Understanding the Cost of Community Services

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Tonight's presentation:

- Introduction to COCS
- Methodology
- Results
- Resources
- Limitations of method
- Policy implications

Community Services

- Public safety - police, fire, ambulance, inspection
- Public works - gas/electric, water, sewer, solid waste, recycling
- Transportation - road construction, maintenance, mass transit
- Education - K-12, technical schools

Community Services

- Culture and recreation - library, parks, community center
- Health and human services - hospitals, elderly care, disability services, cemeteries
- Local government

Who pays for services?

- Direct charge for services
- Licenses, fees, fines
- State and federal subsidies
- Local taxation

Land Use Categories

- Residential
- Agricultural-residences
- Commercial
- Manufacturing
- Agricultural
- Forests
- Undeveloped

COCS Studies

- Case study approach to determine the fiscal contribution of existing land uses at a particular point in time
- Results displayed as a set of ratios comparing annual revenues to annual expenditures across land use categories
  - Example: Residential 1.00 : 1.25

History

- Developed by American Farmland Trust in the mid-1980s
  - Designed as a straightforward and inexpensive way to measure the contribution of agricultural lands to the local tax base
- Conducted in over 100 communities throughout the U.S.

Methodology

1. Collect local data
2. Allocate revenues and expenditures by land use category
3. Compute revenue-to-expenditure ratios

Methodology

1. Collect data
   - Budget - DOR Municipal Financial Report
   - School district data - DPI
   - Other local records
   - Interviews

Methodology

2. Allocate revenues and expenditures

Table 7.2 Allocation Methods

EXPENDITURES	METHODS OF ALLOCATION
General Government:	Default percentage
Public Safety:	
Law enforcement	Number of police calls to land use categories
Fire protection	Number of fire calls to land use categories
Ambulance	Number of ambulance calls to land use categories
Inspection	Local records detailing specific sites of inspections
Public works:	
Street maintenance	Local records detailing where maintenance occurred
Street lighting	Location of street lights; often only in residential areas
Refuse/garbage collection	Local records of where collection occurs
Solid waste disposal	Local records and local interviews
Recycling program expense	Local records and interviews
Health/human services	Residential and Other (Ag-Residences)
Culture/rec/education	Residential and Other (Ag-Residences)
Conserv/development	Residential and Other (Ag-Residences)
Debt service	Dependent upon what the debt is financing; elicit through interviews

Methodology

2. Allocate revenues and expenditures
   - Default percentage

Table 7.1 Assessed Values, Town of Anywhere

Land Use	Assessed Value	Relative Value (relative to Total)
Residential	$275,000,000	91.70%
Commercial	5,350,000	1.78%
Manufacturing	2,000,000	0.70%
Agricultural Land	8,744,600	2.92%
Other (Ag Residence)	6,680,000	2.67%
Forest	535,500	0.18%
Swamp and Waste	293,500	0.10%
Total	**$298,603,600**	**100.00%**

Methodology

2. Allocate revenues and expenditures

Table 7.3 Allocation of Expenditures, Town of Anywhere

EXPENDITURES	TOTAL	Residential	Commercial	Manufacturing	Agricultural	Swamp/ Waste	Forest	AgRes/ Other
Total general government	**400,000**	368,880	7,040	2,640	11,520	400	720	8,800
Law enforcement	100,000	90,000	2,500	2,500				5,000
Fire Protection	125,000	110,000	5,000	5,000				5,000
Ambulance	55,000	45,000	5,000					5,000
Inspection	8,500	8,000	500					
Total public safety	**288,500**							
Street maintenance	250,000	200,000	12,500	7,500	12,500			17,500
Street lighting	7,000	7,000						
Refuse/ garbage collection	105,000	99,750						5,250
Solid waste disposal	1,500	1,425						75
Recycling program	80,000	76,000						4,000
Total public works	**443,500**							
Total Health/ human services	**85,000**	80,750						4,250
Total Cultural/ rec/ education	**35,000**	33,250						1,750
Total conservation/ development	**18,500**	17,575						925
Total debt service	**68,000**	68,000						
TOTAL Expenditures	**1,338,500**	**1,205,630**	**32,540**	**17,640**	**24,020**	**400**	**720**	**57,550**

Methodology

3. Calculate revenue-to-expenditure ratio

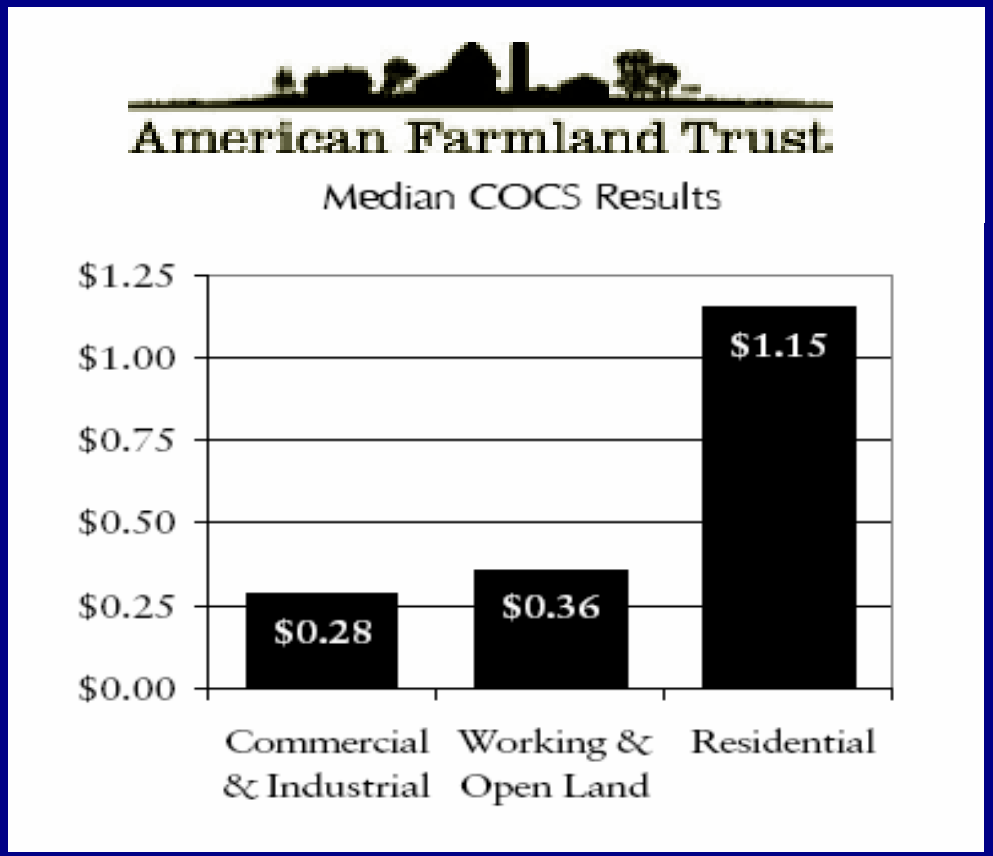
Table 7.5 Cost Revenue Ratios

	Residential	Commercial	Manufacturing	Agricultural	Swamp/Waste	Forest	AG/other
Total Revenues	1,193,075	33,356	15,818	32,324	676	1,511	60,384
Total Expenses	1,205,630	32,540	17,640	24,020	400	720	57,550
Ratio	1.00:1.01	1.00:.98	1.00:1.12	1.00:.74	1.00:.59	1.00:.48	1.00.95

- For every $1 in revenue generated from residential uses, $1.01 is spent on public services.

Typical Results

- United States (AFT, 2004):



Typical Results

- Wisconsin (PATS, 2000):

Table 4: Cost of Service Ratios (taxpayers perspective*)

Land Use	Residential	Ag. Residential	Commercial/ Manufacturing	Ag. Land	Swamp/ Forest	Ag. Land and Residences
Dunn	1.02	1.09	.55	.16	.10	.96
Perry	1.20	1.21	1.04	.09	.04	.96
Westport	1.11	1.23	.31	.13	.08	.74
Harrison	1.04	1.21	.30	.06	.07	.92
Stockton	1.08	1.09	.44	.04	.03	.74
Jamestown	1.01	1.11	1.11	.29	.43	.91
Wyoming	1.30	1.35	.61	.20	.17	.83
New Richmond	1.13	1.19	.15	.14	.11	.69
**River Falls	1.03		.92	.93		.93

* Includes all local costs, including costs/revenues for school districts.
**River Falls represents the only City in the sample.

Average Ratios:	**1.10**	**1.19**	**0.60**	**0.23**	**0.13**	**0.85**

Resource requirements

- Time
- Money
- Staff

Criticisms of Method

- Many underlying assumptions
  - Default percentage
  - Data and interviewer accuracy
  - Objectiveness of analyst
- Too many land use types grouped together (i.e. agricultural land and residences, open space, etc.)
- Results are often misinterpreted

Limitations

- *COCS studies cannot…*
  - Predict future revenues or expenditures
  - Analyze specific development proposals
  - Measure non-economic costs or benefits derived from services (ex. aesthetics, traffic, environment, etc.)
  - Distinguish between different development types in a single land use category (ex. old vs. new neighborhood or single vs. multi-family housing)

Capabilities

- *COCS studies can…*
  - Provide a snapshot in time of revenues and expenditures by land use category
  - Provide a relatively quick, straightforward and inexpensive method
  - Help local officials and citizens make informed land use and policy decisions

Policy Implications

- Will residential development result in a net fiscal gain for our community?
- What types of development do we want?
- How much are we willing to pay to maintain working and other open lands?

Conclusions

- One type of land use is not intrinsically better than another
- COCS studies are not meant to judge the overall public good or long-term merits of any land use or taxing structure
- COCS studies provide communities with an inexpensive tool to make decisions about future land uses

Thank You!

- Questions?