

Geography 12: Maps and Spatial Reasoning  
**Lecture 6: Land Partitioning  
Systems and Parcels**

Professor Keith Clarke



**Grid systems can describe areas  
as well as points**

- Zip codes
- Police Districts
- Census enumeration districts and tracts
- Land ownership parcels (Cadastral)
- Cities, Counties, Minor Civil Divisions, etc.
- Neighborhood and districts
- National grids, variable resolution



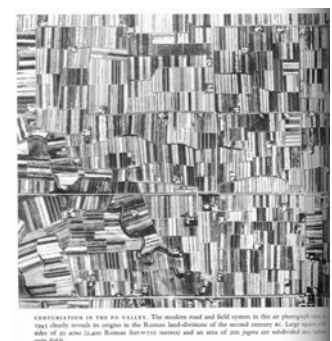
For example.....



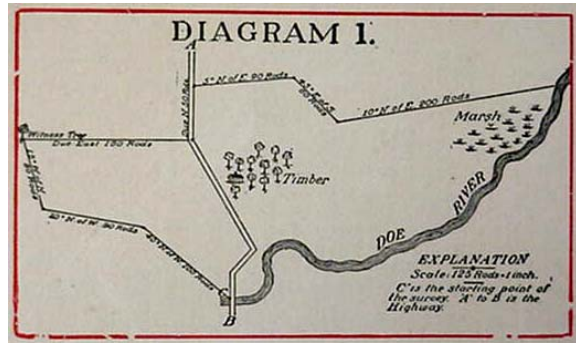
**The Po Valley: Centuriation**



Verona



### Early US land partitioning: metes and bounds

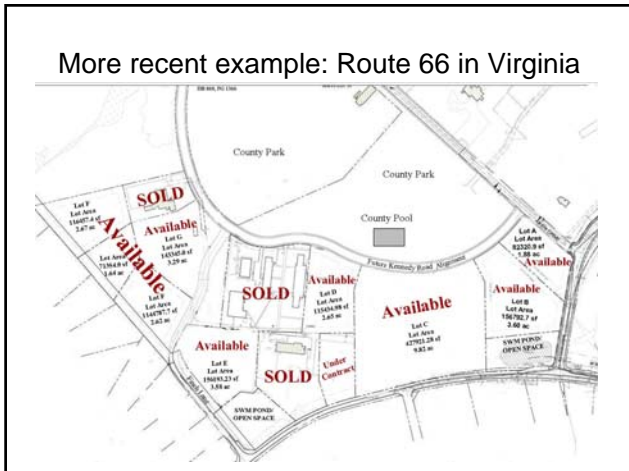


### Written example

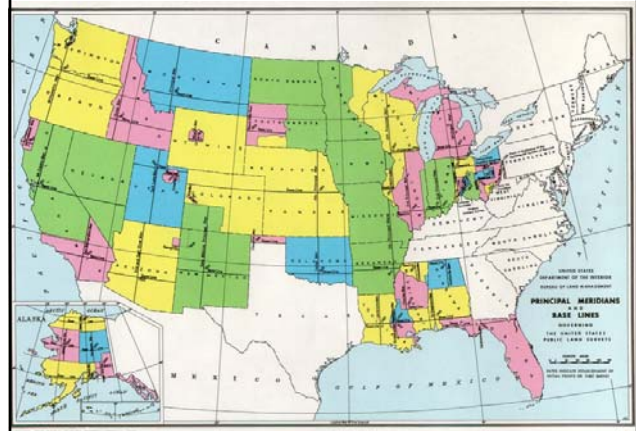


- **Mercer County, Kentucky Deed Book 7, p.417**
- 13 February 1810. Rice BEADLES of Lincoln Co., Ky sells 140 acres and 36 poles of land in Mercer County on Doctors Fork to John CRAIN for 200 pounds.
- Land bounded as follows...:
- Beginning at the mouth of a branch at an ash stump  
thence up the creek S 20 poles to 2 beach  
thence east 41 poles to a small walnut in Arnett's line  
thence north 50 east 80 poles to a linn hickory dogwood in said line  
thence north 38 poles to an ash  
thence west 296 poles with Potts's line till it intersects with Tolly's line  
thence south 30 west 80 poles to a whiteoak and sugar thence east 223 poles to beginning....

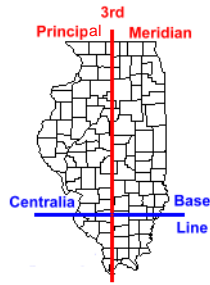
### More recent example: Route 66 in Virginia



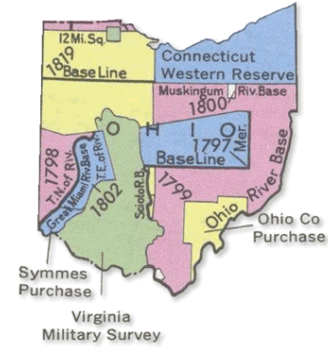
### The United States Public Land Survey System (USPLSS)



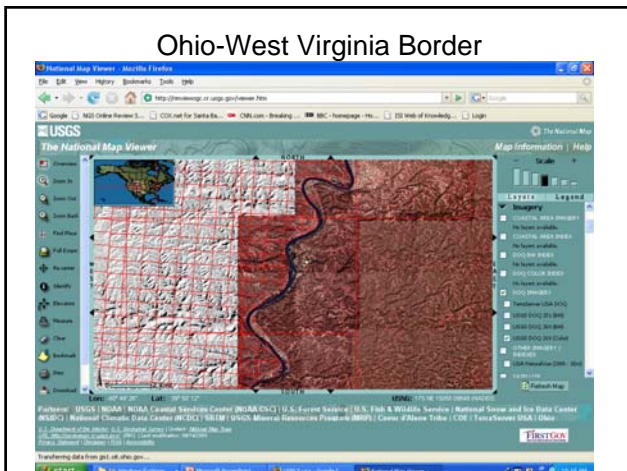
## Geographers line: Illinois



## Ohio: A mess!



## Ohio-West Virginia Border



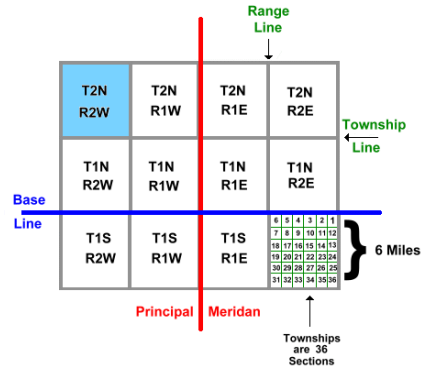
## California



## Remnants



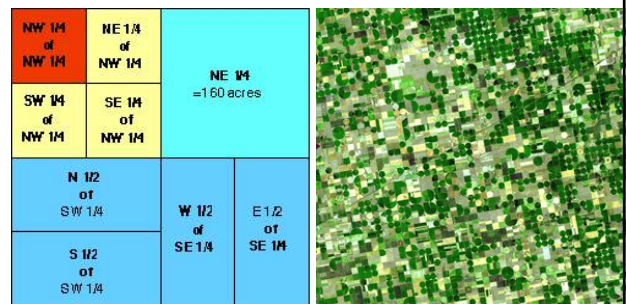
## Laying out the grid



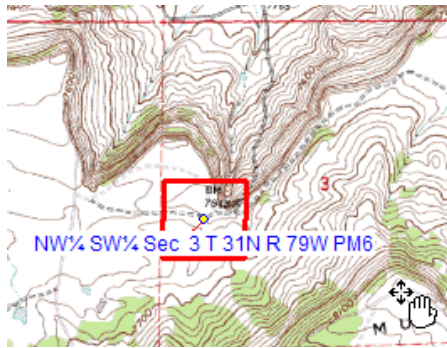
## Boustrophedonic Section Numbers

36	31	32	33	34	35	36	31
1	6	5	4	3	2	1	6
12	7	8	9	10	11	12	7
13	18	17	16	15	14	13	18
24	19	20	21	22	23	24	19
25	30	29	28	27	26	25	30
36	31	32	33	34	35	36	31
1	6	5	4	3	2	1	6

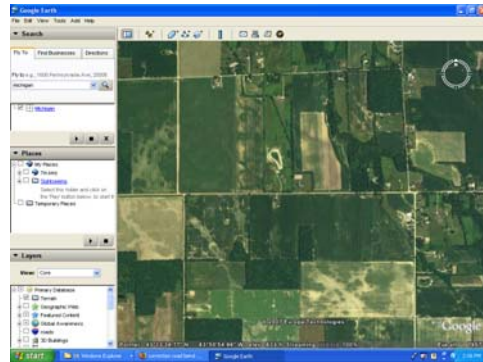
## Section Sub-division



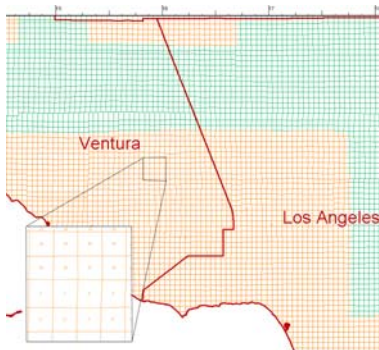
## A parcel reference



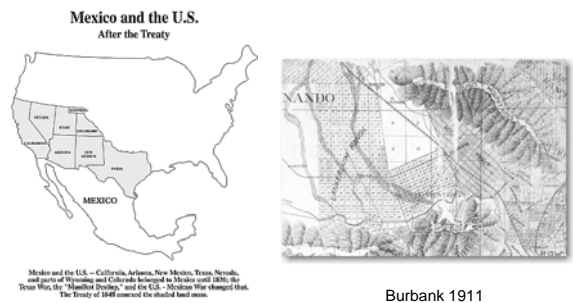
## Section corner corrections (Frankenmuth, MI)



## California and the USPLS



## T-R and Sections, but...

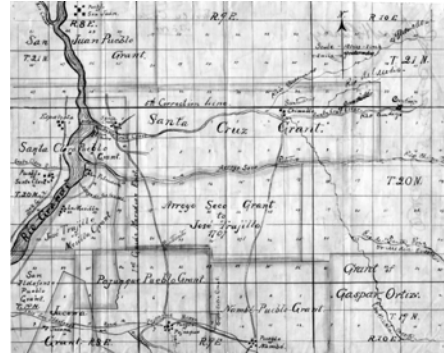


Burbank 1911

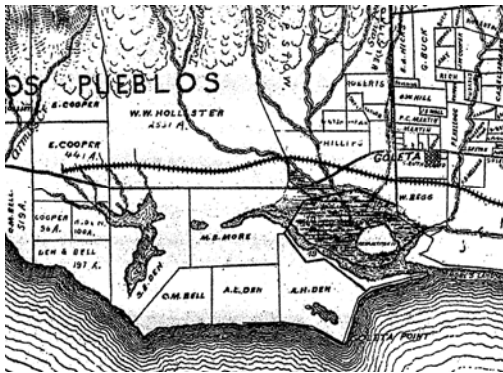
French tradition: Rivers and long lots



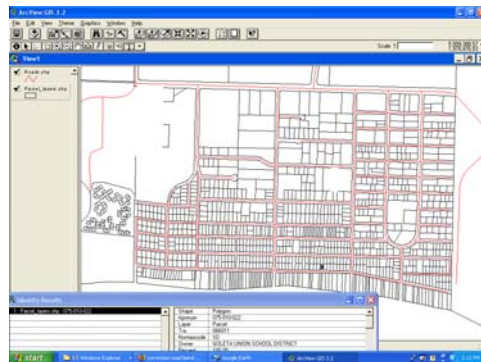
Colorado



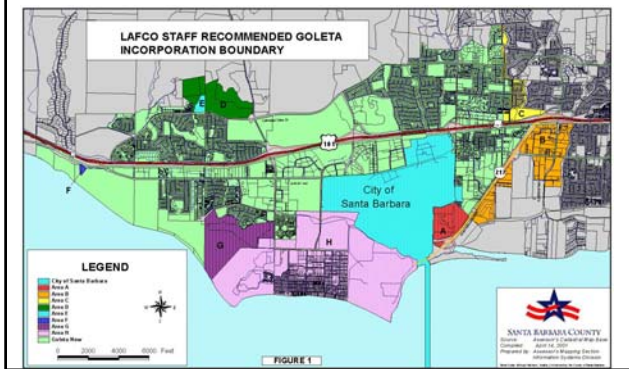
More locally



Santa Barbara Co. Assessors Office Land Parcels

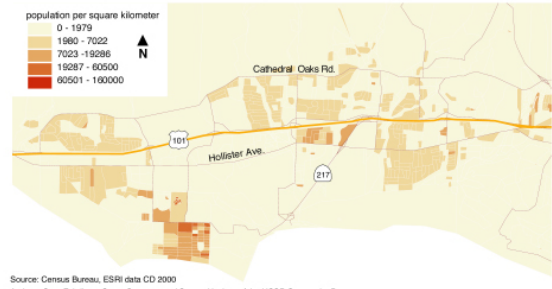


## Other region-based land partitions LAFCO

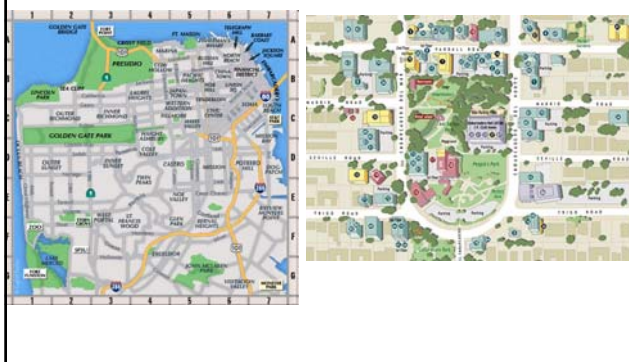


## Census Tracts

### Population density in Goleta and Isla Vista



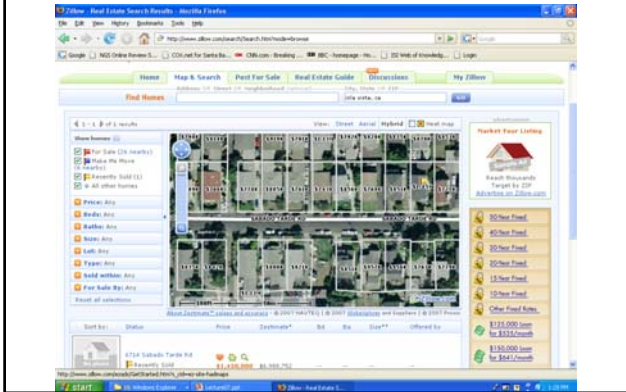
## Back to names...



## School districts



## The cadastre and real estate: zillow.com



## Summary

- Land partitioning systems describe areas on the earth's surface
- Early systems were metes and bounds, centuriation, long lots
- The US standardized on the USPLSS
- System users principal meridians, base lines, townships, ranges, sections
- A grid imposes itself on the human landscape