

ANU COLLEGE OF ASIA & THE PACIFIC

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Inquiry Secretary  
Standing Committee on Infrastructure, Transport and Cities  
Parliament House  
Canberra ACT 2600

Dear Sir, Madam

Thank you for the opportunity to provide a submission to the Committee.

I have already forwarded to the Committee a copy of an article on the risks of overestimation in the calculation of so-called Wider Economic Impacts. The reference is Dobes, L. & Leung, J. 2015. 'Wider Economic Impacts in transport infrastructure Cost-Benefit Analysis. A bridge too far?', *Agenda*, 22(1): 75-95.

**“Value capture” taxes pecuniary externalities, not wealth creation**

Land or house prices near new infrastructure may rise if demand for those locations increases. If there is a corresponding decrease in prices in other areas because house owners there sell their houses in order to move closer to the infrastructure, the effect is merely pecuniary. That is, new infrastructure may have a negative, as well as a positive effect on house or land prices.

The offsetting increases and decreases in prices are a transfer of wealth from one part of a city to another, but there is no overall increase in wealth of the city. If increased prices are to be taxed, will owners of reduced-price land be compensated by the developers of the infrastructure?

**The tax base for “value capture”**

It is not clear what area of a city around the new infrastructure would be subject to increased taxation in order to reap “value capture”. Any bounded area will ultimately be arbitrary. For example, houses up to two blocks from the infrastructure may be taxed, but a house on the other side of a boundary street may not. Substantial inequities may result from such an arrangement.

“Value capture” is not usually associated with new bus routes because the additional infrastructure required is relatively minimal if roads have already been built. If taxation is to be applied to price increases due to train infrastructure like trains, however, then it should logically be applied around bus routes as well. It is sometimes argued that train services are permanent because of the infrastructure that is installed, whereas bus routes do not provide the same level of confidence in the future provision of services and do not therefore affect prices. However, train services can be downgraded in quality and tracks can, and have been closed in the past.

To avoid distortions and potential inequities, it would be necessary to institute arrangements that ensure that only the capital gain directly attributable to the new infrastructure will be taxed. But land values may rise because of a change in tastes or the opening of a new coffee shop in the vicinity, speculation in real estate, population growth, etc.

Valuation of capital gains for land is problematic from a timing perspective. Would land prices be assessed immediately after construction of the infrastructure? A year or two later, after real estate values had adjusted to a longer term level? An annual charge in perpetuity; perhaps to cover ongoing maintenance of the infrastructure?

### **Reservation of transport corridors**

It is easier to determine changes in land value attributable to infrastructure after construction, than to do so prospectively. Reserving land corridors for possible future development must be treated differently to ex post estimates because the value only reflects a real (quasi) option to use the corridor in the future, rather than the value of services provided. The degree of uncertainty about the proposed future use of the corridor is a key determinant of the option value; in this case, a “call option”.

The now considerable literature on options is comparatively specialised because its focus is on investment under uncertainty. It would be difficult to summarise succinctly the theory and methodologies here. A relatively accessible introductory text is Brealey, Allen & Myers 2006 *Principles of corporate finance*, McGraw Hill, USA.

### **“Value capture” is neither a necessary nor a sufficient condition for infrastructure projects**

Because “value capture” is a purely financing instrument, it cannot indicate to decision-makers whether a project is justified from the perspective of society as a whole. For example, considerable externalities in the form of noise or noxious emissions may mean that social costs outweigh social benefits. Only a rigorous social cost-benefit analysis can provide necessary information to decision-makers.

It is not always necessary to build new infrastructure to solve transport problems. So-called “value capture” is a seductively attractive financing instrument, but alternatives also need to be considered. An example is congestion charging, which would help reduce negative externalities of several types, as well as raising revenue.

For example the Bureau of Transport Economics 1996 *Traffic congestion and road user charges in Australian capital cities*, Report 92, AGPS, Canberra, estimated charges for one kilometre square areas in capital cities. Debit cards installed in vehicles, with fees deducted at every intersection using magnetic strips could be used in practice. Informal modelling by Bureau staff following publication of the report indicated that annual expenditure on roads in Australia could be covered from the revenue collected.



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