

# A Statutory "Time Machine"

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# Why?

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The purpose of this talk is to give those implementing legal information systems for statutory law or regulations something to consider adding to their systems.

It comes, in part, from my interest in the history of how patent and copyright law has evolved over time, which I've found helpful in teaching it to engineering and computer science students.

I'm not aware of any current system that provides this capability, but in talking with a variety of users they have all said that is something they wished they had.

# Need for a "time machine"

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- ◆ Books provide a snapshot at a past time
- ◆ Online systems provide the current text
  - Sometimes also provide a history, but often inconvenient to use
- ◆ Statutory and administrative law not static
  - Doesn't make sense to link to the current version from a court opinion (although it is done)
  - Sometimes, seeing the progression of changes gives a better perspective of the current version

# Need for a "time machine"

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- ◆ Sometimes you want law as of a particular time
  - Time of a court opinion referencing it
    - Is it still good law?
    - How has it been changed?
  - Before and after a specific enactment
    - What is it trying to accomplish, and how

# Some legal material is different

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- ◆ The “treatise loop”
  1. Treatise proposes approach to problem
  2. Court adopts the approach
  3. Treatise modified to discuss the opinion
- ◆ Sometimes, you can predict the future
  - Effective date after enactment
  - What has changed, and when?
- ◆ This is very different from, say, versions of a technical manual

# Toy implementations

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- ◆ Test collections, through 2005:
  - Title 17, Copyright, from 1976
  - Title 35, Patents, from 1952
  
- ◆ Amendment rate interesting, but not overwhelming
  - Text changes
  - New sections
  - Repealed sections
  - Replaced sections

(I should note that this was done before David Hayes did his web site of copyright law versions, [law.copyrightdata.com](http://law.copyrightdata.com), in 2007.)

# Current approach

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- ◆ Database of all past versions of each section
  - Under a megabyte of text
  - Created by starting with original enactment
  - Hand-editing in each public law
  - Bulk could be done by a program, with human intervention for unusual things
- ◆ Tagged with public law that made change, date of enactment, and effective date
- ◆ Can select through Web interface or specify date in a URL for the section

# Adding time-based comparisons

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- ◆ How has the section changes from one date to another:
  - From enactment to today?
  - From court opinion to today?
  - If pending bills are added, how they change today's law?
- ◆ Algorithm should be tailored to common forms of statutory amendment
  - Keep results from "going wild"
  - Special handling for replaced sections
- ◆ Aided by current display technology
  - Color or underline/strike-through
  - Big displays allow side-by-side
  - Dynamically changing



# Links to additional information

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- ◆ Links could be provided to:
  - The "section-by-section" analysis of a bill in a committee report
  - Portions of Federal Register discussing an amended regulation
- ◆ Easy to link to full report, even jump-link to the analysis section
- ◆ Not that difficult to link to the particular discussion of a section, because of relatively-standard format for a committee report

# Predicting the future

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- ◆ Indication that a section has been revised
  - Comparison as of an effective date to today
  - After effective date, past still available because it may still be applicable in litigation or other contexts
- ◆ No special handling required, just put in database
- ◆ User specifies times for display or comparison
- ◆ Indicated much like indicating past revision dates

Concept can be expanded to show pending legislation

# Addressing pending legislation

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- ◆ Very hard to understand what is being done
- ◆ Often, text of bill only indicates replacement
- ◆ Sometimes, a section is replaced rather than specify a number of changes
- ◆ Committee report showing changes to existing law often too late

# Addressing pending legislation

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- ◆ Pending legislation can be added to the database
  - Mostly-automatic conversion, with some touch-up
- ◆ Different ways of specifying
  - Specify a bill and click on a section
  - View a section and see pending bills
- ◆ Comparison to today or any past time

# Final comments

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- ◆ Simple, but powerful, idea
- ◆ Useful in a variety of contexts
  - Seeing the development of the law
  - Understanding the effects of court decisions
  - Seeing how things will change in the future
    - Delayed effective dates
    - Pending legislation
- ◆ May be particularly useful as an “app”
  - Tractable storage requirements
  - Instantaneous display changes (no network delay)

