
**NSW Ministry of Transport
Tax Incentives for Public Transport Users**

**Ernst & Young
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1. Executive summary

A viable case can be made to support the position that the level of subsidisation afforded private transport users is (at least) comparable (if not more generous) than that afforded public transport users. Further, it may be the case that perceived costs associated with private transport use are more relevant than actual costs when seeking to understand how any subsidisation provided may influence commuters' decisions as to the mode of transport (private or public) that they use to travel from home to work.

In addition, it can be demonstrated that (in certain circumstances) employees are afforded concessional FBT treatment in relation to salary packaged cars. As no similar concession is available in respect of public transport, a bias exists in the tax system which favours private over public transport.

Once employees have made the decision to salary package a car (and to use that car to drive from home to work) any subsequent decision to use public transport may result in a reduction in their take home cash. That is (in certain circumstances) commuters who have salary packaged cars will be penalised for choosing public transport.

Further, these commuters will be made very well aware of this penalty when their employers provide them with details in relation to how their package has been calculated each year. This being the case, the FBT bias may encourage commuters to drive rather than use public transport.

While merits exist in relation to various forms of public transport tax incentives that may be provided to redress this bias (eg tax deductions, FBT exemptions and tax rebates), on balance, the provision of an FBT exemption would appear to have a number of advantages.

One of the key merits of this type of incentive is that, as the provision of an FBT exemption requires some level of employer buy-in, this may provide an opportunity to influence commuter's behaviour through their employer. This assertion is borne out by studies that have been conducted into the experience in other countries who have sought to introduce transport incentives to encourage a modal shift from private to public transport.

Although no study (or group of studies) is definitive, the findings of most studies seem to indicate that countries that have sought to provide some form of employer sponsored incentive (which is one of the advantages of an FBT exemption) have been more successful in achieving a modal shift from private to public transport than those that have sought to provide broad based tax incentives alone.

On the basis of the analysis in this report, including the experience of other countries, there would be merit in giving further consideration to, and undertaking more detailed analysis on, the option of providing an FBT exemption for employer sponsored programs aimed at encouraging public transport use for travel to and from work.

2. Introduction

Various reports, including the Ministerial Inquiry into Sustainable Transport in NSW (December 2003 – known as the Parry Report) and the Review of Bus Services in NSW (February 2004 – known as the Unsworth Report) have highlighted the social, economic and environmental benefits that may accompany increased public transport patronage.

In their meeting of 10 February 2006, the Council of Australian Governments (“COAG”) committed to a national transport reform agenda to improve transport infrastructure so as to enhance national productivity. This included a specific commitment to reducing urban congestion, informed by a review into causes, trends, impacts and options in relation to such congestion. The terms of reference for the review recognize the potential role for taxation incentives in urban congestion management.¹

Similarly, the Sustainable Cities Report² noted that sustainable transport logistics are vital to reversing the problems caused by automobile dependence in Australia and building cities which are equitable, accessible and economically viable. In this regard, the Sustainable Cities Report noted that there are at least 3 options for improving the sustainability of transport in Australia, namely:

1. Changing current transport patterns
2. Increasing the efficiency or environmental performance of transport modes
3. Changing transport modes

The June 2006 meeting of the Australian Transport Council (“ATC”) agreed to task the Standing Committee on Transport (“SCOT”) with the preparation of a report (for consideration at the October ATC meeting) in relation to costs and benefits and implementation issues associated with the introduction of tax incentives to encourage public transport use.

Following agreement by SCOT that NSW would prepare the report for endorsement by SCOT for presentation to the ATC, the NSW Ministry of Transport (“the Ministry”) engaged Ernst & Young to conduct research into tax incentives that may be provided to encourage public transport use (ie exploring the impact of tax incentives on option 3 above).

1 Council of Australian Governments’ Meeting 10 February 2006 - Communiqué

2 Sustainable Cities House of Representatives Standing Committee on Environment and Heritage (Aug 2005)

Scope of this report

As requested by the Ministry, we have conducted research in relation to:

- The levels of subsidisation provided to private and public transport users in NSW
- Whether a bias exists within the Australian Federal tax system (“the tax system”) which favours private over public transport
- The likely impact that such a bias may have on commuters’ decisions to use private or public transport in respect of home to work travel in the Greater Sydney Region
- Incentives that could be provided through the tax system (“tax incentives”) to encourage public transport use
- The likely impact that these tax incentives may have on commuters’ decisions to use private or public transport
- Issues associated with the implementation of these tax incentives
- The experience of other countries who have sought to introduce similar incentives

It should be noted that this report does not represent a detailed economic analysis of the relevant issues. Estimates contained in the report have been arrived at using approximations based on readily available information. While this may be appropriate in the context of a high level analysis, a more detailed economic analysis would be required to underpin further work.

Glossary

Details in relation to key terms used in this report are as follows:

- Private transport – means travel via car
- Public transport – means travel via rail and / or bus
- FBT – means Fringe Benefits Tax
- GST – means Goods and Services Tax
- Salary packaged car – means a car:
 - That is provided by an employer to an employee (for the private use of the employee)
 - That represents a “car benefit” for FBT purposes
 - Where all costs associated with the car (eg lease costs, fuel etc), apart from any “recipient contribution”, are “paid for” by the employee out of pre-tax dollars

- Private car – means a car:
 - That is not provided by an employer to an employee
 - That does not represent a car benefit for FBT purposes
 - Where all costs associated with the car (eg lease costs, fuel etc) are paid for by the employee out of after-tax dollars
- Car benefit – means a benefit per Division 2 of the FBT Act
- Recipient contribution – means a payment by an employee to their employer which is paid out of after tax dollars (and is not subsequently reimbursed by their employer)
- Private travel – means travel (whether by private or public transport) that is not tax deductible (eg home to work travel³)
- Business travel – means travel (whether by private or public transport) that is tax deductible
- Modal shift – means a shift from private to public transport or vice versa

Disclaimers

NSW Ministry of Transport

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³ Whilst home to work travel may be tax deductible in very limited circumstances (eg in respect of home to work travel undertaken by police officers), for the purposes of this report we have assumed that home to work travel is not tax deductible

3. Levels of subsidisation

In order to determine the relative level of subsidisation afforded private transport users, it would be necessary to calculate the marginal cost⁴ of road use. This is the same sort of analysis that is used in setting the price of road user charges (for example, registration costs and fuel levies). As this would require a detailed economic analysis to be conducted, the making of such a determination is beyond the scope of this report.

Estimated levels of subsidisation

An alternate method for approximating the level of subsidisation afforded private transport users may be to use the cost of travelling on a tolled motorway as an indicator of the level of this subsidisation. Conceptually, the toll charged on a motorway represents the cost to a private transport user of using that portion of the road. To the extent that private transport users travel on un-tolled roads, it is arguable that the “toll not paid” is the amount that is otherwise paid for / subsidised by the Government. Based on the toll charged on the M2 motorway in Sydney (\$3.80 per journey) over the distance of the motorway (21kms), it is arguable that the level of subsidisation to users of equivalent Sydney roads is approximately \$0.18 / km⁵.

This can be compared to the level of subsidisation afforded public transport users in Sydney per the Parry Report of \$0.20 / km for trains and \$0.07 / km for buses⁶. This translates to a weighted average subsidisation of \$0.15 / km (taking into account relative levels of patronage of trains and buses).

Having regard to the above, the following table sets out the relative levels of subsidisation for private transport users as compared to public transport users in respect of annual home to work travel:

Relative level of subsidisation	Private transport subsidy	Public transport subsidy
Subsidy provided per km	\$0.18 / km	\$0.15 / km
Average home to work journey (return) ⁷	25.5 kms	25.5 kms
Business days per year ⁸	228	228
Level of subsidisation per year	1,047	872

4 Marginal cost pricing is a standard tenet of neo-classical economics which states that, in a competitive market, an optimal level of production will be achieved if the prices paid are equal to the short run marginal costs of production (that is, the cost of producing an additional unit of production)

5 While the cost of travelling on the M2 motorway includes a profit component, it is arguable that the full \$3.80 is the appropriate indicator of the level of subsidisation on the basis that the cost to the private sector of building and operating the road (including a return on this activity) is the true cost of the road

6 Ministerial Inquiry into Sustainable Transport in NSW (Dec 2003) p 52

7 Average journey by public transport is based on the distance travelled on an average rail or bus journey in Sydney apportioned by the respective patronage levels for each service

8 Assumed business days per year based on the legislated number of business days per section 39FA(4) of the FBT Act

Based on this analysis, the proposition that public transport users are more heavily subsidised than private transport users is open to challenge. Indeed, it suggests that private transport may in fact be more heavily subsidised than public transport.

Alternate / counter arguments

Nonetheless, it is acknowledged that the above estimate of the level of subsidisation afforded private transport users is not based on any detailed economic analysis and, as such, its usefulness may be open to debate. Specifically, the question may arise as to whether (despite the existence of some subsidisation) private transport users do in fact “pay” for their fair share of road use through other means (eg the cost of their cars, registration, insurance etc).

However, while private transport users already pay substantial amounts for their cars (and these costs do include certain levies and taxes) they only pay for specific road use on a few tolled roads and crossings. That is, private transport users are not charged for the true social costs (including externalities such as pollution, congestion etc) they impose in respect of road travel⁹.

Further, it may be the case that perceived costs associated with private transport use are more relevant than actual costs when seeking to understand how any subsidisation provided may influence commuters’ decisions. This is supported by a study conducted in 1993 by Carlo-Souza¹⁰ which concluded that (i) while the total cost of an average car trip in Washington was US\$9, the perceived cost to the commuter was only US\$1¹¹ and (ii) the actual cost of travel by public transport was more in line with perceived costs.

This being the case, we believe that a viable case can be made to support the position that the level of subsidisation afforded private transport users is (at least) comparable (if not more generous) than that afforded public transport users.

9 Ministerial Inquiry into Sustainable Transport in NSW (Dec 2003) p 53

10 Cited in Refocusing Road Reform, Cox, Hallmark Editions, Melbourne (1994) p 301

11 This discrepancy was largely the result of the fact that most employers in Washington pay for their employees’ car parking

4. FBT bias in favour of private transport

Given the (arguably) relative similarity between the levels of subsidisation afforded private vs public transport, the question arises as to whether there are any other differences in relation to the treatment of these transport modes that may impact commuter behaviour. In this regard, we believe that it is arguable that:

- A bias exists within the tax system, specifically within the FBT regime, which favours private over public transport
- This “FBT bias” may encourage commuters to drive rather than use public transport

Salary packaging of car benefits

Where an employee salary packages a car, their employer will usually “charge” them for all costs associated with the car (including FBT) by reducing their pre-tax salary by an equivalent amount. This being the case, even though FBT is a tax on the employer, it is very “visible” to employees.

For employees on salaries where the applicable marginal tax rate is less than the top tax rate (including Medicare) of 46.5%, the fact that FBT will be charged back to them at the FBT rate (which is also 46.5%) may mean that the employee is worse off (in terms of “take home cash”) by salary packaging a car.

However, a mechanism exists within the FBT regime whereby:

- If an employee makes an after tax contribution toward the provision of a car benefit; then
- This “payment” (known as a “recipient contribution”) effectively reduces the taxable value (refer below) of the benefit (and therefore the amount of FBT payable); such that
- The employee may still be better off (in terms of take home cash) by salary packaging the car.

This is because:

- Where the taxable value of a car benefit is calculated using the statutory formula method (refer below); then
- The amount that an employee would be required to pay out of after tax dollars as a recipient contribution is, usually, appreciably lower than the running costs (eg lease costs, fuel etc) that he / she would be required to pay out of after tax dollars if the car were a private car.

Calculation of FBT in respect of car benefits

The provision of a car by an employer to an employee (for the private use of the employee) may give rise to a car benefit. Where this is the case, FBT is payable by the employer based on the “taxable value” of the car in question. In this regard, the employer has the choice of calculating this taxable value using one of two methods, namely:

- The “log-book method”; or
- The “statutory formula method”

While the log-book method is designed to be a reasonably precise measure of the “real” value of the benefit being provided (based on the maintenance of a log-book by the employee concerned setting out details in relation to the amount of business travel undertaken over a specified period), the statutory formula method is an “approximation” of this value based on a more generic formula.

Although the statutory formula method may (in some instances) result in a greater amount of FBT being payable, it has a distinct advantage over the log-book method in that it does not require employees to maintain log-books in order for their employer to calculate the amount of FBT payable. That is, the statutory formula method is administratively a much simpler means of calculating the amount of FBT payable in respect of car benefits.

However, an FBT bias arises as a result of the way in which FBT is calculated using the statutory formula method. Broadly, the statutory formula method states that the taxable value of a car benefit is calculated based on the cost of the car in question multiplied by a “statutory fraction”. This statutory fraction decreases as kms travelled increases as follows:

Distance	Fraction
Less than 15,000 kms	0.26
15,000 kms – 24,999 kms	0.20
25,000 kms – 40,000 kms	0.11
More than 40,000 kms	0.07

This being the case, the taxable value of a car (and hence the amount of FBT payable) will decrease as kms travelled increases. The result of this (inverse) relationship is that:

- Where an employee is provided with a salary packaged car; and
- The taxable value of the car is calculated using the statutory formula method; then
- Even where the employee only uses the car for private purposes;
- The employee may be better off financially than if the car were a private car.

That is, the employee is afforded “concessional” tax treatment in relation to the car through the tax system. As no similar concession is available in respect of public transport, a bias exists in the tax system which favours private over public transport.

Example

The way in which the FBT bias works can best be shown by way of an example. In this regard, we have considered the take home cash position (ie the position after taxes, pre tax and after tax costs has been considered) of John Smith who is an average commuter with the following features:

- John's "total package" (ie cash salary plus fringe benefits) is \$50,000 pa¹²
- John's employer provides him with a salary packaged car worth \$32,440¹³ such that his cash salary is reduced by an amount equal to expenses associated with the car (eg lease costs, fuel etc) which are provided by his employer as fringe benefits
- Total travel undertaken by John using the car is 15,000 kms pa¹⁴
- Of the total travel undertaken:
 - None relates to business travel
 - 5,814 kms pa¹⁵ relates to home to work travel
 - 9,186 kms pa relates to other private travel (eg weekends use, holidays etc)
- John makes a recipient contribution (within the terms of the FBT regime) in relation to the provision of the car which means that, even though he is funding part of the cost of the car from after tax dollars, this is more effective than if he had a private car and paid for all costs associated with the car (eg lease costs, fuel etc) from after tax dollars

12 The average individual annual wage of an employee in the NSW metropolitan area was \$38,956 pa for the year ended 30 June 2001 per 2001 Australian Bureau of Statistics ("ABS") data. This translates to \$48,314 pa for the year ended 30 June 2006 based on an average rate of increase (over the five year period to 30 June 2006) of 4.4% per 2001 ABS data. This being the case, for the purposes of this report we have used \$50,000 pa as being representative of the average individual wage of an employee in the NSW metropolitan area as at 30 June 2006

13 Average cost of a car (incl GST) in Australia per the Australian Automobile Association (2003 data)

14 Based on the 5 year national average per the NRMA (2006 data)

15 Based on the average home to work return trip via public transport for commuters in the Greater Sydney Region per the Ministry of Transport (2005 data) x 228 business days per year

	Private car	Salary packaged car
Total package	\$50,000	\$50,000
Less pre tax car costs	\$0	\$5,510
Taxable income	\$50,000	\$44,490
Less tax (incl Medicare)	\$11,100	\$9,364
Less after tax car costs	\$12,528	\$6,488 ¹⁶
Take home cash	\$26,372	\$28,637

Details in relation to the complete calculations supporting the above are included at Appendix 1.

Observations

Based on the above calculations:

- John's take home cash would be \$28,637 pa
- However, if the car were a private car then his take home cash would only be \$26,372 pa
- That is, John is \$2,265 pa better off by simply choosing to salary package the car

The above example illustrates that FBT can have a pronounced impact on the take home cash position of a commuter without any other change in the commuter's behaviour. In this example, John drives from home to work under both scenarios (rather than using public transport). However, the FBT system is clearly making him relatively better off than a commuter with the same fact pattern who does not salary package a car.

¹⁶ Represents the recipient contribution

5. FBT bias – commuting via public vs private transport

Having established that a bias exists, the question arises as to the impact that this bias may have on commuters' decisions to use private over public transport.

One way to consider this question is to examine the impact that certain factors may have on the financial position of commuters (as we have done with John Smith and which can be observed with a degree of certainty) and then use this information to make observations in relation to the potential impact that the FBT bias may have on their behaviour.

Example

Turning again to our commuter, we have set out below details in relation to the impact on John Smith's take home cash position under the following scenarios:

1. Where John uses a private car for home to work travel as well as other travel
2. Where John uses public transport for home to work travel and a private car for other travel
3. Where John uses a salary packaged car for home to work travel as well as other travel
4. Where John uses public transport for home to work travel and a salary packaged car for other travel

In all cases where John is provided with a salary packaged car we have assumed that:

- The taxable value of the car will be calculated by John's employer using the statutory formula method; and
- All costs associated with the car (eg lease costs, fuel etc) will be paid for by John out of pre tax dollars (ie all costs will be "charged" by John's employer to his package)

Per our analysis, the take home cash position of our average commuter under the various scenarios is as follows:

	Scenario 1	Scenario 2	Scenario 3	Scenario 4
	Private car	Private car	Salary packaged car	Salary packaged car
	Drives to work	Catches PT to work	Drives to work	Catches PT to work
Total package	\$50,000	\$50,000	\$50,000	\$50,000
Less pre tax car costs	\$0	\$0	\$5,510	\$2,993
Taxable income	\$50,000	\$50,000	\$44,490	\$47,007
Less tax (incl Medicare)	\$11,100	\$11,100	\$9,364	\$10,157
Less after tax car costs	\$12,528	\$11,705	\$6,488 ¹⁷	\$8,434 ¹⁸
Less after tax PT costs	\$0	\$1,573	\$0	\$1,573
Take home cash	\$26,372	\$25,622	\$28,637	\$26,842

Details in relation to the complete calculations supporting the above are included at Appendix 1.

Observations

Based on our calculations, it is evident that:

- Where John has a private car (ie under Scenarios 1 and 2), he is worse off (by \$750 pa) by taking public transport to work. This being the case, there is an incentive for him to drive to work
- Whether John chooses to drive to work or not, he is better off financially by choosing to salary package his car (ie under Scenarios 3 and 4 rather than under Scenarios 1 and 2)
- The largest single increase to John's take home cash (ie \$3,015 pa) is achieved when he moves from having a private car and catching public transport to work to having a salary packaged car and driving to work (ie from Scenario 2 to 3)
- Where John has a salary packaged car (ie under Scenarios 3 and 4), he is better off by \$1,795 pa by simply choosing to drive to work (ie the difference between the take home cash positions under Scenarios 3 and 4). That is, he is "rewarded" for using his salary packaged car to drive to work. This increase is:
 - A direct result of the FBT bias which encourages him to "drive more" in order to reduce the taxable value of the car

¹⁷ Represents the recipient contribution

¹⁸ Represents the recipient contribution

- Available to him for doing no more than electing to salary package a car and using that car to drive to work
- Not linked to any behaviour that would otherwise be afforded concessional tax treatment (eg the availability of a tax deduction for home to work travel using the same car)
- Once John has made the decision to salary package a car (and to use that car to drive from home to work) any subsequent decision to use public transport, which results in his total annual kms travelled falling below 15,000 kms, will lead to a reduction in his take home cash of \$1,795 pa. That is, John will be “penalised” for choosing public transport. Further, John will be made very well aware of this penalty when his employer provides him with details in relation to how the various components of his total package have been calculated each month, year etc
- The above result is a consequence of the fact that the taxable value of the car is calculated using the statutory formula method and the relevant statutory fraction decreases at a level of kms (ie at 15,000 kms) that equates to the annual distance travelled by John using the car
- Choosing to use public transport to travel from home to work will result in a decrease in total kms travelled of 5,814 kms pa. This will mean that the taxable value of the car will increase. As finding an alternate source of kms may not be a viable option (5,814 kms roughly equating to three trips from Sydney to Queensland and back), there is a strong incentive for John to use his car to travel from home to work

While the above observations are constant (in dollar terms) for commuters with a marginal tax rate of 30% (ie commuters with a taxable income in the range of \$25,001 - \$75,000)¹⁹ similar observations (in terms of the relative incentives / disincentives involved) can be made for commuters on other income levels. In this regard, it should be noted that employees on lower marginal tax rates (or employees who do not make an after tax contribution toward the provision of their salary packaged car) may actually be worse off by salary packaging.

In addition to the above, it is worth noting that employees who choose to salary package cars usually enter into a 3 year lease in relation to their car (with financial penalties for breaking the lease). This may mean that salary packaged drivers are “locked in” to driving from home to work (rather than using public transport) for an extended period.

While it may not necessarily be the case that an employer will offer salary packaged cars to employees, employers do have an incentive to encourage salary packaging as:

- This may result in payroll tax and workers compensation savings for the employer²⁰. In the above example, John’s employer saves NSW payroll tax of 6% and NSW workers compensation of an estimated 1.5% on the amounts that have been salary packaged. This translates to a saving to his employer in the order of \$413 pa. While this may not initially

¹⁹ Taxable income does not include salary packaged amounts (ie amounts “paid” for by commuters from pre tax dollars)

²⁰ This may also result in a decrease in the amount of superannuation that employers are required to contribute on behalf of employees. While this is in effect a saving for the employer it also means that less superannuation is being accumulated for the benefit of employees

appear significant, it translates to \$413,000 pa for an employer with 1,000 employees in a similar position to John (and does not take into account any superannuation saving)

- The fact that an employer provides employees with the option to salary package may position the employer as an “employer of choice” which may assist in recruiting and retaining staff

6. Implementing public transport incentives - options for redressing the FBT bias

Having established that an FBT bias does in fact exist that may impact commuters' decisions to drive to work, the question arises as to the options for redressing the bias. For the purposes of this report we have concentrated on:

- A tax deduction – where the cost of public transport is able to be claimed as a tax deduction in an individual's personal income tax return
- An FBT exemption – where the cost of benefits in relation to public transport provided by an employer to an employee is FBT-free. This effectively means that commuters would be able to “pay” for public transport from pre-tax dollars
- A tax rebate – where the cost of public transport is rebateable against personal income tax payable. This effectively means that commuters would be “subsidised” for costs incurred in relation to public transport via the tax system on an after tax basis

In considering the merits of the above, consideration has been given to the following:

- Efficiency – an incentive will be efficient where it encourages or can be targeted to encourage a modal shift from private to public transport in respect of home to work travel without providing similar incentives to other commuters (eg commuters who use public transport for trips that are not related to home to work travel)
- Visibility – an incentive will be visible where commuters are aware of the incentive each time they travel from home to work using public transport
- Equity – an incentive will be equitable where it delivers a consistent benefit to commuters regardless of the income level
- Simplicity – an incentive will be simple where it is administratively easy to deliver (from a government or employer perspective) and to receive (from a commuter perspective)

We have discussed the each of the above in the context of the tax incentives under consideration.

Efficiency

The provision of a tax deduction or tax rebate would have the potential to apply to a broad cross section of commuters (ranging from those who already use public transport for home to work travel to those who are non-users). This being the case, the provision of a deduction or rebate has the potential to be a relatively inefficient form of incentive.

While measures could be put in place to narrow the focus of such an incentive (eg limiting the eligibility for a deduction / rebate to yearly ticket holders), these measures are likely to come at the cost of simplicity.

In addition, such limitations are likely to preclude commuters who may be inclined to shift from private to public transport but who may not strictly qualify for the concession (eg because they have not purchased a yearly ticket) from making such a shift.

While the same issue may arise in relation to the provision of an FBT exemption, this may have less impact because:

- In most cases FBT only applies where benefits are provided by employers to employees; therefore
- Where public transport is made FBT-free, such an incentive will only benefit commuters who are employed (and whose employers choose to provide public transport benefits); such that
- It is arguable that the provision of an FBT exemption will have greater likelihood of successfully influencing behaviour in relation to home to work travel

Another advantage of an FBT-exemption is that, because the provision of this type of incentive requires some level of employer buy-in, it provides those parties who wish to encourage public transport use (eg State Governments) with an opportunity to target employers (for example in particular locations where there is low public transport use) and use them to promote “take up” among their employees. This may have positive impacts on visibility as well (refer below).

This being the case, we believe that the provision of an FBT exemption is the preferred form of incentive from an efficiency perspective.

Visibility

Tax deductions and tax rebates are claimed by taxpayers in their annual income tax returns²¹. While this means that the provision of a deduction or rebate would have at least some level of visibility (as commuters would be prompted to consider the benefit of these concessions when they prepare and lodge their income tax returns), this is a once a year exercise.

In contrast, the provision of an FBT exemption would have ongoing visibility for commuters as, where the public transport costs concerned are provided by employers as salary packaged benefits, employees will have increased disposable income each time they are paid (eg weekly, fortnightly etc).

As noted above, as the provision of an incentive by way of an FBT exemption requires some level of employer buy-in, this may provide an opportunity to target commuters through their employer. While it may not necessarily be the case that an employer will allow employees to salary package public transport costs, employers do have an incentive to encourage salary packaging as:

- This may result in payroll tax and workers compensation²² savings for the employer

21 While some exceptions to this exist (eg in respect of private health insurance) these exceptions are very limited

22 And potentially superannuation

- The fact that an employer provides employees with the option to salary package may position the employer as an “employer of choice” which may assist in recruiting and retaining staff

This being the case, we believe that the provision of an FBT exemption is the preferred form of incentive from a visibility efficiency perspective.

Equity

The provision of a tax deduction or FBT-exemption may impact commuters on different income levels to different degrees (eg where commuters are on different marginal tax rates). In contrast, the provision of a tax rebate should benefit commuters on different income levels by the same amount in absolute dollar terms.

This being the case, a rebate would (at face value) be the preferred form of incentive from an equity perspective. Nonetheless, the impact of a tax deduction or FBT-exemption will be the same (all other things being equal) for all commuters on comparable marginal tax rates.

Simplicity

While the provision of a tax deduction or tax rebate may (at face value) be relatively simple measures to introduce, the overall simplicity of these measures may be negatively impacted where any attempt is made to target these incentives at a particular class of commuter (eg commuters using public transport to travel from home to work).

Any attempt to restrict the availability of either a deduction or a rebate to a particular class of commuter would come at the expense of additional administration costs which would need to be borne by either commuters (eg by having to evidence that costs incurred related to home to work travel), transport providers (eg by having to provide commuters with evidence that costs incurred related to home to work travel) or the Federal Government (eg by having to ensure that deductions / rebates claimed me to work travel).

This being the case, we believe that an FBT exemption would be the preferred form of incentive from a simplicity perspective.

Summary

While merits exist in relation to each form of incentive, we believe that, on balance, the preferred form of tax incentive to be introduced would be an FBT exemption. One of the key merits of this type of incentive is that, as the provision of an FBT exemption requires some level of employer buy-in, this may provide an opportunity to influence commuter’s behaviour through their employer, and to target the benefit. This assertion is borne out by the experience in other countries which is discussed at Section 9 below.

7. Impact of FBT exemption on commuters

Turning again to our commuter, we have set out below details in relation to the impact that introducing an FBT exemption for public transport would have on John Smith's take home cash position under the scenarios discussed at Section 5 above.

These calculations have been based on the assumption that each incentive is linked to the actual cost of public transport to the commuter (eg a \$1 tax deduction is available for each \$1 spent on public transport) rather than any multiple / portion of this amount. This is consistent with most forms of tax concession currently afforded individual taxpayers through the tax system.

Example

We have re-stated below the take home cash position of our average commuter in an environment where public transport is not concessionally taxed ("the existing rules") and compared this to the situation where public transport is FBT-free ("the proposed rules").

Existing rules	Scenario 1	Scenario 2	Scenario 3	Scenario 4
	Private car	Private car	Salary packaged car	Salary packaged car
	Drives to work	Catches PT to work	Drives to work	Catches PT to work
Total package	\$50,000	\$50,000	\$50,000	\$50,000
Less pre tax car costs	\$0	\$0	\$5,510	\$2,993
Taxable income	\$50,000	\$50,000	\$44,490	\$47,007
Less tax (incl Medicare)	\$11,100	\$11,100	\$9,364	\$10,157
Less after tax car costs	\$12,528	\$11,705	\$6,488 ²³	\$8,434 ²⁴
Less after tax PT costs	\$0	\$1,573	\$0	\$1,573
Take home cash	\$26,372	\$25,622	\$28,637	\$26,842

23 Represents the recipient contribution

24 Represents the recipient contribution

Proposed rules	Scenario 5	Scenario 6	Scenario 7	Scenario 8
	Private car	Private car	Salary packaged car	Salary packaged car
	Drives to work (ie same as Scenario 1)	Catches PT to work Salary packages PT (as it now FBT-free)	Drives to work (ie same as Scenario 5)	Catches PT to work Salary packages PT (as it is now FBT-free)
Total package	\$50,000	\$50,000	\$50,000	\$50,000
Less pre tax car costs	\$0	\$0	\$5,510	\$2,993
Less pre tax PT costs	\$0	\$1,430	\$0	\$1,430
Taxable income	\$50,000	\$48,570	\$44,490	\$45,577
Less tax (incl Medicare)	\$11,100	\$10,649	\$9,364	\$9,707
Less after tax car costs	\$12,528	\$11,705	\$6,488 ²⁵	\$8,434 ²⁶
Take home cash	\$26,372	\$26,216	\$28,637	\$27,436

Details in relation to the complete calculations supporting the above are included at Appendices 1 and 2.

Observations

Based on our analysis, it is evident that:

- Where John has a private car (ie under Scenarios 5 and 6) then, where he salary packages public transport (because it is now FBT-free) and takes public transport to work, he is slightly worse off by \$156 pa by doing so (ie he is worse off under Scenario 6 than 5). However, this is an improvement on the same position under the existing rules (ie where public transport is not FBT-free) where he was worse off by taking public transport by \$750 pa (ie Scenario 2 versus 1)
- Where John has a salary packaged car (ie under Scenarios 7 and 8), he is still better off driving to work even where he has salary packaged the public transport. In this case however, the incentive has reduced from \$1,795 pa (ie the difference between Scenarios 3 and 4) to \$1,201 pa (ie the difference between Scenarios 7 and 8)

25 Represents the recipient contribution

26 Represents the recipient contribution

- Once John has made a decision to salary package a car (and to use that car to drive to work) any subsequent decision to use public transport under the proposed rules will result in a less significant reduction in his take home cash position than under the existing rules. While this still means that he is penalised for choosing public transport, the reduction in the size of the penalty may assist in “levelling the playing field” in relation to the tax treatment of private and public transport. This may mean that:
 - At least some commuters may shift to public transport provided there are other advantages for doing so (eg efficient public transport services, less traffic etc)
 - For commuters who have private cars, the introduction of an FBT exemption may provide them with the incentive to start using public transport thus encouraging at least some modal shift in the community

8. Other impacts

An analysis of the full impact of the introduction of the proposed FBT exemption would need to be the subject of a detailed economic analysis. Nonetheless, we have set out at Appendix 3 a very high-level summary of the estimated impact on selected Federal and State Government income and expenditure items.

This estimate is based on a hypothetical modal shift in single occupant vehicle (“SOV”) home to work trips in the Greater Sydney Region from private to public transport of 5%. This percentage has been used for illustrative purposes only and is not representative of any estimated modal shift that may actually take place.

These calculations do not contain any estimates in relation to revenue impacts as a result of increases or decreases to tax revenue (apart from very basic calculation seeking to identify key GST and fuel excise impacts). One approach to offsetting negative impacts on revenue associated with these taxes (if any) may be to consider modifications to the tax regimes in question (eg additional changes to aspects of the FBT regime and / or changes to payroll tax rules).

Further, the impact on State Government costs associated with the fact that additional public transport capacity may not be available has not been considered.

9. Overseas experience

Various studies have been conducted into the relationship between the provision of transport incentives and the impact on commuter behaviour⁹. Although no study (or group of studies) is definitive, the findings of most studies reviewed by Ernst & Young in preparing this report seem to indicate that countries that have sought to provide some form of employer sponsored incentive (which is one of the advantages of an FBT exemption) have been far more successful in achieving a modal shift from private to public transport than those that have sought to provide broad based tax incentives alone.

Such measures include encouraging the provision of tax-free public transport vouchers by employers (which have been popular in the US and are essentially the same as providing an FBT exemption) and providing incentives for employers to sponsor car pooling arrangements amongst employees.

Based on our research, the US appears to have the most widespread range of transport incentives backed up by the most readily available data available to commuters. This being the case, we have summarised the position in relation to the US experience below in some detail. In addition, we have included some discussion in relation to transport incentives in other countries where successful programs have been introduced.

United States

Historically, the cost of travelling between home and work has generally not been tax deductible in the US and most employer provided benefits were treated as being taxable income in the hands of employees. Since 1984 several changes have been made to these rules to encourage public transport use. Specifically, under the current rules employer sponsored transport benefits are concessionally taxed as follows:

- Employers can provide employees with up to \$105 in transport benefits per month which is tax-free in the hands of employees. This is broadly similar to what would be considered an FBT exemption in Australia
- Employees can elect to have up to \$105 per month taken out of their pre-tax salary provided it is used to obtain transport benefits without the amounts being treated as taxable salary and wages. Again, this is broadly similar to what would be considered an FBT exemption in Australia

In relation to the above it is important to note:

- The concessions only apply where they relate to arrangements between employers and employees and are provided as part of specific transport programs (eg the Public Transport Benefits Program, Commuter Check Program etc which are discussed below); and
- As employer provided parking is also concessionally taxed (being effectively FBT-free) additional incentives are provided to negate the impact that this may have on modal shift away

from public transport. Specifically, employees are able to “cash-out” the value of their car parking with the resulting payout being tax-free in their hands

Upon the original implementation of the above, analysis commissioned by the US Federal Government found that public transport use increased by 25% among employees who were offered the incentives²⁷. Out of the employees who accepted the incentives, one out of four was a new transit user²⁸. After an increase in the cap in 2000 (from \$65 to \$100), an 11% modal shift in Washington from private cars to public transport was attributed to the provision of employer provided transit benefits.

Studies in relation to transport incentive programs in the US suggests that these programs can lead to a modal shift from private to public transport usage. Based on our research in relation to these studies, there appears to be a general consensus that, where transport incentives have been introduced in the US then:

- 24% of employees who had not accepted public transport benefits said they would definitely or generally increase public transport patronage
- They have attracted commuters who would otherwise drive alone
- They have resulted in a modal shift from private to public transport

Details in relation to the effectiveness of three programs which have been the subject of recent studies are set out below.

Public Transport Benefits Program

Transport incentives have been provided to employees of the US General Accounting Office under their Public Transport Benefits Program since 1993. Research undertaken in 1993 in relation to the program indicates that:

- Employee participation rates were highest in New York (88%) and Chicago (80%) and lowest in Kansas City (4%) with take up impacted by the level of public transport provided in the relevant areas
- Approximately 70% of employees receiving car parking from their employer received it free of charge
- 12% of employees who accepted public transport benefits previously drove from home to work alone

27 Mass Transit, Federal Participation in Transit Benefits Program – Statement of Kenneth M. Mead, Director of Transportation Issues to the United States General Accounting Office (1993)

28 Mass Transit, Federal Participation in Transit Benefits Program – Statement of Kenneth M. Mead, Director of Transportation Issues to the United States General Accounting Office (1993)

Additional research undertaken in 1999 by the Washington DC Metropolitan Transportation Authority found that 26% of sampled recipients of the benefit had previously travelled from home to work via private transport. In this regard, Black et al have noted that it can be assumed that the modal shift impact would be at least as high in cities with comparable service coverage.

Latest research in relation to this program (undertaken in 2000 by the IBI Group) indicates that, on average, the number of employees using public transport to travel from home to work would increase by 37% per cent if they were offered similar benefits.

Commuter Check Program

In November 1994 a survey was conducted in the San Francisco Bay Area amongst 239 employers that purchased Commuter Checks for their employees. A total of 1,800 employees from 149 employers responded averaging a 40% to 50% response rate. One third of the employees receiving the benefit reported an increase in their public transport use.

The greatest percentage of employees increasing their public transport use were those in suburban areas (although more employees living in city locations received the benefit). These factors were interpreted by Black et al to indicate that:

- By lowering public transport costs the incentive led to an increase in public transport use and a modal shift from private to public transport; and
- The level of modal shift that can be achieved via an employer sponsored tax incentive is significant and (importantly) greater than might be expected from the provision of a more general tax concession alone

Transit Check and Commuter Choice Schemes

In New York a different variety of programs, such as the Transit Check and Commuter Choice Schemes are offered to the public.

In discussing the Transit Check Program Potter et al²⁹ noted that the introduction of the Transit Check scheme had the effect that 14,000 employers purchased Metrocard passes and/or vouchers from the New York Transitcenter to provide to their employees. In evaluating the scheme Litman³⁰ (1990) noted the following:

- Around 25% of the Transit Check recipients previously travelled from home to work alone via car
- A small amount (about 4%) were previously passengers in other commuters' vehicles; and
- About 2% previously walked

²⁹ Tax treatment of employer commuting support: an international review, Transport Reviews, Vol 26, No.2, 221-237, March 2006, Potter, Enoch, Rye, Black, Ubbels

³⁰ Potter et al

Based on the above findings it appears that:

- The introduction of transport incentives via the tax system has the potential to influence the decision making process of commuters such that it may result in a modal shift from private to public transport
- The findings in the US may be of relevance to Australia as the provision of tax incentives in the US (through employer sponsored programs) are not dissimilar to the provision of an FBT exemption

Ireland

As with the US, the cost of travelling between home and work was historically treated as being not tax deductible and most employer provided benefits treated as being taxable on the basis that they were benefits in kind. However, in 1999 the Irish Government introduced a specific concession for employer provided public transport incentives whereby benefits provided by employers by way of a monthly or annual bus pass were treated as being tax-free (up to a value of \$1,500 pa). When the concession was implemented in 1999, the benefit could be given as a bonus in lieu of a pay increase (on the condition that the public transport pass was a monthly or annual pass).

While uptake in relation to the incentive was initially poor due (in part) to the fact that the rules were difficult to apply in practice, changes introduced in 2000 which allowed employees to salary package these benefits saw a dramatic increase in participation rates³¹.

At the time of writing it is very difficult to measure what the impact of the tax incentive has been on public transport use although the following facts should be noted:

- Research by Potter et al indicates that the take up by companies offering salary packaging of public transport costs to employees is in the range of 10 - 15%
- Data provided by Dublin Buses indicates that the number of "tax saver tickets" issued increased from 894 in 1999 to 39,549 in 2005
- A report by the Dublin Transportation Office in 2002 indicates that the percentage of private transport use in Dublin during morning peak hours has decreased from 72% in 1997 to 70% in 2002

Canada

In its 2006 / 2007 budget, the Canadian government announced a decision to offer tax incentives for public transport which is aimed at reducing congestion and addressing environmental concerns. From 1 July 2006, transit users are able to claim a tax credit for public transport use in their income tax returns.

31 S. Potter et al

In addition, while not a direct tax incentive to commuters, the city of Winnipeg in the province of Manitoba embarked on a small pilot program whereby employers offered employees discount tickets with the discounts partly funded by the local transport authority.

The pilot program involved 14 organizations and a total of 14,000 eligible employees³². Through offering discounted transit passes, the use of public transport increased by 45% and sales of monthly transit passes increased by about 500% (equivalent to a 5% increase city-wide). The results of the pilot study highlight the effectiveness of promoting public transport through offering discounts in fares for public transport. However, the study did note that the taxable status of transit benefits prevented broader participation by both employers and employees.

The Netherlands

Under the commuting benefits system in the Netherlands, different levels of tax exemptions are available to employees depending on the mode of transport adopted. Specifically, where employers reimburse employees for the costs on public transport in respect of home to work travel, all reimbursements are tax free in the hands of employees. Effectively, this is equivalent to providing an FBT exemption in Australia.

However, unlike the exemption provided for public transport costs on home to work travel, the reimbursement of motor vehicle costs does not receive an exemption in the Netherlands. Similarly, in the case of the provision of company cars, no tax exemption is available.

32 Information and figures sourced from Ecopass: Employer-Sponsored Transit Passes (2004) on the Transports Canada website: www.tc.gc.ca.

10. Conclusion

Based on the above analysis we believe that:

- A viable case can be made to support the position that the level of subsidisation afforded by private transport users is (at least) comparable (if not more generous) than that afforded public transport users
- Employees are afforded concessional FBT treatment in relation to the salary packaged cars in certain circumstances through the tax system. As no similar concession is available in respect of public transport, a bias exists in the tax system which favours private over public transport. Further, this FBT bias may encourage commuters to drive rather than use public transport
- While merits exist in relation to various forms of public transport tax incentives that may be provided to redress this bias (eg tax deductions, FBT exemptions and tax rebates), on balance, the provision of an FBT exemption would appear to have a number of advantages
- The findings of most studies in relation to the experience of other countries seem to indicate that countries that have sought to provide some form of employer sponsored incentive (which is one of the advantages of an FBT exemption) have been far more successful in achieving a modal shift from private to public transport than those that have sought to provide broad based tax incentives alone
- On the basis of the analysis in this report, including the experience of other countries, there would be merit in giving further consideration to, and undertaking more detailed analysis on, the option of providing FBT exemptions for employer sponsored programs aimed at encouraging public transport use for travel to and from work.

Appendix 1 – calculations (FBT bias)

	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Type of car	Private car	Private car	Salary packaged car	Salary packaged car
Travel via PT	0	5,814	0	5,814
Travel via car ³³	15,000	9,186	15,000	9,186
Total remuneration ³⁴	50,000	50,000	50,000	50,000
Less pre tax costs:				
Annual lease costs ³⁵	0	0	8,160	8,160
Annual fuel costs ³⁶	0	0	2,124	1,301
Annual registration costs ³⁷	0	0	215	215
Annual insurance costs ³⁸	0	0	1,369	1,369
Annual R&M costs ³⁹	0	0	660	660
FBT payable on car	0	0	0	0
Input tax credit for annual car costs	0	0	-1,119	-1,045
Recipient contribution	0	0	6,488	8,434
Input tax credit on recipient contrib	0	0	590	767
Total	0	0	5,510	2,993
Less pre tax PT costs:				
Annual PT costs	0	0	0	0
FBT payable on PT	0	0	0	0
Input tax credit for annual PT costs	0	0	0	0
Tax deduction for annual PT costs	0	0	0	0
Total	0	0	0	0

33 15,000 kms based on 5 year national average per the NRMA (2006 data), 5,814kms = based on the average home to work return trip via public transport for commuters in the Greater Sydney Region per the Ministry of Transport (2005 data)

34 The average individual annual wage of an employee in the NSW metropolitan area was \$38,956 pa for the year ended 30 June 2001 per 2001 ABS data. This translates to \$48,314 pa for the year ended 30 June 2006 based on an average annual rate of increase (over the five year period to 30 June 2001) of 4.4% per 2001 ABS data. This being the case, for the purposes of this report we have used \$50,000 pa as being representative of the average individual wage of an employee in the NSW metropolitan area

35 Based on average cost of a car (incl GST) of \$32,440 per the Australian Automobile Association (2003 data) provided under a 3 year lease with a 45% residual

36 Per Federal Chamber of Automotive Industries (2001 data)

37 Based on a 1,100 kg car per the Australian Automobile Association (2005 data)

38 Based on average cost of a car (incl GST) of \$32,440 per the Australian Automobile Association (2003 data)

39 Estimate only

Existing rules	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Taxable income	50,000	50,000	44,490	47,007
Less tax (including Medicare)	11,100	11,100	9,364	10,157
Less after tax car costs:				
Annual lease costs	8,160	8,160	0	0
Annual fuel costs	2,124	1,301	0	0
Annual registration costs	215	215	0	0
Annual R&M costs	660	660	0	0
Annual insurance costs	1,369	1,369	0	0
Recipient contribution	0	0	6,488	8,434
Total	12,528	11,705	6,488	8,434
Less after tax PT costs ⁴⁰	0	1,573	0	1,573
Take home cash	26,372	25,622	28,637	26,842

⁴⁰ Based on the average cost of a rail and bus return trip (incl GST) per the Ministry of Transport x 228 business days per year

Appendix 2 – calculations (impact of FBT exemption)

Proposed rules	Scenario 5	Scenario 6	Scenario 7	Scenario 8
Type of car	Private car	Private car	Salary packaged car	Salary packaged car
Travel via PT	0	5,814	0	5,814
Travel via car	15,000	9,186	15,000	9,186
Total remuneration	50,000	50,000	50,000	50,000
Less pre tax costs:				
Annual lease costs	0	0	8,160	8,160
Annual fuel costs	0	0	2,124	1,301
Annual registration costs	0	0	215	215
Annual insurance costs	0	0	1,369	1,369
Annual R&M costs	0	0	660	660
FBT payable on cars	0	0	0	0
Input tax credit for annual car costs	0	0	-1,119	-1,045
Employee contribution	0	0	6,488	8,434
Input tax credit on employee contrib	0	0	590	767
Total	0	0	5,510	2,993
Less pre tax PT costs:				
Annual PT costs	0	1,573	0	1,573
FBT payable on PT	0	0	0	0
Input tax credit for annual PT costs	0	-143	0	-143
Tax deduction for annual PT costs	0	0	0	0
Total	0	1,430	0	1,430
Taxable income	50,000	48,570	44,490	45,577

	Scenario 5	Scenario 6	Scenario 7	Scenario 8
Less after tax car costs:				
Annual lease costs	8,160	8,160	0	0
Annual fuel costs	2,124	1,301	0	0
Annual registration costs	215	215	0	0
Annual insurance costs	1,369	1,369	0	0
Annual R&M costs	660	660	0	0
Recipient contribution	0	0	6,488	8,434
Total	12,528	11,705	6,488	8,434
Less after tax PT costs	0	0	0	0
Take home cash	26,372	26,216	28,637	27,436

Appendix 3 – other impacts

Impact	
Average SOV trips per day in Greater Sydney Region per day ⁴¹	138,000
Percentage reduction	5%
Reduction in number of SOV trips per day	6,900
Federal Government impact	
Reduction in number of SOV trips per day	6,900
Average home to work round trip per day ⁴²	25.5 kms
Business days in year ⁴³	228
Fuels consumption (ltrs per 100km) ⁴⁴	8.28 ltrs
Annual reduction in fuel consumption	3,321,654 ltrs
Cost of fuel per ltr (incl GST) ⁴⁵	\$1.375
Annual reduction in fuel excise revenue - due to decreased fuel sales	\$1,266,979

41 Weighted average based on data per Parry Report p58

42 Average home to work return trip via public transport per the Ministry of Transport (2005 data)

43 Assumed business days per year based on the legislated number of business days per section 39FA(4) of the FBT Act

44 Per Federal Chamber of Automotive Industries (2001 data)

45 Per the NRMA (2006 data)

Impact	
State Government impact	
Increase in public transport patronage per day	6,900
Average home to work round trip per day (kms)	25.5 kms
Business days in year	228
Average cost of public transport round trip per day (incl GST) ⁴⁶	\$6.90
Estimated increase in revenue per year (incl GST)	\$10,855,080
Public transport subsidy per commuter per km (incl GST) ⁴⁷	\$0.15
Annual increase in subsidy (incl GST)	\$6,017,490
Net farebox revenue impact - increase (decrease)	\$4,837,590
Annual increase in GST - due to increased farebox revenue	\$986,825
Annual reduction in GST - due to decreased fuel sales ⁴⁸	\$Nil
Net GST impact - increase (decrease)	\$986,825

46 Average cost of rail and bus return trip per the Ministry of Transport (2006 data).

47 Weighted average as calculated per Section 3 of this report

48 Assuming all fuel costs in relation to salary packaged cars are fully creditable

