

# planning tool: cost of community services study

A Cost of Community Services (CoCS) study provides information about the financial impact of existing land uses in a municipality. It is a snapshot in time of current revenues and expenditures on a land use basis. A CoCS study analyzes the financial demands of public services and shows how much it costs to provide these services to working lands and open space, residential, and commercial/industrial land uses.

The Lamoille County Planning Commission (LCPC), following the methodology developed by the American Farmland Trust, conducted a CoCS study for the Town of Cambridge during the summer of 2005. This study provides a model that can be adapted by municipalities in Vermont and elsewhere. The process of preparing a CoCS study is straightforward, but ensuring reliable figures requires the involvement of municipal staff and officials.

The basic steps LCPC followed were:

- ✦ Meet with local sponsors to define land use categories
- ✦ Collect property and budgetary data
- ✦ Allocate revenues and expenditures by land use
- ✦ Analyze data and calculate land use ratios

## *A. Define Land Use Categories*

The American Farmland Trust methodology groups all land uses into one of four categories:

- ✦ Residential
- ✦ Commercial and industrial
- ✦ Working lands and open space
- ✦ Public lands

These categories and the land uses that are put in each may need to be adjusted to reflect local conditions or concerns. As a first step, meet with the municipality's listers/assessors and other municipal officials and/or staff that will be involved in the study. With their input, determine how best to group specific land use classifications into general categories for the purposes of allocating costs and revenues. For example, given the significant number of seasonal homes in Cambridge, the town and LCPC staff decided to separate year-round residential and seasonal residential properties into two sub-categories.



Large-lot residential properties may comprise a significant amount of open space lands in the municipality. Those lands can be placed in the working lands and open space category, while the residence is included in the residential category. Similarly, the value of a farmhouse residence should be separated from its associated working lands.

For example, in Cambridge the value of land from all Residential 2 (six acres or larger) properties was allocated to the working lands and open space category. In Vermont, the house site (dwelling plus not more than two acres) value could also be used to allocate the assessed value of large-lot residential or farm properties between the residential and open space categories.

Which lands will be classified as public for the purposes of the CoCS study will also need to be determined. Other than lands owned by a unit of government, there may be other quasi-public properties in the municipality such as a social hall available for community use or a wildlife preserve owned by a conservation organization that is freely open to the public for recreational use. It may be necessary to review such properties on a case-by-case basis to determine which category is the most appropriate in light of local conditions and concerns.

Figure 1 shows the land use classifications commonly used by Vermont listers and how they might be grouped into the four general categories for use in the CoCS study.

## B. Collect Data

The following data will need to be gathered in order to conduct a CoCS study:

- ✦ The use and assessed value of each parcel of land in the municipality. In Vermont, the listers' Certified Final Computation Sheet will provide the data needed on property use and value. Use of GIS tax parcel data, if it can be linked to land use and assessment data, may be useful for classifying lands and for illustrating how parcels have been categorized for the purposes of the CoCS study.
- ✦ Municipal revenues and expenditures, including those for education. It may be necessary or desirable to interview department heads to fill in gaps or gather more detailed information as the study progresses. An understanding of each revenue source and expense will be needed to determine the most appropriate method for allocating the revenue or expense among the land use categories.

FIGURE 1

### LAND USE CATEGORIES

<b>Residential</b>	
<b>Year-Round</b>	
Residential 1	
Residential 2 residences*	
Commercial apartment	
Other (condos)	
Mobile home landed	
Mobile home unlanded	
Farm residences*	
<b>Seasonal</b>	
Vacation 1	
Vacation 2	
<b>Commercial &amp; Industrial</b>	
Commercial	
Industrial	
Electric Utilities	
Other Utilities	
<b>Working Lands &amp; Open Space</b>	
Farm	
Woodland	
Miscellaneous	
Large-lot residential land*	
<b>Public Land</b>	
Federal land	
State land	
Municipal land	
Quasi-public land*	

\* These lands will need to be individually calculated or assessed to determine how best to classify them.

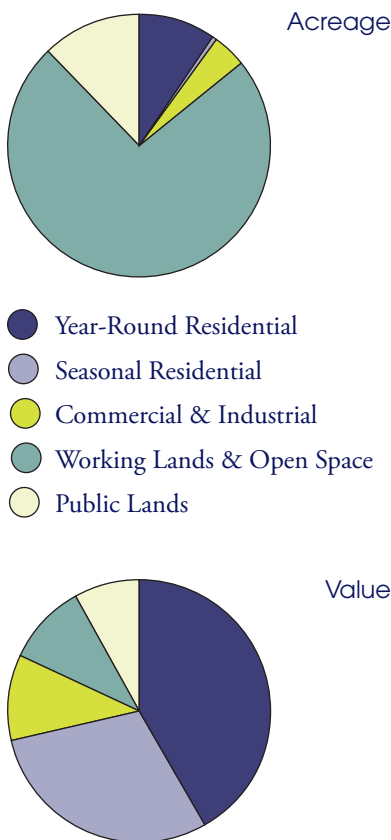
FIGURE 2

LAND USE BY CATEGORY, CAMBRIDGE

Land Use Category	Acres	% of Total	Assessed Value	% of Total
Residential (All)	3,909	10.0%	\$242,223,462	71.5%
Year-Round Residential	3,811	9.7%	\$141,091,012	41.7%
Seasonal Residential	98	0.3%	\$101,132,450	29.9%
Commercial and Industrial	1,737	4.4%	\$36,046,300	10.6%
Open Space and Working Lands	28,758	73.6%	\$33,466,438	9.9%
Public Lands	4,687	12.0%	\$26,842,600	7.9%
<b>Total</b>	<b>39,091</b>	<b>100.0%</b>	<b>\$338,578,800</b>	<b>100.0%</b>

FIGURE 3

ALLOCATION MULTIPLIERS  
CAMBRIDGE



### C. Allocate Revenues and Expenditures

When undertaking a CoCS study, the most complicated task is interpreting existing records to reflect the general land use categories. Allocating revenues and expenses requires a significant amount of research, including the participation, generally in the form of interviews, of municipal officials, administrators and/or staff.

While some revenues and expenses may be directly attributable to a specific land use category, most will not be so easily allocated. The American Farmland Trust CoCS methodology suggests using a multiplier for each land use category, based either on percentage of total assessed value or percentage of total acreage, to allocate revenues and expenses that are not directly attributable to a single use.

LCPC, when undertaking the CoCS study for Cambridge, decided that the multiplier based on assessed value was more representative of the demand for public services by each land use category. As shown in Figure 3, nearly three-quarters of the town's acreage was in the open space and working lands category, but the assessed value of those lands was less than 10% of the town's total grand list. Local conditions should be considered to determine which multiplier is most appropriate.

Revenues or expenses that are directly related to specific land use categories may include:

- ✦ School expenses, which are directly attributable to residential land uses.

**FIGURE 4**

**EXAMPLE OF REVENUES ALLOCATED BY LAND USE, CAMBRIDGE**

	Total Revenue	Residential (71.5%)	Year-Round Residential (41.7%)	Seasonal Residential (29.9%)	Commercial or Industrial (10.6%)	Working Lands and Open Space (9.9%)	Public Land (7.9%)
<b>TAXES</b>							
Municipal	\$1,015,751	\$789,239	\$459,337	\$329,902	\$116,811	\$109,701	
School	\$4,963,246	\$3,856,442	\$2,244,449	\$1,611,993	\$570,773	\$536,031	
<b>STATE OF VERMONT</b>							
VTrans Town Highway Grant*	\$122,406	\$87,520	\$50,921	\$36,599	\$12,975	\$12,118	\$9,670
DHCA Planning Grant*	\$3,500	\$2,503	\$1,456	\$1,047	\$371	\$347	\$277
ANR PILOT	\$23,495						\$23,495
<b>LICENSES AND PERMITS</b>							
Beer and Wine	\$1,900				\$1,900		
Dog Licenses	\$1,882	\$1,882	\$1,095	\$787			
Septic Permits	\$3,400	\$2,961	\$1,723	\$1,238	\$439		
<b>OTHER</b>							
Recording Fees*	\$79,971	\$57,179	\$33,268	\$23,911	\$8,477	\$7,917	\$6,318
Use of Copier	\$1,951	\$1,700	\$990	\$710	\$252		

\* Revenues allocated based solely on multiplier (percentage of total assessed value)

- ✦ Water and sewer expenses/revenues, which would apply to all categories except open space and working lands.

Revenues or expenses that will need to be allocated based on a multiplier may include:

- ✦ Recording fees.
- ✦ Salaries of administrative personnel.
- ✦ Highway maintenance costs and grants.

As illustrated in Figures 4 and 5, each line of the municipal budget must be allocated among the land use categories. Some budget items may be allocated among all land use categories based on the selected multipliers while others may be divided between fewer categories.

LCPC met with Cambridge’s department heads and other officials, including the County Sheriff, Town Clerk, Rescue Chief and head of Public Health, to review the budget allocations before completing the final step in the study.

**FIGURE 5**

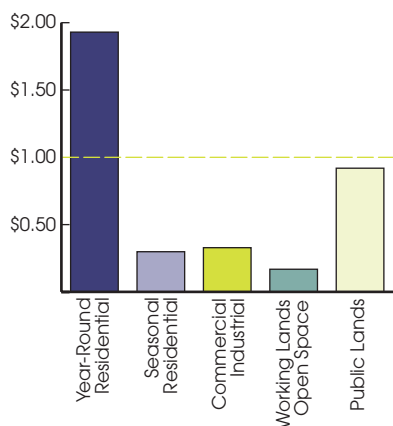
**EXAMPLE OF EXPENSES ALLOCATED BY LAND USE, CAMBRIDGE**

	Total Expense	Residential (71.5%)	Year-Round Residential (41.7%)	Seasonal Residential (29.9%)	Commercial or Industrial (10.6%)	Working Lands and Open Space (9.9%)	Public Land (7.9%)
<b>TAXES</b>							
County	\$45,629	\$35,454	\$20,634	\$14,820	\$5,247	\$4,928	
School	\$4,963,246	\$4,963,246	\$4,963,246				
Lamoille Cty Planning*	\$2,757	\$1,971	\$1,147	\$824	\$292	\$273	\$218
Varnum Memorial Library	\$15,200	\$13,239	\$7,705	\$5,534	\$1,961		
<b>SALARIES AND SERVICES</b>							
Assistant Town Clerks*	\$59,398	\$42,470	\$24,710	\$17,760	\$6,296	\$5,880	\$4,692
Listers	\$50,969	\$39,603	\$23,079	\$16,554	\$5,861	\$5,505	
<b>ANIMAL CONTROL</b>							
North Country Animal League	\$150	\$150	\$87	\$63			
<b>OTHER</b>							
Business Park Lights	\$231				\$231		
Street Lights	\$2,600	\$2,265	\$1,318	\$947	\$335		
Parks and Lawns*	\$2,700	\$1,931	\$1,124	\$807	\$286	\$267	\$213
Voting Machine	\$1,012	\$1,012	\$589	\$423			

\* Expenses allocated based solely on multiplier (percentage of total assessed value)

**D. Calculate Expense to Revenue Ratios**

**FIGURE 6**  
**COST PER \$1 OF REVENUE**  
**CAMBRIDGE**



Once all revenues and expenses are allocated, they can be totaled by land use category. Simple division results in a ratio of revenues to expenditures by land use category.

The Cambridge study showed that year-round residential land uses cost the municipality nearly twice what they pay in as revenue. AFT has collected the results of more than 80 CoCS studies based on their methodology from around the country. As shown in Figure 7, the results from LCPC’s Cambridge study are similar to those found in other communities.

FIGURE 7

COCS STUDY RESULTS, CAMBRIDGE

Land Use Category	Revenues	Expenditures	Ratio	National Range	National Average
Residential	\$5,370,131	\$6,708,598	1.25	1.01 - 2.11	1.09
Year-Round Residential	\$3,126,181	\$6,029,303	1.93		
Seasonal Residential	\$2,224,303	\$730,570	0.33		
Commercial and Industrial	\$798,139	\$266,659	0.33	0.05 - 1.04	0.51
Working Lands and Open Space	\$798,673	\$137,696	0.17	0.02 - 0.99	0.71
Public Lands	\$63,782	\$58,899	0.92		

**E. Resources**

The Northwest Project Website

Website: [www.transportation-landuse.org](http://www.transportation-landuse.org)

Resources Available Include:

- ✦ Final report for the Cambridge CoCS study prepared by the Lamoille County Planning Commission as a downloadable PDF.

American Farmland Trust

New England Office: (413) 586-4593, ext. 29

Website: [www.farmland.org](http://www.farmland.org)

Resources Available Include:

- ✦ *Cost of Community Services Studies Fact Sheet, 2006* - A downloadable PDF that summarizes AFT's CoCS study methodology and results from around the country.
- ✦ *Cost of Community Services Studies: Making the Case for Conservation, 2002* - A printed publication for sale from the AFT bookstore.
- ✦ AFT has completed more than 80 CoCS studies nationwide. Summary reports for many of those studies are available from their website as downloadable PDFs.