

# MAV Submission to the ESC Productivity Study: Local Government

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## 1 Background

The ESC Consultation Paper considers possibilities for determining the efficiency factor by which the rate cap applied to local government may be discounted. These include:

- a small notional factor;
- a value drawn from wider economy experience; and
- a value calculated using DEA analysis/modelling based on work undertaken by Predictive Analysis Group (PAG).

The ESC clearly favours the DEA modelling approach as the best method of determining an efficiency factor.

#### 1.1 Productivity and the Rates Capping Framework

The ESC indicates that it frequently uses a productivity dividend as a mechanism to ensure that price regulated industries remain efficient. The MAV believes that this approach fails to account for the significant inherent efficiency dividends that are contained within the ESC's preferred rates cap model.

The ESC itself has previously acknowledged in public presentations and discussions that its rates cap model is not a cost index for local government. The MAV's approach to a cost index<sup>1</sup> for the sector suggests that a vast majority of expenditure is driven by employee costs (around 80 per cent) with the remainder driven by construction costs. The inclusion of a 60 per cent CPI weighting within the rates cap means that the preferred quantum of the rates cap is well below the actual change in input costs for local government. The following graph indicates that over a 20 year period, WPI has consistently outstripped changes in the CPI.

<sup>&</sup>lt;sup>1</sup> See, for example, the MAV's cost index reports available at: <u>http://www.mav.asn.au/about-local-government/local-government-finance/Pages/cost-index.aspx</u>



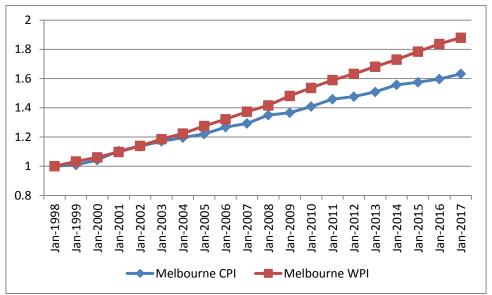


Figure 1: WPI and CPI Indexes, Melbourne, June 1998 to June 2017

Source: ABS catalogue 640103; ABS catalogue 634504a

The cumulative gap between CPI and WPI is around 25 percentage points over this time period. In addition, the preferred ESC rates cap methodology makes no allowance for infrastructure and construction cost movements for councils.

The MAV contends that the input costs for councils have been well in excess of the ESC's rates capping model historically.

In addition the framework makes no allowance for the lack of control of councils' nonrates income and the inherent discipline that these constraints impose on councils in a rates-capped environment. These constraints include:

- freezes in the Financial Assistance Grants for the three years to 30 June 2017 and increases broadly in line with consumer prices otherwise;
- similar constraints on existing grants programs, which have nominal indexation well below the change in input costs;
- regulatory or service agreement instruments that impose caps on the movement of user charges, such as planning fees, home and community care fees, etc.

Typically these factors mean that, assuming input costs move above CPI, councils will be required to increase their rates revenue significantly above a rates cap. The magnitude of this gap will differ depending on the specific council's mix of services and revenue sources.

The MAV argues that the existing rates capping framework imposes a significant productivity dividend before any additional discount is identified and imposed. It is the view of MAV that no further productivity dividend is warranted and that no specific allowance should be included in the ESC's recommended cap figure to the Minister.



## 2 The DEA Model

#### 2.1 Measuring Productivity in the Local Government Sector

The MAV has strong reservations with respect to the efficacy of the ESC's favoured approach in both identifying the relative efficiency of councils and establishing productivity trends in the local government sector. Using this as the basis for recommending on an efficiency factor to be applied to the rate cap should be reviewed critically. The ESC indicates its preferred model represents a starting point for measuring productivity meaningfully in the sector however the MAV firmly believes that it may be time to go back to the drawing board because the approach has fundamental problems arising from level of abstraction involved in the methodology. The modelling is not robust as claimed by the ESC. The approach is complex in presentation and has a high degree of statistical fog. The Consultation Paper and PAG Final Report, on which it is largely derived, are heavy on statistical analysis but in the end it really doesn't matter how sound are the techniques being used if the primary assumptions used are flawed.

Ignoring the issue of service quality and focusing purely on the quantitative, there are fundamental shortcomings with the approach based on its following assumptions:

- Victorian local government mainly delivers services to property;
- proxies can be introduced for service outputs that objectively measure efficiency – these proxies reasonably reflect the common bundle of services provided by councils and where differences exist these are marginal;
- Total Factor Productivity (incorporating all inputs and outputs in a single measure) reasonably reflects the range of services and various outputs that are delivered by councils; and
- Local Government outputs are assumed to be fixed or exogenous (compared with the large degree of control councils have over the inputs used) because councils do not have much control over the number of businesses and households in the municipality.

#### 2.2 Does Local Government Mainly Deliver Services to Property?

It is unclear why this this continues to be argued strongly by certain academics but reiterated in the Paper. The assumption provides support for the selection of proxies (households and businesses) and to a significant extent is used to provide justification for the crudeness of the model. The claim that local government mainly delivers services to property may have been justified several decades ago, but it runs counter to what is actually being delivered by Victorian councils today. Local government chiefly provides services to people including families and individuals. Any dispassionate and rational review of the major beneficiaries of council functions and services can do nothing but confirm this (see Appendix). Local Government delivers a range of human, cultural, recreational services and other services **to people**.

While councils also deliver a range of services that more directly benefit property these are arguably much more limited to those things like specific infrastructure



assets, for example kerb and channel that abut houses and a limited number of services including waste water management (septic tanks), drainage, power line clearing and waste collection. If one were to exclude local roads - which is legitimate given that it does not represent a service to property but a means by which individuals, families and businesses travel and move produce between destinations - the bulk of operating expenditures (including related buildings and infrastructure) of councils tend to relate to things like libraries, recreational facilities, aged care, family and children's services and the ilk.

The ESC may well make the point that it has covered "services to people" amply by its adoption of the number of households as one of the proxies. The problem is that households differ substantially in composition in terms of age profile and needs within any municipality and as a result the number of households may have little relevance to the number and type of service units delivered by a council. The Paper assumes that the proxies used are the main influences on costs and productivity and this has not at all been demonstrated.

#### 2.3 Proxies Do Not Reasonably and Objectively Measure Efficiency

Clearly, the further things are aggregated – services to groups of services and groups of services into functions the less accurate is any model that purports to reflect relative efficiency.

The difference between the proxies used in the model and true outputs is stark. At this point it is useful to distinguish between a universal set variable, a cost driver and an output. The proxies used by the ESC may be defined more accurately as universal set variables – aggregates argued to have some intrinsic relationship to the bundle of functions provided across all local governments. However they are not particularly useful as an indicator of efficiency because of their broad nature. Universal set variables are at best only crude indicators of "servicing" levels, nothing else.

At the next level of disaggregation are cost drivers – variables that influence demand for a service but not the actual amount of service produced. These are commonly used to establish implied service demand benchmarks for functions or groups of services.

Finally, there are outputs - discrete units of service that are produced and consumed. Examples of each type of variable are provided below.



Examples				
Universal Set Variables	Cost Drivers	Outputs		
Population	Persons Aged 65+ Years (HACC)	Direct Service Hours		
Assessments	Children 0-6 Years (M&CH)	Effective Nurse Hours		
Households	Persons Aged 12 to 23 Years (Youth Services)	Program Person Hours		
Businesses	Establishments Selling Food & Drink (Food Safety)	Registered Premises		
	Children 3-4 years (Pre- Schools)	Places		
	Number of Schools (School Crossings)	Crossing Supervisor Hours		
	Households Receiving Service (Domestic Waste)	Tonnes Waste		

The aggregated approach necessarily results in the use of *total factor* productivity where all inputs and outputs are combined in a single measure. The rationale argued in the model is that councils provide a common bundle of services and where differences exist that they are marginal.

While the MAV agrees that there are a core group of services that tend to be delivered by all councils, the complement of services delivered across councils varies and these differences are significant enough to raise issues with respect to the establishment of relative efficiencies – for example, some councils do not deliver HACC services, some are located on the coast and are required to clean beaches, while some provide saleyards and airports. These things result in substantive differences in outlays for councils when taken across all services.

The assumption that outputs are endogenous or fixed – for which the proxies are therefore representative appears totally at odds with the vastly different approaches taken by councils to common services. Services may be provided in different ways or with different emphases. A good example is service provision in HACC. HACC or community care represents a group of related services that are provided to older residents. Councils make both policy and operational assessment decisions with respect to the duration of care episodes, how many hours of care are required per week and the choice of service between primary services like domestic assistance, personal care and respite, the latter two appreciably more costly to deliver.

The crude approach of the ESC in adopting its proxy variables means that there is no sensitivity to such differences. The approach promoted by the ESC reflects the contributory cost of HACC and every other service by crude use of common denominators, regardless of their characteristics. The proxies used can be easily demonstrated to have a tenuous relationship with services. The total number of businesses, households and length of local roads can be regarded as the universal set but is not a particularly accurate reflection of target populations, cost drivers, or more importantly, councils' service outputs. A simple comparison between two small shires exhibiting very, very similar proxy numbers against relevant target populations/cost drivers and outputs for a relatively small number of services illustrates the poor correlation. Note the considerable differences in the actual output of the two councils.



	Variable	Description		Year	Strathbogie	Gannawarra	Difference
		No. Occupied Households		2011	4,176	4,161	0%
All Functions/	<b>ESC</b> Proxies	No. Businesses		2014	1,309	1,351	-3%
Services		Local Roads Kms		2014	2,243	2,272	-1%
Local Roads	Output	Local Roads Sealed Kms		2014	742	504	47%
	Cost Driver	Persons Aged 70+ years		2016	1,921	1,974	-3%
			Domestic Assistanc	2014	11,192	12,255	-9%
HACC Core		Direct Service Hours	Personal Care	2014	3,230	4,640	-30%
Services	Output		Respite	2014	1,018	2,499	-59%
			Property Mnce	2014	1,219	1,702	-28%
		Meals	Delivered Meals	2014	5,598	17,970	-69%
	Cost Driver	Persons Aged 0-4 Years		2016	467	541	-14%
M&CH	Output	Effective Nurse Hours		2014	1,335	1,311	2%
	Cost Driver	Persons Aged 5 to 24 years		2016	1,956	2,317	-16%
Libraries	Output	Active Members		2014	np	2,141	
Libraries	Output	Loans of Physical Items		2014	78,161	74,065	6%
	Output	Weekly Opening Hours		2014	54	77	-30%
Food Safety	Output	Registered Premises		2015	200	139	44%
roou salety	Output	Compliance Checks		2015	178	45	296%
	Output	Permit Applications		2014	150	110	36%
Planning	Output	Permit Decisions		2014	144	85	69%

The analysis shows:

- despite very similar total length of local roads there is a massive difference of 47% in the quantum of sealed roads. Roughly estimated a sealed road may have an initial construction cost in the order of \$400,000 per kilometre with a life of 60 years, resealing costs in the order of \$47,000 per kilometre every 12-15 years, as well as periodic maintenance of around \$500 per kilometre per year. This contrasts with a comparable gravel road with an indicative cost of \$40,000 per kilometre, grading once a year at a cost of \$1,000 per kilometre and re-sheeting every 10 -12 years depending on usage, at around \$27,000 per kilometre. Implying lifecycle costs for gravel roads at something approaching 3 times the annualised cost of a gravel road implies that despite having very similar total road lengths, ceteris paribus, an output cost 20% higher in the council maintaining more sealed roads;
- one council provides 75% more units across the range of HACC services and a materially higher proportion of higher cost primary services (37% of direct care hours consist of personal care and respite compared with 28%);
- with respect to the key indicator for libraries, opening hours differing by as much as 30%;
- despite a difference of only 3% in number of businesses, 44% more registered premises and three times more food safety compliance checks in one council; and
- vastly contrasting outputs for planning in terms of applications received and decided.

The MAV would point not only to the significant differences in specific service outputs compared with proxies but emphasise the potential cumulative impact of more modest differences across the full gamut of services that are delivered. Inherent in the ESC approach is a theory that taken across all services and all councils these



variations and distortions cancel out and compensate for each other when expressed in terms of proxy values. In the end we would argue that it is likely that the ESC approach cannot reliably say anything about the relative efficiency of councils. The grouping of data into what are considered like councils obviously provides no comfort for these concerns across councils.

We also have concerns related to the proxies, namely;

- the number of households appear to be occupied households. Given the model's assumption that council services are predominantly provided to property it seems logical that the household figures should include both occupied and unoccupied households (noting that unoccupied houses account for as much as 56% in a single municipality and more than 20% in 18 councils);
- the impact of multi-location businesses (businesses registered under a single ABN/Type of Activity Unit but operating in more than one location).

#### 2.4 Problems on the Input Side

On the input side the model is neutral with respect to the range of structural factors that impact councils. The ESC (PAG) contention is that the differences between councils, for example, scale economies impacted by small and declining populations is addressed by the inclusion of groupings of councils and, in any case, the ability of smaller rural councils to show relatively high relative technical efficiency may point to structural and size issues not being as significant as thought.

The position of two small rural councils rated within the top 12 in terms of relative efficiency in the Single Group Analysis Model 1 is curiously noted (all councils however being unnamed). It is unclear whether they may provide fewer or more rudimentary services than other councils and whether (some) other councils could ever possibly achieve the same level of efficiency without making trade-offs in terms of reduced service volumes and/or quality.

Even if one were to assume that outputs were fully exogenous the effect of a number of factors on the "spend" required by councils is well appreciated. The VGC in its approach to making general purpose allocations has regard to a number of cost adjustors/disability factors in order to provide for horizontal equalisation. It effectively adjusts for productivity differences in service (function) provision costs because of the distortion in servicing levels provided by a pure input/output approach.

Other concerns we have are:

 several of the DEA models do not include materials and contract costs as service inputs. It is unclear why these models have been used as these are important service inputs and substitute for in-house labour inputs in many cases. For example, some councils contract out their MCH services while a majority provide the service in-house. Any model without material and service costs can be discarded because it does not reflect the complement of inputs involved in service delivery;



- DEA models 1 through 4 include total capital outlays from Schedule ABS1 in the VGC questionnaire. Total capital outlays in this schedule appear to include labour costs and this raises the issue that labour inputs are being double counted;
- spending excludes debt servicing on the basis that it "artificially inflates inputs rather than contributes to outputs". This needs further explanation as the interest cost on capital is part of the full cost of service provision and without debt many outputs would not be produced. There is clearly an efficiency dimension to council borrowing portfolios – with different efficiency impacts arising from things like loan consolidation, the timing of projects and other strategies that maximise opportunities from changes in interest rates;
- exclusion of depreciation there would appear to be no reason to exclude depreciation as a legitimate operating expense despite there being wide variations in interpretation and application across councils as these are probably no more material than the differences that arise from the use of proxies;
- the possible distortion of year-on-year and five-year findings being impacted by capex, unfunded superannuation liabilities and natural disaster allocations given that they may be significant and lumpy.

#### 2.5 Sensitivity Analysis

The MAV feels it would have been appropriate to consider whether the differences in complement and type of services being provided by individual councils were influential, in other words some testing of the assumptions about the proxies that underpin the model.

## 3 An Efficiency Factor Drawn from Wider Economy Experience

The ESC Paper considers the possibility of basing a productivity factor on the economy generally or a relevant subset of industrial sectors (derived from ANSZIC classification). The ESC's preference is for the former, based on an average of 16 of the 19 ANZSIC sectors. It is unclear whether the ESC means each of the 16 respective values for each sector or the average of the combined population of 16 sectors. The latter more accurately reflects the general economy while the former could be argued to give undue weight to smaller sectors.

In any case the data is national. It also excludes 3 of the sectors with most relevance for government but for which there is no productivity data (public administration & safety, education & training and health care & social assistance) which means the approach largely reflects the experience of private sector or for-profit businesses. Although needing to factor in a return on capital, private sector businesses arguably do not face the operating constraints of governments and not–for-profits, which are concerned with outcomes that are not market-related.

The MAV argued strongly in the course of discussions around introduction of the rate cap that it should have relevance to the cost pressures faced by local government and that any mechanism should correspond with the services the Victorian local government sector provides. Consistent with this it has concerns as to the



applicability of an economy-wide factor because of the inherent private sector bias, favouring a more sophisticated approach. It is noted that Deloitte were commissioned to comment on more relevant indicators and recommended the weighting of three ANZSIC sectors to provide an efficiency factor. Deloitte included three sectors - Administrative & Support Functions, Art & Recreation Services and Transport, Postal and Warehousing. Detail as to the relative weightings was not provided and, with all due respect to Deloitte, the choice of the latter sector is curious indeed, having no relevance at all to the sector. On the other hand Deloitte failed to include construction which is considered to be much more relevant.

The ESC states that, based on DEA modelling results, PAG found that over the 5 year period from 2010-11 to 2015-16 productivity across the broader economy increased slightly while productivity in the local government sector was going in the opposite direction. Our view is that the DEA model/s does not permit an objective assessment of council efficiency however this claim needs further qualification. In addition to whether the comparison is at all relevant given the private sector bias described above, it would be useful to know whether this translates to increased productivity per enterprise or whether specific sectors may have disproportionately contributed in the broader economy.

We also submit that Victorian councils have been required to both take on increased responsibilities (i.e. increase their inputs) that have been imposed in one form or another by the State Government that in no way lead to increased production. It might well be argued that while there has been an emphasis on the reduction of red tape for Australian businesses, movement has been in the opposite direction for Victorian councils. In addition to being provided additional service delivery responsibilities by the State there have been material increases in costs associated with additional reporting requirements (e.g. the LGPRF) and consultation on various reforms (e.g. flood levees, rural drainage, emergency management functions, domestic animal management and future aged care reforms, etc)

### 4 Adverse Impacts for Cost Effectiveness, Quality and Optimising Outputs

The ESC draws a little bit of attention to this in its Consultation Paper stating "theoretical predictions of potential efficiency gains may not be transferable to actual gains when service quality, fundamental differences between services and the cost of implementing change are fully accounted for".

It is important to accept that efficiency is not an end within itself and cannot be divorced from the objectives related to the provision of services. These objectives may differ between councils. Cost effectiveness, which involves comparing the relative costs and outcomes (effects) of different courses of action to produce outputs is an important consideration in designing services. Indeed the ESC also noted that non-efficiency objectives such as access and equity are also important policy considerations for governments against which benefits must inevitably be balanced.

While productive (technical efficiency) is extremely important in optimising output, the concept of social inefficiency should not be ignored. Social inefficiency occurs when the cost of producing something does not take into account all the costs and benefits associated with an economic exchange. It might also describe the process where outputs are degraded in order to reduce costs. For example, the administration cost of food safety for registered premises costs might be lowered through reduced



compliance checks and less intensive reviews of food safety programs and an increase in library opening hours accompanied by reduced reference and IT resources at those times. Both have broader adverse implications for local communities but move on the production frontier outward.

The MAV has concerns for those councils already regarded to be technically efficient because an efficiency factor will be applied generally to councils. Should the State Government agree to apply a productivity factor as recommended by the ESC there appears no dispensation for these councils and no hint of how, if at all, the relative efficiency of individual councils would be addressed in the rate cap variation process.

### 5 Variant Approaches if an Efficiency Factor Were to be Applied

#### 5.1 LGPRF

The ESC also reflected on the possibility, but dismissed, using the Local Government Performance Reporting Framework (LGPRF). It argued that while there are merits in terms of transparency and accountability, the actual emphasis and use of the LGPRF leads to results that vary by council and that it is not really possible to understand overall council performance or efficiency from the LGPRF.

The LGPRF reports on both broad financial and specific service delivery efficiency indicators. The MAV has concerns about the quality of the reporting of some of the service level indicators in the LGPRF but would argue that further development of this approach might have been considered. We would argue that inferences that may be drawn from this approach would be at least as reliable as those from the DEA approach if the quality of reporting on major services were expanded and found to be improved.

#### 5.2 VGC Functional Approach

The ESC appears not to have explored the possibility of an approach at a functional level using costs drivers based on VGC held data. This would at least permit some adjustment for structural characteristics based on the use of its cost adjustors. It would be much more reflective of "achievable efficiency" and more accurate given that the picture is built-up from groupings of services.

#### 6 Summary

The MAV does not support the inclusion of a productivity factor in the determination of the annual rate cap. We believe that the rate cap itself imposes sufficient financial discipline on councils. On top of the rate cap, any addition of an efficiency factor will lead to false economies in councils that are already relatively efficient.

We do not support the preferred approach (DEA) for a number of reasons including:

- problems with its underlying assumptions, particularly as they relate to the services provided by councils and the use of proxies to measure output;
- neutrality with respect to structural factors impacting councils' service provision ; and
- neutrality with respect to quality and other specific objectives around council outputs.



The rationale for a small notional factor being used has not been demonstrated, particularly on the basis that efficiencies can always be realised. This figure is not underpinned by anything, so why have it?

We have confidence issues around a suitable wider-economy reference from which to draw because of data issues around relevant industrial sectors and private sector bias.

If a factor is to be applied we believe that more work needs to be done with respect to making it more reflective of local government service delivery and actual outputs or cost drivers. To this end further consideration of augmentation of the LGPRF and use of VGC-type approach to establishing relative costs for functions should be considered.



## 7 Appendix

Service/Function	Service Primarily to: People/Property
Animal Control	People
Aquatic Facilities	People
Art Galleries and Museums	People
Beach Cleaning	People
Building Control	People & Property
Child Care Centres/Creches	People
Commercial Waste	Property - Business
Community Amenities	People
Domestic Waste & Recycling	Property - Household
Drainage - Stormwater	Property
Environmental Protection	People
Festivals & Cultural Events	People
Fire Protection	People
Food Safety	Property - Business
Footpaths	Property
Footpaths, Kerb & Channel	Property
HACC/Community Care	People
Health Licences, Fees and Registrations	Property - Business
Immunisation	People
Libraries	People
Local Laws	People
Local Roads	People
Maternal & Child Health	People
Neighbourhood Houses	People
Parking	Property, People
Parks & Reserves, Bike and Walking Tracks	People
Planning	People & Property
Powerline Clearing	Property
Pre- Schools/Kindergartens	People
Public Centres and Halls	People



Service/Function	Service Primarily to: People/Property
Recreation Centres	People
Saleyards	Property - Business
School Crossings	People
Septic Tanks/Wastewater	Property
Sportsgrounds	People
Street Cleaning	Property - Household, Business
Street Enhancements	People
Street Lighting	Property
Tourism & Area Promotion	People
Traffic Control	People
Youth Centres	People