### ERER Task Force Pilot Phase 1 - Project Status Reports

### <Example> County - Report No. 1 5/1/2003

Report for: Beth McInerny, Project Coordinator State of Minnesota ERER Task Force, John Engerholm, Erin Hultgren, The Navis Group, LLC

Submitted by:

### 1. Deliverables Summary:

Deliverable	Status Notes	% Complete	Target Date	Completion Date
Baseline Measurements				
Pilot Measurements Matrix				
Cost Benefit Table				

## **1.1 Deliverables Details: (Update as you have the answers)**

### 1.1.1 Baseline Measurements:

Phase 1 – Satisfaction	Pre-Pilot Cost/Measurement	Phase 1 Cost/Measurement
Number of Satisfaction Documents		
Processed		
(1 year)		
Number of Staff Involved in Processing		
Satisfaction Document		
(From receipt of Satisfaction until it is		
returned to submitter)		
Staff Hours Spend Processing –		
Average Cost Per Hour -> Total Internal		
Cost		
Example: employee A earns \$20/hr and		
(on average) spends 2 hours a day on		
Satisfactions. Employee B earns \$10/hr		
and spends 1.5 hours a day on		
Satisfactions. The calculation is as		
follows: $(\$20 x 2) + (\$10 x 1.5) = \$55$		
**When calculating hourly pay rates for		
employees, include benefits as		
compensation in the hourly rate.**		
Average Staff Processing Cost Per		
Document (Total Internal Costs/		
Number of Documents Processed)		

Cost from above answer/ Number of		
Satisfactions Processed (on average) for		
one day		
Number of Satisfaction Documents		
Rejected		
(in 30 consecutive days)		
Average Number of Days From Date of		
Receipt to Date Indexed for Satisfaction		
Average for a year		
Delivery Cost Per Document		
Average cost per document.		
Example: (\$.37 + cost of envelope)		
Total Delivery Costs for Satisfaction		
Document (mail, FedX, currier, etc.)		
(Delivery cost per document x # of		
documents processed in 1 year)		
System Maintenance (cost of		
maintaining system, IT costs, etc.)		
1 year		
Estimate the % of total documents		
Satisfactions account for (e.g. 15%).		
Multiply this times the total cost of		
maintaining current recording systems.		
Other Expenditures for Satisfaction		
(description and amount)		
(e.g. banking costs, customer service,		
etc.)		
Other Savings for Satisfaction		
(description and amount)		
Phase 1 – Certificate of Release	Pre-Pilot	Phase 1

	Cost/Measurement	Cost/Measurement
Number of Certificate of Release		
Documents Processed		
(1 year)		
Number of Staff Involved in Processing		
Certificate of Release Document		
(From receipt of COR until it is returned		
to submitter)		
Staff Hours Spend Processing –		
Average Cost Per Hour -> Total Internal		
Cost		
Example: employee A earns \$20/hr and		
(on average) spends 2 hours a day on		
COR's. Employee B earns \$10/hr and		
spends 1.5 hours a day on COR's. The		
calculation is as follows: $(\$20 \times 2) +$		
(\$10  x  1.5) = \$55		
**When calculating hourly pay rates for		
employees, include benefits as		
compensation in the hourly rate.**		
Average Staff Processing Cost Per		
Document (Total Internal Costs/		
Number of Documents Processed)		
Cost from above / Number of COR's		
Processed (on average) for one day		
Number of Certificate of Release		
Documents Rejected		
(in 30 consecutive days)		
Average Number of Days From Date of		
Receipt to Date Indexed for Certificate		

of Release	
Average for a year	
Delivery Cost Per COR Document	
Average cost per document.	
Example: (\$.37 + cost of envelope)	
Total Delivery Costs for the Certificate	
of Release Document (mail, FedX,	
currier, etc.)	
(Delivery cost per document x # of	
documents processed in 1 year)	
System Maintenance (cost of	
maintaining system, IT costs, etc.)	
1 year Estimate the % of total documents	
COR's account for (e.g. 15%). Multiply this times the total cost of maintaining	
current recording systems.	
Other Expenditures for Certificate of	
Release (description and amount)	
(e.g. banking costs, customer service,	
etc.)	
Other Savings for Certificate of Release	
(description and amount)	

ERER Task Force Consideration	Standards Recommendation	Measurement Question	Findings
1. Cost / Benefit -         Consider studying         existing system         configurations,         hardware types,         outsourcing practices,         and vendor choices.	<del>Included in interviews and surveys</del>		
2. Consider estimating the extent to which existing systems will require modification or replacement to accommodate any changes that the ERER Task Force recommends.	<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	County: What model of e-recording did your county pilot test with Trusted Submitters? How much system re- use did you experience? As a result of decreased data entry responsibilities at the county, has elapsed recording time been affected?	

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.	Did your current system require significant modifications or replacements to accommodate e- recording?	
Model 3	How much manual intervention was	
<ul> <li>Pro:</li> <li>Model 3 allows for the greatest reduction in work</li> </ul>	needed in the automated process?	
effort by eliminating data entry at the county. Because of this, elapsed recording time is also significantly reduced.	What is the rejection rate? What are the top 3 reasons for rejection?	
<ul> <li>Since robust validation rules can be implemented, the document rejection rate should be greatly improved.</li> <li>The private sector should realize a reduced work effort because of process flow efficiencies provided by model 3.</li> </ul>	<b>Trusted Submitter:</b> What modifications did you need to make or plan to make to accommodate e- recording?	
This model should promote	Do you think these	

3. Consider updating	<ul> <li>more business-to-business integration throughout the Real Estate industry as electronic processing pushes further upstream.</li> <li>Because of digital signatures and encryption, document integrity improves over model 1 or 2. Con:</li> <li>With automation comes complexity. Additional business rules and processing steps must be encapsulated within the system.</li> <li>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.</li> <li>Because of the complexity of implementation, full model 3 integration may not be practical for many counties.</li> </ul>	modifications will be beneficial in your work with counties? How much manual intervention was needed in the automated process? What is the rejection rate? What are the top 3 reasons for rejection?	
the results of the			

<del>county-by-county</del>		
survey regarding tract		
indexes, Torrens, and		
other matters that the		
<del>county recorders are</del>		
currently conducting.		
4. Consider	Included in interviews and surveys	
inventorying the major		
eategories of land-		
related records that		
<del>counties</del>		
<del>currently maintain,</del>		
including, for example,		
zoning maps, building		
<del>permit files, wetland</del>		
and other natural		
resource inventories,		
and property tax		
<del>records.</del>		
5. Consider using its	Complete	
website to keep publie-		
sector employees,		
private-sector users,		
and the general public		
informed of the ERER		
Task Force's progress,		
as a way of evaluating		
its ideas and building		
support for its final		

recommendations		
6. Consider conducting	Pilot Testing Phase	
<del>pilot studies of</del>		
different types of		
electronic recording		
technology in a small		
eross-section of		
counties including, for		
example, rural as well		
as		
metropolitan counties,		
before recommending		
any such technology		
for statewide use.		
7. Consider modeling	Current State Model	
the major public- and		
private-sector functions		
<del>and workflows</del>		
associated with real		
estate recording, both		
inside and outside of		
government, in order to		
identify tasks that are		
affected by real-estate		
recording.		
8. Consider studying (i)	<del>Out-State Interviews/ Summary &amp;</del>	
what other states have	Matrix	
done with respect to		
authenticating,		

securing, and		
determining the		
recording priority of		
recordable instruments,		
<del>and (ii) how</del>		
U.S. systems other than		
real estate recording		
systems (for example,		
UCC filings, state		
and federal court		
filings) address those		
<del>concerns.</del>		
9. Consider explaining	Completed	
how the ERER Task		
Force will produce its		
work, including,		
for example, through		
subcommittees, by		
supervising the work of		
<del>a new ERER Task</del>		
Force staff, by		
retaining consultants,		
<del>or through a</del>		
combination of those		
approaches.		
10. Consider preparing	Completed	
a timeline for future		
ERER Task Force		
<del>work.</del>		

E-Recording			
Standards 11. Consider emphasizing the overriding importance of identifying features	Recommended Standards: <b>1. Implement escrow accounts</b> with business partners for payment of taxes and fees.	<b>County:</b> What kind of payment account is used at your county?	
that will both (i) facilitate or enhance county recorders'		Was it convenient?	
numbering, indexing, recording, payment, verification of receipt,		What issues have you encountered?	
certification, return of documents, and on- and off-site customer		<b>Trusted Submitter:</b> Were you already set	
access services, and (ii) foster procedures and		up to sue the same payment method as the county? If no, was it	
policies that promote uniform, secure, accessible, and user-		convenient to setup?	
friendly electronic creation, transmission, recording, storage,		Did you need to modify your system to perform financial	
retrieval, and preservation of, as well as payment for, real		transactions with the county for pilot	
estate documents. Payment Method		testing? If yes, please explain.	
		Are you using this payment method for	

		more than just e- recording?	
11. Consider emphasizing the overriding importance of identifying features that will both (i) facilitate or enhance	<ul> <li>Recommended Standards:</li> <li>Adopt the satisfaction, certificate of release, and closing package use cases as Minnesota standards.</li> </ul>	<b>County</b> : Was the Use Case useful for designing new processes? What issues have you	
county recorders' numbering, indexing, recording, payment, verification of receipt, certification, return of documents, and on-		encountered in complying with the adoption of these Use Cases?	
and off-site customer access services, and (ii) foster procedures and policies that promote		What specifically did you adopt or change?	
uniform, secure, accessible, and user-		<b>Trusted Submitter:</b>	
friendly electronic creation, transmission, recording, storage, retrieval, and		Was the Use Case useful for designing new processes?	
preservation of, as well as payment for, real estate documents.		What issues have you encountered in complying with the	
Use Case		adoption of these Use	

		Cases? What specifically did you adopt or change?	
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)	<ul> <li>Recommended Standards:</li> <li>The best practice workflow should be used as a starting point for counties as they refine their document recording process.</li> </ul>	County: Was the workflow useful for designing your processes? What issues have you encountered in complying to the adoption of this work flow? What specifically did	
foster procedures and policies that promote uniform, secure, accessible, and user- friendly electronic creation, transmission, recording, storage, retrieval, and preservation of, as well		you adopt or change? Trusted Submitter: NA	

as payment for, real estate documents. <u>Workflow</u>			
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	Recommended Standards: • Images created or submitted as part of electronic recording should be archived with existing document images.	Has compliance to storing images been an issue? Do you provide data and image retrieval? Have people wanted the data portion along with images? <b>Trusted Submitter:</b> NA	

as payment for, real			
estate documents.			
Storage / Retrieval			
12. Consider requiring	<b>Recommended Standards:</b>	County: Have you	
that any technology- based improvements to	• Images created or submitted	experienced any issues	
existing systems that it	as part of electronic	archiving images sent with electronic filings?	
recommends provide	recording should be archived	with electronic mings:	
for long-term	with existing document		
maintenance and	images.	How do you provide	
development of		access to existing documents and to e-	
electronic real estate recording, including		recorded documents?	
the migration,		Is there a difference in	
conversion, and		accessibility or	
preservation of data		processes to access	
over time.		these records?	
15. Consider the implications of			
integrating existing		Are all images sent	
paper, microfilm,		electronically being	
microfiche, and optical		archived?	
methods of storing real			
estate documents with		Do you archive XML	
any digital, encrypted, or other document		data along with the	
formats that the ERER		archived image?	
Task Force			
recommends, to help			
make access to and			

searches of the real estate recording system as seamless and uniform as possible.		Trusted Submitter: NA	
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.	<ul> <li>Recommended Standards:</li> <li>Adopt the best practice workflows as Minnesota standards.</li> <li>Adopt the satisfaction and closing package use cases as Minnesota standards.</li> <li>Adopt the satisfaction, certificate of release, deed, assignment, certificate of real estate value, and affidavit of purchaser for Torrens property as Minnesota standards.</li> <li>Adopt the data element list as Minnesota standards.</li> </ul>	County: Did you find the schema useful? Did you have to make significant changes to the schema as presented? If yes what were those? What elements of the schema, workflow, data elements, use cases or standards have presented issues in your county and processes? Trusted Submitter: Did you find the schema useful?	

14. Consider	Recommended Standards:	Did you have to make significant changes to the schema as presented? If yes what were those? What elements of the schema, workflow, data elements, use cases or standards have presented issues in your county and processes? <b>County</b> : Is your	
developing performance standards for electronic management of real estate records that do not specify particular hardware or software applications.	Document standards must be created using technology that is platform neutral.	application free to accept filings from a Trusted Submitter using a different technology platform? From which Trusted Submitters and what platform do they use? Are there any issues with your transmitions? <b>Trusted Submitter:</b>	

		Is your filing software able to submit to any county's technology?	
		What counties are you working with and what platform do they use?	
		Are there any issues with your transmittions?	
		What modifications did you have to make to transmit to another county once implemented?	
16. Consider the many	Recommended Standards:	Phase 2 Issues:	Phase 2 Issues:
ancillary functions that are part of the real estate recording process, including for example (i) collection	Implement escrow accounts with business partners for payment of taxes and fees.	<b>County</b> : How does your e-system flag a document as a split?	
of deed and mortgage registry taxes;	<b>Recommended Standards:</b>	Is this process working	

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.	Implement a process for identifying divisions or splits and removing them from the electronic recording process, so that they can be manually recorded.	<ul> <li>well?</li> <li>Does the manual recording process seem to be the best work around?</li> <li>Do the escrow accounts work for collecting funds in different departments?</li> <li>Trusted Submitter: Are the fees the same as what you had calculated? If not, why?</li> </ul>	
17. Consider ensuring	<b>Recommended Standards</b> :	<b>County</b> : Is the vendor	
that any electronic real	Social Security Number data	package providing a	
estate recording system	element within the certificate of	thorough audit trail of	

that the ERER Task	real estate value must be	real estate	
Force recommends		transactions? Are	
accommodates citizens'	encrypted and viewable only by		
	the Department of Revenue.	there any issues	
statutory rights to		working with this audit	
privacy and	Applications developed to	trail?	
confidentiality of	support electronic recording		
sensitive data and	must comply with Minnesota		
information as well as	statute 13.	In reference to Statute	
lawful uses of the real		13, is there free (no	
estate record, and		charge) access to data,	
supports units of		and more specifically	
government that are		e-recorded data at the	
authorized to (i) revise,		county?	
supplement, or			
otherwise modify			
certificates of real		Phase 2 Issue:	
estate value (CRVs)			
and other documents			
that part of the real		Does SS# appear	
estate recording		encrypted upon	
process, (ii) search and		receipt?	
compile such data for			
purposes unrelated to			
real estate recording,		Trusted Submitter:	
and (iii) require an		Does encrypting the	
audit trail of particular		SS# in an	
real estate transactions.		e-transaction present	
		issues or concerns for	
		your clients?	
18. Consider requiring	Phases 1 and 2 were identified.		

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.	Phase 1, Satisfaction and Certificate of Release Phase 2, all others		
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.	<b>Recommended Standards:</b> 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.	<b>County</b> : What issues does the county experience or foresee in using standards for PIN and the use of legal description?	
		<b>Trusted Submitter:</b> Does the use of standards around PIN and use of Legal Description affect the efficiency in filing documents with the county?	
		Does e-recording provide better access	

		to this information?	
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.	Recommended Standards: Adopt the PRIJTF indexing guidelines as a statewide standard. Maintain the indexing standards through the same maintenance organization responsible for Minnesota document standards.	County: Did you implement the indexing guidelines? If so, how far back in the data did you go to adapt to this change? What major changes did you have to make? What percentage of data was changed? Did you have to print new reports, etc? Trusted Submitter:	
		NA	
21. Consider whether use of any uniform indexing standards should be mandatory; whether such use should be prospective only; and if indexing	Recommended Standards: Require adoption of uniform indexing standards as counties move to electronic recording. Implement uniform indexing	<b>County</b> : What issues do you experience or foresee in using a standardized indexing system?	

standards are to be used retrospectively as well as prospectively, how far back in time existing indexes should	standards prospectively only.	How has a standard indexing system affected your process?	
be amended.		Trusted Submitter: How has a standard indexing system at counties affected your process?	
		How has your data entry processes changed to comply with indexing standards?	
22. Consider defining the term "real estate records," including, for example, clarifying whether probate records and judgments are included.	Recommended 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 MISMO c-mortgage standard as the Minnesota standard.	NA	NA

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).	Recommended Standards: 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.	County: Has PIN been a part of your system in the paper world? Has the inclusion of PIN in the e-filings created any issues? If so, please explain. Trusted Submitter: Has the inclusion of PIN affected your filing process with a county? If so, please explain.	
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	Determined Out of scope	NA	NA

descriptions.			
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.	Recommended Standards: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:• It should be unique • It should be retained in perpetuityThe application should support tracking a split property to the original propertyCounties should implement PINs on a prospective basis	County: How does the PIN standard affect your current process at the county? Trusted Submitter: Do standardized PIN numbers affect the processes at your office?	

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 ERER Task Force to serve as the initial standards maintenance board.	NA	NA
<ul> <li>27. Legal –</li> <li>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.</li> <li>(Chapter 13 mandate)</li> </ul>	LegalConsideration#12DefinitionoftheOfficialRecord(AccessandReproduction).	County: 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	

		<ul> <li>issues involved that were not present in the paper process? Please explain.</li> <li>Does e-filing provide better or timelier access to data? Please explain.</li> <li>Trusted Submitter: NA</li> </ul>	
28. Legal – Consider identifying the legal issues involved in determining the recording priority of instruments filed in person, by mail, and electronically.	LegalConsideration#4RecordingPriorityvis-à-visDeliveryMethodThere 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.	County: 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. How did you integrate the acceptance of e- recorded documents into your current process? What are the hours of	

		an anation for a	
		operation for e-	
		recording?	
		<b>Trusted Submitter:</b>	
		NA	
<del>29. Legal –</del>	Legal Consideration #1 Pilot	NA	NA
Consider surveying the	Project Enabling Legislation		
Uniform Electronic			
Transactions Act, Data	Pilot Activity: Legislation has		
Practices Act,	been adopted as Chapter 365 of		
Official Records Act,	the 2002 Session Laws to		
Records Management	authorize the pilot project(s). It		
Act, Torrens statute,	is considered adequate to permit		
recording act, laws	"live" e-recordings. The		
concerning notarial	standards necessary to the		
acts, and all other	pilot(s) will be established by the		
Minnesota statutes and	ERERTF.		
regulations (i) to			
determine which	Long Term ERER: Legislation		
should be amended or	permanently setting post-pilot		
repealed in response to	statewide standards for e-		
the introduction of	recorded documents and any		
electronic technology	associated non-standard		
into the real estate	surcharge provisions will be		
recording system, and	needed upon completion of the		
(ii) to identify any new	pilot project(s). That permanent		
legislation that may be	legislation is on the Legal		
required.	Subcommittee's long-term "to		
_	<del>do" list.</del>		
<del>30. Legal –</del>	Legal Consideration #11	NA	NA

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.	Allocation of Risk for E- Recording Problems. There is apparent concurrence that there should be no difference between c-recording and the current paper process in regard to this issue and so no further action is recommended.		
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.	<del>See Cost / Benefit Chart,</del> <del>Attachment A.</del>		
32. Cost / Benefit – Consider the appropriateness and feasibility of making recording and similar fees, as well as copying	Recommendation: Mechanisms to improve access to county fee structures should be included in applications developed to support electronic	<b>County</b> : How has your county provided it's fee structure information to Trusted Submitters?	

and certification charges, uniform in all counties.	recording.	<b>Trusted Submitter:</b> Are the pilot county fee structures more easily accessible? Please explain.	
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 clectronic real estate recording initiatives	See E. Funding Sources discussion in Cost / Benefit Analysis document.	NA	

<del>34. LOST / BENEFIT   Kecommendation:</del>   <del>NA</del>   <del>NA</del>	that the ERER Task Force recommends.			
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.       — Provide early adopters of electronic recording with an opportunity to participate in the standards maintenance organization.         26. 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       — Initiate education campaign different to some fits of electronic recording.	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. 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	electronic recording with an opportunity to participate in the standards maintenanceorganization.— Evaluate Task Force objectives to determine if public support is appropriate.— Initiate education campaign directed to counties and trusted submitters on benefits of	NA	

35. Cost / Benefit -         Consider protecting, to         the extent feasible, the         significant public- and         private sector         investments in real         estate record systems         that have been made to         date.	Recommendation: <u>Document standards must</u> <del>allow for systems to be</del> <del>extended rather than replaced</del>	<del>Cost / Benefit Chart</del> <del>Below.</del>	Cost / Benefit Chart Below.
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: 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: Parties should establish separate key pairs for digital signatures and encrypting data. Multiple parties should not sign the same data.	Trusted Submitters: Did your company utilize separate key pairs for digital signatures? If not, what did you do instead? Did you encrypt your data? If not, what did	

		you do instead? Did parties sign separate pieces of data? If not, what did you do instead?	
		What issues did you experience as a result of this standard?	
Namespace	Recommended Standards: The target namespace for standards should be http://www.erertf.org/0.1/schema	NA	NA

# Attachment A Cost Benefit Analysis Template

### 1.1.3 Cost / Benefit

Implementation Costs		Desim		Testing			Pilot Testing
	Analysis Phase	Design Phase	Development Phase	Testing Phase	Implementation Phase	Total	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				

In what function	In what function
-	Reason for Cost Savings Total Savings
	rotal Gavings
Removed from what function	Removed from what function
Added to what new function	Added to what new function
Explain experience / results	Explain experience / results
	Reason for Cost Savings Total Savings Removed from what function

### 2. Ongoing Pilot Risks:

<b>Risks Identified</b>	Phase Risk Identified	Mitigation Strategy

## 3. Implementation Findings:

Phase	Findings
Development	
Implementation	
Testing	

#### 4. Best Practices Identified:

Phase	Practices
Development	
Implementation	
Testing	