



U.S. Department of Transportation
Federal Highway Administration
Federal Transit Administration



TRANSPORTATION PLANNING INFORMATION EXCHANGE

Performance Measures for Financial Sustainability of Highway Assets

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CONTEXT



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**Sustainability of services
should be key objective
of every agency**



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Economic development



Social & Recreation Needs



Public health & safety



Highly interdependent



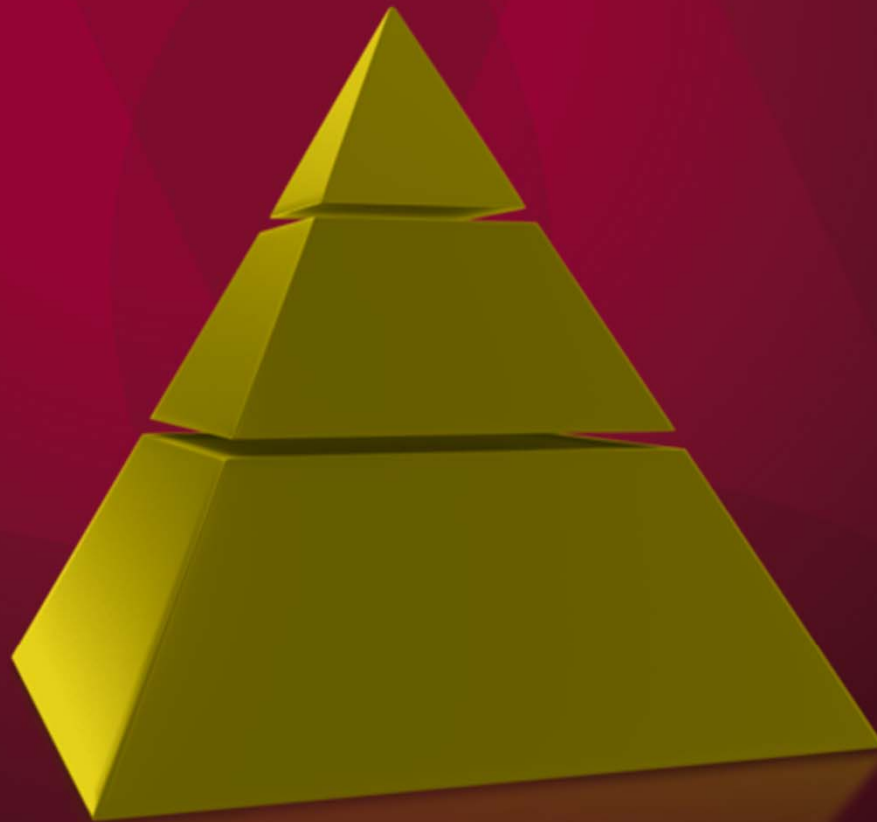
Municipal Government is asset rich and revenue poor



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**We manage more assets relative
to income than other govts**



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**We have a responsibility to
current & future generations**



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**You cannot manage long lived
infrastructure from year to year**



You need a long term sustainable plan for your network & community



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Sustainably managing your Network



FINANCIAL &
INFRASTRUCTURE
SUSTAINABILITY

\$\$\$

ASSET
MANAGEMENT
PLAN
Services
required, how
provided &
funds required

LONG TERM
FINANCIAL
PLAN
How services
are to be
funded



Sustainable Communities

3 KEY ELEMENTS

1. Stewardship:
Role of Elected Members
2. Managing existing as well as new:
Asset Management Planning
3. Essential part of Business:
Long Term Financial Planning





Sustainable Communities

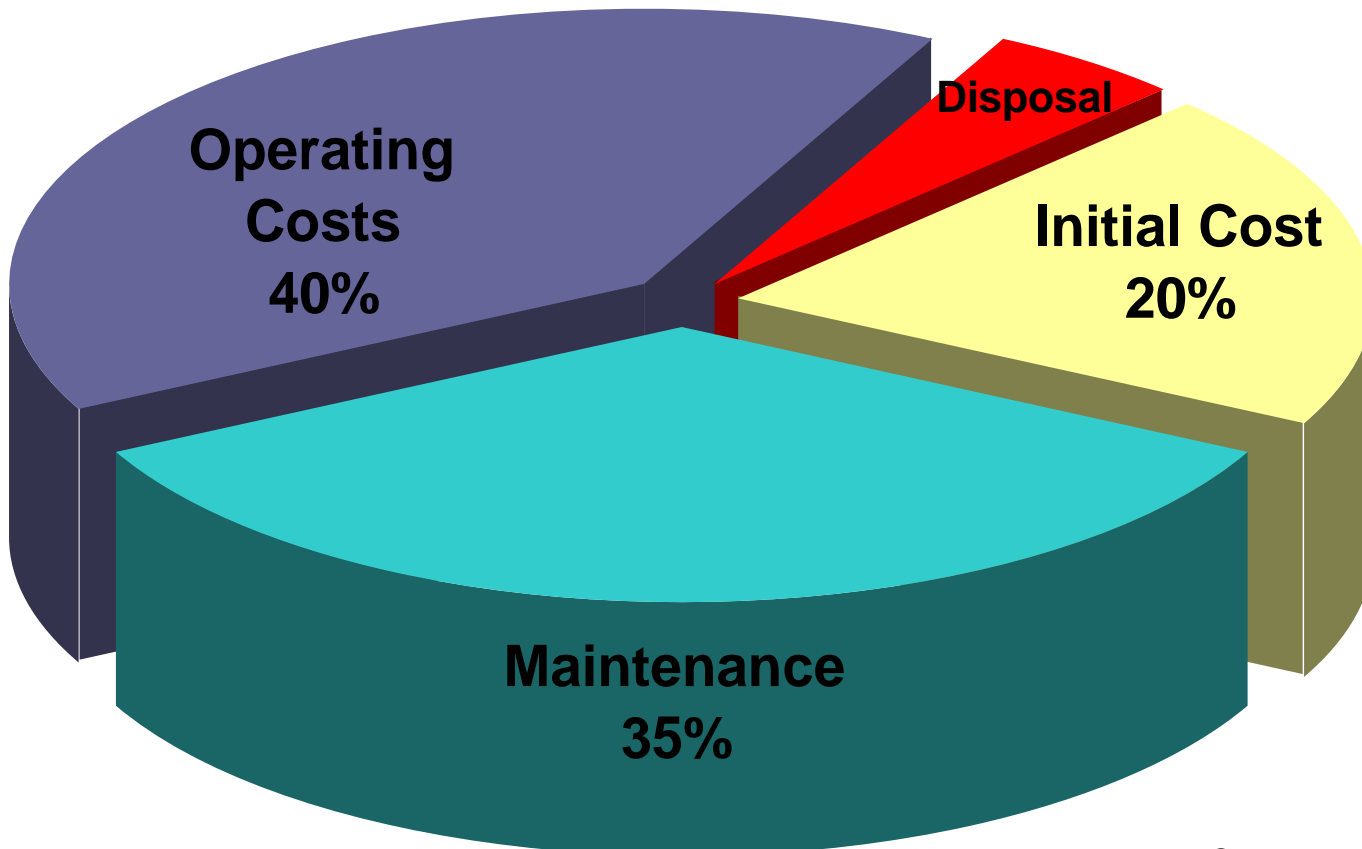
3 KEY ELEMENTS

1. **Stewardship:**
Role of Elected Members
2. **Managing existing as well as new:**
Asset Management Planning
3. **Essential part of Business:**
Long Term Financial Planning



A close-up photograph of a young child's face, focusing on the eye and curly hair. The child has light-colored eyes and brown, curly hair. The background is a soft, out-of-focus green, suggesting foliage. The text is overlaid on the right side of the image.

Decaying
infrastructure
leaves a
liability for
future
generations



**Infrastructure Assets
Typical Life Costs**

What are the risks, priorities & funds required to sustainably manage infrastructure?



Make the link between
levels of service and price



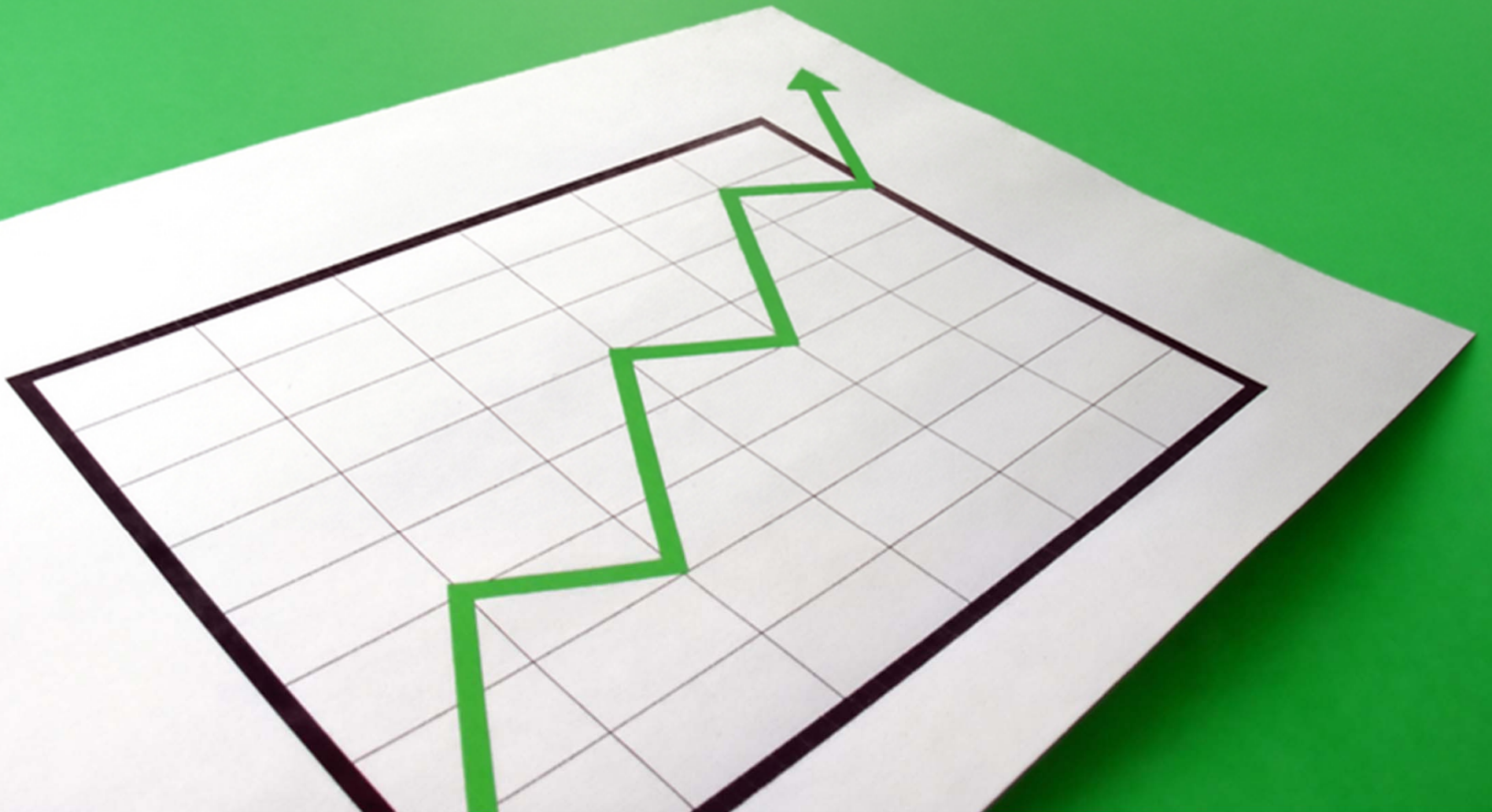
Manage the gap

(not just funding the gap)

- Understanding impact new assets
- Better asset information
- Timely maintenance
- Improved work practices
- Disposal of assets
- Alternative service delivery
- Lower levels of service
- Innovative solutions



Move from annual budgeting to long term financial planning






Sustainable Communities

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A man with short brown hair and blue eyes is peering over a white rectangular sign. He is holding the top edge of the sign with both hands. The background is plain white.

**Engineers don't understand
Accountants
Accountants don't understand
Engineers**

Accountants



Past Investments

Asset Consumption

Annual Depreciation Expense

Asset Managers



Future Investments

Asset Renewal

Renewal Cashflow Projections

Engineers & Accountants talking the same language



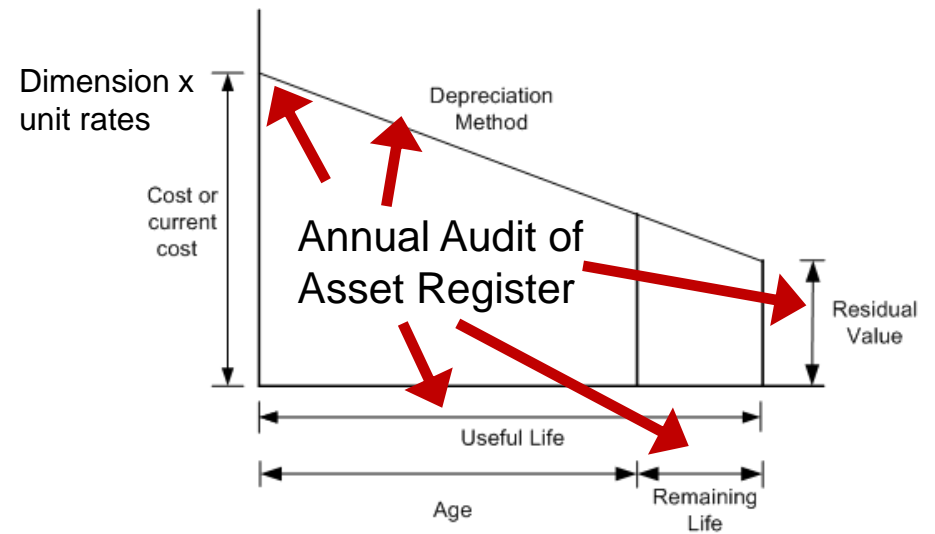
All singing from the same song book

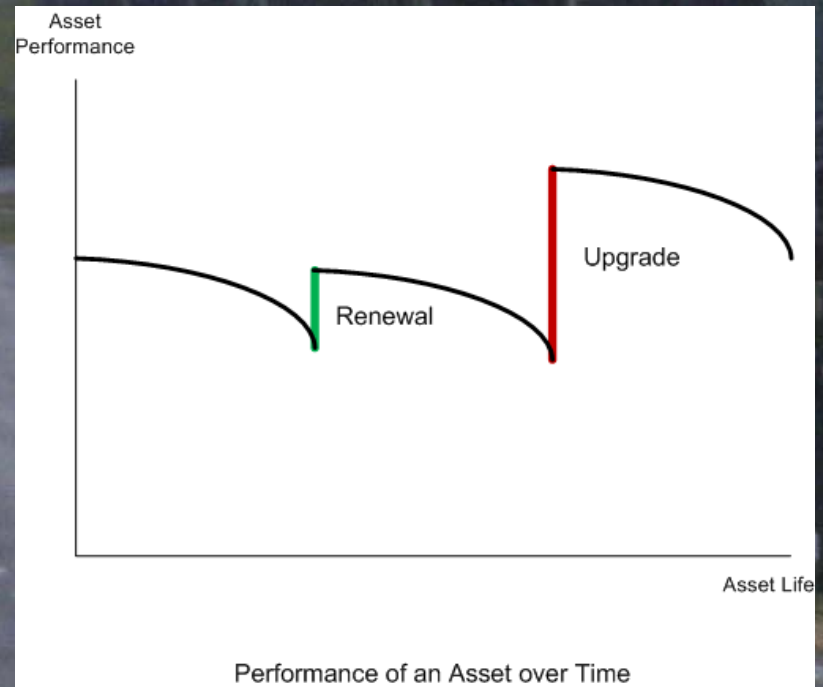
Accounting for infrastructure
can reflect the way we
manage
our assets

- Accrual Accounting
- CRC / Fair Value,
not Historical cost

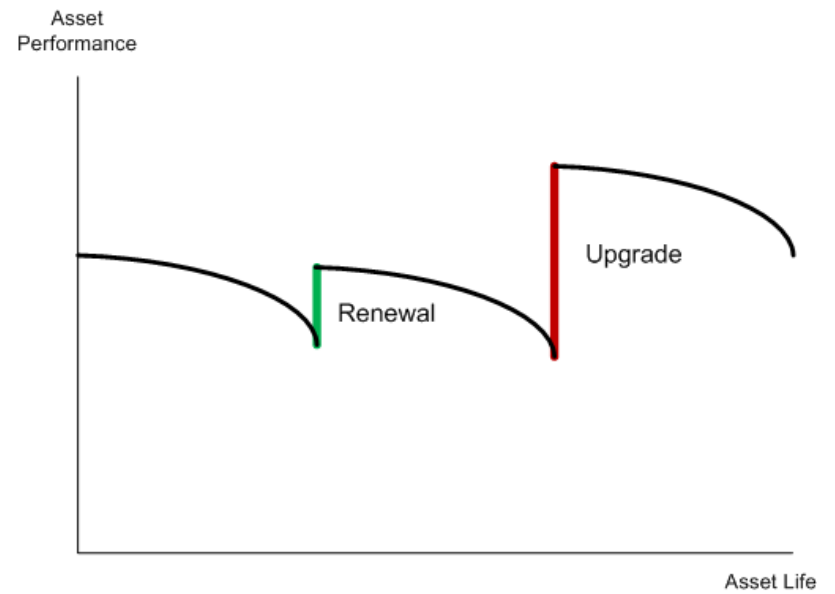


Use AMP & LTFP
process to
improve your
asset register &
financial
statements





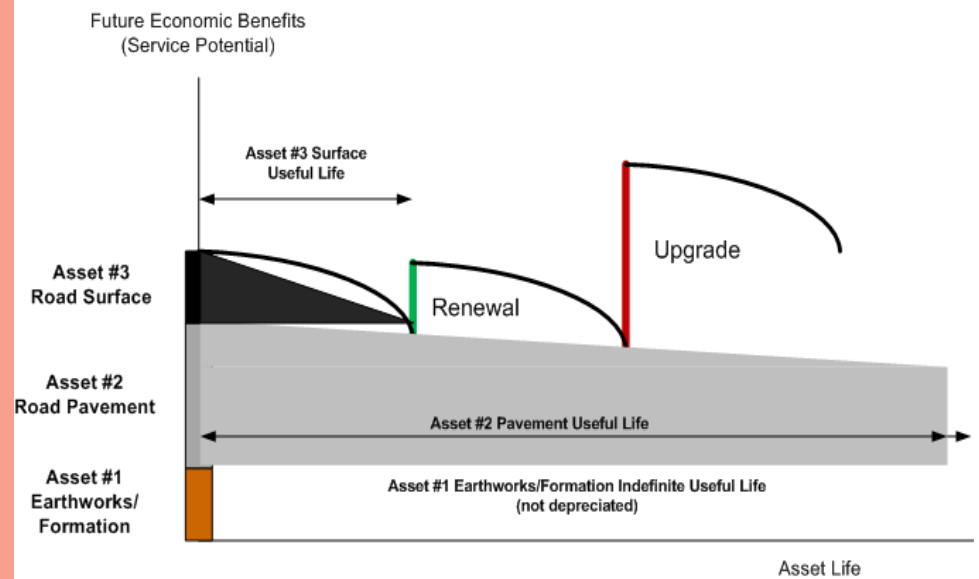
Assets recognised at component level



Performance of an Asset over Time

Assets recognised at component level

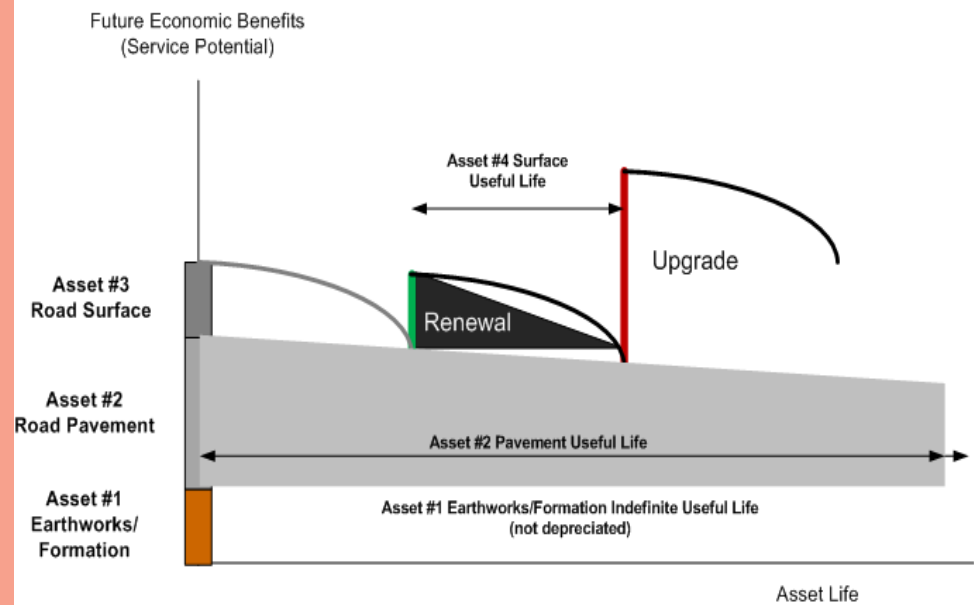
Consumption Phase 1



Depreciating the Assets – Phase I
(Recognising asset consumption)

Assets recognised at component level

Consumption Phase 2

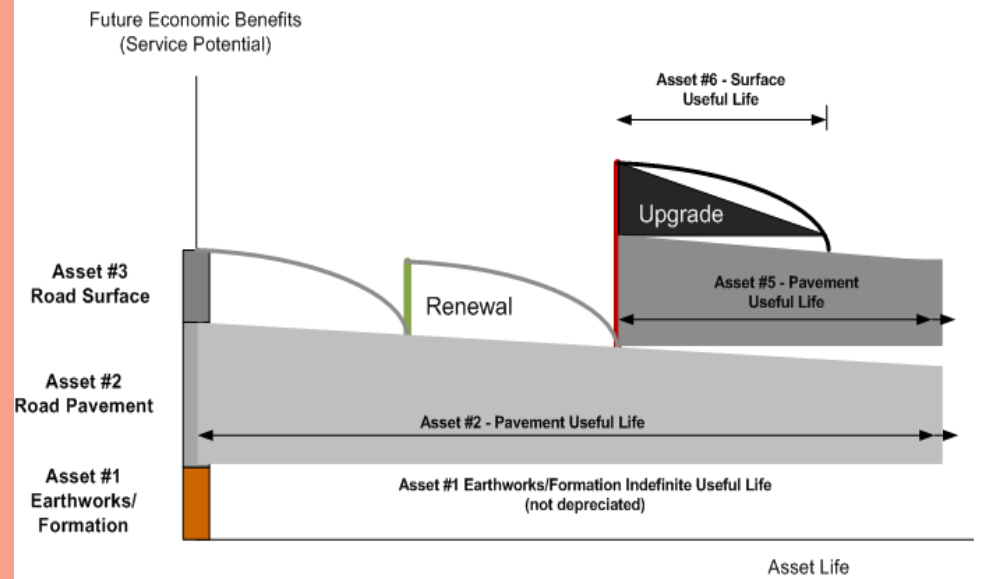


Depreciating the Assets Phase II

Assets recognised at component level



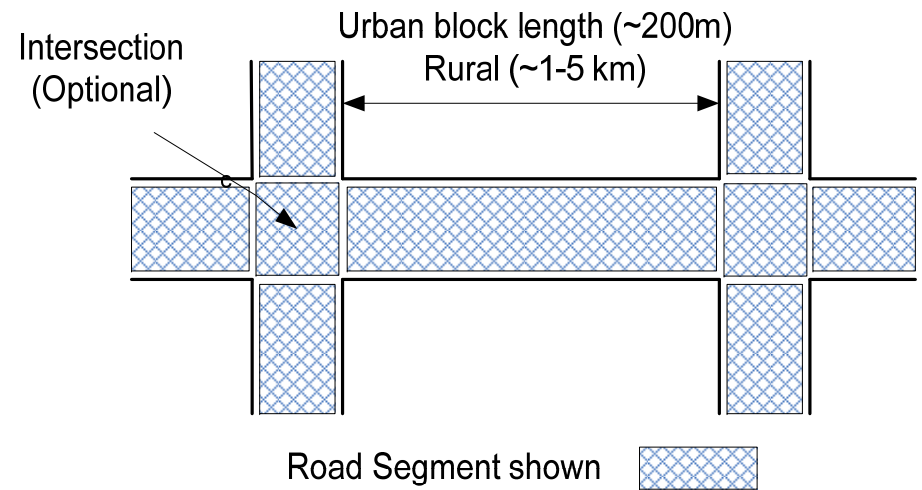
Consumption Phase 3



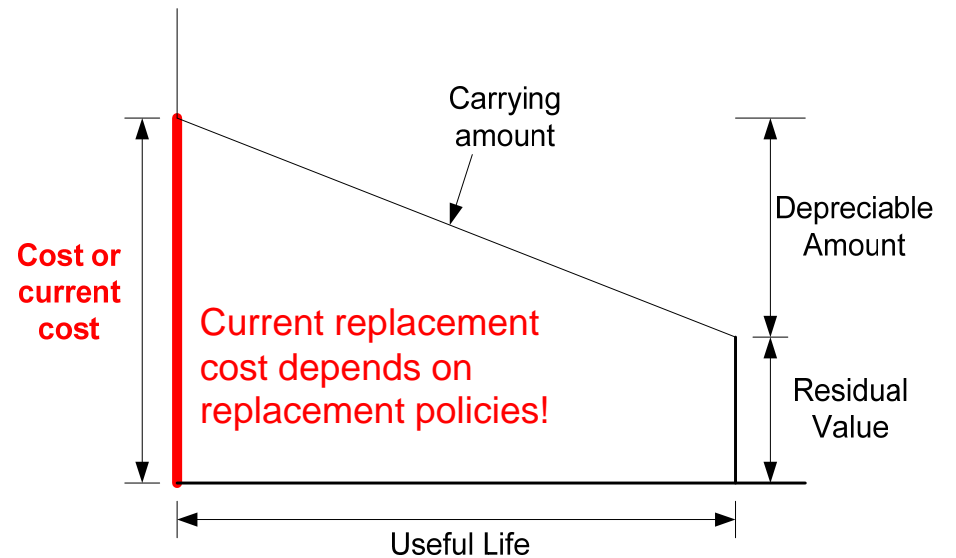
Depreciating the Assets - Phase III

Assets
recognised at
component level

Segmentation



Value assets to reflect how we manage



Value assets to
reflect how we
manage



Take replacement
policies into account

Case 1

Replacement K&G with
road pavement

Replacement cost
\$50/m

Case 2

Replacement in isolation

Replacement cost

K&G \$80/m

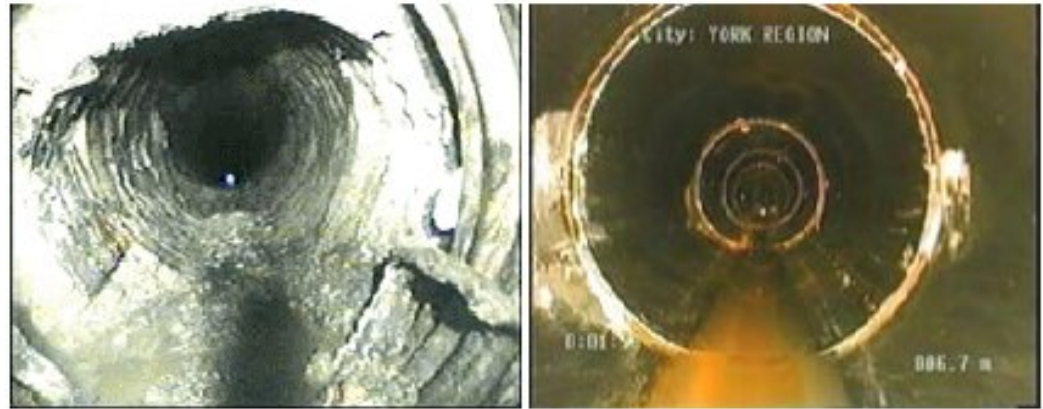
Restoration \$30/m

\$110/m

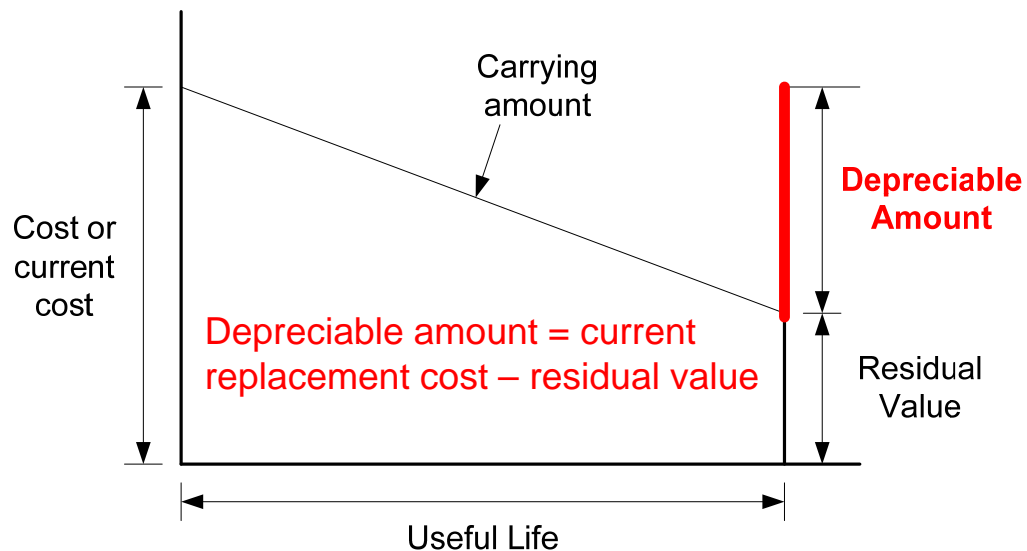
Value assets to reflect how we manage

Residual value has meaning in the field

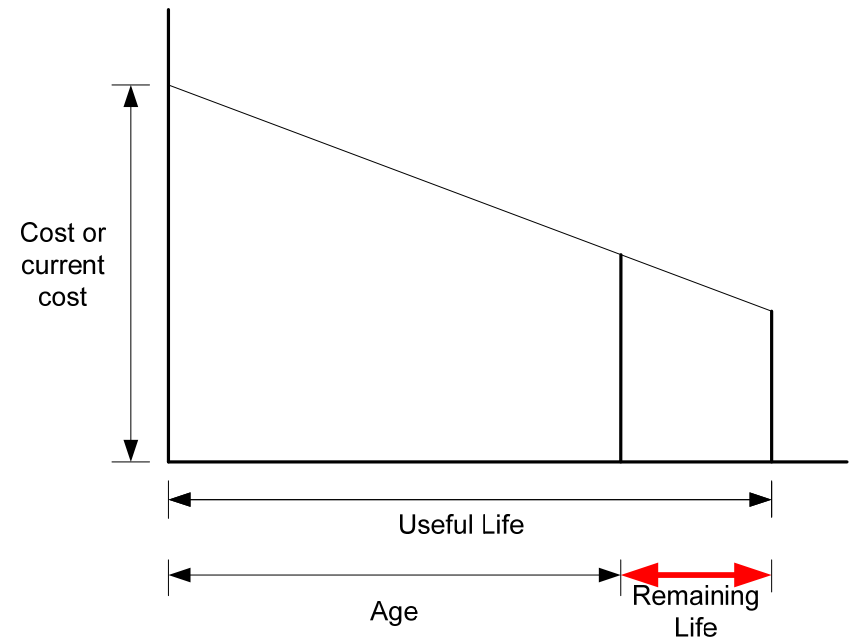
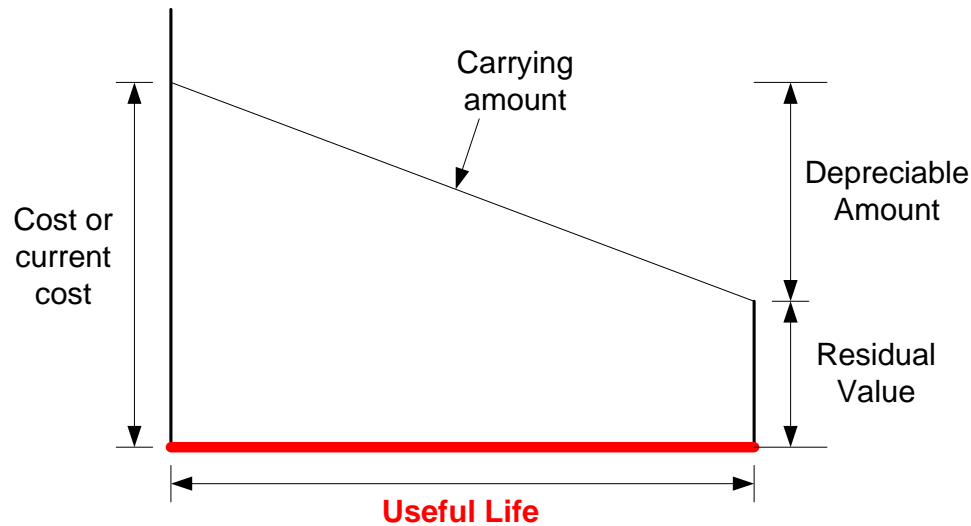
Pipeline lining



Road pavement recycling



Useful life is not a look up table

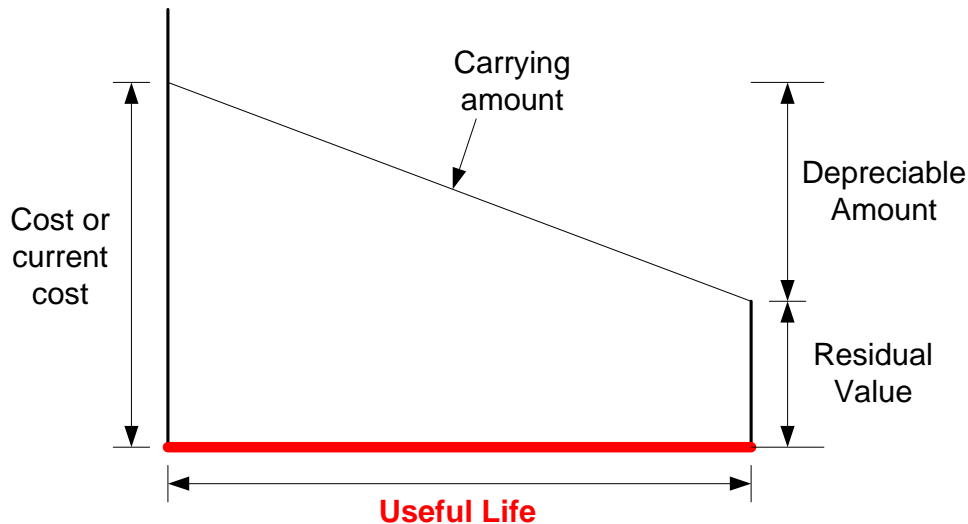


Period that the asset provides the required level of service

- Use best information available
- Experience with similar assets
- When will replacement / disposal appear in the Works Program?

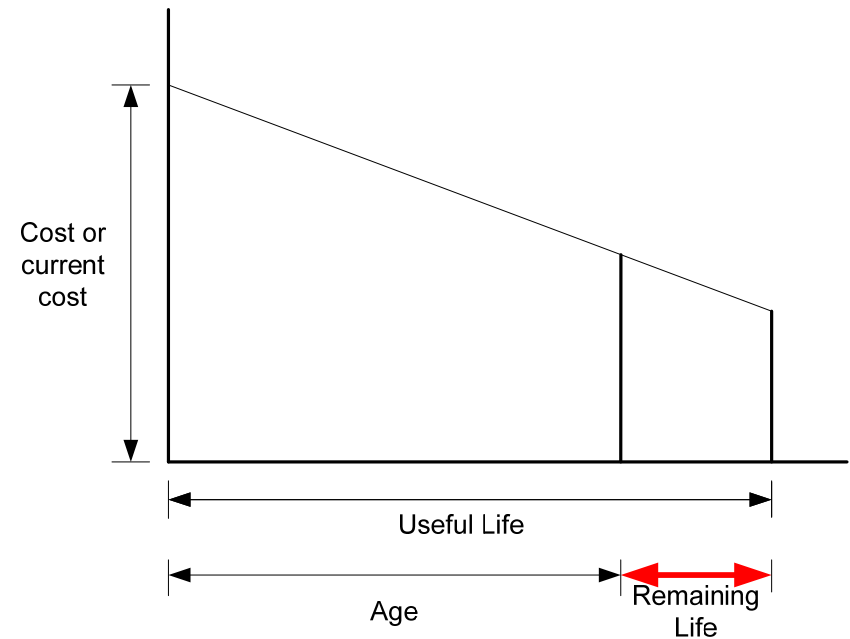


Useful life is not a look up table



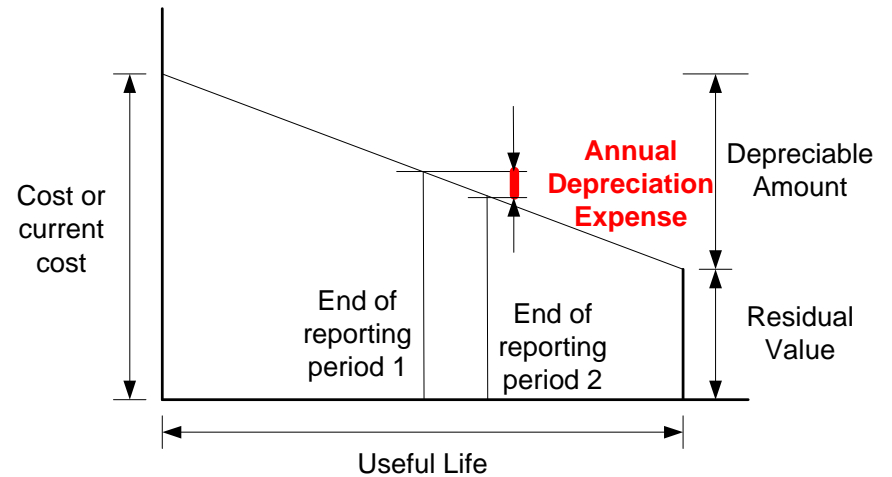
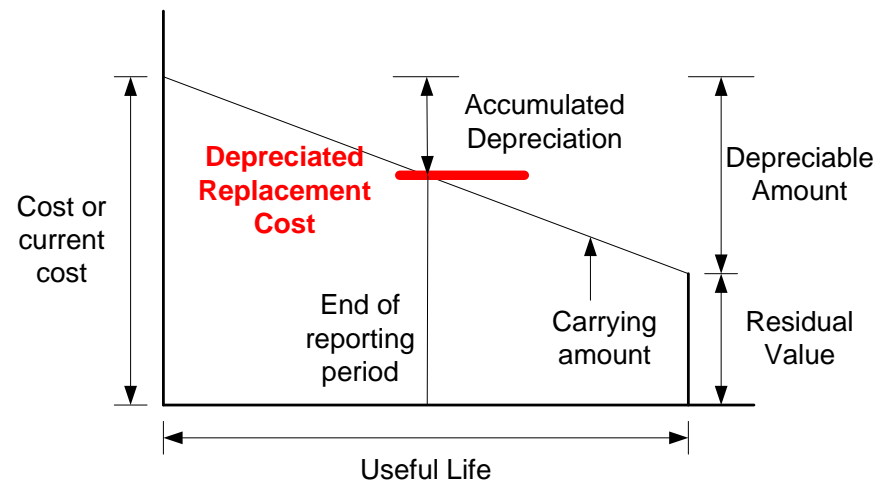
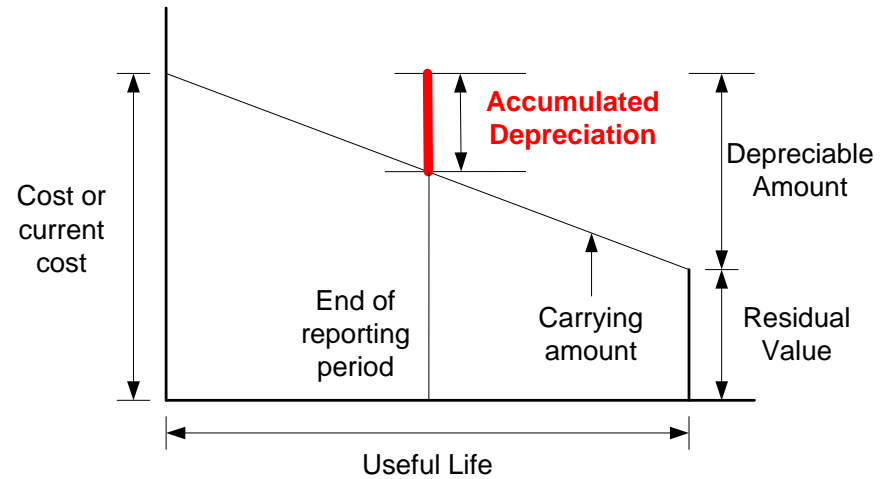
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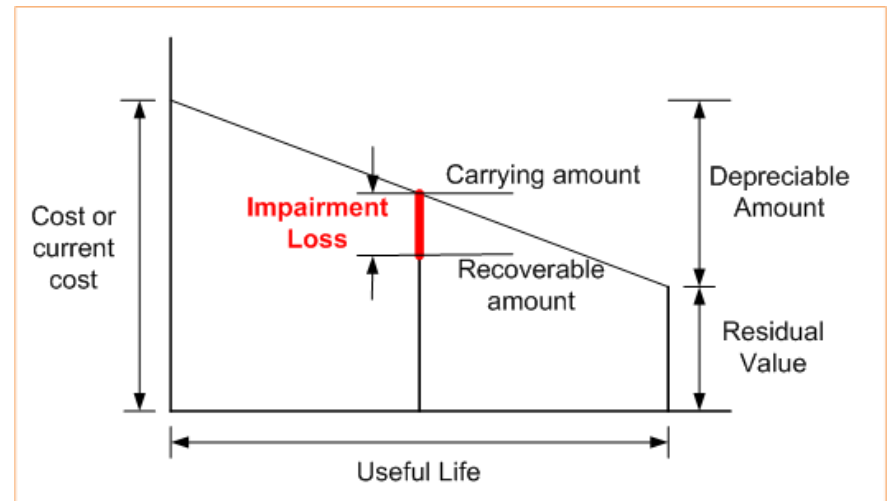


- Condition / Functional
- Capacity and Utilisation
- Cost and efficiency
- Safety and compliance
- Location, Obsolescence
- Availability of funding, etc

Calculate accumulated depreciation, fair value & annual depreciation expense



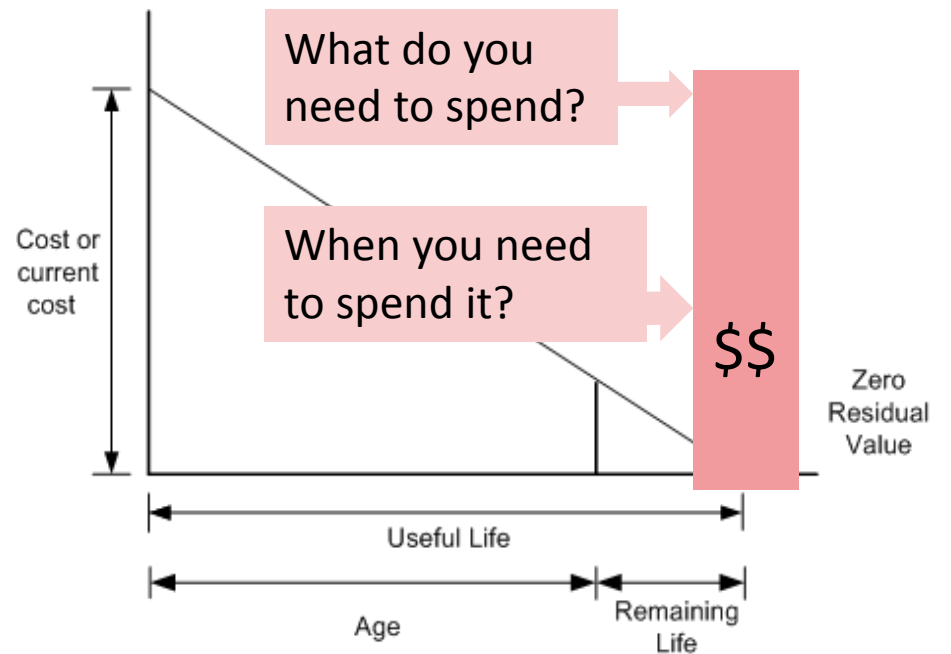
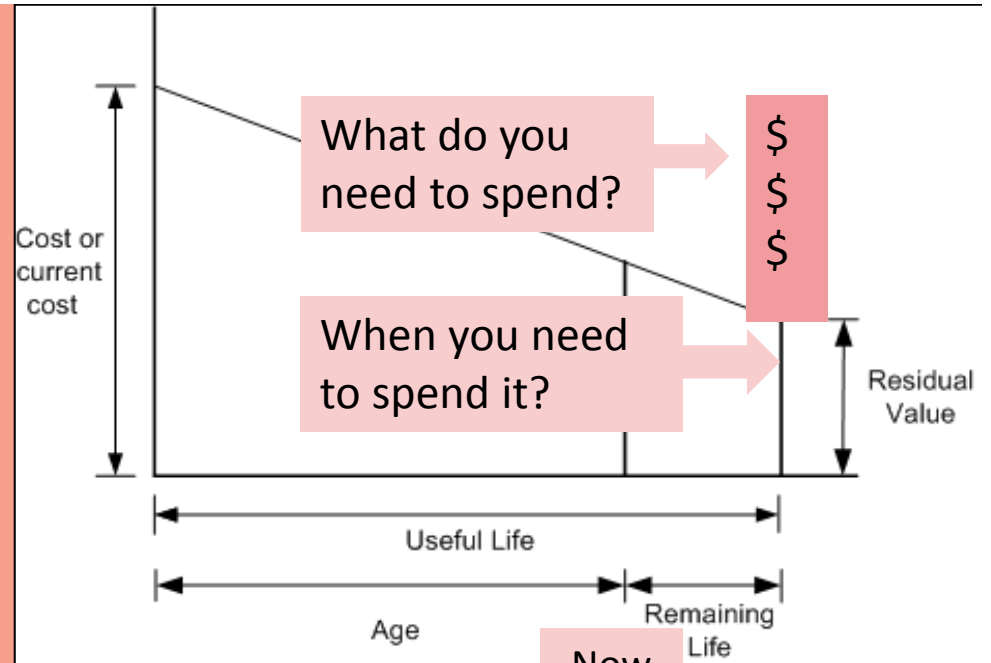
Test for impairment & calculate loss



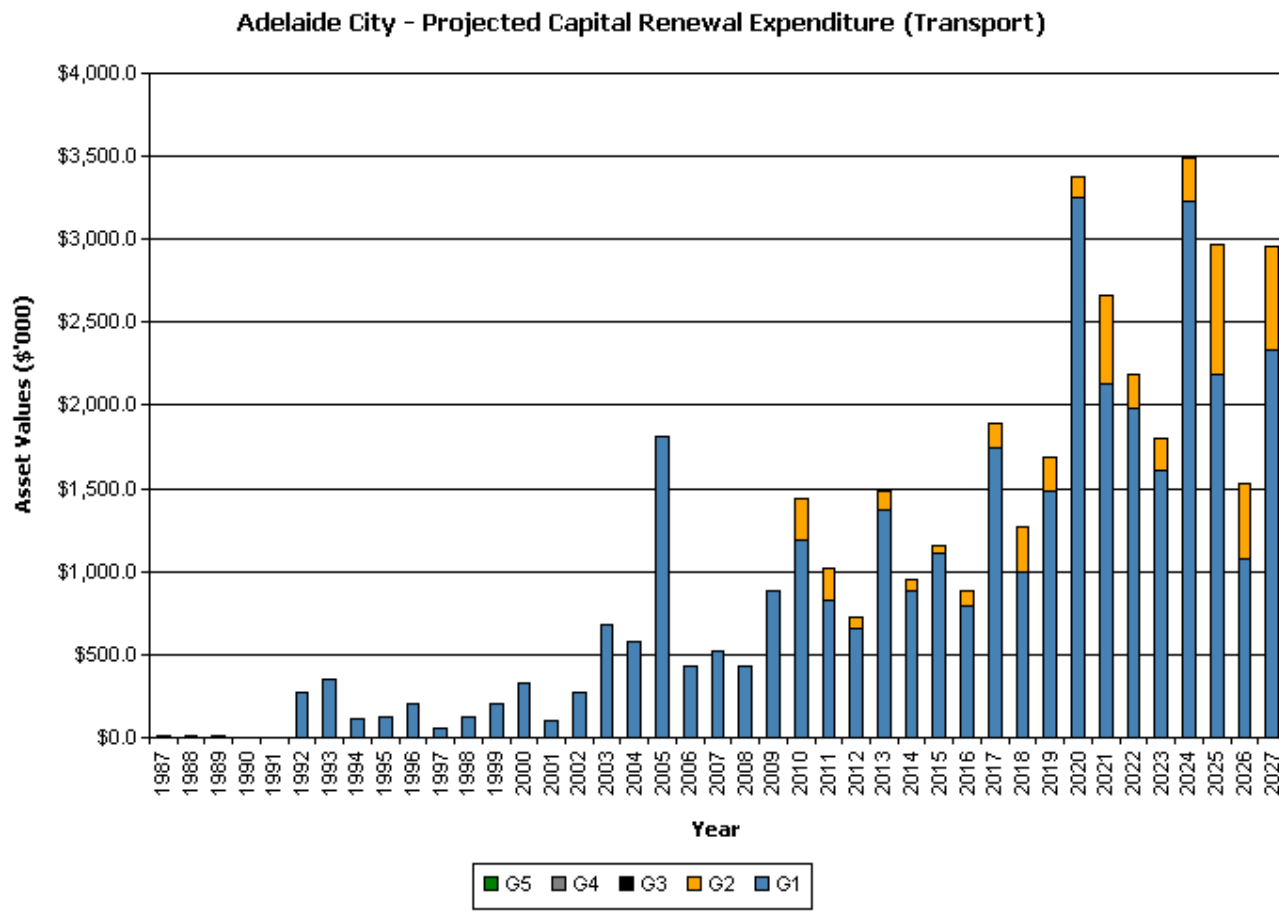
Sum the
components

Document to
substantiate &
justify for audit

Use the data for asset renewal planning



Project capital renewal requirements



Sustainably managing your Network



FINANCIAL &
INFRASTRUCTURE
SUSTAINABILITY

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ASSET
MANAGEMENT
PLAN
Services
required, how
provided &
funds required

LONG TERM
FINANCIAL
PLAN
How services
are to be
funded



Sustainable Communities

3 KEY ELEMENTS

1. Stewardship:
Role of Elected Members
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LTFP PN

Free download: www.ipwea.org.au/PracticeNotes



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3 steps to ensure sustainable service levels



develop
plan



frame
strategy



target
indicators



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**Step 1.
Develop 10yr
long term
financial plan**



**Accrual accounting principles
importantly include depreciation**



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AM Plan projections minimising whole of life costs input into LTFP

LONG-TERM FINANCIAL PLAN - ESTIMATED INCOME STATEMENT												
	2006-07 Actual \$'000	2007-08 Budget \$'000	2008-09 Plan \$'000	2009-10 Plan \$'000	2010-11 Plan \$'000	2011-12 Plan \$'000	2012-13 Plan \$'000	2013-14 Plan \$'000	2014-15 Plan \$'000	2015-16 Plan \$'000	2016-17 Plan \$'000	2017-18 Plan \$'000
INCOME												
Rates												
Statutory charges												
User charges												
Grants, subsidies and contributions												
Investment Income												
Reimbursements												
Other Revenues												
Share of profit – joint ventures & associates												
Total Revenues												
EXPENSES												
Employee Costs												
Materials, contracts & other expenses												
Finance Costs												
Depredation, Amortisation & Impairment												
Share of loss – joint ventures & associates												
Total Expenses												
OPERATING SURPLUS/(DEFICIT) BEFORE CAPITAL AMOUNTS												
Net gain/(loss) on disposal or revaluation of assets												
Amounts received specifically for new or upgraded assets												
Physical resources received free of charge												
NET SURPLUS/(DEFICIT)												

Expenditure Projections from Asset Management Plans

Valuation Projections from Asset Management Plans



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Your LTFP will have a strategic focus

	\$Y1	\$Y2	\$Y3	\$Y10
Revenue	x_1	x_2	x_3	x_{10}
Expenses	y_1	y_2	y_3	y_{10}
Capital Works	z_1	z_2	z_3	z_{10}
Avail/needed cash	a_1	a_2	a_3	a_{10}
Financial Perf Indicators	b_1	b_2	b_3	b_{10}
Financial Perf targets	c_1	c_2	c_3	c_{10}

where targeted performance is not projected to be achieved the plan should be revised

- Less 20pp
- Narrative overview
- Not too detailed
- Iterative process
- Year 0 Last FY
- Year 1 Budget

Document your key assumptions

- Rate of growth or decline
 - will impact operating revenue & expenditure
- Mandated or discretionary service levels
 - changes assumed
- Relative price variations over time
 - use trend estimates; focus major outlays
- Use of real (net of inflation) values
 - inter-year comparisons more meaningful
- Changes in revenue beyond your control

Step 2.
Frame your plan
within a clear
financial strategy



Target small underlying operating surplus on average over time

*Operating Result = Operating Revenue
Less Operating
Expenditure*


Include depreciation
not Capital Outlays



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Ongoing operating deficits imply running your assets down



- Taxes & charges less than cost of service
- Current policies & LOS unsustainable



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Renewing or replacing ageing assets add little operating costs

- Acquiring new assets will!
- Depreciation not significantly different
- Operating & maintenance costs may decrease

3 steps to ensure sustainable service levels



develop
plan



frame
strategy



target
indicators



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Step 3.
Monitor projections
against target
financial indicators



	\$Y1	\$Y2	\$Y3...	\$Y10
Revenue	x_1	x_2	x_3	x_{10}
Expenses	y_1	y_2	y_3	y_{10}
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where targeted performance is not projected to be achieved the plan should be revised

AIFMG's recommend you monitor 8 financial indicators

1. Operating surplus
2. Operating surplus ratio
3. Net financial liabilities
4. Net financial liabilities ratio
5. Interest cover ratio
6. Asset sustainability ratio
7. Asset consumption ratio
8. Asset renewal funding ratio

AIFMG's recommend you monitor 8 financial indicators

1. Operating surplus
2. Operating surplus ratio
3. Net financial liabilities
4. Net financial liabilities ratio
5. Interest cover ratio
6. Asset sustainability ratio
7. Asset consumption ratio
8. Asset renewal funding ratio

3 key financial indicators

1. Operating surplus ratio

- % operating surplus/deficit varies from major controllable income source (operating income)

2. Net financial liabilities ratio

- The significance of net amount owed (i.e., less money held, invested or owed to entity) compared with operating income

3. Asset sustainability ratio

- Ratio asset replacement expenditure relative to depreciation; measures replacement rate

Step 3.
Monitor projections
against target
financial indicators



**Sustainability is maintaining
financial capital
and infrastructure capital
over the long term**

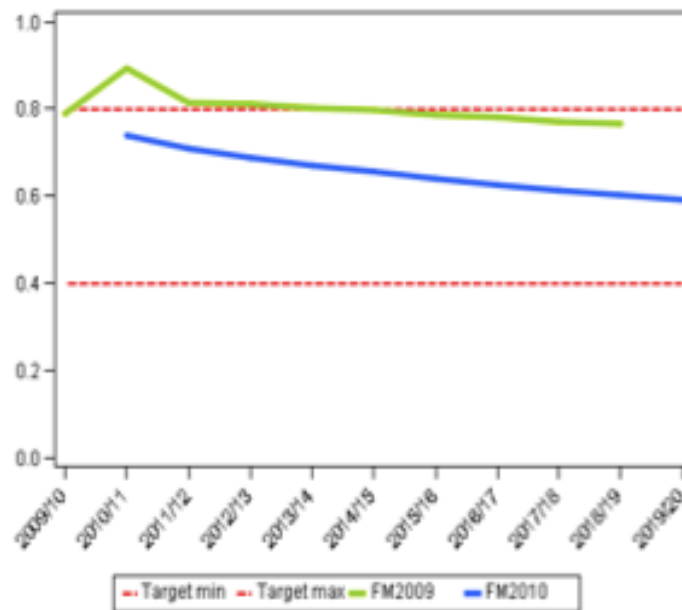


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Undertake sensitivity analysis of variation in assumptions & inputs

Comparative asset consumption ratio—small local governments



**Review & revise your plan
annually**



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Manage the gap (not just funding the gap)

- Understanding impact new assets
- Better asset information
- Timely maintenance
- Improved work practices
- Disposal of assets
- Alternative service delivery
- Lower levels of service
- Innovative solutions

You need long term plan to sustainably manage long lived infrastructure



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Ensuring adequate investment in community infrastructure



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Sustainable infrastructure supporting viable communities



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IPWEA resources to assist

www.ipwea.org.au/AM

- Community of Practice in AM
- IPWEA App
- Australian Infrastructure Financial Management Guidelines
- LTFP Practice Note (free download)



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LTFP PN

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Explore New Territory
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