

Modernizing the Register of Deeds in Dane County, Wisconsin

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ABSTRACT

Efforts around the world to improve property registration systems have devised various indicators of how well these systems are functioning. This article uses a case study of the Dane County, Wisconsin, USA, Register of Deeds to develop four indicators of the Register of Deeds' performance, and to explore the effects of major investments in information technology on that performance.

INTRODUCTION

Property registration systems have been studied extensively, as countries have attempted to find ways to make property markets work better. The United Nations Economic Commission of Europe (1996, p.9), observed:

“A system for recording land ownership, land values, land use and other land-related data is an indispensable tool for a market economy to work properly, as well as for sustainable management of land resources. All industrialized nations with a market economy maintain some sort of land register system that fulfils the above requirements.”

Most analyses of registration systems, however, look at them either from the point of view of the users to calculate transaction costs in order to make changes in the procedures of registration and thereby make land markets more dynamic, or from the perspective of the requirements of a market economy (See Burns et. al., 2003) to make institutional recommendations in countries moving toward a market economy. Such a focus on system creation and organization is useful in exploring options for the design of such systems.

However, once established, land registries perform more or less well. How to evaluate this performance once the offices and system are established is important for improving that performance over time. As Adlington (2002, p.2) observed,

“...despite the significant resources being invested by the donor community for modernizing land administration infrastructure, there is little systematic discussion of the key elements of such a system and of what constitutes effectiveness within particular socio-economic, cultural and temporal contexts.”

The International Federation of Surveyors (FIG) addressed this performance monitoring question in a paper on benchmarking cadastral systems, with the objective of making comparisons across systems (See Steudler and Kaufmann, 2003). Such an approach is difficult to use, however, because of the different institutional and legal contexts in which registration/cadastral systems

function. A more useful approach for monitoring performance is to develop indicators of performance of a single system over time. As part of the policy to shift the Land Registry in the United Kingdom to an independent executive agency, specific indicators were established to show government whether the new Land Registry was meeting goals of gradually improving efficiency and effectiveness (HM Land Registry Executive Agency, 1996). John Manthorpe prepared an analysis of these performance indicators (Manthorpe, 2000).

With the growing interest around the world in making property registries self financing, client oriented and efficient, this U.K. approach could prove useful. Even more useful would be a set of indicators which could be applied to a single registration office, and not the entire system as in the U.K. In order to test out this notion, we have taken the Dane County Register of Deeds as a case study to explore the question whether meaningful and useful performance indicators can be developed in a non-UK context.

These indicators are then used to analyze the costs and benefits of the introduction of Information and Communication Technologies into the operations of the Register of Deeds. The second question is whether there has been a simple shift from people related expenses to technology expenses, or has technology introduction generated some net benefits?

1. Background

Dane County, Wisconsin, is the location of the State Capital, the largest campus of the University of Wisconsin System, the Madison metropolitan area, and numerous businesses. The population is approximately 458,000 people (Dane County, Wisconsin, 2005). In 2004 there were approximately 180,000 properties (land parcels and condominium units) in the County of which approximately 174,000 are housing units. There were 2,887 farms in Dane County in 2002, containing a total of 415,310 acres of cropland. In 2004 there were 39 sales³ of agricultural land continuing in agricultural use, averaging 83.6 acres per sale at an average price of \$6,765 per acre. There were 38 sales of agricultural land diverted to other uses averaging 58.7 acres per sale, with an average price of \$23,839 per acre (Wisconsin Agricultural Statistics Service, 2005).

The total value of real estate in the County was approximately \$36 billion in 2004, up by 11% from 2003, an indicator both of the large asset base of the County and of the rapidly rising property values in the region. In 2004 the total value of properties that changed ownership was approximately \$3.5 billion⁴. Documents that describe property transactions are recorded at the Dane County Register of Deeds (ROD), which is the authoritative source of information about real property transactions.

The property market in Dane County is most active for residential parcels or condominium units. Table 1 shows the number of residential sales and median prices for 2000 through 2004 as tabulated from listings by realtors working in the county, and linked with the South West Wisconsin Realtor Association. Condominium sales have been increasing more rapidly than houses, and the median prices have been increasing rapidly for both types of residences.

Table 1: Residential Sales in Dane County 2000-2004

YEAR	SALES				MEDIAN PRICE			
	Houses- Number	%	Condos- Number	%	Total- Number	%	Houses	Condos
2000	4375	82.1%	956	17.9%	5331	100.0%	\$154,400	\$124,400
2001	4902	81.4%	1120	18.6%	6022	100.0%	\$163,335	\$136,000
2002	5261	81.3%	1212	18.7%	6473	100.0%	\$178,000	\$144,900
2003	5620	79.8%	1427	20.2%	7047	100.0%	\$189,900	\$158,900
2004	5775	75.6%	1868	24.4%	7643	100.0%	\$210,000	\$162,700

Source: South West Wisconsin Multiple Listing Service Corporation

NOTE: This information is based in whole or in part on data supplied to the South Central Wisconsin MLS Corporation by realtors. The SCWMLS does not guarantee and is not responsible for its accuracy. Data maintained by the SCWMLS does not reflect all real estate activity in the market.

Returning to the Register of Deeds, over the six year period 1999-2004, there have been an average of 17,087 deeds recorded yearly (See Table 2), including sales (which represented about 98% of all deeds recorded), intra family transfers, and other types of transfers. Most of these deed transactions reflect sales of urban properties.

Sales deeds, however, are just one type of transaction. Mortgage related transactions are quite numerous. An average of almost 70% of all documents recorded over the past 6 years have been mortgages or satisfactions of mortgages, with the year 2003 experiencing a very high number of such documents recorded.

There were nearly 150,000 real estate related documents recorded in the ROD in 2004, but over 236,000 documents recorded in 2003—showing that there are large variations year to year.

Using the estimate of 180,000 real estate units in the County, the “turnover” rate is close to 75%-80% of the total number of properties each year on the average, and in some years the rate is over 100%, depending on the rate of mortgage interest, and the desire of property owners to re-finance when interest rates drop as they did in 2002-2003.

The ROD charges a fee of \$11 for the first page of a document that is submitted for recording, plus \$2 for each additional page. This fee is set for all 72 ROD’s of the State.

Table 2: NUMBER OF DOCUMENTS BY TYPE RECORDED AT DANE COUNTY ROD--1999-2004

	1999	2000	2001	2002	2003	2004	TOTAL 1999- 2004	Average Yearly Number- 1999- 2004	PERCENT 99-04
DEEDS	16,263	14,941	16,071	17,274	18,856	19,117	102,522	17,087	10.8%
MORTGAGES	40,985	32,035	53,529	72,442	85,441	54,136	338,568	56,428	35.6%
LAND CONTRACTS	325	238	204	239	195	193	1,394	232	0.1%
SATISFACTIONS	41,235	25,945	44,969	71,290	87,002	46,708	317,149	52,858	33.3%
PLATS	62	48	41	42	60	45	298	50	0.0%
CONDO PLATS	68	83	97	91	130	137	606	101	0.1%
CONDO DEC	95	102	124	117	153	164	755	126	0.1%
CERTIFIED SURVEY	383	352	369	353	323	330	2,110	352	0.2%
MISC DOCS	21,889	21,919	30,367	39,131	43,699	27,702	184,707	30,785	19.4%
HT 110	622	547	638	664	664	609	3,744	624	0.4%
REAL ESTATE TOTAL	121,927	96,210	146,409	201,643	236,523	149,141	951,853	158,642	100.0%

Source: Dane County Register of Deeds, 2005

“Satisfactions” are mortgage satisfactions. “Plats” are mainly subdivision survey plans with a few assessor's, cemetery and transportation project plats included. “Condo plats” are condominium plats which is a map showing the locations of units and their dimensions, and common areas of condominium type buildings. “Condo dec” are condominium declarations, which are documents which set up the governance of condominiums. “Cert survey” refers to certified survey maps. “Misc. docs” includes affidavits, agreements, judgments, lis pendens, restrictions, resolutions, power of attorney, federal tax liens, etc. “HT 110” is the form used for the termination of decedent's property interest.

Other revenues for the Dane County ROD come from document copying, and of growing importance are the revenues from fees charged for access by various types of clients to the digital information maintained by the ROD. The ROD also has a “vital records” section, where it maintains records of births, deaths and marriages which occur within the County. About 7% of the fees generated by the ROD come from the copies provided to the public of birth, death and marriage certificates.

Since the Register of Deeds is an institution of fundamental importance for the operation of property markets and the management of \$36 billion in assets in the County, how well this institution functions is of interest. We use the following indicators of ROD management to try and evaluate it.

For a properly functioning ROD, we would expect:

1. The number of recorded documents by one staff person should increase over time, showing improving ROD staff productivity;

2. The total cost per document recorded should decrease over time, showing increasing ROD economic efficiency
3. The surplus of revenues over costs should increase over time, showing that the ROD is meeting client needs and is operating efficiently.
4. The increased availability of property information from the ROD should lead to a reduction in fees charged the participants in property transactions by private companies for verifying title.

2. Staff Productivity

Table 3 shows the staffing levels and the number of real estate documents they recorded by year. With only the addition of two full time staff people since 1990-03 period, the ROD handled almost double the number of documents on the average in the 2001-04 period. The average number of documents recorded increased by nearly 92%. The general trend in real estate activity is upward but there are also significant peaks and valleys. Dane County ROD has been able to "ride the storms" of periods of heavy recording (most frequently due to refinancing of mortgages, due to dropping interest rates).

The average number of documents recorded per staff member increased over 71% from the four year average of 1990-93 in comparison with the four year average 2001-04.

Although some of this increase in staff productivity came from an increase in the use of short term employees in recent years, much of the increased productivity comes from important investments made in the intervening period in information and communication technology (see Land Information Bulletin (1998), for a description of these investments.

In the 1980's the ROD had already invested in an in-house mainframe software program that produced microfiche images of recorded documents and microfiche indexes for retrieval of those documents. By 1995, the switch to a client-server PC-based system with document imaging was well under way, financed by a \$300,000 grant. The office transformation continued with the acquisition of 26 workstations, two scanners, one 88-platter jukebox, three laser printers, a 12-megabyte file server, a database server, an image server, a print server, and a modem.

In 2000, the ROD offered "Laredo," an online system providing access to its index and images. In 2001, the ROD upgraded its imaging and indexing systems resulting in increased speeds of indexing, scanning and access. In 2003 the ROD recorded the first document electronically, and now accepts digital filing of mortgages, assignments of mortgage, satisfactions of mortgages and subordination agreements from eight major lending institutions.

Table 3: Register of Deeds Staffing and Work Load by Year

YEAR	STAFF	No. of Real Estate Documents Recorded (1)	No. of Documents Recorded per Staff Person
1990	16.5	61,044	3,700
1991	16.5	72,173	4,374
1992	16.5	115,621	7,007
1993	16.5	133,066	8,065
1994	17.8	94,953	5,334
1995	18	75,223	4,179
1996	18	94,745	5,264
1997	17.5	98,346	5,620
1998	17.5	147,754	8,443
1999	18.5	121,927	6,591
2000	18.5	96,210	5,201
2001	18.5	146,409	7,914
2002	18.5	201,643	10,900
2003	18.5	236,523	12,785
2004	18.5	149,141	8,062
90-93 avg.	16.5	95,476	5,786
01-04 avg.	18.5	183,429	9,915
% Change	+12%	+92%	+71%

(1) Staff are cross-trained such that real estate staff help with customer service in Vital Records and Vital Records staff can help with indexing in the Real Estate section. Vital Records documents received by the Register of Deeds are not included in this table, nor are documents relating to personal property. The number of copies of vital records produced for clients ranged between 11,800 and 13,100 the past four years.

Source: Dane County Register of Deeds, 2005

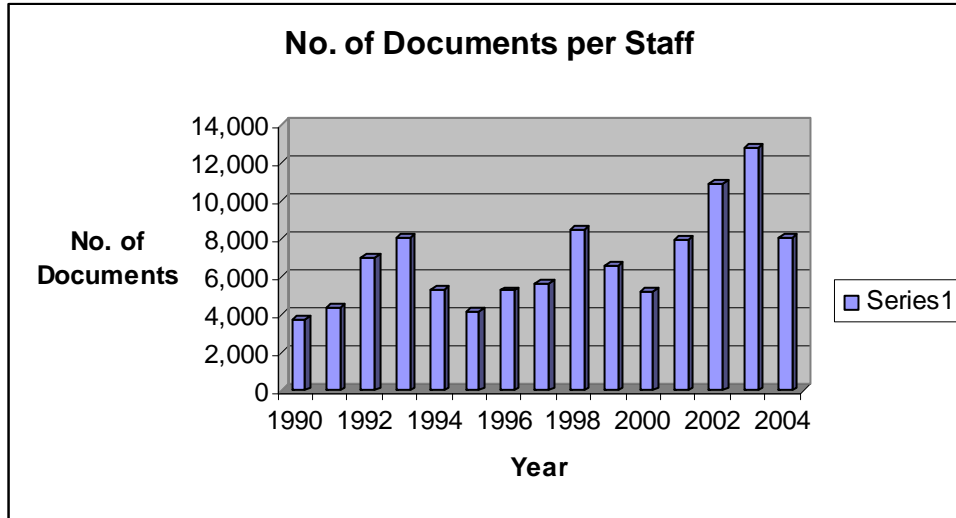


Figure 1: Documents Recorded Per REGISTER OF DEEDS Staff Person by Year

Figure1 shows the overall trend toward increasing numbers of documents recorded per staff person, but also that there appears to be a five year cycle of increasing and then decreasing numbers of documents recorded.

3. Cost of Recording Each Document

The staff levels have remained relatively constant since 1990, increasing by just two persons in 15 years. The year-to-year variation in the number of documents recorded is partly absorbed by the increased reserve capacity of the technology installed in the mid 1990's, and also through the hiring of short term staff when the work load increases, and dismissing of such staff when the work load drops.

Have the investments in ICT and flexible staffing simply shifted the costs from permanent staff to investments in technology, an exchange of machines for people?

Table 4 shows the costs of Register of Deeds operation, including capital investments, by year. A major capital investment of \$300,000 was made in 1994, and was amortized over five years, and shown in the "Projects" column for 1994-98. The REGISTER OF DEEDS retains some of its revenues, up to \$17,000 per year, for its own investments in capital improvements.

Table 4: Total Operating Costs of the REGISTER OF DEEDS by Year

YEAR	PERSONAL SERVICES	SUPPLIES	REPAIR	PROJECTS	OTHER	TOTAL EXPENSES
1990	\$468,681	\$41,526	\$11,358	\$60,071	\$14,262	\$595,898
1991	\$529,729	\$52,010	\$10,592	\$2,974	\$9,821	\$605,126
1992	\$653,499	\$93,863	\$9,661	\$1,616	\$1,135	\$759,774
1993	\$749,889	\$97,960	\$19,680	\$2,645	\$17,354	\$887,528
1994	\$737,146	\$80,443	\$11,294	\$61,979	\$14,390	\$905,252
1995	\$749,198	\$81,098	\$24,631	\$62,986	\$11,618	\$929,531
1996	\$781,072	\$76,774	\$39,415	\$78,463	\$8,015	\$983,739
1997	\$787,680	\$88,271	\$22,677	\$86,225	\$14,685	\$999,538
1998	\$875,107	\$95,843	\$35,759	\$60,000	\$22,467	\$1,089,176
1999	\$861,583	\$100,017	\$31,368	\$43,470	\$35,437	\$1,071,875
2000	\$856,834	\$81,324	\$22,563	\$0	\$34,901	\$995,622
2001	\$933,421	\$112,112	\$25,206	\$33,621	\$45,864	\$1,150,224
2002	\$996,005	\$90,370	\$14,047	\$83,373	\$42,187	\$1,225,982
2003	\$1,063,705	\$112,749	\$11,571	\$83,356	\$69,251	\$1,340,632
2004	\$1,013,348	\$89,158	\$10,124	\$84,073	\$63,045	\$1,259,748

Source: Dane County Register of Deeds, 2005

In nominal terms, the average expenses for the years 1990-93 have increased nearly 75% when compared with the average expenses for the years 2001-04. Yearly inflation totaling about 45% over the period 1990-2004 is partly responsible for this increase in costs. There have been net positive increases in total Register of Deeds costs, in response to the 92% increase in workload (number of documents recorded).

Table 5 shows the trends in the total operating costs per recorded document by year, to see whether there has been an increase in economic efficiency during the past 15 years. The total costs for each year have been adjusted for inflation by expressing those costs for each year in 2004 dollars.

Table 5: Expenses per Recorded Document (in 2004 dollars)

YEAR	Expenses Per Document in 2004 Dollars
1990	\$ 14.13
1991	\$ 11.51
1992	\$ 8.66
1993	\$ 8.54
1994	\$ 11.85
1995	\$ 14.97
1996	\$ 12.27
1997	\$ 11.68
1998	\$ 8.32
1999	\$ 9.76
2000	\$ 11.19
2001	\$ 8.30
2002	\$ 6.32
2003	\$ 5.80
2004	\$ 8.45
90-93 avg.	\$ 10.71
01-04 avg.	\$ 7.22
% Change	-33%

Source: Dane County Register of Deeds, 2005

While 2004 showed an increase in costs to levels of early 1990's, the average costs for the four years 2001-04 were 33% lower than the average costs for the four years 1990-93, net of inflation. Economic efficiency has tended to improve substantially.

4. Revenues in Relation to Expenses

Register of Deeds revenues traditionally have come in part from the fees charged for the recording and copying of documents. As the number of documents recorded increases, the fees generated increase. About 49% of Register of Deeds fees come from this document based fee.

In recent years, however, with the development of digital data bases available on line and a reputation for accurate and reliable information private companies have reached agreements with the Register of Deeds for access to the data bases for a fee.

Private sector interest in access to Register of Deeds information also has been stimulated by a change in the law in the early 1990s that eliminated the minimum prices that title insurance companies could charge for their services. That legal change allowed title insurance companies to

compete for clients on the basis of service provided and price. The number of title companies (six) doubled in less than five years. Today, over 70 firms and 200 individual customers regularly do business in the Register. Most of them have not invested in costly title plants because they can get reliable and timely access to recorded documents from the Register. These are Laredo online subscribers who access the Register's index and images of recorded documents nearly every day. They are title companies, law firms, banks and lenders, realtors, appraisers, utility companies, surveying and engineering firms, municipal assessors, and others who are marketing construction projects or other home-related items. Other customers purchase information from time to time in Tapestry or buy document copies in the office. The fees generated from access licensing amount to about \$162,000 per year, or about 4% of the total Register revenues. See Table 6.

Fees charged for services produce about 59% of Register total revenues. These fees have "paid" for the expenses of the ROD in every year since 1990, even those years when the major investments were made in information and communication technology. The major investments in that technology are repaid approximately every two years from fees for services which have been made possible by those investments.

A substantial part (41%) of Register revenues, however, comes from being assigned 20% of the Transfer Fee charged by the County on every real estate ownership transfer transaction. This fee is 0.3% of the value of the transferred property (\$0.30 per \$100 of value). Value is determined based on the declared sale price for sale transactions, although Department of Revenue auditors review all such declarations for their correspondence to known real estate prices.

Table 6: Sources of Revenues for the ROD, 2001-2004

SOURCES OF ROD OFFICE REVENUES--2000 thru 2004	2001	2002	2003	2004	4 Year Averages	Average Percents
Vital Records(4)	\$153,253	\$186,657	\$185,064	\$197,264	\$180,559	4.2%
UCC/FTL	\$15,964	(2)	(2)	(2)		
Real Estate Recordings(5)(6)(7)	\$1,647,823	\$2,318,347	\$2,866,722	\$1,657,855	\$2,122,687	49.3%
Real Estate Photocopies/FAX	\$65,541	\$68,987	\$77,811	\$68,219	\$70,139	1.6%
Real Estate Indices/On-line & Images(1)	\$85,116	\$151,920	\$241,196	\$168,590	\$161,705	3.8%
CSM paper	\$253	\$584	\$535	\$569	\$485	0.0%
TOTAL ROD Fees	\$1,967,949	\$2,726,495	\$3,371,328	\$2,092,496	\$2,539,567	59.0%
20% of Transfer Fees to ROD	\$1,394,086	\$1,674,285	\$1,872,316	\$2,115,670	\$1,764,089	41.0%
County General Fund -- ROD(3)	\$3,362,036	\$4,400,780	\$5,243,644	\$4,208,166	\$4,303,656	100.0%

(1) Customer Account established 10/1/96

(2) Folded into "Real Estate Recordings" after 2001

(3) Includes General Fees + 20% of Transfer Fees

(4) \$7 out of every \$12 fee for birth certificates goes to the State for the Child Trust Fund to fight child abuse.

The remaining \$5 per certificate fee is shown in this line item. There is no fee for filing vital records; the fees are charged for providing certified copies of vital records after they are filed.

(5) \$5 out of \$11 fee for the first page of every recorded document goes to the County Land Records Fund

(6) \$2 out of \$11 fee for the first page of every recorded document goes to the State Land Records Fund

(7) The remaining \$4 for the first page of every document, and the \$2 fee for all subsequent pages is shown in this line item.

(8) The Transfer Fee is \$0.30 per hundred dollars value of the property.

Source: Dane County Register of Deeds, 2005.

Table 7 shows the trends in revenues and their relations with expenses over the past 15 years.

Table 7: Register of Deeds Revenues and “Surpluses” by Year

YEAR	REVENUE	SURPLUS
1990	\$1,049,392	\$453,494
1991	\$1,208,749	\$603,623
1992	\$1,818,286	\$1,058,512
1993	\$2,078,130	\$1,190,602
1994	\$1,744,357	\$839,105
1995	\$1,553,899	\$624,368
1996	\$1,886,188	\$902,449
1997	\$1,924,399	\$924,861
1998	\$2,522,837	\$1,433,661
1999	\$2,414,233	\$1,342,358
2000	\$2,167,978	\$1,172,356
2001	\$3,376,727	\$2,226,503
2002	\$4,400,780	\$3,174,798
2003	\$5,243,644	\$3,903,012
2004	\$4,208,166	\$2,948,418
90-93 avg.	\$1,538,639	\$826,558
01-04 avg.	\$4,307,329	\$3,063,183
% Change	180%	271%

Source: Dane County ROD, 2005

While there are year-to-year variations, there are strong trends for revenues to exceed expenses by substantial amounts over the 15 year period, particularly after the year 2000. Revenues increased over 180% since 1990. Following a decline in surpluses in the years of the large IT investment, the rising trend in surpluses became impressive by 2004, increasing 271% since 1990 (using four year averages as done in previous tables).

Very active land markets, a positive “client orientation” in the Register, and a digital information system accessible on line have combined to produce these positive results.

5. Benefits for the Public

About 70% of the Register’s document recording load is presented by title insurance companies. In a typical sale, there are two title policies--an owner’s title policy, of which the deed is the

foundation, and a loan policy--of which the mortgage is the foundation. Therefore, of the various recorded documents involved in the average transaction, both the buyer and the seller typically pay for a title insurance policy. The seller pays for the new owner's policy and the buyer (who is the new owner) pays for the mortgage policy. About 11% of all recorded documents for the period 1999 through 2004 were ownership transfers (mostly sales) or land contracts, a total of 103,916 such transactions during those five years, with the yearly average being 17,319 such transactions (see Table 2).

Fees for title insurance have changed dramatically since 1990. In 1990 the fees that title insurance companies could charge were regulated and a minimum fee was established by law. In that year in Dane County and in other large counties with more competition among the title insurance companies than the smaller counties, the cost of title insurance for a \$100,000 home (the average home cost for Dane County in that year) was \$575. For a "re-issue" used for refinancing mortgages where the title company had already done the title work several years earlier, the cost was approximately \$430. For an average home sale in 1990, the cost of title insurance was about \$1,000. Title companies in northern Wisconsin would typically charge an additional three hundred dollars, a practice allowed by law. They did so because the value of the properties tended to be less, they did not have the volume of work as in the south, and title work in the less urbanized County offices was very labor intensive.

In 1990, the cost of title insurance in Dane County occasioned by the sale of a \$200,000 home was \$975, and \$730 for a re-issue of a mortgage for such a home.

In 2005, the average home in Dane County is worth \$200,000 but the basic title insurance cost for a \$200,000 home is about \$400 and \$275 for mortgage re-issues. Assuming that there will be approximately 17,000 sales in 2005 (the average number over the past 5 years) and approximately 40,000 mortgage re-financings, Table 8 shows that there would be a total savings of \$35.7 million for those engaged in the main transactions carried out in 2005.

Table 8: Estimated Savings from Reducing Costs of Title Insurance--2005

	At 1990 Rates (2)	No. of Transactions (1)	Cost of Insurance	At 2005 Rates (2)	No. of Sales	Cost of Insurance	Estimated Savings
Cost of Insurance-- sales--new owners	\$975	17,000	\$16,575,000	\$400	17,000	\$6,800,000	
Cost of insurance-- mortgages-- sales	\$730	17000	\$12,410,000	\$275	17,000	\$4,675,000	
Cost of Mortgage re- financing	\$730	40000	\$29,200,000	\$275	40,000	\$11,000,000	
Total Cost			\$58,185,000			\$22,475,000	\$35,710,000

(1) Assuming the average number of yearly sales to be approximately 17,000. To arrive at an estimate of the number of refinanced mortgages, we subtracted the average number of sales from the average number of mortgages. See Table 2.

(2) These figures are only indicative, since there are many different situations which involve different title insurance rates.

Source: Table 2 and estimates of title insurance costs from ROD.

The changes in the ROD management of information and its network of clients have meant dramatic savings for the borrowers.

6. Replicability?

How replicable is this experience in other places? The Dane County financial accounting and reporting system has enabled the authors to do most of these calculations. Without such a system, evaluating a county agency would be extremely difficult.

For the past 25 years, the Register of Deeds has developed a “culture” of modernization of its services, with the first major improvement being the shift to microfiche for archiving and accessing records, computerizing the grantor-grantee and tract indices, and in recent years to a web based property records system. This latest phase of a full digital environment lays the basis for improving efficiency of services in the future, the reduction of costs of archiving and retrieving documents, and the greater security of information storage.

As far as the shift to digital information processing is concerned, in Dane County, there is a very supportive IT environment. There is good vendor support for the Register’s indexing and imaging system in coordination with the County Information Management Division that purchases all

computer hardware and handles installation. These two groups work together to give the Register reliable service, which is key in the Register of Deed's ability in turn, to provide reliable service to its customers.

The Wisconsin Land Information program is also a vital element in the Register's success story. Some of the financial support from this program was used to purchase its first indexing and imaging system and the associated hardware in the mid 1990s. That support allowed the Register to begin to offer online access to customers in 2000. The revenue from that service is used to pay for indexing/imaging software lease and for hardware upgrades. For example, in 2000 the Register abandoned its jukebox storage system and moved to massive hard drive storage space, an upgrade that requires less cost for maintenance and provides faster image retrieval.

The County's Land Information Office (part of the Wisconsin Land Information Program) offers AccessDane that provides links to the Parcel Information program (tax assessment information) and DCiMap (a user-friendly GIS) via the Internet, two excellent and useful programs that save many county offices numerous customer phone calls and staff resources.

The Register of Deeds of Dane County is presently working with the Wisconsin Department of Revenue (along with the rest of the county Registers in the state) to accept the electronic version of the Wisconsin Real Estate Transfer Return Form required with every instrument of conveyance and this will allow the Register to accept deeds electronically. This method saves time and money for everyone. It will become an important "safety valve" as the years roll on and the office continues to record more documents under the county executive's strict rule of no additional staff.

The Register's web-based systems provide the opportunity for the office to continue to serve its customers at a remote location should some natural or human-made disaster strike. The office is also preparing its "Continuity of County Operations Plan" to develop a strategy to strengthen and improve record preservation and public access now and in future years.

7. Conclusions

The real estate markets in Dane County have been producing dramatically increased number of documents to be recorded by the Register of Deeds, increasing approximately 92% since 1990 through 2004. In the mid-1990s the Register of Deeds introduced new management procedures and new ICT.

Using four indicators the paper presents data about how well the Register of Deeds has met the challenge of a dramatically increasing work load.

1. Has staff productivity increased during the past 15 years?

The data show an average increase of 71% of documents recorded per staff person since 1990.

2. Has the cost per document recorded decreased over time, showing increasing economic efficiency?

The expenses per recorded document declined by approximately 33% since 1990.

3. Is the Register meeting client needs, has an adequate fee structure, and is operating efficiently, as measured by the surplus of revenues over expenses?

While there are year-to-year variations, revenues have exceeded expenses by substantial amounts over the 15 year period studied, particularly after the year 2000. Overall, revenues increased over 180% since 1990. Following a decline in surpluses in the years of the large IT investment, the rising trend in surpluses became impressive by 2004, increasing 271% since 1990. Since surpluses increased more than revenues, the Register has probably improved its management efficiency. The improved services offered due to the investments in information and communication technology have opened up new sources of revenues in recent years, indicating that the Register has found new ways to satisfy the needs of its main clients.

4. Have fees charged the participants in property transactions by private title insurance companies for verifying title declined over time?

The increased availability of property information from the Register through its offering of title search capabilities via computer assisted searches should contribute to a reduction in fees. Over the past 15 years these fees have dramatically declined. Certainly a change in the law removing minimum title insurance fee requirements was also an important contribution to this reduction in fees. Another possible contributing factor is the title insurance company shift from highly trained and qualified title search staff to more clerical staff, thereby reducing their costs and fees they charge. The improved access to archives by the introduction of IT and improved access policies of the Register has been an important factor in the dramatic reductions in charges to the public for title searches.

Other Registers of Deeds in Wisconsin have made similar investments. Out of 72 county Registers, 70 have computerized imaging and indexing systems. Twenty eight Registers are offering online access and ten are able to accept documents for recording electronically.

What about such organizations in places without a highly active real estate market which operates through the formal registration system, and without a highly developed support network for IT? Might they benefit from making the investments in technology and management of the type undertaken in Dane County?

The “environment” of the Dane County Register in Madison, Wisconsin is very favorable. There is a widespread effort to introduce ICT into public and private sector organizations, and to change access of the public to land information in Dane County. Technical support services for IT are readily available. The very active real estate markets produce significant revenues of the Register which facilitates the securing of adequate budgetary resources, and the offering of more services, thereby increasing revenues. Dane County financial management systems

enable the monitoring of the actions of County agencies, and the rewarding of capable managers.

How “replicable” the specific experiences of the Register of Deeds might be in other contexts, is a question to be assessed by those interested in Dane County’s efforts, and in the indicators which can be used to monitor the modernization process.

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ABOUT THE AUTHORS

Jane Licht received an M.S. from UW-Madison in Land Resources with an emphasis in land information systems, and has a Wisconsin Real Estate Broker’s license. She became Register of Deeds of Dane County in 1989. She is past president of the Wisconsin Register of Deeds Association, past president of the Wisconsin Land Information Association, past member of the Wisconsin Land Information Board, and a current member of the Dane County Land Information Office.

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Endnotes

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³ Land sales figures include only averages of 'arm's length' transactions. Sales made under other than normal market conditions (such as family sales or foreclosures) are not included. Sales are reviewed by the Wisconsin Department of Revenue, Bureau of Equalization. With each sale of a parcel of land, the buyer is required to file a Wisconsin Real Estate Transfer Return, documenting the parcel size, sale price, present use, and intended use of the property. State appraisers inspect the site and verify the transfer return. The sales data are a summary of the Wisconsin Real Estate Transfer Returns.

⁴ Estimated from the Transfer Fees charged during 2004 by Dane County, with an average of \$183,000 per property transferred.