

**MODERNIZING AMERICAN LAND RECORDS:  
INCLUDING BOTH THE NATURE AND EXTENT OF LAND INTERESTS**

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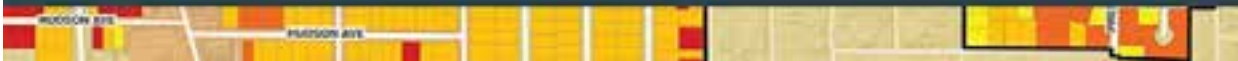


# Modernizing American Land Records

## Order Upon Chaos



Earl F. Epstein  
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# 1 A perspective on land records and information

Not just about the location of land features and location-based services

Encompass all that is needed to “Know the Land.”

Serve the needs of all citizens and groups for that which helps them fully participate in decisions about how land and its resources are used and managed in 21<sup>st</sup> century America.

## 2 “Knowing the Land”

Involves knowledge of more than what can be seen

Requires knowing the intangible, inchoate, unseen attitudes and practices people associate with land and its features – the cultural aspects

The unseen cultural aspects appear in the legal processes that identify, recognize, and record land rights, restrictions, and responsibilities – property rights and interests

### 3 Assertions

Failure to fully “Know the Land” leads to problems:

Individual – Limits on the ability to understand what is happening on the land and to participate in land use decisions

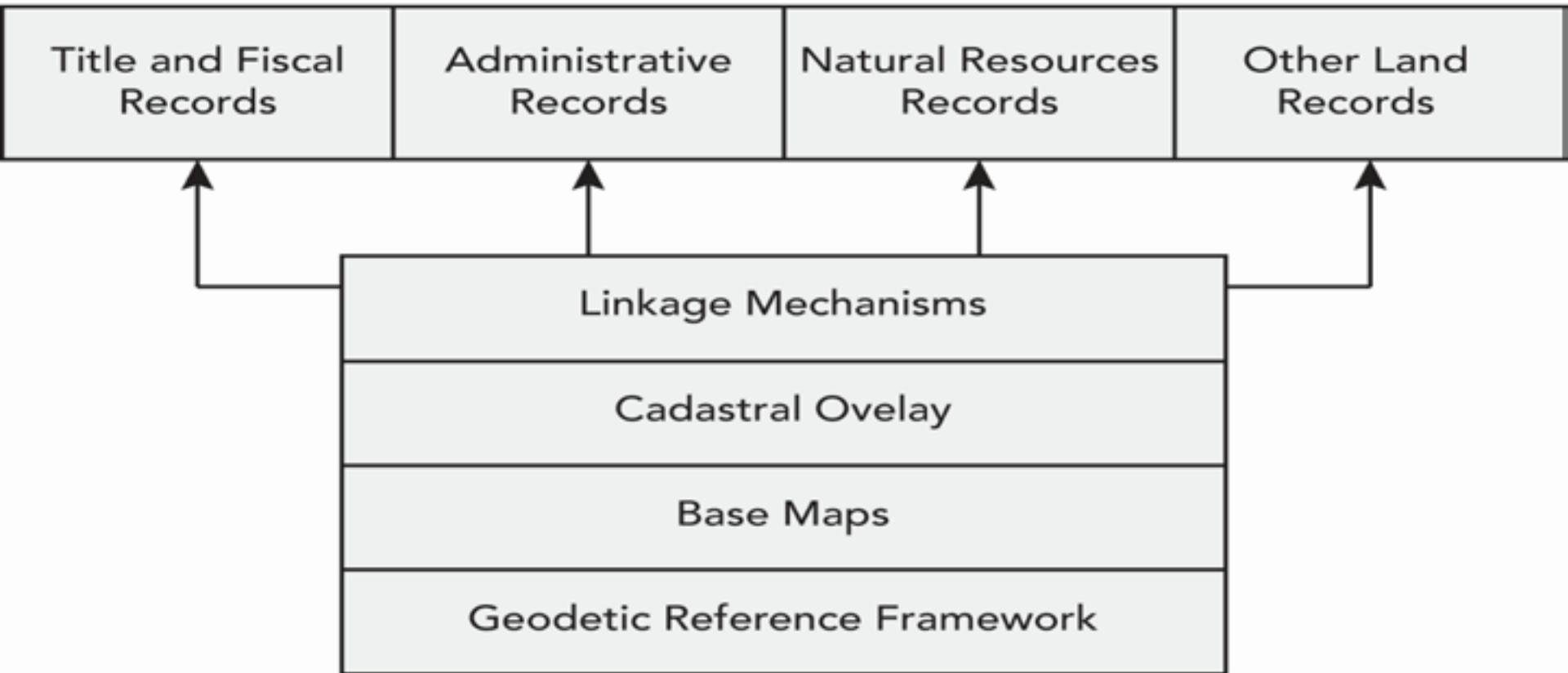
Collective - Less than optimal land use and management

Existing American land records systems do not adequately provide the appropriate material needed to “Know the Land.”

American land records systems are in a state of arrested development

American legal and administrative processes that determine land and resource use are bases for design and implementation of modernized American land records systems

In "Need for a Multipurpose Cadastre" (National Research Council, 1980), the parcel in all its aspects was central to the concept of a modern land records system



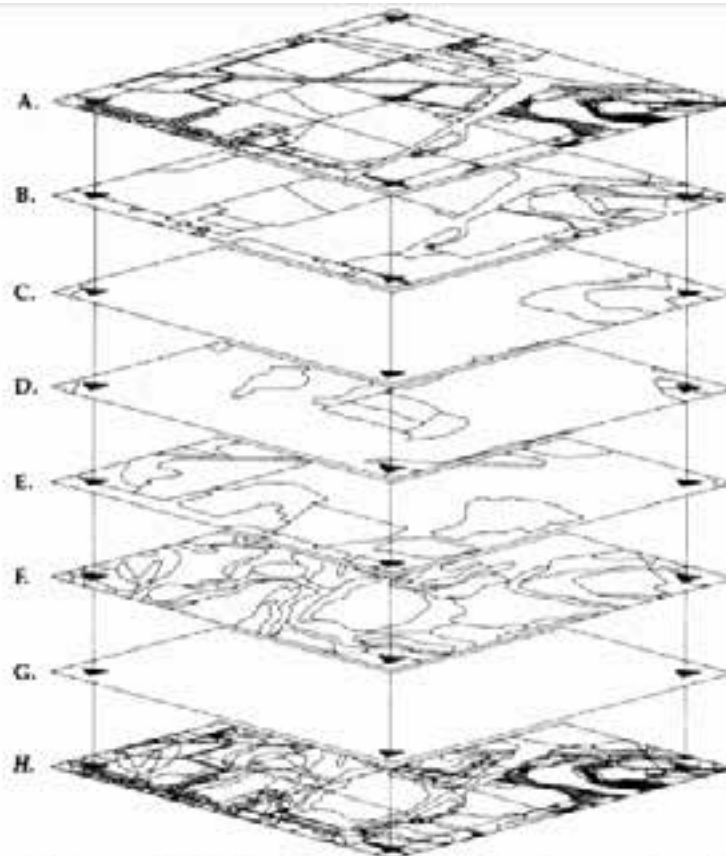
## 4 Arrested development of institutions and land records chaos

Development of modern land measurement and information technology has emphasized the location of land features and location-based services

The parcel continues to have a unique status in human affairs

This status is associated with the allocation of rights, restrictions and responsibilities

A map of parcel boundaries has become, for some scientists and engineers, just one spatial data layer among many



## Concept for a Multipurpose Land Information System

### Section 22, T8N, R9E, Town of Westport, Dane County, Wisconsin

Data Layers:

- A. Parcels
- B. Zoning
- C. Floodplains
- D. Wetlands
- E. Land Cover
- F. Soils
- G. Reference Framework
- H. Composite Overlay

Responsible Agency:

- Surveyor, Dane County Land Regulation and Records Department
- Zoning Administrator, Dane County Land Regulation and Records Department
- Zoning Administrator, Dane County Land Regulation and Records Department
- Wisconsin Department of Natural Resources
- Dane County Land Conservation Department
- United States Department of Agriculture, Soil Conservation Service
- Public Land Survey System corners with geodetic coordinates
- Layers Integrated as needed, example shows parcels, soils, and reference framework

Land Information and Computer Graphics Facility  
College of Agricultural and Life Sciences, School of Natural Resources



## 4 Arrested development of institutions and land records chaos

Development of modern land measurement and information technology has deemphasized parcel-oriented property rights

Development has not focused on connections between the nature and extent of land features and interests

The remarkable similarity of institutional recommendations in the National Research Council 1980 report "Need for a Multipurpose Cadastre" and the 2007 NRC report "National Land Parcel Data: A Vision for the Future" indicates that the institutional issues have not been addressed during a period of revolutionary change in land measurement and information technology

## 5 Problems

Title records

Publicly established land rights, restrictions and responsibilities

GIS science and technology

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A general failure to hear and attend to messages from the land use drama where land use and management decisions are recognized

## 5 Problems

Unheeded messages from those who have a major role in the land use drama

“Do not rely on government maps.

With good science, the boundaries can be negotiated.”

anonymous lawyer

“An adversarial relationship can exist wherever data is a matter of dispute. The idea that a neutral agency will create a noncontentious data set for decision making is inconsistent with our adversarial legal system and is not good policy in a society where we respect the right of the individual to question the facts that are used to determine rights and interests”

A. Dan Tarlock

## 5 Problems

St. Croix River

MERS

PLSS data and information

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## 6 Overview of the chaos and institutional problems

Connections between records of both the nature and extent of extent land features and interests require new, modernized actions and relations between a large, diverse set of public and private organizations

# The large, diverse set of organizations involved in land records modernization

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## 6 Overview of the chaos and institutional problems

Each person can put any data everywhere

Overriding processes and institutions that promote or require the use of modern technology to identify, connect and distribute records of both the nature and extent of land features and interests are not well developed

Procedures for sorting and giving authoritative status to specific data and information for specific land use and management decisions are not well developed

## 7 Modernization of land records

### GOAL

Develop processes and institutions that actively identify, assemble, connect and distribute authoritative data about both the nature and extent of land features and interests to all who are interested in land planning and management



## The concept of authoritative data

Not authoritative data as data from a trusted source

Authoritative data as data given legal status as the specific basis for a specific land use decision

Examples – Flood hazard maps; Nautical charts; Subdivision plats

An underdeveloped source of land records and information

The concept of a process and institution that actively identifies, assembles, connects and distributes authoritative data

St. Croix River

Dane County Register of Deeds

## 7 Modernization of land records

### ACTIONS

Develop organizations, such as the Register of Deeds, into active participants in the modernization of land records

Use 21<sup>st</sup> century technology to develop a common record of publicly established land use and other public interests –

A Registry of Publicly Created Land Interests

Establish formal procedures in agencies for not only receipt of citizen data input but also for making these data authoritative for specific land planning and management

Promote the common use of unique parcel identifiers

## 8 Conclusion

Technology was not ready in 1980

Many phenomena and attributes of land are important to wise planning and management

We are on the cusp of new developments

Technology presents us with the opportunity to get it right



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