

ERER Pilot Measurements – County & Trusted Submitter

ERER Task Force Consideration	Standards Recommendation	Measurement Question
<p>1. Cost / Benefit - Consider studying existing system configurations, hardware types, outsourcing practices, and vendor choices.</p>	<p>Included in interviews and surveys</p>	
<p>2. Consider estimating the extent to which existing systems will require modification or replacement to accommodate any changes that the ERER Task Force recommends.</p>	<p><u>Model 3: Fully electronic</u> – At this level the entire recording process can be completed without manual intervention. The submitter creates an XML based electronic document that includes both data and presentation information. This document is wrapped with a digital signature and may also include digitized signatures. Once received, the county systems will validate document integrity and proceed with automated indexing. Business rules will be used to validate recordability and an image of the document will be generated which becomes the document of record. Receipt and recording information is returned to the submitter electronically. This level provides the greatest efficiency improvement since no manual intervention is required and processing time is greatly reduced.</p> <p>Model 3</p> <p>Pro:</p> <ul style="list-style-type: none"> • Model 3 allows for the greatest reduction in work effort by eliminating data entry at the county. Because of this, elapsed recording time is also significantly reduced. • Since robust validation rules can be implemented, the document rejection rate should be greatly improved. 	<p>How much system re-use did you experience?</p> <p>As a result of decreased data entry responsibilities at the county, has elapsed recording time been affected?</p> <p>Did your current system require significant modifications or replacements to accommodate e-recording?</p> <p>TS: What modifications did you need to make or plan to make to accommodate e-recording?</p> <p>Do you think these modifications will be beneficial in your work with counties?</p>

	<ul style="list-style-type: none"> • The private sector should realize a reduced work effort because of process flow efficiencies provided by model 3. • This model should promote more business-to-business integration throughout the Real Estate industry as electronic processing pushes further upstream. • Because of digital signatures and encryption, document integrity improves over model 1 or 2. <p>Con:</p> <ul style="list-style-type: none"> • With automation comes complexity. Additional business rules and processing steps must be encapsulated within the system. • Both the private sector and counties will need to implement systems more complex than those required at model 1 or 2. Because of the additional complexity, model 3 applications are more costly to develop and implement. • Because of the complexity of implementation, full model 3 integration may not be practical for many counties. 	
<p>3. Consider updating the results of the county-by-county survey regarding tract indexes, Torrens, and other matters that the county recorders are currently conducting.</p>	<p>Determined as out-of-scope for project</p>	

4. Consider inventorying the major categories of land-related records that counties currently maintain, including, for example, zoning maps, building permit files, wetland and other natural resource inventories, and property tax records.	Included in interviews and surveys	
5. Consider using its website to keep public-sector employees, private-sector users, and the general public informed of the ERE Task Force's progress, as a way of evaluating its ideas and building support for its final recommendations	Complete	
6. Consider conducting pilot studies of different types of electronic recording technology in a small cross-section of counties including, for example, rural as well as metropolitan counties, before recommending any such technology for statewide use.	Pilot Testing Phase	
7. Consider modeling the major public- and private-sector functions and workflows associated with real estate recording, both inside and outside of government, in order to identify tasks that are affected by real estate recording.	Current State Model	
8. Consider studying (i) what other states have done with respect to authenticating, securing, and determining the recording priority of	Out-State Interviews/ Summary & Matrix	

<p>recordable instruments, and (ii) how U.S. systems other than real estate recording systems (for example, UCC filings, state and federal court filings) address those concerns.</p>		
<p>9. Consider explaining how the E-Recording Task Force will produce its work, including, for example, through subcommittees, by supervising the work of a new E-Recording Task Force staff, by retaining consultants, or through a combination of those approaches.</p>	<p>Completed</p>	
<p>10. Consider preparing a timeline for future E-Recording Task Force work.</p>	<p>Completed</p>	
<p>E-Recording Standards</p>		
<p>11. Consider emphasizing the overriding importance of identifying features that will both (i) facilitate or enhance county recorders' numbering, indexing, recording, payment, verification of receipt, certification, return of documents, and on- and off-site customer access services, and (ii) foster procedures and policies that promote uniform, secure, accessible, and user-friendly electronic creation, transmission, recording, storage, retrieval, and preservation of, as well as payment for, real estate documents.</p> <p><u>Payment Method</u></p>	<p>Recommended Standards:</p> <ul style="list-style-type: none"> • Implement escrow accounts with business partners for payment of taxes and fees. 	<p>What kind of payment account is used at your county?</p> <p>Was it convenient?</p> <p>What issues have you encountered?</p> <p>TS: Were you already set up to use the same payment method as the county? If no, was it convenient to setup?</p> <p>Did you need to modify your system to perform financial transactions with the county for pilot testing? If yes, please explain.</p>

		<p>Are you using this payment method for more than just e-recording?</p>
<p>11. Consider emphasizing the overriding importance of identifying features that will both (i) facilitate or enhance county recorders' numbering, indexing, recording, payment, verification of receipt, certification, return of documents, and on- and off-site customer access services, and (ii) foster procedures and policies that promote uniform, secure, accessible, and user-friendly electronic creation, transmission, recording, storage, retrieval, and preservation of, as well as payment for, real estate documents.</p> <p><u>Use Case</u></p>	<p>Recommended Standards:</p> <ul style="list-style-type: none"> • Adopt the satisfaction, certificate of release, and closing package use cases as Minnesota standards. 	<p>Was the Use Case useful for designing new processes?</p> <p>What issues have you encountered in complying with the adoption of these Use Cases?</p> <p>What specifically did you adopt or change?</p> <p>TS: Same questions.</p>
<p>11. Consider emphasizing the overriding importance of identifying features that will both (i) facilitate or enhance county recorders' numbering,</p>	<p>Recommended Standards:</p> <ul style="list-style-type: none"> • The best practice workflow should be used as a starting point for counties as they refine their document 	<p>Was the workflow useful for designing your processes?</p> <p>What issues have you encountered in</p>

<p>indexing, recording, payment, verification of receipt, certification, return of documents, and on- and off-site customer access services, and (ii) foster procedures and policies that promote uniform, secure, accessible, and user-friendly electronic creation, transmission, recording, storage, retrieval, and preservation of, as well as payment for, real estate documents.</p> <p><u>Workflow</u></p>	<p>recording process.</p>	<p>complying to the adoption of this work flow?</p> <p>What specifically did you adopt or change?</p> <p>TS: NA</p>
<p>11. Consider emphasizing the overriding importance of identifying features that will both (i) facilitate or enhance county recorders' numbering, indexing, recording, payment, verification of receipt, certification, return of documents, and on- and off-site customer access services, and (ii) foster procedures and policies that promote uniform, secure, accessible, and user-friendly electronic creation, transmission, recording, storage, retrieval, and preservation of, as well as payment for, real estate documents.</p> <p><u>Storage / Retrieval</u></p>	<p>Recommended Standards:</p> <ul style="list-style-type: none"> • Images created or submitted as part of electronic recording should be archived with existing document images. 	<p>Has compliance to storing images been an issue?</p> <p>Do you provide data and image retrieval?</p> <p>Have people wanted the data portion along with images?</p> <p>TS: NA</p>
<p>12. Consider requiring that any technology-based improvements to existing systems that it recommends provide for long-term</p>	<p>Recommended Standards:</p> <ul style="list-style-type: none"> • Images created or submitted as part of electronic recording should be archived with 	<p>Have you experienced any issues archiving images sent with electronic filings?</p>

<p>maintenance and development of electronic real estate recording, including the migration, conversion, and preservation of data over time.</p> <p>15. Consider the implications of integrating existing paper, microfilm, microfiche, and optical methods of storing real estate documents with any digital, encrypted, or other document formats that the ERER Task Force recommends, to help make access to and searches of the real estate recording system as seamless and uniform as possible.</p>	<p>existing document images.</p>	<p>How do you provide access to existing documents and to e-recorded documents? Is there a difference in accessibility or processes to access these records?</p> <p>Are all images sent electronically being archived?</p> <p>Do you archive XML data along with the archived image?</p> <p>TS:</p>
<p>13. Consider how to build a framework for sharing and communicating information that would rely on existing, recognized policies and standards for technology, metadata, or data, and that would best support and improve procedures for recording, gaining access to, searching, preserving and retrieving real estate records.</p>	<p>Recommended Standards:</p> <ul style="list-style-type: none"> • Adopt the best practice workflows as Minnesota standards. • Adopt the satisfaction and closing package use cases as Minnesota standards. • Adopt the satisfaction, certificate of release, deed, assignment, certificate of real estate value, and affidavit of purchaser for Torrens property as Minnesota standards. • Adopt the data element list as Minnesota standards. 	<p>Did you find the schema useful?</p> <p>Did you have to make significant changes to the schema as presented? If yes what were those?</p> <p>What elements of the schema, workflow, data elements, use cases or standards have presented issues in your county and processes?</p> <p>TS: Same questions</p>
<p>14. Consider developing performance standards for electronic management of real estate records that do not specify particular hardware or software applications.</p>	<p>Recommended Standards:</p> <ul style="list-style-type: none"> • Document standards must be created using technology that is platform neutral. 	<p>Is your application free to accept filings from a Trusted Submitter using a different technology platform? From which Trusted Submitters and what platform do they use?</p>

		<p>Are there any issues with your transmissions?</p> <p>TS: Is your filing software able to submit to any county's technology?</p> <p>What counties are you working with and what platform do they use?</p> <p>Are there any issues with your transmissions?</p>
<p>16. Consider the many ancillary functions that are part of the real estate recording process, including for example (i) collection of deed and mortgage registry taxes; recording, well and conservation fees; special assessments and past-due real estate taxes; and Green Acres amounts, (ii) disclosure of information regarding wells and waste disposal systems, (iii) subdivision of land and lot-splitting, (iv) filing of Affidavits of Purchaser and Examiner's Directives in the Torrens system, and (v) with respect to real estate conveyances, verification of the tax parcel number; determination of the assessed value of the real estate; and disclosure of the name and address of the new taxpayer.</p>	<p>Recommended Standards:</p> <ul style="list-style-type: none"> • Implement escrow accounts with business partners for payment of taxes and fees. <p>Recommended Standards:</p> <ul style="list-style-type: none"> • Implement a process for identifying divisions or splits and removing them from the electronic recording process, so that they can be manually recorded. 	<p>Phase 2 Issues:</p> <p>How does your e-system flag a document as a split? Is this process working well?</p> <p>Does the manual recording process seem to be the best work around?</p> <p>TS: NA</p>

<p>17. Consider ensuring that any electronic real estate recording system that the ERER Task Force recommends accommodates citizens' statutory rights to privacy and confidentiality of sensitive data and information as well as lawful uses of the real estate record, and supports units of government that are authorized to (i) revise, supplement, or otherwise modify certificates of real estate value (CRVs) and other documents that part of the real estate recording process, (ii) search and compile such data for purposes unrelated to real estate recording, and (iii) require an audit trail of particular real estate transactions.</p>	<p>Recommended Standards:</p> <ul style="list-style-type: none"> • Social Security Number data element within the certificate of real estate value must be encrypted and viewable only by the Department of Revenue. • Applications developed to support electronic recording must comply with Minnesota statute 13. 	<p>Is the vendor package providing a thorough audit trail of real estate transactions? Are there any issues working with this audit trail?</p> <p>In reference to Statute 13, is there free (no charge) access to data, and more specifically e-recorded data at the county?</p> <p>Phase 2 Issue:</p> <p>Does SS# appear encrypted upon receipt?</p> <p>TS: Does encrypting the SS# in a e-transaction present issues or concerns for your clients?</p>
<p>18. Consider requiring that any enhancements or changes to existing applications that the ERER Task Force recommends be designed to be developed in phases and adaptable to various systems.</p>	<p>Phases 1 and 2 were identified.</p> <p>Phase 1, SAT and Certificate of Release</p> <p>Phase 2, all others</p>	
<p>19. Consider whether a tract index should be mandatory in all counties, and if so, whether it should replace the grantor-grantee index as the official index.</p>	<p>Recommended Standards:</p> <ul style="list-style-type: none"> • Applications developed to support electronic recording should utilize the standards for PIN and legal description to create tract index entries, as soon as is practical. 	<p>What issues does the county experience or foresee in using standards for PIN and the use of legal description?</p> <p>TS: Does the use of standards around PIN and use of Legal Description affect the efficiency in filing documents with the county?</p>

<p>20. Consider recommending the creation, evaluation, and revision of uniform indexing standards to facilitate computerized searches, for example, by clarifying whether “John Smith Truck Co.” will be indexed as Smith, John, Truck Co. or as John Smith Truck Co., and whether a name that starts with “Saint” be indexed as Saint, St., or St.</p>	<p>Recommended Standards:</p> <ul style="list-style-type: none"> • Adopt the PRIJTF indexing guidelines as a statewide standard. • Maintain the indexing standards through the same maintenance organization responsible for Minnesota document standards. 	
<p>21. Consider whether use of any uniform indexing standards should be mandatory; whether such use should be prospective only; and if indexing standards are to be used retrospectively as well as prospectively, how far back in time existing indexes should be amended.</p>	<p>Recommended Standards:</p> <ul style="list-style-type: none"> • Require adoption of uniform indexing standards as counties move to electronic recording. • Implement uniform indexing standards prospectively only. 	<p>What issues do you experience or foresee in using a standardized indexing system?</p> <p>How has a standard indexing system affected your process?</p> <p>TS: How has a standard indexing system at counties affected your process?</p> <p>How has your data entry processes changed to comply with indexing standards?</p>
<p>22. Consider defining the term “real estate records,” including, for example, clarifying whether probate records and judgments are included.</p>	<p>Recommended Standards:</p> <ul style="list-style-type: none"> • Adopt the satisfaction, certificate of release, deed, assignment, certificate of real estate value, and affidavit of purchaser for Torrens property as Minnesota standards. • Adopt the MISMO e-mortgage standard as the Minnesota standard. 	<p>NA</p>

<p>23. Cost / Benefit - Consider studying the costs and benefits of linking real estate records with other layers of public data including, for example, data regarding transportation, hydrology, topography, and political boundaries, as part of the statewide geographic information system (GIS).</p>	<ul style="list-style-type: none"> Counties that are planning on implementing GIS should plan for inclusion of PIN numbers in their recording systems so that integration with GIS will be supported. 	<p>Has PIN been a part of your system in the paper world?</p> <p>Has the inclusion of PIN in the e-filings created any issues? If so, please explain.</p> <p>TS: Has the inclusion of PIN affected your filing process with a county? If so, please explain.</p>
<p>24 Consider creating a simplified platting process that would facilitate reference to real estate parcels that are subject to metes and bounds or other complex legal descriptions.</p>	<p>Determined Out of scope</p>	<p>NA</p>
<p>25. Consider recommending the inclusion of parcel identification numbers (PINs), geographic information system (GIS) identifiers, or other unique labels in recordable instruments to foster cross-referencing among real estate records and other layers of public data such as city assessor's records and Minnesota Department of Revenue records.</p>	<p>Recommended Standards:</p> <p>A data element for PIN is included in the document standards as an optional field to accommodate entry into tract index and allow for future integration with GIS and other systems. The PIN number should have the following characteristics:</p> <ul style="list-style-type: none"> It should be unique It should not be reused It should be retained in perpetuity The application should support tracking a split property to the original property Counties should implement 	<p>How does the PIN standard affect your current process at the county?</p> <p>TS: Do standardized PIN numbers affect the processes at your office?</p>

	PINs on a prospective basis	
26. Consider identifying the entity(ies) that will be responsible for developing and updating standards for the content and format of electronic real estate records.	Recommended Standards: Retain a subset of the ERE Task Force to serve as the initial standards maintenance board.	NA
27. Legal – Consider making user-friendly, reliable, and convenient on- and off-site public access to real estate records an important goal of any authentication, security, and recording-priority standards that it proposes. (Chapter 13 mandate)		Is access to both data and image provided? How has this access to data been provided? Is access provided on-line , in house or both ? Is access provided free of charge? What are the charges, if any? Do vendors provide access to the data? What are their charges? How has this access to data been provided? Are there any security issues involved that were not present in the paper process? Please explain. Does e-filing provide better or timelier access to data? Please explain.
28. Legal – Consider identifying the legal issues involved in determining the recording priority of instruments filed in person, by mail, and electronically.	There appears to be a consensus that the date and time of acceptance should govern priority, but that each county would or should have discretion to set its own policy in regard to the precise process of affixing such date and time to documents.	Does your county utilize date / time of acceptance as the priority for documents? Define your policy to affixing date and time to each process used to deliver filings to the county office.

<p>29. Legal – Consider surveying the Uniform Electronic Transactions Act, Data Practices Act, Official Records Act, Records Management Act, Torrens statute, recording act, laws concerning notarial acts, and all other Minnesota statutes and regulations (i) to determine which should be amended or repealed in response to the introduction of electronic technology into the real estate recording system, and (ii) to identify any new legislation that may be required.</p>		NA
<p>30. Legal – Consider studying who should bear the financial risk of breaches in security and other problems that might arise with the introduction of electronic technology into the real estate recording system.</p>		NA
<p>31. Cost / Benefit – Consider estimating the costs and benefits of (i) operating the real estate recording system in its current form, and (ii) implementing and maintaining any technology upgrades or other changes that the ERER Task Force recommends.</p>		Cost / Benefit chart at bottom.
<p>32. Cost / Benefit – Consider the appropriateness and feasibility of making recording and similar fees, as well as copying and certification charges, uniform</p>	<p>Recommendation:</p> <ul style="list-style-type: none"> • Mechanisms to improve access to county fee structures should be included in applications developed to support electronic 	<p>How has your county provided it's fee structure information to Trusted Submitters?</p> <p>TS: Are the pilot county fee</p>

in all counties.	recording.	structures more easily accessible? Please explain.
<p>33. Cost / Benefit – Consider public and private funding alternatives, Internet advertising, new user access fees, a new statewide technology trust fund, and allowing counties to retain current mortgage registry and deed taxes and the recording surcharge as possible revenue sources, in order to assure that every county can pay for any technology upgrades or other electronic real estate recording initiatives that the ERER Task Force recommends.</p>		NA
<p>34. Cost / Benefit – Consider proposing that the legislature offer counties financial or other incentives (1) to adopt uniform indexing standards prospectively, and (2) to amend existing indexes to comport with them.</p> <p>36. Consider proposing educational, financial, or other incentives to encourage those in the public and private sector that currently use the real estate record system to participate in any electronic recording initiatives that the ERER Task Force recommends.</p>	<p>Recommendation:</p> <ul style="list-style-type: none"> • Provide early adopters of electronic recording with an opportunity to participate in the standards maintenance organization. • Evaluate Task Force objectives to determine if public support is appropriate. • Initiate education campaign directed to counties and trusted submitters on benefits of electronic recording. 	NA
<p>35. Cost / Benefit – Consider protecting, to the extent feasible, the significant public- and private sector investments in real estate record systems that have been</p>	<p>Recommendation:</p> <ul style="list-style-type: none"> • Document standards must allow for systems to be extended rather than replaced 	Cost / Benefit Chart Below.

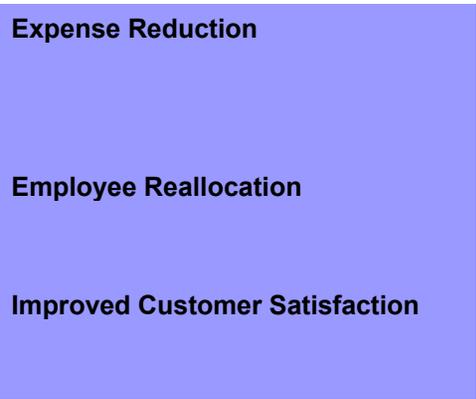
made to date.		
37 Cost / Benefit – Consider whether it is appropriate and feasible for counties to collect filing fees and other revenues associated with the real estate recording process electronically.	Recommendation: <ul style="list-style-type: none"> • Implement escrow accounts with trusted submitters for payment of taxes and fees. • Investigate alternative payment options as part of the pilot process or prior to standards implementation. 	
Other Technical Considerations – Electronic Signatures	Recommended Standards: <ul style="list-style-type: none"> • Parties should establish separate key pairs for digital signatures and encrypting data. • Multiple parties should not sign the same data. 	Did your company utilize separate key pairs for digital signatures? Did parties sign separate pieces of data? What issues did you experience as a result of this standard?
Namespace	Recommended Standards: <ul style="list-style-type: none"> • The target namespace for standards should be http://www.erertf.org/0.1/schema 	NA
Cost of processing paper documentation		
Cost of delivery of paper documentation		

Type of Pilot (e.g., Model 3 Satisfactions and Certificates of Release)		
Number of documents processed		
Staff Hours Spent Processing e-doc		
Average Cost Per e-Transaction Hour		

Total Internal Cost		
Average Staff Processing Cost per Document (total internal cost/# of documents)		
Number of Documents Rejected		
Average Number of Days From Date of Receipt to Date Indexed		
Total Delivery Costs for the Documents (mail, FedEx, courier, etc.)		
Delivery Cost per Document		
Other Expenditures (description and amount)		
Other Savings (description and amount)		

Cost Benefit Analysis Template

Implementation Costs	Analysis Phase	Design Phase	Development Phase	Testing Phase	Implementation Phase	Total	Pilot Testing
							On-Going Costs
Labor - Staff - Total Hours and Cost							
Labor - Contract - Total Hours and Cost							
Hardware - Description and Cost							
Software - Description and Cost							
Digital Certificate							
Infrastructure							
Training - Total Hours and Cost							
Maintenance Contract							
Transaction Fees							
Other							
Total							
Quantitative Benefits	Public	Private		Total Annual			
Filing Fee (ERERTF portion only)							
Reduced Processing Time	Reduction in what function	Reduction in what function					
	Reason for reduction	Reason for reduction					
	Total time saved	Total time saved					
Productivity Savings	Savings in what function	Savings in what function					
	Reason for productivity saving	Reason for productivity saving					
	Total time saved	Total time saved					



Expense Reduction

In what function
Reason for Cost Savings
Total Savings

In what function
Reason for Cost Savings
Total Savings

Employee Reallocation

Removed from what function
Added to what new function

Removed from what function
Added to what new function

Improved Customer Satisfaction

Explain experience / results

Explain experience / results