



Case Study: Municipal Asset Inventory to Meet Sustainability Goals

Barnstable County inventories buildings, vehicles and parking infrastructure as key action item in County Sustainability Project.

INTRODUCTION

Barnstable County is made up of 15 small communities on Massachusetts' Cape Cod. Beginning in 1999, the County initiated the County Sustainability Project to identify indicators and action items to address the sustainability of their communities' social, economic and environmental systems. The County, comprised of 13 departments and 600 employees, had identified facility, fleet and infrastructure inventory as a key action item in their County Sustainability Project and used Yellow Wood Associates' Green Community Technologies® to gain a clear understanding of the assets held in these three areas so actionable planning could take place.

THE PROCESS

Yellow Wood worked with Barnstable County officials to create an Asset Inventory of the County's buildings, vehicles and parking. County

officials closest to each piece of infrastructure worked on completing customized forms to gather information about each asset, including:

- Asset Title
- Description
- Cost
- Expected lifespan
- Current Condition
- Ability to meet the County's current needs
- Projected ability to meet the County's needs in 5, 10 and 15 years

Once all of the data had been collected, Yellow Wood developed an inventory database and used a systems approach to identify opportunities for efficiently managing and improving assets both within and between categories.

In analyzing the data, Yellow Wood focused on three key properties of each asset: (1) condition,

(2) whether the asset is currently meeting the County's needs, and (3) whether the asset will meet the County's needs in the future. Each of these properties was rated by county staff based on the following rubrics.

CONDITION OF ASSET

Considering the condition of the asset today, what is its current condition?

Poor	Requires major renewal or almost unserviceable, at the end of its useful life
Fair	Backlog maintenance required, over 50% through its expected life cycle
Good	Minor defects only, approximately midway or less through its life cycle; no concern for immediate replacement
Excellent	Top condition, within first 10-15% of life cycle.

MEETS NEEDS OF THE COMMUNITY

Considering the performance of the asset in relation to current conditions in the community, how well does the asset meet community needs?

Fully	The asset performs reliably and is well-sized in relation to community needs. No complaints.
Adequately	The asset is generally reliable, but there is room for improvement. There are periodic complaints regarding its performance.
Inadequately	The asset is unreliable or insufficient to meet community needs. Regular complaints.

WILL MEET FUTURE NEEDS OF THE COMMUNITY

Considering patterns of growth and/or decline in the community, how well is the asset expected to meet community needs over the next ten years?

Fully	The asset is properly sized and positioned to meet community needs at least ten years into the future without major alteration.
Adequately	The asset will become less well-matched to community needs over time, or will require substantial reinvestment to maintain its utility over the next ten years.
Inadequately	The asset will be unable to meet community needs over the next ten years and will have to be replaced.

The Outcome

The process identified all of the assets in the three areas of buildings, vehicles and parking and considered their condition, whether the asset was currently meeting the county's needs and whether the asset would meet the County's needs in the future. The project provided the County with a detailed inventory database that they can continue to maintain and use. This database offers a complete picture of the assets and provides valuable information for planning and prioritizing future capital expenditures.

In addition to the database, Yellow Wood was able to provide recommendations to help the County utilize the assessment and identify both short and long-term projects as part of the County Sustainability Project and the general maintenance of county infrastructure.

Sample Vehicle Condition Table

MAKE	MODEL	YEAR	EXPECTED LIFE	CONDITION	MEETS NEEDS	WILL MEET NEEDS
TOYOTA	PRIUS	2004	10	2-GOOD	1-FULLY	1-FULLY
FORD	F-150	2002	6	2-GOOD	1-FULLY	2-ADEQUATELY
FORD	F-SUPER DUTY	1998	10	2-GOOD	1-FULLY	1-FULLY
CHEVROLET	SILVERADO	2005	5	1-EXCELLENT	1-FULLY	1-FULLY
CHEVROLET	BLAZER	2005	5	1-EXCELLENT	2-ADEQUATELY	2-ADEQUATELY
DODGE	CARAVAN	1999	10	3-FAIR	3-INADEQUATELY	3-INADEQUATELY
CHEVY	K20	1986	5	4-POOR	3-INADEQUATELY	3-INADEQUATELY
GMC	SIERRA	1990	5	4-POOR	3-INADEQUATELY	3-INADEQUATELY
DODGE	RAM TRUCK	1992	5	4-POOR	3-INADEQUATELY	3-INADEQUATELY
FORD	F250 S-90	1993	5	4-POOR	3-INADEQUATELY	3-INADEQUATELY