

# Victorian Response to Issues Raised in the Telepresence Agenda

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The Secretary  
Department of Treasury and Finance  
1 Treasury Place  
Melbourne Victoria 3002  
Australia  
Telephone: +61 3 9651 5111  
Facsimile: +61 3 9651 5298  
[www.dtf.vic.gov.au](http://www.dtf.vic.gov.au)

Authorised by the Victorian Government  
1 Treasury Place, Melbourne, 3002

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# 1. Mining

## 1.1 Introduction

The annotated agenda included issues relating to the policy impact on the mining revenue base. Victoria understands the issues to be that there is policy contamination of the revenue base through two sources:

- differences between the states in the extent that they approve mining projects and, therefore, their revenue base (which requires an adjustment to the revenue base); and
- general policy contamination creating uncertainty (which requires a discount to the assessment).

Each of these issues will be discussed in turn below.

## 1.2 Policy impact on the mining revenue base

The issue that was concerning Commission staff was illustrated with regard to coal seam gas. State A was accommodating of proposals to develop its coal seam gas reserves, while State B was less accommodating. The amount of revenue that each state would receive from the exploitation of its coal seam gas reserves would, therefore, depend on the extent to which it allowed exploitation of the reserves.

Commission staff indicated that in this situation they would like to be able to make an adjustment to State B's revenue base to make it consistent with State A's.

There are a number of issues which are raised in attempting to make this adjustment, or determining what the value of this adjustment should be.

The first is there needs to be an assessment of what is average state policy in regard to the exploitation of mineral reserves. The implicit assumption is that it is 100 per cent, but this may not necessarily be the case. A particular state may prefer a phased exploitation of its mineral reserves, while another state may restrict exploitation because of environmental concerns. The first step for Commission staff would be to determine what is average state policy in regard to the exploitation of the revenue bases used for assessment.

The second issue is that the extent to which the mining companies exploit the mineral reserves that state make available. In the case of State A above, although it may approve development of its coal seam gas reserves, the extent and timing of their development will depend on factors such as the cost of development, demand for the product and profitability of developing the reserves. Most, if not all, of these factors are beyond the control of the particular state. Therefore, the extent to which state policy have an impact on the revenue base in any particular year may be considerably less than envisaged by Commission staff.

Victoria's view is that regardless of any theoretical grounds for adjusting the revenue base for variations in state policies, the practicalities involved would make the determination of the adjustment required extremely difficult. It would add to complexity of the assessment and it would not be clear that, due to the uncertainties involved, that the HEF outcome would be improved. Victoria considers that no change be made to the current means of valuing the revenue base.

### 1.3 Other policy contamination of the revenue base

A claim was made that the mining revenue base was so policy contaminated that was sufficient uncertainty about its value to warrant a discount being applied to the mining revenue assessment.

However, no evidence was supplied regarding the nature of this policy contamination, its extent and how it would have an impact on the valuation of the revenue base.

Victoria considers that until such evident is produced Commission staff should not give any consideration to discount the mining revenue assessment.

## 2. Mining Related Expenditure

### 2.1 Introduction

The main issue for the telepresence was the options presented for assessing the needs for roads to support mining development. Some other data requests relating to mining related expenditure were also discussed.

### 2.2 Roads

The annotated agenda present four options developed by Commission staff to assess the needs generated by mining development and other economic activity.

Victoria supports the current methodology and so does not support any of the options presented. Of the options presented Option 3 would seem to be the most appropriate. However, while it is not as complex as Option 2, it does require additional data input where the required data may not always be available. An element of judgement may also be required to determine the main economic driver for a particular road.

Option 4 would require elements of Option 2 or Option 3 if the Commission were to base its judgement on the basis of available evidence.

The assessment would also need to take into consideration any funding provided to the states for these roads, such as from the Commonwealth or the private sector and whether the provision of this funding was based on needs not currently assessed.

Victoria considers that the complications and uncertainties involved would not result in these options improving the HFE outcome.

### 2.3 Mining related expenditure across all GPCs

Victoria has provided Commission staff with the data it has available on these expenditures. However, Victoria considers that if Commission staff want take such expenditure into consideration then it should do so for all industry support expenditure and not just that related to the mining sector.

## 3. Wages

### 3.1 Introduction

A staff discussion paper, *Simplifying the Interstate Wages Regression Model*, was provided to the states along with the annotated agenda paper for the telepresence. This paper discusses the simplification of the regression model and changes to the definition of variables.

As expressed in its second submission to the *2015 Methodology Review*, Victoria is of the view that it is no longer valid to use the growth in private sector wages to determine the 'policy neutral' growth in public sector wages. Commission staff would be better considering how to better model the growth in public sector wages rather than tinker with a model that is no longer credible.

The model was reviewed by Jeff Borland and he found it to be acceptable. Victoria would like to see some substantive reasons for revisiting the specification of the model.

### 3.2 Use of dummy variables instead of effects coding

Victoria remains to be convinced that replacing effects coding with simple dummy variables reduces complexity, especially if there is no change in the final impact on relative wages.

While it may be true that it may be easier to interpret the coefficients of a regression model that uses simple dummy variables, post-regression manipulation of the coefficients is required to obtain deviations from the national average. This means that states will have to examine two separate set of results rather than just the one set of a model that uses effects coding.

### 3.3 Remove female interaction variables

Victoria is perplexed as to the reason Commission staff now consider the female interaction variables to be unnecessary. There has been no change to the data used to estimate the regression model and the inclusion of these variables must have been considered warranted when the model was originally estimated.

Three claims are made about the female interaction variables:

- they do not explain much of the change in wages (on the basis of R-squared values);
- they add complexity; and
- they potentially decrease the precision of the model.

In regard to complexity, the discussion paper does not explain the source of this complexity, nor its problems it causes. It is assumed that the complexity is due to the large number of explanatory variables in the regression model. This does not need to be a problem if it leads to a model that is better specified and captures more of the influences on wage growth.

The discussion paper does not explain the potential decrease in model precision due to the inclusion of the female interaction variables. The increase in the R-squared values (assumed to be  $R^2$ ) would not lead to this conclusion. It may be possible that the female interaction variables may cause collinearity in the estimated coefficients, but this can be assessed using statistical tests rather than just speculation.

A more considered and structured approach is required in regard to the removal of the female interaction variables. The appropriate test to determine whether the data supports their removal is the F-test. Also as the female interaction are applied to groups of variables, such as marital status, migrant status, size of firm, etc., it would be better to test the removal of the female interaction terms for each variable group.

Commission staff provided the states with the results of the 2009 SET regression model. The statistical significance of the coefficient estimates were used to note:

- the female interaction variable for married was statistically significant and dropping this variable risks creating mis-specification bias;
- the presence of young children and a permanent job were not statistically significant for both males and females so the dropping of each of these variable should be examined;
- none of the female interaction variables for migrant status were significant and the dropping of these variables should be examined; and
- the female interaction variables for cumulative duration of employment and work experience were all statistically significant and dropping these variables risks creating misspecification bias

The conclusion that can be drawn is that dropping all the female interaction terms without conducting the appropriate statistical tests is likely to result in a mis-specified model and biased coefficient estimates.

### 3.4 Remove some hours worked variables

The discussion paper proposes the removal the variables that measure the impact of working less than 15 hours and more than 60 hours as these variables do not add any explanatory power beyond the information included in the continuous hours worked variable.

These two variables were statistically insignificant for males and only the female interaction variable for working more than 60 hours was statistically significant. It is likely that there is some multicollinearity associated with these variables and they could be dropped subject to the appropriate statistical test. Specifying hours worked as a quadratic or cubic may detect the non-linearity that the model was attempting to impose.

### 3.5 Use of capital city wages

The discussion paper proposes the use of capital city wages rather than whole of state wages to assess interstate wage relativities. Victoria would support this approach given that other factors take into account the cost impact of regional service delivery.

### 3.6 Conclusion

The discussion paper concludes that the female interaction variables and the under 15 and over 60 hours worked variables do not add explanatory power to the model. This must be regarded as an untested assertion as no appropriate statistical tests were conducted to establish whether this is the case.

While removing these variables would simplify the model, simplification should not be an objective in its own right, especially if it produces a mis-specified model.

In regard to the proposals presented in the discussion paper:

- remove effects coding and use simple dummy variables—Victoria is not convinced that this is necessary, but is indifferent as the same final results should be produced;
- remove the female interaction variables—Victoria does not support this and argues that a considered and structured approach is required to determine which of the interaction variables can be removed; and
- remove the variable hours worked less than 15 and greater than 60—Victoria support this, subject to appropriate statistical testing.

Victoria reiterates its view that considering changes to the interstate wages regression model is irrelevant as it is no longer valid to use the growth in private sector wages to determine the ‘policy neutral’ growth in public sector wages.

## 4. Rawlinsons

### 4.1 Limitations of the proposed approach

The scope of the Rawlinson's index does not appear to be as broad as has been suggested in the Commission's discussion paper. Very large elements of capital expenditure, including electricity or railway signalling systems, are not included in the index.

Even in more conventional areas of construction, the Rawlinson's index provides a good guide to assessing the cost of particular constituent elements of a government works project (for example, a retaining wall), but very little guidance as to the overall cost of constructing the entire project (like an underground toll road).

Some expensive components of capital works excluded from the index, like signalling systems, are likely to be provided by a very small number of highly specialised businesses, at a cost that is unlikely to vary by jurisdiction. If the cost of performing this work does indeed vary from state to state, it is unlikely to vary on the same basis as the outputs used to compile the Rawlinsons index. Accordingly, it is likely that the exclusion of these significant capital costs from the index artificially inflates the differences in relative construction costs faced by state governments.

Similarly, the price State governments are actually required to pay for capital investment through a tender process will be influenced by many factors unrelated to movements in the cost of physical outputs, including the margins able to be extracted by contractors.

There is doubt over the conceptual validity of using a physical output index for total material and labour costs to measure underlying variation in state government capital costs, and the Commission should explore the use of alternative data that may be more fit-for-purpose.

### 4.2 An alternative measure of relative construction costs

An alternative approach to comparing interstate variation in construction costs is the ABS Producer Price Indexes (Cat 6427.0). As well as being a more conceptually valid measure to use as a basis for interstate cost comparisons, these indexes provide extensive detail on particular areas of construction most relevant to state governments.

This is particularly important because the ABS data suggests relative construction costs vary markedly by project type. For example, in assessing the relative costs of roads investment, the best measure would be the ABS Road and Bridge Construction index, which incorporates interstate variation in construction costs.

The Commission should further investigate the use of the ABS Producer Price Indexes as an alternative to Rawlinsons and other proposed approaches.

## 5. Schools

### 5.1 Introduction

The current schools education assessment assumes that States allocate total non-government school funding based on the number of students, and this funding is a fixed proportion of the average per government school student funding. However, National Education Reform Agreement (NERA), signatory states are required to develop a needs-based funding model for non-government school students as a prerequisite for receiving additional Commonwealth funding.

### 5.2 State funding of non-government schools

For a number of years Victoria has used the Victorian financial assistance model (FAM) as a needs based model for non-government schools. These loadings are differentially weighted to those used to calculate funding for government schools, and assess slightly different student characteristics.

Now that NERA requires signatory states to develop a needs-based funding model for non-government school students, such a funding model should be regarded as average state policy. This would require the assessment to explicitly take into account the needs of non-government schools students in addition to the needs of government school students.

Commission staff have asked for information on whether or not loadings used by state governments to allocate funding between non-government schools are also used to determine total funding for that sector in a given year. Commission staff have argued that if states only use loadings to determine the allocation of funding rather than the total quantum available, then they are not relevant to the Commission's methodology.

This distinction is not necessarily relevant, and is not applied in other areas of state expenditure. In the case of government schools, while Victorian funding is nominally allocated according to a detailed funding formula that includes a series of loadings for disadvantage, the total funding envelope in a given year is determined independently, as part of normal budget processes. When determining whether it is average state policy to pay loadings for disadvantage in government schools, the Commission rightly looks at what the data say, rather than attempting to delve into government decision making processes.

Like government schools, Victoria pays loadings for disadvantage to non-government school students, within a funding envelope determined through normal budget processes. For both sectors, this decision is informed by the level of resourcing required to support the differential funding of need embedded in both government and non-government school funding models. It would be inconsistent to treat these sectors in different ways.

In the case of non-government schools, one of the factors impacting on total funding decisions is a Victorian Government policy that support for this sector should

represent around 25 per cent of the per student funding provided to government school students. NSW currently implement a similar policy. In practice, aggregate funding for non-government school students in Victoria has often been higher than 25 per cent.

In light of the 25 per cent funding floor for non-government school students embedded in the NERA (and the commitment of signatory states to pursue a needs-based funding model for non-government school students consistent with this approach), Victoria considers this funding floor to unambiguously be average state policy (particularly in light of the Commission's new approach to determining average state policy).

## 6. Health

### 6.1 Emergency departments and outpatient services

Victoria notes that Commission staff have reduced the economic environment factor from the originally proposed 60 per cent to 25 per cent, in line with the evidence presented in Victoria's second submission to the *2015 Methodology Review*. Victoria supports the Commission's decision to determine this 25 per cent with reference to the ABS patient experience survey. However, Victoria considers the most recent survey data suggests that the economic environment factor should be applied to a slightly lower proportion of emergency department (ED) expenses, as substitutability between GPs and ED services is likely to be less than 25 per cent.

As noted in Victoria's submission, the patient experience survey identified that just 22.6 per cent of ED presentations thought care could have been provided by general practitioner for most recent visit to emergency department. While this suggests that substitutability between ED and GP services is likely to be relatively low, it also relevant to consider the reasons some patients chose to attend an ED, despite believing care could have been provided by a GP.

25.5 per cent of total survey respondents chose to attend an ED instead of a GP because of the time of the day or week, suggesting they were presenting at an ED afterhours when their GP was closed. So long as most GPs operate standard hours, this suggests states will still be required to provide services to these patients irrespective of GP coverage.

The patient experience survey notes that just 2.5 per cent of patients attending an ED did so because the waiting time for a GP appointment was too long. This suggests that the relative availability of GP services has very little impact on the number of ED presentations. Accordingly, the Commission should consider further reducing the proportion of ED expenses to which it applies the economic environment factor.

### 6.2 Community health

Victoria does not consider it appropriate to use all emergency department presentations to determine the SDC profile for community health services. If emergency department presentations are the only source of data to determine the SDC profile then only triage category 4 and 5 presentations should be used. It is unlikely that community health services would have to deal with resuscitation or other emergencies.

For the sake of consistency, the Commission should apply an economic environment factor to the same proportion of community health expenses as other health expenses. In the absence of any data to substantiate an assumption of 50 per cent substitutability, the Commission should apply the factor to 25 per cent of expenses, or less if the proportion for other health services is reduced.

Victoria notes that OATSIH grants directly fund community health services that would otherwise have to be provided by state governments. Victoria considers then that a very high proportion of this funding is likely to be substitutable.

## 7. Urban Transport

### 7.1 Proposed assessment

The proposed assessment methodology accords with the views put by Victoria in its second submission to the *2015 Methodology Review*. However, although a state may not own any transport assets in a particular location, it may provide a capital subsidy to enable the purchase of assets.

### 7.2 Data on assets by city

Victoria can provide an update of total asset values for the entire state each year. In accordance with the relevant accounting standards re-valuations are undertaken at least every five years. Revaluations are conducted when there is a material movement in the accounting formula used to determine the fair value.

In terms of assets by city, Victoria does not have data at this level of detail currently. Victoria's Victrack engages PWC to undertake the asset valuation for Victoria's rail infrastructure. The possibility of engaging PWC to provide information which would enable track length to be assigned to cities in Victoria will be explored.

### 7.3 NNR 50 per cent discount

Victoria has previously noted that the exclusion of 50 per cent of Commonwealth payments for NNR construction was justified by the Commission on the grounds that data were not available to reliably measure national disabilities. Victoria considers that this 50 per cent conclusion was arbitrary and should not be applied unless there is supporting evidence. However, the more important issue is that Commonwealth funding for road and rail projects should be treated on a consistent basis. If a proportion of NNR projects are to be continued to be excluded then the same proportion of rail projects should be excluded.

In the actions arising from the telepresence circulated by Commission staff the question was raised as to whether Commonwealth funding of general road construction be treated differently to funding for NNR construction.

Victoria considers that unless the Commonwealth explicitly states that there are different reasons for funding off-NNR and NNR construction then both funding should be treated in a consistent manner. It could be argued that by funding NNR construction the Commonwealth is enabling states to divert expenditure of their funds to off-NNR construction. In that sense NNR funding would have the same impact on state financial capacity as off-NNR funding.



