

JAMES A. GRAASKAMP COLLECTION OF TEACHING MATERIALS

IX. MISCELLANEOUS PROJECTS AND CORRESPONDENCE WITH INDUSTRY

A. Computer Modeling

3. Sample of Correspondence and Information Tax Form for the Assessment of Village of Maple Bluff, Dane County, 1978 - 1986: Includes development of computerized market comparison valuation system for Maple Bluff properties

University of Wisconsin Madison

School of Business
1155 Observatory Drive
Madison, Wisconsin 53706

Graduate School of Business
March 14, 1978

Dear Property Owner:

Last year the Board of Maple Bluff Trustees emphasized correction and updating of assessments on single family homes and lots in Maple Bluff. This year the Trustees have requested that we extend our review to all the commercial properties in Maple Bluff as well.

To this end I, or my assistant, Fraser Gurd, would like to visit with you briefly before April 15, 1978 to inspect the property and to discuss with you the rental income and/or operating expenses of the property during 1977. You undoubtedly have these figures collected for your income tax statements. Because the number of commercial properties in Maple Bluff is so limited and because some of the sales prices along Sherman Avenue seem unrealistic, we would like to relate our assessments primarily to the net operating income of the property as it is currently being used or as it would rent if it were available in the rental market. We believe this approach will be most consistent and fair to all the commercial property owners in Maple Bluff.

We look forward to meeting you in the next few weeks.

Sincerely,

James A. Graaskamp
Village of Maple Bluff Assessor

JAG/db

University of Wisconsin Madison

School of Business

1155 Observatory Drive
Madison, Wisconsin 53706

Graduate School of Business

October 26, 1978

Robert T. Kist, MAI
Chairman, Trust Fund Committee
Equitable Assurance Company
1750 Equitable Building
10 Broadway
St. Louis, Missouri 63102

Re: Research Support for Development of Micro Computer System for Appraisers

Dear Mr. Kist:

At the suggestion of Charles Akerson and Robert Ford, we are sending you the proposal which follows for consideration by the Research and Education Trust Fund at the Honolulu meetings.

Introduction

Over the past few months Robert Knitter and myself in our various roles in continuing education have heard many an appraiser expressing interest in various micro computer configurations as they might be appropriate to real estate analysis. Further we believe that the economics of the micro computer are beginning to make sense for both small appraisal offices and the education efforts of professional appraisal societies.

The proposal which follows is a request that the Research and Educational Trust Fund consider for immediate funding (in conjunction with funding by the University of Wisconsin Business Research Center) the development of a micro computer system package with options appropriate for use by appraisers and real estate analysts. We believe that with prompt action the equipment configuration could be assembled and operating to demonstrate a basic investment model and MKTCOMP model for the May 1979 meetings in Chicago and that the total software package could be made available by the University of Wisconsin Foundation or others in time for the November 1979 meetings of the Institute! The detail of our proposal is provided below, and because of the impending November meeting, we have provided copies of this proposal to the various members of the Committee that we could identify and sent extra copies to Charles Akerson in care of his suite at the Ilikai Hotel.

General Objectives:

A micro computer system consists of some basic hardware units, selected computer language processing software, and application programs. We are proposing that the Research Fund purchase the hardware and processing software for the University of Wisconsin and that the University School of Business Research Fund provide for the personnel of James Graaskamp, Robert Knitter, and an additional programmer-research assistant to create or adapt the application programs for real estate that would be available

to appraisers choosing to use a micro computer in their own office. Further adaptation of the same programs to a micro computer suitable for multi-user input/output for a classroom will be kept in mind, but the hardware required for constant student use would be more expensive than that proposed herein and is therefore an extension postponed for further funding by others.

The hardware system required for this proposal would be a stand-alone, single user, desk-top micro computer suitable for the limited budget and applications found in a small appraisal office. It should be capable of supporting applications related to valuation, word processing and document production, as well as administrative office accounting. The hardware system should include state of the art components for which local maintenance would be available in most cities and a self diagnosis program would be available. The circuitry should be sufficiently flexible to permit a range of equipment options for input, storage, and output suited to various capacity requirements and quality standards of independent appraisal operations. Finally, the combination of hardware, processing software, and a useful array of application programs should cost the user between \$10,000 for the basic configuration and \$15,000 for a deluxe package in place in his office. Such a system could be built around a micro processor such as that offered by Radio Shack (See Exhibit 1) and in any event would be chosen in each instance from those alternatives which are among the most common and readily available (30-90 day delivery time).

Equipment Budget and Detail

Micro processor, memory, and power supply	\$3,000 (1)
CRT visual display and input keyboard	900 (2 & 3)
Printer 30CPS (high quality)	2,000 (4)
Disk Storage unit	2,000 (5)
Operating system software in Fortran and Basic available from Equipment Vendors	1,800 (6)
Accounting, statistics, and other packages purchased for modification	<u>1,200 (7)</u>
	\$10,900 rounded \$11,000

1. Central Processor

32K memory with optional expansion beyond 64K desirable. Main bus suitable for use of optional circuitry available from multiple vendors. Memory speed of 2MH₂ or greater. Bus and power supply allows suitable system expansion.

2. Visual Display (CRT)

20 x 80 charactes, upper/lower case, 9600 Baud. Standard RS232 interface desirable. High resolution (10MH₂ min) required. Full cursor control required.

3. Keyboard

Full ASCLL encoding. Reliable. Separate from display (desirable)

4. Printer

Alternate printer options allowed. RS232 interface to printer required to allow selection from wide range of printer options currently available.

5. Disk Data Storage

Flexible disk (floppy disk) system with on-line capacity of 1MByte (2MByte desirable). 2 drives required. Standard recording format.

6. Processing Systems Software Requirements

Operating System

Features: Simplified user interface. Advanced programmer functions. Flexible management system for disk data. Multi-language support. Supports alternative I/O devices at various speeds.

Fortran Processor

ANSI standard as a minimum. Efficient data storage. Character string handling capabilities. Direct access to disk data allowed. Suitable for modular programming.

7. Application Program

Certain programs for word processing, data base management, accounting, statistics, and perhaps surveying are available from a variety of vendors and need to be purchased for use on hardware above. This budget item covers outright purchase. For balance of programs see next section.

Applications Program Development and Personnel:

The University of Wisconsin School of Business research program has been requested to provide salary funds for H. R. Knitter, Prof. James A. Graaskamp, and a research assistant to manage the adaptation and development of real estate valuation programs for the micro-processor. The total value of that budget request is \$ as submitted in Exhibit 2; while it is termed summer funding, that is because limits on salaries payable per month would require postponement of compensation to months when courses are not being taught, etc. Program development would involve adaptation of some programs and development of new. Real estate programs developed at the University of Wisconsin would be made available to real estate appraisers at appropriate cost through the University of Wisconsin Foundation and a report describing the system and its various options would be issued by the Bureau of Business Research at cost to the general public. Program development will have three phases:

Phase 1:

In addition to testing of priority programs for word processing and accounting, a new version of MKTCOMP and a basic investment model for real estate valuation would be available in time for demonstration to the Committee or the Institute at large for the May meetings in Chicago in 1979.

Phase 2:

Preparation of a list of existing packages available from vendors in accounting, statistics, surveying, and other areas would be prepared during the summer of 1979; in addition, a statistical package for real estate, adaptation of selected EDUCARE programs and a new program for land land development would be developed to be included in the finished package available for distribution in November 1979.

Phase 3:

Additional new programs for real estate analysis including condominium conversion, alternative VRM, GPM and FPM mortgage forms, an income projection model for multiple tenant leases with escalators, and additional standard word processing formats would be prepared for delivery by May of 1980.

Educational Option:

If the Research and Education Research Committee is satisfied by the May 1979 presentation, we would recommend preparation of an illustrated slide lecture on cassette tape for use by appraisal chapters around the country to demonstrate the system configuration and output. Such a program would cost \$1,000 with two sets of slides and cassettes.

Structuring the Grant:

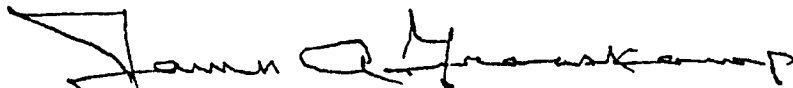
This application to the trust fund is made after careful consideration of alternatives. The micro computer for the office at reasonable cost is a reality which calls for professional response and some professional standardization to reduce unnecessary development expense or unnecessary purchasing errors by its more progressive members exploring application of the micro computer. While EDUCARE might be an appropriate vehicle, it does not have the capital, and the time needed to involve all three member organizations would postpone any development to 1980 at the earliest. Perhaps future responsibility could be assigned to EDUCARE if participating members provided matching grants at some future time. Joint application to SREA and the American Institute seemed awkward at this particular time pending redefinition of their relationship and areas of cooperative endeavor. Operations of the Appraisal Education Foundation are indeterminate at this time and it seemed inappropriate to apply to the SREA Foundation when we had received valuable encouragement and dimensioning of the task from Robert Ford and Charles Akerson. Thus your Research and Education Trust Fund appears to be the most suitable partner for this practical and timely development of an in-house analytical tool, which teaches contemporary appraisal methods while it contributes immediately to appraisal service and income potential.

In summary we are proposing a partnership in which the Research and Educational Trust Fund provides the capital for the equipment and the system components while the University of Wisconsin School of Business provides the manpower.

The total amount of the research grant requested is Eleven Thousand Dollars (\$11,000.00) as itemized above. The research grant would be payable to University of Wisconsin Foundation which would purchase the equipment, transfer title to the Regents, and the University would provide insurance and maintenance.

We look forward to an early response as we must notify the University Graduate Research Committee of our funding status for equipment.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "James A. Graaskamp". The signature is written in a cursive style with a large initial "J" and "G".

James A. Graaskamp
Chairman, Real Estate & Urban Land Economics

JAG/db

cc Akerson, Hastings, and balance of Research and Education Trust Fund Committee

School of Business
 1155 Observatory Drive
 Madison, Wisconsin 53706

Graduate School of Business

November 4, 1978

MEMORANDUM

TO: Maple Bluff Village Board

FROM: James. A. Graaskamp, Village Assessor

RE: 1979 Annual Budget for January 1, 1979 Assessment and Preparation for January 1, 1980 Assessment

A change in State law has shifted assessment date to January 1 of each year beginning in 1979. Given the short space of time, we propose to correct the 1978 roll by adding 1978 sales since May 1, correcting data files on selected properties which were particularly difficult in 1978, and inspecting key sales comparables to improve reliability. We would present the roll at the end of March. Then during the summer, Fraser Gurd and one assistant to be licensed would conduct an inspection of each home to improve data on interior features and other remodeling which is generally missing in present data files. The object would be to have a consistent 100% market value representation for January 1, 1980.

Items to be covered by University of Wisconsin Foundation proposed budget for January 1:

James A. Graaskamp, Assessor	\$1200	
University of Wisconsin Business Computer Center and MACC (or cost actually billed)	1500	
Inspection of 550 homes for January 1, 1980 assessment @\$10/house (or actual cost if less)	<u>5500</u>	\$8200

Expenses payable directly by Maple Bluff:

Fraser Gurd, Assistant Assessor, \$400/mo.	\$4800	
Clerical and mailing costs	<u>500</u>	
		<u>5300</u>
Total Assessment Budget		<u><u>\$13500</u></u>

November 7, 1978

MEMORANDUM

TO: Charles Akerson
Robert Kist
Robert Ford



FROM: James A. Graaskamp

RE: Proposal for Micro Computer Research Project

It has been suggested that if the Research Foundation were to finance our proposal for a micro computer that EDUCARE eventually have full use of the equipment.

We fully expect that EDUCARE will have full use of the equipment and assume that from the start. The technical problems are as follows:

1. Title for the equipment will first be with University of Wisconsin Foundation as the purchaser and the Foundation must under its procedures gift it to the University so that University insurance covers, University staff maintains, and University faculty can be paid for working on the project from University funds.
2. The Appraisal Research Foundation will want to avoid any reversion to the benefit of the Institute which is a third owner of the Foundation for the tax ambiguities it would cost.
3. The politics of EDUCARE are such that in the past each participant provided matching funds of equal amount. To offset the value of the micro computer the other agencies might forgive a portion of their notes and the EDUCARE Foundation might purchase the micro computer for a token amount.

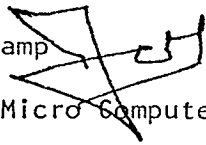
In the meantime there is no need to resolve the technical problems above because as a practical matter the micro computer will be added to the EDUCARE course once it is programmed.

School of Business
1155 Observatory Drive
Madison, Wisconsin 53706

Graduate School of Business

MEMORANDUM

TO: Dean E. J. Blakely, Professor Robert Hauser
Graduate Research Committee

FROM: Professor James A. Graaskamp 

RE: Research Grant to Purchase Micro Computer for Development of
Appraisal System

Received notice by telephone this morning from Robert Kist, Vice President of the Equitable Life Assurance Co. that the research Foundation for the American Institute of Real Estate Appraisers has granted our request for \$11,000 as per the attached letter. Funds will be deposited in the University of Wisconsin Foundation on or about January 3, 1979. Confirmation will follow from the Institute by letter.

The request for this equipment paralleled our application to the Graduate Research Committee for summer funding for Professor James A. Graaskamp and Robert Knitter and a research assistant to develop a software package for use by assessors in small communities and as well as independent appraisers. We now need some resolution by the Graduate Research Committee as to where we stand for summer funding. Without matching time, we would lose the opportunity for research and teaching potentials of the micro computer. It is our intent to order the equipment as soon as possible and have the system initially operational to teach ourselves its idiosyncrasies as early as possible.

Our letter of proposal which was accepted by the Institute is attached.

**THE GRADUATE SCHOOL
UNIVERSITY OF WISCONSIN—MADISON**

BASCOM HALL
MADISON, WISCONSIN 53706

DEC 15 1978

Professor James A. Graaskamp
School of Business
118 Commerce

Dear Professor Graaskamp:

The Research Committee has given careful consideration to your July 1, 1979 to June 30, 1980 grant application to do research on "COMPUTERIZED REAL ESTATE PROPERTY ASSESSMENT SYSTEM MINICOMPUTER FOR LOCAL ASSESSOR OPERATION", and will provide the following support for this project.

Investigator Salary - Summer 2/9ths	\$3,504.00	(Graaskamp)
Staff Salaries - Specialist	\$4,142.00	(Knitter)
Project Assistant - Summer 2/9ths	\$1,024.00	
Supplies and Expense -	\$ -0-	

NOTE: All personnel action forms, payrolls, requisitions, travel expense forms and miscellaneous invoices must use the following coding:

Project Number	Fund/Account Number	Unit	Division	Department
100369	101-1009	A	34	1220

Attached for your information are guidelines for administration and staff payroll of your project. Please review these procedures to expedite the processing of the necessary paper work for your research project.

All salary support is awarded at the Regent approved rate. Appropriate fringe benefits are provided separately by the Research Committee.

Research Committee salary support is an investment in University faculty development and is available only for persons who will be faculty members in the semester following that support.

The individual appointed as a specialist under this award must be informed that this funding is limited to the period July 1, 1979 to June 30, 1980. There is no commitment beyond June 30, 1980, by the Research Committee. You should contact your Dean's Office or the Academic Personnel Office for detailed instructions.

Professor James A. Graaskamp
School of Business
Page 2

The funds for support of this research are made available by the state for studies relating to the economic development of Wisconsin. Any questions concerning origin and application of funds should be directed to the Assistant Director of the University Industry Research Program, at 3-2840.

If there are any questions regarding your grant support, please refer to your project number above when contacting the Graduate School Accounting Office (2-5835).

Sincerely,

A handwritten signature in cursive script that reads "Robert M. Bock". The signature is written in black ink and is positioned to the right of the typed name.

Robert M. Bock
For the Research Committee

RMB:mh

cc: Dean, School of Business
UIR

October 25, 1979

Board of Trustees
Village of Maple Bluff
18 Oxford Place
Madison, Wisconsin 53704

Re: Budget for January 1, 1981 Assessment Program

Gentlemen:

With completion of property inspections and improvements to the assessment program and output format for January 1, 1980, the experimental phase of the Maple Bluff assessment should be complete. While the School of Business will be pleased to continue servicing the experiment another year, the school is generally not permitted to serve as a data processor as a basic business operation. Therefore, the trustees should begin to consider a shift to an outside contractor by 1981. Needless to say we would be proud to continue as a private contractor through our own office, Landmark Research, Inc., and using our own computer processing equipment, but the Board should decide how it wishes to procure assessment services and appraisal.

For this year we would estimate the budget to be as follows:

50 building inspections and data reviews for new construction, remodeling, and appeals at \$15 each	\$750.00
Postage and mailing services for tax announcements, etc.	500.00
Prof. Graaskamp - supervision and appeals	900.00
Assistant assessor	4,800.00
Indirect payroll costs at 15%	700.00
School of Business data processing services	750.00
	<u>\$8,400.00</u>

When we have completed property inspections and the assessment for 1980, we will make an accounting of funds advanced to the Foundation and a refund, if any, as appropriate.

Respectfully submitted,

James A. Graaskamp
Village Assessor, Maple Bluff

JAG/db

February 2, 1980

Mr. Robert Boardman
Village of Maple Bluff
18 Oxford Place
Madison, Wisconsin 53704

Dear Bob:

Since Fraser Gurd has fallen behind in his Ph.D. program, he has decided to discontinue outside activities for the time being. Therefore, I would like to recommend to the Village Board that we appoint Ms. Jean B. Davis, 647 Crandall Street, Madison, Wisconsin 53711 as the Assistant Assessor and payable directly by the Village.

As you know, Jean Davis has done an outstanding job of property inspection and public relations for the real estate tax program in Maple Bluff. She has been certified for assessment by the State, has an MS degree in Real Estate Appraisal, and was our outstanding graduate student in 1979. The balance of her time will be for Landmark Research projects so there will be opportunity for daily communication between Jean and myself.

Please secure the necessary approvals and place her on the payroll as quickly as possible.

Sincerely,

James A. Graaskamp, CRE
Village of Maple Bluff Assessor

JAG/db

University of Wisconsin Madison

School of Business
1155 Observatory Drive
Madison, Wisconsin 53706

Graduate School of Business

February 8, 1980

Mr. R. T. Kist
Vice President
Equitable Life Assurance Society
1750 Equitable Building
10 Broadway
St. Louis, MO 63102

Dear Mr. Kist:

I am writing to bring your Committee of the Appraisal Institute Research Foundation up to date on the University of Wisconsin effort to develop a suitable set of mini computer specifications and programs for appraisal.

First, the bad news is that our work with the TRS-80 has proven very unsatisfactory, and we are scrapping further development for this particular machine. It has proven very unreliable and a xerox of the log kept by Tom Johnson, our graduate student programmer, is attached as Schedule A.

The financial news is that our resources are as follows:

Original gift of January 31, 1979	\$11,000.00
Less: Hardware and Software Schedule B	4,814.35
Less: Graduate Student	<u>1,000.00</u>
Funds still available	\$ 5,185.65

There is no charge for the time of Professors Graaskamp and Knitter. We have put in motion a request to the University to dispose of the TRS-80 and supporting materials. We are reasonably confident that we can recover at least \$2,500 of our investment. State rules require that it be offered for two weeks to any department in the University system at a price which we name (\$3,000) before we can sell it outside the system.

Now the good news, Professor Knitter and myself have been intensively searching for a package which would be appropriate for appraisers and within our means. We have found a DEC package which could be afforded by most appraisal offices and is completely compatible with our University of Wisconsin Development computers, a fact which would accelerate adaptation of programs to the equipment. The major problem seems to be locating an effective work processing system which will also work on the

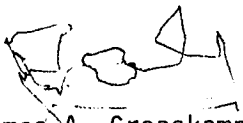
Mr. R. T. Kist
February 8, 1980
Page 2

sixteen bite chip that is the key to the processor. Professor Knitter is currently on the west coast where he will be looking at some possible solutions to this problem while doing some other work on the coast.

In the mean time, three known appraisal firms are standing by and will probably purchase the same configuration we select so there will be immediate application in professional practice.

On balance, we regret the delay but find that the first part of 1980 has introduced a wide array of new choices and heralds a better solution should our remaining resources after sale of a TRS-80 fall short of equipment costs, we will try to fund the balance from other sources so that your grant will have additional leverage despite the sunk costs of the TRS-80.

Thanking you and your committee for your patience,

A handwritten signature in black ink, appearing to read 'James A. Graaskamp', written over a faint horizontal line.

James A. Graaskamp
Chairman, Real Estate and
Urban Land Economics

cs

SCHEDULE B

TRS-80 MICRO COMPUTER COST

HARDWARE:

26-1006	16K RAM, LEVEL II CPU/KEYBOARD	\$ 789.00
26-1201	VIDEO DISPLAY	199.00
26-1205	CASSETTE RECORDER	49.95
26-1141	EXPANSION INTERFACE WITH 16K RAM	498.00
26-1160	FIRST DISK DRIVE	499.00
26-1161	SECOND DISK DRIVE	499.00
26-1150	LINE PRINTER, FRICTION FEED	1,299.00
26-1401	PRINTER CONNECTION CABLE	39.00
26-1145	RS 232-C BOARD	99.00
26-1171	TELEPHONE INTERFACE II	199.00

TOTALS

\$4,169.95

MANUALS:

26-2016	LEVEL I USER MANUAL	\$ 5.95
26-2102	LEVEL II USER MANUAL	5.95
26-2103	TRS-80 TECHNICAL MANUAL	9.95
26-2104	DOS/DISK BASIC USER MANUAL	5.95

\$ 27.80

MICROSOFT FORTRAN 80 MANUAL (5)

SOFTWARE:

26-310	DOS DISKETTE DOS VER 2.3	\$ 14.95
MICROSOFT	FORTRAN 80	399.00
TBS	TOOLKIT	31.80
TBS	SYSTEM DOCTOR	28.50
	27 DISKETTES @\$3.80	102.60
	2 ROLLS PAPER	10.00
26-1573	REAL ESTATE VOLUME III	29.75

\$ 616.60

TOTAL:

\$4,814.35

March 17, 1980

Dear Maple Bluff Resident:

In anticipation of the 1980 property assessments which will be mailed during the latter part of April, it seems appropriate to discuss some changes that may occur for some property owners this year. The property inspections which were made this last fall have provided improved, up-to-date information on Maple Bluff properties which the assessor's files have long lacked. As a result, there will be some shifts in the tax burden in the 1980 property assessments and past inequities will be remedied.

The change in assessed values from 1979 to 1980 may be affected both by a change in the information on file regarding your property's characteristics and by the recent sale prices of homes sold in Maple Bluff. A large change may indicate that your property has been carrying either more or less of its fair share of the tax burden in the past and also that home buyers in Maple Bluff are willing to pay more or less money for homes similar to your property.

METHOD OF VALUATION

In Maple Bluff, the market comparison (direct sales) approach to valuation is used in the assessment process; it is the most accepted appraisal method for residential property.

For the 1980 assessments, 111 houses which have sold over the past four years are used as benchmarks to value the 543 homes in Maple Bluff. The assessor selects four homes that best match the home to be valued and that have sold recently; the assessor uses six property characteristics to choose the four comparable sales. The six factors are: the most recent sale date (thereby capturing the most recent shifts in the market), the neighborhood, the age of the home, the size of its living area, the number of bedrooms, and if lake property, the number of lakefront feet. Lake properties are valued separately from nonlake properties. Uniform adjustments are made in the sale price of each comparable property based upon forty different property attributes so that it is most similar to the property being valued. From the four resulting adjusted sale prices the value of the subject property is determined.

The more accurate information now available about each Maple Bluff property will result in values closer to 100 percent of fair market value. The price of homes that have sold recently and are most nearly like yours will determine the 1980 valuation of your home for assessment purposes. Vacant sites are valued by a similar procedure.

Maple Bluff Residents
Page Two
March 17, 1980

THE CURRENT HOUSING MARKET

Sales in the past two years will have the most influence in determining value for 1980. In 1978, there were 23 fair market transactions and in 1979 there were 36. In 1979, 11 of these 36 homes sold for prices more than 25 percent over their 1979 assessed value with a range from 27 to 64 percent. 11 more were sold for between 15 to 25 percent over the 1979 assessed value and 13 were sold for between 3 to 14 percent over the 1979 assessment. Only 1 was sold for less than its 1979 assessment. To bring assessments closer to 100 percent of fair market value in 1980 there will have to be some changes. The dramatic differences between 1979 sale prices and 1979 assessed value were due partly to inadequate information which had existed in the assessment files of many properties, thus leading to incorrect assessments (under or over fair market value) and to spiraling inflation. Even with a general slowing of home sales in Madison in 1979, 18 of the 36 sales in Maple Bluff were finalized after June of 1979, and the majority of the larger differences between sale price and assessed value occurred during this time.

RELATIONSHIP OF ASSESSMENTS AND TAXES

The 1980 assessed value of all of Maple Bluff properties becomes the tax base with each property's assessed value representing its fair share of the tax burden. In the fall of 1980, the various state and municipal budgets are set for 1981 and it can then be determined how much tax money must be raised. The total budget amount divided by the total assessed value yields the mill rate.


$$\frac{\text{1981 Budget}}{\text{1980 Assessed Value}} = \text{Mill Rate}$$


The mill rate multiplied by the assessed value of each property gives the amount of taxes due for 1980. If assessments continue to experience overall inflationary increases but the budget needs remain fairly stable, the mill rate could decrease. Even though assessed value may increase, actual dollars paid in taxes may remain stable, especially for those properties whose assessments are stable or lower because of corrections made in the assessment files.

Since assessments are made as close to 100 percent of fair market value as possible, the best check on the fairness of your assessment is to ask yourself what you would accept as the sale price for your property on January 1, 1980, if you had put it on the market at that time.

The 1980 assessment notices should be in the mail in the latter part of April. With the assessment notice you will be informed of the dates and times available to meet with the assessor if you have questions regarding your assessment. Also, the schedule for the formal Board of Review sessions will be announced at that time.

Sincerely,


John A. Bolz
President
Village of Maple Bluff


Jean B. Davis
Assistant Assessor
Village of Maple Bluff

VILLAGE OF MAPLE BLUFF, DANE COUNTY
 SINGLE-FAMILY RESIDENTIAL TAX INFORMATION FORM
 AS OF JANUARY 1, 1980

1	Tax Parcel Number			
2	Property Owner			
3	Street Number			
4	Street Name			
5	Previous Lot Sale Price	PLSPRICE		
6	Previous Lot Sale Date	PLSDATE		
7	Geocode X	GEO X	49	Era
8	Geocode Y	GEO Y	50	Sq. Ft. Living Space
9	Neighborhood Number	NBRHD	51	Number of Stories
10	Lot Square Feet	LTSOFT	52	Roof
11	Lot Front Feet	LTFFT	53	Exterior
12	Lot Depth	LTDPTH	54	Garage Type
13	Lot Subdividable	LOTSDIV	55	Building Style
14	Lot Oversized	LOTOVSZD	56	Basement Type
15	Lake Access Easement	LKACC	57	Basement Condition
16	Shore Quality	SHORE	58	Appearance to Neighbors
17	Water Quality	WATER	59	Quality
18	Lake Front Feet	LKFFT	60	Enclosed Porch
19	Lot on Corner	LTCNR	61	Total Number Rooms
20	Lot on Cul de Sac	LTCUL	62	Total Number Bedrooms
21	Inside Lot	LTINS	63	Total Number Bathrooms
22	Lot Wooded	LTWOOD	64	Half
23	Lot View	LTVIEW	65	Three Quarters
24	Lot Topo	LTTOPO	66	Full
25	Adverse Influence	ADINF	67	On First Floor
26	Tennis Court	TENCT	68	Total Number Fireplaces
27	Outdoor Pool	OUTPOOL	69	Living Room
28	Patio	PATIO	70	Dining Room
29	Storage Shed	STSHD	71	Den/Library/Study
30	Boathouse	BTHSE	72	Kitchen Score
31	Seawall	SEAWLL	73	Kitchen Size
32	Indoor Pool	INPOOL	74	Kitchen Type
33	Flevator	ELEV	75	Kitchen Work Area
34	Other Structure Name	STCT1	76	Kitchen Eating Space
35	Other Structure Value	VALUE1	77	Family Room
36	Other Structure Name	STCT2	78	Recreation Room
37	Other Structure Value	VALUE2	79	Laundry Area Score
38	Special Structures Total	SPECTOT	80	Laundry Area Location
39	Driveway	DRVWY	81	Laundry Area Type
40	Neighborhood Foliage	NBRFOL	82	Heating System Score
41	Landscaping	LNDSCP	83	Heating Fuel
42	Screening of Back	CRBK	84	Heating Type
43	Screening of Front	SCRFT	85	Electrical Service
44	Curb Gutter	CRBGTR	86	Water Heater
45	Sidewalk	SIDWLK	87	Interior Circulation
46	Previous Sale Price	PSPR	88	Special Features Score
47	Previous Sale Date	PSDATE		
48	Year Built	YRBLT		

Date of Inspection_____

Name of Inspector_____

VILLAGE OF MAPLE BLUFF
DANE COUNTY
WISCONSIN

SINGLE FAMILY RESIDENTIAL INFORMATION FORM

1. _____ Tax Parcel Number
2. _____ Property Owner
3. _____ Street Number
4. _____ Street Name

LAND DATA

5. _____ Previous Lot Sale Price
6. _____ Previous Lot Sale Date
7. _____ X Geocode
8. _____ Y Geocode
9. _____ Neighborhood Number
(01-18)
10. _____ Lot Square Feet
(rounded to nearest 500 ft.)
11. _____ Lot Front Feet
(rounded to nearest foot)
12. _____ Lot Depth
(rounded to nearest foot)

13. _____ Lot Subdividable
(smaller of A, B,
A & B apply only to unplatted-uncertified lots)

0 = No

CONDITIONS WHICH MUST
BE MET:

A = Unplatted = $\frac{\text{Lot area} - 40,000 \text{ sq.ft.}}{\text{Gross Lots } 25,000 \text{ sq.ft.}}$
(round down to next integer value)

1. All lots must have no less than 40' of street frontage or a single driveway (apron) easement.

B = Net = $\frac{\text{Lake frontage} - 100 \text{ ft.}}{\text{Additional Lots}}$
(round down to next integer value)

2. Platted vacant lots (within a parcel) will be treated as buildable if, separately or in combination, the total area is \leq 14,000 SF, and conforms to condition #1.

14. _____ Lot Oversized (but not subdividable)
0 = under 65,000 sq.ft.;
1 = oversize lot

15. _____ Lake Access Easement
0 = No; 1 = Yes

16. _____ Shore Quality
3 = inaccessible bluff/Dengel Bay
2 = shallow
1 = mud; 0 = no dominant problem

17. _____ Water Quality
3 = odor; 2 = flotsam; 1 = weeds;
0 = no dominant problem

18. _____ Lake Front Feet
(rounded to nearest foot)

19. _____ Lot on Corner
0 = No; 1 = Yes

- 20. _____ Lot on Cul-de-sac
0 = No; 1 = Yes
 - 21. _____ Inside Lot
0 = No; 1 = Yes
 - 22. _____ Lot Wooded
0 = Below average (0 to 3 major trees)
1 = Average wooded lot (4 to 7 major trees)
2 = Above average lot (more than 7 major trees)
 - 23. _____ Lot View
0 = Commercial lot or railroad lot
1 = Average view
2 = Golf course or park view
3 = Water average (non-State Capitol view)
4 = Water superior (State Capitol view)
 - 24. _____ Lot Topography
0 = Severe, non-usable slope
1 = Wet pockets
2 = Downsloping lot
3 = Level contour
4 = Upward sloping lot
 - 25. _____ Adverse Influence
0 = None
1 = Contiguous lake easement
2 = Joint driveway
3 = Other (high lines, etc.)
4 = Commercial property
5 = Public property or exposure
6 = Railroad
7 = High traffic
9 = Combination
- If lot suffers from two adverse influences, enter the higher value.

SITE IMPROVEMENT DATA

- 26. _____ Tennis Court
- 27. _____ Outdoor Pool
- 28. _____ Patio
- 29. _____ Storage Shed
- 30. _____ Boathouse

31. _____ Seawall
32. _____ Indoor Pool
33. _____ Elevator
34. _____ Other Structure Name
35. _____ Other Structure Value
36. _____ Other Structure Name
37. _____ Other Structure Value
38. _____ Special Structures Total
(Sum of columns 26 - 37)
39. _____ Driveway
(score = style, material)

STYLE

MATERIAL

- 1 = Linear into garage-
back into street
- 2 = Linear with turn-
around space
- 3 = Circular
- 4 = Large with parking
space and turnaround
space
- 5 = Circular with parking
space

- 1 = Dirt
- 2 = Gravel
- 3 = Asphalt
- 4 = Concrete/Brick

40. _____ Neighborhood Foliage
- 1 = New and raw
- 2 = Some mature trees
- 3 = Shady
41. _____ Landscaping
- 1 = Little or none
- 2 = Average
- 3 = Above average
42. _____ Screening of Back
- 0 = Little or none
- 1 = Yes

43. _____ Screening of Front
0 = Little or none
1 = Yes

44. _____ Curb and Gutter
0 = No; 1 = Yes

45. _____ Sidewalk
0 = No; 1 = Yes

IMPROVEMENT DATA

46. _____ Previous Sale Price

47. _____ Previous Sale Date

48. _____ Year Built

49. _____ Era
0 = Pre-1910 3 = 1950-1969
1 = 1910-1929 4 = 1970 to present
2 = 1930-1949

50. _____ Square Feet Living Space

51. _____ Number of Stories
0 = Vacant Lot 1.6 = Multilevel
1 = 1 Story 2 = 2 Stories
1.3 = 1-1/2 Stories 2.3 = 2-1/2 Stories

52. _____ Roof
(score = style, material)

STYLE

1 = Gable
2 = Hip
3 = Mansard
4 = Gambrel
5 = Flat
6 = Single pitch

MATERIAL

1 = Gravel
2 = Asphalt shingles
3 = Wood shake/shingle
4 = Slate shingles
5 = Tile
6 = Metal

53. _____ Exterior

- | | |
|-----------------------------|-------------------------------------|
| 0 = Concrete block | 6 = Part masonry/
stained boards |
| 1 = Wood siding/frame | 7 = Part masonry/aluminum |
| 2 = Stucco | 8 = Predominantly brick
veneer |
| 3 = Stained boards/shingles | 9 = Predominantly stone |
| 4 = Aluminum siding | |
| 5 = Part masonry/frame | |

54. _____ Garage Type

- | | |
|--------------------|---------------------------|
| 0 = None | 5 = 2-3 car detached |
| 1 = Carport | 6 = 2-3 car basement |
| 2 = 1 car detached | 7 = 2 car attached, small |
| 3 = 1 car basement | 8 = 2 car attached, large |
| 4 = 1 car attached | 9 = 3 car attached |

55. _____ Building Style

- | | |
|---|--|
| 1 = Cottage | 6 = Good builder's
suburban/mansion |
| 2 = Pre-1940 | 7 = Architectural
contemporary |
| 3 = Standard builder's
suburban (Owner custom
obsolescence) | 8 = Architectural
traditional |
| 4 = Architectural modern | 9 = Architectural colonial |
| 5 = Pre-1940 remodeled | |

56. _____ Basement Type

- | | |
|-------------|---|
| 0 = Slab | 4 = Partially exposed (opening on
grade at least one side) |
| 1 = Crawl | 5 = Exposed (raised ranch/bilevel-
English basement- window sill at grade) |
| 2 = Partial | |
| 3 = Full | |

57. _____ Basement Condition

- 0 = No problem
- 2 = Mild problem due to seepage/aging
- 5 = Poor condition or no basement

58. _____ Appearance to Neighbors

- 1 = Less attractive
- 2 = Equally attractive
- 3 = More attractive

59. _____ Quality

- | | |
|--|-------------------------|
| 0 = Uninhabitable | 5 = Well-maintained |
| 1 = Major mechanical or
structural problems | 6 = Maintained like new |
| 2 = Interior damage | 7 = New--standard |
| 3 = Exterior maintenance
required | 8 = New--custom |
| 4 = Average condition | 9 = New--deluxe |

60. _____ Enclosed Porch
0 = None 5 = Average glass
1 = Small screen 6 = Large glass
2 = Average screen 7 = Small glass, heated
3 = Large screen 8 = Average glass, heated
4 = Small glass 9 = Large glass, heated

61. _____ Total Number of Rooms

62. _____ Total Number of Bedrooms

63. _____ Total Number of Bathrooms
(sum of bathroom scores)

64. _____ Half
(Score = .5 for each)

65. _____ Three-quarter
(Score = .75 for each)

66. _____ Full
(Score = 1 for each)

67. _____ Bathroom on First Floor
0 = No
1 = Yes

68. _____ Total Number of Fireplaces

69. _____ Living Room
(score = size, layout)

<u>SIZE</u>	<u>LAYOUT</u>
1 = Small	1 = Poor
2 = Moderate	2 = Indifferent
3 = Large	3 = Good

70. _____ Dining Room
0 = None
STYLE
1 = At end of living room
2 = Dining L
3 = Full dining area
4 = Separate room

71. _____ Den/Library/Study
 0 = None 2 = Average
 1 = Small 3 = Large
72. _____ Kitchen Score
 Score = (Size * Type * Work area) + Eating space
73. _____ Kitchen Size
 1 = Small
 2 = Average
 3 = Large
74. _____ Kitchen Type
 1 = Single wall 4 = U-shaped
 2 = Pullman 5 = L- or U-shaped with island
 3 = L-shaped
75. _____ Kitchen Work Area
 To calculate kitchen score use:
 0 = Obsolete (.5)
 1 = Dated (.75)
 2 = Modern (1.00)
76. _____ Kitchen Eating Space
 To calculate kitchen score use:
 0 = None 0
 1 = Counter/Stools .2
 2 = Space for table/chairs .4
 3 = Breakfast nook .6
77. _____ Family Room
 (Score = location, size)
 0 = None

<u>LOCATION</u>	<u>SIZE</u>
1 = Poor	1 = Small
2 = Adjoining kitchen	2 = Average
3 = Fully separate and well located	3 = Large
78. _____ Recreation Room
 0 = None
 1 = Yes (Must have fully finished floor, ceiling, and walls)
79. _____ Laundry Area Score
 (Score = location * type)

80. _____ Laundry Area Location

LOCATION

- 1 = Basement
- 2 = At grade
- 3 = Second floor

81. _____ Laundry Area Type

0 = None

TYPE

- 1 = Exposed
- 2 = Enclosed closet
- 3 = Separate room

82. _____ Heating System Score
(Score = Fuel * Type)

83. _____ Heating Fuel

FUEL

- 1 = Electricity
- 2 = Oil
- 3 = Gas

84. _____ Heating Type

TYPE

- 1 = Old hot water - radiators
- 2 = Old low pressure steam - radiators
- 3 = Old hot water integrated with water heater
- 4 = Gravity hot air grills on floor
- 5 = Hot water-baseboards
- 6 = Forced hot air
- 7 = Forced hot air-zoned
- 8 = Multiple forced hot air units

85. _____ Electrical Service

AMPERAGE

- 1 = 30 amp.
- 2 = 60 amp.
- 3 = 100 amp.
- 4 = 125 amp.
- 5 = 150 amp.
- 6 = > 150 amp.

86. _____ Water Heater
Score = (Capacity, Fuel)
0 = With hot water heat system

<u>CAPACITY OF UNIT</u>		<u>FUEL</u>
1 = 20 gal.	5 = 75 gal.	1 = Electric
2 = 30 gal.	6 = 100 gal.	2 = Solar
3 = 40 gal.	7 = 100+ gal.	3 = Oil
4 = 50 gal.		4 = Gas

87. _____ Interior Circulation (Traffic pattern)
0 = Poor
1 = Moderately good
2 = Good
3 = Excellent

88. _____ Total Special Features Score
(Sum of all special features points)

SPECIAL FEATURES

1. _____ Front Exterior Entry
(Score = Sum of style and function)

<u>STYLE</u>	<u>FUNCTION</u>
0 = Single door	-1 = Unprotected
1 = Double door	2 = Protected

2. _____ Front Interior Entry
(Score = Sum of points)
-3 = Entrance direct to living room
0 = Vestibule (hall entry)
1 = Foyer (enclosed entry)
2 = Spacious vestibule
3 = Spacious foyer

3. _____ Master Bedroom Suite
(Score = Sum of points)
1 = Extra closet space
2 = Dressing area
3 = Sitting area

4. _____ Living Room Extras
(Score = Sum of points)
-3 = Classical cathedral ceiling
0 = None
1 = Contemporary sloped ceiling,
built-in cabinets
2 = Sunken multi-level, special natural
illumination, deluxe woodwork

5. _____ Dining Room Extras
(Score = Sum of points)
0 = None
1 = Built-in china cabinet, break front/buffet
2 = Wet bar
3 = Deluxe built-ins

6. _____ Den/Library/Study Extras
(Score = Sum of points)
0 = None
1 = Built-in cabinets
2 = Deluxe woodwork

SPECIAL FEATURES (Continued)

7. _____ Kitchen Extras
(Score = Sum of Points)
0 = None
1 = Each built-in appliance, serving pantry/bar, direct access to outside, grill/BBQ, more than one sink area
-3 = No window
-2 = Below average window area
0 = Average window area
1 = Above average window area
8. _____ Family Room Extras
(Score = Sum of points)
0 = None
1 = Built-in cabinets, deluxe flooring, deluxe paneling, sloped ceiling
2 = Wet bar
5 = Kitchen facilities
9. _____ Number of Special Spaces
(Score = Sum of points)
0 = None
1 = Special woodwork/craft area
2 = Dark room
3 = Sewing, sitting, office areas, partially finished recreation room
10. _____ Recreation Room Extras
(Score = Sum of ponits)
0 = None
1 = Built-in cabinets
2 = Wet bar
5 = Kitchen facilities
11. _____ Household Extras
(Score = Sum of points)
0 = None
1 = Greenhouse - attached at window, special indirect lighting
2 = Security system
3 = Greenhouse - attached and walk-in, sauna
5 = Central air conditioning, grand spiral staircase



School of Business

1155 Observatory Drive
Madison, Wisconsin 53706

Graduate School of Business

October 18, 1980

Mr. R. T. Kist, Vice President
Equitable Life Assurance Society
1750 Broadway
St. Louis, Missouri 63102

RE: Research Grant for Minicomputer Program Development

Dear Bob:

Since we last reported to you, we have disposed of the Radio Shack TRS-80 equipment for \$2,250 plus sales taxes, and we have acquired with the assistance of the University of Wisconsin School of Business a small machine manufactured by General Robotics, their Gemini System, for \$6,000. It utilizes a PDP-11 processor manufactured by Digital Equipment Company (DEC) and therefore is fully compatible with larger PDP-11 models. The system is locally maintained and has been very reliable, but General Robotics is a small Wisconsin firm which assembles its equipment from components manufactured by others so that it does not yet have a dealer system. Nevertheless most cities will have a computer maintenance firm which can work with it because it uses DEC components. It has 64K of working area and 1.2 megabytes of storage on floppy discs.

The program library which is now available for the General Robotics Gemini (and other equipment below) includes the following which are available from EDUCARE:

Ellwood
BFCF
RATES
CIT (Compound Interest Tables)
MRCAP
AIP
MKTCOMP (including FNMA output)
MULTIPLE STEPWISE REGRESSION

MRCAP and MKTCOMP would require a special licensing fee but the other programs would be included with a package including the hardware or sold separately.

We are exploring smaller systems which parallel the TRS-80 but the exact choice has not been determined. Bob Knitter is examining the capacity and cost of the Apple III computer system as a primary vehicle for installation of the EDUCARE library as well as systems such as the North Star.

At the same time EDUCARE has been moving toward the upper end of the price range of minicomputer systems, specifically stand alone systems in the

range of (\$10-17,000). These systems are not expansions of hobby computers, but in all cases were designed for integration into office environments and have complete technical resources and documentation from national firms to support development activities of the kind real estate appraisal would require.

The systems considered were those provided by:

Data General
Datapoint
DEC
Hewlet Packard
General Automation
IBM
Texas Instruments
Wang

Each of these vendors produce systems in the price range and type appropriate for the appraisal office. After careful consideration the Digital Equipment Corp. PDP-11/03 system was chosen as the most desirable alternative from the list above. This choice was based on the following criteria:

1. The scope of software available and the ease of conversion from systems presently being used by EDUCARE.
2. The maturity and flexibility of the operating system (a technical consideration which has substantial indirect user impact).
3. The power and speed of hardware available on this system.
4. The diversity and quality of program language support (specifically Basic and Fortran).
5. The availability of general purpose software such as word processing, statistics, data base and accounting systems.
6. The expandibility of the system to larger and multi-terminal configurations.
7. The market availability of the hardware from multiple alternative sources with varying configurations and costs.

EDUCARE Computer Network Inc. has installed the first PDP-11/03 system in the offices of Callaway & Price Inc. The system consisted of 64K memory, two 8-inch floppy discs, a deluxe visual display terminal and a letter quality printer. The cost of hardware for this system was approximately \$15,000. While software prices have not been firmly established EDUCARE has made available to Callaway & Price a word processing package (resold at \$2,000) and the library of the most used EDUCARE programs presently available under G. E. Timesharing.

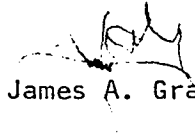
The programs for the PDP-11/03 came right off the Gemini with a minimum of conversion effort. At the same time that Bob Knitter set up the Callaway office, Jim Graaskamp was setting up his office with a somewhat larger capacity Data General unit. A larger capacity was necessitated by several mass appraisal projects. As that conversion is completed, the EDUCARE library will also be available for the Data General line using Fortran V.

EDUCARE Network Inc. is in the process of converting to a co-op nonprofit corporation under Wisconsin law and has the capacity to handle distribution

of software and hardware packages. Currently under development is an all-purpose cashflow program which is adaptable to land development, condo conversions etc. and which exploits the interactive, trial and error opportunities of the in-house system. This program will be added to the EDUCARE libraries as funding for the co-op is completed.

We regret the delay in completing this research assignment but we think the Gemini and its present EDUCARE library represents a sound, low budget, intermediate point between the hobby computer and the full office mini such as the Callaway and Landmark installations. Accounting will follow.

Yours truly,



James A. Graaskamp and H. Robert Knitter

bjd

cc: Robert Ford