

# GAZBEE?? What (or Who) is That?!!

*Patsy Anderson, Manager  
Technology Transfer Program*

*It's not a bird, it's not a plane, and you may feel like Superman when you understand the whole idea and have complied with it. But, it's a good thing. Read on...*

GASB is the acronym for the Governmental Accounting Standards Board. It is a private, not-for-profit organization for establishing accounting practices for state and local governments. GASB is funded by sales of its own publications and from services provided to governments, the public accounting profession, and the financial community.

The Governmental Accounting Standards Board (GASB) is responsible for setting accounting standards for state and local governments. At this time, there is no legal requirement that Kentucky counties follow GASB standards; however, cities are required to follow them (see article on back page). It is considered sound business practice to follow GASB standards, and it is the standard by which agencies will be audited after the deadline date for implementation.

## It is Best to Comply

Following generally accepted business practices is just good business. It allows auditors to give you clear opinions. It will likely reduce the cost of issuing debt through general obligation or revenue bonds. If you are not in compliance, you may pay more to issue debt in terms of bond rating because bonding organizations ask to see (a) your true financial condition and (b) accounting information based on generally accepted accounting standards (which are set by GASB).

By following these accounting standards, you will be able to clearly judge whether the government agency is adequately managing its assets and making wise decisions on use of funds. The potential political and financial implications make it even more important that government agencies take the time to understand and comply as soon as possible—you don't have to wait until the deadline!

## You Are Convinced—Let's Get Started

The GASB Report has several components, including a Management's Discussion and Analysis (MD & A), along with financial statements and supplemental information. The MD & A is basically a "State of the Agency" narrative report detailing significant financial events that happened during a reporting period. The first step in compliance is to inventory assets, place a value on them, and establish a depreciation schedule. Buildings and equipment are insured and therefore it is fairly easy to get this information. Roads, streets, bridges and sidewalks are not insurable so an organized method for establishing value must be adopted.

There are two methods for determining value of infrastructure: (1) the depreciation approach, and (2) the modified approach. Both have advantages and disadvantages; it is up to the agency to determine which fits its need. On page 4 is detailed information for instituting the depreciation approach; on page 7 is an article detailing the modified approach.

Read on...and when you have chosen a method, learn all you can and determine who in your agency has overall responsibility for compliance. Set up a team, roll up your sleeves, and make it happen!



**Special Edition featuring GASB-34 and Asset Management**

# Cash Accounting Versus Accrual Accounting: What's the Difference?

Most government agencies use cash accounting methods to report infrastructure assets (which include roads, bridges, sidewalks, utility facilities, etc.). Under this method, the total capital cost of a project is reported in the yearly financial records of the year in which it was actually constructed. The value of that asset (road, building, pipeline, etc.) does not appear on a financial report again—and, of course, it still has value long after the original cost is incurred. It has a useful life expectancy and it depreciates over that life span.

The actual net worth of an agency cannot be determined based on cash accounting methods. If you want to know an agency's financial status, you have to take into account the *current day depreciated value* of what it owns.

This method of accounting, called "*accrual accounting*," spreads the cost of an asset across the asset's useful lifetime.

Accrual accounting keeps infrastructure value on the books and allows a government agency to be viewed in the same manner as a private sector business. The ultimate purpose of GASB could be viewed as making the financial well-being of an agency more understandable to the public, investors, creditors, and the agency itself.

The principle purpose of GASB Statement 34 is to "improve the accountability of governments to their citizens by providing better, more accessible information about the condition and costs of capital assets."

## Check Out Your World

## AT THE LIBRARY

### GASB 34 and Asset Management

1. *21<sup>st</sup> Century Asset Management: Executive Summary*, 1997. (HD62.35.C46 1997)
2. *Asset Management: Advancing the State of the Art into the 21<sup>st</sup> Century Through Public/Private Dialogue*, 1997. (FHWA-RD-97-046)
3. *Asset Management Primer*, 1999. (HE336.E3A8)
4. *Getting Started in Public Works Asset Management*, 2000. (HD4431.G48)
5. *Guide to Implementation of GASB Statement 34 on Basic Financial Statements*, 2000. (HJ9777.A3G8)
6. *Primer: GASB 34*, 2000. (FHWA-IF-00-010)
7. "Asset Management and Asset Valuation: The Implications of the Government Accounting Standards Bureau (GASB) Standards for Reporting Capital Assets," S. McNeil. *Mid-Continent Transportation Symposium 2000*, pp. 134-137. (Do a Site Search on "Mid-Continent Transportation Symposium": [www.ctre.iastate.edu/](http://www.ctre.iastate.edu/))
8. "Asset Management: What Is the Fuss?" S. McNeil, M. L. Tischer, A. J. DeBlasio. *Transportation Research Record* TRR 1729, pp. 21-25, 2000.
9. "How to Implement Road Asset Management," *Better Roads*, 70(10) pp. 17-18, October 2000.
10. "New York State's Approach to Asset Management," T. W. Clash, J. B. Delaney, *Transportation Research Record* TRR 1729, pp. 35-41, 2000.
11. "Small Counties Can Prioritize Too: How Jackson County (MO) Learned to Manage its Infrastructure with an Asset-Management System and Save \$1,000,000 Every Year," A. Roohanirad, *Better Roads*, 71(6) pp. 48-50, June 2001.
12. "Why Asset Management Is More Critically Important Than Ever Before," A. R. Kane, *Public Roads*, 63(5) pp. 22-24, March 2000.

Laura Whayne, Librarian  
1-800-432-0719 or 859-257-4513, ext. 234  
Email: [lwhayne@engr.uky.edu](mailto:lwhayne@engr.uky.edu)  
Fax: 859-257-1815

Getting the value of your transportation system is but one step in complying with GASB Statement 34. In many cities and counties, the treasurers are responsible for accounting records, and the Department for Local Government has been working with these individuals to make the transition go as smoothly as possible.

The following article by Commissioner Jody Lassiter details activities currently underway.



*Jody Lassiter, Commissioner  
Kentucky Department for Local  
Government*

Lee County's project is complete except for the capital assets and infrastructure portion. We will receive information from them on their capital assets and road system and combine that with the bridge inventory that we have obtained from the Kentucky Transportation Cabinet and the insured capital assets that we have obtained from their insurance carrier.

Christian County is complete except for capital assets in the "furniture and fixtures" category. We also received a list of their bridge inventory from the Transportation Cabinet and a list of insured assets from their insurance carrier. Both projects have gone exceptionally well to date.

Christian County also has allowed the DLG to use its GASB reports as an example for other Kentucky counties to follow during its implementation.

The Department for Local Government thanks the Kentucky Transportation Center at the University of Kentucky, the Kentucky Auditor of Public Accounts Office, the various county road supervisors, and the many other individuals who have dedicated extensive time and effort in the research and development stage of the GASB Statement 34 implementation.

For more information on these worksheets, contact DLG at 502-573-2512.

## DLG Develops GASB Worksheets

The Kentucky Department for Local Government (DLG) has developed GASB Statement 34 worksheets in Excel software that are linked to Excel Quarterly Financial Statement worksheets.

The GASB worksheets retrieve category totals from the quarterly worksheets and arrange these figures in the Statement 34 format. The only information that cannot be retrieved from the Quarterly Financial Statement is the capital assets and the infrastructure.

DLG also has been working on Excel spreadsheets to inventory these items and insert the totals into the GASB worksheets.

Christian and Lee Counties have been gracious enough to volunteer as pilot projects for DLG during the research and development stage of implementation.



## 2002 Training Calendars Available

The popular, wire-bound, training calendar that the Center produces each year is being distributed to mayors, county judges, public works directors, road supervisors, street superintendents, area development district directors, transportation association presidents/directors, and others. The calendar lists the Center's training schedule for the year along with useful information for transportation workers. *If your local government hasn't received a copy, contact the Center at 1-800-432-0719.*

The Calendar gives details about the Roads Scholar and Road Master programs along with the Superintendent Training Program for State Employees. It lists hotels and state parks in the locations of the courses so you can make reservations if you need to stay overnight. It also lists many of the University of Kentucky sporting events, and the Keeneland and Red Mile racing information.

District training coordinators have received calendars to distribute to each KDOH maintenance barn.

# Establishing Rural Road/Street System Values--The "Depreciation Approach"

You need the following facts to establish current-day depreciated value:

1. **An inventory.** The length, width, and type of roads and streets, as well as length and width of sidewalks and bridges.
2. **Age.** If you do not know the actual date the structure was built, use a "best guess" after consultation with your fiscal court or council.
3. **Construction Cost.** Use either the actual construction cost or an estimated historical cost.
4. **Lifespan.** Suggested life spans are listed in *Roadway Infrastructure Life* on this page.
5. **Salvage Value.** At the end of a life span, a structure retains the value of the right-of-way and the substructure. Salvage value is estimated at 20% of the construction cost for paved roads/streets and bridges, and 10% for unpaved roads and sidewalks. Salvage value does not depreciate. It is subtracted before the yearly depreciation begins.

## The Inventory

You probably already have this information. It is simply the name or roadway number, whether it is paved, unpaved, or resurfaced; a subdivision street or city street, a bridge or sidewalk, along with length and width. For purposes of calculating value, it is best to convert length/width to square feet.

## The Age

If you don't know an actual construction date, you may find this information in court records. If not, use the "best guess" approach. On resurfacing, the age is determined by

### Free Software Program to Help You!

The Center has developed and is offering free of charge a software program to make it easier to determine your roads asset values (you must have the Microsoft Access software in order to use the program). Turn to Page 6 to see a sample screen and to find out how to get this helpful tool.

when the resurfacing was completed, not by the age that the original pavement was laid.

## Construction Cost

It will probably be quite difficult to find the original construction costs of all your structures. If you do not have this information, a historical cost can be calculated (See page 5, *Determining Historical Cost*).

## Calculating the Value

In this straight-line depreciation approach, the original investment (construction cost minus salvage value) is depreciated over the life span of the structure by dividing the cost by the life span and multiplying by the number of life-years remaining.

This becomes the base line for all future depreciation and improvements that will be required in order to comply with GASB-34 accounting standards.

## Roadway Infrastructure Life

**Unpaved Roadways:** 15 years

**Paved Roadways, Subdivision Streets:** 25 years

**Resurfaced Roads/Streets:** 12 years

**Bridges (all types):** 50 years

**Sidewalks (all types):** 30 years

These life spans have been simplified for audit purposes and are not specific to construction materials or methods. Unpaved roadways are chip seal, gravel, dirt, or any surface other than bituminous concrete or Portland cement concrete (PCC) pavements. Paved roads and subdivision streets can be either asphalt or PCC pavements. Bridges of any construction type have been averaged into one expected life span, as have sidewalks and resurfacing projects. This simplified method also has been applied to estimated construction costs, which are outlined on the next page.

# Determining Historical Cost

Determine what the pavement/bridge/street/sidewalk would cost at today's construction costs using the chart below to obtain the estimated construction cost. Multiply this figure by the appropriate year of construction index percentage (See Price Index table on this page) to determine the historical cost.

## 2001 Estimated Construction Costs

**Unpaved Roads/Streets:** \$30/LF (Linear Foot); \$1.50 sq. ft.

**Paved Roads/Streets:** \$55/LF; \$2.75 sq. ft.

**Subdivision Streets:** \$125/LF; \$6.25 sq. ft.

**Bridges:** \$2,000/LF/24 ft. wide; \$83.34 sq. ft.

**Resurfaced Roads/Streets:** \$10/LF; or \$.50 sq. ft. (plus salvage value)

**City Sidewalks:** \$2.50/sq. ft.

These estimates are for rural, low-volume roadways/streets/bridges typical of those owned by local governments in Kentucky. They are "best guess" estimates arrived at after review of federal government web sites and consultation with industry and local agency associations. These estimates have been reviewed and endorsed by the Kentucky Association of County Engineers and the Kentucky Chapter, American Public Works Association.

Calculations are based on a 20-foot width and include curb, gutter and sidewalk. Cost of sidewalk construction is quoted by square footage because of the varying widths of sidewalks.

Bridge construction costs are for bridges spanning 20 feet and greater, regardless of material. Under 20 feet, the structure should be considered part of the pavement and not calculated separately.

### GASB Web site

For additional information on GASB 34 and Asset Management, visit the following web site:

[www.ctre.iastate.edu](http://www.ctre.iastate.edu)

# Price Index\* for Highway Construction

Year	Bridges	Percentage	Roads/ Streets/ Sidewalks	Percentage
1960	21.7	.16	23.0	.15
1965	24.8	.18	25.0	.17
1970	38.2	.28	34.8	.23
1971	40.0	.29	36.8	.24
1972	40.7	.30	38.6	.26
1973	45.4	.33	42.5	.28
1974	61.7	.45	57.9	.38
1975	60.6	.44	58.1	.38
1976	57.2	.42	56.3	.37
1977	59.7	.44	59.8	.40
1978	70.7	.52	70.7	.47
1979	88.6	.65	85.5	.57
1980	100.0	.73	97.2	.64
1981	94.9	.69	94.2	.62
1982	90.0	.66	88.5	.59
1983	86.7	.63	87.6	.58
1984	88.2	.64	92.6	.61
1985	98.1	.72	102.0	.67
1986	98.0	.72	101.1	.67
1987	100.0	.73	100.0	.66
1988	111.0	.81	106.6	.71
1989	118.4	.86	107.7	.71
1990	117.8	.86	108.5	.72
1991	112.5	.82	107.5	.71
1992	108.4	.79	105.1	.70
1993	105.3	.77	108.3	.72
1994	109.0	.80	115.1	.76
1995	119.5	.87	121.9	.81
1996	121.6	.89	120.2	.79
1997	132.7	.97	130.6	.86
1998	133.4	.97	126.9	.84
1999	138.3	1.01	136.5	.90
2000	146.9	1.07	145.6	.96
2001	136.9		151.2	

\*Excerpt from "Price Trends for Federal-Aid Highway Construction," prepared quarterly by the Federal Highway Administration Office of Engineering.

*This index changes each year and these percentages will not be valid after a new index is issued for 2002. We will revise this chart at that time (estimated time: April 2002).*

# MS Access Makes it Easy!

## Establishing Rural Road/Street System Values

All you need is Microsoft (MS) Access software and our program. Enter the name, length, miles, width, type, and year built and the program calculates everything and issues reports by type, name, and total agency transportation system. The calculations used in the sample screen below are the ones listed on pages 4-5 in this *Link*. To get your free copy of our program (this doesn't include MS Access software), email Annette Smith at [aasmit3@engr.uky.edu](mailto:aasmit3@engr.uky.edu) or call her at 1-800-432-0719. She also offers technical support in using our program.

### Sample Screen:

<b>Description</b>	test1		
<b>LengthInFeet</b>	34320		
<b>Miles</b>	6.5	<b>Amount</b>	\$1,887,600.00
<b>WidthInFeet</b>	20	<b>Historical Cost</b>	\$1,264,692.00
<b>Type</b>	Paved	<b>Salvage Value</b>	\$252,938.40
<b>YearBuilt</b>	1985	<b>Current Value</b>	\$617,169.70
<b>Life</b>	25	<b>Depreciation Amt</b>	\$40,470.14
<b>SquareFeet</b>	686400	<b>Until</b>	2010
<b>Cost Per Foot</b>	\$2.75		

## TRAINING CALENDAR

## 2001-2002

\* Indicates Roads Scholar course    # Indicates Road Master course.    \*\* Indicates Central Standard Time zone

### December

- 11 Pesticide Continued Training (for licensed applicators).. Pennyrile State Resort Park\*\*
- 12 Pesticide Continued Training (for licensed applicators).. Pennyrile State Resort Park\*\*

### January 2002

- 8 Pesticide Continued Training (for licensed applicators) ..... Ramada Inn & Convention Center, Lexington
- 15 Pesticide Continued Training (for licensed applicators) ..... General Butler State Resort Park
- 22 \*Managing People I ..... Holiday Inn, Ft. Mitchell
- 24 \*Traffic Management Through Signals, Signs, & Markings . Ramada Inn & Convention Center, Lexington
- 29 #Computer Familiarization ..... Central Kentucky Technical College, Lexington
- 29 Pesticide Continued Training (for licensed applicators).. Barren River Lake State Resort Park\*\*
- 30 Pesticide Continued Training (for licensed applicators).. Barren River Lake State Resort Park\*\*

**NOTE:** For more information about any of these courses, call the Center at 1-800-432-0719 or 859-257-4513.

**SEE PAGE 3 FOR INFORMATION ON THE NEW SPIRAL-BOUND 2002 TRAINING CALENDAR.**

# The "Modified Approach" Includes the Value of Maintenance

*Patsy Anderson, Manager, Technology Transfer Program*

Information for this article was taken from articles appearing in the January/March and April/June 2001 editions of *The Bridge*, published by the Michigan LTAP Center, with contributions by Tom Maze, Vice-President, Howard R. Green Company. Full, unedited copies of the articles are available by calling 1-800-432-0719 or by visiting the Michigan LTAP Center web site [www.MichiganLTAP.org/](http://www.MichiganLTAP.org/).

The life (and value) of a road or bridge largely depends on how well it is maintained. The modified approach incorporates the benefits, or value, of maintenance activities into the reporting process. Those agencies that already use a road surface management system may have a head start on using this method.

The modified approach to placing value on infrastructure requires more data collection than does the depreciation approach. Agencies must demonstrate that they: (1) maintain an up-to-date inventory of infrastructure assets; (2) regularly assess the condition of these assets using a measurement scale; and (3) annually estimate the cost required to maintain the assets. The agency is also required to establish a minimum acceptable condition level.

According to GASB 34, an infrastructure condition assessment must be conducted at least once every three years. The results of the three most recent condition assessments must provide reasonable assurance that the assets are being preserved approximately at or above the minimum condition level established by the agency.

The mechanics of implementing the modified approach are left to the agency to determine.

Determining the current value under the modified approach will require considerable effort by public works officials. The *GASB-34 Guide to Implementation* gives little guidance other than encouragement to exercise reasonable, sound and consistent professional judgment. No guidelines have been set.

It has been suggested that estimating the current value of an asset under the modified approach be based on reasonable and consistent methods for determining the current condition of assets. A relatively simplistic approach

would be to rate assets (roads/streets/bridges) on a condition scale from 0 to 100, where 100 is perfect, 0 is impassable, and 40 is considered the minimum acceptable level of condition. This would mean that a road could lose a maximum 60 condition points in its life. Under this approach, a road currently rated at 70 (half the maximum point loss) would be valued at half the historical cost.

The long-term benefits of the modified approach make the extra effort worthwhile. It reflects the positive effects of maintenance activities on the value of roads, streets, and bridges. By using the modified approach, agencies will have established a basic "asset management system" that will provide the information necessary to guide and plan overall resource allocation.

For more information on asset management, visit the Federal Highway Administration's web site [www.fhwa.dot.gov/](http://www.fhwa.dot.gov/) or call our Librarian, Laura Whyne, for a literature search.

## **Publication Statement**



*The Link*© is published quarterly by the Kentucky Transportation Center, College of Engineering, University of Kentucky, using funds from the Federal Highway Administration and the Kentucky Transportation Cabinet. The opinions, findings, or recommendations expressed in this newsletter are those of the Kentucky Transportation Center and do not necessarily reflect the views of the Federal Highway Administration nor the Kentucky Transportation Cabinet nor the University of Kentucky. Any product mentioned in *The Link* is for informational purposes only and should not be considered as a product endorsement. Comments may be addressed to Kentucky Transportation Center, 140 Raymond Building, University of Kentucky, Lexington, KY 40506-0281. Phone: 859-257-4513 or 800-432-0719. Staff include:

*Paul Toussaint, Director  
Kentucky Transportation Center*

*Patsy Anderson, Manager  
Kentucky Technology Transfer Program*

*Nancy Robinson, Newsletter/Publications Editor*



**Please visit our web site: [www.ktc.uky.edu](http://www.ktc.uky.edu)**

# Cities Must Comply; Counties Should

For the last twenty years, Kentucky *cities* have been required by statute (KRS 91A.020 and 91A.010) to comply with the GASB accounting standards. Statement 34 just makes some rather major changes and additions to those standards and how financial information is presented in the government's annual financial report—better known as the annual audit.

There are no statutory requirements for *counties* to comply with GASB accounting standards. They are, however, being encouraged to do so. (Read the other articles in this newsletter to learn why.)

The object of the new standard, as with most standards, is to allow consistent reporting from each government each year so that financial and now management functions can be compared from year to year for that government and also to be able to compare that government to other governments on a consistent and compatible basis.

## T<sup>2</sup> is a Bargain!

According to the *American Society of Training and Development*, the average cost of one hour of training is:

- \$40-\$50 for Professional Training
- \$35-\$40 for Technical or Administrative Training

For comparison, during FY 2000-2001, the Technology Transfer Program presented training at the following hourly costs:

- \$10/hr. for Road Scholar Program
- \$11/hr. for Road Master Program
- \$19/hr. for Special Projects Program

Registration fees cover about 90 percent of training costs. Fees are supplemented by funding from the Federal Highway Administration, Kentucky Transportation Cabinet, and the University.

### What's Inside?

*Cash Accounting vs. Accrual Accounting* ..... Page 2  
*At the Library* ..... Page 2  
*DLG Develops GASB Worksheets* ..... Page 3  
*2002 Training Calendars Available* ..... Page 3  
*Depreciation Approach* ..... Page 4

*Roadway Infrastructure Life* ..... Page 4  
*Determining Historical Costs* ..... Page 5  
*2001 Estimated Construction Costs* ..... Page 5  
*Price Index for Highway Construction* ..... Page 5  
*MS Access Makes it Easy* ..... Page 6  
*Training Calendar* ..... Page 6  
*Modified Approach* ..... Page 7



Kentucky Transportation Center  
 176 Raymond Building  
 University of Kentucky  
 Lexington, Kentucky 40506-0281

Non-Profit Org.  
 U.S. Postage Paid  
 Lexington, KY  
 Permit No. 51

