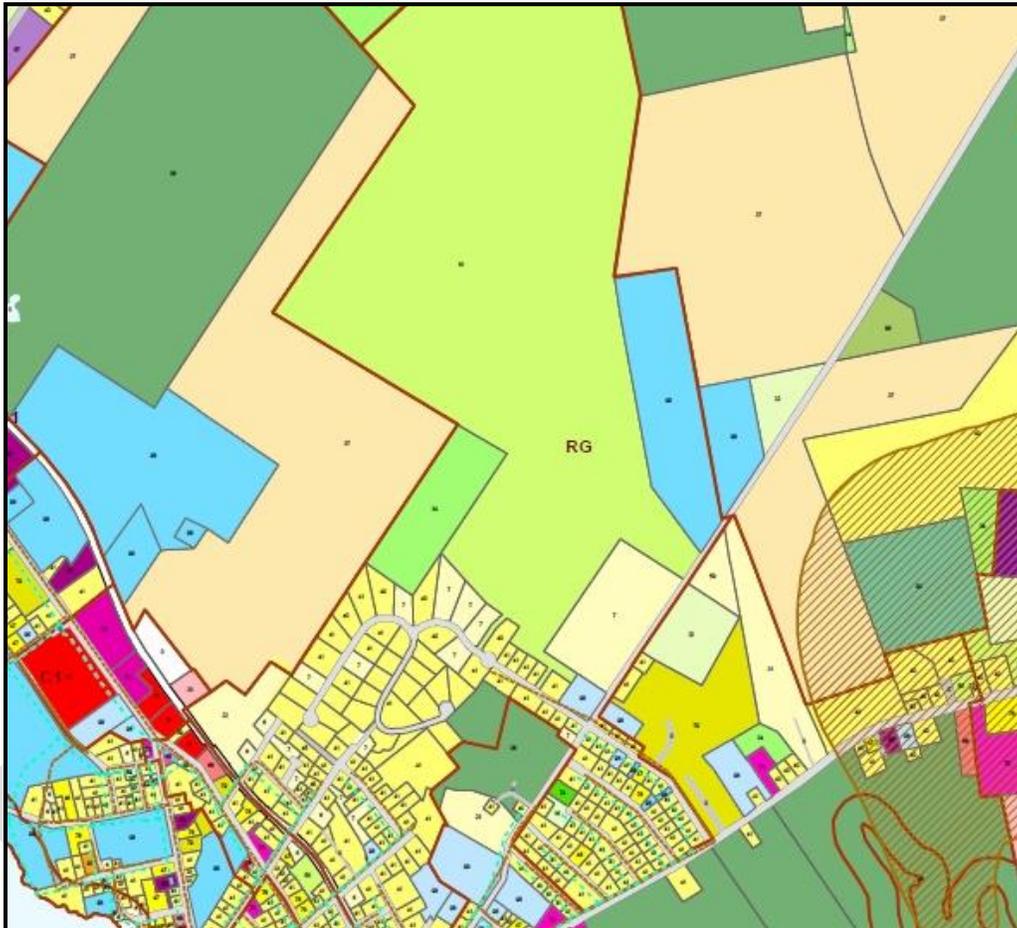


# Maine Geolibrary Land Use Code Committee

## Report and Recommendations

April 29, 2011



*Graphic compliments of the City of Ellsworth Planning Department*

### Committee:

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## ***Introduction***

The Land Use Code Study Committee was formed to recommend standardized land use codes in Maine that will maximize the benefits of land use mapping for the citizens of Maine. This report summarizes the process and findings of the committee and recommends a streamlined system of codes that can be applied statewide.

The Maine GeoLibrary Board adopted a standard for digitizing and coding town parcel maps in 2003<sup>1</sup>. The Board subsequently awarded grants to towns for digitizing parcel maps and to submit the resulting information to the GeoLibrary GeoPortal. Recent projects including GeoParcels<sup>2</sup> have put more emphasis on the importance of the digital parcel file standard and it is currently being reviewed and updated.

One of the primary codes included in the standard for each parcel is the existing land use for that parcel. Land use codes are commonly used in computer assisted mass appraisal (CAMA) systems and by many governmental agencies including the Maine Revenue Service (MRS). Different codes are used and they are applied differently. As a result the land use codes submitted to the GeoLibrary within the town parcel layer are not consistent and not particularly useful.

Standardized land use codes can be an important component of the digitized parcel maps because they can be used to illustrate the distribution of individual uses, show diversity of the landscape, contrast the land diversity of different regions, and monitor changes in land use over time across the entire state.

## ***Existing Land Use Coding Systems***

The committee reviewed the kinds of land use codes being used in Maine and how they were applied. The review began with an examination of the land use codes provided by the Town of Winslow and City of Ellsworth. Both towns use Vision CAMA software and the similarities between the codes were evident. Each town added codes by using additional levels in the third digit in the code. Vision is used by a large number of towns in Maine. The original source for the Vision codes are the property type codes used by the Massachusetts Dept of Revenue. Massachusetts is the only state in New England that requires municipalities to use a standard property type code for assessing.

Trio is also widely used in Maine. Trio does not provide a standard list of land use codes. However, Trio provides the functionality for towns to implement their own customized property type/land use codes. The Town of China uses Trio and provided a copy of the land use codes that were used in their recent town-wide assessment re-evaluation. This was a good example of what we would expect to see with other small rural Maine towns. Trio can support the implementation of a standardized list of land use codes.

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<sup>1</sup> <http://www.maine.gov/geolib/Policies/policies.htm>

<sup>2</sup> <http://www.fgdc.gov/grants/2010CAP/projects/G10AC00169>

O'Donnell is also commonly used in the state. Their CAMA software has three categories that could be viewed as land use codes. They are MVR Classification (i.e., property types), Neighborhood and Zoning. The MVR Classification is actually the land classifications that are currently used on the MRS real estate transfer tax form. O'Donnell's MVR codes will evolve with the MRS system. Users have flexibility in implementing the neighborhood and zoning codes.

Cape Elizabeth uses land use codes in their implementation of Northern Data Systems. Two codes, type and use, are used. It was not clear what the origin of the NDS or Cape Elizabeth codes, but is a logical and fairly straightforward system for a large community.

Land use codes are used by two federal systems, the Bureau of Census North American Industrial Classification System (NAICS) and the American Planning Association Land Based Classification Systems (LBCS). NAICS is the standard used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy. While very logical and complete relative to business activities, non-business classes and codes are not included. The LBCS better reflects the needs of planners. However, land use is modeled by 5 dimensions, is very complex and not easy to implement. The LBCS "function" and "activity" mirror the "form" and function important to land use planners.

The United Nations land use system has characteristics of both land use and land cover. Land cover is the vegetative nature of land and categories can span many parcels and not follow parcel lines (e.g., wetlands). Land use classifications characterize the observable use of the land and is the primary focus of the committee so the United Nations System provides information beyond our scope. Moreover, state agencies have already developed and maintain GIS layers that describe land cover and related "conservation land" information so addressing this would be redundant.

The property type codes used on the MRS municipal real estate transfer tax form were developed in the 1990's to provide a statewide picture of valuation. The MRS property type code classes do not include a few important classes found in other systems. In addition, critical land use codes are missing while some are not placed in the appropriate category. It is important to note that town assessors complete the MRS valuation returns and therefore now regularly use the MRS property valuation codes.

### ***Findings and Recommendations***

The committee identified several key factors for the successful implementation of standardized codes statewide. The factors are as follows:

- The system needs to be simple yet useful. An overly complicated system is unlikely to be implemented statewide.
- Engaging the assessing community's support in implementing the standard codes is critical. Assessors create and maintain databases that relate directly to land parcels and existing land use across the state.

- Maintaining a relationship with the Maine Revenue Service (MRS) property type codes is also necessary for success. For the most part, the property type codes reflect the broad land use categories that are needed and these codes are reported by town assessors on the real estate transfer tax form. A spreadsheet was developed to compare the highest order land use classifications of the systems. The result are the following land use categories:

- residential
- Commercial
- industrial
- social/institutional/public
- transportation
- undeveloped

The MRS property type codes were added as subcategories to the major categories. Since the Massachusetts Department of Revenue property types were used in numerous CAMA installations (e.g., Vision) and used as reference in the MRS system development, this source document was used to supplement the list of subcategories where there were obvious omissions from a planning perspective.

Many times there is a one-to-one relationship between a land use and a property but multiple uses creating one-to-many situations are very common. Examples include a large property with a house, pasture land and forest or a small urban parcel with multi-story office building having varying uses. The land use code system, therefore, needs to provide the ability to code a parcel for at least the two dominant uses of the parcel.

***Based on our findings, the committee recommends that the GeoLibrary Board adopt the land use codes presented in appendix A. The codes are to be implemented to represent the observed existing use of the land. Two attributes will be added to the parcel attribute table. Standard land use codes would be used in the first field (e.g., majorLU) to describe the dominant land use of the parcel. The second field (e.g., subLU) will be used to describe the next most dominate use of the parcel.***

The “majorLU” field must be populated for parcel data submitted as the result of a GeoLibrary or state grant. “subLU” would be optional, but strongly encouraged.

## *Appendix A - Land use codes*

Major category	Subcategory		Major category	Subcategory
1000	Residential			
1010	Single Family			
1020	Condominium	3130		Lumber/Saw Mill
1030	Mobile Home	3140		Pulp/Paper Mill
1040	Two-family	3150		Other manufacturing and Processing
1050	Mobile Home Park			
1110	Apartments (2-4 units)	3200		Storage Warehouses & Distribution F
1120	Apartments (5-10 units)	3300		Construction contractors
1130	Apartments (>10)	3400		Marine
1200	Seasonally occupied	3500		Mining and Quarrying
1300	Non-Transient Group Quarters	3600		Energy Generation
		3700		Utilities - transmission and distribution
1900	Vacant residential lot			Vacant industrial lot
2000	Commercial	3900		
2110	Hotel/Motel/Inn/Timeshare	4000	Social/Institutional/Public	
2120	Nursing Home	4100		Government
2130	Homeless Shelter	4200		Educational Facilities
2140	Other transient Group Quarters	4300		Cemetery
		4400		Recreation
2200	Medical	4500		Fraternal organizations
		4600		Churches
		4900		Vacant social/institutional/public lot
2300	Financial, insurance and real estate	5000	Transportation	
2400	Restaurant/food service	5100		Airport
2430	Shopping and strip malls	5200		Bus terminal
		5300		Port facility
		5400		Rail station
		5410		
2500	Other retail and services	Rail		
		ROW		
2600	Office Building			
	Cultural,Entertainment, Properties	Recreational		
2700		5700		other transportation
2900		5900		Vacant transportation lot
2900	Vacant commercial lot	8000	Undeveloped land	
3000	Industrial	8100		Forest
3110	Light Manufacturing	8200		Agriculture/Horticulture
3120	Heavy Manufacturing	8300		Open land
		8400		Wasteland

8500

Conservation  
Water

9700

9800

unknown land use

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