT AND BLOCK MAPS COMPLETED

- 1972 Sewickley Borough Wilmerding Borough
- 1973 City of McKeesport

1974 Aleppo Township Edgeworth Borough Glassport Borough Leetsdale Borough Leet Township Port Vue Borough Stowe Township

1975 Kennedy Township South Versailles Township Versailles Borough White Oak Borough

1976 Ohio Township Sewickley Hills Borough Sewickley Heights Borough

APPENDIX

The Reform of the Property Tax Administration

For Achieving Intrajurisdictional

Equity in Property Taxation*+

Ъу

R. Carbone¹ and R. L. Longini²

¹Assistant Professor of Management Sciences and Public Administration The Ohio State University, Columbus, Ohio 43210

²Professor of Electrical Engineering and Urban Affairs, Carnegie-Mellon University, Pittsburgh, PA 15213

*The authors would like to express their thanks to Mr. E. Ivory, former president of the Greater Pittsburgh Board of Realtors, for his help in securing the data and many useful discussions. Appreciation is also expressed to M. Hattery for his assistance in performing the experiments reported in this paper.

+Prepared for the ORSA/TIMS 49th Joint National Meeting, Philadelphia, March 31, 1976.

ABSTRACT

Property tax is the foundation for the financing of the operation of both local governments and school districts. Pressing changes are needed in the way this form of taxation is administered to ensure that all properties be assessed equitably. In this paper we examine meanings attached to equitable assessment and discuss what intrinsic properties a computer-oriented reform should exhibit so as to meet efficacy, equity and public acceptability criteria. The properties that emerge appear to be in contradiction to the well-known MRA system. A new automated system developed in accordance to these properties which utilizes concepts in feedback control and pattern recognition is reviewed. Results of empirical studies to test out this system and issues related to its implementation are discussed.

D

1. Introduction

The levying and collection of taxes on real property forms the foundation for the financing of the operation of both local governments and school districts in the U.S. Attacks on this type of system have highlighted the possible inequities for financing political jurisdictions when those entities have markedly different property values. The decaying urban center cannot generate enough revenues to finance and maintain municipal services while wealthy suburbs can generate surpluses with relatively low tax burdens on the community members. However, there is a more fundamental policy issue that must be resolved before state or local governments can begin to deal with the above problems: the accurate and equitable assessment of properties so that each taxpayer pays only his or her fair share.

In response to increasing attention focused on this fundamental issue, the administration of the property tax has undergone some major changes in recent years. Tax administrator offices are rapidly turning to the field of automation to impart a greater degree of objectivity into the assessment process. Several local governments have already adopted computerized systems for appraising residential properties. The most common of these systems, denoted the MRA system because of its reliance on multiple regression, was first initiated by the California State Board of Equalization in the late 1960's, compare [5], [6] and [7]. However, several methodological and operational problems inherent to the use of multiple regression analysis in the area of property valuation may hinder the basic goal of automation. The goal being to provide equitable assessment rolls according to present statutory requirements. These shortcomings in fact cast serious doubts on the potential adequacy of MRA systems to acquire public confidence and stand-up in court from a legal point of view.

The attention in this paper is directed at providing a viable solution to this policy issue. In the next section, we explore meanings attached to equitable assessment and attempt to answer the following question: what inherent properties should an automated reform of the property tax administration process so as to satisfy equity and public acceptability criteria while imparting the greatest possible measure of efficacy? Section 3 discusses a new approach to automated assessment which was designed on the basis of the properties that emerge. An empirical study which demonstrates the effectiveness of the approach is presented in - the subsequent sections of the paper.

2. Equitable assessment and automated reform

Equitable property assessment in its strictess sense is deceivingly simple in principle: assessed value per dollar of fair market value shall be uniform for all taxable parcels within a political jurisdiction. It would be a simple matter to operationalize this concept if fair market values were observable. Unfortunately, they are not. Values must instead be determined.

The primary function of an automated mass appraisal system is the generation of a valuation comparison formula which accurately establishes the fair market value of any parcel as a function of certain observable property characteristics (e.g. age, location, lot size, house square footage etc.) Great care must be devoted to develop a system which is:

- (1) accurate enough for reliable implementation,
- (2) easy to use and which produces few taxpayer complaints (achieves public confidence), and perhaps the most important and implying the others is
- (3) defensible in the event of court actions by property taxpayers.

What this implies is that not only must such a system yield accurate predictions at the lowest possible cost, but more important, it must also satisfy certain public acceptability requirements. Again the basic goal behind automation is to provide equitable assessment rolls. In the absence of observable fair market values, this objective becomes a subjective judgement. It therefore becomes essential that property taxpayers are able to perceive that they are being treated even handily if fair market values are to be generated automatically via some kind of valuation mechanism.

The achievement of equity, efficiency and public acceptability criteria entails the design of a system which embodies certain properties. If a system is to achieve public confidence, the derived coefficients assigned to the various characteristics entered into a valuation formula which express their dollar value and are to be used for predicting purposes should appear reasonable. One can imagine the resulting problems, given that the coefficients are publicly known as they should be, if a negative. coefficient would be attached to a property feature such as square footage. What may appear even more disturbing is wide inconsistencies in the values of certain coefficients from one assessment year to the next. Under such conditions, it would seem extremely difficult, if not impossible, for appeal boards to fall back on the system to defend any changes in assessment. It therefore becomes essential in order not to jeopardize the credibility of the system that the coefficients assigned to the characteristics do not behave erratically from one assessment year to another, or, if drastic changes are noticed, at least a gredual progression from their old values to their new ones should be demonstrable. It should be mentioned that similar credibility problems may well arise if the coefficients derived were inconsistent not only over time but also between various housing submarkets for which separate valuation formulae had been generated.

- 5 -

In conjunction with the time consistency aspect, the set of coefficients to be applied to all properties whenever assessments are to be determined should reflect prevalent market conditions at that point in time if present statutory requirements for valuation as of a single date in a year are to be met. What this means is that they should be viewed as time dependent and thus updated with the occurrence of each new sale transaction so as to adapt their values to the housing market dynamics. If the coefficients are not updated as in MRA systems as currently used, they then represent intermediate values over the estimation period and may not be reflective of market conditions whenever assessments are to be established. As a result, one may expect to find properties to be overassessed in declining neighborhoods and underassessed in those areas where property values are increasing.

As to the algorithm used for generating the coefficients, a percentage rather than an absolute or square error scheme (MRA systems) appears more appropriate from an equity point of view. It is in fact only through a percentage error scheme for generating the coefficients that a system can adequately respond to characteristics of low value properties. Under an absolute or square error scheme, a deviation of \$2,000 on a \$100,000 parcel for example would be weighted the same as a \$2,000 deviation on a \$5,000 piece of property. This is certainly not equitable. Moreover, the algorithm should be designed to minimize over-reactions to transient errors and thus provide robust coefficients. This is so because transaction values may not be reflective of fair merket values.

From a pure efficacy standpoint, the construct of the system should be such that it seeks to reduce the major component contributing to the total cost of implementation, that is, the collection and maintenance of the field data required. It goes without saying that the system should be readily implementable, and if at all possible, even in small computers for providing greater operational flexibility.

- 6 -

It is clear that the properties that have emerged are in general in contradiction with those characterizing MRA systems.

3. Automated Mass Appraisal Using Feedback

A new automated system designed on the basis of the desired properties we have discussed has been developed and subjected to some preliminary empirical testing, see Carbone [1], Carbone and Longini [3]. In This system, robust time-varying coefficients are generated by recursively updating values via a servo-mechanism built on a feedback principle. In simplest terms, the operation of the system may be expressed in the following way.

Given the estimates of the coefficients associated with the housing characteristics entered in a house-price relationship at time t, the market transaction which occurs at time t+1 provides a new data point which can be utilized to compute given the postulated relationship a predicted value of the selling price. The value predicted will almost certainly deviate from the observed value by a certain amount. This deviation is then used to cause a correction to be applied to the coefficient values. Since transacted values do not necessarily reflect fair market values, only a small portion of the deviation is corrected for by damping the updating process. The resulting updated set of coefficients for period t+1 is then used, given the next sale information at time t+2, to cause a further correction. This simple process continues in the same fashion as properties are transacted over time so as to reduce deviations between predicted and true market values by capturing the pattern of change in market conditions. A schematic representation of this process is illustrated in Figure 1.

The continuous learning process from information provided with each new transaction involved here avoids not only serious mislearning from non-bona fide sales since only small adjustments avoids are made at each iteration but also/complete re-estimation at each assessment year. Smooth progressions from old to new values are thus easily demonstrable. An important feature of the correction mechanism we have developed is that it requires no a priori knowledge of the patterns of variation that may arise. Given initial values

- 7 -

Deviation transaction value (from deed record Imperfect marke Consideration or conditions Some "pattern recognition" Difference predicted value and the True talue Difference between the The correction loop is Unknown known as "feedback["]. Adama are need horn consideration Adaptive automated mass appraisal system Property - a house and a lot coefficients used in the which has changed hands. Partial corrections of COMPUTER MAISYS **Predicted** value model 7 House-price relationship and values Figure 1: of the coefficients assigned to the Size, style, age Characteristics Corrections location, etc. Known characteristic.

8

for the coefficients, the system automatically captures the types of processes governing the change in the valuation of the housing characteristics over time. If some or all of these processes should suddenly alter their trajectory because of unformaten events, the information provided by subsequent sales is sufficient to guide the system back to its proper functioning.

The estimation algorithm used for generating the time-varying coefficients, the AEP (adaptive estimation procedure) method, see Carbone and Longini [4], is not limited by the number of housing attributes that can be incorporated into a valuation comparison formula nor as to the type of formulae which may be structured. It applies itself to a variety of linear and complex non linear interactive forms which may account for the differing effect of housing attributes on values in accordance to their intrinsic "qualitative" or "quantitative" nature. In relation to the former aspect, it thus makes possible the generation of a single valuation formula at a county level. Such a formula would incorporate a large number of indicator variables exhibiting in which area, such as municipality, and subarea, such as neighborhood within a given municipality, a property is located. Beside alleviating credibility problems which may arise from generating a separate valuation formula for each predefined homogeneous area, such a design may well allow for a substantial reduction in the data management cost. By setting each property within its geographic market structure one would expect that only a few basic attributes would secure a more than adequate performance since others would automatically be controlled for by the location factors. Finally, rather than being computationally impractical and very costly to use, the method is quite inexpensive and can be programmed to perform efficiently all the required operation on a mini-computer.

4. Effectiveness of the Feedback Approach

In [1] and [3], empirical results are presented which demonstrate the feasibility of this new approach. Attention here is focused on a

- 9 -

larger scale experiment to further examine the effectiveness of the system under different conditions.

The study is based on the analysis of a sample of 532 owneroccupied dwelling units where real estate transactions were recorded from 1969 to 1971. These dwelling units are all located in the greater Pittsburgh east-end which covers approximately onefifth of the total area of Allegheny County, Pennsylvania. Even if the communities selected are situated in the same general location, they reflect the heterogeneity character of metropolitan communities. Old and new, industrial and residential suburbs are included. Transfaction values in the sample vary from \$4,000 to \$80,000.

Twelve attributes beside location were used to describe each parcel. They are lot size, number of rooms, bathrooms, stories, car garage, type of structure (e.g. wood, brick, stone, etc.), type of garage (detached, attached), garage entrance (paved, not paved), landscaping condition; age, central air and finally, fireplaces (none, 1, 2 or morc). Among these attributes, the first five were defined as "quantitative". The remaining ones were all considered as "qualitative" and reflected by 0/1 indicators. For example, the age variable was broken down into five interval factors (0-10 years old, 10-20, 20-30, 30-50, 50 and over). Information on all these attributes for each parcel was collected from past individual property transaction records of several realtors in the .area. As for location, 17 clusters determining homogeneous housing sub-markets which in some cases crossed over municipal boundaries were identified. For each such cluster, a 0/1 qualitative indicator was defined specifying whether or not a property was located in the cluster.

A second input file, herein refered to as input II as opposed to input I for the file described above, was created in which the qualitative features landscaping condition, central air and fireplaces were suppressed. The motivation for creating this second file was to examine the comparative effectiveness of the system when only basic property features which are easily obtainable, objectively determined and usually remain constant over the life of a property are used under a single valuation formula design.

- 10 -

The house-price relationship assumed in the study mirrors a basic interaction phenomenon between "qualitative" and "quantitive" attributes. Some property features are entered in linearly additive ways while others in multiplicative forms. More specifically, the structure postulated expresses the contribution to total value of each quantitative variable as a function of the qualitative aspects embodied in a property. Hence, under this formulation, the coefficients assigned to the various qualitative indicators we have arbitrarily defined are not viewed as adding or substracting an amount to value, if the indicator is observed, but rather as indirectly affecting value by appropriately weighting the coefficients associated with the quantitative attributes. The end result of this "structure is virtually a separate valuation formula for each class of properties defined by a quanlitative characteristic arrangement, e.g. brick house, 10-20 years old, located in cluster 1, and so on.

Table 1 presents the set of coefficients generated for input file I and II at two points in time: the start and end of the three years study period. These values were derived by recycling several times the two groups of observations through the system so as to converge to the experienced patterns of change having set in both instances the initial values of the coefficients to 1. The recycling here was necessary because of the small number of observations involved. Also, a normalization scheme was employed for the qualitative indicators. One indicator within each grouping was suppressed (those with coefficient value 1 in Table 1). The collection of the suppressed indicators becomes the "standard" qualitative class of properties. Having created such a standard class, the values of the coefficients associated with the quantitative attributes represent incremental valuations in the presence of this class. As to the magnitudes of the coefficients assigned to the indicators not selected as standard within each grouping, it determines the valueratio of these indicators relative to the standard indicator. For example, looking at Table 1, we notice that a frame structure is valued approximately 13% less than a brick house.

	Percent or	Inj	, put I	Inp	ut II		Percent or	Input		Input	
Variables	Mean Value	Start	End	Start	End	Variables	Mean Value	Start	End	Start	End
						Garage entrance					
Cluster						Paved	56.77	1.111	1,120	1.103	
1	5.26	1.295	1.296	1.488	1.487	not Paved	43.23	1,000	1,000	1.000	1,000
2	5.09	1.076	1.078	1.109	1.112	Landscaping					
3	4.70	1.i24	1.127	1.182	1.183	fair	32.70	1.004	1.006	-	-
4	6.77	1.018	1.017	1.003	1,002	good	45.68	1.000	1,000	-	-
5	4.70	1.087	1.089	1.060	1.062	excellent	21.62	1.105	1.110	-	-
6	6.39	1.018	1.020	.997	.999	type of structure					
7	18.98	1.000	1.000	1.000	1.000	Wood	7.14	.874	.873	.873	.872
8	5.45	1.161	1.163	1.175	1.179	Wood-brick	10.90	1.007	1.008	.999	1.001
9	1.69	1.000	.999	1.004	1.003	Brick	63.91	1.000	1,000	1.000	1.000
10	5.83	.873	.870	.856	.852	Aluminum	1.69	.958	•956	.925	.923
11	3.01	.803	.793	.772	.768	Aluminum-brick	12.97	1.004	1.005	.980	.981
12	3.95	1.059	1.060	1.058	1.059	Stone	3.39	1.054	1.055	1.060	1.062
13	5.26	1.152	1,153	1.210	1.214	Central air					
14	7.33	1.053	1.054	1.077	1,080	ye s	9.02	1.087	1.087	-	· 🕳
15	6.77	1.006	1.004	1.018	1.018	no	91.98	1.000	1.000	-	
16	3.57	.996	.996	.984	,985	Fireplaces					
17	5.26	1.064	1.065	1.112	1.114	None	69.55	. 934	, 938		
		•				· 1	25.56	1.000	1,000	-	-
Age					•	2 or more	4.89	1.138	1,138	-	-
0-10	29.70	1.407	· 1.409	1.328	1.326						
10-20	. 31.95	1.244	1.247	1.191	1.201						
20-30	12.41	1.000	1.000	1.000	1,000	Lot size (sq. ft.)	9119.13	.20	.24	.26	.31
30-50	17.67	1.024	1.023	.998	1.002						
50 and	8.27	.807	.804	.787	.784	# of rooms	6.62	1226.46	1405.06	1114,21	1308.05
over				-	-						
						f of bathrooms	1.53	645,40	736,81	1128.99	1320.50
Garage	•				•	·			-		
-						f of stories	1.66	1324.12	1507.73	1171.73	1373.39
detached	14.47	.988	• 989	.979	.983						
attached	65.53	1.000	1.000	1.000	1.000	f of car garage	1.13	1512.09	1782.34	1716.93	2015.15

Table 1: Coefficient estimates for input file I and II: start and end of period

Coefficient Estimate

Coefficient Estimate

T

- 12

1

.

approximately 15% from 1969 to the end of 1971. This reflects accurately the general increase in values experienced in Allegheny County during those years.

What is important to point out here is the general consistency of the coefficients obtained when comparing input I and II results. Differences in values can be observed but mainly for those assigned to the cluster and age variables as one should suspect given the nature of the suppressed indicators (landscaping condition, central air and functional fireplaces) in input II. For example, we note that the most valued cluster (cluster 1) when all the variables are considered becomes after suppression about 18% more valued in contrast to the standard location.

Some descriptive measures of predictive performance of the system for input I and II are presented in Table 2. By carefully examining this table, we find that the results are promising in terms of the mean square prediction error, the multiple correlation coefficient, the mean absolute percentage error and the coefficient of dispersion. Also little or no error in central tendency and variation can be detected. Given (1) the relatively small number of transactions used in this experiment, (2) the length of the time interval over which

- 13 -

	Input		
	I	II	
Mean transaction value	21393.05	21393.05	
Mean predicted value	21543.37	21284.16	
Standard deviation of transaction values	9059.75	9059.75	
Standard deviation of predicted values	8890.48	8337.10	
Root mean square prediction error	3912.98	4258.55	
Multiple correlation coefficient	. 905	.883	
Mean absolute percentage error	14.31	15.17	
Coefficient of dispersion	13.28	14.33	

Table 2: Some descriptive measures of performance.

they occurred and (3) the type and number of housing characteristics included in the house-price relationship estimated, it is apparent from these results that the automated system we have developed yields a more than satisfactory level of precision. It is also interesting to note in comparing input II to input I performance that the suppression of landscaping, central air and fireplaces resulted in a negligible decrease in predictive power.

It is interesting to note that running a simple linear multiple regression analysis on input file II with a constant included, for instance, provides slightly inferior results. For example, the root mean square error obtained is 4388.23, the multiple correlation coefficient, .875, and the mean absolute percentage error, 16.57%. Our intention here is not to build a strawman out of the regression approach nor to draw any general conclusions on the basis of these results. A valid comparison is very difficult, if at all possible to make. Two different functional forms are involved here. Also regression measures of performance are computed on the basis of estimated as opposed to predicted values. In doing so, we are hence biasing slightly our approach. However, it is important to point out that for those properties in the sample which sold for \$10,000 or less, the regression mean absolute percentage error is 45.67% whereas the percentage computed via the AEP method for the same properties is 31.47%. This supports our contention that a square error scheme cannot respond adequately to low value properties and hence, may well violate the goal of automation.

5. Concluding remarks

The object of the experiments reported in this paper was to see if the system we designed satisfies the needs of assessors and taxpayers. The results conform with the properties we believe essential for providing equitable assessment rolls. In addition the single valuation formula approach looks promising. As shown by our results, this design can secure a more than adequate performance by using only a few objectively determined basic property descriptors which usually remain constant over the life time of a property and can generally be found in present records or measured visually.

- 15 -

In closing, we address the issue of the role of an assessor within a computer-oriented organizational plan. The question is whether or not the computer should be contemplated as a substitute to the assessor or rather an extension of his abilities. Our present feeling on this matter is that the system could lose its credibility if assessors would be allowed to modify the computer assessment unless he has a documented case to back up his decision. We rather favor a process by which the taxpayer himself decides whether or not he agrees with the computer assessment. If he believes that he has been treated unfairly, only then would the assessor be called upon to perform an on site independent appraisal to verify the claim of the taxpayer.

Ξ.

- 16 -

- R. Carbone, "The Design of an Automated Mass Appraisal System Using Feedback" (Ph.D. diss., Carnegie-Mellon University, 1975).
- R. Carbone and R. S. Lai, "Assessment of Urban Residential Properties: An Empirical Study of Pittoburgh," Journal of Environmental Systems 4 (October 1974): 207-16.
- 3. R. Carbone and R. L. Longini, "A Feedback Approach to Automated Real Estate Assessment," WPS 75-55, College of Administrative Science, The Ohio State University (December 1975).
- 4. R. Carbone and R. L. Longini, "An Adaptive Stockastic
 Approximation Algorithm for Estimating Time-Varying Parameters" WPS 75-56, College of Administrative Science, The Ohio State University (December 1975).
- 5. J. Dasso, <u>Computarized Assessment Administration</u> (Chicago: International Association of Assessing Officers, 1973).
- 6. R. H. Custafson, "E.S.P. and The Appraiser," in <u>Revenue</u> <u>Administration 1967</u> (Chicego: Federation of Tax <u>Administrators</u>, 1967).
- T. GWARTENCY, "A Computerized Assessment Program," in The <u>Assessment of Land Value</u>, ed. D. M. Holland (Madison: University of Wisconsin Press, 1970), 125-42.

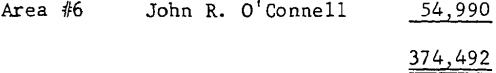
value of real estate. Unfortunately, there is no is complete for the entire County.

R1 Forms - R1 forms do not exist for e real estate and the forms which do exist are not extension of information regarding details on the Exhibit IV for type of detail information presently are loose leaf and are filed in manila folders in t This procedure makes them very easily misplace

Field Books - The assessors' field book one source which is most complete. A recent sum members of the Board of Property Assessment, A a result of questions by the Study Committee at th This survey shows that only 81 percent of the des County are complete in even the limited description required on the field book sheets.

REPORT ON NUMBER OF HOMES WITH INF

		```	No. of <u>Homes</u>
Area	#1	Louis H. Artuso	42,192
Area	#2	Samuel Rudick	59,550
Area	#3	Glen C. Jones	77,021
Area	<i>#</i> 4	John J. Fallon	65,839
Area	<b>#</b> 5	Joseph E. Feledick	74,900
1-00	# <b>6</b>	Toba P O'Connoll	5/ 000



# ⁹Data supplied by Board of Property Ass Review.

- 28 -

Each assessor has his own methods and procedures in keeping and maintaining his records, the use of sales data, records of notice of change, appeal information and determining actual market values. There is no uniformity within assessment areas under the direction of a Board member or among Board members.

Lot and Block Maps - The Controller's Office has completed only 96 of the 129 municipalities on the lot and block system. Each assessor has a complete set of maps for his area. However, they are not revised as changes occur. Maps are maintained on a current basis in the Deed Registry Office.

W.P.A. Records - During the middle Thirties, W.P.A. prepared sketches of buildings showing dimensions and detailed information regarding the type and construction. These records were very well done but were only complete for the urban areas (cities and boroughs). The records have become outdated over the years as the result of remodeling, demolition and new construction.

#### Sales Data

Information on sales of property is necessary for three different purposes. First, the Board of Property Assessment, Appeals and Review must submit monthly a report to the State Tax Equalization Board showing all real estate transfers, the sales price as shown by the deed and Pennsylvania tax stamps and the assessed valuation. Secondly, the assessors need sales data in order to determine market values and market conditions for

- 29 -

their assigned territory. Thirdly, BSCS needs the information in order to maintain up-to-date computer records on new owners, agents, and owner or agent's address for tax billing purposes.

At the present time, sales information is being supplied from two different sources, thus, duplication. The Deed Registry Office receives copies of all deeds from the Recorder of Deeds Office. Information from the_deed, including the sales price, is coded on forms and sent to BSCS. From this data, BSCS updates the computer file and also prepares an assessment/sales ratio report.

The Board of Property Assessment, Appeals and Review has a contract with Real Estate Statistical Service at the current annual rate of \$1,968 for which they receive data on all sales of property which are recorded in the Office of the Recorder of Deeds on a duplicate form. The information received contains:

- 1. Property address and Lot/Block number;
- 2. Brief description of the property;
- 3. Name of Grantee and Grantor;
- Dollar consideration and amount of Pennsylvania tax stamps;
- 5. Date of deed and date recorded.

This information is turned over to the assessor who records the sales information on his records and inserts the assessed valuation of the property on a copy of the form which is then returned to Real Estate Statistical Service. Real Estate Statistical Service in turn prepares the monthly report for the Board of Property Assessment, Appeals and Review to be sent to the State Tax Equalization Board.

The Board of Property Assessment, Appeals and Review receives from the State Tax Equalization Board ten cents (\$.10) for each transfer; therefore, it receives more than the costs of the annual contract with Real Estate Statistical Service.

Investigation and discussion with the various offices involved indicate that the entire process could be handled by BSCS and consideration has been given to it by BSCS. However, until 1976, it has received a low priority compared to other new programs and systems being developed for other County needs. It is the Subcommittee's understanding that beginning in January 1977, BSCS will prepare the STEB report and the contract with Real Estate Statistical Service will no longer be necessary.

The sales information supplied by Real Estate Statistical Service or the sales ratio reports prepared by BSCS are not used as an audit on the effectiveness of the performance of the assessment function. However, some of the Board members do utilize sales information for their own areas to determine market conditions and to check on the performance of assessors under their supervision.

#### Training and Supervision

All assessors are encouraged to take courses in assessment and appraisal procedures. However, the assessors are not reimbursed for this expense.

- 31 -

In 1972, all assessors attended a 20-session course consisting of eighteen sessions of course work, one session of review and one session for the examination. This course was funded by Allegheny County and was held at Duquesne University with the American Institute of Real Estate Appraisers and the Society of Real Estate Appraisers furnishing the instructors.

In addition, the assessors are urged to take the International Association of Assessing Officers (I. A. A. O. ) course which consists of six parts and is conducted by the Pennsylvania Assessors' Association. When all six courses have been taken, the assessor is then qualified to take an examination and if he passes, he is then a Certified Pennsylvania Evaluator. These courses are all taken at the expense of the assessor and he receives no reimbursement from the County. At the present time, approximately 80 percent of the assessors have completed the first five courses. Only 21 assessors have not taken any of the courses.

The Board of Property Assessment, Appeals and Review Office maintains records on all course work taken by each assessor as well as the assessors' educational background.

Other than the materials received through course studies, seminars attended and published articles, there are no written general rules and regulations established by the Board for the assessment process which the assessor is expected to follow in Allegheny County. This lack of written general rules and procedures results in each Board member and each assessor proceeding in his own way with varying degrees of effectiveness.

- 32 -

For example, some assessors utilize cubical content and others use square feet as a basis for market value comparisons.

#### Assignment of Territories

Every field assessor is assigned to a territory. A territory may contain several wards and/or one or more municipalities. Each supervising assessor supervises a group of assessors. Assessors report into the offices of the Board of Property Assessment, Appeals and Review approximately once every two weeks. Therefore, there is no direct day-to-day supervision of their work. Supervising assessors have stated that they know where the assessors are working each day, and in some cases, indicated that they have a place where they meet with the assessors in the morning. On the surface, this appears to be a very loose arrangement for the supervision of some 120 assessors and assistant assessors. On the other hand, having them all come into the office every day before sending them out to various parts of the County would be also a considerable waste of time, and expensive from a mileage reimbursement standpoint.

Presently, each supervising assessor prepares a bi-weekly report covering the activities of the assessors under his supervision.

The only way the present system can work satisfactorily is to make sure that the supervising assessor is a responsible, conscientious, dedicated supervisor capable of supervising employees and with the means of obtaining disciplinary action against employees who fail to perform according to the rules and regulations established by the Board.

- 33 -

The assessors are unionized and when a vacancy occurs in a territory, the assessors have the right to bid on the vacant territory. The Board Chairman has indicated that, to date, this has not presented a problem. However, such a system of assignment of territories does not permit the flexibility of utilizing the best talents most effectively.

On the other hand, assignment of territories does provide the opportunity for the assessor to become thoroughly familiar with his assigned area. As a result, he should be better able to make the value judgements that are necessary in obtaining uniformity based upon the market value of property.

#### **Building Permits**

Building permits are not required by every municipality in the County. In those municipalities which do require building permits, there is no requirement that a report of permits issued be filed with the Board of Property Assessment, Appeals and Review. As a result, in municipalities where permits are issued, the assessor must go to the offices of the municipality and hand-copy the information from the permit. Some municipalities provide the assessor with a copy of the permit which eliminates his copying the information. Such data is necessary as an aid to the assessor in locating new construction and additions for assessment purposes.

The Fourth to Eighth Class County Assessment Law¹⁰ requires the office issuing building permits in every political subdivision of each

¹⁰72 P.S. 5453.602b.

- 34 -

county shall keep a daily record, separate and apart from all other records, of every building permit issued, which shall set forth the following information:

- 1. Date of issuance;
- 2. Name and address of person owning and a description sufficient to identify the property for which the permit was issued;
- 3. Nature of the improvements and amount in dollars in which issued.

On or before the first Monday of each month, the office shall file the daily record in the office of the chief assessor of the county. The office shall collect from each person to whom a building permit is issued the sum one dollar (\$1.00)* of Mitteen cents (\$2.25) which shall be full compensation for its services to the county.

In addition, this same section of the Fourth to Eighth Class County Assessment Law requires that whenever a person makes improvements other than painting of or normal repairs to a building of \$1,000 or less in value annually and he is not required to obtain a building permit by any political subdivision, he must within 30 days of commencing the improvements furnish similar data to the office of the chief assessor.

At the present time, assessors in municipalities which do not require building permits are unaware of improvements. Therefore, assessment changes resulting from such improvements are dependent upon the assessors picking them up during the triennial assessment.

* amended 1968

- 35 -

#### Recording of Deeds

At the present time, there is no law which requires the owner of a property to record the deed in the Office of the Recorder of Deeds, and therefore, it is possible that not all transfers of property are recorded in the assessment records and tax bills would be sent to the previous owner. It has been indicated, however, that there does not appear to be a serious problem in that deeds are generally recorded.

The Fourth to Eighth Class County Assessment Law¹¹ requires that it is the duty of every grantee of real property to register the deed in the office of the chief assessor for the county in which the land or the greater portion of it is situated, within 30 days of the date of conveyance. unless such deed shall have been previously recorded in the Office of the Recorder of Deeds.

#### APPEAL PROCESS

#### Notice of Change of Assessment

A cut-off date is established annually to enable BSCS to prepare, en masse, Notices of Change in Assessment in the triennial area for all new taxable accounts, and any existing taxable account having a change in assessment of whatever amount. These notices are turned over to the Board of Property Assessment, Appeals and Review for mailing. A listing of changes is also produced for each municipality and school district. These are also

¹¹72 P.S. 5453.605a.

turned over to the Board and are usually hand delivered by the assessor because of their bulk.

Notices of Change in Assessment which occur after the cut-off date as well as Notices of Change in Assessment in the inter-triennial areas are handwritten by the assessor. Copies of these individual notices are mailed to the municipalities and school districts. (See Exhibits VI and_VI-A.)

At the completion of the triennial assessment, BSCS produces two sets of assessment books. One is used for display in the municipality and one for display in the offices of the Board of Property Assessment, Appeals and Review. For the City of Pittsburgh triennial, only one set of assessment books is prepared for display.

#### Appeal Filing

Following the close of the triennial and the printing of the assessment books, property owners are advised by public notice that they may view the assessment book and press releases are prepared which state that the assessors will be available to answer questions at such times or places as listed.

An application for appeal must be filed within 30 days from the date of the official notice of change. It should be noted that an appeal from an assessment of a property located in the triennial area which has not been changed may also be filed. Regarding appeals on property located in inter-triennial areas, the Board has stated that the County Law

- 37 -

Department rendered an informal opinion that an appeal could not be accepted during the inter-triennial period unless the property met the conditions which are set forth in the Second Class County Assessment Law.¹² In summary, the conditions are interpreted to mean that some physical change in the improvements or adjacent thereto or in the vicinity must occur; otherwise, the appeal is not accepted.

- Applications for appeal are available from the assessor when he is sitting in the municipality or from the offices of the Board of Property Assessment, Appeals and Review. (See Exhibits VII and VII-A.) If the property is an income producing property, an Income and Expense Statement form, which is furnished by the Board, must be completed and filed with the appeal application. (See Exhibit VIII.)

Rules and regulations governing appeals from the triennial assessment are printed and published in the newspaper and the Legal Journal. They are also available at offices of the Board of Property Assessment, Appeals and Review. These rules and regulations cover the dates the assessment books at the Board are open for inspection, who may appeal, appeal applications, intervention, hearing, postponements, witnesses, etc. The published rules and regulations are silent on the right and conditions under which an appeal may be taken during the inter-triennial period.

¹²72 P.S. 5452.13 and 5452.14.

- 38 -

#### Review of Assessment

Copies of all filed appeal applications are sent to the supervising assessor in whose territory the property is located. Copies of filed appeal applications are not sent to the municipalities and school districts in which the property is located. Every property on which an appeal is filed is reportedly reviewed, usually by two assessors, and a report with the assessors' recommendations is prepared.

As a result of the review and with the agreement of the supervising assessor and a Board member, a correction in the assessment may be agreed upon, and in such cases, a two-part post card is sent to the appellant indicating the revised assessment. If the appellant agrees to the revised assessment, he merely signs the card and mails it back to the Board. If he does not agree, the appellant does not return the card and appears for a hearing at the date and time indicated on the card.

In all cases where the assessment is sustained by the reviewing assessors, notices of the date and time of hearing are mailed to the appellant.

#### Appeal Hearings

Appeals from assessments are usually heard by one Board member because of the number of appeals to be heard. For example, there are approximately 8,500 appeals to be heard in 1976. This means that each Board member will hear approximately 1,400 appeals. In addition to the Board member, the supervising assessor and assessor attend the hearings.

- 39 -

At the weekly meetings of the Board of Property Assessment, Appeals and Review, reports of Board members' hearings are submitted with recommendations which are acted upon by the entire Board. The report consists of a listing of the name of owner, current assessment and new assessment. The Board members present at the weekly meeting make the final decision without hearing or knowing the facts of the case. The action taken is then transmitted to the appellant who then has sixty (60) days in which to appeal the decision of the Board to the Court of Common Pleas.

#### DEED AND ASSESSMENT REGISTRY OFFICE

#### Function

The functions of the Deed and Assessment Registry Office which relate to the maintenance of assessment records are as follows:

The maintenance of the lot and block system as prepared by the Controller's Office and certified as completed by the Court of Common Pleas; recording changes in ownership as evidenced by various official documents; recording changes in valuations, improvements and descriptions as submitted by the Board of Property Assessment, Appeals and Review; maintaining a control on the total assessed valuation of real property in each municipality; assembling and binding the tax duplicate blotters for municipalities, school districts, County Treasurer and the Board of Property Assessment, Appeals and Review.

#### Organization

The Deed and Assessment Registry Office is organized into three bureaus: drafting; deed tranfer; and transcribing. As of March 21, 1976, there were 82 positions in this department (see Exhibit IX for organizational chart) broken down by position title as follows:

1 Director;

l Administrative Assistant;

1 Secretary;

- 3 Supervisors;
- 2 Assistant Supervisors;
- 8 Supervising Clerks;
- 8 Draftsmen;
- 6 Deed Transfer Clerks;
- 3 Clerk Typists;
- 1 Typist;
- 48 Clerks
- 82 Total Positions

#### Bureau Duties and Responsibilities

Drafting Bureau - The Drafting Bureau maintains approximately 22,000 map sheets covering the entire County. This includes maps prepared under the lot and block system by the County Controller's Office and then turned over to the Deed and Assessment Registry Office covering 96 municipalities, and existing County maps covering the remaining 33 municipalities. Up to the present time, two sets of maps were maintained; the original maps and a copy which is made available for public use. The maps for public use are in the process of being eliminated. All maps have been microfilmed and a microfilm for each map placed on an index card which can be viewed in microfilm readers. Two card indexes are also maintained, one of which is filed by municipality and lot and block number and one alphabetically by owner. These cards contain general property location; property description; owner's name; deed book and page number of recorded deed and date of recording. In areas where lot and block maps have not been completed by the Controller's Office, a pseudo lot and block number has been assigned.

The present card index system is being changed to a microfiche system. This system consists of a 4 x 6 microfilm which contains indexes by owner's name, by lot and block number and by street address. Each microfilm will contain approximately 18,000 listings. When this system has been completed and installed, the present alphabetical card index will be eliminated. However, the lot and block card index will continue to be maintained because the card contains additional information.

In addition, this bureau serves and assists the public in obtaining the available information including the reproducing of map sheets. Public inquiries average approximately 300 per day.

- 42 -

Deed Transfer Bureau - The Deed Transfer Bureau processes all changes of real estate ownership as evidenced by deeds from the Recorder's Office (average 30,000 per year); deeds from Sheriff's Office (average 750 per year); probated wills; court orders; ordinances; declarations of takings, etc.

The process includes noting changes on the Deed Registry blotters and index cards and typing the official change order in triplicate, the original and one copy of which is forwarded to the Transcribing Bureau.

Transcribing Bureau - The Transcribing Bureau consists of four sections: Transfer Section; Coding Section; Assessor's Change Order and Control Section; AE (Additional and Exonerations) Section.

The Transfer Section receives official change orders and correction slips from the Deed Transfer Bureau in two lots: Straight transfers or whole taking which are properties transferred in their entirety; and split transfers where only part of the original is transferred to a new owner or a property is broken up and transferred to two or more owners. Notations are made in the blotter and straight transfer data changes are typed on Optical Character Reader forms with Selectric typewriters. These forms are then sent to BSCS and are read by the Optical Character Reader which automatically changes the computer data. On split transfers the original and second copies are forwarded to the Board of Property Assessment, Appeals and Review for new valuations. The assessors retain the second copy, and the original copy with the new valuations is returned to the Transfer Section where the additional notations are made on the records

- 43 -

and then forwarded to the Coding Section for processing. Split transfers comprise approximately 25 percent of all transfers.

Assessors Change Order and Control Section receives all Assessors Change Orders from the Board of Property Assessment, Appeals and Review. These change orders reflect changes made in valuations, addition or deletion of improvements, changes in description, etc. The clerks in this section add code and line numbers, check the addition or subtraction of valuations and note changes in the blotters. The Assessors Change Orders are then forwarded to the Coding Section for processing. Approximately 60,000 Assessors Change Orders are processed each year. In the peak triennial years of 1970 and 1971, there were approximately 110,000 to 120,000 Assessors Change Orders processed.

The Assessors Change Order and Control Section also maintains the assessed valuation control sheets for each municipality, which is balanced with the offices of the County Controller and County Treasurer. All additions and exonerations, which can affect previous tax years as well as the current year, are posted to the control sheets. The certified valuation balance is made to the County Controller every month. Balanced valuation report sheets are certified with the County Controller's Office, County Treasurer's Office and the Board of Property Assessment, Appeals and Review for each municipality. These reports show total real estate valuations, total real estate taxable valuations, total real estate exempt valuations, and gross total County tax.

- 44 -

The Coding Section receives all official change orders which are not handled by Optical Character Reader forms and all Assessors Change Order forms. Changes are coded and sent to BSCS for key punching and updating the computer record.

## BUREAU OF SYSTEMS AND COMPUTER SERVICES

The Bureau of Systems and Computer Services maintains a land tax file.¹³ This file contains information on each account (parcel or contiguous parcels) and provides the following information on all properties within Allegheny County.

- 1. Lot and block number;
- 2. Control number (used to identify location of property record on the computer);
- 3. Municipality and ward;
- 4. School district;
- 5. Taxable or exempt;
- 6. Street name and address;
- 7. Owner's name;
- 8. Mailing address of agent or property owner;
- 9: Current assessment on land and improvements shown separately and in total.

¹³ A computer tape containing data on each piece of property.

From the information contained in the land tax file, the follow-

ing forms and reports are prepared.

- 1. Two sets of blotters for display purposes prior to close of appeal period, one for display by the assessor at the municipality and one for display at the Board of Property Assessment, Appeals and Review Office.
- Five sets of final assessment blotters are produced and distributed as follows: One for Board of Property Assessment, Appeals and Review; one for County Treasurer; two for Deed Registry and one for municipal and school tax purposes.
- 3. Notices of change in assessment are produced, en masse, at the end of the triennial and are submitted to the appeals bureau. Changes made after designated cut-off date and in the inter-triennial areas are prepared by the assessor and submitted to the appeals bureau.
- 4. Listings of notices of change in assessments are * prepared for:
  - a. Municipality;
  - b. School District;
  - c. Appeal Bureau;
  - d. Assessors.
- 5. Sales ratio reports are to be prepared annually.
- 6. Property record cards are prepared annually for triennial area.

#### Property Record Card

Property record cards designed for computer purposes were first used for the Pittsburgh triennial in 1974 and then for the southern Allegheny County triennial in 1975. Upon receipt of forms, the cards will be printed for the northern triennial area for 1976. These property record cards are not designed as a permanent record but are used as source information for the computer record of the property. The system is designed to print a new property record for the area in which a triennial assessment is to be undertaken. The property record cards are then turned over to the Records Office which is in charge of the property record cards and is located in the offices of the Board of Property Assessment, Appeals and Review.

The property record card was designed to contain numerous factors which describe the exterior and interior of buildings as well as various factors which are believed to influence the value of the land, and previous sales information. These sections of the cards are not being used at the present time.

# LOT AND BLOCK SYSTEM

# Legislative Background

The Second Class County Code, 16 P.S. 3701 - 3707, dated July 1953, empowers the County Commissioners to establish, in the office of the County Controller, the lot and block system (tax maps) for the registration of land titles, for the accumulation of County tax liens, and for the enumeration of the parcels of real estate to be assessed for County, city, borough, township and school purposes.

The Code further authorizes the County Commissioners to use current tax revenues or issue general obligation bonds to defray the cost of expense of establishing the lot and block system.

- 47 -

When the County Controller has certified to the County Commissioners that the system has been completed for one or more municipalities, the plats and plat books (maps) are turned over to the Deed Registry Office for upkeep.

#### Completions to Date

In 1945, the County Commissioners proceeded to establish a lot and block system and issued \$150,000 in 20-year bonds to begin the work.

As of January 1, 1976, a total of \$7,470,000 in bonds has been issued (see Exhibit X) for the establishment of the lot and block system and 96 of the 129 municipalities have been completed and turned over to the Deed Registry Office. A list of the completed municipalities and years certified to Deed Registry is shown in Exhibit XI.

It is anticipated that three municipalities: Robinson Township and Liberty and Lincoln Boroughs will be completed in 1976 and turned over to Deed Registry by January 1, 1977.

# Estimated Completion

The balance of the 30 municipalities are in various stages of completion and it has been estimated by the Mapping Section of the Controller's Office that with the present work force it will take at least an additional five to six years to complete the work.

# Conclusion

The fact that the lot and block system is not completed does not present problems to the short or long-range objectives of assessment

- 48 -

procedures and practices because a pseudo number has been assigned by the Deed Registry Department to identify properties on the County maps of the 33 uncompleted municipalities. As municipalities are completed, the pseudo number will be changed to the official lot and block number.

Submitted by:

Alexander J. Jaffurs, Chairman Donald J. Lee Joseph D'Anna J. Paul Riden, Research Staff

### PART III

# LONG RANGE SUBCOMMITTEE REPORT

If any one work could summarize the long range solution to the problem of property assessments in Allegheny County the word would be acceptance--acceptance by the public of the system based on their perception that it is a fair and equitable system imposed on them. Clearly, that perception does not exist today.

- Assessments, by their nature, are complex. The whole theory of property taxation dates back to the time when only a few owned property and the assessor was a visible person who rendered his judgments based on criteria he could uniformly apply throughout the taxing district.

Today, with over 100 assessors of varying degrees of training and competence and over 500,000 property accounts, assessments have become a great puzzle, which can be manipulated only by the large sophisticated property owner and, to some extent, by elected officials.

It is the Subcommittee's belief that obtaining public acceptance of the assessment process lies in the eventual development of an automated system. Such a system, as demonstrated in the attached report by Subcommittee member Dr. Richard Longini, must achieve four basic goals: A reliable data base with continuous updating, equity, credibility and public access to information. A discussion of these goals follows.

#### I. An Accurate and Reliable Data Base with Continuous Updating

The basic problem of the assessor, or even a private appraiser, is the assembling, study and analysis of data concerning recent sales in arriving at an estimate of value. The better the facts, the better the conclusion.

The data base now in use, the property card, may or may not be complete or accurate depending on the assessor who made the initial entry and the amount of updating performed. Any long range improvement in the assessment system will require that all such property information cards be accurate and reliable.

Essentially, there are three methods to secure the initial

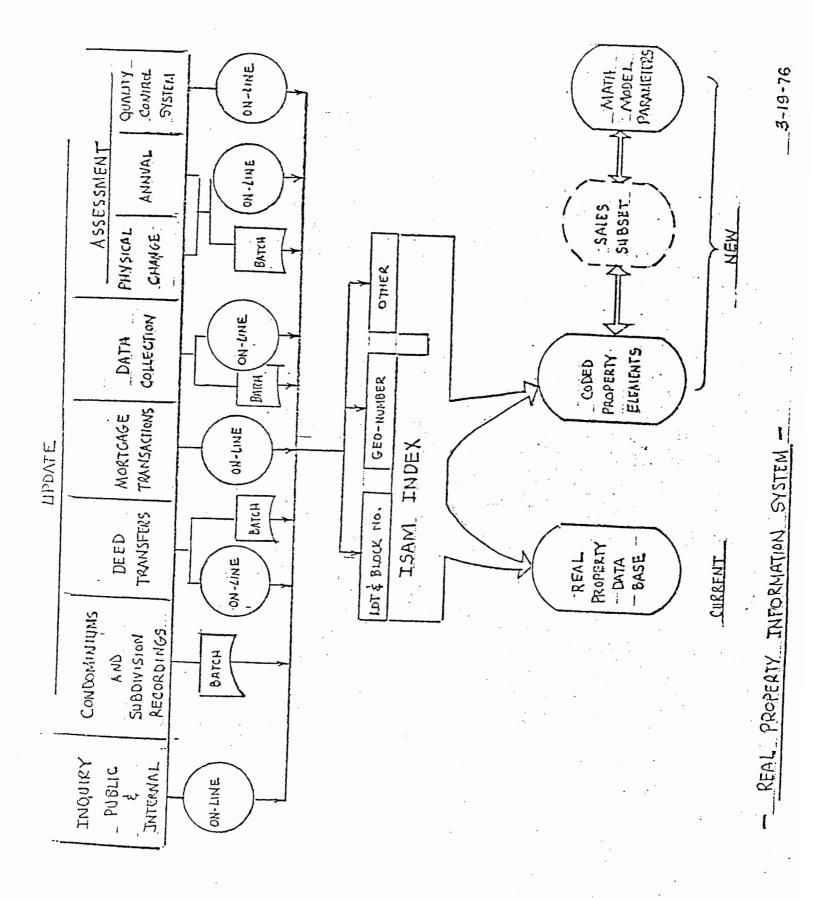
data:

- Relying on the present assessment staff to check accuracy of present cards and development of those not in existence or working order.
- Employment of a private appraisal firm to cover all properties in the County for initial data entry. Such an appraisal is particularly suited to a period in which reassessments are "frozen".
- 3. Request each property owner to supply basic information in a simplified format.

Each approach has cost implications. Approach #2 is particularly costly although verification costs would be minimal. Approach #1 would produce the least "added" cost although the present staff might be unable to perform the function within a specified time limit. Approach #3 would have a minimal initial cost although certification and "no report assessments" would likely be a continual and costly problem.

In addition to these three approaches, there is currently available at minimal cost "appraisal reference cards" through a service which provides data on properties viewed by professional appraisers. In any of the approaches, data obtained from the service could be used in lieu of individual searches or as a verification mechanism.

Once the data is in a reliable and comprehensible form a process of continual updating must be instituted. The updating process should be viewed as one component of the property information system already being developed by the County. This system is represented in the following chart:



- 52 -

The proposed configuration builds on the existing data base, which is already on direct-access, to include the acquisition of new data elements and the orderly handling as the data is being collected; and with continual maintenance.

The integrated system includes batch, batch-and-forward, and on-line inputs for updating the data base, based on the type of transaction and the economics thereof. On-line access would be provided for a Quality Control System and Inquiry.

Access to the data base would be made through an Index Sequential Access Method file using the lot-and-block number or a geographical parcel code as the key. For a single transaction, or en-masse, the Real Property Data Base, or the Coded Elements Data Base, or both data bases would be accessed directly.

In this way the Real Property Data Base could be updated for owner, agent, address and descriptive data in conjunction, or independently, of updating the Coded Elements Data Base. The status of the Coded Elements Data Base would be maintained in the ISAM file so that it would always be related accurately to the Real Property Data Base.

Provision would be made for a land use code in the ISAM file with additional codes as needed for property classification by lot and building within the Coded Elements Data Base.

A Sales Subset of the Coded Property Elements Data Base would be used for maintenance of the parameters of the mathematical models. The mathematical models would be part of an on-line quality control. system to calculate a predicted market value based on the coded elements contained in the Coded Elements Data Base for each property. The land use code and other codes would be used to select the appropriate model for calculation of the market value. Comparable property analysis, uniformity reviews, and other modules would be included in the on-line quality control system for public and internal use.

# II. Equity

The basic reason for going through a major reform of an assessment process is, of course, to achieve some degree of equity, and especially perceived equity, on the part of the taxpayer. Whether the final system relies on automation or an overhaul of the manual system, all of the following elements must be built into the system in order to achieve some degree of equity:

- A. All values should be as of one particular date; if a mechanical system is developed, then a revision should be made of all properties simultaneously as the model is updated; on a mechanical system, continuous assessing can go on but new values must be applied simultaneously.
- B. Comparable properties that have been transacted should be shown where possible. Corrections for neighborhood, size and structural differences should be shown.
- C. The system should treat all economic levels equally. Any reasonable system minimizes error but the system should specify the minimizing of the percent error rather than the absolute error.
- D. Any change in base criteria, whether in a mechanical model or a manual should be carefully documented to avoid the appearance of preferential treatment.
- E. Development of a mechanism to separate land values from improvement values will greatly assist the taxpayer in perceiving some degree of equity as is mandated for municipalities. in the County.

The Subcommittee wishes to point out that the development of a totally equitable system, especially an automated one, denies the practice of an assessor applying subjective judgements to properties whose owners, due to social conditions or others, find themselves unable to meet increasing real property taxes.

If it is the desire of public officials to provide tax "relief" to the elderly, handicapped, unemployed, etc., then some "circuit breaker scheme" designed to reimburse property owners or pay taxes directly should be legislated. It is the Committee's belief that using the assessment function to provide such relief would be difficult and only further perceptions of inequality. Should municipalities be expected to provide direct relief through reduced assessments, however, then some scheme for "flagging" these properties must be built into the automated system.

## III. Credibility

Perhaps the chief complaint about assessment systems in Allegheny County, and all over the nation, is that they are exceedingly complex and based on criteria, formulas and procedures understandable to professional assessors and appraisers, but not to the general public. This lack of understanding leads the property owner to believe, often with justification, that criteria are not uniformly applied throughout the taxing district. Such beliefs are enhanced by nonprofessional assessment offices as well as superficial news coverage and political abuse of the system.

In considering long range improvements to the Allegheny County assessment process a vital element is the development of a credible system wherein the property owner has access to information on how the assessor and/or mechanical system arrived at the valuation.

Such a system requires the following:

- A. A set of measurable criteria on which the assessor can base his evaluations.
- B. The application of the criteria must be uniform and be physically reflected on a property card or data sheet, which is available to the taxpayer.
- C. Periodically, the taxpayer should be brought up-to-date on his assessment and what it means either by mailing a summary of the property card data with tax bills and/or, at the very least, include an explanation of what criteria have changed when the assessment is increased or reduced.
- D. Public forums and seminars should be held to explain the criteria and the process.