

MODEL NATIONAL MUNICIPAL ASSET VALUATION METHODOLOGY MANUAL



**Government of India
Ministry of Urban Development**

January 2009

Ministry of Urban Development Government of India

Supported by

Office of the Comptroller & Auditor General of India
National Institute of Urban Affairs (NIUA) and Indo-USAID FIRE-D Project

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PREFACE

The Ministry of Urban Development (MoUD), Government of India, has been taking several initiatives towards good urban governance and making urban local bodies self-sustaining viable entities of Local Self Government. Implementation of key municipal reforms including accounting reforms is an important element of these initiatives. Ministry had earlier brought out simplified toolkit of the National Municipal Accounting Manual (NMAM), which has been well received; however, a need has been felt to develop a uniform methodology for asset valuation in the context of implementation of accounting reforms. The Ministry has now developed a Model National Asset Valuation Methodology Manual (MNAVMM), which can be referred by Urban Local Bodies for valuation of their assets and preparation of financial statements.

The C&AG has overseen the task for the development of this Manual. The Indo-USAID FIRE-D Project and the National Institute of Urban Affairs have supported the initiative. The manual includes the guidelines, procedures, methodology and basis for valuing the municipal assets as well as forms for collection of information about assets. It also provides guidelines for asset lifecycle management, forms and formats for maintenance and monitoring of asset register and their current and future values. The manual would further serve as valuable reference for determination of the useful life of municipal assets, assessment of decline in asset values due to use and obsolescence and an appropriate rate of depreciation and amortization of municipal assets.

MoUD is thankful to the C&AG who has overseen the task of development of this Manual and also to the Indo-USAID FIRE-D Project and the National Institute of Urban Affairs who have supported the initiative. We hope this manual will be found useful by all stakeholders including Urban Local Bodies and State Governments in developing state specific asset valuation methodology manual.

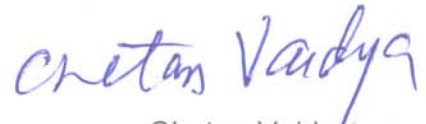
Date: January 15, 2009


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ACKNOWLEDGEMENT

The National Institute of Urban Affairs (NIUA) and Indo-USAID Financial Institutions Reform and Expansion (FIRE-D) Project would like to place a record of acknowledgement for the support and technical advice rendered by the following in carrying out the manual:

- Office of the Comptroller & Auditor General of India
- Ministry of Urban Development, Government of India
- Team members of the Infrastructure Professional Enterprise [P] Ltd.
- Other experts who have contributed to the preparation of the Manual



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CHAPTER I: USING THIS MANUAL

Purpose of the Manual

1. This Model National Municipal Asset Valuation Methodology Manual (henceforth referred to as 'Manual') has been designed for use by the staff of urban local bodies (ULBs) to facilitate bringing on record the value of municipal assets determined during the course of preparation of Opening Balance Sheet. In particular, it will help to :
 - i. determine the appropriate value, useful life and depreciation of municipal fixed assets and their reporting in the financial statements;
 - ii. increase the effectiveness of control over municipal fixed assets; and
 - iii. assist ULBs to which they belong to present its true and fair financial position, facilitate budgetary planning and control over resources.

Methodology

2. The Manual has been developed based on the Accounting Principles Framework provided by the Model National Municipal Accounting Manual (NMAM) released by the Government of India and Accounting Standards issued by Institute of Chartered Accountants of India (ICAI). It seeks to complement the NMAM by providing specific guidance in the area of fixed asset valuation, treatment and reporting. In particular, it proposes to address (i) valuation of assets for the purpose of Opening Balance Sheet and (ii) the determination of depreciation rates for annual depreciation.
3. The proposed methodology has been prepared after:
 - i. review and analysis of existing methodologies and bases used across India for determining the value of municipal assets¹;
 - ii. review and analysis of the valuation methodology and basis recommended by the International Valuation Standards developed by the International Valuation Standards Committee (IVSC);
 - iii. review and analysis of current best practices in good asset management and asset lifecycle management, including the maintenance of asset registers;
 - iv. review and analysis of the available information on typology of municipal assets (such as buildings, land, plant and machinery, sewer lines, etc.) used in different size/ classes of ULBs; and
 - v. review and analysis of existing forms and formats and other documentation regarding asset identification, location and use, etc.

¹ In this context, methodology used by the Income Tax Department, Central Public Works department for buildings, and the valuation methodology used by the Municipal Corporation of Delhi, Kolkata Municipal Corporation and state policies for West Bengal, Tamil Nadu and Karnataka have been considered.

4. A draft version of the manual was shared with NIUA and other stakeholders in July 2008. This version takes into consideration the feedback and suggestions received on the earlier document.

Structure of the Manual

5. There are several important steps in fixed assets management so far as ULBs are concerned. The first step is identification and categorization, the second step is location, the third step is valuation, the fourth step is recording, the fifth, updating, the sixth, accounting, and the seventh, presentation.
6. This Manual is structured according to these steps. Additional guidance has been provided to help municipal staff to deal with some of the very common problems of Municipalities. Such problems may commonly include:
 - i. the non-availability of records pertaining to the various fixed assets – including sometimes their original cost, date of acquisition or construction etc.;
 - ii. the difficulty of locating a fixed asset - for instance, a road roller which had been purchased and appears on the books, but was physically scrapped a long time ago and no record of its disposal remains; and
 - iii. the lack of data on current condition and remaining useful life.
7. These problems are not necessarily typical to ULBs only, but so far as ULBs are concerned, given that there is now a mandate to change over to the accrual system of accounting, it is important to address these problems and to put in place a Fixed Assets Management System that will become more and more accurate over a period of time.

Use by ULBs

8. Users of this Manual will find it useful to first study the whole Manual and perhaps undergo a familiarization program with respect to this Manual. Once the system is in place, specific chapters of the Manual can be referred to for dealing with specific kinds of problems.
9. It should be remembered that no manual can by itself either anticipate or presume to answer all possible questions that may arise in practice. For that purpose, it is useful to refer to external guidance, including referrals to experts as well as to authoritative texts.
10. Like the NMAM, this is a 'Model' Valuation Manual. Hence, it lays down the policy level guidance in respect of asset valuation. States are free to adapt this manual to suit their needs in line with their accounting manual and ULB requirements.

CHAPTER II: DEFINITION AND CATEGORIZATION OF ASSETS

Definition of Fixed Assets

11. There are several definitions of assets that are commonly used in various parts of the world, as different accounting and standards exist in different countries. Accounting Standard 10 on 'Accounting for Fixed Assets', promulgated by the Institute of Chartered Accountants of India (ICAI), defines a fixed asset as:

An asset held with the intention of being used for the purpose of producing and providing goods or services and is not held for sale in the normal course of business.

12. The context of Urban Local Bodies is different from commercial bodies to whom these accounting standards generally apply. Hence, a set of Accounting Standards for Public Sector Bodies have been developed by the International Public Sector Accounting Standards Board (IPSASB), a constituent of the International Federation of Accountants (IFAC). The IPSASB considers the International Financial Reporting Standards (IFRS) released by the International Accounting Standards Board (IASB) and following a due process of consultation, adapts them to the public sector context for use by government.²

13. The definition of Assets as per the IPSASB is:

Assets are resources controlled by an entity as a result of past events and from which future economic benefits or service potential are expected to flow to the entity.³

Concept of Control

14. The concept of control of an asset's economic benefit is a key issue in determining whether that asset should be reported in the financial statements of a ULB. This concept of control is what leads to non-owned assets like Hire Purchase assets, Leasehold property to be recognized as assets. This concept is important because governments are required to maintain control over public property in a fiduciary capacity and hence any loss of control is not only a financial but also a fiduciary loss.

15. To determine whether a ULB should be reporting an asset, it is necessary to look to the indicators of control. According to AS26, 'control' is identified when the enterprise has the power to obtain future economic benefits flowing from the underlying resource and also can restrict the access of others to those benefits.

16. Where the control of the asset has been affected, say where municipal land has been encroached, the 'Technical Guide for Accounting by ULBs' issued by ICAI provides that a

² In India, the ICAI has set up a 'Committee on Accounting Standards for Local Bodies' to prescribe standards for local bodies. Adherence to these standards would be needed once they are developed and accepted by the Government.

³ International Public Sector Accounting Standard (IPSAS) 1—Presentation Of Financial Statements; Para 7 - Definitions

provision equal to virtually the entire carrying amount of land shall be provided. Even in such cases, the right to take possession remains with the ULB.

Accounting Standards for Assets

17. The Indian accounting standards issued by the ICAI which have a bearing for the purpose of accounting and valuation of assets are:

- i. Accounting Standard 10 – Fixed Assets
- ii. Accounting Standard 6 – Depreciation
- iii. Accounting Standard 16 – Borrowing Costs
- iv. Accounting Standard 28 - Impairment of Assets
- v. Accounting Standard 19 - Leases

18. Although they do not apply in the Indian context, the IPSAS are a useful source of information for public sector accounting. The major IPSAS for Fixed Assets include:

- i. IPSAS 17 – Property, Plant & Equipment
- ii. IPSAS 16 – Investment Property
- iii. IPSAS 13 – Leases
- iv. IPSAS 5 – Borrowing Costs
- v. IPSAS 21—Impairment of Non–Cash Generating Assets
- vi. IPSAS 26—Impairment of Cash-Generating Assets

19. The other source is the Statements issued by the Governmental Accounting Standards Board (GASB) of USA. Specifically, GASB Statement No. 34 deals with the accounting, valuation and treatment of Fixed Assets in Local Bodies of USA. However, except for Delhi, Bangalore and some other ULBs, the GASB model is hardly used in India.

Classification of Assets

20. The classification of fixed assets can be done in several ways –‘function-wise’ for example water works and sewerage and drainage or ‘nature-wise’ such as plant and machinery etc. The NMAM provides a structure for fixed assets classification based on a mix of ‘function’ and ‘nature’ roles.

21. Since this manual intends to supplement NMAM, we propose that the NMAM classification of assets should be extended for use in this manual. Where states have modified the NMAM heads or added further detail codes, the modified heads should be used.

Infrastructure Assets

22. The NMAM prescribes fixed assets to be divided into two main categories⁴ :

- i. Infrastructure Assets; and
- ii. Other Assets

23. 'Infrastructure assets' are long-lived capital assets associated with governmental activities that normally are stationary in nature and can be preserved for a significantly greater number of years than most capital assets (e.g., roads, bridges, tunnels, drainage systems, water and sewer systems, dams, and lighting systems)⁵. Buildings are excluded from the definition of infrastructure assets unless they are an ancillary part of a network of infrastructure.

24. As per IPSAS, 'infrastructure assets' usually display some or all of the following characteristics:

- i. They are part of a system or network;
- ii. They are specialized in nature and do not have alternative uses;
- iii. They are immovable; and
- iv. They may be subject to constraints on disposal.

Existing classification by ULBs

25. Apart from this, several ULBs may have their own classification systems based on local laws (accounting rules) or practices. In some cases, the maintenance of fixed asset registers is done as per these classifications i.e. Tools Register, Plant & Equipment Register etc.

Asset Classification as per NMAM

26. However, the account coding structure prescribed in NMAM does not maintain this distinction and classifies assets into 11 major groups, all under the Broad head of 'Fixed Assets'⁶: The choice of minor heads is left to states. The proposed classification of Fixed Asset as per NMAM code of accounts(Appendix 2 of NMAM- *Codification Structure & Chart of Accounts*) is into 11 categories as follows:

- i. Land
- ii. Buildings
- iii. Roads & Bridges
- iv. Sewerage and Drainage
- v. Water Works

⁴ National Municipal Accounting Manual, 2005, Government of India, Chapter 21 – Fixed Assets (Para 21.5)

⁵ Similar definition has been used in the United Kingdom in the context of resource accounting.

⁶ National Municipal Accounting Manual, 2005, Government of India, Appendix – 'Chart of Accounts Listing – Assets'

- vi. Public Lighting
- vii. Plant & Machinery
- viii. Vehicles
- ix. Furniture, Fixtures, Fittings and Electrical Appliances
- x. Office & Other Equipments
- xi. Other Fixed Assets

27. Among these, items (iii), (iv), (v) and (vi) can be classified as 'infrastructure assets'.

28. .In another place, the NMAM has classified Assets into 'Movable' and 'Non-movable' category⁷. This distinction is especially useful when the objective is to physically verify the assets, as was the purpose in that chapter.

Land

29. Land includes parks, playgrounds, agricultural land, Dhobighat, Dumping ground, Tonga, rickshaw, taxi (other than underground taxi stands) and cycle stand, parking places (other than those which are covered) and any vacant site on which no construction has taken place. Where assets such as buildings, roads, bridges etc. are constructed on land, all land (including covered land) should be shown as under this head.

Buildings (including Structures)

30. Buildings include Office-Buildings, School-Buildings, Public-conveniences, Hospitals, Dispensaries, Maternity and Child welfare centers, Shopping-complex, Town Hall Building, Community Centers, Staff Quarters, Rest-house, Milk Dairy, Workshop Buildings, Fire stations, Stores Building, Covered taxi stands, Covered parking areas, Lavatory Blocks, Urinals, Dhalaos and Dustbins and garbage vats, etc.

31. Structures include public fountains and others which cannot be classified as buildings but are nevertheless of a permanent nature.

32. Land under buildings should be separated and shown distinctly under 'Land'.

Roads & Bridges

33. This includes several types of assets including Roads, pavements, footpaths, bridges, subways, over bridges, Flyovers, culverts, and causeways.

Sewerage and Drainage

34. This includes items like roadside drains, underground drains, sewerage network etc. Plant and Machinery for stations including pumps etc. would be classified under this head. Note that land

⁷ Ibid – Guidelines For Preparation Of Opening Balance Sheet – para 34.3

and buildings for sewerage would be already classified under 'Land' and 'Building' earlier, and should not be included here.

Water Works

35. This includes all items related to water works such as bore wells, treatment plants, reservoir, overhead tanks, pipelines, plant and machinery for water works etc. Note that land and buildings for sewerage would be already classified under 'Land' and 'Building' above, and should not be shown here.

Public Lighting

36. This covers all assets related to lighting and includes electrical installations like transformers, cables etc, lamps and fittings and poles. Any electrical installations other than for public lighting would be covered under subsequent head of 'Furniture, Fixture, Fittings & Electrical Appliances'.

Plant and Machinery

37. Plant and machinery include all engineering equipments like road rollers, bull dozers etc., medical equipments used in hospitals, dispensaries and maternity centers, scientific equipments, generators, clock tower etc. This will not include plant and machinery used specifically in waterworks, pumping stations, sewerage treatment plant etc. which are already classified under those heads. However, plant and machinery used for other purposes should be included under this head.

Vehicles

38. Vehicles include all types of trucks, water tankers, buses, jeeps, cars, two-wheelers, three-wheelers and loaders, etc. Mobile machinery such as Road Rollers and Bulldozers would not be classified as vehicles as their primary purpose is not transportation.

Office & Other Equipments

39. All items of office use such as computers, peripherals, photocopy machines, type-writers, communication and telecom equipments would be recorded under this head. Other equipment (which may not be used in office) should also be recorded under this head.

Furniture, Fixture, Fittings & Electrical Appliances

40. They include metal as well as wooden chairs, tables, racks, cupboards, water coolers, fans, air-conditioners, refrigerators, TV etc. Items which can be classified as Office and Other Equipment should be first classified under that head. Else, should be included here.

41. It would also include all types of Installation cables, lampposts, mercury vapor lamps, sodium vapor lamps, light fittings, power points, etc., used in the buildings and other premises used by the ULB (other than those used for street-lighting as they are included under the heading 'Public Lighting').

Other Fixed Assets

42. This will include all other assets not specifically covered in any of the earlier heads. It will include for instance, intangible assets such as software, rights etc.
43. Specific assets with different valuation or re-use norms (such as Heritage assets, works of arts etc.) may also be classified as separate sub-groups under this head.

Issues in classification

44. There are a few fixed assets where classification, at times, may lead to confusion. The following may be adopted for such assets:

Traffic signals

45. Traffic signals, if any, are to be classified as part of 'Other Fixed Assets'.

Network of pipes

46. There is sometimes a question of whether the network of pipes within the total land of a water works is to be taken as part of 'Sewerage & Drainage', or as part of 'Water works'. Whatever falls within the identified area of the 'water works' is to be taken as a part of it.

Fountains and decorative structures

47. To be taken under 'Buildings' which includes all civil structures.

Road over-bridge

48. To be taken under 'Roads and Bridges'

Mobile generators

49. Should be taken as part of 'Plant & Machinery'.

Earth moving equipments

50. Should be included under 'Plant & Machinery'.

Statues and Monuments

51. Where the valuation and re-use policy is substantially different from other buildings, this should be shown as a separate sub-group under 'Other Assets'.

Works of Art and History

52. Assets like paintings, manuscripts etc. should be taken under 'Other Assets'. Heritage Buildings and structures, if very different in nature from 'Buildings' may also be classified in 'Other Assets'.

Minor Movable Assets

53. Like office phone, calculators, tools etc. If these are below the threshold for capitalization as per the accounting policies (see next chapter), they should not be capitalized. If they are beyond the

threshold, they should be groups appropriately under 'Office Equipment', 'Plant & Machinery' or 'Other Assets' as appropriate.

Stand-by equipment and servicing equipment

54. Machinery spares which are not specific to a particular item of fixed asset but can be used generally for various items of fixed assets should be treated as inventories for the purpose of AS 2 and such machinery spares should be charged to the statement of profit and loss as and when issued for consumption in the ordinary course of operations; otherwise it shall be capitalized as per AS-10. Stand-by equipment such as generator or a water pump is a fixed asset by itself and should be treated as such.

Major Spare Parts

55. AS-10 states that if some spare parts can be used only in connection with a specific item of fixed assets and their use is expected to be irregular then, they should be capitalized separately at the time of their purchase. So far as classification is concerned, such insurance spares should be tagged to the item of equipment to which they refer.

Capital Work in Progress

56. In addition to the above categories, one more category is important 'Capital Works in Progress'. This includes costs of constructing fixed assets before construction is substantially complete. The identification of an items of construction as 'Capital Work in Progress ' means that the item is intended to be capitalized once it is complete / put into use.

57. Capital Work in Progress (CWIP) is included in the 'Fixed Assets' group of assets but is only an interim account, until the asset is put into use. In particular

- a. CWIP is not recorded in any of the 'asset' registers. Instead, a separate CWIP Register is maintained to record progressive bills for construction;
- b. Any amount paid for purchase / construction of an asset which has not been completed / put to use should be shown as CWIP and recorded in CWIP Register;
- c. No depreciation is charged on CWIP since the asset has not been put to use;
- d. The asset should be transferred from CWIP to Fixed Asset Register when it is put into use. Hence, CWIP register should be reviewed regularly for such items.

Suggested coding of Assets

58. A proper classification of fixed assets should employ a code for each asset. By using the code, a ULB becomes ready for computerization of its Fixed Assets Management System. Further, with such a code, it is easy to cross-classify data and to roll up categories to have the possibility of making a wide variety of reports. The primary classification code is for the major group:

Example 2: Coding System – Office Building

An office building is owned by the municipality in Ward No. 11. The building faces the road and there are adjoining buildings on the side and a service lane at the back of the building. The code for this will be 2001010110002. The first '20' refers to Building, the next '01' refers to the appurtenant land less than 50% of ground covered area, the next '01' refers to the Office Building. '011' refers to the serial number of the ward and the last four digits refer to the serial number of building.

Example 3: Coding System – Road Roller

A road roller which is garaged in the Ward Office of Ward No.9 will have the code 4004010090003. The first '40' refers to 'Plant & Machinery', the next '01' refers to Engineering Equipment, '01' refers to Road Rollers, '09' refers to serial number of the Ward, and the next four digits refer to serial number of the road roller.

62. Fixed Asset codification is essentially a control tool for ULB level management. Hence the structure of the Fixed Asset Code should be such that it enables the ULB to know enough details and maintain sufficient control over its assets. For example, some large cities may feel the need to add more codes to further detail the location.
63. ULBs have the freedom to add or subtract from this list to suit their specific requirements. It is important to remember that no coding structure can fully describe a given asset. For example, while it is certainly possible to have more codes indicating, for example, how many floors a building has, this will make the code much more cumbersome.
64. The purpose of the coding system is to group the assets so that the total value of the group can be calculated, where necessary, age-wise analysis of items within a group can be done and high value and low value assets within a group can be identified for asset management purposes.

CHAPTER III: VALUATION OF ASSETS – GENERAL PRINCIPLES

65. In general, there are two models for valuation of fixed assets:

- The Cost Model; and
- The Revaluation Model

Cost Model

66. The Cost Model requires that:

After recognition as an asset, an item of property, plant and equipment shall be carried at its cost less any accumulated depreciation and any accumulated impairment losses.¹⁰

67. This is the traditional ‘historical cost’ model based on which assets are generally valued for financial reporting purposes in India.

Revaluation Model

68. Under the revaluation model, the valuation of assets is continually reviewed to reflect the fair market value as much as possible. The model is described below:

After recognition as an asset, an item of property, plant and equipment whose fair value can be measured reliably shall be carried at a revalued amount, being its fair value at the date of the revaluation less any subsequent accumulated depreciation and subsequent accumulated impairment losses.¹¹

69. The fair value of items of assets is usually determined from market-based evidence by appraisal. However, many ULBs have assets for which it may be difficult to establish market value because of the absence of market for these assets. In such cases, the fair value of the item may be established by reference to other items with similar characteristics, in similar circumstances and location.

Accounting Principles for Fixed Assets

70. Under the NMAM, principles for fixed asset accounting / valuation are¹²:

- All Fixed Assets shall be carried at cost less accumulated depreciation.** The cost of fixed assets shall include cost incurred/money spent in acquiring or installing or constructing fixed asset and other incidental and indirect expenses incurred up to that date.
- Any Fixed Asset, which has been acquired free of cost or in respect of which no payment has been made, shall be recorded at nominal value of Re. 1/-.**

¹⁰ International Public Sector Accounting Standard (IPSAS) 17—Property, Plant & Equipment; Para 43

¹¹ Ibid – para 44

¹² National Municipal Accounting Manual, Chapter 3 – Accounting Policies (Para 3.21)

- c. **All assets costing less than Rs.5,000 (Rupees Five thousands) would be expensed / charged to Income & Expenditure Account in the year of purchase**
- d. **Interest on borrowings directly attributable to acquisition or construction of qualifying fixed assets up to the date of commissioning of the assets shall be capitalized.**¹³

Choice of Model

71. The recommended valuation model for fixed assets is that:

- a. **Assets should be valued at initial (historical) cost paid to acquire them;**
- b. **Depreciation should be charged periodically to reflect the written down value of the asset;**
- c. **Revaluation would be permitted, with some restrictions.**

Recognition of Fixed Assets

72. The principle for determining capitalization is given below:

The cost of an item shall be recognized as a fixed asset if:

- (a) the asset is held for producing or providing goods or services and is not held for sale in the normal course of business;**
- (b) the future economic benefits or service potential associated are expected to flow to the entity;**
- (c) The estimated useful life of the asset is beyond one year; and**
- (d) Is beyond the minimum threshold limit for recognition as fixed asset.**

73. The NMAM accounting principles provide a cut-off for recognizing assets in the financial statements. As per this, assets below Rs.5,000 should be charged off to the Income & Expenditure account. Hence, any asset beyond this value should be recognized as a Fixed Asset in the financial statements as well as in the supporting records.

74. The threshold of Rs.5,000 is based on the principle of materiality and is to be applied on the historical cost of the asset (not the depreciated value). Hence, any asset whose **original** cost is estimated to be below Rs.5,000 should be

- a. Charged to Income & Expenditure account, if it occurs during the year;
- b. Omitted while considering the assets being collated / valued for the Opening Balance Sheet.

¹³ Ibid – para 3.18

75. In case an asset is being constructed and the construction takes time, the asset should be recognized as specific fixed asset i.e. building etc. only when the construction is complete. Until then, the amounts paid should be kept under 'Capital Work in Progress'.
76. There are many instances where the nature of a transaction makes it difficult to distinguish whether it is revenue expenditure or a capital expenditure. Guidance in this regard is provided in Chapter IV following.

Historical Cost

77. This is the bedrock of the valuation principle and is stated as follows:

Fixed Assets are to be reported at Historical Cost. The cost of a fixed asset includes not only its purchase price or construction cost but also related charges necessary to place the asset in its intended location and condition for use. Since the historical cost of donated / gifted assets is NIL, they are to be valued at a nominal cost of Rs. 1/-

The rationale of valuation at Re. 1/-

It may appear that a Re.1/- valuation is of no significance in the overall fixed asset block of the ULB which may run into crores. Hence, it would perhaps make no difference if the asset was valued at NIL. This is erroneous. The reason for valuing assets at Re.1/- is to ensure that the asset is identified and tracked in the fixed asset system. Non-recognition of the asset or NIL valuation would not allow the asset to appear in the Fixed Asset Register.

Hence municipal managers and auditors should particularly pay attention to the transaction of assets which are valued at Re.1/- for technical reasons, but may be worth more than many other assets.

78. The cost of a fixed asset includes:
- a. purchase price, less trade discounts and rebates, if any;
 - b. import duties;
 - c. other taxes or levies which are non-refundable in nature;
 - d. transportation cost, if charged separately from the purchase price;
 - e. cost of inspection, if paid separately;
 - f. handling costs;
 - g. cost of site preparation;
 - h. installation cost, including cost of such permanent or temporary structures that are considered necessary for installation;
 - i. professional fees for engineers or architects or inspectors, etc.; and
 - j. any other cost incurred to put the asset at its location and use.

79. Any expenditure that is made by the ULB on test runs or experimental production is to be capitalized and added to the cost of the asset. For example, the oil and bitumen necessary for the test run of an assaulting plant is to be added to the cost of the plant.
80. Cost of the asset should include all costs incurred to bring the asset to a working condition. For example, if a large pump is to be installed at a water treatment plant, not only the cost of pump but also the transportation cost, where charged separately, should be included.

Self constructed assets

81. In cases where a ULB constructs the asset itself (school building, primary health clinic, etc.), the cost of construction of that building and other costs which are directly attributable should be taken into consideration in arriving at the value of the building. This means that all the material costs of construction, payments made to the various contractors, etc., should be included. For example, if the ULB appoints an Assistant Engineer whose only work is to look after the construction of the building, then the salary of the Assistant Engineer for the construction period should also be added.
82. As per AS-10, administration and general overhead are excluded from cost of fixed asset as they do not relate to specific fixed asset. However, if such expenses are related to construction or acquisition of a particular fixed asset, then it should be capitalized.

Assets acquired under exchange

83. Sometimes, a ULB may acquire some fixed assets in exchange for some other fixed assets. This can happen for instance, when old office machinery is exchanged for a newer model. Where the assets exchanged are similar, the net book value of the asset (the office machinery) which is exchanged should be taken, and to it the extra amount that is paid, if any, is added. If instead of an extra payment, a refund is involved, the necessary adjustment will have to be made. In case of dissimilar assets, the assets acquired should be recognized at its fair value.
84. In certain special cases, a ULB may acquire constructed floor area in a building for the construction of which the ULB has given development rights to a developer. In such a case, the constructed floor area will be recorded at the fair market value of the property.

Fair Market Value

As per AS-10, Fair Market Value is the price that would be agreed to in an open and unrestricted market between knowledgeable and willing parties dealing at arm's length who are fully informed and are not under any compulsion to transact.

85. It is pertinent to note that this use of Fair Market Value does not vitiate the Historical Cost Concept as it merely *determines what would have been the historical cost paid for the property, but for the exchange transaction.*

Borrowing Cost

86. Borrowing costs that are directly attributable to the acquisition, construction or production of a *qualifying* asset should be capitalized as part of the cost of that asset.

87. A qualifying asset is an asset that necessarily takes a *substantial period of time* to get ready for its intended use or sale. As per AS for ULBS issued by ICAI on 'Borrowing Cost' it is specified that a time period of 12 months is a *substantial period of time* unless shorter time period can be justified on the basis of facts and circumstances of the case.
88. In case any borrowing costs i.e. interest on loan etc. can be *identified* with the asset, they can be capitalized. The general test for determining whether a loan can be *identified* with an asset is to ask the question, "Would these borrowing costs have been avoided if the outlays on the qualifying asset had not been made?" If yes, then the borrowing cost can be capitalized, else not.
89. The capitalization of borrowing costs should commence when:
- a. Outlays for the asset are being incurred;
 - b. Borrowing costs are being incurred; and
 - c. Activities that are necessary to prepare the asset for its intended use or sale are in progress
90. Capitalization of borrowing costs should be suspended during extended periods in which active development is interrupted, and expensed. Capitalization of borrowing costs should cease when substantially all activities necessary to prepare the asset for its intended use or sale are complete.
91. The capitalization of interest cost is applicable only for new assets being developed / constructed by a ULB. *'This principle should not be applied for valuation of existing assets for the purpose of preparing the First Balance Sheet.*

Depreciation

92. 'Depreciation' is the charge of a fair proportion of the *depreciable amount* in each accounting period during the *expected useful life* of the asset.¹⁴
93. 'Depreciable amount' of an asset is its historical cost, or other amount substituted for historical cost in the financial statements, less the estimated residual value.¹⁵
94. The 'residual value' of an asset is the estimated amount that an entity would currently obtain from disposal of the asset, after deducting the estimated costs of disposal, if the asset were already of the age and in the condition expected at the end of its useful life.¹⁶
95. 'Useful life' is:
- a. The period over which an asset is expected to be available for use by an entity; or

¹⁴ Accounting Standard 6 – Depreciation Accounting – para 3.1

¹⁵ Ibid – para 3.4

¹⁶ International Public Sector Accounting Standard (IPSAS) 17—Property, Plant & Equipment; Para 13

- b. The number of production or similar units expected to be obtained from the asset by an entity.
96. The value of an asset in future years (after recognition in financial statements) is the Book Value, which is calculated by deducting Accumulated Depreciation from the Historical Cost of the asset.

Process of Valuation

97. The process of valuation of assets is required:
- a. When the first (opening balance sheet) is being prepared; and
 - b. At the time of preparing annual financial statements
98. This is discussed, in the background of these principles, in the following chapters.

CHAPTER IV: VALUATION OF ASSETS FOR OPENING BALANCE SHEET

Process for Preparation of Opening Balance Sheet

99. The following steps need to be followed for preparation of Opening Balance Sheet:

- a. **Identification of Assets** - using various sources of data, and compiled in the forms provided in Chapter 34 of the NMAM;
- b. **Verification of Assets** – This is prescribed to be carried out as current identification initiatives may either miss out existing assets or take in assets which do not belong to the ULB. Hence some test checks or verification, with records and physical inspection are recommended;
- c. **Identification of Assets that require Valuation** - This shortlists the assets which need to be valued in accordance with the following procedures and have not outlived their useful life in which case a summary valuation of Re.1/- can be made;
- d. **Valuation of Assets** – This is the subject matter of this manual. Although accounting norms / policies for these are provided, ULBs lack guidance in practical matters of asset valuation. This requires determination of appropriate Book Value (using historical cost) for incorporation in the Opening Balance Sheet;
- e. **Passing of opening entries** – This is the process for preparation of First (Opening) Balance Sheet. Taking cognizance of the assets value in the accounting records brings it within the purview of the new accrual based double entry accounting system.
- f. **Maintenance and updating of fixed asset records** – The details of assets are also recorded in appropriate Fixed Asset Registers and a system has to be developed through which these registers are continually updated with any addition, modification or disposal of these assets.

100. This chapter deals with the bases for valuation of assets in the Opening Balance Sheet of a ULB.

Basic Premises

101. The basic premises proposed for the valuation methodology are:

- a. Considering the current practices in asset record maintenance, most ULBs do not have readily available records about existing assets;
- b. The purpose of valuation is not to determine the 'correct value' of an asset. It is to get a *reasonable estimate of the book value* for the purpose of including in a statement which reflects the 'true and fair' financial position of the ULB;
- c. Unlike other entities where valuation of assets affects share prices and / or prospective takeovers *based on valuation of the company*, this concern is not relevant to ULBs;

- d. Some assets present problems in terms of identification because of their nature – for example, underground drains cannot be easily verified while preparing asset list;
- e. Many assets of ULBs present problems in terms of resale or reuse. For example, roads which have been constructed cannot generally be disposed off, sold, nor reused.
- f. Even valuation at a nominal price Re 1/- is recommended for maintaining the asset on the fixed asset register. Hence, the value is not as important as the identification and correct recording of the nature of the asset.

102. Keeping these concerns in mind, the premise for valuation is as follows:

- a. **Encourage thorough identification of assets** – this must be done to ensure that not even one asset, no matter how small, is left out;
- b. **Simplify valuation** – Considering the premises mentioned, it would be sufficient to have a ‘reasonable valuation’ rather than a ‘perfect’ one;
- c. **Ensure updating** – Ensure that after the one time exercise on identification and valuation, the assets are recorded in the asset register and the register is regularly updated thereafter.

Valuation principles

103. The identified assets of the ULB may have been gifted to it or purchased / constructed by it over the years. The valuation process has to be carried out for assets as on a particular date (for example on the last day of the previous financial year, say 31.3.2008). All references to valuation should be made with respect to this date. The process of valuation shall be as follows:

104. If the asset was received as gift:

- a. Value at Re.1/-. All particulars of the asset should be recorded in the prescribed forms.

105. If the asset was purchased / constructed, it will be valued as per the following order of preference:

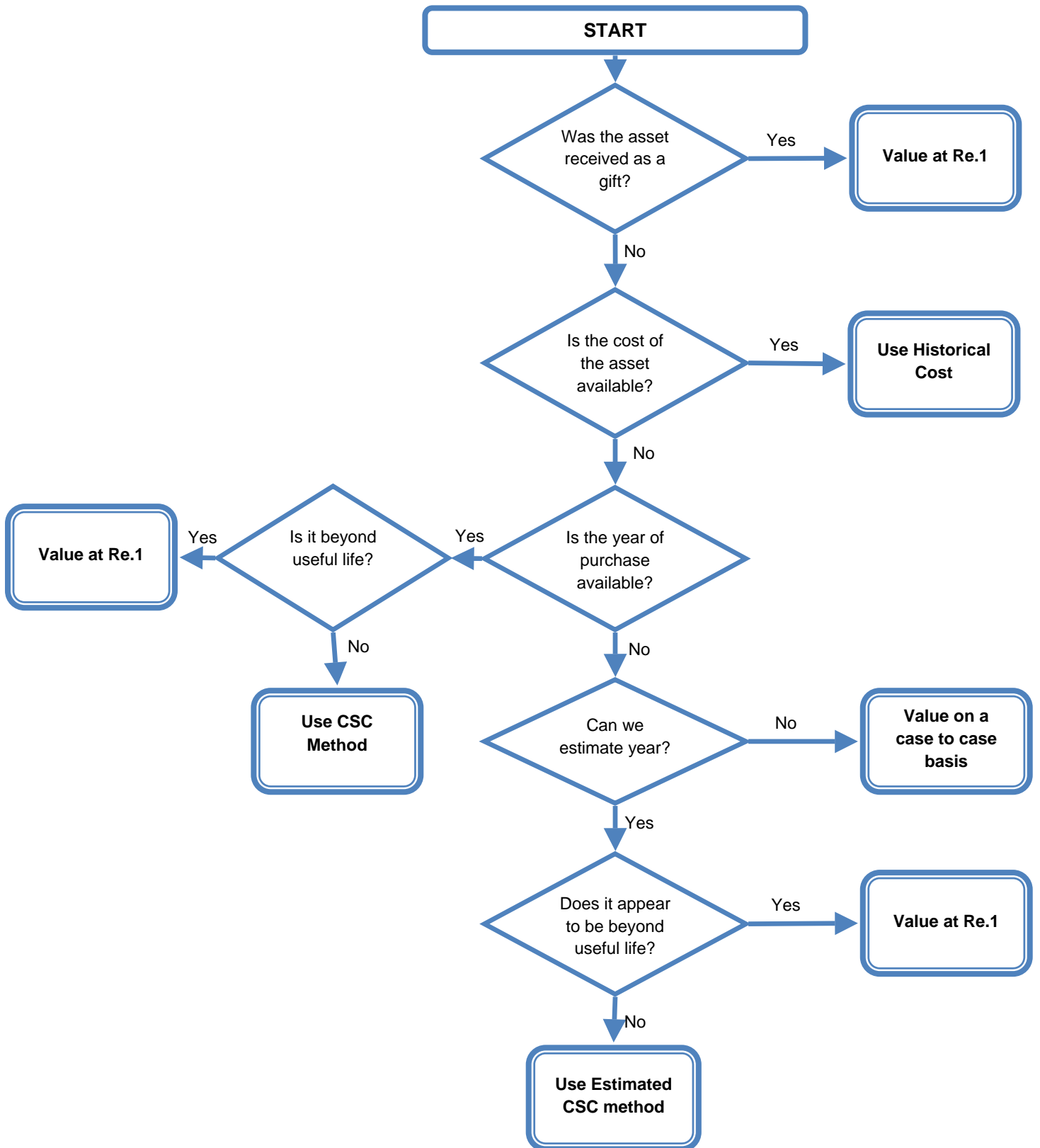
- a. If both the cost and date of purchase/ construction is available / ascertainable:
 - i. Original cost less depreciation provided from the date of purchase / construction to the date of valuation.
- b. If cost is not available /unascertainable but the date or year of construction/ purchase is ascertainable:
 - i. In case of land where the original documents are not available, valuation can be ascertained from relevant records of the Land Revenue Department or transaction value of a similar plot in the similar area around the estimated year of transaction

- ii. If the asset has outlived its estimated useful life, then it will be valued at Re. 1/-. Estimation of useful life will be based on the list used for estimation of depreciation for ULBs. This is given in the following chapters.
- iii. If the asset has not outlived its useful life, then
 - 1. Valuation will be done based on the *Current Standard Cost (CSC)* rates prescribed. The ULB will use this per sq. feet rate or area rate and apply it to the quantitative parameter of the asset. This will give the estimated current standard cost of the asset.
 - 2. In order to reflect the cost of the asset in the year in which it was purchases / constructed, the CSC will need to be deflated by an appropriate inflation index (discussed ahead) to give the *Deflated Standard Cost (DSC)* of the asset.
 - 3. Thereafter, the value will have to be depreciated based on the recommended rate of depreciation (discussed ahead) in order to arrive at the *Estimated Book Value* of the asset, which will be carried to the Opening Balance Sheet as Gross Block.
- c. If neither the cost nor the date of purchase/ construction is available:
 - i. If the asset is beyond its estimated useful life, it will be valued at Re. 1/-
 - ii. If the asset is within its useful life, estimation shall be made of its year of purchase / construction and the procedures prescribed in case of (ii) above shall be applied i.e. its estimated CSC, DSC and *Current Book Value* shall be deduced using the standard rates and the deflation indices.
- d. In case it is impossible to assess the year of purchase / construction or the asset is unique in nature, not appearing in the standard list, its valuation will have to be done on a case by case basis after taking into account the condition and obsolescence factor. The ULBS may use specialist valuers to assess the value of such assets in such cases.

Flowchart of valuation

106. This decision making and valuation process is explained in the following flowchart:

Flowchart for valuation of Fixed Assets for Opening Balance Sheet



Asset received as a gift

107. If evidence exists, or it is known that an asset was received by the ULB as a gift i.e. without any consideration being paid, it should be recognized at Re.1/-. This is in line with the basic policy of historical cost reporting i.e. to report an asset at the consideration paid for it.
108. However, these assets may be of considerable value in the market and hence, their nominal valuation should not take away the importance to maintain and monitor them appropriately.
109. It is not necessary that there should be a document establishing the gift – mere knowledge would suffice.

Historical Cost Based

110. Where the details of purchase are available (this will usually happen in case of recent years' assets), the amount of purchase cost and date of purchase would be available. In such a case valuation should be done as follows:
- a. Step 1: Determine Historical cost as on the date of purchase (refer previous chapter for details);
 - b. Step 2: Determine depreciation till valuation date (this is covered subsequently);
 - c. Step 3: Deduct depreciation (b) from historical cost (a) to arrive at the book value on the date of valuation.
111. This is the closest we can get to the historical cost of the asset. All other methods are improvisations to overcome deficient information about the existing assets.
112. Although policies for capitalizing assets require inclusion of ancillary expenses such as borrowing cost, these require significant analysis and are elaborate. Unless the amount of such expense is likely to be significant, they can be ignored for valuation of existing assets in the opening Balance Sheet.

Illustration on use of Historical Cost Method

A ULB determines that an MS Steel Tank was installed at a cost of Rs. 1,50,000 and started operation on 13.4.2006. The Historical Cost based Valuation on 31.3.2008 would be as follows:

Historical Cost	1,50,000
Less: Depreciation*	<u>60,000</u>
Book Value on 31.3.2008	<u>90,000</u>

* Depreciation is calculated on the Original Cost for 2 years (2006-07 and 2007-08) @ 20% p.a. of Historical Cost.

Note: As per Depreciation policy, use of asset beyond six months in a year would lead to full year's depreciation. Hence in this case, full year depreciation is charged for 2006-07.

Current Standard Cost Method

113. Where the historical cost is not available, but the date (or year) is known, we can apply appropriate standardized valuation techniques to estimate the Current book Value of the asset.
114. Under the Current Standard Cost (CSC) method, we estimate current cost (as on the date of valuation for example 31.3.2008) at which equivalent (new) assets can be purchased or constructed. They are calculated in terms of appropriate 'units of measurement' such as rate per square meter, rate per running feet etc. and then applied to the details of the asset.
115. Rates are calculated for each asset's 'unit of measurement' such as:

Group	Unit
Land	Sq meters
Buildings	Sq meters
Roads of standard width	Per km
Pipelines	Diameter X length
Drains of standard dimensions	Running meters
Pumps	Horse Power

Based on these standard rates, the value of the asset can be determined. For instance, a Building of 1500 sq meters can be valued by multiplying the rate prescribed for one meter cube by 1500.

116. Ideally, every state would have its own valuation process and with appropriate engineers, ULB representatives and accounting specialists, be able to determine the Rate for each unit of measurement¹⁷. A model list of Current Standard Cost for various assets is given in Annex 2.
117. The process of valuation would be as follows:
- a. Step 1: Collect appropriate details about the asset (including location, quantitative details such as area, length etc.)
 - b. Step 2: Classify to appropriate head in the CSC list. If exact description is not available, use the closest match possible.
 - c. Step 3: Check if the useful life is over (refer Depreciation rate list). If so, value at Re. 1/-. Else, go to Step 4.
 - d. Step 4: Calculate CSC by multiplying the quantity with the rate provided. This is the CSC of the asset i.e. the value of purchasing / constructing a new asset as on date.
 - e. Step 5: Deflate this index to the year of purchase giving the Deflated Standard Cost (DSC). This is done to estimate the historical cost in the year of purchase. A standard list

¹⁷ This process has been carried out in Karnataka and the government has notified current standard rates for various assets. These are used in this manual as representative rates. States may decide to amend or add to these.

of indices from 1981-82 to 2007-08 is given in Annex 4¹⁸. Any asset known to have been procured before 1981-82 should be deflated using the 1981-82 index.

- f. Step 6: Calculate depreciation from the year of purchase till valuation date, assuming this value (Step 5) was the original historical cost.
- g. Step 7: Deduct the depreciation (Step 6) from Historical Cost (Step 5) to arrive at the Current Book Value of the asset.

Illustration on use of CSC Method

A ULB determines that a Class 1 Civil Structure Building was constructed in 1976 with the following specifications:

Type: RCC framed structure with mosaic flooring and teak doors

Height: Ground + 2 floors

Area: Ground Floor – 500 sq m, First Floor – 320 sq m, Second Floor – 240 sq m

The CSC based Valuation on 31.3.2008 would be as follows:

Current Standard Cost*	62,36,000	(Value as on 31.3.2008)
Deflated Standard Cost (DSC)**	11,31,760	(Estimated Value in 1976)
Less: Depreciation***	<u>7,24,327</u>	(Depreciation till 2008)
Book Value on 31.3.2008	<u>4,07,433</u>	

* Ground Floor (500 X 6,200)+ First (320 X 5,600)+ Second (240 X 5600) = Rs. 62,36,000. Rates for CSC taken as per Annex 2.

** $(62,36,000/551)*100 = 11,31,760$. Index for 2007-08 is 551; index for 198-82 and earlier is 100. Index taken from Annex 4.

*** Depreciation is calculated on the DSC for 32 years (1976 – 2008) @ 2% p.a. (since useful life is 50 years, not yet exhausted)

Estimated CSC Method

118. Where the year of purchase / construction cannot be estimated, there will be difficulty in deflating and applying depreciation rates. However, keeping in view the objective of having reasonable valuation principles, it is suggested that Estimated CSC method may be used. This will be done as follows:

- a. Step 1: Collect appropriate details about the asset (including location, quantity details such as area, length etc.)
- b. Step 2: Classify to appropriate head in the CSC list. If exact nomenclature is not available, use the closest specification possible.

¹⁸ There can be several price indices which can be used for this. However, since this related to Capital Assets, we recommend the Cost of Inflation Index (CII) released by the Income Tax Department to calculate Capital Gains Tax.

- c. Step 3: Estimate year of purchase. This becomes subjective but is possible to be carried out by the ULB itself. This process is simpler and faster than a valuation appraisal. The years may be estimated even within ranges for e.g. 10-15 years old. In this case, the maximum life can be taken i.e. 15 years ago.
- d. Step 4: Check if the useful life is over (refer Depreciation rate list). If so, value at Re. 1/-. Else, go to Step 5.
- e. Step 5: Calculate CSC by multiplying the quantitative units with the rate provided. This is the CSC of the asset i.e. the value of purchasing / constructing a new asset as on date.
- f. Step 6: Deflate this index to the estimated year of purchase giving the Deflated Standard Cost (DSC). This is done to estimate the historical cost in the estimated year of purchase. Use standard list of indices from 1981-82 to 2007-08 given in Annex 4¹⁹. Any asset known to have been procured before 1981-82 should be deflated using the 1981-82 index.
- g. Step 7: Calculate depreciation from the year of purchase till valuation date, assuming this value (Step 6) was the original historical cost.
- h. Step 8: Deduct the depreciation (Step 7) from Historical Cost (Step 6) to arrive at the Current Book Value of the asset.

Illustration on use of Estimated CSC Method

A ULB identifies a Class 1 Civil Structure Building. The year of construction cannot be estimated but it is expected to have been made 25-30 years ago. The specifications are:

Type: RCC framed structure with mosaic flooring and teak doors

Height: Ground + 2 floors

Area: Ground Floor – 500 sq m, First Floor – 320 sq m, Second Floor – 240 sq m

The Estimated CSC based Valuation on 31.3.2008 would be as follows:

Current Standard Cost*	62,36,000	(Value as on 31.3.2008)
Estimated DSC**	11,31,760	(Estimated Value in '78)
Less: Depreciation***	6,79,056	(Depreciation till 2008)
Book Value on 31.3.2008	4,52,704	

* Ground Floor (500 X 6,200)+ First (320 X 5,600)+ Second (240 X 5600) = Rs. 62,36,000. Rates for CSC taken as per Annex 2.

** $(62,36,000/551)*100 = 11,31,760$. Index for 2007-08 is 551; index for 1981-82 and earlier is 100. Index taken from Annex 4.

*** Depreciation is calculated on the DSC for 30 years estimated @ 2% p.a. (since useful life is 50 years, not yet exhausted)

¹⁹ There can be several price indices which can be used for this. However, since this related to Capital Assets, we recommend the Cost of Inflation Index (CII) released by the Income Tax Department to calculate Capital Gains Tax.

Case by Case determination

119. In case the cost as well as the year is not determinable, there would have to be a case by case determination of value. However it should be remembered that the purpose is to determine the Book Value rather than the Fair Market Value as on date. Hence, the following order of process may be followed:

- a. Step1: Is the asset's useful life over? (Refer Annex 3 for Useful life). If so, value at Re. 1/-.
Else go to Step 2.
- b. Step2: If the asset is within its useful life, determine book value by reference to other assets with same characteristics or properties. Assumptions can be made in this case – the objective is to have a reasoned justification for the value.
- c. Step 3: Use the rate of similar asset for calculating the value of this asset.

Important Caveat – Maintenance of Gross Block and Accumulated Depreciation

The above processes are required to provide a Gross Block Value (Historical Cost) and Accumulated Depreciation till date. It is important to maintain both these values; merely using the Net Book Value i.e. Gross Block less depreciation will create problems in charging annual depreciation using Straight Line Method. For e.g. In the last illustration:

Historical Cost (Gross Block) is	Rs. 11,31,760
Accumulated Depreciation is	Rs. 6,79,056 (@ 2% for 30 years)
And Net Book Value is	Rs. 4,52,704

Now, if only the Net Book Value is recorded i.e. 4,52,704, annual depreciation will be charged on this i.e. Rs.9,054 (2%) p.a. and the assets value will be extinguished **only after another 50 years**.

However, using the original historical cost of Rs.11,31,760 results in an annual depreciation of Rs. 22,635 (2%) which will ensure that the asset will have been **fully depreciated in another 20 years**.

Issues in using CSC

120. The use of CSC and DSC, as well as choice of rates can obviously be debated. The purpose of proposing these rates is in line with the larger objective of 'reasonable' valuation and also to achieve a certain sense of uniformity in asset valuation across ULBs in a state.

121. Current efforts in some states have resulted in anomalies in valuation such that 2 ULBs with similar assets are showing drastically different values. This is because the valuation principles are not standardized and sometime technical finesse (such as non-availability of records in one ULB) results in different valuation (i.e. at nominal value, instead of historical cost).The CSC can be adapted by state governments to achieve this overall standardization in valuation, depreciation and book value determination.

122. However, some assets do not have prescribed CSC. The valuation in this regard can be as follows:

Items not having CSC prescribed rates	Suggested method
Land	Use 'Guidance Value' prescribed under the Stamp Duty Act for the location, type of land and date.
Laboratory Equipment	Check if the useful life is over – generally 10 years, then value at Re.1/- If within useful life, use recent purchase cost for similar assets and deflate using index. Depreciate to arrive at current book value.
Vehicles	The year will be available by reference to registration document. If it is beyond useful life, value at Re. 1/-. Otherwise determine rate of particular car in that year from dealer / manufacturer. Value and depreciate accordingly.
Furniture, fixture, fittings, electrical appliances	Check if the useful life is over – generally 10 years, then value at Re.1/- If within useful life, use recent purchase cost for similar assets and deflate using index. Depreciate to arrive at current book value.
Office & Other Equipment including Computer, peripherals etc.	Check if the useful life is over – generally 10 years, then value at Re.1/-. If within useful life, use recent purchase cost for similar assets and deflate using index. Depreciate to arrive at current book value.

Valuing Capital Work in Progress

123. The information with regard to Capital Work in Progress (CWIP) shall have to be prepared on the date of the opening Balance Sheet from the records such as Bills Register, Measurement Book, Grants Register etc. Since assets represented by the Capital Work in Progress would be under construction on the prescribed date, it should be easier to identify these assets and then to determine its costs.
124. Amounts are to be booked based on the gross amount of bill received by the ULB pertaining to work done before the Balance Sheet date. A cut-off date of 2 months beyond the opening Balance Sheet may be taken to include all bills which may have been received afterwards but pertain to work done before the Balance Sheet date. This may be done by carrying out post vouching (i.e. checking of vouchers for at least two months after the Balance Sheet date, to identify payments being made for CWIP).
125. Borrowing cost for CWIP will also be included if it satisfies the requirements as per Accounting Standards 16 on Borrowing Costs.

CHAPTER V – VALUATION OF ASSETS - ONGOING

126. Once the asset have been valued and included in the Balance Sheet, their carrying value needs to be periodically recomputed to provide for depreciation and other transactions.
127. Aspects such as revaluation of assets, depreciation of assets etc. which arise on a regular basis in the ULB are discussed in this chapter.

Depreciation of Assets

128. Depreciation has a significant effect on the determination and presentation of the financial position of a ULB. Depreciation is charged in each accounting period by reference to the extent of the depreciable amount.
129. ULBs need to report depreciation accurately in their financial statements for two main reasons.
- to match expenses with the incomes generated because of or with, those expenses and;
 - to ensure that the asset values in the balance sheet are not overstated. An asset acquired in Year 1 is unlikely to be worth the same amount in Year 5.

Accounting Principles

130. The basic principles under NMAM with regard to depreciation are:
- Depreciation shall be provided at the rates prescribed by the state. **Depreciation on all fixed assets is to be provided** consistently on either **Written down Value or Straight Line Method**. The Accounting Standard as well as NMAM allows any of these two methods to be used. It only states that whatever method is used, it should be applied consistently.
 - Depreciation shall be provided at full rates for assets, which are purchased / constructed before October 1** of an Accounting Year. Depreciation shall be provided at half the rates for assets, which are purchased / constructed on or after October 1 of an Accounting Year.
 - Depreciation shall be provided at full rates for assets, which are disposed on or after October 1** of an Accounting Year. Depreciation shall be provided at half the rates for assets, which are disposed before October 1 of an Accounting Year.

Straight-line Method (SLM)

131. Straight-line depreciation is the simplest and most often used technique, in which the ULB estimates the "salvage value" of the asset after the length of time over which it will be used to generate revenues or provide service (useful life), and will recognize a portion of that original cost in equal increments over that amount of time.

Written Down Value Method

132. The WDV method is a type of accelerated depreciation because it recognizes a higher depreciation cost earlier in the asset's lifetime. Under this method, each year's depreciation is applied to the opening net book value of the asset rather than original cost of the asset. This process continues until we reach the residual /salvage value or the end of the asset's useful life.
133. **Residual or Salvage value** is the amount which an enterprise expects to obtain for an asset at the end of its useful life after deducting the expected costs of disposal.
134. It should also be noted that the book value of the asset being depreciated is never brought below its salvage value, regardless of the method used.
135. Where the salvage value is determined at NIL, the asset value should always be retained at a nominal value of Re. 1/-

Rate of Depreciation

136. State governments would be best placed to determine applicable depreciation rates for ULB assets. The important things to remember are:
- a. The classification of assets for depreciation should follow the accounting codification structure;
 - b. The method of depreciation i.e. SLM or WDV should be determined upfront;²⁰
 - c. 'Useful life' and 'residual value' of various assets should be determined in consultation with engineers, valuers and municipal staff. It is important to remember that there is no 'perfect' rate and all depreciation rates are only an estimation;
 - d. Determine rates for various classes of assets using SLM or WDV;
 - e. Provide these for use by the ULBs.
137. This manual provides an estimation of useful life for various assets and applicable SLM depreciation rates. This is given in Annex 3²¹.

Closing Book Value

138. Once these rates have been applied to the assets, the Closing Book Value is determined by reducing the depreciation charge for the year from the Opening Book Value. This is the 'carrying amount' of the assets at the end of the period.

²⁰ The Companies Act provides both SLM and WDV rates for depreciation of assets. The Income Tax Department only allows use of WDV. Certain large ULBs like Kolkata and Hyderabad are providing depreciation on WDV, However, state level implementations in Tamil Nadu and Karnataka are using SLM.

²¹ These rates are adapted from Karnataka which followed the due process described in determining the rates for ULB assets.

Amortization

139. In the case of an intangible asset, the term 'amortization' is generally used instead of depreciation. Both terms have the same meaning.
140. The period of amortization will depend on the asset. Accounting Standard 26 prescribes for a rebuttable presumption of 10 years for the life of intangible assets. However, in case of items like software where technological advances will result in a quicker obsolescence, a time frame of 3-5 years is recommended.
141. Intangible assets below Rs.25,000 can be expensed and need not be capitalized. The higher limit (compared to tangible assets) is prescribed to avoid detailed recording and amortization of minor items like software which generally cost below Rs.25,000.

Impairment of Assets

142. 'Impairment' is a loss in the future economic benefits or service potential of an asset, over and above the systematic recognition of the loss of the asset's future economic benefits or service potential through depreciation.²²
143. In other words, if the carrying amount of an asset is more than the amount that is to be recovered through use or sale of the asset, then the asset is said to be 'impaired'. It basically means that although there may be useful life left of an asset, the productivity of the asset has gone down sharply. For example if by policy of the government, certain items are decided not to be produced by the ULB, the future cash flows would be affected that the existing recoverable value of assets used in the production could go below its carrying amount.
144. ULBs are required to identify impaired assets at every Balance Sheet date and to disclose the same. However, that application of the Accounting Standard²³ is fairly complex and will require the taking of decisions on case-to-case basis for the calculation of the recoverable amounts, useful lives and so forth. ULBs are advised to take the help of professional accountants for the identification of impaired assets and determination of the extent of impairment.

Creation / purchase of new assets

145. The ongoing construction / purchase of fixed assets would be valued at historical cost and as and when the transaction is undertaken. No specific special treatment / process is prescribed in this regard. The process prescribed in NMAM would suffice to record assets as and when they are purchased / constructed.

Accounting Principles

146. Some significant accounting treatment for creation / purchase of assets are:
- a. All Fixed Assets shall be carried at cost less accumulated depreciation. The cost of fixed assets shall include cost incurred/money spent in acquiring or installing or constructing

²² International Public Sector Accounting Standard (IPSAS) 21—Impairment of non-cash generating assets; Para 14

²³ The relevant Indian Accounting Standard is AS 28

fixed asset, interest on borrowings directly attributable to acquisition or construction of qualifying fixed assets up to the date of commissioning of the assets and other incidental and indirect expenses incurred up to that date.²⁴:

- b. Assets under erection/installation on existing projects and capital expenditures on new projects (including advances for capital works and project stores) shall be shown as "Capital Work-in-Progress"²⁵
- c. Any Fixed Asset, which has been acquired free of cost or in respect of which no payment has been made, shall be recorded at nominal value of Re. 1/-.
- d. All assets costing less than Rs.5,000 (Rupees Five thousands) would be expensed / charged to Income & Expenditure Account in the year of purchase
- a. Interest on borrowings directly attributable to acquisition or construction of qualifying fixed assets up to the date of commissioning of the assets shall be capitalized.²⁶

Ongoing Lifetime costs

147. After the asset has been acquired, certain costs are incurred during its lifetime for maintenance, repair and improvement. The treatment of these expenses often cause confusion as some of them may merit capitalization i.e. addition to the value of fixed assets. This section provides guidance on the issues of classification of expenses as revenue or capital.

Maintenance and repairs

148. The terms 'maintenance' and 'repairs' generally are used interchangeably. However, they are slightly different.

149. Maintenance is defined as

'the keeping of property in operable condition'

150. Repair is defined as

'the restoration of a capital asset to its full productive capacity, or a contribution thereto, after damage, accident, or prolonged use, without increase in the asset's previously estimated service life or productive capacity'.²⁷

151. Since ordinary maintenance and repairs expenditures are regarded as operating costs, they are to be charged directly to expense when incurred.

Extraordinary Repairs

152. Extraordinary repairs are repairs that:

²⁴ National Municipal Accounting Manual, Chapter 3 –Para 3.21

²⁵ National Municipal Accounting Manual – Chapter 3, para 3.12

²⁶ Ibid – para 3.18

²⁷ Eric Louis Kohler, Kohler's Dictionary for Accountants

‘ . . . occur infrequently, involve relatively large amounts of money, and tend to increase the economic usefulness of the asset in the future because of either greater efficiency or longer life, or both. They are represented by major overhauls, complete reconditioning, and major replacements and betterments’.²⁸

153. Because expenditures for extraordinary repairs increase the future economic usefulness of an asset, they benefit future periods and are therefore capital expenditures.

Replacements, Improvements and Additions

154. Replacements, improvements, and additions are related concepts.

155. Replacement is defined as

‘the substitution of one fixed asset for another, particularly of a new asset for an old, or of a new part for an old part.’²⁹

156. An improvement (or betterment) is

‘an expenditure having the effect of extending the useful life of an existing fixed asset, increasing its normal rate of output, lowering its operating cost, increasing rather than merely maintaining efficiency or otherwise adding to the worth of benefits it can yield.’

157. Improvements ordinarily do not increase the physical size of the productive facility. Such an increase is called an ‘addition’.

158. The accounting for replacement, improvement and addition all three is substantially the same. As per the NMAM, any addition to or improvement to the fixed asset that results in increasing the utility or useful life of the asset shall be capitalized and included in the cost of fixed asset.

159. The cost of existing assets that are replaced, together with their related accumulated depreciation accounts, are required to be eliminated from the accounts.

Illustration – Upgradation of a 10m road to 30 meters

This is an ‘improvement’ and would need to be capitalized in the accounts. However, when the 30 m road is capitalized the existing book value of the 10 m road would need to be eliminated i.e. de-capitalized from the books.

Rehabilitation

160. Expenditures to rehabilitate buildings or equipment purchased in a rundown condition with the intention of using them should be capitalized. Normally the acquisition price of a rundown

²⁸ Glenn A. Welsch, Robert N. Anthony, and Daniel G. Short, Fundamentals of Financial Accounting

²⁹ Eric Louis Kohler, Kohler’s Dictionary for Accountants

asset is less than that of a comparable new asset, and the rehabilitation expenditures benefit future periods. Such expenditures can therefore be capitalized.

Disposal of Assets

161. When an asset is retired from service, it should be treated in accordance with the procedures provided in the NMAM. In particular:
- a. No depreciation should be charged after disposal / retirement of the asset;
 - b. In case the disposal happens before October 1, 50% of the depreciation should be charged. If it is on or after October 1, full depreciation should be charged;
 - c. The assets which are out of service should be recorded in a separate register;
 - d. Once an asset is disposed, its movement should be updated in the Fixed Asset Register

Revaluation of Assets

162. Here again the treatment is specified in detail under NMAM. The recommended policies are:
- a. An increase in net book value arising on revaluation shall be credited to a 'Revaluation Reserve Account' under the Municipal Fund. A decrease in net book value arising on revaluation of fixed assets should be charged to Income and Expenditure account except to the extent that such a decrease is related to a previous increase in revaluation in which case it should be set off from the Revaluation Reserve Account.
 - b. If an asset is revalued, the entire class to which that asset belongs shall be revalued. A class is generally a category of similar assets which differs substantively from other similar groups of assets. For example, the category 'Land' would signify a class of asset, different from say 'Buildings' or 'Vehicles'.
 - c. Revaluation of a class of assets shall not result in the net book value of that class being greater than the recoverable amount of the assets of that class.
 - d. Revaluation reserve shall be reduced by transfer of equivalent amount of depreciation charged on the revalued portion of the cost of the fixed assets.

CHAPTER VI: ASSET MANAGEMENT

163. Although this manual is primarily intended to help in the valuation of fixed assets, a necessary corollary would be the maintenance of proper fixed assets records and good asset management practices. This is encompassed in the term 'Asset Life Cycle Management' and is briefly covered in this chapter.

Asset Life-cycle

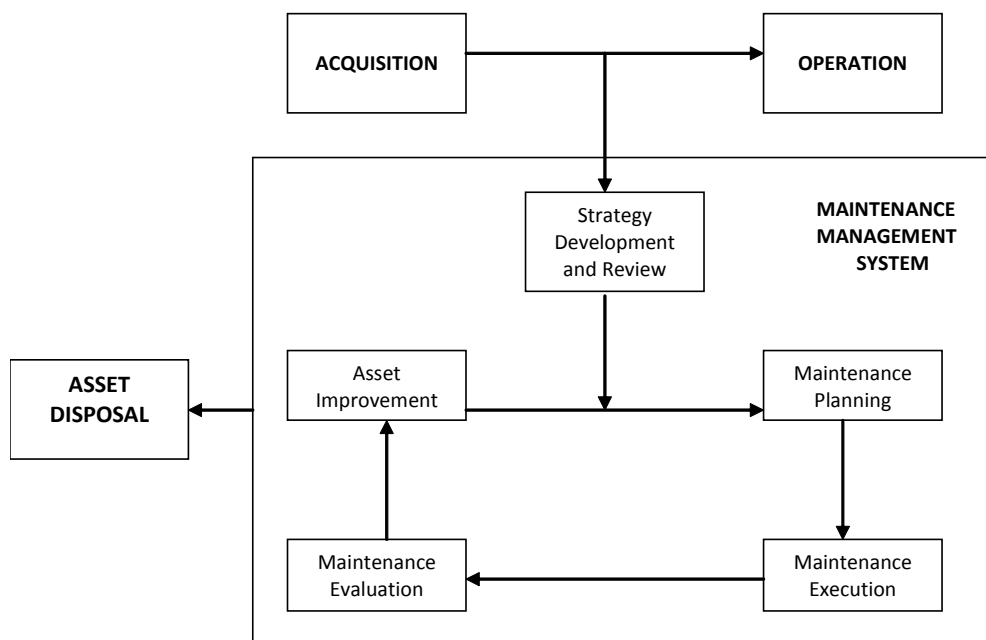
164. An asset proceeds through a number of sequential phases during its life cycle acquisition, operation and maintenance, refurbishment or enhancement, and, finally, disposal. The life cycle of an asset begins with a planning process that identifies the need for that asset and determines how and when it is to be procured. The asset is then acquired - either an existing asset is purchased or a new one is created. The asset then enters its operational phase.

As the asset ages, it may deteriorate or become obsolete, at which stage a decision is made to either refurbish, enhance or dispose of it. If the need still exists for the service provided by the asset, the cycle recommences.

165. There are essentially three broad stages in the life cycle of an asset:

- a. Acquisition;
- b. Operation and Maintenance; and
- c. Disposal.

166. These various stages are illustrated below³⁰:



³⁰ Adapted from Maintenance Engineering Society of Australia (www.mesa.org.au)

Record Keeping - Fixed Asset Register

167. Once the assets have been identified, listed and valued by the ULB, their record needs to be maintained and continually updated. This is achieved through the Fixed Asset Register (FAR). If the FAR is not continually updated, the efficacy of the entire asset identification, valuation and management will be greatly reduced.
168. The FAR will form the basis for further planning and maintenance under the ALCM strategy for the ULB. Hence, this document will have a recordkeeping and planning function.
169. The process of recording and updating of fixed assets data is shown in the Flow chart at Annex 5. The format of various fixed asset registers is given in Annex 6.

Asset Life-cycle management strategy

170. Asset Life Cycle Management (ALCM) is a strategic, integrated approach to maintenance that considers all the elements that affect the productive life of an asset - from design to disposal. It is a proactive process that compliments existing policies by providing strategic focus and perspective.
171. Asset-intensive organizations including ULBs which successfully adopt asset life cycle management will reduce maintenance costs and improve productivity through superior planning. From design to disposal, an asset's life cycle includes the following stages:
- a. Clarify the need or requirement to be satisfied by the asset;
 - b. Identify the type of asset suitable for the requirement and fulfill the need;
 - c. Determine the maintenance strategy, cycle and plan for the life of the asset;
 - d. Purchase the asset;
 - e. Commission, operate and maintain the asset; and
 - f. Dispose of the asset at the end of its economical life.
172. To achieve ALCM, organizations need visibility into three main areas of maintenance planning; short term, outage and long term planning. These planned maintenance strategies improve reliability, overall productivity, the length of an asset's life, and ultimately reduce the total cost of asset ownership.

Asset Management Unit (AMU)

173. It would be clear from the foregoing discussions that ALCM would greatly enhance the productivity and performance of ULBs. However, currently there is no unified department in ULBs which looks at all aspects of asset management. In most ULBs, the acquisition of fixed assets is the responsibility of the Stores and Purchase Department. Similarly, the accounts department normally records only the financial transaction and is not concerned with the maintenance and management of the asset.

174. For these reasons, it may be useful for the ULBs to set up an Asset Management Unit (AMU) so that various aspects of asset life cycle are properly managed. This AMU may be centrally located and under the charge of the head of Finance or the Commissioner. The justification for the cell to report directly to the Commissioner arises from the fact that the use of many of the fixed assets such as land and building has policy overtones, and the alternatives in these respects may have to be examined from a larger perspective.

175. In this connection it is also to be noted that planning for assets (capital budgeting) is a specialized and time consuming exercise by itself, and most departments of finance and accounts in ULBs do not have the wherewithal in terms of either time or human resources to spare for it. Hence, the AMU can have specialized and dedicated staff for exclusively focusing on these issues.

Structure of AMU

176. The AMU could consist of the following staff and officers:

- a. Head, AMU – preferably a person with Asset Management experience, including MIS and computer systems;
- b. Procurement plan Officer– responsible for purchase planning, scheduling and design;
- c. Recording Officer – for review / maintenance of Fixed Asset registers. Also to keep track of disposed assets, sales and preparation of various reports including depreciation schedules;
- d. Maintenance plan Officer – To oversee all scheduled, planned maintenance, to co-ordinate with relevant departments to ensure all assets are in working condition and serviced in time;
- e. Other staff as may be needed

177. The AMU staff and officers must all be computer literate and reasonably proficient in working with electronic spreadsheets. If capacity building measures are necessary in these regards, the ULB must speedily plan for the same and implement necessary programs.

178. Attention is to be paid to the qualifications and experience of the officers deputed to the AMU. At the minimum, officers should have formal accounting qualifications, with in-service training or external diplomas or other qualifications in information technology. Head of AMU should have at least ten years of work experience of which at least five years should have been in the area of evaluation of proposals, procurement, MIS, and asset accounting. Officer in charge of asset planning must have procurement as well as materials planning and capital budgeting experience. Staff should be appropriately chosen with regard to experience in accounting, procurement, and MIS.

Functions of AMU

179. The functions of the AMU shall be, without any loss of generality, as follow:

Procurement Planning

- a. To prepare short and medium term asset acquisition plans in consultation with the proposer/user departments and to present the same with due financial impact exercises and alternatives for consideration of Competent Authority;
- b. To prepare general Procurement Plan for fixed assets before the beginning of the fiscal year in terms of the approved asset acquisition plans and to lay out necessary timelines, parameters and benchmarks;

Asset Acquisition

- c. To assist and facilitate the Purchase department in the process of acquisition of assets as per Asset Procurement Plan;
- d. To assist and facilitate the other execution departments to carry out the Procurement Plan;

Recording and Reporting

- e. To develop, update and maintain an asset tracking database with respect to the location, condition, and other parameters with respect to fixed assets;
- f. To develop, update and maintain a Capital Works in Progress database and to generate necessary MIS there from;
- g. To develop, update and maintain the Fixed Assets Register and to record all fixed asset related transactions which add to or subtract from the book-value of the asset;
- h. To separately maintain the register of impaired assets and assets scheduled for disposal with due attention to computation of value in use and recovery/salvage values. To also assure that due process is followed in determination of fair values and market prices;
- i. to prepare evaluative and analytical reports for the management from time to time; and
- j. to prepare depreciation schedules

Maintenance

- k. To prepare, in consultation with other departments, planned maintenance schedules and to oversee their implementation;
- l. to prepare, in consultation with concerned departments, schedules for conditional assessment and plans for major renovations, repairs, and modifications;

Disposal of Assets

- m. to prepare and follow through on the annual disposal plan for fixed assets;
- n. To prepare Asset renewal plan which will feed into the capital procurement plan;

180. A separate list of reports to be prepared by the AMU and submitted to the Management, should be drawn up. Such reports may include the following:

- Annual Procurement Plan;
- Short term and medium term capital budgets showing construction and acquisition of fixed assets;
- Review of Annual Procurement Plans with respect to targets and achievements quarterly and half-yearly;
- Annual Disposal and Salvage Plans and review of progress quarterly and half-yearly;
- Fixed Assets Register;
- Planned Maintenance Schedule
- Conditional Assessment Schedule and Reports;
- Report on major repairs and renovations carried out on fixed assets and the effect thereof on remaining useful lives;
- Depreciation Schedules; and
- Such others as may deemed necessary from time to time

Using IT for asset management

181. Since most ULBs will have a large number of assets, it would be most efficient to use appropriate IT tools for their management. Asset tracking can be done through FARs which can be maintained on databases. Maintenance plans and schedules can be best managed through project management and resource scheduling software. Preparation of various reports should be automated and schedules (such as for depreciation) generated through software.

182. Most of these functions can be achieved through basic computer applications and minimal programming. It is strongly emphasized that ULBs should not, at the initial stages at least, look to use complex ERP systems which are difficult to implement.

CHAPTER VII: ISSUES IN VALUATION

Freehold Land

183. All land ownership of which vests with the ULB should be included in the opening balance sheet.

Land acquired through purchase

184. The land will be recorded at the purchase price paid/payable and other incidental costs such as registration charges incurred to bring the asset to its present location and condition

Lands acquired through compulsory acquisition

185. The land will be recorded at the total compensation paid/ payable for the acquisition of the land.

- **Compensation paid:** It shall be valued at compensation actually paid.
- **No Compensation Paid:** If the asset was acquired without paying any compensation then it shall be valued at Re.1/-. However, any developmental work done should be capitalized at cost.
- **Compensation in dispute:** The amount paid will be recorded as the asset value. Any extra amount that may be payable, if determinable, should be shown as contingent liabilities. When any further amount is paid to the previous owner, it will be added to the asset in the year of payment.

Vested government lands

186. Vested government lands are those lands which are not owned by the ULBs nor does any economic benefit accrue to the ULB. The ownership of these lands vest with the State/Central government and the ULB merely acts as a trustee for these lands. As per Technical Guide issued by ICAI for ULBs, vested government land shall not be recorded as asset as neither ownership nor economic benefits is with ULBs. The description of such lands shall form a part of the notes to the balance sheet.

Land improvement

187. Original cost of any improvement to land such as land development and land filling should be capitalized as an improvement to the land.

Land acquired through government grants

188. If the ULB has purchased land from government grants, then the cost of the land will be shown at gross value i.e. cost paid/ payable or as determined. The grant received should be shown as Capital Reserve in the Balance Sheet.

Buildings

189. The valuation of buildings shall be carried out as follows:

Buildings purchased

190. The purchase cost of the building shall include the purchase price cost and incidental costs such as registration charges and other costs incurred to bring the asset to its present location and condition.

Building constructed

191. If the building has been constructed, then the cost of construction will be taken as the cost.

Grants received in respect of buildings

192. As per Technical Guide on Accounting for ULBs and AS-12 'Accounting for Grants' issued by ICAI, government grants related to specific fixed assets should be presented in the balance sheet by showing the grant as a deduction from the gross value of the assets concerned in arriving at their book value.

193. Alternatively the building can be shown at gross value and the grant recognized as deferred income. Further, the income should be recognized in the income and expenditure account out of the deferred income account in the proportion of depreciation charged on the buildings in view of the requirements of AS 12.

Heritage Buildings

194. Heritage buildings are generally to be valued in the same manner as other buildings. However, they are to be disclosed separately under the Head 'Heritage Assets' under Other Assets. The purpose is to distinguish the assets for their historical, cultural and / or religious significance and to recognize the restrictions on their use or sale.

Art and Historical items

195. ULBs should capitalize works of art, historical treasures, and similar assets at their historical cost. These items can be classified under 'Heritage Assets' under 'Other Assets'.

196. Governments should disclose information about their works of art and historical collections. Capitalized collections or individual items that are exhaustible, such as exhibits whose useful lives are diminished by display or educational or research applications, should be depreciated over their estimated useful lives. Depreciation is not required for collections or individual items that are inexhaustible.

Value of land under Roads

197. Roads are generally built on property that is owned by the ULB. Hence, apart from the road, the land under the road also needs to be valued and accounted.

198. Such land is to be kept under 'Land' and not included in 'Roads & Bridges'. The value of such land should be taken at the historical cost i.e. if any amount is paid to acquire it then at the compensation paid etc. If the amount cannot be ascertained, a nominal value of Re. 1/- should be considered for the land under each road.

Pipe networks

199. Networks will normally have trunks, mains, and sub-mains. This is equally valid for water supply as well as sewerage network.
200. Those parts of network which are relatively standalone should be considered separate assets on their own. The criterion to be also used is that failure of the smaller network is not critical to the continued operation of the larger one.
201. While computing historical costs, original costs of digging an earth work should be included.
202. Any major cost for improvement of network functioning (for instance, removal of sediments and coating from mains or trunks) should be added to the book value.

Assets under Hire Purchase / Finance Lease

203. Hire Purchase / Finance Lease shall be treated as follows³¹:
- a. The purchase price shall be capitalized as the cost of fixed assets
 - b. Hire Purchase (HP) installments shall be apportioned between the finance charge and the reduction of the principal outstanding. The finance charge shall be allocated so as to produce a constant periodic rate of interest on the remaining balance of the liability;
 - c. The total amount of interest portion out of the 'HP Payable' shall be accounted by debiting to a control account under current assets. This amount will be adjusted on accounting of finance charges
 - d. The depreciation policy for assets purchased under HP should be consistent with that for owned assets.

Intangible Assets

204. Intangible assets in ULBs will generally be in the nature of expenditure on software. The ULB will assess the expenditure made in development or purchase of the intangible asset in the last 2 years and capitalize it as fixed asset. In case the intangible asset has been provided free of cost, on a sharing basis, it should not be shown in the balance sheet. Expenditure below Rs. 25,000/- should be charged to revenue and not capitalized.
205. The process of valuation of intangible asset would be as follows:
- a. **If Purchased:** The cost of an intangible asset comprises its purchase price, including any import duties and other taxes (excluding recoverable amount from the taxing authorities), and any directly attributable expenditure like professional fees for legal services etc on making the asset ready for its intended use. Any trade discounts and rebates are deducted in arriving at the cost.

³¹ National Municipal Accounting Manual – para 3.22 (c)

- b. **If Internally Generated:** The cost of internally generated assets³² such as software should be determined in line with AS 26 'Intangible Assets'. Where the asset meets the criteria for recognition, its cost will comprises all expenditure that can be directly attributed or allocated on a reasonable and consistent basis to create the asset / software for its intended use. Costs include (i) expenditure on materials and services used in developing the asset, (ii) salaries, wages and other employment related costs of personnel directly engaged in developing the asset, (iii) any expenditure that is directly attributable to generating the asset. However, it excludes (i) selling, administrative and other general overhead expenditure unless this expenditure can be directly attributed to making the asset ready for use; (ii) clearly identified inefficiencies and initial operating losses and (iii) expenditure on training the staff to operate the asset.
 - c. **If Gifted/Donated:** If the asset was acquired without paying any price and gifted to ULB (or if it is donated): then it shall be valued at Re.1/-..
 - d. **If Acquired through exchange:** An intangible asset may be acquired in exchange or part exchange for old intangible asset. Where the assets exchanged are similar, the net book value of the asset which is exchanged should be taken, and to it the extra amount that is paid, if any, is added. If instead of an extra payment, a refund is involved, the necessary adjustment will have to be made. In case of dissimilar assets, the assets acquired should be recognized at its fair value.
206. The residual value of an intangible asset in ULBs should be assumed to be zero. Hence, the full cost should be 'amortized' over the estimated useful life of the asset.
207. Subsequent expenditure on intangible assets should be generally recognized as an expense unless it increases the capacity or the life of asset.

³² As per AS 26, an internal intangible asset should be recognised only if there is reasonable evidence of future economic benefit. For instance, no research expenditure is allowed to be capitalized. Further, internally generated brands, mastheads, publishing titles etc. are not permitted to be recognised as intangible assets since they cannot be distinguished from the cost of developing the business as a whole.

ANNEX 1 - CLASSIFICATION AND CODIFICATION OF ASSETS FOR FIXED ASSET REGISTER

Primary Group	Secondary Group	Primary Group Code	Secondary Group Code
Land	Vacant Land without structures, right, title and interest with ULB	10	01
	Vacant land with boundary wall or fencing, no internal structures, right, title and interest with ULB	10	02
	Land with minor structure, temporary or permanent, right, title and interest with ULB	10	03
	Vacant land without structures under control of ULB, title transferred, right and interest not physically established	10	04
	Landfill	10	05
Buildings	Building with appurtenant land less than 50% of ground covered area	20	01
	Building with appurtenant land more than 50% of ground covered area	20	02
	Structures with appurtenant land with less than 50% ground covered area	20	03
	Structures with appurtenant land, more than 50% ground covered area	20	04
	Structures – public utility	20	05
	Solid Waste Transfer Station	20	06
Roads & Bridges	Roads	30	01
	Bridges	30	02
	Road Over Bridge	30	03

Primary Group	Secondary Group	Primary Group Code	Secondary Group Code
	Underpass	30	04
	Subway	30	05
	Culvert	30	06
Sewerage & Drainage	Drain	31	07
	Sewerage Network	31	08
	Sewerage Treatment Plant	31	09
Water Works	Water Supply Network	32	09
	Water Treatment Plant	32	10
	Water Pumping Station	32	11
	Bore Well	32	12
	Overhead Tank and Pumping Station	32	13
Public Lighting	Street Lighting System	33	10
Plant and Machinery	Composting Plant	40	01
	Incinerator	40	02
	Slaughterhouse Machinery	40	03
	Engineering Equipment	40	04
Vehicles	Solid Waste related vehicles	50	01
	Water Works related vehicles	50	02

Primary Group	Secondary Group	Primary Group Code	Secondary Group Code
Office & Other Equipment	Office Equipment	60	01
	Other equipment	60	02
	Computer installation	60	03
Furniture, fixtures, fittings and electrical appliances	Office Furniture	70	01
	Electrical Installation (in office)	70	02
Other Fixed Assets	Large Pumps	80	01
	Insurance spares	80	02
	Heritage Assets	80	03

	Major Group	Third level Sub-Group	Code
1.	Land	Parks	01
		Playground	02
		Agricultural Land	03
		Vehicle Parking Areas	04
		Bus Stands	05
		Cycle Stands	06
		Lakes and Ponds	07

	Major Group	Third level Sub-Group	Code
2.	Building and Structure	Office Building	01
		School Building	02
		Market	03
		Shopping Mall	04
		Public Convenience	05
		Community Centre	06
		Child Welfare Centre	07
		Polyclinics	08
		Milk Booth	09
		Workshop	10
		Fire Station	11
		Stores Buildings	12
		Staff Quarters	13
		Covered Parking Areas	14
		Garbage Vats	15
		Transfer Station	16
		Fountains	17
3.	Roads & Bridges	Road 30 m wide	01
		Road 20 m. wide	02
		Road 15 m wide	03
		Road 10 m. wide	04
		Road 5 m. wide	05
		Road 3 m. wide	06
		Bridge more than 100 m.	07

	Major Group	Third level Sub-Group	Code
		Bridge less than 100 m.	08
		Pavements concrete inter locking slabs	09
		Pavement with nominal reinforcement for lanes	10
		BT roads with wearing surface, Chip Carpet	11
		BT roads with wearing surface, BMSDBC	12
		Roads and Pavements Sub grade	13
		Flyovers and Grade Separators	14
		Causeways	15
		Culverts	16
4.	Sewerage & Drainage	Storm Water Drains	01
		Sewerage System (UGD)	02
		Roadside Drains	03
5.	Water Works	Water Supply Source and Transmission System	04
		Water Distribution System	05
		Water Distribution System (Mini Water Supply Scheme)	06
6.	Public Lighting	Electrical installation	01
		Lampposts	02
		Mercury vapor lamps	03
		Electrical fittings for Public Lighting	04

	Major Group	Third level Sub-Group	Code
7.	Plant and Machinery	Road Roller	01
		Medical Equipment	02
		School Equipment	03
		Public Health Equipment	04
		Electrical Equipment	05
		Other Equipments	06
8.	Vehicles	Heavy Vehicles	01
		Light Vehicles	02
		Earth-moving Vehicles	03
		Other Vehicles	04
9	Furniture, Fixture , Fittings & Electrical appliances	Wooden chairs	01
		Cupboards	02
		Water Coolers	03
		Refrigerators	04
		Fans	05
		TV	06
		Light fittings	07
		Power points	08
10	Office & Other Equipment	Typewriters	01
		Photocopy Machines	02
		Communication and Telecom Equipment	03

	Major Group	Third level Sub-Group	Code
		Equipment	
		Office Equipment	4
		Other Equipment	5
		Computers	6
		Computer Network	7
		Printers	8
		Network Server	9
		Other computer equipments	10
		Insurance spares for Generators	11
11	Other Assets	Insurance spares for Heavy Machinery	01
		Insurance spares for Heavy Pumps	02
		Heritage Buildings	03
		Historical assets	04
		Works of Art	05

ANNEX 2 -CURRENT STANDARD COST (CSC) FOR VALUING ASSETS³³

SL. NO.	ITEM	UNIT	RATE (Rs.)
II	BUILDINGS		
<i>Class I Civil Structures including Building</i>			
	RCC framed structure with granite flooring and teak wood doors and windows Ground Floor Above Ground Floor	Sq m Sq m	7,300 6,500
	RCC framed structure with marble flooring and teak wood doors and windows Ground Floor Above Ground Floor	Sq m Sq m	6,900 5,800
	RCC framed structure with mosaic flooring and teak wood doors and windows Ground Floor Above Ground Floor	Sq m Sq m	6,200 5,600
	RCC framed structure with mosaic flooring and hone / nandi / mathi wood doors and windows Ground Floor Above Ground Floor	Sq m Sq m	6,000 5,400
	RCC framed structure with mosaic flooring and hone / nandi / mathi wood doors and steel windows Ground Floor Above Ground Floor	Sq m Sq m	5,700 5,100
	RCC framed structure with red oxide flooring and hone / nandi / mathi wood doors and windows		

³³ These rates are based on calculations made by Karnataka for its ULBs vide Letter NO: UDD: 19 /AS/2006-07 dated 1.2.2007. Other states may review / revise these rates for their specific use.

SL. NO.	ITEM	UNIT	RATE (Rs.)
	Ground Floor	Sq m	5,100
	Above Ground Floor	Sq m	4,600
	RCC framed structure with red oxide flooring and Jungle wood doors and windows		
	Ground Floor	Sq m	5,000
	Above Ground Floor	Sq m	4,400
	Madras terrace/Mangalore tiles/AC sheet roof brick/stone masonry walls and red with oxide flooring and Jungle wood doors and windows	Sq m	3,200
<i>Class II Civil Structures including Building</i>			
	Madras terrace/Mangalore tiles/AC sheet roof with mud walls and Jungle wood doors and windows	Sq m	2,400

SL. NO.	ITEM	UNIT	RATE (Rs.)
III	ROADS & BRIDGES		
Roads & Pavements			
Roads and Pavements – Concrete			
	Cement concrete road/pavement of width 3.75 m without reinforcement for lanes and sub lanes	one km	36,00,000
	Cement concrete road/pavement of carriage width 3.75 m with nominal reinforcement for lanes	one km	45,00,000
Roads and Pavements – BT Roads – Sub grade			
	Sub surface of 150 mm thickness gravel with granular sub base (WBM) of 225 mm thickness ,carriage width 3.75m	one km	22,00,000
Roads and Pavements – BT Roads – Wearing Surface			
	Wearing surface, chip corpet of 20 mm thickness and type "B" seal coat, carriage width 3.75m	one km	8,00,000
	Wearing surface of bituminous macadam (BM) of 50 mm thickness and wearing course of semi dense bituminous concrete of 25 mm thickness with carriage width 3.75m	one km	13,50,000
Footpaths			
	BS Slab footpath of 1 m width with kerb stone of 10 cm thick and 30 cm height	one km	5,90,000
	Cement concrete footpath of 1 m width with kerb stone 10 cm thick and 30 cm height	one km	7,65,000
	Footpath of 1 m width with inter locking cement concrete blocks pavement (cobble stone)	one km	9,00,000
Bridges			
	Major Bridge	per sqm	19,500
	Minor Bridge	per sqm	23,000
	Small Bridge	per sqm	28,000
Flyovers			

SL. NO.	ITEM	UNIT	RATE (Rs.)
	Flyovers, Grade Separators of all types and spans	per sqm	19,000
Culverts			
	Culvert with humepipe of 1 m dia for a road with parapet walls	Each	22,000
	Culvert of size 1 m sq. of masonry walls with RCC deck slab & parapet wall	Each	30,000
Subways			
	RCC Pedestrian Subway	per sqm	22,500

Note:

1. Cement concrete roads and pavements:

Urban road width is the width between building lines which includes road side drains, footpaths, shoulders, carriage way and median.

The Cement concrete roads are considered as rigid pavements for road ways as per IRC-58-2002. The Cement concrete roads may be without reinforcement for simple lanes and sub lanes for low traffic intensity or may be with reinforcement for multiple lanes of highways having high traffic intensity. In municipalities of Karnataka most of the lanes and sub lanes having narrow width are constructed without reinforcement in view of economy also. The unit construction cost of cement concrete road / pavement is calculated for a nominal thickness of 0.25 m on a prepared sub surface either with reinforcement or without reinforcement, for a unit width of 3.75 m carriage way and a length of the kilometer.

2. Roads with metal sub grade and bituminous wearing surface:

Urban road width is the width between building lines which includes road side drains, footpaths, shoulders, carriage way and median

The roads with sub base course of gravel, laterite, kankar, brick metal, crushed stone, crushed slag, crushed concrete or combination of these base course of conventional water bound macadam (WBM), wet mix macadam (WMM) or other equivalent granular construction conforming to IRC is termed as flexible pavements as per IRC-37-2001.

The unit construction cost of sub grade for a nominal minimum thickness of 225 mm is worked out for a unit width of 3.75m carriage way and length of one kilometer. The cost of construction is for a road having minimum CBR 2% and traffic intensity of 1 to 10 msa (million standard axes) as per IRC-37-2001. However for wearing surface costs are worked out for road surfaces of Pre-mixed chip carpet (PC) with seal coat or bituminous macadam with mix seal, semi bituminous concrete, dense bituminous concrete for a unit width of 3.75 m carriage way and length of one kilometer.

3. Bridges

A bridge is a structure having a total length above 6 m between the inner faces of the dirt walls (abutments).

The bridges are classified as under:

- a) **Major Bridge:** is a structure having total length above 60 m between the inner faces of the dirt walls (abutments).
- b) **Minor Bridge:** is a structure having total length of up to 60 m (more than 30 m) between the inner faces of the dirt walls.
- c) **Small Bridge:** is a structure having total length of 30 m between the inner faces of the dirt walls and individual span is not more than 10 m.

4. Culverts

A culvert is a cross drainage structure having a total length of 6 m or less between the inner faces of the dirt walls.

SL. NO.	ITEM	UNIT	RATE (Rs.)
IV	SEWERAGE & DRAINAGE		
<i>Sewerage Works</i>			
	SWG Pipes	Diameter (mm) X	4.20
	RCC Pipes	Length (m)	3.47
<i>Pipelines</i>			
	GI pipes		6.81
	CI/DI pipes		9.95
	PVC pipes		2.94
	RCC pipes	Diameter (mm) X	2.57
	PSC pipes	Length (m)	4.58
	MS pipes		7.14
	HDPE pipes		6.48
	AC pipes		6.77
<i>Plant & Machinery – Sewerage</i>			
	Pumps including all mechanical and electrical equipment		
	5 to 10 HP	Per HP	17,000
	Above 10 to 25 HP	Per HP	13,000
	Above 25 to 50 HP	Per HP	11,000
	Above 50 HP	Per HP	10,000
<i>Storm Water Drains</i>			
<i>Size Stone Masonry Drains (SSM)</i>			
	Of size range upto 1 cum	Rm	2,300
	Of size range of 1 to 3 cum	Rm	3,200
	Of size range of 3 to 6 cum	Rm	6,100

SL. NO.	ITEM	UNIT	RATE (Rs.)
	Of size range of 6 to 10 cum	Rm	9,500
	Of size range above 10 cum	Rm	11,000
Reinforced Cement Concrete Drains (RCC)			
	Of size range upto 1 cum	Rm	5,300
	Of size range of 1 to 3 cum	Rm	7,000
	Of size range of 3 to 6 cum	Rm	11,600
	Of size range of 6 to 10 cum	Rm	16,400
	Of size range above 10 cum	Rm	18,300
Roadside Drains			
	BS Slab drain of size 0.6x0.6 m	one km	4,30,000
	Size stone masonry box drain of size 0.6x0.6 m	one km	9,70,000
	RCC drain of size 0.6x0.6 m	one km	20,00,000
	RCC median pre casted concrete blocks as per IRC Standard	one km	3,00,000

Notes:

1. Storm Water Drains:

The storm water drains are normally designed for maximum flood discharged over a period of time. Since the drains will not be having standard cross section, the cost of construction of storm water drain per running meter can be fixed on cross sectional area of vents.

2. Roadside Drains:

For estimate of cost, standard roadside drain size of 0.6 m x0.6 m are furnished and linear variation shall be adopted for calculating values for the different size of drains. The actual costs are to be worked out on the side dimension on pro-rata basis

2. Pipelines:

The cost for different pipes are calculated by reference to the pipe material factor (given in the table) and its length and diameter as below:

Cost of pipes = Factor X diameter (mm) X length (m).

This includes all costs such as supply of pipes, excavation, laying of pipes and refilling of trenches

SL. NO.	ITEM	UNIT	RATE (Rs.)	
V	WATER TREATMENT AND TRANSMISSION SYSTEMS			
Water Source System				
	Overhead Tanks / GLR		As per valuation for Buildings	
Water Transmission System				
	Channels		Same as Storm Water Drains	
	Conduits (main lines)		Same as Water Mains / Distribution System	
Pipelines				
	GI pipes		6.81	
	CI/DI pipes		9.95	
	PVC pipes		2.94	
	RCC pipes	Diameter (mm) X Length (m)	2.57	
	PSC pipes		4.58	
	MS pipes		7.14	
	HDPE pipes		6.48	
	AC pipes		6.77	
Plant & Machinery – Water Works				
	Pumps including all mechanical and electrical equipment			
	5 to 10 HP	Per HP	17,000	
	Above 10 to 25 HP	Per HP	13,000	
	Above 25 to 50 HP	Per HP	11,000	

SL. NO.	ITEM	UNIT	RATE (Rs.)
	Above 50 HP	Per HP	10,000
	Deep Bore Well Drilling including installation of pump set etc.	Per R ft	300
<i>Water Distribution System (Mini Water Supply)</i>			
	M S Steel Tanks	Per tonne	15000
	Hand Pumps	each	9000

Notes:

1. Pipelines:

The costs for different pipes are calculated by reference to the pipe material (given in the table) and its length and diameter as below:

Cost of pipes = Factor X diameter (mm) X length (m).

This includes all costs such as supply of pipes, excavation, laying of pipes and refilling of trenches

SL. NO.	ITEM	UNIT	RATE (Rs.)
VI	PUBLIC LIGHTING		
Electrical installations			
HT Transformers			
	Structure including Cross arm / brace etc.		
	For 25 to 63 KVA	Unit	15,000
	For 100 to 250 KVA	Unit	18,000
	Transformer Cost		
	25 KVA		45,000
	63 KVA	Unit	60,000
	100 KVA		75,000
	250 KVA		153,000
	Other costs like Line Materials, Distribution system, Earthing, Oil, painting etc.	Unit	56,500
LT Transformers			
	LT Transformers		10% less than HT transformer costs
Transformer Distribution Box			
	Up to 100 KVA	Unit	48,000
	Above 100 KVA	Unit	76,000
Lamp Posts			
	RCC Poles (9 m)	Unit	5,500
	Tubular Steel Poles (9m)	Unit	7,500
	CI Poles	Unit	9,000
Electrical Fittings			

SL. NO.	ITEM	UNIT	RATE (Rs.)
	Sodium Vapor Lamp & Fittings		
	125 W	Unit	3,500
	250 W	Unit	6,800
	400 W	Unit	7,100
	Mercury Vapor Lamp & Fittings		
	125 W	Unit	3,100
	250 W	Unit	6,200
	400 W	Unit	6,300
	Tube Light & Fittings		
	Single Fitting	Unit	1,700
	Double Fitting	Unit	2,000
	High Mast Fittings		
	12 m Height, 5 fittings with 5 X 2 lamps	Unit	3,00,000
	15 m Height, 8 fittings with 8 X 2 lamps	Unit	3,75,000
	16 m Height, 8 fittings with 8 X 2 lamps	Unit	4,00,000
	Cables		
	All HT Cables	m	1,400
	All LT Cables	m	500

ANNEX 3 - ESTIMATED USEFUL LIFE AND DEPRECIATION RATES

The recommended rates in this Annex³⁴ have been calculated under Straight Line Method (SLM) using the estimated useful life estimated thereagainst.

Sl. No.	Description of Assets	Details of assets to be included	Estimated Life	SLM Rate p.a.
1	Land	Parks, burial grounds, play grounds, any vacant site on which no construction has been done, any other land owned by ULB on which construction has been made. This includes open spaces of all kinds surrendered by the layout promoters to the ULB, lands given to the ULB by transfer, acquisition etc.	Infinite-	NIL
2a	Buildings - Class I Civil Structures	They include RCC framed concrete structures and all Pucca constructions done using bricks/stones with cement as binding material and having RCC as roof.	75 years	1.33%
2b	Buildings Class II Civil Structures	They include buildings that are without RCC roof, buildings that do not have cement as binding material for building blocks, or civil structures that are constructed with country bricks, stones or locally available building materials like mud blocks, small water tanks, earthen bunds, etc.	50 years	2.00%
2c	Minor Civil Structures	Including Bus Shelters, Fountains, Seats in parks, Swings, fencing to parks, etc	10 years	10.00% p.a.
3a	Roads and pavements	a) Concrete	15 years	6.67%
		b) BT Roads		
		i) Wearing Surface	5 years	20.00%
		ii) Subgrade	15 years	6.67%

³⁴ These rates are based on calculations made by Karnataka for its ULBs vide Letter NO: UDD: 19 /AS/2006-07 dated 1.2.2007. Other states may review / revise these rates for their specific use.

Sl. No.	Description of Assets	Details of assets to be included	Estimated Life	SLM Rate p.a.
3b	Footpaths	a) Concrete	15 years	6.67%
		b) Others ((Stone slab, cobble stones etc)	8 years	12.50%
3c	Bridges, Flyovers, subways etc.	Bridges, flyover, subways	75 years	1.33%
3d	Causeways	Cause ways	15 years	6.67%
3e	Culverts	Culverts	30 years	3.33%
4a	Sewerage collection & transmission system	Sewerage Lines	30 years	3.33%
4b	Storm Water drains-open drains	Storm Water drains-open drains	25 years	4.00%
4c	Road side Drains	Road side Drains	15 years	6.67%
4d	Laboratory equipments – Sewerage works	All equipments in the laboratories maintained for the water supply system	10 years	10.00%
4e	Plant & Machinery for sewerage works	All Plant and machinery used for collection, transmission and treatment of sewerage.	15 years	6.67%
5a	Water supply source & transmission system	Reservoirs	100 years	1.00%
		Ground water wells/deep bore wells	15 years	6.67%
		Channels	25 years	4.00%
		Metallic Conduits (main lines)	50 years	2.00%
		Non- Metallic Conduits (main lines)	30 years	3.33%
	Pumps	15 years	6.67%	

Sl. No.	Description of Assets	Details of assets to be included	Estimated Life	SLM Rate p.a.
5b	Water Pipelines and Systems	Pipe Lines: <ul style="list-style-type: none"> • PVC pipes of all diameters • MDP, HDPE Pipes of all diameters • Metallic pipes of all diameters 	20 years	5.00%
		OHT/GLR	30 years	3.33%
			50 years	2.00%
			100 years	1.00%
5c	Water Distribution system (mini water supply)	M.S.Steel tanks	10 years	10.00%
		Hand Pumps	5 years	20.00%
5d	Laboratory equipments – Water Works	All equipments in the laboratories maintained for the water supply system	10 years	10.00%
5e	Plant & Machinery for Water works	All Plant and machinery used for sourcing, treatment, transmission and distribution	15 years	6.67%
6a	Electrical installation cables	HT & LT Installations including transformers & cables	20 years	5.00%
6b	Electrical installation - lamp posts	RCC / PAC / CI All length (sizes)	30 years	3.33%
6c	Electrical installation – lamp fittings	Mercury Vapour Lamp Fittings	10 years	10.00%
		High Mast Lamp Fittings	20 years	5.00%
		Sodium Vapour lamp fittings	10 years	10.00%
6d	Electrical installation – lamp fittings	Tube light fittings	3 years	33.33%
7	Plant/ Machinery & Equipment (excluding office)	Road rollers, mixing mortars, other civil engineering equipments, medical equipments in hospitals, dispensaries & maternity centers, school equipments, public health equipments, tower clocks,	15 years	6.67%

Sl. No.	Description of Assets	Details of assets to be included	Estimated Life	SLM Rate p.a.
	equipment)	electrical equipments, motor pumps, other plant & machinery, etc.		
8a	Heavy vehicles	Lorry, tractor, bulldozer, mechanical sweeper, tipper, loader, bus, road roller, water tanker etc	15 years	6.67%
8b	Light vehicles	Jeeps, cars, power tillers, motorcycles, mini lorry, auto tipper etc	10 years	10.00%
8c	Other vehicles	Single/double person driven Push Cart, Bicycle/Tricycle, cart etc	5 years	20.00%
9	Furniture, Fixtures, Fittings, Electrical Appliances etc	Steel chairs, steel tables, wooden chairs, wooden tables, steel racks, wooden racks, steel cupboards	10 years	10.00%
		Air conditioners, water coolers, refrigerators, fans, electrical fittings, other office equipments radios, TVs, stools	5 years	20.00%
10a	Office Equipment	General Office equipment like photocopy machines etc.	10 years	10.00%
10b	Communication equipments	Public address systems, wireless equipments copiers	5 years	20.00%
10c	Computers	Computer machinery, peripherals, printers, typewriters, duplicators, Photocopy machines,	5 years.	20.00%
21	Plant & machinery	• Water Supply	15 years	6.67%
		• Sewerage	15 years	6.67%

- (i) Where the rate of depreciation is not prescribed, states may determine the rate by dividing the depreciable amount by the estimated useful life of the asset.
- (ii) The SLM depreciation rates are presuming a nominal salvage value –hence 100% of the cost is depreciated over the life of the asset. In case ULBs intend to maintain a percentage of cost as salvage value, the SLM depreciation rate can be calculated as follows:

$$(100\% - \text{Percentage estimated to be salvage value}) / \text{Estimated useful life}$$

Example. For a Class 1 Civil Structure, if residual value is 10% of original cost, SLM rate will be $(100\%-10\%)/50 = 1.8\%$ p.a.

ANNEX 4 - INFLATION INDEX

Inflation Index to be used for arriving at Deflated Standard Cost (DSC)

The process of valuation requires ULBs to determine the standard current cost of assets and, using a deflator, represent its cost in the year of purchase. For the purpose of arriving at its cost in the year of purchase, the following inflation index should be used:

Financial Year	Inflation Index
1981-82 and earlier	100
1982-83	109
1983-84	116
1984-85	125
1985-86	133
1986-87	140
1987-88	150
1988-89	161
1989-90	172
1990-91	182
1991-92	199
1992-93	223
1993-94	244
1994-95	259
1995-96	281
1996-97	305
1997-98	331
1998-99	351
1999-00	389
2000-01	406
2001-02	426
2002-03	447
2003-04	463
2004-05	480
2005-06	497
2006-07	519
2007-08	551

Illustration

A building belonging to the ULB is identified. Using the Current Standard Cost (CSC) Rate, its value is determined in 2007-08 as Rs.5,21,000. The building is known to have been completed in 1996-97. Hence, its Deflated Standard Cost (DSC) in 1996-97 will be:

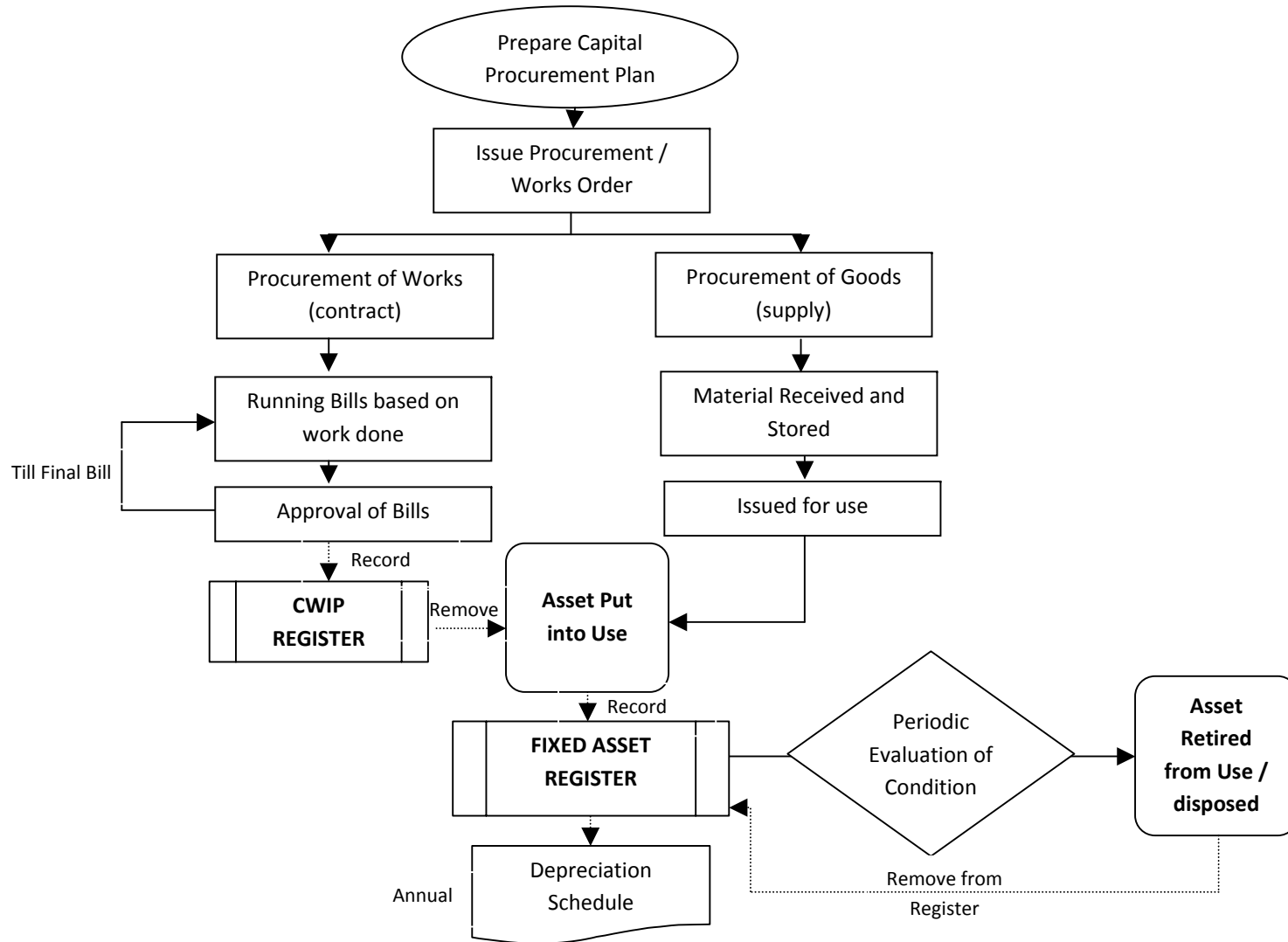
$$5,21,000 \times (305 / 551) = \text{Rs.}3,31,889$$

This represents the estimated cost of the building if it was constructed in 1996-97, derived from its Current Standard Cost. In order to arrive at its current estimated value i.e. on 1.4.2008, depreciation should be provided on this, for the period 1996-97³⁵ to 2007-08 i.e. 12 years. Hence the cost of the building to be included in the balance sheet as on 1.4.2006 will be as follows:

Current Standard Cost (CSC) of Building:	Rs.5, 21,000
Deflated Standard Cost (DSC) in 1996-97:	Rs.3, 31,889
Less: Depreciation till 2007-08 (12 years @ 2% p.a)	<u>Rs.79, 653</u>
Estimated Current Value (for Opening Balance Sheet)	(Rs.3, 31,889 – 79,653) = 2, 52,236

³⁵ In case information is not available, it can be assumed that the asset was put to use for more than 6 months in the first year and hence full year's depreciation can be charged for that year.

ANNEX 5 – FLOW CHART FOR MAINTENANCE OF FIXED ASSET REGISTER



ANNEX 6 – FORMAT OF FIXED ASSET REGISTER

Registers have been prescribed for 11 category of assets viz.

- | | |
|--|---|
| 1. Register of Land | 2. Register of Buildings |
| 3. Register of Roads & Bridges | 4. Register of Sewerage and drainage Assets |
| 5. Register of Water Work Assets | 6. Register of Public Lighting Assets |
| 7. Register of Plant and Machinery | 8. Register of Vehicles |
| 9. Register of Office & other equipments | 10. Register of Furniture, fixtures, fittings and Electrical appliances |
| 11. Register of Other Fixed Assets | |

General Instructions for use of the Fixed Assets Register:

- i. All the assets should be categorized into relevant asset class. Unique asset identification numbers are to be provided for all assets. Separate Registers shall be maintained for each class of structures owned by the ULB.
- ii. Each asset shall be recorded on a separate page in the register.
- iii. At the end of the accounting year, the 'Closing / depreciated value' in respect on the current year shall be entered as 'Opening Value' of the next year (next row).
- iv. In the year in which there is any acquisition / improvement to the asset, show such cost in the current year's 'Opening / acquisition' column.
- v. For each entry made, record the Name, Designation and Signature of the person making entry in the register and the person checking the entry.
- vi. Totals should be taken at the end of each year in respect of total cost incurred on acquisition / construction / improvement (from the date of acquisition/construction) for each of the assets owned by the ULB.
- vii. In Remarks column, indicate whether the ULB has the ownership right to the property or have only utilization rights.

Register of Land

**NAME OF ULB
REGISTER OF LAND**

Asset No.:

Description of the Land:

Location of the Land:

Survey No. of the Land:

Area (sq. mtr.):

Title documents available:

Mode of acquisition:

Sketch the boundaries of the Land:

Date of Acquisition / Improvement	Description of Expense	Opening Value / Amount of Acquisition (Rs.)	Entry Ref. in Cash Book	Use of Land	Date of Disposal	To whom disposed	Amount of Disposal (Rs.)	Entry Ref. in Cash Book	Remarks
Total for the year 20**-20**									
Total for the year 20**-20**									
Total for the year 20**-20**									

Register of Buildings

**NAME OF ULB
REGISTER OF BUILDINGS**

Asset No.:

Location of the Structure:

Survey No. of the land on which Structure is located:

Area of land on which constructed (sq. mtr.):

Reference to Land Register:

Description of the Structure:

Title documents available:

Mode of acquisition:

Dimensions of the Structure:

Rate of Depreciation

Date of Acquisition / construction / Improvement	Description of Expense	Opening Value / Amount of acquisition (Rs.)	Entry Ref. in Cash Book	Use of Building	Annual Depreciation (Rs.)	Closing / Depreciated Value (Rs.)	Date of Disposal	To whom disposed	Amount of Disposal (Rs.)	Entry Ref. in Cash Book	Remarks
Total for the year 20**-20**											
Total for the year 20**-20**											
Total for the year 20**-20**											

Register of Roads & Bridges

**NAME OF ULB
REGISTER OF ROADS & BRIDGES**

Asset No.:

Location of the Road / Bridge:

Footpath / Flanks: Length: Width:

Area of land on which constructed (sq. mtr.):

Rate of Depreciation:

Description: (Type of Road / Bridge):

Total area of Road / Bridge (sq m):

Carriageway: Length: Width:

Reference to Land Register:

Date of construction / Improvement	Description of Expense	Opening Value / Amount of construction (Rs.)	Entry Ref. in Cash Book	Type of Road / Bridge	Annual Depreciation (Rs.)	Closing / Depreciated Value (Rs.)	Date of Disposal / conversion	Details of disposal / conversion	Amount on Disposal (Rs.)	Entry Ref. in Cash Book	Remarks
Total for the year 20**-20**											
Total for the year 20**-20**											
Total for the year 20**-20**											

Register of Sewerage & Drainage Assets

**NAME OF ULB
REGISTER OF SEWERAGE & DRAINAGE ASSETS**

Asset No.:
Location of the Asset:
Measure of Asset (Length etc.)

Type of Asset:
Description of Asset:
Rate of Depreciation:

Date of construction / acquisition	Description of Expense	Opening Value / Amount of acquisition (Rs.)	Entry Ref. in Cash Book	Use of Asset	Annual Depreciation (Rs.)	Closing / Depreciated Value (Rs.)	Date of Disposal	Details of disposal	Amount on Disposal (Rs.)	Entry Ref. in Cash Book	Remarks
Total for the year 20**-20**											
Total for the year 20**-20**											
Total for the year 20**-20**											

Register of Water work Assets

**NAME OF ULB
REGISTER OF WATER WORK ASSETS**

Asset No.:
Location of the Asset:
Measure of Asset (Length etc.)

Type of Asset:
Description of Asset:
Rate of Depreciation:

Date of construction / acquisition	Description of Expense	Opening Value / Amount of acquisition (Rs.)	Entry Ref. in Cash Book	Use of Asset	Annual Depreciation (Rs.)	Closing / Depreciated Value (Rs.)	Date of Disposal	Details of disposal	Amount on Disposal (Rs.)	Entry Ref. in Cash Book	Remarks
Total for the year 20**-20**											
Total for the year 20**-20**											
Total for the year 20**-20**											

Register of Public Lighting

**NAME OF ULB
REGISTER OF PUBLIC LIGHTING**

Asset No.:

Location of the Asset:

Details of Streetlight:

Type of Asset:

Description of Streetlight:

Rate of Depreciation:

Date of construction / acquisition	Description of Expense	Opening Value / Amount of acquisition (Rs.)	Entry Ref. in Cash Book	Use of Asset	Annual Depreciation (Rs.)	Closing / Depreciated Value (Rs.)	Date of Disposal	Details of disposal	Amount on Disposal (Rs.)	Entry Ref. in Cash Book	Remarks
Total for the year 20**-20**											
Total for the year 20**-20**											
Total for the year 20**-20**											

Register of Plant & Machinery

**NAME OF ULB
REGISTER OF PLANT & MACHINERY**

Asset No.:
Location of the Asset:
Technical Specifications:

Type of Asset:
Description of Asset:
Rate of Depreciation:

Date of construction / acquisition	Description of Expense	Opening Value / Amount of acquisition (Rs.)	Entry Ref. in Cash Book	Use of Asset	Annual Depreciation (Rs.)	Closing / Depreciated Value (Rs.)	Date of Disposal	Details of disposal	Amount on Disposal (Rs.)	Entry Ref. in Cash Book	Remarks
Total for the year 20**-20**											
Total for the year 20**-20**											
Total for the year 20**-20**											

Register of Vehicles

**NAME OF ULB
REGISTER OF VEHICLES**

Asset No.:

Location Base:

Specification of Vehicle (Regn No.):

Type of Vehicle:

Description of Vehicle

Rate of Depreciation:

Date of purchase / acquisition	Description of Expense	Opening Value / Amount of acquisition (Rs.)	Entry Ref. in Cash Book	Use of Asset	Annual Depreciation (Rs.)	Closing / Depreciated Value (Rs.)	Date of Disposal	Details of disposal	Amount on Disposal (Rs.)	Entry Ref. in Cash Book	Remarks
Total for the year 20**-20**											
Total for the year 20**-20**											
Total for the year 20**-20**											

Register of Office & Other Equipment

**NAME OF ULB
REGISTER OF OFFICE & OTHER EQUIPMENT**

Asset No.:

Location of the Asset:

Details of Asset (Model No. Serial no. etc.):

Type of Asset:

Description of Asset:

Rate of Depreciation:

Date of purchase / acquisition	Description of Expense	Opening Value / Amount of acquisition (Rs.)	Entry Ref. in Cash Book	Use of Asset	Annual Depreciation (Rs.)	Closing / Depreciated Value (Rs.)	Date of Disposal	Details of disposal	Amount on Disposal (Rs.)	Entry Ref. in Cash Book	Remarks
Total for the year 20**-20**											
Total for the year 20**-20**											
Total for the year 20**-20**											

Register of Furniture, fixtures, fittings and Electrical appliances

**NAME OF ULB
REGISTER OF FURNITURE, FIXTURES, FITTINGS AND ELECTRICAL APPLIANCES**

Asset No.:

Location of the Asset:

No. of units:

Type of Asset:

Description of Asset

Rate of Depreciation:

Date of purchase / acquisition	Description of Expense	Opening Value / Amount of acquisition (Rs.)	Entry Ref. in Cash Book	Use of Asset	Annual Depreciation (Rs.)	Closing / Depreciated Value (Rs.)	Date of Disposal	Details of disposal	Amount on Disposal (Rs.)	Entry Ref. in Cash Book	Remarks
Total for the year 20**-20**											
Total for the year 20**-20**											
Total for the year 20**-20**											

Register of Other Assets

**NAME OF ULB
REGISTER OF OTHER ASSETS**

Asset No.:
Location of the Asset:
No. of units:

Type of Asset:
Description of Asset:
Rate of Depreciation:

Date of purchase / acquisition	Description of Expense	Opening Value / Amount of acquisition (Rs.)	Entry Ref. in Cash Book	Use of Asset	Annual Depreciation (Rs.)	Closing / Depreciated Value (Rs.)	Date of Disposal	Details of disposal	Amount on Disposal (Rs.)	Entry Ref. in Cash Book	Remarks
Total for the year 20**-20**											
Total for the year 20**-20**											
Total for the year 20**-20**											