SUBMISSION TO THE
FINANCE AND EXPENDITURE SELECT COMMITTEE ON THE
LAND TRANSPORT MANAGEMENT (REGIONAL FUEL TAX) AMENDMENT BILL

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About the author

1. I am an economist with fourteen years’ experience in various policy roles, all with significant economic and regulatory impact analysis components.

2. I was employed in the Ministry of Transport’s Funding and Infrastructure team for four years until August 2017, which included dealing with tax and expenditure policy. I have advised on three Government Policy Statements (GPS) on land transport: GPS 2015, the draft GPS 2018 for the then National-led Government, and the draft GPS 2018 for the now Labour-led Government.

3. This year, I will be producing a report under The New Zealand Initiative banner on the problems with current transport funding, planning and expenditure policies. This will be followed by a report on how to reform the sector.

4. During my studies, I was awarded the New Zealand Association of Economists & Treasury Scholarship, and all of Victoria University’s prizes for economics and public policy at the time, including the School of Economics and Finance Prize in Economics, the Jan Whitwell Prize for Monetary and Macroeconomics, and the Civil Service Institute Prize in Public Policy and Public Administration.

Disclaimer

5. This submission is mine. Views expressed are mine and do not necessarily reflect the views of The New Zealand Initiative, its staff, advisors, members, directors or officers.

My general position on regional fuel taxes

6. The Bill proposes that the revenue from regional fuel taxes accrue to regional and local authorities. They are, essentially, a partial replacement of other local authority revenue tools – primarily property rates.
Because of a lack of information in the Ministry of Transport’s regulatory impact statement, I am neutral on regional fuel taxes versus property rates. Too much is uncertain, particularly around the impacts of continuing with rates as a source of funding.

There is, however, more than enough information in my research to show that fuel tax is inequitable and grossly regressing and should be replaced by new funding sources including congestion and road pricing at the earliest possible opportunity.

Whichever are ultimately used – regional fuel taxes or rates – they should continue only as a short-term measure before better funding sources are implemented.

The Bill says regional fuel taxes can be set for anywhere up to 10 years, and that this can be renewed. Congestion and road pricing could be implemented in a few years. To encourage government and local authorities to transition as quickly as possible to these sources, I propose that the maximum limit for regional fuel taxes be 4 years renewable only if there are good reasons not to implement congestion and road pricing.

Summary of problems with the Ministry of Transport’s analysis

I have serious concerns with the regulatory impact statement which is attached to the Bill and which Ministers and MPs have used to form their views on the relative merits of a regional fuel tax. The regulatory impact statement was prepared by the Ministry of Transport and assessed by the Treasury’s Regulatory Quality Team as meeting Quality Assurance criteria.

I was previously employed by the Regulatory Quality Team when it was housed in the then-Ministry of Economic Development. I would have assessed the proposal as not meeting the Quality Assurance criteria for the reason that it cannot be relied upon to reasonably accurately inform Government’s and Parliament’s deliberations.

Among other issues, the regulatory impact statement:

- overplays the evidence for price-spreading and under-commits to activities that would mitigate price-spreading and improve the effectiveness of regional fuel taxes
- ludicrously exaggerates the risk of black markets forming
- underplays the impact of fuel tax on low-income people
- sets out its analysis in such a way as to be almost incomprehensible in key parts
- wrongly assesses the merits of some options, and
• fails to recommend other options which Parliament could have legislated for, complementing regional fuel taxes.

Structure of this submission

14. While regional fuel taxes are superior to property rates in some regards (e.g. if you drive more, you pay more towards the maintenance and improvement of roads), and inferior in others (e.g. regional fuel taxes mean poorer people with less fuel-efficient cars pay more, against rates which generally charge wealthier people more). The best option, therefore, comes down to how much you weight those criteria.

15. Though I am neutral on regional fuel taxes, members of this Committee should base their decision on accurate information. The regulatory impact statement lacks vital information and is wrong in many important areas. My submission:

• describes current transport funding policy, busts a few myths, and then describes how transport funding should ideally work
• corrects many aspects of the Ministry of Transport’s regulatory impact statement upon which Ministers, this Committee and the public will have relied in forming views, and advises on what that means for the Bill or the actions of this Committee
• offers other amendments.

16. The submission is divided into the following sections:

1. Things everyone involved in transport policy should understand
2. Price-spreading
3. Tax evasion and black markets
4. The inequitable impact of fuel taxes, particularly on poor people
5. How in love with cars are New Zealanders really?
6. One reason why Governments and their agencies love fuel tax
7. The multiple errors of the Ministry of Transport’s assessment of options

My recommendations to the Committee

17. Sections 2, 3, 4 and 7 contain recommendations to the Committee. These are replicated below for ease of future reference:
2. Price-spreading

- If the Commerce Act amendments currently before Parliament pass, the Commerce Commission will have greater power to investigate potential competition issues through a Market Studies Power. The Committee could recommend that the Minister of Commerce ask the Commerce Commission to use its new power to investigate the fuel market.
- The Ministry has little in the way of a plan for monitoring price-spreading and responding accordingly. Such monitoring will be necessary before the Commerce Commission can complete its investigation, or if an investigation into the fuel market is not a priority for the Commission. The Committee could ask the Ministry to prepare and implement a proper monitoring regime, and to regularly report to the Committee on how regional fuel markets respond to regional fuel taxes.

3. Tax evasion and black markets

- The Committee could consider whether the fine for tax evasion is high enough and seek more advice from the Ministry.
- The Committee should disregard any concern about black markets forming.

4. The inequitable impact of fuel taxes, particularly on poor people

- The Committee should amend the period for which regional fuel taxes apply from 10 years to 4 years, renewable only if there is not good reason to implement congestion and road pricing.
- The Committee should, if congestion and road pricing has not been legislated for by the end of those four years, ask the Ministry of Transport to provide the Committee advice on transitioning from petrol excise duty to road user charges.
- The Committee should ask the Ministry of Transport and Ministry of Social Development to provide advice on what additional income support could be provided to disadvantaged people most adversely affected by regional fuel taxes.

7. The multiple errors in the Ministry of Transport’s assessment of options

- The Committee should note that if regional fuel taxes do not pass into law, the status quo is not that the Auckland Transport Alignment Project and other transport projects do not go ahead, but that Councils will use rate increases, debt and, perhaps, defer some projects (including non-transport projects) instead.
• The Committee should note that correcting in Ministry’s errors would lead to tolling (and other congestion and road pricing options) being more positively assessed and regional fuel taxes (and fuel taxes in general) being more negatively assessed.

Information drawn upon in this submission

18. This submission primarily draws upon the Ministry’s regulatory impact statement and my original analysis. Apart from the Bill itself and a two-page Q&A, the regulatory impact statement is the only material the Ministry has released about the proposal.

A lack of public consultation

19. The Ministry of Transport only undertook consultation with a handful of selected organisations: the Automobile Association, Road Transport Forum, fuel companies and distributors, Auckland Council and NZ Transport Agency.

20. This is regrettable.

21. Had the Ministry undertaken general public consultation, it would have received a submission similar to this one which would have, perhaps, corrected its assessment of the relative merits, costs and risks of regional fuel taxes.

The Ministry of Transport likely unlawfully withheld information

22. To seek out more information, on 15 January 2018, and under the Official Information Act, I asked the Ministry of Transport to provide me with any information provided to Ministers about regional fuel taxes.

23. Despite Cabinet having already made decisions a month earlier, the Ministry withheld most information saying that release of information would unreasonably prejudice decisions around the drafting of legislation. In my 14 years in and around the public service, this is the first I have ever heard this attempted justification.

24. I subsequently asked the Ministry to provide all information around my request for information about regional fuel taxes. The Ministry’s response revealed many likely breaches of the Official Information Act.
25. I followed-up with the Ministry after the Bill was drafted and published online – being the Ministry’s (false) reason for withholding the information – and asked that the information be released so it could inform my submission.

26. The Ministry has refused to even acknowledge that request, let alone provide the information.

27. I have since laid a complaint with the Ombudsman. My submission, and others, is likely to be incomplete because of the Ministry’s disregard for the law.
1. **Things Everyone Involved in Transport Policy Should Understand**

1.1. **Current Transport Funding Arrangements**

29. The National Land Transport Fund (NLTF) is made up of revenue from:

- fuel excise duty – currently 59.524 cents per litre
- road user charges – varies by vehicle weight and configuration; for example, a light diesel vehicle (3.5 tonnes or less) pays $62 per 1,000 kms, while an 8-axle truck pays at least $333 per 1,000 kms
- motor vehicle registration – a fixed annual fee per vehicle.

30. A regional fuel tax of 10 cents a litre would *increase the per litre* charge on petrol to 69.524 cents (and to about 79.524 cents with the proposed national fuel tax increase), and *introduce a per litre* charge on diesel of 10 cents.

31. There has been some suggestion – from the Taxpayers’ Union, from Judith Collins, even recently from the Ministry of Transport – that fuel excise duty and road user charges should only be spent on roads or things that benefit drivers.

32. This view is mistaken.

33. Apart from state highway maintenance and improvements, most all other transport expenditure from the National Land Transport Fund is matched close to 1 to 1 from rates including local road maintenance and improvements, public transport (which is about half funded from users), and walking and cycling.

34. Many ratepayers drive very little, or not at all.

35. A commitment to only spend road taxes on roads would commit ratepayers to only spend their contribution on roads. This would be a massive subsidy to road users.

36. While motorists might pay for some projects they don’t benefit from (e.g. a driver in Southland paying for public transport in Wellington), ratepayers might pay for projects they don’t benefit from (e.g. people who walk to work in Wellington paying for roads people use to drive to work in Wellington).

37. Governments have to be mindful of this balance when deciding how to set taxes, rates and public transport fares and in divvying-up expenditure.
1.2. **How transport funding should work**

38. Instead of everyone paying a bit towards projects they don’t really want, people should pay for the projects they do want.

**User pays**

39. Motorists should pay for roads. Public transport users for public transport. Walkers and cyclists – well, it’d be hard to get them to pay, so funding for that will likely always come from rates. These charges would also vary by region, or local authority, so that, for example, people in Canterbury where it is cheaper to put in transport, don’t subsidise people in Wellington where it is more expensive. This is a user-pays approach. For roads, it is known as ‘road pricing’.

**Congestion pricing**

40. Instead of motorists subsiding public transport for the congestion relief benefits, there should be congestion charges. The problem with public transport subsidies from motorists is that they have to be paid to everyone who uses public transport, even the ones who would always use public transport even if they were paying the full price.

41. Consider an example of lowering public transport fares to encourage people off the roads and onto trains and buses. Because you can’t tell who’s newly off the road and who was already using public transport, you must lower fares for all users. You will succeed in getting some additional people off the road, but it’ll cost you in terms of paying everyone who uses public transport, not just the additional people.

42. Congestion pricing – an extra charge on road users if they want to travel at peak/congested times – encourages people to take public transport or travel at a different time of day. It gets the same behaviour change, but at a much lower cost. Further, the revenue from the congestion charge can be used in any number of ways including:

- compensating low-income people for the higher cost of travel if they have to keep driving, or the inconvenience of changing modes or travelling at a different time of day
- providing more public transport, walking and cycling, or roads
- lower public transport fares or road taxes
- anything else.
Social provision of transport

43. What then of public transport for social welfare reasons / providing choice to those who have little choice or limited means?

44. As above, the revenue from congestion charging can be recycled to leave the poor no worse off (or even the rich no worse off if you wish).

45. Other than that, transport social welfare should be provided by the Crown as other social welfare programmes like subsidised health and education are. We have a progressive income tax and social welfare system that taxes the rich a bit more in order to support the poor.

46. It is inappropriate to use fuel taxes – a regressive tax; one that is paid disproportionately by the poor – to provide social welfare transport to the poor.

47. Nor is it appropriate to tax a subset of society – motorists – to pay for social welfare transport.

48. Motorists should pay for their costs of transport. New Zealand society should pay, and the rich among society a bit more, for social welfare transport.

Overall

49. While people can legitimately favour regional fuel taxes or rates depending on their preferences and concern for different ‘winners’ and ‘losers’ from each, the approach outlined above of congestion pricing, road pricing, and Crown funding for social welfare reasons is as close as any policy gets to an ‘everybody wins’ solution.

50. Members of the House in all parties should work to see it implemented as soon as possible.
1.3. HOW TRANSPORT FINANCING CURRENTLY WORKS

Central Government

52. Road taxes are ring-fenced (also known as ‘hypothecated’) for land transport expenditure. Funding ranges for different types of expenditure – public transport, state highway improvements – are set in the Government Policy Statement on land transport. Taxes are set by regulation.

53. Being largely outside of the normal Budget process, there is less scrutiny of taxes and expenditure. The Ministry of Transport advises Ministers, but it’s not in the context of competing uses of tax revenue from other Votes and the process attracts little interest from Treasury.

54. Because of the lack of scrutiny and to protect against overly political decision-making, transport is funded on a pay-as-you-go basis – capital expenditure is paid for when it is undertaken by today’s motorists and ratepayers, not over the lifetime of the asset as businesses or households might normally do (such as with home loans). ¹

55. Lots of expenditure is planned in the next few years, particularly in Auckland, that will last decades and lifetimes. Burdening today’s road tax and ratepayers with all of that cost rather than spreading the cost over the lifetime of the asset is both inefficient and inequitable. It’s a high price we pay because we can’t trust politicians to make good investments.

Local government

56. While councils do usually finance transport investment through borrowing, Auckland council is currently targeting a self-imposed limit on borrowing of 270% of operating revenue beyond which, the Council says, credit agencies would downgrade Auckland Council from its AA rating.

57. Transferring the burden from Councils to ratepayers and motorists, of course, doesn’t really reduce the risk of higher borrowing costs to Auckland as a whole – it just transfers it from the Council to households, many of whom with house prices where they are, will have borrowing of 1,000% of income.

¹ There are a handful of exceptions with some projects financing through borrowing from the Crown or public-private partnerships (PPPs).
1.4. **How transport financing should work**

58. Capital expenditure on transport should be paid off by all who use it, not just today’s motorists and ratepayers.

59. In the medium-term, this could be achieved through an overhaul of transport planning – reducing the potential of political decision-making and increasing the chance that transport investments accurately reflect what users want.

60. But something could also be done now.

61. The current Labour-led Government has a lot in common with the previous National-led Government when it comes to the Auckland Transport Alignment Project (ATAP). There are differences around a handful of major projects, but a Labour-revised ATAP in 2018 will look, in large part, quite similar to the one National agreed to in August 2017.

62. If there’s broad political consensus on many of these train, bus and road projects, why not finance them with debts or public-private partnerships and spread costs over time? The answer is probably the Government’s commitment to its debt-to-GDP target, the Budget Responsibility Rules, and the Auckland Mayor’s commitment to limited rates increases. Unfortunately, all these targets and rules do with regards to the issue of transport funding is shift the credit risk from Government to households.
2. **PRICE-SPREADING**

2.1. **SUMMARY**

63. Price-spreading is mainly discussed on pages 36 and 37 of the regulatory impact statement.

- The Ministry has over-stated the evidence of historical price-spreading.
- Price-spreading is a real possibility, however, and depends on the extent of competition in regional fuel markets.
- If the Commerce Act amendments currently before Parliament pass, the Commerce Commission will have greater power to investigate potential competition issues through a Market Studies Power. **The Committee could** recommend that the Minister of Commerce ask the Commerce Commission to use its new power to investigate the fuel market.
- The Ministry has little in the way of a plan for monitoring price-spreading and responding accordingly. Such monitoring will be necessary before the Commerce Commission can complete its investigation, or if an investigation into the fuel market is not a priority for the Commission. **The Committee could** ask the Ministry to prepare and implement a proper monitoring regime, and to regularly report to the Committee on how regional fuel markets respond to regional fuel taxes.

2.2. **WHAT IS PRICE-SPREADING?**

64. In its regulatory impact statement, the Ministry of Transport describes the risk of price-spreading as ‘a significant concern’. Price-spreading involves fuel retailers increasing petrol prices by less than the 10 cents in Auckland and recouping the remaining tax from other regions. The most extreme example of price spreading would see every region’s tax go up 3 cents.

2.3. **DID PRICE-SPREADING EVER EXIST?**

65. The Ministry says that ‘price spreading occurred in the early 1990s when a regional petrol tax was in place in the main urban regions’. The Ministry has always claimed price-spreading was evident in the 1990s but, as far as I am aware, no one has ever provided compelling, or even reasonable, evidence of this.
A BERL report in 2012 referred to the ‘perceived response to the 1992 regional fuel tax’ and ‘allegations of tax spreading to other regions’. I’ve heard that these perceptions came from freight companies. You’d want better evidence than my faint memories of someone else’s anecdote before saying that price-spreading occurred.

### 2.4. Price-Spreading Can Only Exist If The Market Is Not Competitive

The Ministry says that ‘fuel is bought and sold in a competitive national market’, seemingly suggesting that competition isn’t a concern.

However, the Ministry also says ‘the extent to which prices would increase in one area will also depend on the extent of competition in that area or region’. The ‘also’ in this sentence is wrong. Price-spreading entirely depends on a lack of competition. Competition pushes prices down. Prices can only be held up if a company has price-setting abilities without fear of prices being undercut by a competitor.

If regional markets are competitive, price-spreading will not be an issue. If regional markets are not competitive, price-spreading might be an issue.

### 2.5. Are Retail Fuel Markets Competitive?

The previous National-led Government commissioned a report by NZIER into competition in fuel markets. That report suggested a lack of competition in some areas. NZIER said: ‘we cannot definitively say that fuel prices in New Zealand are reasonable, but we have reason to believe that they might not be’ and that ‘retail gross margins in Wellington and the South Island have increased at a faster rate than margins in the [rest of the] North Island’.

### 2.6. What Can Be Done About A Possible Lack Of Competition?

The NZIER report made a number of recommendations. The Ministry of Transport’s regulatory impact statement mentions one of them – the Commerce Commission having the power to initiate investigations which is before Parliament through a Market Studies power in amendments to the Commerce Act – but is silent on pursuing other recommendations from the NZIER’s report.

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72. Instead a couple of other options are listed as being possible:

- Publication of the kind of data that might help indicate price spreading
- ‘Developing a proactive communication strategy designed to enlist industry support’.

73. I’m not sure what the second one means (which industries?), what it involves and why it would be effective, but the Ministry makes no undertakings to do either of these things. The Ministry also does not include the cost of these things in its ‘summary table of costs and benefits of the preferred approach’.

74. The Ministry does not have a detailed plan for monitoring the fuel market. It should. And it should have had this for at least the past 25 years if, as it states in the regulatory impact statement, it has had concerns about competition for at least 25 years (since the early 90s).

75. It is not sufficient to simply publish data. Data must be processed, analysed, and reports and calculations reviewed.

76. How will the Ministry know if price-spreading has possibly occurred? The Ministry doesn’t say.

77. How will the Ministry respond to possible price-spreading through non-regulatory interventions it or other agencies can make? The Ministry doesn’t say.

78. How will the Ministry know whether to recommend to Ministers that a fuller investigation be initiated? The Ministry doesn’t say.

2.7. THE LACK OF MONITORING

79. Too often agencies say they’ll monitor how regulation performs, but without a plan, and then fail to do so. When regulatory change are next considered, the lack of monitoring means there’s little evidence to inform amendments.

80. Here’s the entirety of the Ministry of Transport’s plan for monitoring the effectiveness of road safety regulation changes in 2010⁴:

> The effectiveness of these initiatives will be monitored as part of reviewing the Safer Journeys action plans. This function will be carried out by the

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National Road Safety Committee, who will provide regular progress reports to the Minister of Transport.

81. By 2015 it was clear, though the Ministry wouldn’t say so, that the road toll had started increasing since 2013. Even now in 2018 and the Ministry is unable to say why or credibly say what should be done about the increasing rate of road deaths.

82. This can be traced back to ineffectual monitoring – from plans, to resources.

2.8. RECOMMENDATIONS

83. The Committee should ask the Ministry of Transport to:

- develop a detailed plan for monitoring indications of price-spreading and for what actions might be triggered if price-spreading is detected
- report back on this plan by 30 September 2018, being three months after the first regional fuel tax is scheduled to be implemented
- regularly report publicly, to Ministers and the Committee on the results of ongoing monitoring.
3. **TAX EVASION AND BLACK MARKETS**

3.1. **SUMMARY**

84. The risk of tax evasion is discussed on page 37 of the regulatory impact statement. In some media, this has been interpreted as black markets forming.

- The Ministry of Transport says that fuel tax evasion could come in the form of 30,000 litre road tankers.
- There is a risk of tax evasion by fuel companies, but the proposed fine may be too low to deter it.
- There is no risk of black markets forming. The cost of establishing a black market outweighs the revenue by considerable margins.
- **The Committee could** consider whether the fine for tax evasion is high enough and seek more advice from the Ministry.
- **The Committee should** disregard any concern about black markets forming.

3.2. **WHAT DOES THE MINISTRY OF TRANSPORT SAY ABOUT TAX EVASION AND BLACK MARKETS?**

85. The Ministry makes a valid point on page 38 of the regulatory impact statement about drivers, particularly large transport operators, filling up at points on their trip that have lower fuel prices and that this might be in regions that neighbour those with regional fuel taxes.

86. But the Ministry goes further. On page 37, the Ministry says:

> Individuals and businesses may use the regional fuel tax for financial gain by purchasing fuel outside the regional fuel tax area and re-selling it within the regional fuel tax area. The scale of this could be anything from small containers to entire 30,000 litre road tankers.

87. The Ministry’s wording is vague.

88. The Ministry might mean that fuel companies would send trucks from distribution centres in Northland and Tauranga, where the tax doesn’t apply, to parts of Auckland rather than from the distribution centre in Auckland.

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Another interpretation is black marketeers being involved in the purchasing and on-selling of fuel through their own means. Former Ministry staff have said it was a concern internally and it has been raised by industry participants in the past.\footnote{http://www.stuff.co.nz/dominion-post/news/4822339/Call-for-regional-fuel-tax-slammed}

I consider each of these interpretations below.

### 3.3. Tax Evasion

Financial incentives do exist to evade regional fuel taxes. Fuel companies could send trucks from Northport to service stations in Auckland where it is more cost-effective to do that than transport fuel from Auckland’s distribution centre.

The Bill provides for fines of up to $75,000. The regulatory impact statement does not say why the Ministry thinks this is an appropriate level.

With a regional fuel tax of 10¢, a 30,000 litre truck would gain additional revenue of $3,000 per round trip. This means that a company could raise the value the maximum fine through only 25 trips (about 15,000 car fill-ups). In 2016, there were over a million light passenger vehicles in Auckland filling their tanks around once every three weeks.

I’m not an auditor, but it feels like it would be much easier to detect unpaid PAYE and GST (for which the fine is not much lower at $50,000) than to detect fuel being redirected within a business’s production chain.

The Committee could consider whether the fine is high enough and perhaps ask for more advice from the Ministry.

### 3.4. Black Marketeers

Perhaps the easiest way to understand why a black market won’t arise is to realise that for similar savings of 6c to 20c a little, there is no thriving second-hand market for supermarket fuel vouchers. The costs to people of searching out a black marketeer and the costs to a black marketeer of physically transporting and selling fuel are, instinctively, much higher than for a trade in fuel vouchers.

The more detailed analysis that follows confirms that a black market is impossible.
Individual black marketeers

98. For the sake of argument, let’s assume black marketeers and their customers evenly split the 10c saving. It is very difficult to imagine individuals travelling from a regional fuel tax region with small containers to resell to others for 5c of revenue per litre. It is even more difficult to imagine potential customers seeking out these black marketeers to buy from for a $2.50 saving per 50 litre car tank of petrol. Even if that was likely, how many litres can an individual black marketeer transport? Barely enough to fill one car for $2.50 of revenue.

99. There’s a time cost in participating in a black market that doesn’t exist when filling up your vehicle at a different service station during a long journey, or from filling up your car at a service station then doing a runner.

30,000 litre tankers

100. But perhaps there are economies of scale to black marketeers if they could somehow get their hands on a 30,000 litre truck.

101. This is what a 30,000 litre road tanker looks like:

102. My simple calculation below, which leaves many costs unquantified, shows that the costs of transporting and selling fuel into Auckland from outside Auckland would be much more than the revenue generated. That is, any black market could only hope to make significant losses.

The calculation

103. The maximum revenue a 30,000 L truck can earn from a 10c difference between Auckland and neighbouring regions is $3,000 per round trip.
104. The most “plausible” black market would be a fuel company loaning a truck tanker to a side business in the black market, rather than a cowboy buying or renting their own truck. This keeps truck capital or hire costs close to zero.

105. A fuel company couldn’t loan its land storage, though. Due to auditors and the big risk of detection by members of the public or authorities, the retail end of a black market couldn’t operate from a fuel companies’ petrol station or other premise. A black marketeer would, therefore, still have to purchase or hire their own 30,000 litre land storage tank and find a place to park the truck tanker for two weeks. If a black marketeer can’t find a fuel company to loan a truck tanker, they’d have to purchase and hire that too.

106. Not being able to use a fuel company’s self service station, the black marketeer will have to be there in person, pumping fuel and transacting with consumers. At 50 litres per fuel tank in a car, 30,000 litres is 600 cars. At 10 minutes each to fill and pay, that’s 100 hours of time.

107. One hundred hours of time is about two weeks. A 30,000 litre truck could, therefore, make a round trip every two weeks.

108. Right here the logistics are substantial, and make the idea of a black market hard to fathom.

109. Fuel is stored near ports, so trips would be between either Northport and Auckland or Tauranga port and Auckland. Here’s how the revenue and cost of those two options stack-up:

Table 1: Revenue and costs of a black market involving 30,000 litre trucks

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<tr>
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<th>Northport – Auckland</th>
<th>Tauranga – Auckland</th>
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<tbody>
<tr>
<td><strong>Revenue and costs per round trip (two weeks)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenue</td>
<td>$3,000.00</td>
<td>$3,000.00</td>
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<tr>
<td>Costs</td>
<td>$4,302.24</td>
<td>$4,936.54</td>
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<tr>
<td>Trip to Auckland</td>
<td>$645.24</td>
<td>$962.39</td>
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<tr>
<td>Land storage</td>
<td>$135.76</td>
<td>$135.76</td>
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<tr>
<td>Sale time</td>
<td>$2,876.00</td>
<td>$2,876.00</td>
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<tr>
<td>Return trip</td>
<td>$645.24</td>
<td>$962.39</td>
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<tr>
<td>Profit or loss</td>
<td>-$1,302.24</td>
<td>-$1,936.54</td>
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**Assumptions per round trip**

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<tr>
<td>Distance (km)</td>
<td>281</td>
<td>436</td>
</tr>
<tr>
<td>Driving time (hours)</td>
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<tr>
<td>Toll road charge</td>
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<td>RUC per 1,000 km</td>
<td>$559.00</td>
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<tr>
<td>Wage rate per hour</td>
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<td>$28.76</td>
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<td>Other operating costs per km</td>
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<td>Land storage</td>
<td>$135.76</td>
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<td>Selling time (hours)</td>
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<td>Toll road charge</td>
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<td>RUC per 1,000 km</td>
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<td>Wage rate</td>
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</tbody>
</table>

Other operating costs per km
The Ministry of Transport says that “on average RUC makes up about 10 percent of total road freight costs, so even quite large increases in RUC will represent a relatively small change in total truck operating costs”.
$559 worth of RUC implies $5,590 of total operating costs. Subtracting RUC and wage costs, and we have about $4.62 per km in other operating costs.
This might be an overestimate. I can’t find New Zealand estimates for fuel trucks, but a US estimate says the per km operating costs are about $3.00. Longer hauls in the US will spread fixed costs, so $3.00 is likely too low for New Zealand. Between $3 and $5, depending on the size of the truck, accords with some information provided to me by a freight company.
I settled on an assumption of $4 per kilometre minus the wage costs already calculated, leaving $3.62 in other operating costs.

Land storage
A 30,000 land tank costs about $27,000. At a business interest rate of 10% per annum and a useful life time of 14.3 years, the monthly repayment is $295.15. This assumes that either the regional fuel tax lasts 14.3 years, rather than just 10, or that a black marketeer could sell the tank second hand at the end of 10 years. If not, and the tank needs to be paid off by the end of 10 years, the monthly repayment is $355.22 (or about $163.39 per trip).
Selling time (hours) Calculated. 30,000L at 50L cars is 600 cars. At 10 minutes per car, this is 100 hours.

110. Uncounted here are the following:

- The cost to consumers of seeking out the black marketeer.
- Any paint job and new number plates required to make a truck tanker less conspicuous, and less likely to be traced back visually to the company that provided it.
- The cost of land under a tank and parking for customers and the truck.
- The risk of bandits from this apparently high-value fuel.
3.5. RECOMMENDATIONS

The Committee:

- could consider whether the fine for tax evasion is high enough and seek more advice from the Ministry of Transport
- should disregard any concern about black markets forming.
4. **THE INEQUITABLE IMPACT OF FUEL TAXES, PARTICULARLY ON POOR PEOPLE**

4.1. **SUMMARY**

112. Equity issues are mostly discussed on pages 24 and 28 of the regulatory impact statement.

- The Ministry of Transport makes only a brief mention of the impact on poor people of a regional fuel tax.
- The Ministry only says that negative impacts on the poor ‘may’ or ‘could’ happen.
- The Ministry makes no attempt to quantify the extent of these impacts.
- Fuel tax is inequitable and grossly regressive. My analysis shows:
  - There are big inequities in the amount of tax drivers in general pay. Drivers of vehicles that are among the 10% least fuel efficient pay more than double the tax per kilometre of drivers of vehicles that are among the 10% most fuel efficient.
  - Poor rural areas subsidises rich urban areas. Wairoa is the most over-taxed, paying 9.3% more tax per kilometre drive than New Zealand as a whole. Wellington city is the most under-taxed, paying 5.7% less tax per kilometre.
  - Within regions, Māori, the unemployed and sole parents are more likely to be over-taxed. For example, 30% of Māori households are overtaxed by 25% or more, compared to 16% for New Zealand as a whole.
  - The dollar value of over-taxation is already high from existing fuel taxes and will get worse under the Government’s proposals. Currently, households with vehicles that are among the 10% least fuel efficient pay between about $1,385 and $1,490 per annum. If they were paying based on the kilometres they drive, they’d be paying $950, or about $500 per annum less.
  - A regional fuel tax in Auckland of 10¢ combined with the likely nation-wide increase of about 10¢ will increase the amount a low fuel-efficiency vehicle pays by between $440 and $470 per annum. If they were paying based on the kilometres they drive, they’d be paying $320 per annum. Māori, the unemployed and sole parents are more likely to pay this level of tax than others.
- The inequity and regressivity of fuel taxes means, if regional fuel taxes are to be implemented, they should be only for the short-term until other revenue sources such as congestion and road pricing are implemented.
• **The Committee should** amend the period for which regional fuel taxes apply from 10 years to 4 years, renewable only if there is no good reason to implement congestion and road pricing.

• **The Committee should**, if congestion and road pricing has not been legislated for by the end of those four years, ask the Ministry of Transport to provide the Committee advice on transitioning from petrol excise duty to road user charges.

• **The Committee should** ask the Ministry of Transport and Ministry of Social Development to provide advice on what additional income support could be provided to disadvantaged people most adversely affected by regional fuel taxes.

4.2. **WHAT DOES THE MINISTRY SAY ABOUT THE DISTRIBUTIONAL IMPACTS OF A REGIONAL FUEL TAX?**

113. The regulatory impact statement says more about the inequitable impacts of a regional fuel tax that would arise from price-spreading (residents in regions without a regional fuel tax paying higher prices) than it does about the impact on poor people.

114. The Ministry notes Darryl Evans of Mangere Budgeting and Family Support saying that poor people will be most affected by a regional fuel tax because of the distances they drive. The Ministry also notes that ‘lower income households are less likely to own newer more fuel efficient vehicles or electric vehicles’ and would, therefore, pay more tax per kilometre driven.

4.3. **THREE TYPES OF INEQUITY**

**A general inequity**

115. Operators of light diesel vehicles (cars, vans, utes) all pay the same tax of 6.2 cents per kilometre. The amount that operators of light petrol vehicles pay depends on the vehicle’s fuel efficiency, which varies widely. Figure 2 shows the distribution of under- and over-taxation for light petrol vehicles.

116. That many people can pay 25% less tax and others 50% more per kilometre is inequitable.
Regional fuel tax versus rates

117. It’s possible to argue that a regional fuel tax is fairer than rates if people who drive more pay more for the maintenance and improvement of roads. It’s possible to argue that rates are fairer than regional fuel taxes if rates raise more revenue from richer households than poorer households.

118. What people consider is fair depends on the extent of, and how much they weight, each of those aspects. Unfortunately, the regulatory impact statement contains almost no assessment of the magnitude of these relative aspects. This makes it very difficult for Parliament and society to decide the best course of action.

The burden of fuel taxes falls disproportionately on the poor

119. It is not possible to argue that a regional fuel tax is fair when it charges poor people with less fuel-efficient cars more than rich people with more fuel-efficient cars.

120. Unfortunately, the regulatory impact statements doesn’t quantify the magnitude of this inequity.

121. I have.
4.4. **POOR RURAL AREAS SUBSIDE RICH URBAN AREAS**

122. According to my analysis of data supplied by the NZ Transport Agency and the Ministry of Transport, poor rural regions subsidise a handful of rich cities.

123. Figure 3 shows the average fuel excise duty paid per kilometre compared to a vehicle with the national-average fuel efficiency. That is, vehicles with average fuel efficiency pays no more or less tax than the average vehicle, while those with higher/lower fuel efficiency pay less/more tax.

**Figure 3: Under- and over-taxation of fuel excise duty by territorial authority**

![Map showing under- and over-taxation of fuel excise duty by territorial authority](image-url)
124. Wellington city is the most undertaxed territorial authority, paying 5.7% less tax per kilometre than the national average. Wairoa is the most over-taxed paying, 9.3% more tax per kilometre than the national average.

125. Only 12 territorial authorities are undertaxed. The twelve can be characterised as relatively affluent cities with more transport choices (such as public transport should people not wish to pay higher fuel taxes).

126. Fifty-five of the 67 territorial authorities are over-taxed and are relatively low-income. Low-income areas of New Zealand are subsidising high-income areas.

127. Table 2 lists the 12 under-taxed territorial authorities, their level of under-taxation and their household incomes. Table 2 also lists the 12 most over-taxed territorial authorities.

<table>
<thead>
<tr>
<th>Twelve under-taxed</th>
<th>Twelve most over-taxed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Territorial authority</td>
<td>Tax</td>
</tr>
<tr>
<td>Wellington</td>
<td>-5.7%</td>
</tr>
<tr>
<td>Auckland</td>
<td>-2.3%</td>
</tr>
<tr>
<td>Kapiti Coast</td>
<td>-1.6%</td>
</tr>
<tr>
<td>Lower Hutt</td>
<td>-1.4%</td>
</tr>
<tr>
<td>Porirua</td>
<td>-1.3%</td>
</tr>
<tr>
<td>Upper Hutt</td>
<td>-1.1%</td>
</tr>
<tr>
<td>Christchurch</td>
<td>-1.0%</td>
</tr>
<tr>
<td>Hamilton</td>
<td>-0.6%</td>
</tr>
<tr>
<td>Palmerston North</td>
<td>-0.4%</td>
</tr>
<tr>
<td>Tauranga</td>
<td>-0.3%</td>
</tr>
<tr>
<td>Dunedin</td>
<td>-0.1%</td>
</tr>
<tr>
<td>Nelson</td>
<td>-0.0%</td>
</tr>
</tbody>
</table>

128. The territorial authority data shows that fuel excise duty is regressive: lower-income people pay more tax per kilometre. But territorial authority data also hides wide differences within territorial authorities.

4.5. Poorer, and more at-risk households, are over-taxed and subsidise richer households
129. Within regions, Māori, the unemployed and sole parents are among those who are over-taxed and subsidising others. This accords with what we would expect: those on lower-incomes\(^7\) cannot afford more fuel-efficient vehicles\(^8\), and those with bigger families need bigger, less fuel-efficient vehicles.

130. Figure 4 shows who pays the most and least tax per kilometre by family type, ethnicity, and employment status.\(^9\) The first table suppresses results where there are fewer than 30 households (below which you would be concerned about data reliability). The second table relaxes the suppression to fewer than 10 households. The additional results in the second table will not be statistically sound, but are consistent with other results and what we would expect.

131. Families with at least one Māori person pay, on average, 14% more tax than the average New Zealand Household. Households with at least one unemployed person and at least one child pay 6% more. Sole parents pay 5% more.

---

\(^7\) Ministry of Transport survey data about incomes was not good enough to use, but being Māori, unemployed and a sole parent are all correlated with low income.

\(^8\) Note that there will be additional hidden costs here. Those on low incomes have a greater incentive to buy vehicles that are smaller (and more fuel-efficient) than they would otherwise prefer. Despite, low income households’ vehicles are, on average, less fuel efficient than the national average.

\(^9\) Where an ethnicity is recorded as any ethnicity other than European, that household has at least one person of that ethnicity. For example, a Māori household has at least one Māori person, while a European household consists of only European people.

With regards to employment status, a person who was both a student and employed was recorded as a student. A person receiving a benefit and employed was recorded under ‘other benefit’ rather than employed. Employed, therefore, refers to employed people who are also not a student or receiving welfare support.
Figure 4: Under- and over-taxation by household type

**At least 30 households**

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Employment status</th>
<th>Retired</th>
<th>Student</th>
<th>Unempl.</th>
<th>Other ben.</th>
<th>Employed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Māori</td>
<td>All</td>
<td>-6%</td>
<td>+1%</td>
<td>+3%</td>
<td>+1%</td>
<td>+2%</td>
</tr>
<tr>
<td>Pacific Is.</td>
<td>Person living alone</td>
<td>-6%</td>
<td>-1%</td>
<td>+3%</td>
<td>+1%</td>
<td>-1%</td>
</tr>
<tr>
<td>Asian</td>
<td>Family with adults only</td>
<td>-8%</td>
<td>-5%</td>
<td>+4%</td>
<td>+1%</td>
<td>-1%</td>
</tr>
<tr>
<td>European</td>
<td>Other adults only (eg flatmates)</td>
<td>-4%</td>
<td>-4%</td>
<td>+1%</td>
<td>+1%</td>
<td>+1%</td>
</tr>
<tr>
<td></td>
<td>Married/defacto couple only</td>
<td>-5%</td>
<td>+6%</td>
<td>+3%</td>
<td>+1%</td>
<td>+1%</td>
</tr>
<tr>
<td></td>
<td>Single adult living with children</td>
<td>-10%</td>
<td>+5%</td>
<td>+6%</td>
<td>+3%</td>
<td>-1%</td>
</tr>
<tr>
<td></td>
<td>Family (including extended) with children</td>
<td>-6%</td>
<td>+6%</td>
<td>+6%</td>
<td>+3%</td>
<td>+3%</td>
</tr>
</tbody>
</table>

**No. of children**

<table>
<thead>
<tr>
<th>Regions</th>
<th>Zero</th>
<th>One</th>
<th>Two</th>
<th>Three</th>
<th>Four or more</th>
<th>Sole parents</th>
<th>Other households with children</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-6%</td>
<td>-4%</td>
<td>+8%</td>
<td>+13%</td>
<td>+10%</td>
<td>+5%</td>
<td>+2%</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Northland</td>
<td>Taranaki</td>
<td>Wellington</td>
<td>Nelson-Marlborough-Tasman</td>
<td>West Coast</td>
<td>Otago</td>
<td>Canterbury</td>
</tr>
<tr>
<td></td>
<td></td>
<td>+6%</td>
<td>-3%</td>
<td>+3%</td>
<td>+4%</td>
<td>+4%</td>
<td>+1%</td>
</tr>
<tr>
<td></td>
<td>Auckland</td>
<td>-2%</td>
<td>+4%</td>
<td>+5%</td>
<td>+4%</td>
<td>+4%</td>
<td>-4%</td>
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<tr>
<td></td>
<td>Waikato</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Manawatū-Wanganui</td>
<td>+5%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bay of Plenty</td>
<td>+1%</td>
<td></td>
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<tr>
<td></td>
<td>Gisborne</td>
<td>+7%</td>
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**At least 10 households**

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<tr>
<th>Ethnicity</th>
<th>Employment status</th>
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<th>Student</th>
<th>Unempl.</th>
<th>Other ben.</th>
<th>Employed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Māori</td>
<td>All</td>
<td>-6%</td>
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<td>+1%</td>
<td>+2%</td>
</tr>
<tr>
<td>Pacific Is.</td>
<td>Person living alone</td>
<td>-6%</td>
<td>-9%</td>
<td>-5%</td>
<td>+4%</td>
<td>+1%</td>
</tr>
<tr>
<td>Asian</td>
<td>Family with adults only</td>
<td>-8%</td>
<td>-5%</td>
<td>+4%</td>
<td>+1%</td>
<td>+1%</td>
</tr>
<tr>
<td>European</td>
<td>Other adults only (eg flatmates)</td>
<td>-4%</td>
<td>-4%</td>
<td>+1%</td>
<td>+1%</td>
<td>+1%</td>
</tr>
<tr>
<td></td>
<td>Married/defacto couple only</td>
<td>-5%</td>
<td>-2%</td>
<td>+4%</td>
<td>+3%</td>
<td>+3%</td>
</tr>
<tr>
<td></td>
<td>Single adult living with children</td>
<td>-10%</td>
<td>+7%</td>
<td>+6%</td>
<td>-1%</td>
<td>-3%</td>
</tr>
<tr>
<td></td>
<td>Family (including extended) with children</td>
<td>-6%</td>
<td>+6%</td>
<td>+6%</td>
<td>-1%</td>
<td>+3%</td>
</tr>
</tbody>
</table>

**No. of children**

<table>
<thead>
<tr>
<th>Regions</th>
<th>Zero</th>
<th>One</th>
<th>Two</th>
<th>Three</th>
<th>Four or more</th>
<th>Sole parents</th>
<th>Other households with children</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-6%</td>
<td>-4%</td>
<td>+8%</td>
<td>+13%</td>
<td>+10%</td>
<td>+5%</td>
<td>+2%</td>
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<td>Taranaki</td>
<td>Wellington</td>
<td>Nelson-Marlborough-Tasman</td>
<td>West Coast</td>
<td>Otago</td>
<td>Canterbury</td>
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<tr>
<td></td>
<td></td>
<td>+6%</td>
<td>-3%</td>
<td>+3%</td>
<td>+4%</td>
<td>+4%</td>
<td>+1%</td>
</tr>
<tr>
<td></td>
<td>Auckland</td>
<td>-2%</td>
<td>+4%</td>
<td>+5%</td>
<td>+4%</td>
<td>+4%</td>
<td>-4%</td>
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<td></td>
<td>Waikato</td>
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<tr>
<td></td>
<td>Gisborne</td>
<td>+7%</td>
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</tbody>
</table>
4.6. **These inequities are not small**

132. Ministers have said these differences are small, and the proposed tax increases marginal. The Minister of Transport said the proposed national increase in fuel excise duty amounts to ‘no more than a cup of coffee a week’. This is true of the average household and it’s true that a Maori household would ‘only’, at 14% more, pay 1.14 cups of coffee a week.

133. I disagree that these are small burdens, particularly when we dig a bit deeper.

134. For the average household on an average income with an average fuel-efficiency vehicle, a cup of coffee a week may not be much. But for people on low incomes, on benefits, sole parents with dependents, these increases are not small. These households are not regularly going out for café coffee.

135. That Māori pay 14% more might not seem like a big deal to some, but even this hides burdens on different households. Figure 5 shows the distribution of under- and over-taxation among Māori families.

**Figure 5: Under- and over-taxation of Māori households**

136. 55% of vehicles owned by Māori households, are overtaxed compared to 39% for New Zealand as a whole.
137. 30% of vehicles owned by Māori households are overtaxed by 25% or more, compared to 16% for New Zealand.

138. 11% of vehicles owned by Māori households are overtaxed by 50% or more, compared to 6% for New Zealand.

4.7. The Over-taxation Adds Up to Considerable Amounts

139. Taxing vehicles by the litres they consume rather than the kilometres they’ve driven creates wide differences in tax paid, with the 10% lowest fuel efficiency vehicles paying between 110% and 135% more tax per kilometre than the 10% highest fuel efficiency vehicles.

140. Table 3 shows the difference in the current tax paid between the vehicles with the most and least fuel efficiency assuming they travel the national-average 10,500 kms per annum. The last column, for example, compares the 20% most fuel-efficient vehicles with the 20% least-fuel efficient vehicles.

Table 3: Differences in current tax paid per annum by operators of light petrol vehicles

<table>
<thead>
<tr>
<th></th>
<th>All types of light petrol vehicle (household, taxis, hire vehicles, goods, other)</th>
<th>Household light petrol vehicles only</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5%</td>
<td>10%</td>
</tr>
<tr>
<td>Highest fuel efficiency</td>
<td>$305 to $315</td>
<td>$330 to $340</td>
</tr>
<tr>
<td>Lowest fuel efficiency</td>
<td>$765 to $870</td>
<td>$720 to $785</td>
</tr>
<tr>
<td>Difference per vehicle</td>
<td>$450 to $565</td>
<td>$385 to $455</td>
</tr>
<tr>
<td></td>
<td>+145% to +185%</td>
<td>+115% to +135%</td>
</tr>
</tbody>
</table>

141. The average household pays $950 in fuel excise duty per annum ($580 per vehicle\(^{10}\)).

142. Owners of low fuel efficiency vehicles subsidise owners of high fuel efficiency vehicles. Households with vehicles among the 10% lowest fuel efficiency pay between $1,385 and

\(^{10}\) New Zealand households own an average of 1.64 vehicles for household use.
$1,490 tax per annum. Households with vehicles among the 10% highest fuel efficiency only pay between $645 and $660 per annum.

143. As earlier, Māori, the unemployed and sole parents are over-represented among households with low fuel efficiency vehicles.

144. For the average household in Kawerau with a household income of $37,300 per annum, the extra $500 per year some of them are overtaxed amounts is a lot.

4.8. THE BURDEN ON THE POOR WILL INCREASE WITH HIGHER FUEL TAXES

145. The last National-led Government increased fuel excise duty by 17 cents per litre between July 2009 and July 2015. I estimate this increased annual tax on a 10% most fuel-efficient vehicle by $115 and $120, compared to $235 to $250 for a 10% least fuel-efficient vehicle (nominal figures).

146. The current Labour-led Government intends to increase nation-wide fuel excise duty by about 10 cents over the first three years of a ten-year period. I estimate that this will increase the annual tax on a 10% most fuel-efficient vehicle by about $70, compared to between $140 and $150 for a 10% least fuel-efficient vehicle.

147. For Auckland, where the intention is to have a regional fuel tax of a further 10 cents a litre, I estimate that this will increase the annual tax on a 10% most fuel-efficient vehicle by between $135 and $140, compared to between $260 and $275 for a 10% least fuel-efficient vehicle.

Table 3: Increases in tax 2009 to 2018 and beyond

<table>
<thead>
<tr>
<th></th>
<th>5%</th>
<th>10%</th>
<th>20%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All light petrol vehicles</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>National-led Government 2009 to 2015</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highest fuel efficiency</td>
<td>$110 to $110</td>
<td>$115 to $120</td>
<td>$125 to $125</td>
</tr>
<tr>
<td>Lowest fuel efficiency</td>
<td>$250 to $280</td>
<td>$235 to $250</td>
<td>$220 to $225</td>
</tr>
<tr>
<td><strong>Labour-led Government intentions for 2018 onwards</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Other than Auckland</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highest fuel efficiency</td>
<td>$65 to $70</td>
<td>$70 to $70</td>
<td>$75 to $75</td>
</tr>
<tr>
<td>Lowest fuel efficiency</td>
<td>$145 to $165</td>
<td>$140 to $150</td>
<td>$130 to $135</td>
</tr>
<tr>
<td>Auckland (including regional fuel tax)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Highest fuel efficiency</td>
<td>$125 to $130</td>
<td>$135 to $140</td>
<td>$145 to $145</td>
</tr>
<tr>
<td>Lowest fuel efficiency</td>
<td>$275 to $305</td>
<td>$260 to $275</td>
<td>$245 to $250</td>
</tr>
</tbody>
</table>
148. In Auckland, the average household will pay about $320 more in nation-wide and regional fuel taxes per annum than it does today (from $930 to $1,250).

149. For a household with vehicles that are among the least 10% fuel efficient, the additional tax will be between $440 and $470 per annum, with disproportionately more of these households being Māori, unemployed, and sole parents.

4.9. **But won’t the expenditure from Auckland’s regional fuel tax benefit the poor?**

150. Perhaps, but the question is not whether the poor are made better off, but what is the best way to fund the desired projects.

151. The regulatory impact statement contains little analysis of the magnitude of impacts, particularly around distributional impacts, to be confident that regional fuel taxes are better for the poor than rates.

152. Investment in public transport has two primary benefits: (1) short-to-medium-term congestion benefits, and (2) social welfare benefits when subsidised and provided to areas of deprivation. It’s possible that the proposed investment under GPS 2018 will have greater benefits to the poor, but not always and not forever.

153. With regards to (1), low-income people work night shifts more than high-income people meaning the potential congestion benefit to low-income people is likely less than to high-income people.

154. With regards to (2), I understand much of the public transport services will reach deprived areas of Auckland, but:

- taxing poor people more to provide services to poor people is not ideal. If we want user pays, should be charged per kilometre through road user charges, rather than per kilometre through petrol taxes
- there is no guarantee that future expenditure will not be directed to other, wealthier, parts of society under this Government or future ones.

4.10. **Other sources of revenue available now**

155. The Auckland Council could have increased rates or debt. The Government could have increased debt. Both could then have repaid those debts as congestion and road pricing were
implemented. Both the Council and the Government have made public commitments not to take on more debt and only weak signals about progressing other revenue sources, preferring regional fuel taxes instead.

156. If the Council and Government continue with that, I need to be clear that that is a conscious decision to do so at the expense of poor people.

4.11. RECOMMENDATIONS

157. Fuel taxes are inequitable and grossly regressive. They should be replaced at the earliest possible opportunity with congestion pricing and road pricing – approaches to transport funding that are as close to an ‘everyone wins’ policy as it gets.

158. If congestion and road pricing are more than a few years away, we need to think about moving from fuel taxes to road user charges and/or compensating poor households.

159. The up to 10-year period, renewable, for regional fuel taxes risks embedding or becoming a crutch for officials. It risks slowing progress on other revenue sources. Four years is long enough to complete policy work and make legislative change.

160. I recommend that, if the Committee is of a mind to recommend regional fuel taxes to Parliament, that:

- in order to reduce the risk of further embedding regressive taxes, the Bill be amended to reduce the maximum period of a regional fuel tax from 10 years to 4 years, renewable only if there is not good reason to implement congestion and road pricing
- if congestion and road pricing has not been legislated for by the end of those four years, ask the Ministry of Transport to provide the Committee advice on transitioning from petrol excise duty to road user charges
- ask the Ministry of Transport and Ministry of Social Development to provide advice on what additional income support could be provided to disadvantaged people most adversely affected by regional fuel taxes.
5. **How in Love with cars are New Zealanders Really?**

161. Half a dozen times, the regulatory impact statement says “fuel use and vehicle use is relatively inelastic” including in its table on pages 21 to 26. The Ministry uses this to say that raising fuel taxes will collect a lot of revenue without changing behaviour much.

162. It is true that how much fuel people buy doesn’t change much when prices/taxes go up. A 10% increase in price is estimated to cause a 3% reduction in fuel purchases in the long term (anything less that 10% is called ‘inelastic’ in economics).

163. However, this is because fuel makes up only a small part of the cost of running a vehicle (average 17¢ per kilometre). Other costs include maintenance, insurance, time, etc (56¢ excluding time, $1.02 including time).

164. If we used this logic, we’d say peoples’ use of trains is inelastic with respect to the cost of reupholstering passenger seats – true, but completely meaningless for setting transport policy.

165. Worse than meaningless. The notion that driving is inelastic has mis-directed transport policy.

166. An elasticity of 0.3 on fuel purchases implies an elasticity of driving of between about 1.2 and 2.0. Driving is, in economic terms, elastic, not inelastic. That is, a 10% increase in price causes between a 12% and 20% change in driving.

167. A 5% increase in petrol prices from a 10¢ per litre increase is equivalent to between a 0.8% and 1.2% increase in the overall costs of driving, depending on whether time costs are included, but causes a 1.6% reduction in driving.

168. Revenue might be fairly constant because the tax is on fuel, but driving is elastic, not inelastic.

169. Unfortunately, the idea that driving is inelastic – that people love driving and will never change – has dominated transport planning and policy for decades.
6. **One reason why governments and their agencies love fuel tax**

170. The Ministry of Transport has copied and pasted (very bad and often unintelligible) analysis from a different project\(^ {11}\) completed in 2015 into its regulatory impact statement.

171. Perhaps inadvertently, the Ministry cites the following in a paragraph about the supposed relative advantages of regional fuel tax (page 16):

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Payment of fuel taxes requires no action on the part of end users, who may not even be aware of how much they are paying. Small increases can go unnoticed by many users and generate little negative response. Transport fuel taxes have significant scope to be increased. Fuel demand is generally acknowledged to be highly inelastic historically, that is, demand is not very responsive to price. However, this may be changing according to both international and national indicators, especially since the price of petrol in New Zealand increased to above two dollars per litre.
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172. It’s possible that the Ministry may say that this is a matter of fact and not an advantage of fuel tax, per se. However, the same text appeared in the work from 2015\(^ {12}\) explicitly as an advantage of fuel tax:

**Advantages**

- It has significant revenue yield, coupled with very low administrative and compliance costs. A small increase in the fuel tax generates substantial revenue.
- As payment of fuel taxes is automatic with purchase it requires no action on the part of end users. who may not even be aware of how much they are paying. Small increases can go unnoticed by many users and generate little negative response.

173. The only people who benefit from not knowing how much tax they’re paying and whether expenditure plans warrant those levels of taxes are people who don’t care and Governments and their agencies that would rather that those people who do care, don’t notice.

174. This is a remarkable, striking admission and not in keeping with requirements for government to be open and transparent.

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\(^{12}\) Ibid, page 8.
7. **The multiple errors in the Ministry of Transport’s assessment of options**

7.1. **Summary**

175. The Ministry has made multiple, simple yet often important, errors. Most of this relates to the text in pages 14 to 20 and the table in pages 21 to 26 of the regulatory impact statement.

- Some of the errors illustrate that the Ministry has not got a good understanding of transport revenue policy and economics.
- Some of the errors illustrate that the Ministry has not got a good understanding of how to structure and analyse policy more broadly.
- The Committee should note that if regional fuel taxes do not pass into law, the status quo is not that ATAP and other transport projects do not go ahead, but that Councils will use rate increases, debt and, perhaps, defer some projects (including non-transport projects) instead.
- The Committee should note that correcting in Ministry’s errors would lead to tolling (and other congestion and road pricing options) being more positively assessed and regional fuel taxes (and fuel taxes in general) being more negatively assessed.

7.2. **What is the status quo?**

176. There is no clear definition of what the counterfactual is. One of the options – the supposed counterfactual – is ‘no action’. I don’t think any reader will know what that option means.

177. The stated reason for regional fuel taxes is to progress projects faster than they would otherwise. If the status quo of ‘no action’ is that no other funding source would be increased, then the RIS would need to analyse the impact of other funding source options (such as increasing rates) on the speed of project delivery and the impact on net benefits to transport users. If increasing rates, for example, is less feasible, politically or otherwise, the rates option would be assessed as delivering benefits more slowly than a regional fuel tax.

178. This analysis has not happened.

179. A clearer status quo would be to assume that there are a set of projects to be undertaken that, in Auckland, looks something like ATAP (or a revised version) particularly as ATAP is part of the status quo along with its associated funding gap, and then talk about the best ways to raise revenue.
An increase in local authority rates would probably be the status quo, or a mix of that and debt. At the moment, an increase in rates scores mostly negatively against the counterfactual, when most people’s idea of the counterfactual/status quo is rates increases. Even RNZ’s Mediawatch got this right in its piece about media coverage of the regional fuel tax proposal.\(^\text{13}\)

An important question the Committee needs to ask itself is what happens if Parliament decides not to pass a Bill allowing regional fuel taxes. The answer is not that ATAP and other projects do not go ahead, but that they would be funded by rates increases and debt and, perhaps, on a longer timeline.

The Ministry’s analysis borders on misleading the Committee in this regard.

**7.3. This causes rates increases to appear worse than they are**

Overall, the Ministry assesses rate increases negatively against the Ministry’s ill-defined status quo. This serves to accentuate the difference between rate increases and a regional fuel tax, but it’s effectively double-counting.

**7.4. Speed of implementation**

While there is no analysis of options’ impact on the delivery of transport projects, there is a ‘speed of implementation’ criterion. This is more about how quickly a source of revenue can be established, rather than whether that would have an impact on the delivery of projects. However, even here the analysis is wrong.

The ‘no option’ scores better than local authority rates because ‘there will be no implementation required as the status quo will remain in place’, rather than much worse than rates because not closing the funding gap will see the slowest delivery of projects of all the options.

**7.5. Environmental sustainability**

Increasing fuel taxes will have co-benefits of reducing emissions, but there is already provision for this in the Emissions Trading Scheme tax on fuel.

\(^\text{13}\) In the audio version of this: https://www.radionz.co.nz/national/programmes/mediawatch/audio/2018639331/transport-plan-sparks-front-page-road-rage. Note: I was moderately in favour of regional fuel taxes at the time I wrote the piece referred to in Mediawatch. Further analysis has shifted my view to neutral.
187. If the Government is concerned about climate change, as it should be, it should increase the carbon price / cost of ETS units.

188. By most economic assessments, the ETS charge should be ten times its current approximate 3¢ per litre level, and rising quickly from there in the near future.

189. When it does eventually do this, the environmental sustainability justification for regional fuel taxes will be nil.

7.6. **THE CRITERION OF ‘ECONOMIC EFFICIENCY’ IS ABSENT**

190. The Ministry of Transport includes a ‘compliance and administration cost’ criterion, but these costs are just one part of whether something is economically efficient.

191. The absence of an overall ‘economic efficiency’ criterion is astonishing.

192. Taxes increase the costs of goods and services to which they apply, reducing the amount that consumers are willing and able to buy. Taxes change the relative prices of goods and services, distorting purchasing decisions – encouraging people to buy things with lower tax.

193. In general, taxes create a deadweight loss – a reduction in benefit to consumers and producers over and above the revenue generated.

194. The situation is a bit different if a Government is cost-recovering, through a user charge, a product it provides. Only congestion and road pricing are true user charges. The only option the Ministry considered that matches this description is tolling.

195. Fuel taxes under- and over-charge people. They therefore generate deadweight loss. The deadweight loss per vehicle is small, but there are millions of vehicles in New Zealand.

196. The deadweight loss is bigger on non-road uses of transport such as fuel used on farms, in lawnmowers, in boats, etc.

197. To put this in perspective, let’s consider current fuel taxes versus (paid by petrol vehicles) road user charges (paid by diesel vehicles). It’s often argued that fuel taxes are much more efficient than road user charges. This is because fuel taxes have low administration and compliance costs (they are incurred as you fill up your car) whereas people have to, at a minimum, go online to purchase road user charges. The deadweight loss from fuel taxes makes road user charges almost as efficient a revenue source as fuel taxes.
198. If deadweight loss had been counted, this would count negatively against all options to different degrees except tolling for which there is, essentially, no deadweight loss.

7.7. **Why aren’t we fixing toll road policy at the same time?**

199. The Ministry of Transport lists road tolls as an option in the regulatory impact statement.

200. The Ministry doesn’t say anything significantly wrong in its analysis on page 15. Current road tolling policy is a mess, particularly because of the prohibition on tolling existing roads.

201. But if the Land Transport Management Act is being amended to allow regional fuel taxes, why not remove the prohibition on tolling existing roads at the same time?

202. Tolling is more equitable than regional fuel taxes and, for some roads, more economically efficient. Tolls could be used to limit the need for regional fuel taxes.

203. It’s too late now for the Committee to recommend this change as part of this Bill, but this Bill has been a wasted opportunity in this regard.

7.8. **Tolls are scored too lowly against the Government’s objectives**

204. Tolls are assessed as being equally fair as regional fuel tax. Tolls charge for people’s actual use of roads. Fuel taxes charge by fuel use, and are grossly inequitable to poor regions and the poor within regions (see section 4).

205. Tolls should have been assessed as much better than the status quo (++), not better than the status quo (+).

206. The overall effect of the mis-assessment of tolls is to underplay the benefits of more precise and equitable revenue collection. Tolls are also one way of delivering congestion and road pricing. Because of short-term implementation challenges, road pricing is not an immediate solution, but it is a medium-term one. The Ministry’s analysis wrongly undercuts that.

7.9. **Increasing RUC and FED nationally**

207. The RIS sets out the problem as being about closing regional funding gaps for projects / finding better ways to fund the local/regional share of projects.

208. The overall assessment of increasing RUC and FED nationally is assessed as being a better option than increasing rates. This leads to the inevitable, but unstated by the Ministry
(perhaps they didn’t realise), conclusion that local authority contributions to projects should be eliminated, rates reduced with all transport funding coming from RUC and FED.

209. Where, then, is the recommendation to amend the Act to abolish joint-funding with councils? Perhaps there is good reason to have joint-funding – say, to encourage councils to put forward only projects they think are worth putting funding towards themselves. If so, and those reasons are good enough to have joint-funding, the mis-assessment that increasing RUC and FED nationally is better than rates is wrong and shows how poorly the Ministry has assessed the options.

7.10. FINANCING

210. Financing as an option is absent.

211. The investment required for Auckland is lumpy, and front-loaded in the first five years or so, yet there is no option to finance the projects through debt or PPPs and repay over time.

212. The ring-fencing of transport taxes meant less competition for funding with other Votes and less scrutiny by Treasury.

213. To protect against overly political decision-making, transport is mostly pay-as-you-go. Infrastructure that might last decades is paid for as it's built. Pay-as-you-go encourages politicians to do the calculus of the political cost and not pass unnecessary debt onto future generations/governments. But it also front-loads all costs onto current users.

214. The current Government has a lot in common with the previous Government when it comes to ATAP. There are differences around some projects, but a revised ATAP in 2018 will look, in large part, the same as the one agreed in August 2017.

215. If there’s broad political consensus on many of these train, bus and road projects, why not finance them with debt (or other sources), and spread the costs over time?

216. The answer is political commitments not to. The preference of Councils and Government is, instead, to pursue fuel taxes at the expense of poor people.

217. But this does not answer why the Ministry did not include this option. The Ministry is required to include all feasible options. It has omitted financing for reasons that are unclear.

Final remarks
218. The decision to introduce regional fuel taxes should not be taken lightly. At best, they are marginally better than other existing revenue sources. Others will view them as a politically-convenient way of allowing local-body politicians to keep promises of small rate increases.

219. Regional fuel taxes, and fuel taxes in general, are inequitable and grossly regressive. It is difficult to justify implementing more of them, let alone continuing with the fuel taxes we already have.

220. I am neutral on regional fuel taxes in the short-term only because it will take a few years to implement other revenue sources. I am strongly against regional fuel taxes continuing for any more than a few years. Fuel taxes should be replaced by congestion and road pricing as quickly as possible.

221. Thank you for your consideration of my submission. I look forward to meeting you all in person at the Select Committee hearing.