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# Brief history of property and depreciation accounting in municipal accounting

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# A BRIEF HISTORY OF PROPERTY AND DEPRECIATION ACCOUNTING IN MUNICIPAL ACCOUNTING

*Abstract:* Generally accepted accounting principles require the exclusion of permanent property and the non-recognition of depreciation in most governmental funds. Although this issue was settled in the early 1930s fervent debate continued as to the merits of this practice from 1895 to around 1925. Several prominent accountants argued for the inclusion of permanent property and the recognition of depreciation in governmental funds during this earlier period.

## *Introduction*

As might be expected, municipal accounting in the United States reflected developments in England in many ways up to about 1900. Indeed, local government in the United States was initially modeled after its English counterparts. The English Municipal Corporations Acts of 1835 and 1882 and the Local Government Act of 1888 explicitly enumerated the principal income and expenditure classifications for all English towns or boroughs. Since these Acts did not directly address the question of accounting for capital expenditures, English borough accountants actively debated this issue during the latter part of the nineteenth century.

By 1900, accountants and others in the United States concerned with the development of accounting systems for local government joined the debate. From 1900 to 1935 opinion on the issue of the proper accounting treatment of capital expenditures and depreciation was sharply divided. However, the issue was resolved with the issuance of the statement of Municipal Accounting principles by the National Committee on Municipal Accounting in 1935.

## *Positions taken by English Municipal Accountants*

In the latter part of the nineteenth century, considerable difference of opinion about the preferred method of presenting capital expenditures on the balance sheet existed. One school of accountants maintained that all capital expenditures, regardless of their nature, should appear on the balance sheet as assets. Others held that only that portion which represented realizable property should be carried permanently, while other capital expenditures should be written down periodically on the balance sheet. In either case, the statement would also show the amount of money raised by loans remaining unexpended, the amount expended, the amount of the loans already repaid, and the amount remaining outstanding.[1]

James H. Parker, writing in *The Accountant* in 1895, stipulated three possible valuation bases for capital expenditures:

1. The original cost without a yearly write down for expiration
2. The original cost written down year by year by the amount of the sinking fund contribution
3. A revaluation each year or other period.

He vehemently attacked the revaluation method on the grounds that streets, sewers, bridges, and the like, while having no market value, are nonetheless valuable municipal properties. In Parker's view, the market value theory of valuation is tantamount to a statement of affairs in a liquidation, and hardly applicable to a viable municipality. All the capital assets must be valued as part of a going concern; and so long as they fulfill their intended purpose, their only real value should be original cost. Parker further contended that capital assets which are properly maintained through repairs and replacements should not be subject to depreciation.[2]

Parker argued against the idea, strenuously suggested by some accountants, that the amount set aside each year for a sinking fund contribution be applied as depreciation. To use the term of years of a loan as the criterion for deciding the period of usefulness of an asset, and to reduce the asset as the loan is paid off is illogical since the life of the asset is independent of the loan period.

Parker maintained that the purpose of the balance sheet would better be served by retaining the cost basis of the asset and transferring the sinking fund balance to a *Capital* or *Capital Surplus* account as the loans are paid off out of revenue. This account, increasing as the loan is paid off, would then represent or indicate the actual amount of assets on which all loans have been paid off, and it would gradually increase as other loans are redeemed.

Writing in *The Accountant* three months later, Swainson advocated a balance sheet which classified assets in the following manner:[3]

I. REVENUE BEARING PROPERTY

A. Realizable and intended for realization (Such as land and buildings in the line of street improvements)

B. Realizable, but not for realization (Such as land and building occupied by the corporation for public purposes—gasworks, waterworks, markets, town hall, tramways, docks and harbours)

II. NON-REVENUE BEARING PROPERTY

A. Realizable and intended for realization (Such as unoccupied lands for sale)

B. Realizable, but not for realization (Such as open spaces, parks, museums, and libraries and their contents)

Swainson did not favor writing down assets as the loans against them are paid off, nor did he favor recording depreciation on any class of assets as long as, ". . . all assets of value . . . are kept up out of revenue equal to cost price."[4] Swainson was indifferent about the valuation basis. He considered either the cost basis or periodic appraisal satisfactory, so long as the method chosen is disclosed in the balance sheet.

Another article in *The Accountant* recognized the possibility of the functional factors in depreciation:

> The only possible point upon which it occurs to us that there is something to be said on the other side is with regard to those works which, although in a sense they may be regarded as permanent, are yet known to be of such a nature that, in the ordinary course of events, it is only reasonable to suppose that such advances in the way of invention will be made in the course of time, that it may reasonably be considered certain that the whole work will eventually require to be superseded by other and more modern construction. In such a case as this it certainly seems desirable that the original cost should be written down from time to time, so that the whole burden of the improvement may not fall upon the ratepayers who actually make the change.[5]

Against those supporting the method of reducing the asset by the amount of sinking fund installments, the writer argued that, ". . . if convenience in keeping the accounts is offered as justification for the use of the method then no sufficient case had been made."[6] His suggestion is to debit *Revenue* and credit a *Surplus* or *Surplus Capital* account when certain of the liabilities are redeemed, ". . . out of accumulations of revenue." A more suitable name for *Surplus* or *Surplus Capital,* according to this article, would be "Common Fund." The existence of a large amount in this account would constitute tangible evidence of the credit worthiness of the municipality.[7]

The debate over capital asset valuation is curious inasmuch as the English municipalities had no intention—and little capability—to sell their permanent property. Most arguments concerned the necessity for retaining permanent improvements on the balance sheet after the debts incurred to purchase the improvements had been retired. Some accountants favored showing permanent properties on the balance sheet because the outlay represented "value" to the borough; other accountants held that such outlays did not represent "value" because those sums were not realizable.

Most late nineteenth century English accountants favoring retention of permanent properties on the balance sheet preferred a single statement showing all assets and liabilities of the borough. Other accountants preferred the use of two balance sheets—one showing the permanent properties opposite the liabilities incurred to acquire them, and the second showing the remainder of the assets and liabilities of the borough. A review of the financial statements of several English boroughs revealed a wide variety of statement preparation formats. Evidently, the accountant of each borough exercised wide latitude in the form and manner in which the statements were prepared.

The concept of depreciation did not seem to be well understood. Even among accountants favoring showing permanent properties on the balance sheet, opinions were divided as to the need for recognition of depreciation in municipal accounting. While some accountants apparently viewed depreciation as a rational and systematic cost allocation over the useful life of the asset, the majority associated depreciation with the sinking fund provisions to retire the debt incurred to acquire the asset. Other writers saw no necessity of recognizing depreciation. They seemed to believe that no depreciation occurred so long as proper maintenance was performed, and one writer recognized that certain assets actually increase in value over time. Others believed that periodic revaluation of the capital assets was the only proper method of fixed asset presentation.

### *Discussion in the United States: 1900-1920*

By the early 1900s, considerable interest in municipal accounting had been generated by the activities of the National Municipal League. Treatment of permanent property and depreciation—as well as other topics—was fervently debated.

Writing in 1906, Duncan MacInness severely criticized the League's advocating the creation of a balance sheet for a municipality. For a balance sheet to have a reason for being, MacInness wrote, a "positive and essential" meaning must attach to the balances included. Only such values as can be measured, and which represent the value of a significant and appreciable "fact," should be included. While MacInness saw no necessity for a municipal balance sheet, he recognized that, ". . . the demand for such a balance sheet suggests the possibility of there being such a thing."[8] The inclusion in the municipal balance sheet of such items as parks, bridges, schools, police stations, and other possessions of the municipality, broadly labeled as "Unavailable" or "Fixed Assets," was absurd in MacInness' view. A supplementary schedule arraying these types of properties would be acceptable, ". . . but to include such as an integral part of a municipal balance sheet would be in fact to repeat values that were already merged into and had become a part of the values of the taxable real estate on which the faith and credit of the municipality was based and which measured its legal right to or precluded it from engaging in further public undertakings."

MacInness' notion of a balance sheet would simply show the "floating status" of a municipality. Such status would be determined by the difference between the cash on hand plus other realizable assets (such as receivables for taxes, assessments, water, rent, and miscellaneous revenue included in the accounts) and the "cash liabilities," admitted claims, and contingent liabilities reported by the various departments. In justification of his argument, MacInness observed that the main purposes of a municipal balance sheet should be to show the possibilities of realization to liquidate current liabilities and to show clearly the legal margin of its borrowing capacity; therefore, prospective bondholders and taxpayers alike may know at once the measure of a city's right to engage in public undertakings. If the right of a municipality to engage in permanent improvements is determined by the *Capital Surplus* (arrived at by offsetting the cost of streets, parks, bridges, public buildings, and equipment, against the sum of the unliquidated liabilities), many cities might be led into an inordinate increase in their public debt.[9]

In retort to MacInness, Frederick Cleveland stated that frequently pavements and sewers have been cited as forms of improvements for which no capital accounts are to be carried. Admittedly, no relation can be made to the public debt; but, administratively, the sewer has a present value which should be represented in the accounts. The money paid for a sewer, which will last ten years, belongs to the same category as money paid in advance for the insurance of a building for ten years, Cleveland admonished.[10]

Cleveland seemed unable to decide if depreciation is inevitable. While suggesting that depreciation is postponable he alluded to the necessity for computing depreciation on an actuarial basis. He favored the recognition of depreciation in the accounts if depreciation actually occurred. After determining the annual charge, this amount should be set up as a reserve for depreciation, with the cost of repairs being charged against the reserve.

The *Handbook of Municipal Accounting,* published in 1913 by the New York Bureau of Municipal Research, and hailed as the most significant contribution of the 1910 decade, also addressed the question of the proper treatment of property accounts. In the *Handbook,* the Capital Account Balance Sheet and related property accounts are treated rather briefly. Permanent properties are inventoried and set up by debits to respective asset accounts for their estimated cost. A credit is made to *Reserve for Depreciation* so that the net of the debit and credit equals the book value of the permanent properties. Such net amounts are then credited to *Capital Surplus.*

The *Handbook* favors the recording of depreciation on property that is "continually undergoing deterioration." The text indicates that the journal entry would be:

| | | |
|---|---|---|
| Depreciation | XX | |
| Reserve for Depreciation | | XX |

This entry would be recorded at the beginning of the fiscal year. Depreciation is viewed as a method of providing replacement funds. The *Handbook* states that provision for this charge should be included in the budget of expenses so that, at the end of the estimated life, resources will be available to replace the asset.[11]

A reconsideration of positions by advocates of the publication of municipal balance sheets and those who believed such presentation was useless or misleading began about 1915. Henry Fernald presented a middle position in a 1918 article. Fernald agreed that the *Surplus* account, which by this time was fashionable in municipal financial reporting, is misleading to the average reader.

By the inclusion of town properties as an asset on the balance sheet, wrote Fernald, many towns, ". . . have been lulled into a false sense of security by showing a large surplus."[12] To demonstrate this point, a "typical" balance sheet of a town is shown in Illustration 1.

According to Fernald, the "surplus" of $1,000,000 is generally regarded as showing that the finances of the town are in excellent shape. Citizens and financial officers may mistakenly assume that improvements which may have been authorized are to be paid for out of this "surplus." By the time a new finance committee looks at the "assets" to determine where the money is coming from, faith in the million dollar surplus is, ". . . very much shattered and the so-called assets are looked at with great distrust."[13]

A rearrangement of the information presented in the balance sheet to show the assets from a realization point of view, and with the cost of projected future outlays included in the computation, conveys a quite different impression. Illustration 2 indicates the amount to be raised by future taxation if the city is to remain solvent.

Such a calculation shows the reader that, in reality, the town has very little in the way of liquid assets except the power to tax. Fernald reasoned that if depreciation on properties is recognized,

**Illustration 1**

"Typical" Balance Sheet of a Town

| Assets | | Liabilities | |
|---|---|---|---|
| Revenue Assets: | | Current Liabilities: | |
| Cash | $ 50,000 | Accounts Payable | $ 50,000 |
| Taxes Receivable | 100,000 | Notes Payable | 200,000 |
| Sundry Accounts | 50,000 | Bonds Outstanding | 1,500,000 |
| Improvement Accounts | 200,000 | Total Liabilities | $1,750,000 |
| Capital Assets: | | Surplus | 1,000,000 |
| Town Properties | 2,000,000 | | |
| Sinking Funds | 350,000 | | |
| Total Assets | $2,750,000 | Total | $2,750,000 |

Source: Henry Fernald, "Capital Accounts of a Municipality." *The Journal of Accountancy* (October 1918), p. 274.

**Illustration 2**

Amount to be Raised by Future Taxation

| | | |
|---|---|---|
| Total Liabilities | | $1,750,000 |
| Realizable Assets: | | |
| Cash | $ 50,000 | |
| Taxes Receivable in the Near Future | 75,000 | |
| Improvement Assessments from Property Owners | 100,000 | |
| Sinking Funds | 350,000 | |
| Total Realizable | | 575,000 |
| Excess of Liabilities over Realizable Assets | | $1,175,000 |
| Add Estimated Amount for Projected Improvements | | 225,000 |
| Amount to Be Raised by Further Taxation | | $1,400,000 |

Source: Henry Fernald, "Capital Accounts of a Municipality." *The Journal of Accountancy* (October 1918), p. 275.

the inclusion of the capital surplus may be of some benefit. But he cautioned against the increasing practice of attempting to follow too closely the form of commercial balance sheets advocated by Cleveland and others. Fernald saw a distinct value in arranging the data in municipal financial statements to clearly state the fundamental differences between the two types of entities. Fernald's proposed statement emphasized liquidity and working capital.

### *The Shifting Emphasis Toward Liquidity: 1921-1935*

Francis Oakey wrote *Principles of Government Accounting and Reporting* in 1921. Oakey acknowledged that land, buildings, and equipment are "assets" of the government but asserted that they have no place in the balance sheet. The permanent properties owned by the government cannot be measured in dollar value; the value of such assets can only be measured in terms of capacity. The concept of a capital balance sheet is thus fallacious. Since the fundamental principle of such a statement is the comparison of the book values of permanent property with the amount of outstanding bonded debt, there exists no true common denominator for expression. Furthermore, the surplus of such a fund is meaningless. The book value of permanent properties may be twice the amount of bonded debt, but no action can be taken on the basis of this fact. Such assets are not available for expenditure and should not be treated in the statements in such a way as to affect expendable surplus.

Oakey opposed the recognition of depreciation on permanent property. Undepreciated cost is the most desirable basis on which to carry permanent properties because it is the simplest, most accurate, and most reliable asset measure, and it is, in itself, a standard derived from reliable sources.

Governmental financing methods do not depend on internally generated resources to replace deteriorated or obsolete properties. Therefore, recording depreciation of permanent properties serves no useful purpose unless a legislative body has authorized that certain portions of the resources be set aside annually to provide a fund for replacements. Setting up a reserve for depreciation has no effect on the resources, since those resources cannot be applied to the purpose for which the reserve was created.[14]

Shortly after the publication of Oakey's work, R. G. Walker published an essay summarizing and contrasting the major positions in the controversy over the content of the municipal balance sheet. According to Walker, the major arguments are those articulated by Cleveland, MacInness, and Oakey.

Walker's essay presented a strong position for a municipal balance sheet to include only realizable assets associated with expendable funds. Walker argued that since there is little that is self-sustaining within the municipal entity's supervision and control, it must periodically be supplied with a renewal of resources. According to Walker, the municipal organization enjoyed a perennial source of revenue which it may command as wants dictate.

It logically follows then, according to Walker, that fixed assets and bonded debt cannot be admitted into the municipal balance sheet. Offsetting of unrelated assets and liabilities is misleading and is to be avoided, since it communicates an erroneous idea concerning the source of the means of liquidation of liabilities and suggests, in a surplus figure, an availability of capital which is not true. A "dangerous" practice is being followed when the same term is given more than one meaning in the same accounting exhibit, as would be the case in a balance sheet showing both a current or general surplus and a capital surplus.[15]

Apparently, all other objectives of the accounting system are overridden by the emphasis on liquidity. For that reason only current assets and current liabilities should be encompassed in

Walker's formal accounting system. Long-term debt and permanent properties are relegated to supplemental records outside the formal accounting system. It seems reasonable to assume that Walker's position on long-term debt and fixed assets led to what is now referred to as the general long-term debt and general fixed asset groups of accounts. Walker concluded that municipal accounting is primarily concerned with the operation of expendable funds, of which all expenditures are decreasing elements and all revenues are increasing elements.[16] Walker's ideas were not revolutionary, but his advocacy of a limited balance sheet seems to have ended the trend toward a commercial method of presentation.

Morey suggested that property owned by a municipality should be included in the accounting records at cost. However, the property accounts should be kept separate from the accounts of expendable resources. Especially, any surplus arising from the investment in fixed assets must be kept separate from surplus available for expenditures.[17]

Morey argued against the recognition of depreciation on most municipal properties for the following reasons:

1. There is no particular occasion for knowing the current value of government property, since the government does not depend for credit or for any other purpose on the valuation of the property owned by it.
2. The chief item of interest in accounts with permanent property is 'What did that property cost the government?'
3. Since no accounts are kept with profit and loss, there is no occasion for accounting for depreciation as an expense.
4. A reserve for depreciation would be useful only if it could be funded and carried forward to provide for replacement of the property when worn out. This is impossible; first, because governmental revenues for the most part are fiscal in character and must be expended during the fiscal period; and, second, because the greater part of public property is acquired through bond issue and it would be impossible to raise by taxation an amount to provide for depreciation in addition to paying the principal of the bonds.[18]

Depreciation should be recorded for any municipal activity in which profit and loss is involved, such as a public utility or similar enterprise. Depreciation should be entered as an expense in such instances by a debit to *Depreciation* and a credit to *Reserve for Depreciation*. If depreciation is to be recorded on general properties of the municipality, *Surplus Invested in Fixed Assets* should be debited and *Reserve for Depreciation* should be credited.

Carl Chatters' *Accounting Manual for Small Cities*, published in 1933, contains a note that it is "Publication No. 1" of the Municipal Finance Officers Association of the United States and Canada. Chatters also generally followed Morey's recommendations for fund groupings and the use of the "simplified" system of journalizing. However, Chatters' method of recording transactions in the Bond Issue Fund was materially different from Morey's. In addition, permanent properties were not shown in Chatters' presentation; and Chatters included the bonded debt principal as a liability of the Bond Issue Fund as opposed to Morey's system of grouping the bonded debt principal with the property accounts.[19] Chatters' exclusion of permanent property was a significant departure from the prevailing practice of his time and it gave impetus to the development of the modern treatment of excluding general permanent property in fund balance sheets and the establishment of a separate account group for general permanent property.

The National Committee on Municipal Accounting was constituted and held its first meeting in early 1934. Nine principles of municipal accounting were adopted on a tentative basis at this meeting. Principle 2B addressed the question of permanent property as follows:

> 2 B — Asset accounts for permanent property not available to meet expenditures or obligations should be segregated from other fund assets and the equity represented by them not included in the current surplus of any fund.[20]

Principle 8 indicated property accounts should be maintained on the basis of historical cost, but ". . . it is not considered necessary to account for depreciation of general municipal property, except for unit cost purposes, unless cash can be legally set aside for replacements."[21]

Within two years after the adoption of the first tentative set of municipal accounting principles, several articles appeared which discussed and explained the principles and served to disseminate them to accountants and others. In an article published in December 1934, Morey discussed all nine principles separately and in considerable detail. Certain comments by Morey bear repeating:

> Principle #2—The accounts of a fund include all assets, liabilities and proprietorship . . . . No system which does not maintain the identity of the various funds can be accepted as satisfactory. No plan of consolidated statements in which the various funds are merged or concealed is adequate . . . . There is no one figure of surplus in a municipality.
>
> Principle #8—There is a marked variation of opinion as to whether the valuation of fixed assets should be included in the municipal balance sheet . . . . The National Committee has not yet attempted to pass in a final way on this point. If values of fixed property are included in the balance sheet then the essential thing is to separate the surplus or equity represented by them from that represented by expendable assets . . . . The Committee has reached the conclusion that to include depreciation in the accounts and reports accomplishes no significant end . . . . In unit cost accounting depreciation . . . is essential . . . and could be carried on records auxiliary to the general budgetary accounts.[22]

Four additional principles were added by the Committee in 1935. With these additions the tentative set of principles effectively constituted accepted municipal accounting principles until the publication of *Governmental Accounting, Auditing, and Financial Reporting* in 1968.

### *Summary*

The impetus provided by the discussion of permanent property and depreciation by English accountants in the late nineteenth century sparked continued debate on the subject by accountants in the United States shortly after 1900. The prevailing opinion until the early 1920s was to treat capital assets of a municipality in the manner dictated by accounting theory applicable to for-profit entities.

The focus on liquidity, advocated by Walker and strongly and continuously reinforced by Morey, led to the exclusion of permanent property from the municipal balance sheet by 1935. No significant changes have occurred since that time in municipal accounting principles which affect the National Committee's initial positions on the matter.

## FOOTNOTES

[1]Clare, p. 110.
[2]Parker, p. 263.
[3]Swainson, pp. 582-583.
[4]Swainson, p. 582.
[5]"Form of Municipal Accounts," p. 293.
[6]"Form of Municipal Accounts," p. 294.
[7]"Form of Municipal Accounts," p. 294.
[8]Chapman and MacInness, pp. 15-16.
[9]Chapman and MacInness, p. 137.
[10]Cleveland, pp. 148-149.
[11]Bureau of Municipal Research, pp. 56-57.
[12]Fernald, p. 275.
[13]Fernald, pp. 274-275.
[14]Oakey, pp. 276-277.
[15]Walker, pp. 195-197.
[16]Walker, p. 199.
[17]Morey, *Introduction to Governmental Accounting,* pp. 192-193.
[18]Morey, *Introduction to Governmental Accounting,* p. 196.
[19]Chatters, *Accounting Manual for Small Cities,* pp. 75-76.
[20]Chatters, *Municipal Accounting Progresses,* pp. 101-102.
[21]Chatters, *Municipal Accounting Progresses,* pp. 101-102.
[22]Morey, *Principles of Municipal Accounting,* pp. 32-34.

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