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Australia
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Ian Carruthers
Chair
International Public Sector Accounting Standards Board
277 Wellington Street West
Toronto, ON M5V 3H2

Dear Mr. Carruthers

Consultation Paper Measurement

I am pleased to make this submission on Consultation Paper - Measurement.

I have over 30 years of experience in accounting advisory functions of large accounting and auditing firms across a wide range of clients, industries and issues in the for-profit, not-for-profit, private, and public sectors. My clients across the business and government environments have included listed companies, unlisted and private companies, charitable and not-for-profit organisations, commonwealth, state and local government departments and agencies in the public sector, and government owned corporations (government business enterprises).

My current position is at the Queensland Audit Office where we audit Queensland state government entities, universities and local governments.

I found the approach of including a draft exposure draft in the Consultation paper very useful. While I disagree with many of the suggestions for restructuring guidance, the approach saved a lot of time and effort by being able to identify early alternatives (e.g. of moving fulfilment requirements) that should not be pursued.

I include my detailed responses below.

I have included a list of numerous practical issues I have encountered in applying IFRS 13 in the public sector, particularly to infrastructure assets. These issues will need to be addressed if replacement cost is used for many of those assets.

Yours sincerely,

David Hardidge
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Preliminary View 1—Chapter 2 (following paragraph 2.6)

The IPSASB's Preliminary View is that the fair value, fulfillment value, historical cost and replacement cost measurement bases require application guidance.

Do you agree with the IPSASB's Preliminary View?

If not, please provide your reasons, stating clearly which measurement bases should be excluded from, or added to, the list, and why.

I agree that the four identified measurement bases are the ones to concentrate on.

Preliminary View 2—Chapter 2 (following paragraph 2.6)

The IPSASB's Preliminary View is that the application guidance for the most commonly used measurement bases should be generic in nature in order to be applied across the IPSAS suite of standards. Transaction specific measurement guidance will be included in the individual standards providing accounting requirements and guidance for assets and liabilities.

Do you agree with the IPSASB's Preliminary View?

If not, please provide your reasons, and state what guidance should be included, and why.

While moving transaction specific material to the applicable specific standard has some appeal, sometimes the material is used by other standards. For example, the financial instrument day 1 recalibration of mark-to-model fair value to purchase price is also relevant for other valuations – e.g. property, plant and equipment when a replacement cost valuation is made immediately after construction, and the replacement costs include costs of disruption and replacing the asset in a built-up area.

The implications of possible use by other standards needs to be considered before this approach is implemented.

Preliminary View 3—Chapter 2 (following paragraph 2.10)

The IPSASB's Preliminary View is that guidance on historical cost should be derived from existing text in IPSAS. The IPSASB has incorporated all existing text and considers Appendix C: Historical Cost–Application Guidance for Assets, to be complete.

Do you agree with the IPSASB's Preliminary View?

If not, please provide your reasons, stating clearly what you consider needs to be changed.

While moving all historical cost guidance to the one area looked appealing, I do not agree with the consequences, and I do not agree with the proposals.

Historical cost has been used for many years. Moving it to one area and changing those requirements to make it consistent is then going to change how those items are accounted for. Or at a minimum, raising questions as to whether there has been a change.

Given the desire to be consistent with IFRS, I believe the changes to historical cost should not be made, and the requirements (even if inconsistent) left as they are.

I have encountered diversity in the accounting treatment of long-term prepayments, say 10 to 20 years, and some for 99 years. I have included details in Appendix 1. I request the IPSASB to provide some guidance on this issue.

Other comments

Paragraph C15 – Currently deducts proceeds from testing. The IASB project needs to be monitored.

<https://www.ifrs.org/projects/work-plan/property-plant-and-equipment-proceeds-before-intended-use/>

Paragraph C21 does not look right. It currently states:

C21. For variable rate instruments, where the asset or liability bears interest at a variable rate, the discount rate is updated to reflect changes in the variable rate.

The paragraph appears to be drafted to pick up the essentially practical expedient for floating rate notes in IFRS 9. However, the reference to 'variable rate' might also pick up instruments that have different rates for different periods, e.g. 3% for the first two years, and 5% in years 4 and 5 – in this situation the effective interest rate method covers this.

Preliminary View 4—Chapter 2 (following paragraph 2.16)

The IPSASB's Preliminary View is that fair value guidance should be aligned with IFRS 13, taking into account public sector financial reporting needs and the special characteristics of the public sector. The IPSASB considers Appendix A: Fair Value—Application Guidance, to be complete.

Do you agree with the IPSASB's Preliminary View?

If not, please provide your reasons, stating clearly what you consider needs to be changed.

I believe that there are some gaps in the guidance. The revaluation of PPE seems to assume the replacement cost approach. In many situations of infrastructure assets, like roads this makes sense. However, we have numerous infrastructure assets in GBE's, for example electricity (generation, transmission and distribution), ports and water (generation (such as dams, recycling and desalination plants,) transmission and distribution). The GBE assets are valued on a net present value (fair value) basis in their own financial statements, and also on consolidation. My experience is that a replacement cost approach for these assets are a huge cost burden, and do not result in a value that is anywhere near the NPV value.

I believe that such assets should be valued on an NPV approach, being either fair value or something close to it. However, we have encountered many practical problems with fair valuing such assets. One major problem is related to the exit price concept and having to address the hypothetical market participant when often no such entity exists. I would like to see fair value being used, i.e. using expected cash flows from operating the asset, without the additional complexities and cost burdens of the non-existent hypothetical market participant.

While these assets are often subject to regulatory regimes and price capping, these caps are set for a maximum of five years into the future. Then estimates need to be

made of the future price caps from the end of the regulatory period for tens of years into the future.

Fair value works well with level 1 or level 2 valuations, e.g. social housing where there are markets for similar residential housing.

Other issues to resolve include:

Distinguishing between replacement cost as a measurement base and replacement cost as a method of determining fair value.

What is the difference between market value and fair value?

Preliminary View 5—Chapter 2 (following paragraph 2.28)

The IPSASB's Preliminary View is that fulfilment value guidance should be based on the concepts developed in the Conceptual Framework, expanded for application in IPSAS. The IPSASB considers Appendix B: Fulfilment Value—Application Guidance, to be complete.

Do you agree with the IPSASB's Preliminary View?

If not, please provide your reasons, stating clearly what you consider needs to be changed.

I do not agree with the proposed changes for fulfilment value.

Fulfilment value appears to mainly (or even solely) to liabilities and provisions. Given there is already an accounting standard on accounting for provisions, I do not see the point of moving the requirements to another standard.

I found the changes very confusing, as I could not work out what was changing. I also believe there is a risk of changes that would result in differences to IFRS for no good reason. I believe fulfilment value is better left where it is. The IASB is currently conducting research as to what changes should be made to their standard given the change in their conceptual framework.

The IASB undertook some proposed changes to the provisions standard in 2005 and 2010. I have not analysed whether any of the proposed changes, and the reasons for not proceeding with the changes, are relevant to this topic. From memory, there were issues with recognising a liability for the lower of fulfilling the liability by the entity compared to transferring to a third party.

Other comments

Paragraph 4.19 currently states:

(b) For liabilities where the settlement amounts are uncertain and the timing is unknown

The wording should be whether the amounts are uncertain **or** (emphasis added) timing is unknown.

Preliminary View 6—Chapter 2 (following paragraph 2.28)

The IPSASB's Preliminary View is that replacement cost guidance should be based on the concepts developed in the Conceptual Framework, expanded for application in IPSAS. The IPSASB considers Appendix D: Replacement Cost—Application Guidance, to be complete.

Do you agree with the IPSASB's Preliminary View?

If not, please provide your reasons, stating clearly what you consider needs to be changed.

I agree with the use of replacement cost as a measurement base for PPE. While we often use a form of replacement cost in determining level 3 fair values for infrastructure assets, we have to deal with exit value concepts such as the non-existent hypothetical market participant issue discussed above. The Consultation Paper's approach would mean not having to deal with issue, and using entity specific assumptions.

More guidance is required in how to apply replacement cost. I have included in Appendix 2 a list of numerous practical issues I have encountered in applying IFRS 13 in the public sector, particularly to infrastructure assets. These issues will need to be addressed if replacement cost is used for many of those assets.

Other comments

Paragraph D4 - Alternate locations – I do not agree with the guidance about having to identify alternate locations. Having to assess possible alternate locations is not useful if there are no plans to move the asset. Having to spend time on this issue is similar to the non-existent hypothetical market participant concept.

These paragraphs are inconsistent with paragraphs D25 and D26. I support the approach of paragraphs D25 and D26 not requiring unnecessary time and expense on hypotheticals.

Paragraph D12 – More guidance is needed on valuing the school as a 100 student school – do you value the gross replacement cost being for the asset that is there being a 500 student school and then adjusting for economic obsolescence to reduce the net replacement cost for a 100 student school, or do you just do one valuation and the gross replacement cost is based on a 100 student school.

Paragraph D22 – Restrictions. Australia is currently addressing issues relating to restrictions, particularly on land under public sector assets, including land under roads and land under schools. Some jurisdictions arbitrarily apply discounts because of the public sector usage, and other jurisdictions do not.

Paragraph D33 – the reference to a 300 student school is different to the earlier example of a 100 student school. Also refer to earlier comments on paragraph D12.

Paragraph D37 – Site preparation. This paragraph is confusing and appears to require the day 2 write-off of site preparation and earthwork costs by not including them in the replacement costs.

Preliminary View 7—Chapter 3 (following paragraph 3.28)

The IPSASB's Preliminary View is that all borrowing costs should be expensed rather than capitalised, with no exception for borrowing costs that are directly attributable to the acquisition, construction, or production of a qualifying asset.

Do you agree with the IPSASB's Preliminary View?

If not, please state which option you support and provide your reasons for supporting that option.

I agree with the proposals to expense borrowing costs, which is the most common approach adopted in Australia for public sector assets.

However, the guidance needs to be clearer. The guidance is not very clear on whether the replacement cost should include borrowing costs or not. The reference to using the 'instant' build (paragraph D38) seems to be a fudge to get to not including borrowing costs in the replacement cost amount. If it intended to exclude borrowing costs from the valuation, this should be clearly stated.

The guidance should specifically address service concession assets. In particular, for arrangements where the operator constructs the assets and the grantor makes known payments (the financial liability model). These arrangements have an embedded financing arrangement with borrowings specifically linked to the asset. Under Australia's service concession arrangements standard (AASB 1059), the asset is recognised as it is being constructed – not when the asset is handed over (on completion). This then means that borrowing costs are recognised and expensed during construction. This raises the issue of what is the replacement cost once the asset is completed – should it include the financing costs incurred during the construction period or not? After all, if the asset was to be replaced, presumably a similar approach to its construction (via a service concession arrangement) would be used, presumably over a similar construction period, and consequently with similar financing costs.

Preliminary View 8—Chapter 3 (following paragraph 3.36)

The IPSASB's Preliminary View is that transaction costs in the public sector should be defined as follows:

Transaction costs are incremental costs that are directly attributable to the acquisition, issue or disposal of an asset or liability and would not have been incurred if the entity had not acquired, issued or disposed of the asset or liability.

Do you agree with the IPSASB's Preliminary View?

If not, please provide your reasons, and provide an alternative definition for the IPSASB to consider.

I do not agree with the proposals to change the definition of historical costs (refer above to my comments on Preliminary View 3) because of the consequences of changing current practice and the implications for consistency with IFRS.

Preliminary View 9—Chapter 3 (following paragraph 3.42)

The IPSASB's Preliminary View is that transaction costs should be addressed in the IPSAS, *Measurement*, standard for all IPSAS.

Do you agree with the IPSASB's Preliminary View?

If not, please provide your reasons and state how you would address the treatment of transaction costs in IPSAS, together with your reasons for supporting that treatment.

Per Preliminary View 8, I do not agree with the proposals to change the definition of historical cost because of the consequences of changing current practice and the implications for consistency with IFRS.

Preliminary View 10—Chapter 3 (following paragraph 3.54)

The IPSASB's Preliminary View is that transaction costs incurred when entering a transaction should be:

- Excluded in the valuation of liabilities measured at fulfillment value;
- Excluded from the valuation of assets and liabilities measured at fair value; and
- Included in the valuation of assets measured at historical cost and replacement cost.

Do you agree with the IPSASB's Preliminary View?

If not, please provide your reasons and state how you would treat transaction costs in the valuation of assets and liabilities, giving your rationale for your proposed treatment.

No comment

Preliminary View 11—Chapter 3 (following paragraph 3.54)

The IPSASB's Preliminary View is that transaction costs incurred when exiting a transaction should be:

- Included in the valuation of liabilities measured at fulfillment value;
- Excluded from the valuation of assets and liabilities measured at fair value; and
- Excluded in the valuation of assets measured at historical cost and replacement cost.

Do you agree with the IPSASB's Preliminary View?

If not, please provide your reasons and state how you would treat transaction costs in the valuation of assets and liabilities, giving your rationale for your proposed treatment.

No comment

Specific Matter for Comment 1—Chapter 2 (following paragraph 2.29)

Definitions relating to measurement have been consolidated in the core text of the Illustrative ED.

Do you agree that the list of definitions is exhaustive?

If not, please provide a listing of any other definitions that you consider should be included in the list and the reasons for your proposals.

No comment

Specific Matter for Comment 2—Chapter 3 (following paragraph 3.5)

Guidance in International Valuation Standards (IVS) and Government Financial Statistics (GFS) has been considered as part of the Measurement project with the aim of reducing differences where possible; apparent similarities between IPSAS, IVS and GFS have been noted. Do you have any views on whether the IPSASB's conclusions on the apparent similarities are correct?

Do you agree that, in developing an Exposure Draft, the IPSASB should consider whether the concepts of Equitable Value and Synergistic Value should be reviewed for relevance to measuring public sector assets (see Addendum B)?

No comment

Specific Matter for Comment 3—Chapter 4 (following paragraph 4.21)

Do you agree that the measurement flow charts (Diagrams 4.1 and 4.2) provide a helpful starting point for the IPSASB to review measurement requirements in existing IPSAS, and to develop new IPSAS, acknowledging that other matters need to be considered, including:

- The Conceptual Framework Measurement Objective;
- Reducing unnecessary differences with GFS;
- Reducing unnecessary differences with IFRS Standards; and
- Improving consistency across IPSAS.

If you do not agree, should the IPSASB consider other factors when reviewing measurement requirements in existing IPSAS and developing new IPSAS? If so, what other factors? Please provide your reasons.

Other comments

Diagram 4.2

What if amount changes from initial recognition date measurement date but is still certain??

Appendix 1 – Diversity for accounting for long-term prepayments

I have encountered diversity in the accounting treatment of long-term prepayments, say 10 to 20 years, and some for 99 years.

I believe that the appropriate accounting is to recognise the asset as a long-term receivable of future goods and services including a financing component.

However, I have seen other accounting policies, including those advised by large accounting firms, that uses IAS 38 with initial recognition at a discounted amount and no subsequent recognition of the financing component. This results in ridiculous outcomes. I have included two examples below.

For Example A (20 years) instead of a service expense of 1,000 pa indexed being recognised, with an additional finance income, a fixed amortisation amount of 841 is recognised as an expense per year. How is an expense of 841, being lower than even the initial starting service expense of 1,000 be appropriate accounting?

For Example B (99 years) instead of a service expense of 1,000 pa indexed being recognised, with an additional finance income, a fixed amortisation of 513 is recognised as an expense per year. An even more ridiculous outcome.

Example A (refer detailed calculations attached)

1,000 value of services in Year 1, increased by 2.5% pa for 20 years, and discounted at 4%

Initial recognition at 16,811

If recognised as receivable of a non-financial asset:

Total services expense	25,545
Total finance income	(8,734)
Net expense	16,811

If recognised as an intangible, without a significant financing component, and amortised:

Total amortisation expense 16,811

Example B (refer detailed calculations attached)

1,000 value of services in Year 1, increased by 2.5% pa for 99 years, and discounted at 4%

Initial recognition at 50,814

If recognised as receivable of a non-financial asset:

Total services expense	420,607
Total finance income	(369,793)
Net expense	50,814

If recognised as an intangible, without a significant financing component, and amortised:

Total amortisation expense 50,814

Long-term prepayments

Example A - Example of accounting for a receivable of prepaid services for 20 years

Service cost (Year

1) 1000

Inflation rate 2.50%

Discount rate 4%

NPV 20 years 16,811

Useful life 20

				Financing component recognised				Financing component NOT recognised		
	Amount	Discount	Discounted Amount	Opening Balance	Financing Revenue	Service Expense	Closing Balance	Opening Balance	Amortisation Expense	Closing Balance
1	1000	0.9615	961.54	16,811	672	1000	16,484	16,811	841	15,971
2	1025	0.9246	947.67	16,484	659	1025	16,118	15,971	841	15,130
3	1051	0.8890	934.34	16,118	645	1051	15,712	15,130	841	14,290
4	1077	0.8548	920.62	15,712	628	1077	15,263	14,290	841	13,449
5	1104	0.8219	907.41	15,263	611	1104	14,770	13,449	841	12,609
6	1132	0.7903	894.64	14,770	591	1132	14,229	12,609	841	11,768
7	1160	0.7599	881.50	14,229	569	1160	13,638	11,768	841	10,927
8	1189	0.7307	868.79	13,638	546	1189	12,994	10,927	841	10,087
9	1219	0.7026	856.45	12,994	520	1219	12,295	10,087	841	9,246
10	1249	0.6756	843.78	12,295	492	1249	11,538	9,246	841	8,406
11	1280	0.6496	831.46	11,538	462	1280	10,720	8,406	841	7,565
12	1312	0.6246	819.47	10,720	429	1312	9,836	7,565	841	6,725
13	1345	0.6006	807.77	9,836	393	1345	8,885	6,725	841	5,884
14	1379	0.5775	796.34	8,885	355	1379	7,861	5,884	841	5,043
15	1413	0.5553	784.59	7,861	314	1413	6,763	5,043	841	4,203
16	1448	0.5339	773.10	6,763	271	1448	5,585	4,203	841	3,362
17	1484	0.5134	761.85	5,585	223	1484	4,325	3,362	841	2,522
18	1521	0.4936	750.81	4,325	173	1521	2,977	2,522	841	1,681
19	1559	0.4746	739.97	2,977	119	1559	1,537	1,681	841	841
20	1598	0.4564	729.31	1,537	61	1598	0	841	841	0
Total	25545		16811.41		8733.61	25545			16811.4	

Long-term prepayments

Example of accounting for a receivable of prepaid services for 99 years

Example B

Service cost (Year 1)	1000
Inflation rate	2.50%
Discount rate	4%
NPV 99 years	50,814
Useful life	99

	Amount	Discount	Discounted Amount	Financing component recognised				Financing component NOT recognised		
				Opening Balance	Financing Revenue	Service Expense	Closing Balance	Opening Balance	Amortisation Expense	Closing Balance
1	1000	0.9615	961.54	50,814	2033	1000	51,846	50,814	513	50,300
2	1025	0.9246	947.67	51,846	2074	1025	52,895	50,300	513	49,787
3	1051	0.8890	934.34	52,895	2116	1051	53,960	49,787	513	49,274
4	1077	0.8548	920.62	53,960	2158	1077	55,041	49,274	513	48,760
5	1104	0.8219	907.41	55,041	2202	1104	56,139	48,760	513	48,247
6	1132	0.7903	894.64	56,139	2246	1132	57,252	48,247	513	47,734
7	1160	0.7599	881.50	57,252	2290	1160	58,382	47,734	513	47,221
8	1189	0.7307	868.79	58,382	2335	1189	59,529	47,221	513	46,707
9	1219	0.7026	856.45	59,529	2381	1219	60,691	46,707	513	46,194
10	1249	0.6756	843.78	60,691	2428	1249	61,870	46,194	513	45,681
11	1280	0.6496	831.46	61,870	2475	1280	63,064	45,681	513	45,168
12	1312	0.6246	819.47	63,064	2523	1312	64,275	45,168	513	44,654
13	1345	0.6006	807.77	64,275	2571	1345	65,501	44,654	513	44,141
14	1379	0.5775	796.34	65,501	2620	1379	66,742	44,141	513	43,628
15	1413	0.5553	784.59	66,742	2670	1413	67,999	43,628	513	43,115
16	1448	0.5339	773.10	67,999	2720	1448	69,270	43,115	513	42,601
17	1484	0.5134	761.85	69,270	2771	1484	70,557	42,601	513	42,088

18	1521	0.4936	750.81	70,557	2822	1521	71,859	42,088	513	41,575
19	1559	0.4746	739.97	71,859	2874	1559	73,174	41,575	513	41,061
20	1598	0.4564	729.31	73,174	2927	1598	74,503	41,061	513	40,548
21	1638	0.4388	718.81	74,503	2980	1638	75,845	40,548	513	40,035
22	1679	0.4220	708.46	75,845	3034	1679	77,200	40,035	513	39,522
23	1721	0.4057	698.26	77,200	3088	1721	78,567	39,522	513	39,008
24	1764	0.3901	688.17	78,567	3143	1764	79,945	39,008	513	38,495
25	1808	0.3751	678.21	79,945	3198	1808	81,335	38,495	513	37,982
26	1853	0.3607	668.36	81,335	3253	1853	82,736	37,982	513	37,469
27	1899	0.3468	658.60	82,736	3309	1899	84,146	37,469	513	36,955
28	1946	0.3335	648.95	84,146	3366	1946	85,566	36,955	513	36,442
29	1995	0.3207	639.70	85,566	3423	1995	86,994	36,442	513	35,929
30	2045	0.3083	630.51	86,994	3480	2045	88,428	35,929	513	35,415
31	2096	0.2965	621.38	88,428	3537	2096	89,869	35,415	513	34,902
32	2148	0.2851	612.30	89,869	3595	2148	91,316	34,902	513	34,389
33	2202	0.2741	603.56	91,316	3653	2202	92,767	34,389	513	33,876
34	2257	0.2636	594.84	92,767	3711	2257	94,221	33,876	513	33,362
35	2313	0.2534	586.15	94,221	3769	2313	95,676	33,362	513	32,849
36	2371	0.2437	577.74	95,676	3827	2371	97,132	32,849	513	32,336
37	2430	0.2343	569.34	97,132	3885	2430	98,588	32,336	513	31,823
38	2491	0.2253	561.19	98,588	3944	2491	100,040	31,823	513	31,309
39	2553	0.2166	553.03	100,040	4002	2553	101,489	31,309	513	30,796
40	2617	0.2083	545.09	101,489	4060	2617	102,931	30,796	513	30,283
41	2682	0.2003	537.15	102,931	4117	2682	104,367	30,283	513	29,769
42	2749	0.1926	529.39	104,367	4175	2749	105,792	29,769	513	29,256
43	2818	0.1852	521.80	105,792	4232	2818	107,206	29,256	513	28,743
44	2888	0.1780	514.20	107,206	4288	2888	108,606	28,743	513	28,230
45	2960	0.1712	506.75	108,606	4344	2960	109,991	28,230	513	27,716
46	3034	0.1646	499.44	109,991	4400	3034	111,356	27,716	513	27,203
47	3110	0.1583	492.26	111,356	4454	3110	112,700	27,203	513	26,690
48	3188	0.1522	485.20	112,700	4508	3188	114,020	26,690	513	26,177
49	3268	0.1463	478.24	114,020	4561	3268	115,313	26,177	513	25,663

50	3350	0.1407	471.39	115,313	4613	3350	116,576	25,663	513	25,150
51	3434	0.1353	464.62	116,576	4663	3434	117,805	25,150	513	24,637
52	3520	0.1301	457.94	117,805	4712	3520	118,997	24,637	513	24,124
53	3608	0.1251	451.34	118,997	4760	3608	120,149	24,124	513	23,610
54	3698	0.1203	444.80	120,149	4806	3698	121,257	23,610	513	23,097
55	3790	0.1157	438.33	121,257	4850	3790	122,317	23,097	513	22,584
56	3885	0.1112	432.04	122,317	4893	3885	123,325	22,584	513	22,070
57	3982	0.1069	425.80	123,325	4933	3982	124,276	22,070	513	21,557
58	4082	0.1028	419.70	124,276	4971	4082	125,165	21,557	513	21,044
59	4184	0.0989	413.64	125,165	5007	4184	125,987	21,044	513	20,531
60	4289	0.0951	407.71	125,987	5040	4289	126,738	20,531	513	20,017
61	4396	0.0914	401.81	126,738	5070	4396	127,411	20,017	513	19,504
62	4506	0.0879	396.03	127,411	5096	4506	128,002	19,504	513	18,991
63	4619	0.0845	390.34	128,002	5120	4619	128,503	18,991	513	18,478
64	4734	0.0813	384.68	128,503	5140	4734	128,909	18,478	513	17,964
65	4852	0.0781	379.10	128,909	5156	4852	129,214	17,964	513	17,451
66	4973	0.0751	373.61	129,214	5169	4973	129,409	17,451	513	16,938
67	5097	0.0722	368.20	129,409	5176	5097	129,488	16,938	513	16,424
68	5224	0.0695	362.86	129,488	5180	5224	129,444	16,424	513	15,911
69	5355	0.0668	357.65	129,444	5178	5355	129,267	15,911	513	15,398
70	5489	0.0642	352.50	129,267	5171	5489	128,948	15,398	513	14,885
71	5626	0.0617	347.40	128,948	5158	5626	128,480	14,885	513	14,371
72	5767	0.0594	342.41	128,480	5139	5767	127,853	14,371	513	13,858
73	5911	0.0571	337.46	127,853	5114	5911	127,056	13,858	513	13,345
74	6059	0.0549	332.61	127,056	5082	6059	126,079	13,345	513	12,832
75	6210	0.0528	327.79	126,079	5043	6210	124,912	12,832	513	12,318
76	6365	0.0508	323.05	124,912	4996	6365	123,543	12,318	513	11,805
77	6524	0.0488	318.38	123,543	4942	6524	121,961	11,805	513	11,292
78	6687	0.0469	313.78	121,961	4878	6687	120,153	11,292	513	10,779
79	6854	0.0451	309.25	120,153	4806	6854	118,105	10,779	513	10,265
80	7025	0.0434	304.77	118,105	4724	7025	115,804	10,265	513	9,752
81	7201	0.0417	300.39	115,804	4632	7201	113,235	9,752	513	9,239

82	7381	0.0401	296.06	113,235	4529	7381	110,384	9,239	513	8,725
83	7566	0.0386	291.81	110,384	4415	7566	107,233	8,725	513	8,212
84	7755	0.0371	287.59	107,233	4289	7755	103,767	8,212	513	7,699
85	7949	0.0357	283.45	103,767	4151	7949	99,969	7,699	513	7,186
86	8148	0.0343	279.37	99,969	3999	8148	95,820	7,186	513	6,672
87	8352	0.0330	275.35	95,820	3833	8352	91,300	6,672	513	6,159
88	8561	0.0317	271.39	91,300	3652	8561	86,391	6,159	513	5,646
89	8775	0.0305	267.47	86,391	3456	8775	81,072	5,646	513	5,133
90	8994	0.0293	263.60	81,072	3243	8994	75,321	5,133	513	4,619
91	9219	0.0282	259.81	75,321	3013	9219	69,115	4,619	513	4,106
92	9449	0.0271	256.05	69,115	2765	9449	62,430	4,106	513	3,593
93	9685	0.0261	252.35	62,430	2497	9685	55,243	3,593	513	3,079
94	9927	0.0251	248.70	55,243	2210	9927	47,525	3,079	513	2,566
95	10175	0.0241	245.11	47,525	1901	10175	39,251	2,566	513	2,053
96	10429	0.0232	241.57	39,251	1570	10429	30,392	2,053	513	1,540
97	10690	0.0223	238.09	30,392	1216	10690	20,918	1,540	513	1,026
98	10957	0.0214	234.65	20,918	837	10957	10,798	1,026	513	513
99	11231	0.0206	231.27	10,798	432	11231	-1	513	513	-0
Total	420607		50813.56		369792.25	420607			50813.73	

Appendix 2 - Fair value issues

While these issues were collated in relation to IFRS 13 (fair value), they will also need to be addressed under the proposed replacement cost approach.

Summary of issues:

- How do you take into account restrictions and conditions? Including land under roads, and parkland
- Treatment of borrowing costs
- Nature of component costs to include in an asset's current replacement cost (greenfield vs brownfield);
- How do you adjust for physical obsolescence?
- How do you measure physical obsolescence when the useful life of an asset is dependent on future funding?
- How do you adjust replacement cost and accumulated depreciation for economic obsolescence?
- How do you adjust for deferred maintenance?
- How do you adjust for additional functionality in the modern equivalent?
- Is there a better description to use than accumulated depreciation to represent the inclusion of obsolescence for gross PPE disclosures?
- How do you allocate the NPV to asset classes and components?
- What is the unit of account for an infrastructure asset?
- When an asset is derecognised (e.g. destroyed through flood damage), should the adjustment be derecognised through an impairment adjustment against the asset revaluation reserve or taken direct to profit or loss?
- How should damage be recognised for a revalued asset that is not lost? Should the adjustment be through the asset revaluation reserve, or taken to profit or loss?
- Peppercorn lease issues

Issue	Description
How do you take into account restrictions and conditions? Including land under roads, and parkland	See list below
Treatment of borrowing costs	<p>Do you include an allowance for capitalisation of finance costs for the valuation of public sector assets, when finance costs are not capitalised under NFP accounting policies?</p> <p>Examples of long-life construction projects where financing is material is the construction of specialised buildings such as hospitals, and (soon to be required to be on-balance sheet) toll roads.</p> <p>While some NFP entities seem to exclude finance costs from hospital valuations, others appear to include them. It is often difficult to determine from valuations whether the valuer has included finance costs, as they may be indirectly included through on-cost margins, or builder's profit margin.</p> <p>If assets are self-constructed, then there will often be minimal borrowing costs as public sector departments often have no or minimal borrowings.</p> <p>If assets are acquired through PPP arrangements, then those arrangements will include the internal financing costs of the construction entity.</p> <p>Issues include:</p> <ul style="list-style-type: none"> • Do you include finance costs? • What is a market participant? • What level of borrowings do you use when the owner and / or market participants have no or minimal borrowings? • When determining the level of borrowings do you exclude specific borrowings? E.g. NSW Health has borrowings in relation to PPPs. • Does the approach change depending on how the asset was acquired (e.g. self-constructed or PPP)? • Do you apply a market participant approach to how the asset might be replaced? If so, how do you determine this?

Issue	Description
	<ul style="list-style-type: none"> • What capitalisation rate do you use for PPP arrangements given the diversity of gearing levels (refer examples for toll roads)? • Do the above answers change at whole of government level? Governments also have different gearing levels to each other, and to the departments.
<p>What costs (brown field vs greenfield) should be included in current replacement costs, and does the treatment cause a day 2 valuation adjustment?</p>	<p>Main points</p> <ul style="list-style-type: none"> • While greenfield and brownfield are not defined, or used, in AASB 13, they are relevant in analysing what costs should be included as replacement costs. • The cost to initially construct an asset (greenfield costs) will be different to the cost to replace an asset (brownfield costs). For example, for roads, a replacement would not require earthworks or similar formation (greenfield) costs. Conversely, the cost to replace components of the road (e.g. seal, pavement) (brownfield costs) will be higher, for example from traffic control and diversion costs, the need to work at night at significantly higher costs of labour. • Similar issues apply for specialised buildings where components are replaced into an existing structure, often when the building is being used. • How should these different costs be accounted for? <ul style="list-style-type: none"> ○ Do you include non-recurring greenfield costs like earthworks? QAO believes that greenfield costs for non-recurring components should be included in the fair value as they were part of the cost of establishing the asset and would be part of replacing the asset's utility. If they are not included in replacement cost, how are the costs accounted for? By expensing on day 1? ○ Do you use brownfield costs from day 1 for the replacement cost of components to be replaced – which has the effect of revaluing upwards from the just acquired greenfield cost <p>The adoption of brownfield costs for limited-life components (as these are the replacement costs) and greenfield rates for unlimited-life components (as these are necessary, though non-repeatable costs) can result in the sum of the parts exceeding the asset's total greenfield cost (day 1 gain).</p> <p>If this is the case, should a 'greenfield cap' be applied? The reasoning for a 'greenfield cap' is that the current replacement cost should be no more than the amount required to replace the asset with a substitute (paragraph B9). Paragraph 64 requires that the CRC</p>

Issue	Description
	<p>be calibrated to cost on initial recognition – consequently, no day 1 adjustment should be recognised.</p> <p>The split between greenfield and brownfield costs is also important to determine the componentisation for depreciation.</p>
How do you adjust for physical obsolescence?	<p>The IVSC standards, which are not available to the public for free, distinguish between incurable physical obsolescence and curable physical obsolescence.</p> <p>IVSC presumes a straight-line approach for incurable physical deterioration. Extract from IVS 105 paragraph 80.5 incurable physical obsolescence which considers the asset's age, expected total and remaining life where the adjustment for physical obsolescence is equivalent to the proportion of the expected total life consumed. Total expected life may be expressed in any reasonable way, including expected life in years, mileage, units produced, etc.</p> <p><i>Condition curves and curing physical deterioration</i></p> <p>Some have proposed that physical deterioration is based on a condition curve. Specifically, that physical deterioration may be lower at the start of the life of an asset, and higher at the end of the life of the asset. One of the arguments for this proposal is that a capital renewal project 'cures' (reverses) physical deterioration. However, this view contrasts with the IVSC reference to cure being from repairs and maintenance.</p> <p>Concerns on the use of condition curves include:</p> <ul style="list-style-type: none"> • How are the condition ratings determined, and how can such curves be reliably measured? • How are the condition curves tailored to the entity's particular assets? • Is the cost of developing and maintaining condition curves warranted, in comparison to using straight-line which has nil additional cost as entities are already required by AASB 116 to review useful lives annually. • Are condition rating systems (e.g. a 5 point scale that can give an identical adjustment over a 10 year period if, for example, the condition rating remains at level

Issue	Description
	<p>3 throughout that period) sufficiently robust in comparison to use of years (e.g. 100 for components with an expected life of 100 years)</p> <ul style="list-style-type: none"> • If they are based on the cost to return to 'as new', does this ignore the principal of the AASB residual value decision that a recycling project does not provide a new asset, but rather an asset that consists of new and old components?
<p>How do you measure physical obsolescence when the useful life of an asset is dependent on future funding?</p>	<p>For many infrastructure assets, there is an optimal point in time to undertake capital replacement / refurbishment. After that time, it becomes more costly to operate, because of increasing maintenance costs.</p> <p>Many public sector organisations operate in a fiscally restricted environment, when assets may not be replaced at the optimal time, but at a later point in time. This assumes that the service potential is maintained. E.g. the life of a road seal and pavement is extended by filling in potholes, rather than replacing,</p> <p>Consequently, the useful life of infrastructure assets will vary depending on the assessment of when they will be replaced. This may vary from year to year. How is this change in estimate recognised?</p> <p>For example, the optimal time to replace a road seal is in 5 years. The asset is currently 2 years old. Based on the straight-line basis of determining physical obsolescence, the remaining service potential is $3 / 5 \text{ years} = 60\%$.</p> <p>At the end of the next financial year, the asset is now 3 years old, and there is currently $2 / 5 \text{ years} = 40\%$ remaining service potential.</p> <p>If, due to changes in the fiscal outlook, the road is now intended to be replaced after 8 years. Based on the straight-line basis of determining physical obsolescence, the remaining service potential is $5 / 8 \text{ years} = 62.5\%$.</p> <p>If the gross replacement cost is \$10 million, how is the change from \$4 million (40%) remaining service potential to \$6,250,000 (62.5%) accounted for?</p>

Issue	Description
	Is it via an adjustment in accumulated depreciation (accumulated obsolescence)? And the revaluation reserve?
How do you adjust replacement cost and accumulated depreciation for economic obsolescence?	<p>How do you adjust replacement cost for economic obsolescence? For example, a school, currently constructed for 800 students, would be replaced by a school for 500 students.</p> <p>This assumes that there has been proper assessment that the school would be replaced for 500 students, including an assessment for peak demand.</p> <p>The IVSC standards appear to require the valuation of a school for 800 students, and also the valuation of a school for 500 students, in order to make the IVSC suggested adjustments. This will add costs to the valuation process, when the replacement cost only needs to be determined for the 500 student school.</p> <p>The IVSC standards are not available to the public for free.</p> <p>For example, the structure component of a school building with a gross replacement cost of \$2,000,000 for 800 students, is currently 10 years old with a 40 year total life. A gross replacement cost for a 500 student school would be \$1,600,000. (N.B. The \$1,600,000 is not proportionately 500 / 800 of \$2,000,000 as some core costs are required irrespective of size).</p> <p>Under the IVSC approach, the gross amount of \$2,000,000 for the 800 student school would be depreciated for 10/40 years = \$500,000. Then the net \$1,500,000 would be adjusted for economic obsolescence of something. The example in IVSC TIP2 (now withdrawn) makes assumptions using an income approach, which are not possible to adopt for most infrastructure operated by not-for-profit entities.</p> <p>Paragraph 64 of TIP2 states that it may be possible to make the appropriate adjustment using the cost-to-capacity method where the economic obsolescence relates to excess capacity. The cost-to-capacity method uses the difference in gross values between the existing capacity and the required capacity (replacement cost of \$2,000,000 compared to \$1,600,000 – reduction of \$400,000 or 20% of the 800 student school). Therefore, the</p>

Issue	Description
	<p>adjustment for economic obsolescence would be 20% of the \$1,500,000 calculated above. This gives an adjustment amount of \$300,000 and a revised fair value of \$1,200,000 (gross of \$2,000,000 less accumulated depreciation of \$800,000 being \$500,000 for physical obsolescence and another \$300,000 for economic obsolescence).</p> <p>An alternative approach, that only refers to the valuation of the 500 student school is to use the \$1,600,000 gross replacement cost, and then adjust for accumulated depreciation calculated for physical deterioration of 10/40 years of \$1,600,000 = \$400,000. So the fair value would be \$1,600,000 gross – accumulated depreciation of \$400,000 = \$1,200,000.</p> <p>Under the IVSC approach, gross replacement cost represents the utility actually acquired. Also, the IVSC views economic obsolescence as being able to be reversed and that reversals should be against accumulated depreciation rather than gross replacement cost.</p> <p>Should the IVSC approach, and the need for valuation of two assets be used, or can the alternative of valuing just the adjusted asset by used?</p>
How do you adjust for deferred maintenance?	<p>Should an adjustment be made for deferred maintenance?</p> <p>If deferred maintenance is adjusted for in the fair value, then is the expenditure when it is later incurred:</p> <ul style="list-style-type: none"> • debited directly to PP&E (which is inconsistent with the nature of the expense), or • debited directly to repairs and maintenance expense, with a separate journal used to reflect the reversal of obsolescence by increasing the asset's value (which essentially results in two debits for a single event)?
How do you adjust for additional functionality in the modern equivalent?	<p>AASB 13 and IVS 105 do not adequately deal with the modern substitute having more features (and higher costs) than the current asset. In particular, including higher standard fire systems, air-conditioning, lifts, and disabled access.</p>

Issue	Description
	<p>Current replacement cost is required to reflect the cost of a substitute asset with comparable utility. One view is that if the modern reference asset has greater utility than the existing asset, then the replacement cost should be reduced to reflect the functionality that does not exist in the exiting asset.</p> <p>It is acknowledged that cost data pre-adjustment for excess utility is highly useful for asset management (budgeting) purposes, and should be recorded as a separate field in the entity's asset management system. However, accounting standards only allow utility that has actually been acquired to be recognised as an asset. Recognition of assets that the entity would like to have, but has not actually acquired, is not appropriate. For example, if the quality (and cost) of fire protection systems improve the day after a building is commissioned, (one view is that) it is not appropriate to write-up the gross value and depreciation expense to reflect the additional cost of utility that doesn't exist and that the entity hasn't paid for. While this will result in funded depreciation being insufficient to replace the asset, it is no different to the fact that all new capital needs to be funded from other sources.</p> <p>It is challenging to measure the required adjustment when current cost data is unavailable for the level of service provided by assets possessing outdated technology, design, materials etc.</p> <p>Can guidance be provided on how to measure the adjustment for the difference in cost between the service levels provided by recently constructed assets and service levels provided by older generation assets?</p>
Is there a better description to use than accumulated depreciation to represent the inclusion of obsolescence for gross PPE disclosures? (Issue 9)	<p>Main points:</p> <ul style="list-style-type: none"> • Queensland Treasury, like other Treasury departments, requires the gross approach for revaluations using current replacement cost under AASB116.35(a). Most local governments and other entities also use this approach. • This approach, consistent with common practice, reflects the cost to replace the asset with a new version that provides comparable service levels (gross value),

Issue	Description
	<p>and the net amount reflects the asset in its used condition.</p> <ul style="list-style-type: none"> • This approach, consistent with common practice, uses the term accumulated depreciation (and not obsolescence) to represent adjustments for various forms of obsolescence. • AASB 13 and the IVSC standards are written in terms of the end result, being a net fair value amount. They are not written to meet the gross disclosures and related requirements. However, in practice: <ul style="list-style-type: none"> ○ Current replacement cost can only be derived by firstly measuring a gross replacement cost. Gross replacement cost is one of the inputs required for calculating the adjustment for obsolescence. ○ The gross amount is also required for linking to asset management strategies and plans. • Therefore, use of the gross approach for revaluations is logical and adds value for asset classes measured using current replacement cost. <p>Is there a better description to use than accumulated depreciation to represent the inclusion of obsolescence for gross PPE disclosures?</p>
How do you allocate the NPV to asset classes and components	<p>Many of our for-profit public sector entities (i.e. government controlled corporations (GOCs) / government business enterprises (GBEs)) revalue their PPE infrastructure assets to fair value using the income based-approach (NPV).</p> <p>We have the following practical issues:</p> <p><i>Determining the fair value of components for depreciation</i></p> <p>The income approach uses NPV for the whole asset, not individual classes or components.</p>

Issue	Description
	<p>After determining a single fair value amount for the group of infrastructure assets, we then need to allocate the fair value (NPV value) of the group to asset classes/components in order to determine depreciation.</p> <p>How is this done on a practical basis to asset classes such as land, channels, wharves, and plant & equipment?</p> <p>Some entities allocate the total revaluation increment/decrement in proportion to the carrying value of each separate item in the asset register. However, over time these amounts may no longer be reflective of the fair values of the components.</p> <p>It may also be argued that land which is integral to a network should be revalued separately if its market value as an individual asset is higher than its original cost price plus its share of subsequent revaluation increments/decrements for the network, and that any remaining increment/decrement should then be allocated to the remaining assets in proportion to their carrying values.</p> <p>Some entities obtain current replacement cost valuations as these often arrive at a value for each asset. However, these valuations are very expensive to obtain. Also, they usually determine a value higher than fair value determined using the income-based-approach. This then creates a need for an “impairment overlay” to reduce the current replacement cost down to the NPV.</p> <p>Judgement is often applied to determine how to allocate the “impairment overlay”. Sometimes it is applied proportionately based on current replacement cost. Sometimes it is applied proportionately after excluding land. Sometimes it is applied to a residual asset, such as channels. This then raises the question of whether the valuation provided useful information and whether the money spent on the current replacement cost valuation was value for money. We would like a more economical way to reliably measure the fair value split by asset class.</p> <p><i>Modern equivalent not economical</i></p>

Issue	Description
	<p>In some cases, the modern equivalent is too expensive to replace. For example, a channel with the modern equivalent requiring dumping the dirt onshore, not offshore. If the asset would not be replaced by a modern equivalent, how should these items be treated? If they are included in the valuation at replacement cost of a modern equivalent, they result in what many would regard as an over-weighting in that particular asset category. If the current replacement cost is not included, what value is included?</p> <p><i>Allocation to components when NPV determined using market participant expectations</i></p> <p>An NPV determined using the income-based approach and market participant expectations permits the inclusion of future capital expansion, and the consequent future cash inflow increases.</p> <p>How do you allocate the NPV to asset classes / components when part of the NPV includes future capital expenditure for assets that do not currently exist?</p> <p>Similarly, how do you treat work-in-progress for capital expenditure on projects partly complete, but the cash flows are included in the NPV?</p>
<p>What is the unit of account for an infrastructure asset?</p>	<p>While this issue may be argued to be for AASB 116 and not for AASB 13, it is a common issue in the public sector. We are seeking resolution through the Fair Value Panel, or otherwise (e.g. through a reference to IFRIC.)</p> <p>A for-profit electricity distributor has multiple supply networks containing powerlines or underground power cables (i.e. poles and wires), substations and transformers. The main supply network is subject to a “price cap”. It also has some power generators for the supply networks in regional areas. The distributor charges a regulated tariff for generation and distribution of electricity in those regional areas. As the cost of generating and distributing electricity in those regional areas is greater than the regulated tariff, the distributor receives “Community Service Obligation” payments to achieve a commercial return.</p> <p>AASB 116 does not prescribe the unit of account. Approaches observed include:</p> <ul style="list-style-type: none"> • Option 1 – Some entities treat each identifiable part (such as a pole, a substation, a segment of powerlines) in their asset register as a separate asset and use this

Issue	Description
	<p>as the unit of account. This is typically the level at which acquisitions and depreciation are recorded in the asset register.</p> <ul style="list-style-type: none"> Option 2 – Some entities treat the group of property, plant and equipment that generate the cash flow (the regulated revenue cap) as the unit of account. <p>For impairment purposes, as a for-profit entity, a whole of company valuation (potentially allocated into multiple cash generating units) would be undertaken to include any corporate assets. For those purposes, the unit of account for AASB 136 would be the applicable assets (and liabilities) of the CGUs representing the whole of the company.</p>
<p>When an asset is derecognised (e.g. destroyed through flood damage), should the adjustment be derecognised through an impairment adjustment against the asset revaluation reserve or taken direct to profit or loss?</p>	<p>Similar to the previous issue, we are seeking resolution through the Fair Value Panel, or otherwise (e.g. through a reference to IFRIC.)</p> <p>There is diversity in practice as to how the derecognition of individual assets or components is recognised when the assets have been revalued. Some people recognise the loss of an asset (e.g. for flood damage) by derecognising the asset through profit and loss, even if there is a related asset revaluation reserve (Approach 1). Others derecognise the asset by first reducing the related asset revaluation reserve on the basis that there is first an impairment loss and then recognise a nil gain/loss on disposal (approach 2)</p> <p>This issue is also linked to the unit of account issue above, as there may be different outcomes depending on how the unit of account is determined.]</p>
<p>How should damage be recognised for a revalued asset that is not lost? Should the adjustment be through the asset revaluation reserve, or taken to profit or loss?</p>	<p>Similar to the previous issue, we are seeking resolution through the Fair Value Panel, or otherwise (e.g. through a reference to IFRIC.).</p> <p>Most people recognise the adjustment through the revaluation reserve. However, this treatment is often inconsistent with the treatment of lost assets.</p> <p>Issues include</p> <ul style="list-style-type: none"> Can you distinguish easily between the complete loss of an asset and an asset that has obsolescence due to damage but can still be used in some capacity for some period of time? For example, the pavement component of a gravel road will

Issue	Description
	<p>often be instantly washed away during a flood, while a sealed road will usually continue to be used after a flood until a capital rehabilitation project occurs at some point prior to the NDRRA cut-off, which can be three years later. As the seal and pavement components of the sealed road still exist and are still being used, it could be argued that they have experienced a valuation loss rather than a physical existence loss,</p> <ul style="list-style-type: none"> • If you can distinguish between loss and damage, should there be different accounting? • Should an expense be recognised for derecognition, when it appears similar to an impairment, when the impairment standard no longer applies to specialised assets valued at current replacement cost? • If the asset revaluation reserve is to be adjusted for a disposal, this would be similar to prorating the disposal of an asset under AASB 116.70. A disposal would be similar to the concepts used for each new addition of for each part of a larger asset that has been replaced (AASB 116.70) and each significant part requiring separate depreciation (AASB 116.43)
Peppercorn lease issues	See list below

Restrictions and conditions

The following discussion assumes that the guidance in the standard on restrictions and conditions has been applied correctly – i.e. the restriction or condition is a characteristic of the asset and cannot be voluntarily removed by the owner.

We find diversity in the application of discounts for restrictions and conditions for:

- Land under roads
- Land under rail (rail corridor)
- Land under water (including canals)
- Parks and reserves
- Universities and specific use
- Trust land - Land held in trust for specific use (e.g. aboriginal communities), and is not freehold, and cannot be sold

How are these discounts determined? They appear to be arbitrary (see table below). How can they be compared to observable data, or otherwise verified? Diversity in application of discounts can often result in material differences in valuations when changing from one valuer to another.

The following provides

- Practical issues with land under roads
- Example - land under rail (rail corridor)
- Practical issues with land under water (canals)
- Example of land under water (continental shelf)
- Published discounts for restrictions

Practical issues with land under roads

Valuation approaches

Valuation approaches for land under roads include:

- Englobo undeveloped land values (prices that would be difficult to obtain in an urban environment)
- Englobo ready to build land values
- Discounts for restrictions on the above

Queensland

In Queensland, when a road is declared, the title is extinguished and ownership reverts to the state represented by the Department of Natural Resources and Mines, in accordance with Queensland Government policy.

This generally also includes land under roads maintained by local councils.

In the Department of Natural Resources and Mines financial report, land under roads is included as an administered item.

When the entity administering the land under roads undertakes a valuation, should it regard the land under roads as:

- having a restriction (because it does not control the classification as land under road), or
- not having a restriction (because another entity controlled by the parent does control the classification as land under road).

When the entity valuing the land under roads determines replacement cost, does it value the land under roads based on the restriction (if any), or does it value the land based on what it would cost to replace the land on a greenfield basis (i.e. at market prices without the restrictions)? Is the greenfields amount based on undeveloped land, or ready to build?

Do the answers above change between the entity administering the land under roads (e.g. Department of Natural Resources and Mines) and whole of government?

Example - land under rail (rail corridor)

Extract from Queensland Rail 2016 Annual Report

Land

The *Transport Infrastructure Act 1994* stipulates that the consolidated entity only retains ownership of its non-corridor land. As such, only non-corridor land is recorded in these accounts. Ownership of corridor land remains with the Department of Natural Resources and Mines on behalf of the State. This land is leased to the Department of Transport and Main Roads and subsequently sub-leased to the consolidated entity for no cost.

The sub-lease term is for an initial term of 100 years with a renewal option for an additional 100 years.

Practical issues with land under water (canals)

Some Queensland local councils have land under water, i.e. the land under canals and lakes. For example, Gold Coast has numerous lakes and more than 400 kilometres of constructed canals.

Canals are often treated like roads – with canals being transferred to the state as a public waterway. Again, similar to roads, Councils will have basically the same maintenance responsibilities irrespective of whether the council owns the land or the state owns the land. These responsibilities include maintaining the revetment wall, dredging activities, water quality monitoring and might include shark control programs.

Given the similarity to roads, the approach is to include on balance sheet the canal earthworks and accompanying infrastructure the council is required to maintain. For land under canals, the argument is that given the lack of ability to dispose of the land under canals, and the similarity of responsibilities whether or not the council owns the legal title to the land, that the land under water not be recognised (or recognised at a nominal amount).

Often the land under canals, and the initial canal infrastructure, is contributed by land developers. The argument is that councils would not replace the asset if it was using its own money.

Because the canal systems may also serve as buffers against flooding, the above argument is a bit more complicated.

Example of land under water (continental shelf)

Example from New South Wales

Auditor-General's Report to Parliament 2010 Volume Nine
Land and Property Management Authority

http://www.audit.nsw.gov.au/ArticleDocuments/187/05_Vol_9_2010_Land_and_Property.pdf.aspx?Embed=Y

The Authority's property, plant and equipment balance at 30 June 2010 was \$6.2 billion. This includes \$0.7 million and \$5.3 billion of tenured and untenured Crown land respectively. Untenured Crown Land includes the continental shelf within the Three Nautical Mile Zone valued at \$359 million.

Published discounts for restrictions

The following was published in “Fair value measurement of non-financial physical assets” by the Valuer-General Victoria (July 2015)

6 Guidance for valuers

6.1 Community service obligations (CSO)

6.1.1 CSO definition

CSO is an adjustment for the difference in value between unrestricted assets (e.g. freehold land) and assets held by the public sector, taking into account any legal, financial or physical restrictions imposed on the use or sale of the asset (e.g. restricted land due to a legal restraint).

Examples of assets that are subject to CSO are Crown land in a public use zone and iconic property restricted by legal, physical and financial constraints that would make it difficult to sell on the open market; or, where the constraints would affect the achievable value.

6.1.2 Application of CSO

FRD 103F and AASB 13 require land to be valued having regard to a HBU, taking into account any legal, financial or physical restrictions imposed on the use or sale of the asset. When there are restrictions on the use or disposal of the asset and there are restrictions on the alternative use, the land should be valued at the fair value for its current (existing) use, i.e. the value considering the HBU excluding the cost of achieving that value (e.g. creating a freehold title, rezoning, or overcoming the political or social constraints of an asset) considering the legal, financial and physical constraints.

The CSO adjustment is a reflection of the valuer’s assessment on the impact of restrictions associated with an asset to the extent that is also applicable to market participants. CSO is the difference between the hypothetical unencumbered fair value based on market evidence (i.e. HBU value without any restrictions) and the value ascribed to the asset based on its current use (existing value restricted by constraints). As the adjustments of CSO are considered significant unobservable inputs, specialised land would be classified as level 3 inputs.

6.1.3 CSO considerations

Valuers are expected to apply levels of value that are relative to the use and restriction of the land. The factors valuers use to adjust land values for CSO depends on the legal, financial and physical constraints applicable on the land.

The amount of adjustment applicable to each asset and portfolio depends on the risk factors associated with the property or portfolio and the likelihood that the entity would be able to sell the asset in the open market.

It should be noted that any CSO allowance reflects among other things the community’s attitudes and the government’s policy of the day.

6.1.4 Examples of CSO ranges

The table below provides examples of the ranges, in percentage, for the valuers to consider when determining the rate for the property they value. The adjustment factors are based on VGV’s extensive experience in assessing property valuations for government, on the results of court and tribunal decisions within Australia and on the limited sales evidence available. In all cases, the range of adjustment

factors relate to the potential risks in achieving a rezoning of government held property assets, taking into account the economic, physical and political circumstances.

VGV provides the suggested adjustment factors and guidance to valuers, as required, to provide consistent assessment of similar assets across the State of Victoria.

Table 1 – Examples of possible adjustments for CSO

Type of asset	Appropriate CSO range (%)	
Land zoned residential, industrial, commercial etc. without government restrictions	0	0
Crown land – no planning or other restrictions	10	20
Hospitals, schools	20	30
Public housing in public use zone	20	30
Schools, TAFE colleges, universities	20	30
Arts centres/national galleries	30	40
State parks	60	70
Shrine of Remembrance, Government House	60	70
Water authorities (reservoirs, dams etc.)		90
Cemeteries		95

Peppercorn lease issues

What is the market participant?

What is the market participant for a peppercorn lease to a not-for-profit entity?

In relation to land, do you use commercial market rates that would be paid by a for-profit entity, even though the peppercorn rental arrangements would not be made available to a for-profit entity, or do you use the rent that a not-for-profit entity could afford to pay which is usually not very much? Do you consider some sort of deprival value notion, i.e., that if the not-for-profit had to pay commercial rates, it would not continue to operate, or alternatively, it will only operate and provide services if paying a peppercorn lease rental?

Additional complications arise when having to consider the nature of restrictions and conditions on peppercorn leases or assets of a specialised nature.

Some peppercorn leases are deliberately set at nil, because if they were set at a higher rate, then the NFP lessee would have to raise prices to recover the lease cost, or use valuable funding for lease rentals instead of providing services.

Fair value for lease with early termination rights

What is the fair value of a right-to-use asset under a 99 year lease when the lessor has the right to terminate the lease with no penalty on two years notice?

A market participant (i.e. not a related party) would not assume a 99 year term. Specifically, they would only value the right as being for two years use, or potentially with some risk adjusted premium on the understanding that the lessor would not terminate the lease immediately.

Lessors do kick out lessees, even if previously friendly relationships, for example Monash University with Mimotopes and a special purpose centre:

<http://www.theaustralian.com.au/higher-education/monash-university-drives-out-mimotopes-cancer-firm/news-story/18fc769b6eb4ba96f7c95c746088b68e>

<http://www.abc.net.au/news/2017-03-30/monash-university-hand-mimotopes-centre-eviction-notice/8400094>

IFRIC is currently considering the lease term for such arrangements, though an exit price approach is likely to arrive at a different term than the IFRIC decision.

Contingent rent and fair value

What is the fair value of a peppercorn lease with contingent rent?

If the fair value is based on fixed rent, and then the lease liability for the minimum payments (possibly nil) are deducted, large upfront revenue would be recognised. Such accounting would not reflect the actual agreement, as the entity has not earned that revenue – as it will have to pay some of it in the future through future contingent rentals.

An example is rent of 10% of sale for a kiosk concession on crown land.

Another example is that the lessee pays rental equal to the cost of maintaining the building each year.

For example:

Queensland Performing Arts Trust 2017

Note 18 SERVICES AND ASSETS PROVIDED TO THE TRUST

Arts Queensland, through the Department of Premier and Cabinet, owns and maintains the Performing Arts Centre premises on behalf of the State of Queensland. The Trust is provided with the use of the building and items of fi tout, including certain items of plant and equipment that are not performance related, by way of a service level agreement with the Corporate Administration Agency (CAA). As described in note 3(b) the Trust pays rent below fair value for the use of premises in the Cultural Precinct.

Finance leases

Queensland have something called DOGIT leases (Deeds of Grant in Trust). The land is held in trust for specific use (e.g. aboriginal communities), and is not freehold, and cannot be sold.

Some peppercorn leases are already on balance sheet. For example finance leases. This includes DOGIT land for aboriginal communities and DOGIT land for grammar schools and universities.

Examples of valuation

The DOGIT land for aboriginal communities is valued at a \$1, as it cannot be sold, or used for anything else. The same \$1 value is used whether or not the land is unimproved, or improved (e.g. graded in order to construct a house).

I am currently pursuing the following other valuation examples:

- DOGIT land held by grammar schools and universities, and the adjustments for restrictions and conditions applied
- The Queensland Performing Arts Trust recognises a contribution for rental received at below fair value – refer above for the amount of rent that they do pay. I am following up to determine how fair value was determined.
 Queensland Performing Arts Trust 2017 (see above)
 Note 3 Grants and Contributions
 The Trust has received a contribution in the amount of \$7.660 million (2016: \$7.716 million) from Arts Queensland equal to the amount of rent below fair value charged by Arts Queensland for the use of the premises by the Trust in the Cultural Precinct.

I have seen references to fair value of peppercorn leases being determined by comparable market rentals. However, they have been compared to for-profit entities. As noted above, I have questioned whether this approach is appropriate if the rental is given for NFP purposes and the public benefit.

Other

In addition to the examples I have already provided, other practical difficulties include:

- hospitals sharing facilities with medical research institutions on a collaborative basis.