

In Confidence

Office of the Minister of Transport
Chair, Cabinet Economic Development Committee

SETTING ROAD USER CHARGES FOR 2020/21 TO FUND THE GOVERNMENT POLICY STATEMENT ON LAND TRANSPORT 2018

Proposal

1. This paper seeks agreement to the specific RUC rate increases required for 2020. Cabinet previously agreed to a 3.5 cents per litre increase of petrol excise duty (PED) in 2018, 2019 and 2020, with an equivalent increase in road user charges (RUC) [CAB-18-MIN-0115] to provide the level of funding needed to meet the commitments set out in the Government's Policy Statement on Land Transport 2018 (GPS 2018)
2. I propose that the new RUC rates come into effect on 1 July 2020 at the same time as the PED changes, which were legislated last year.
3. I also propose some other minor and remedial amendments to the schedule of RUC rates with effect from 1 July 2020.

Executive summary

4. A change to RUC rates from 1 July 2020 is needed to ensure that sufficient revenue is available to deliver the Government's land transport commitments, and to align with the increase to PED which will take effect on that date.
5. PED and RUC revenue is hypothecated for investment in the land transport system. The revenue is held in the National Land Transport Fund (NLTF), and is allocated by Waka Kotahi NZ Transport Agency (the NZTA) in accordance with the funding ranges for different activity classes as set out in GPS 2018.
6. This paper follows the decisions of Cabinet on GPS 2018, including an agreement for total expenditure on land transport activities of \$45.1 billion over the 10 years of the GPS 2018. At the time these decisions were made, NLTF revenue was forecast to be approximately \$40 billion over the period of GPS 2018, resulting in a shortfall of approximately \$5 billion.
7. To enable the delivery of GPS 2018, Cabinet agreed to a 3.5 cents per litre increase in PED in 2018, 2019 and 2020, with an equivalent increase in RUC [CAB-18-MIN-0115]. Changes to rates were made in 2018 [CAB-18-MIN-0293] and 2019 [CAB-19-MIN-0173]. Changes to PED for 2020 were made in 2019 along with the 2020 changes, but the data required to calculate RUC rate changes was not available at that time. This paper deals with the last remaining increase, which are the RUC rate increases for 2020.

8. The RUC system has approximately 80 different rates that vary depending on the weight and configuration of the vehicle. The Ministry of Transport operates an engineering-led cost allocation model (CAM) which calculates rates for each vehicle type based on revenue needs and the varying road use cost impacts of different vehicle types, reflecting the purpose of the Road User Charges Act 2012 which is to impose charges which are in proportion to the costs the vehicles generate. However, current RUC rates frequently do not align with the rates calculated by the CAM, with some being above and some being below.
9. Appendix B of this paper sets out further information on the CAM, in response to this Committee's invitation that I report back with further advice on the methodology used to determine that RUC rates reflect revenue needs and the wear and tear impacts that different vehicle types have on the road. [DEV-19-MIN-0075]
10. RUC revenue is required to increase by 5.3 percent in total (\$99 million) to match the 3.5 cent per litre increase in PED. I propose to achieve the required revenue increase in the simplest way, by increasing all RUC rates by 5.3 percent.
11. Once policy approval has been given by Cabinet, draft regulations to increase the RUC rates will be prepared and I intend to submit them to Cabinet Legislation Committee for consideration on 28 April. I intend that the proposed new rates of RUC take effect on 1 July 2020 to align with the already-legislated date of the PED increases.
12. Appendix A sets out the proposed increases in RUC rates, and compares these with both current rates and those indicated by the CAM.

Background, including relationship with NZ Upgrade Programme investment

13. GPS 2018 took effect on 1 July 2018. It sets out the Government's priorities for investment in the land transport system over the next ten years. The GPS noted that that an increase to Petrol Excise Duty of 3.5 cents per litre (and an equivalent increase in Road User Charges) in 2018, 2019 and 2020 was needed for the priorities set out in it to be funded.
14. The New Zealand Upgrade Programme (NZUP) provides \$6.8 billion for specific transport projects across New Zealand from 2019/20. These projects were chosen because there is a need to progress them as key infrastructure priorities, but some were not funded through GPS 2018, and would be unlikely to be funded through GPS 2021, due to funding constraints and focus on more immediate priorities.
15. The NLTF is a limited pot of funding, from which to try to meet Government's ambitions for land transport. The NLTF has no built in increases beyond 2020 and faces construction costs that are rising higher than the rate of inflation. Despite contributions to land transport infrastructure from the Crown through the New Zealand Upgrade Programme and contributions to rail (to be determined by Budget 2020), funding pressures will remain to meet our ambitions for improving the land transport system of New Zealand.

16. I am currently considering options, including funding requirements, for the next GPS (GPS 2021). Parties and Ministries received the draft Cabinet paper and draft GPS 2021 for engagement on 31 January 2020. I intend to seek Cabinet agreement in early March 2020 to release of the draft GPS 2021 for public engagement.
17. Revenue for investment in the land transport system comes from a variety of sources. However, 90 percent of the NLTF revenue is generated from three sources: PED, RUC and motor vehicle registration fees (MVR). That revenue is broken down as follows:
 - 17.1. PED - net revenue \$2.040 billion in 2018/19¹
 - 17.2. RUC - net revenue \$1.727 billion in 2018/19
 - 17.3. MVR - net revenue \$227 million in 2018/19.
18. Approximately \$700m in other contributions to the NLTF are made, not including NZUP.

2020 increases in PED have already been made

19. As part of its decisions on GPS 2018, Cabinet agreed to an increase of 3.5 cents per litre in PED each year for the next three years (2018, 2019 and 2020) [CAB-18-MIN-0115].
20. The 3.5 cents per litre increase in PED from 1 July 2020 has already been legislated in the Excise and Excise-equivalent Duties Table (Budget Measures – Motor Spirits) Amendment Act 2019 alongside the PED increase from 1 July 2019. No further action by Cabinet is required to give effect to this increase.

RUC rates are complex, and heavy vehicles pay significantly more

21. RUC is a distance-based charging system, designed to recover the costs that different types of vehicles impose on the road network. The RUC system applies to all vehicles which are not powered by petrol and any vehicle with a gross vehicle mass (GVM) of more than 3,500 kilograms. There are approximately 700,000 light RUC vehicles (diesel powered vehicles with a GVM of less than 3,500 kilograms and approximately 20,000 electric vehicles²) and approximately 190,000 heavy RUC vehicles (vehicles, including trailers, with a GVM of more than 3,500 kilograms).
22. RUC licences are pre-purchased in increments of 1,000 kilometres. RUC rates are set in regulations, which will require amendment if Cabinet agrees to my proposed increases.

¹ This figure includes excise duty paid on liquid petroleum gas and compressed natural gas, but these account for a very small proportion of overall fuel excise.

² All non-petrol vehicles are subject to RUC, including electric vehicles. However, electric vehicles are currently exempted from RUC as an incentive to encourage their uptake. This exemption is due to expire on 31 December 2021.

23. Further detail about the Ministry's CAM, which is used to inform the setting of RUC rates, is set out in Appendix B. Key points are:
 - 23.1. The CAM is an engineering-based model, designed primarily to ensure that heavy vehicles of different types and weights attract charges that vary in proportion to reflects their contribution to road construction and maintenance costs.
 - 23.2. A large number of different rates are set, to ensure fairness and incentivise optimal vehicle choice.
 - 23.3. Heavy vehicles pay substantially more than light vehicles, largely because the CAM includes an exponential calculation for the road wear component but also reflecting the need they create for stronger bridges and other structures, and the additional road space they occupy.

RUC rates differ from those indicated by the Ministry's cost allocation model

24. Legislated RUC rates do not align precisely with the rates suggested by the Ministry's CAM, both now and in the past. Four factors contribute to these differences:
 - 24.1. Because the NLTF expenditure profile changes from year to year, the costs sought to be recovered, and so the rates calculated by the model, can shift up and down. One change over recent years has been an increase in common costs – which apply equally to all vehicle types – and a reduction in road wear related costs (on a per-kilometre travelled basis). This causes the CAM to indicate an increase in light vehicle rates (which are largely comprised of common costs) and a decrease in heavy vehicle rates (which are largely comprised of road wear costs).
 - 24.2. The long-standing approach to previous changes to RUC rates is that they only ever increase or remain static even in circumstances where the CAM suggests they should be reduced. This delivers additional revenue but can create situations where the rates set in regulations over time become higher than what the cost allocation model suggests certain types of vehicles should be charged.
 - 24.3. Previous RUC rate increases where either all rates have been increased by the same percentage, or a minimum increase has been applied, even to rates that the CAM suggested should fall.
 - 24.4. In recent years, rate increases have been subject to limits, or “ceilings”. Rates have not generally been increased by more than 10 percent in any one year, even where the Ministry's CAM indicates they should. This is desirable to increase certainty and reduce economic shocks to owners of particular vehicle types, but has led to some legislated rates falling below the rates calculated by the Ministry's CAM.
25. The cumulative effect of these four factors over a long period is that light vehicles pay less than the CAM indicates they should, currently by about 13 percent, and some heavy vehicles pay more than the CAM indicates they should. For some vehicles,

particularly heavy trailers, this results in charges exceeding CAM rates by 40 percent or more.

I propose all RUC rates be increased by 5.3 percent

26. In 2019 a RUC rate increase was also required, and Cabinet decided that all RUC rates should be increased by the same percentage [CAB-19-MIN-1073]. I propose that the same approach be taken this year, which would see all RUC rates increased by 5.3 percent³.
27. This is the simplest way of obtaining the additional revenue required, and it means all RUC vehicle types bear the same proportionate burden of the increased revenue requirement. It also means that all RUC rates are increased by the same percentage as the increase in PED.
28. In the process of developing this proposal, I considered a number of options raised by officials.

The proposed increases have broad impact

29. Most New Zealanders will be affected either directly or indirectly by an increase in RUC rates. Individuals and businesses that use diesel vehicles will be directly affected by the rate increases through higher travel costs. Individuals and businesses will also be indirectly affected through the higher cost of goods resulting from freight companies passing their increased costs on to consumers.
30. The direct impacts of the proposed increases in RUC will be equally shared, in terms of percentage increase, across the different groups of road users. The cost of a RUC licence for a light diesel vehicle will increase from \$72 (including GST) to \$76, an increase of 5.55 percent. For a road user travelling 10,000 kilometres per year, this would mean additional costs of approximately \$40 per year, including GST.
31. The cost of RUC is estimated to be approximately 10 percent of the total costs for a road freight operator (other costs include wages, insurance and depreciation).
32. Appendix A provides a list of the individual RUC rates that will increase for 2019/20 under my proposal, and how much those rates are proposed to increase by.

I propose that two other minor matters be addressed

RUC rates currently set by the NZTA should be brought into the principal regulations

33. The NZTA is authorised by the Road User Charges Act 2012 to specify RUC rates for vehicle types where there is no rate set out in the regulations. The NZTA has used this power to specify 12 rates over recent years. These relate to a small number of vehicles operating under over-weight permits, and are set out in Parts 1 and 2 of the Specification of Road User Charges Notice 2019, gazetted on 28 June 2019.

³ RUC rates are rounded so that the GST-inclusive amount is in whole dollars, which means that increases for individual rates may be slightly more or less than 5.3 percent.

34. This rate setting process enables RUC rates to be set more quickly than by regulation when new vehicle types are identified, which enables the system to deliver appropriate and fair rates quickly in response to innovation and changes in the vehicle market. However, I do not consider that a two-tier system should be allowed to evolve over the long term, where some rates are set by the NZTA and others are set by a Cabinet process.
35. I therefore propose that these 12 rates be brought into the principal regulations as part of the current process. To ensure fairness and alignment with other rates, the general 5.3 percent increase should also apply to these rates.

An error made in the 2019 increases should be corrected

36. In the changes made in 2019, an increase of 5.55 percent was to be applied across all RUC rates. However one of the RUC rates was mistakenly increased by 55.5 percent. This rate is for a very unusual RUC licence⁴ and no vehicles were liable to pay this rate in the 2019/2020 year, so this error has had no practical impact. However, in case some vehicles fall within this category in the future, I propose that this rate be corrected to the rate that would have applied had the 2018 rate been increased by 5.55 percent and the 5.3 percent increase proposed for 2020 be applied.

Timing

37. I intend for the new RUC rates to commence on 1 July 2020. The Road User Charges Act 2012 prescribes a 42 day period between gazetting of the new RUC rates and those rates commencing. This means that new RUC rates will need to be gazetted by Friday 15 May 2020. The Parliamentary Counsel Office (PCO) requires time to draft new RUC regulations.
38. I intend to submit the necessary Order in Council for Cabinet Legislation Committee consideration on Tuesday 28 April 2020.

Consultation

39. The Treasury and the NZTA were consulted on this paper.
40. The Treasury considers that the desired increase in RUC revenue should be obtained in a structured way across the different vehicle classes so as to improve their alignment to the rates indicated by the CAM. Increases would be focused on rates for vehicle classes which were less than the rates calculated by the Ministry's CAM, and increases would be minimised for those rates which were above those calculated by the Ministry's CAM. This is consistent with the approach preferred by the Ministry of Transport as set out in the attached Regulatory Impact Statement. Treasury considers that the integrity of the RUC system will be undermined if prescribed rates become increasingly unrelated to the rates indicated by the CAM.

⁴ The rate in Schedule 5 of the Road User Charges (Rates) Regulations 2015, for each additional 1,000kg more than 20,000 kg on a Type 1 (two-axle single tyre) vehicle. 20,000 kg is extremely heavy for a vehicle with only four tyres.

41. The NZTA also expressed concerns about the integrity of the RUC system as legislated rates continue to diverge from CAM rates.
42. The Department of the Prime Minister and Cabinet was also informed.
43. Possible increases in PED and RUC were included in public engagement on the draft GPS 2018. There were mixed reactions to the proposed changes to PED and RUC. Many submitters accepted that increases in PED and RUC would be necessary to deliver on the Government's priorities to create livable cities and thriving regions. However, some submitters were strongly opposed to the increases.

Financial implications

44. The proposed increases to RUC are forecast to generate on average an additional \$99 million per annum for the next ten years.
45. RUC revenue, as well as PED revenue and revenue from Motor Vehicle Relicensing, is hypothecated for spending on land transport spending on land transport activities and will be held in the NLTF.

Legislative implications

46. An Order in Council will be necessary to amend the Road User Charges (Rates) Regulations 2015.

Impact Analysis

Regulatory Impact Analysis

47. The impact analysis requirements apply to the rates increase proposed in this paper (but not to the minor amendments).
48. A Regulatory Impact Statement was prepared and is attached to this paper. It was reviewed by the independent transport sector review panel and was assessed as meeting the quality assurance criteria.
49. In regards to the two minor amendments (including additional rates in the principal regulations and correcting an error made in 2029), The Treasury agrees that no Regulatory Impact Assessment is required, since the proposals are expected to have only minor impacts on businesses, individuals or not-for-profit entities.

Climate Implications of Policy Assessment (CIPA)

50. The Ministry for the Environment has been consulted and confirm that the CIPA requirements to do not apply to this proposal as the threshold for significance is not met.
51. The purpose of increasing RUC rates is to ensure the revenue required to fund GPS 2018 is available, and not to reduce emissions. The increase in rates will increase the cost of vehicle use, so some emissions reductions could be expected.
52. However, we do not expect the reduction in emissions resulting from a 5.3 percent increase in RUC to exceed the 250,000 tonnes per annum threshold for preparation of a CIPA. 250,000 tonnes is approximately 3.5 percent of emissions from the diesel fleet, and transport demand for diesel is relatively inelastic in the short term at least, in part because of the high proportion of it used for commercial freight.

Human rights implications

53. This proposal is consistent with New Zealand Bill of Rights Act 1990 and the Human Rights Act 1993.

Gender implications

54. This proposal has no gender implications.

Disability perspective

55. This proposal has no implications for people with disabilities.

Publicity

56. I have previously announced PED increases of 3.5 cents per litre per year for three years, with an equivalent increase in RUC, as part of the release of the GPS in 2018.
57. The Ministry of Transport and the NZTA will publicise the increases on their respective websites. The rate increases will become publicly known when they are gazetted (no later than 15 May 2020).

Proactive release

58. I intend to proactively release this paper subject to any appropriate redactions under the Official Information Act 1982.

Recommendations

59. The Minister of Transport recommends that Cabinet:
 1. **note** that in June 2018 Cabinet agreed to a 3.5 cents per litre increase in petrol excise duty in 2018, 2019 and 2020, with an equivalent increase in road user

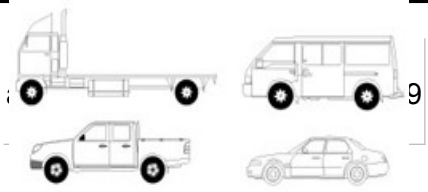

charges (RUC) [CAB-18-MIN-0115], and that an increase in petrol excise duty from 1 July 2020 has already been legislated

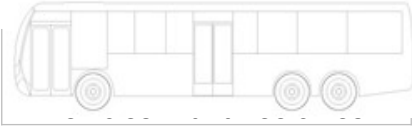
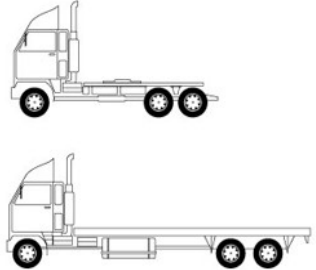

2. **agree** that all rates of RUC be increased by 5.3 percent (subject to rounding) as set out in Appendix A, with effect from 1 July 2020
3. **agree** that the RUC rates currently set out in Parts 1 and 2 of the Specification of Road User Charges 2019 issued by Waka Kotahi NZ Transport Agency (the NZTA) be incorporated into the principal regulations (the *Road User Charges (Rates) Regulations 2015*)
4. **agree** that the rate in *Schedule 5 of the Road User Charges (Rates) Regulations 2015*, for each additional 1,000kg more than 20,000 kg on a Type 1 (two-axle single tyre) vehicle, be corrected to the rate that would have applied had the 2018 rate been increased by 5.55 percent, and the 5.3 percent increase proposed for 2020 be applied, both with effect from 1 July 2020
5. **note** that to enable increased rates of RUC, amendments will be required to the *Road User Charges (Rates) Regulations 2015*
6. **invite** the Minister of Transport to issue drafting instructions to the Parliamentary Counsel Office to give effect to the decisions in the recommendations above
7. **note** that the Minister of Transport proposes to submit the required regulations to the Cabinet Legislation Committee (LEG) for approval on 28 April 2020
8. **note** that Appendix B of this paper sets out a response to this Committee's invitation that I report back with further advice on the methodology used to determine that RUC rates reflect revenue needs and the wear and tear impacts that different vehicle types have on the road. [DEV-19-MIN-0075].

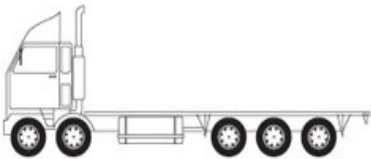



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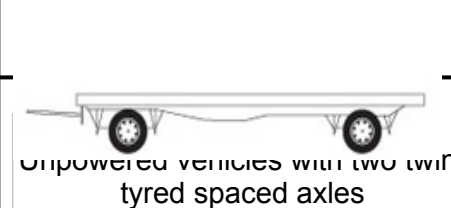
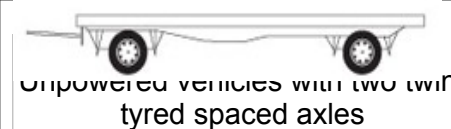
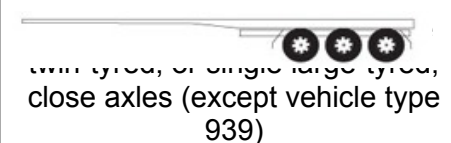
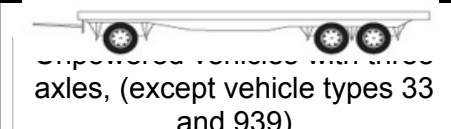
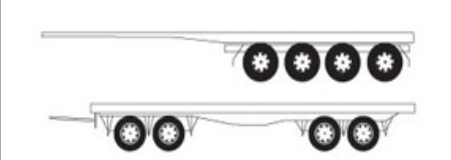

Hon Phil Twyford
Minister of Transport

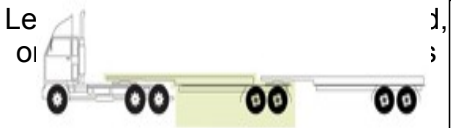


Appendix A - Table showing current RUC rates, proposed 2020 RUC rates, and CAM rates

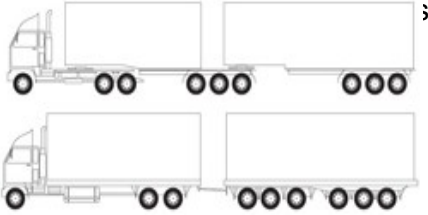
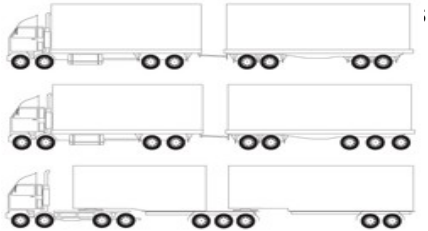
Vehicle type			Current RUC rate		2020 CAM rate	2020 Proposed approach: All rates increase by 5.3% (GST inc)			
			(GST inc)	as % of total RUC revenue	(GST inc)	Rate	Change (%)	Over / Under Recovery	% of the CAM rate
1		Not more than 3.5 tonnes	\$72.00	40.11%	\$81.82	\$76.00	5.6%	-\$5.82	93%
		More than 3.5 tonnes and not more than 6 tonnes	\$78.00	0.29%	\$85.94	\$82.00	5.1%	-\$3.94	95%
		More than 6 tonnes and not more than 9 tonnes	\$159.00	0.01%	\$146.12	\$167.00	5.0%	\$20.88	114%
		Any RUC weight more than 9 tonnes	\$334.00	0.05%	\$288.16	\$352.00	5.4%	\$63.84	122%
2		Not more than 6 tonnes	\$76.00	1.79%	\$86.13	\$80.00	5.3%	-\$6.13	93%
		More than 6 tonnes and not more than 9 tonnes	\$120.00	1.38%	\$122.09	\$126.00	5.0%	\$3.91	103%
		More than 9 tonnes and not more than 12 tonnes	\$163.00	2.09%	\$149.62	\$172.00	5.5%	\$22.38	115%
2	Powered vehicles with one single-tyred spaced axle and one	Any RUC weight more	\$299.00	3.63%	\$258.37	\$315.00	5.4%	\$56.63	122%

Vehicle type			Current RUC rate		2020 CAM rate	2020 Proposed approach: All rates increase by 5.3% (GST inc)			
	twin-tyred spaced axle	than 12 tonnes							
311		Not more than 18 tonnes	\$319.00	0.87%	\$288.01	\$336.00	5.3%	\$47.99	117%
		Any weight more than 18 tonnes	\$392.00	0.60%	\$321.97	\$413.00	5.4%	\$91.03	128%
6		Not more than 12 tonnes	\$104.00	0.02%	\$115.92	\$110.00	5.8%	-\$5.92	95%
		More than 12 tonnes and not more than 18 tonnes	\$338.00	0.65%	\$302.16	\$356.00	5.3%	\$53.84	118%
		Powered vehicles with three axles, (except type 308, 309, 311 or 399 vehicles)	\$412.00	12.60%	\$336.79	\$434.00	5.3%	\$97.21	129%
14	F  axles 99	All RUC weights	\$413.00	9.93%	\$352.20	\$435.00	5.3%	\$82.80	124%
19		All RUC weights	\$369.00	0.06%	\$316.14	\$389.00	5.4%	\$72.86	123%

									
24		All RUC weights	\$120.00	0.02%	\$69.41	\$126.00	5.0%	\$56.59	182%
28		Not more than 10 tonnes	\$46.00	0.00%	\$33.35	\$48.00	4.3%	\$14.65	144%
		Any RUC weight more than 10 tonnes	\$295.00	0.02%	\$259.55	\$311.00	5.4%	\$51.45	120%
29		Not more than 10 tonnes	\$39.00	0.02%	\$27.64	\$41.00	5.1%	\$13.36	148%
		Unpowered vehicles with two dual-tired, or single large-tired close axles, (except vehicle type 929)	\$132.00	0.56%	\$85.22	\$139.00	5.3%	\$53.78	163%
30		Not more than 10 tonnes	\$39.00	0.00%	\$28.98	\$41.00	5.1%	\$12.02	141%

Vehicle type			Current RUC rate		2020 CAM rate	2020 Proposed approach: All rates increase by 5.3% (GST inc)				
		Unpowered vehicles with two twin-tyred spaced axles	Any RUC weight more than 10 tonnes	\$222.00	0.08%	\$118.03	\$234.00	5.4%	\$115.97	198%
33		twin-tyred, or single large-tyred, close axles (except vehicle type 939)	All RUC weights	\$177.00	1.94%	\$114.08	\$186.00	5.1%	\$71.92	163%
37		Unpowered vehicles with three axles, (except vehicle types 33 and 939)	Not more than 10 tonnes	\$42.00	0.00%	\$30.56	\$44.00	4.8%	\$13.44	144%
			Any RUC weight more than 10 tonnes	\$302.00	0.52%	\$231.71	\$318.00	5.3%	\$86.29	137%
43		Unpowered vehicles with four axles	All RUC weights	\$226.00	5.84%	\$133.76	\$238.00	5.3%	\$104.24	178%
951		All RUC weights	All RUC weights	\$170.00	3.02%	\$105.12	\$179.00	5.3%	\$73.88	170%

Vehicle type			Current RUC rate		2020 CAM rate	2020 Proposed approach: All rates increase by 5.3% (GST inc)			
402	Vintage powered vehicle with two axles	RUC weight of more than 12 tonnes+	\$211.00	0.00%	\$186.75	\$222.00	5.2%	\$35.25	119%
403	Vintage powered vehicle with three axles	Any RUC weights	\$185.00	0.00%	\$166.25	\$195.00	5.4%	\$28.75	117%
404	Vintage powered vehicle with at least four axles	Any RUC weights	\$190.00	0.00%	\$169.02	\$200.00	5.3%	\$30.98	118%
929		All RUC weights	\$96.00	0.01%	\$76.07	\$101.00	5.2%	\$24.93	133%
939		All RUC weights	\$64.00	0.37%	\$73.24	\$67.00	4.7%	-\$6.24	91%
308		All RUC weights	\$409.00	0.22%	\$292.16	\$431.00	5.4%	\$138.84	148%
309		All RUC weights	\$329.00	0.23%	\$288.43	\$346.00	5.2%	\$57.57	120%

			Current RUC rate		2020 CAM rate	2020 Proposed approach: All rates increase by 5.3% (GST inc)			
Vehicle type									
408		All RUC weights	\$381.00	2.47%	\$296.97	\$401.00	5.2%	\$104.03	135%
413	Motor caravan with three axles	RUC weight of more than 18 tonnes	\$298.00	0.01%	\$266.66	\$314.00	5.4%	\$47.34	118%
414	Motor caravan with four axles	All RUC weights	\$259.00	0.01%	\$238.03	\$273.00	5.4%	\$34.97	115%
H61	Towing vehicle that is part of an overweight combination vehicle consisting of a type 6 RUC vehicle towing a type 33 RUC vehicle with a permit weight of not more than 42,000kg.	All RUC weights	\$630.00	0.01%	\$459.39	\$663.00	5.2%	\$203.61	144%
H62	Towing vehicle that is part of an	All RUC	\$761.00	0.12%	\$549.10	\$801.00	5.3%	\$251.90	146%

			Current RUC rate		2020 CAM rate	2020 Proposed approach: All rates increase by 5.3% (GST inc)			
Vehicle type	overweight combination vehicle consisting of a type 6 RUC vehicle towing a type 33 RUC vehicle with a permit weight of not more than 44,000kg.	weights							
H71	Towing vehicle that is part of an overweight combination vehicle consisting of a type 6 RUC vehicle towing a type 43 RUC vehicle with a permit weight of not more than 48,000kg.	All RUC weights	\$625.00	0.09%	\$485.21	\$658.00	5.3%	\$172.79	136%
H72	RUC Vehicle Type 6 with a RUC Vehicle Type 929 and RUC Vehicle Type 29 with a permit weight not more than 48,000kg	All RUC weights	\$626.00	0.00%	\$444.39	\$659.00	5.3%	\$214.61	148%
H73	Towing vehicle that is part of an overweight combination vehicle consisting of a type 6 RUC vehicle towing a type 43 RUC vehicle with a permit weight of not more than 50,000kg.	All RUC weights	\$675.00	0.25%	\$570.32	\$711.00	5.3%	\$140.68	125%
H74	Towing vehicle that is part of an overweight combination vehicle consisting of a type 6 RUC vehicle towing a type 43 RUC vehicle with a permit weight of not more than 53,000kg.	All RUC weights	\$890.00	0.00%	\$718.29	\$937.00	5.3%	\$218.71	130%
H81	Towing vehicle that is part of an overweight combination vehicle consisting of a type 14 RUC vehicle towing a type 43 RUC vehicle with a permit weight of not more than 48,000kg.	All RUC weights	\$432.00	0.95%	\$382.38	\$455.00	5.3%	\$72.62	119%

Vehicle type			Current RUC rate		2020 CAM rate	2020 Proposed approach: All rates increase by 5.3% (GST inc)			
H82	Towing vehicle that is part of an overweight combination vehicle consisting of a type 14 RUC vehicle towing a type 43 RUC vehicle with a permit weight of more than 48,000kg but not more than 53,000kg.	All RUC weights	\$624.00	0.41%	\$523.55	\$657.00	5.3%	\$133.45	125%
H83	Towing vehicle that is part of an overweight combination vehicle consisting of a type 14 RUC vehicle towing a type 43 RUC vehicle with a permit weight of more than 53,000kg but not more than 58,000kg.	All RUC weights	\$895.00	0.03%	\$750.99	\$942.00	5.3%	\$191.01	125%
H84	Towing vehicle that is part of an overweight combination vehicle consisting of a type 6 RUC vehicle towing a type 939 RUC vehicle and a type 29 RUC vehicle with a permit weight of not more than 48,000kg.	All RUC weights	\$448.00	0.01%	\$305.72	\$472.00	5.4%	\$166.28	154%
H85	Towing vehicle that is part of an overweight combination vehicle consisting of a type 6 RUC vehicle towing a type 939 RUC vehicle and a type 29 RUC vehicle with a permit weight of more than 48,000kg but not more than 53,000kg.	All RUC weights	\$629.00	0.02%	\$420.71	\$662.00	5.2%	\$241.29	157%
H75	Towing vehicle that is part of an overweight combination vehicle consisting of a type 6 RUC vehicle towing a type 951 RUC vehicle with a permit weight of not more than 48,000kg.	All RUC weights	\$475.00	0.02%	\$347.97	\$500.00	5.3%	\$152.03	144%

Vehicle type			Current RUC rate		2020 CAM rate	2020 Proposed approach: All rates increase by 5.3% (GST inc)			
H76	Towing vehicle that is part of an overweight combination vehicle consisting of a type 6 RUC vehicle towing a type 951 RUC vehicle with a permit weight of more than 48,000kg but not more than 53,000kg.	All RUC weights	\$656.00	0.05%	\$462.95	\$691.00	5.3%	\$228.05	149%
H91	Towing vehicle that is part of an overweight combination vehicle consisting of a type 19 RUC vehicle towing a type 43 RUC vehicle and with a permit weight of not more than 48,000kg.	All RUC weights	\$369.00	0.00%	\$317.14	\$389.00	5.4%	\$71.86	123%
H92	Towing vehicle that is part of an overweight combination vehicle consisting of a type 19 RUC vehicle towing a type 43 RUC vehicle with a permit weight of more than 48,000kg but not more than 53,000kg.	All RUC weights	\$446.00	0.00%	\$426.93	\$470.00	5.4%	\$43.07	110%
H93	Towing vehicle that is part of an overweight combination vehicle consisting of a type 19 RUC vehicle towing a type 43 RUC vehicle with a permit weight of more than 54,000kg but not more than 58,000kg.	All RUC weights	\$600.00	0.00%	\$526.31	\$632.00	5.3%	\$105.69	120%
H94	Towing vehicle that is part of an overweight combination vehicle consisting of a type 14 RUC vehicle towing a type 951 RUC vehicle with a permit weight of not more than 50,000kg.	All RUC weights	\$413.00	4.38%	\$336.23	\$435.00	5.3%	\$98.77	129%
H95	Towing vehicle that is part of an overweight combination vehicle	All RUC weights	\$499.00	1.47%	\$440.76	\$525.00	5.2%	\$84.24	119%

Vehicle type			Current RUC rate		2020 CAM rate	2020 Proposed approach: All rates increase by 5.3% (GST inc)			
	consisting of a type 14 RUC vehicle towing a type 951 RUC vehicle with a permit weight of more than 50,000kg but not more than 54,000kg.								
H96	Towing vehicle that is part of an overweight combination vehicle consisting of a type 14 RUC vehicle towing a type 951 RUC vehicle with a permit weight of more than 54,000kg but not more than 58,000kg.	All RUC weights	\$653.00	1.49%	\$535.33	\$688.00	5.4%	\$152.67	129%
H97	Towing vehicle that is part of an overweight combination vehicle consisting of a type 6 RUC vehicle towing a type 939 RUC vehicle and a type 33 RUC vehicle with a permit weight of not more than 50,000kg.	All RUC weights	\$329.00	0.86%	\$226.10	\$346.00	5.2%	\$119.90	153%
H98	Towing vehicle that is part of an overweight combination vehicle consisting of a type 6 RUC vehicle towing a type 939 RUC vehicle and a type 33 RUC vehicle with a permit weight of more than 50,000kg but not more than 54,000kg.	All RUC weights	\$430.00	0.06%	\$317.89	\$453.00	5.3%	\$135.11	143%
H99	Towing vehicle that is part of an overweight combination vehicle consisting of a type 6 RUC vehicle towing a type 939 RUC vehicle and a type 33 RUC vehicle with a permit weight of more than 54,000kg and not more than 58,000kg.	All RUC weights	\$583.00	0.09%	\$400.82	\$614.00	5.3%	\$213.18	153%

Vehicle type			Current RUC rate		2020 CAM rate	2020 Proposed approach: All rates increase by 5.3% (GST inc)			
H30	Towing vehicle that is part of an overweight combination vehicle consisting of a type 14 RUC vehicle towing a type 929 RUC vehicle and a type 33 RUC vehicle with a permit weight of not more than 50,000kg.	All RUC weights	\$273.00	0.00%	\$257.18	\$287.00	5.1%	\$29.82	112%
H31	Towing vehicle that is part of an overweight combination vehicle consisting of a type 14 RUC vehicle towing a type 929 RUC vehicle and a type 33 RUC vehicle with a permit weight of more than 50,000kg but not more than 54,000kg.	All RUC weights	\$403.00	0.00%	\$361.72	\$424.00	5.2%	\$62.28	117%
H32	Towing vehicle that is part of an overweight combination vehicle consisting of a type 14 RUC vehicle towing a type 929 RUC vehicle and a type 33 RUC vehicle with a permit weight of more than 54,000kg but not more than 58,000kg.	All RUC weights	\$557.00	0.00%	\$456.29	\$587.00	5.4%	\$130.71	129%
H33	Towing vehicle that is part of an overweight combination vehicle consisting of a type 14 RUC vehicle towing a type 939 RUC vehicle and a type 29 RUC vehicle with a permit weight of not more than 50,000kg.	All RUC weights	\$341.00	0.00%	\$293.98	\$359.00	5.3%	\$65.02	122%
H34	Towing vehicle that is part of an overweight combination vehicle consisting of a type 14 RUC vehicle towing a type 939 RUC vehicle and a type 29 RUC	All RUC weights	\$472.00	0.00%	\$398.52	\$497.00	5.3%	\$98.48	125%

Vehicle type			Current RUC rate		2020 CAM rate	2020 Proposed approach: All rates increase by 5.3% (GST inc)			
	vehicle with a permit weight of more than 50,000kg but not more than 54,000kg.								
H35	Towing vehicle that is part of an overweight combination vehicle consisting of a type 14 RUC vehicle towing a type 939 RUC vehicle and a type 29 RUC vehicle with a permit weight of more than 54,000kg but not more than 58,000kg.	All RUC weights	\$625.00	0.00%	\$493.09	\$658.00	5.3%	\$164.91	133%
H11	Towing vehicle that is part of an overweight combination vehicle consisting of a type 14 RUC vehicle towing a type 939 RUC vehicle and a type 33 RUC vehicle with a permit weight not more than 55,000kg.	All RUC weights	\$338.00	0.01%	\$283.02	\$356.00	5.3%	\$72.98	126%
H12	Towing vehicle that is part of an overweight combination vehicle consisting of a type 14 RUC vehicle towing a type 939 RUC vehicle and a type 33 RUC vehicle with a permit weight of more than 55,000kg but not more than 60,000kg.	All RUC weights	\$499.00	0.02%	\$382.28	\$525.00	5.2%	\$142.72	137%
H14	Towing vehicle that is part of an overweight combination vehicle consisting of a type 6 RUC vehicle towing a type 43 RUC vehicle and a type 33 RUC vehicle with a permit weight of not more than 55,000kg.	All RUC weights	\$188.00	0.00%	\$184.31	\$198.00	5.3%	\$13.69	107%
H15	Towing vehicle that is part of an overweight combination vehicle	All RUC weights	\$350.00	0.00%	\$226.99	\$369.00	5.4%	\$142.01	163%

Vehicle type			Current RUC rate		2020 CAM rate	2020 Proposed approach: All rates increase by 5.3% (GST inc)			
	consisting of a type 6 RUC vehicle towing a type 43 RUC vehicle and a type 33 RUC vehicle with a permit weight of more than 55,000kg but not more than 60,000kg.								
H36	Towing vehicle that is part of an overweight combination vehicle consisting of a type 19 RUC vehicle towing a type 951 RUC vehicle with a permit weight of not more than 55,000kg.	All RUC weights	\$408.00	0.00%	\$358.61	\$430.00	5.4%	\$71.39	120%
H37	Towing vehicle that is part of an overweight combination vehicle consisting of a type 19 RUC vehicle towing a type 951 RUC vehicle with a permit weight of more than 55,000kg but not more than 60,000kg.	All RUC weights	\$569.00	0.01%	\$457.87	\$599.00	5.3%	\$141.13	131%
H17	Towing vehicle that is part of an overweight combination vehicle consisting of a type 14 RUC vehicle towing a type 43 RUC vehicle and a type 33 RUC vehicle with a permit weight of not more than 55,000kg.	All RUC weights	\$111.00	0.00%	\$143.07	\$117.00	5.4%	-\$26.07	82%
H18	Towing vehicle that is part of an overweight combination vehicle consisting of a type 14 RUC vehicle towing a type 43 RUC vehicle and a type 33 RUC vehicle with a permit weight of more than 55,000kg but not more than 60,000kg.	All RUC weights	\$222.00	0.00%	\$219.23	\$234.00	5.4%	\$14.77	107%
H19	Towing vehicle that is part of an	All RUC	\$301.00	0.01%	\$286.77	\$317.00	5.3%	\$30.23	111%

Vehicle type			Current RUC rate		2020 CAM rate	2020 Proposed approach: All rates increase by 5.3% (GST inc)			
	overweight combination vehicle consisting of a type 14 RUC vehicle towing a type 43 RUC vehicle and a type 33 RUC vehicle with a permit weight of more than 60,000kg but not more than 63,000kg.	weights							
H38	Towing vehicle that is part of an overweight combination vehicle consisting of a type 19 RUC vehicle towing a type 951 RUC vehicle with a permit weight of more than 60,000kg but not more than 63,000kg.	All RUC weights	\$688.00	0.00%	\$546.18	\$724.00	5.2%	\$177.82	133%
H77	Towing vehicle that is part of an overweight combination vehicle consisting of a type 14 RUC vehicle towing a type 33 RUC vehicle with a permit weight of more than 44,000kg but not more than 48,000kg.	All RUC weights	\$675.00	0.00%	\$584.82	\$711.00	5.3%	\$126.18	122%
H01	Overweight powered passenger service vehicle with 3 axles, with a permit weight of not more than 25 tonnes.	All RUC weights	\$514.00	0.10%	\$472.14	\$541.00	5.3%	\$68.86	115%
H13	Towing vehicle that is part of an overweight combination vehicle consisting of a type 14 RUC vehicle towing a type 939 RUC vehicle and a type 33 RUC vehicle with a permit weight of more than 60,001kg but not more than 63,000kg.	All RUC weights	\$617.00	0.01%	\$470.58	\$650.00	5.3%	\$179.42	138%
H63	RUC Vehicle Type 14 with a RUC Vehicle Type 951 and a		\$800.00	0.05%	\$686.09	\$842.00	5.3%	\$155.91	123%

Vehicle type			Current RUC rate		2020 CAM rate	2020 Proposed approach: All rates increase by 5.3% (GST inc)			
	permit weight more than 58,000kg but not more than 62,000kg								
H78	RUC Vehicle Type 6 with a RUC Vehicle Type 929 and a RUC Vehicle Type 29 with a permit weight more than 48,000kg but not more than 50,000kg		\$676.00	0.00%	\$314.89	\$712.00	5.3%	\$397.11	226%
H79	RUC Vehicle Type 6 with a RUC Vehicle Type 929 and RUC Vehicle Type 29 with a permit weight of 50,000kg but not more than 52,000kg		\$891.00	0.00%	\$368.49	\$938.00	5.3%	\$569.51	255%
299	Self-powered all-terrain cranes with two axles	All RUC weights	\$265.00	0.00%	\$546.84	\$279.00	5.3%	-\$267.84	51%
399	Self-powered all-terrain cranes with three axles	All RUC weights	\$372.00	0.00%	\$763.31	\$392.00	5.4%	-\$371.31	51%
499	Self-powered all-terrain cranes with four axles	All RUC weights	\$346.00	0.00%	\$979.87	\$364.00	5.2%	-\$615.87	37%
599	Self-powered all-terrain cranes with five axles	All RUC weights	\$304.00	0.00%	\$1,205.68	\$320.00	5.3%	-\$885.68	26%
699	Self-powered all-terrain cranes with six axles	All RUC weights	\$304.00	0.00%	\$1,422.24	\$320.00	5.3%	-\$1,102.24	22%
799	Self-powered all-terrain cranes with seven axles	All RUC weights	\$304.00	0.00%	\$1,648.05	\$320.00	5.3%	-\$1,328.05	19%
<i>Rates formerly include in Part 2 of the Specification of Road User Charges Notice 2019</i>									
660	Two-axle specialist vehicle with a gross permit weight up to and including 16,000kg	All RUC weights	\$524.00	0.00%	n/a	\$552.00	5.3%		
661	Two-axle specialist vehicle with a gross permit weight over 16,000kg and up to and including	All RUC weights	\$795.00	0.00%	n/a	\$837.00	5.3%		

Vehicle type			Current RUC rate		2020 CAM rate	2020 Proposed approach: All rates increase by 5.3% (GST inc)				
	18,000kg									
662	Three-axle specialist vehicle with a gross permit weight up to and including 23,000kg that is not a passenger service vehicle	All RUC weights	\$514.00	0.00%	n/a	\$541.00	5.3%			
663	Three-axle specialist vehicle with a gross permit weight over 23,000kg and up to and including 25,000kg that is not a passenger service vehicle	All RUC weights	\$736.00	0.00%	n/a	\$775.00	5.3%			
664	Four-axle specialist vehicle with a gross permit weight up to and including 27,000kg	All RUC weights	\$585.00	0.00%	n/a	\$616.00	5.3%			
665	Four-axle specialist vehicle with a gross permit weight over 27,000kg and up to and including 29,000kg	All RUC weights	\$743.00	0.00%	n/a	\$782.00	5.3%			
666	Two-axle specialist vehicle with a gross permit weight over 18,000kg and up to 20,000kg	All RUC weights	\$1032.00	0.00%	n/a	\$1087.00	5.3%			

Table showing the additional weight rates, with current RUC rates, proposed 2020 RUC rates, and CAM rates

Vehicle type		Additional Weight (KGs)	Current RUC rate	2020 CAM rate	2020 Proposed approach:			
			(GST inc)	(GST inc)	All rates increase by 5.3% (GST inc)			
					Proposed Rate	Change (%)	Over / Under Recovery	% of the CAM rate
1	Powered vehicles with two axles (except type 2 or type 299 vehicles)	1000	\$ 0.53	\$ 0.39	\$ 0.56	5.3%	\$ 0.17	143%
		2000	\$ 0.79	\$ 0.61	\$ 0.83	5.3%	\$ 0.22	136%
		3000	\$ 1.11	\$ 0.89	\$ 1.17	5.3%	\$ 0.28	132%
		4000	\$ 1.49	\$ 1.23	\$ 1.57	5.3%	\$ 0.34	127%
		5000	\$ 1.95	\$ 1.65	\$ 2.05	5.3%	\$ 0.40	124%
		6000	\$ 2.50	\$ 2.16	\$ 2.63	5.3%	\$ 0.47	122%
		7000	\$ 3.15	\$ 2.76	\$ 3.32	5.3%	\$ 0.56	120%
		8000	\$ 3.92	\$ 3.47	\$ 4.13	5.3%	\$ 0.65	119%
		9000	\$ 4.81	\$ 4.31	\$ 5.06	5.3%	\$ 0.76	118%
		10,000	\$ 5.82	\$ 5.28	\$ 6.13	5.3%	\$ 0.85	116%
		11,000	\$ 7.01	\$ 6.39	\$ 7.38	5.3%	\$ 0.99	115%
		12,000	\$ 8.33	\$ 7.67	\$ 8.77	5.3%	\$ 1.10	114%
		13,000	\$ 9.83	\$ 9.13	\$ 10.35	5.3%	\$ 1.22	113%
		14,000	\$ 11.54	\$ 10.78	\$ 12.15	5.3%	\$ 1.37	113%
		15,000	\$ 13.46	\$ 12.64	\$ 14.17	5.3%	\$ 1.53	112%
		16,000	\$ 15.58	\$ 14.73	\$ 16.41	5.3%	\$ 1.67	111%
		17,000	\$ 17.97	\$ 17.07	\$ 18.92	5.3%	\$ 1.85	111%
		18,000	\$ 20.60	\$ 19.67	\$ 21.69	5.3%	\$ 2.02	110%
		19,000	\$ 23.52	\$ 22.55	\$ 24.77	5.3%	\$ 2.21	110%
20,000	\$ 26.73	\$ 25.74	\$ 28.15	5.3%	\$ 2.41	109%		
	Each 1000kg more than 20,000kg	\$ 5.18	\$ 3.51	\$ 3.51	5.3%	-\$ 0.00	100%	
2	Powered vehicles with one single-tyred spaced axle and one twin-tyred spaced axle	1000	\$ 0.79	\$ 0.41	\$ 0.83	5.3%	\$ 0.42	200.7%
		2000	\$ 1.06	\$ 0.58	\$ 1.12	5.3%	\$ 0.53	191.1%
		3000	\$ 1.37	\$ 0.79	\$ 1.44	5.3%	\$ 0.65	183.0%
		4000	\$ 1.75	\$ 1.03	\$ 1.84	5.3%	\$ 0.81	178.6%
		5000	\$ 2.19	\$ 1.32	\$ 2.31	5.3%	\$ 0.99	174.8%
		6000	\$ 2.70	\$ 1.66	\$ 2.84	5.3%	\$ 1.19	171.7%

Vehicle type		Additional Weight (KGs)	Current RUC rate	2020 CAM rate	2020 Proposed approach:			
			(GST inc)	(GST inc)	All rates increase by 5.3% (GST inc)			
					Proposed Rate	Change (%)	Over / Under Recovery	% of the CAM rate
		7000	\$ 3.29	\$ 2.05	\$ 3.46	5.3%	\$ 1.42	169.3%
		8000	\$ 3.97	\$ 2.50	\$ 4.18	5.3%	\$ 1.68	167.4%
		9000	\$ 4.74	\$ 3.01	\$ 4.99	5.3%	\$ 1.98	165.7%
		10,000	\$ 5.61	\$ 3.60	\$ 5.91	5.3%	\$ 2.31	164.1%
		11,000	\$ 6.60	\$ 4.27	\$ 6.95	5.3%	\$ 2.68	162.9%
		12,000	\$ 7.70	\$ 5.02	\$ 8.11	5.3%	\$ 3.09	161.7%
		13,000	\$ 8.94	\$ 5.86	\$ 9.41	5.3%	\$ 3.56	160.7%
		14,000	\$ 10.32	\$ 6.80	\$ 10.87	5.3%	\$ 4.07	159.9%
		15,000	\$ 11.83	\$ 7.84	\$ 12.46	5.3%	\$ 4.61	158.8%
		16,000	\$ 13.51	\$ 9.01	\$ 14.23	5.3%	\$ 5.22	158.0%
		17,000	\$ 15.36	\$ 10.29	\$ 16.17	5.3%	\$ 5.89	157.2%
		18,000	\$ 17.41	\$ 11.70	\$ 18.33	5.3%	\$ 6.63	156.7%
		19,000	\$ 19.63	\$ 13.25	\$ 20.67	5.3%	\$ 7.42	156.0%
		20,000	\$ 22.07	\$ 14.95	\$ 23.24	5.3%	\$ 8.29	155.4%
		Each 1000kg more than 20,000kg	\$ 2.65	\$ 1.86	\$ 2.79	5.3%	\$ 0.93	150.4%
6	Powered vehicles with three axles, (except type 308, 309, 311 or 399 vehicles)	1000	\$ 0.49	\$ 0.25	\$ 0.52	5.3%	\$ 0.27	208%
		2000	\$ 0.64	\$ 0.35	\$ 0.67	5.3%	\$ 0.32	192%
		3000	\$ 0.82	\$ 0.47	\$ 0.86	5.3%	\$ 0.40	185%
		4000	\$ 1.01	\$ 0.60	\$ 1.06	5.3%	\$ 0.46	177%
		5000	\$ 1.24	\$ 0.75	\$ 1.31	5.3%	\$ 0.55	174%
		6000	\$ 1.49	\$ 0.92	\$ 1.57	5.3%	\$ 0.65	170%
		7000	\$ 1.76	\$ 1.11	\$ 1.85	5.3%	\$ 0.74	167%
		8000	\$ 2.07	\$ 1.33	\$ 2.18	5.3%	\$ 0.85	164%
		9000	\$ 2.43	\$ 1.56	\$ 2.56	5.3%	\$ 1.00	164%
		10,000	\$ 2.81	\$ 1.83	\$ 2.96	5.3%	\$ 1.13	162%
		11,000	\$ 3.23	\$ 2.12	\$ 3.40	5.3%	\$ 1.29	161%
		12,000	\$ 3.68	\$ 2.44	\$ 3.88	5.3%	\$ 1.44	159%

Vehicle type		Additional Weight (KGs)	Current RUC rate	2020 CAM rate	2020 Proposed approach:			
			(GST inc)	(GST inc)	All rates increase by 5.3% (GST inc)			
					Proposed Rate	Change (%)	Over / Under Recovery	% of the CAM rate
		13,000	\$ 4.19	\$ 2.79	\$ 4.41	5.3%	\$ 1.63	158%
		14,000	\$ 4.73	\$ 3.17	\$ 4.98	5.3%	\$ 1.81	157%
		15,000	\$ 5.33	\$ 3.59	\$ 5.61	5.3%	\$ 2.02	156%
		16,000	\$ 5.98	\$ 4.05	\$ 6.30	5.3%	\$ 2.25	156%
		17,000	\$ 6.69	\$ 4.54	\$ 7.04	5.3%	\$ 2.50	155%
		18,000	\$ 7.46	\$ 5.08	\$ 7.86	5.3%	\$ 2.78	155%
		19,000	\$ 8.27	\$ 5.66	\$ 8.71	5.3%	\$ 3.05	154%
		20,000	\$ 9.16	\$ 6.29	\$ 9.65	5.3%	\$ 3.35	153%
		Each 1000kg more than 20,000kg	\$ 0.96	\$ 0.68	\$ 1.01	5.3%	\$ 0.33	149%
14	Powered vehicles with four axles (except type 408 or type 499 vehicles)	1000	\$ 0.70	\$ 0.39	\$ 0.74	5.3%	\$ 0.35	191%
		2000	\$ 0.85	\$ 0.49	\$ 0.90	5.3%	\$ 0.40	182%
		3000	\$ 1.02	\$ 0.61	\$ 1.07	5.3%	\$ 0.47	177%
		4000	\$ 1.20	\$ 0.73	\$ 1.26	5.3%	\$ 0.53	172%
		5000	\$ 1.41	\$ 0.88	\$ 1.48	5.3%	\$ 0.61	169%
		6000	\$ 1.64	\$ 1.03	\$ 1.73	5.3%	\$ 0.69	167%
		7000	\$ 1.90	\$ 1.21	\$ 2.00	5.3%	\$ 0.79	166%
		8000	\$ 2.16	\$ 1.40	\$ 2.27	5.3%	\$ 0.88	163%
		9000	\$ 2.46	\$ 1.61	\$ 2.59	5.3%	\$ 0.98	161%
		10,000	\$ 2.80	\$ 1.83	\$ 2.95	5.3%	\$ 1.12	161%
		11,000	\$ 3.13	\$ 2.08	\$ 3.30	5.3%	\$ 1.22	158%
		12,000	\$ 3.52	\$ 2.35	\$ 3.71	5.3%	\$ 1.36	158%
		13,000	\$ 3.94	\$ 2.64	\$ 4.15	5.3%	\$ 1.51	157%
		14,000	\$ 4.38	\$ 2.96	\$ 4.61	5.3%	\$ 1.66	156%
		15,000	\$ 4.86	\$ 3.30	\$ 5.12	5.3%	\$ 1.82	155%
		16,000	\$ 5.37	\$ 3.66	\$ 5.65	5.3%	\$ 1.99	154%
17,000	\$ 5.94	\$ 4.06	\$ 6.25	5.3%	\$ 2.20	154%		
18,000	\$ 6.52	\$ 4.48	\$ 6.87	5.3%	\$ 2.39	153%		

Vehicle type		Additional Weight (KGs)	Current RUC rate	2020 CAM rate	2020 Proposed approach:			
			(GST inc)	(GST inc)	All rates increase by 5.3% (GST inc)			
					Proposed Rate	Change (%)	Over / Under Recovery	% of the CAM rate
		19,000	\$ 7.16	\$ 4.93	\$ 7.54	5.3%	\$ 2.61	153%
		20,000	\$ 7.84	\$ 5.42	\$ 8.26	5.3%	\$ 2.84	152%
		Each 1000kg more than 20,000kg	\$ 0.73	\$ 0.52	\$ 0.77	5.3%	\$ 0.25	148%
19	Powered vehicles with five or more axles (except type 599 vehicles)	1000	\$ 0.45	\$ 0.24	\$ 0.47	5.3%	\$ 0.23	197.6%
		2000	\$ 0.54	\$ 0.30	\$ 0.57	5.3%	\$ 0.26	186.6%
		3000	\$ 0.65	\$ 0.38	\$ 0.68	5.3%	\$ 0.31	181.8%
		4000	\$ 0.76	\$ 0.46	\$ 0.80	5.3%	\$ 0.34	175.7%
		5000	\$ 0.89	\$ 0.54	\$ 0.94	5.3%	\$ 0.40	172.9%
		6000	\$ 1.02	\$ 0.64	\$ 1.07	5.3%	\$ 0.44	168.7%
		7000	\$ 1.17	\$ 0.74	\$ 1.23	5.3%	\$ 0.49	166.5%
		8000	\$ 1.33	\$ 0.85	\$ 1.40	5.3%	\$ 0.55	164.4%
		9000	\$ 1.51	\$ 0.97	\$ 1.59	5.3%	\$ 0.62	163.2%
		10,000	\$ 1.70	\$ 1.11	\$ 1.79	5.3%	\$ 0.68	161.8%
		11,000	\$ 1.90	\$ 1.25	\$ 2.00	5.3%	\$ 0.75	160.2%
		12,000	\$ 2.12	\$ 1.40	\$ 2.23	5.3%	\$ 0.83	159.1%
		13,000	\$ 2.35	\$ 1.57	\$ 2.47	5.3%	\$ 0.91	157.7%
		14,000	\$ 2.61	\$ 1.75	\$ 2.75	5.3%	\$ 1.00	157.2%
		15,000	\$ 2.87	\$ 1.94	\$ 3.02	5.3%	\$ 1.08	155.8%
		16,000	\$ 3.15	\$ 2.15	\$ 3.32	5.3%	\$ 1.17	154.6%
		17,000	\$ 3.47	\$ 2.37	\$ 3.65	5.3%	\$ 1.29	154.5%
		18,000	\$ 3.79	\$ 2.60	\$ 3.99	5.3%	\$ 1.39	153.5%
		19,000	\$ 4.15	\$ 2.85	\$ 4.37	5.3%	\$ 1.52	153.3%
20,000	\$ 4.52	\$ 3.12	\$ 4.76	5.3%	\$ 1.64	152.6%		
		Each 1000kg more than 20,000kg	\$ 0.39	\$ 0.28	\$ 0.41	5.3%	\$ 0.13	144.4%
299		1000	\$ 0.18	\$ 738.33	\$ 0.19	5.3%	-\$ 738.14	58%
		2000	\$ 0.28	\$ 738.46	\$ 0.29	5.3%	-\$ 738.16	65%

Vehicle type		Additional Weight (KGs)	Current RUC rate	2020 CAM rate	2020 Proposed approach:			
			(GST inc)	(GST inc)	All rates increase by 5.3% (GST inc)			
					Proposed Rate	Change (%)	Over / Under Recovery	% of the CAM rate
Self-powered all-terrain cranes with two axles	3000	\$ 0.41	\$ 738.62	\$ 0.43	5.3%	-\$ 738.19	70%	
	4000	\$ 0.57	\$ 738.80	\$ 0.60	5.3%	-\$ 738.20	75%	
	5000	\$ 0.74	\$ 739.03	\$ 0.78	5.3%	-\$ 738.25	76%	
	6000	\$ 0.94	\$ 739.28	\$ 0.99	5.3%	-\$ 738.30	77%	
	7000	\$ 1.18	\$ 739.59	\$ 1.24	5.3%	-\$ 738.34	79%	
	8000	\$ 1.47	\$ 739.93	\$ 1.55	5.3%	-\$ 738.38	80%	
	9000	\$ 1.78	\$ 740.33	\$ 1.87	5.3%	-\$ 738.45	81%	
	10,000	\$ 2.14	\$ 740.78	\$ 2.25	5.3%	-\$ 738.53	81%	
	11,000	\$ 2.55	\$ 741.29	\$ 2.69	5.3%	-\$ 738.61	82%	
	12,000	\$ 3.02	\$ 741.87	\$ 3.18	5.3%	-\$ 738.69	82%	
	13,000	\$ 3.52	\$ 742.52	\$ 3.71	5.3%	-\$ 738.81	82%	
	14,000	\$ 4.11	\$ 743.24	\$ 4.33	5.3%	-\$ 738.91	83%	
	15,000	\$ 4.75	\$ 744.05	\$ 5.00	5.3%	-\$ 739.05	83%	
	16,000	\$ 5.46	\$ 744.94	\$ 5.75	5.3%	-\$ 739.19	83%	
	17,000	\$ 6.25	\$ 745.93	\$ 6.58	5.3%	-\$ 739.35	83%	
	18,000	\$ 7.11	\$ 747.01	\$ 7.49	5.3%	-\$ 739.53	83%	
	19,000	\$ 8.06	\$ 748.21	\$ 8.49	5.3%	-\$ 739.72	83%	
	20,000	\$ 9.10	\$ 749.51	\$ 9.58	5.3%	-\$ 739.93	83%	
	Each 1000kg more than 20,000kg	\$ 1.14	\$ 1.43	\$ 1.20	5.3%	-\$ 0.23	84%	
399	Self-powered all-terrain cranes with three axles	1000	\$ 0.21	\$ 29.48	\$ 0.22	5.3%	-\$ 29.26	55%
		2000	\$ 0.30	\$ 29.59	\$ 0.32	5.3%	-\$ 29.28	61%
		3000	\$ 0.41	\$ 29.73	\$ 0.43	5.3%	-\$ 29.30	66%
		4000	\$ 0.53	\$ 29.88	\$ 0.56	5.3%	-\$ 29.32	70%
		5000	\$ 0.68	\$ 30.05	\$ 0.72	5.3%	-\$ 29.33	74%
		6000	\$ 0.83	\$ 30.24	\$ 0.87	5.3%	-\$ 29.36	75%
		7000	\$ 1.00	\$ 30.45	\$ 1.05	5.3%	-\$ 29.40	77%
		8000	\$ 1.19	\$ 30.69	\$ 1.25	5.3%	-\$ 29.43	78%

Vehicle type		Additional Weight (KGs)	Current RUC rate	2020 CAM rate	2020 Proposed approach:			
			(GST inc)	(GST inc)	All rates increase by 5.3% (GST inc)			
					Proposed Rate	Change (%)	Over / Under Recovery	% of the CAM rate
		9000	\$ 1.40	\$ 30.95	\$ 1.47	5.3%	-\$ 29.47	79%
		10,000	\$ 1.64	\$ 31.24	\$ 1.73	5.3%	-\$ 29.51	80%
		11,000	\$ 1.90	\$ 31.55	\$ 2.00	5.3%	-\$ 29.55	81%
		12,000	\$ 2.18	\$ 31.90	\$ 2.30	5.3%	-\$ 29.61	81%
		13,000	\$ 2.49	\$ 32.29	\$ 2.62	5.3%	-\$ 29.66	82%
		14,000	\$ 2.83	\$ 32.70	\$ 2.98	5.3%	-\$ 29.72	82%
		15,000	\$ 3.20	\$ 33.16	\$ 3.37	5.3%	-\$ 29.79	83%
		16,000	\$ 3.60	\$ 33.65	\$ 3.79	5.3%	-\$ 29.86	83%
		17,000	\$ 4.03	\$ 34.19	\$ 4.24	5.3%	-\$ 29.95	83%
		18,000	\$ 4.49	\$ 34.77	\$ 4.73	5.3%	-\$ 30.04	83%
		19,000	\$ 5.01	\$ 35.40	\$ 5.28	5.3%	-\$ 30.12	83%
		20,000	\$ 5.55	\$ 36.07	\$ 5.84	5.3%	-\$ 30.23	84%
		Each 1000kg more than 20,000kg	\$ 0.60	\$ 0.73	\$ 0.63	5.3%	-\$ 0.09	87%
499	Self-powered all-terrain cranes with four axles	1000	\$ 0.38	\$ 0.59	\$ 0.40	5.3%	-\$ 0.19	68%
		2000	\$ 0.47	\$ 0.70	\$ 0.49	5.3%	-\$ 0.20	71%
		3000	\$ 0.58	\$ 0.82	\$ 0.61	5.3%	-\$ 0.21	74%
		4000	\$ 0.68	\$ 0.95	\$ 0.72	5.3%	-\$ 0.24	75%
		5000	\$ 0.80	\$ 1.10	\$ 0.84	5.3%	-\$ 0.26	77%
		6000	\$ 0.93	\$ 1.26	\$ 0.98	5.3%	-\$ 0.28	78%
		7000	\$ 1.08	\$ 1.44	\$ 1.14	5.3%	-\$ 0.30	79%
		8000	\$ 1.23	\$ 1.63	\$ 1.30	5.3%	-\$ 0.33	80%
		9000	\$ 1.40	\$ 1.84	\$ 1.47	5.3%	-\$ 0.36	80%
		10,000	\$ 1.58	\$ 2.06	\$ 1.66	5.3%	-\$ 0.40	81%
		11,000	\$ 1.78	\$ 2.31	\$ 1.87	5.3%	-\$ 0.43	81%
		12,000	\$ 2.00	\$ 2.57	\$ 2.11	5.3%	-\$ 0.46	82%
		13,000	\$ 2.24	\$ 2.85	\$ 2.36	5.3%	-\$ 0.49	83%
14,000	\$ 2.48	\$ 3.16	\$ 2.61	5.3%	-\$ 0.55	83%		

Vehicle type		Additional Weight (KGs)	Current RUC rate	2020 CAM rate	2020 Proposed approach:			
			(GST inc)	(GST inc)	All rates increase by 5.3% (GST inc)			
					Proposed Rate	Change (%)	Over / Under Recovery	% of the CAM rate
		15,000	\$ 2.74	\$ 3.48	\$ 2.89	5.3%	-\$ 0.60	83%
		16,000	\$ 3.04	\$ 3.84	\$ 3.20	5.3%	-\$ 0.63	83%
		17,000	\$ 3.34	\$ 4.21	\$ 3.52	5.3%	-\$ 0.69	84%
		18,000	\$ 3.67	\$ 4.61	\$ 3.86	5.3%	-\$ 0.75	84%
		19,000	\$ 4.02	\$ 5.04	\$ 4.23	5.3%	-\$ 0.81	84%
		20,000	\$ 4.40	\$ 5.50	\$ 4.63	5.3%	-\$ 0.86	84%
		Each 1000kg more than 20,000kg	\$ 0.39	\$ 0.49	\$ 0.41	5.3%	-\$ 0.08	85%
599	Self-powered all-terrain cranes with five axles	1000	\$ 0.57	\$ 0.80	\$ 0.60	5.3%	-\$ 0.20	75%
		2000	\$ 0.65	\$ 0.91	\$ 0.68	5.3%	-\$ 0.22	76%
		3000	\$ 0.75	\$ 1.02	\$ 0.79	5.3%	-\$ 0.23	77%
		4000	\$ 0.85	\$ 1.15	\$ 0.90	5.3%	-\$ 0.25	78%
		5000	\$ 0.96	\$ 1.28	\$ 1.01	5.3%	-\$ 0.27	79%
		6000	\$ 1.09	\$ 1.43	\$ 1.15	5.3%	-\$ 0.28	80%
		7000	\$ 1.22	\$ 1.59	\$ 1.28	5.3%	-\$ 0.30	81%
		8000	\$ 1.35	\$ 1.76	\$ 1.42	5.3%	-\$ 0.34	81%
		9000	\$ 1.50	\$ 1.94	\$ 1.58	5.3%	-\$ 0.36	82%
		10,000	\$ 1.67	\$ 2.13	\$ 1.76	5.3%	-\$ 0.37	82%
		11,000	\$ 1.83	\$ 2.34	\$ 1.93	5.3%	-\$ 0.41	82%
		12,000	\$ 2.00	\$ 2.56	\$ 2.11	5.3%	-\$ 0.45	82%
		13,000	\$ 2.19	\$ 2.79	\$ 2.31	5.3%	-\$ 0.49	83%
		14,000	\$ 2.41	\$ 3.05	\$ 2.54	5.3%	-\$ 0.51	83%
		15,000	\$ 2.62	\$ 3.31	\$ 2.76	5.3%	-\$ 0.55	83%
		16,000	\$ 2.85	\$ 3.59	\$ 3.00	5.3%	-\$ 0.59	83%
		17,000	\$ 3.09	\$ 3.89	\$ 3.25	5.3%	-\$ 0.64	84%
18,000	\$ 3.34	\$ 4.21	\$ 3.52	5.3%	-\$ 0.69	84%		
19,000	\$ 3.62	\$ 4.55	\$ 3.81	5.3%	-\$ 0.73	84%		
20,000	\$ 3.91	\$ 4.90	\$ 4.12	5.3%	-\$ 0.78	84%		

Vehicle type		Additional Weight (KGs)	Current RUC rate	2020 CAM rate	2020 Proposed approach:			
			(GST inc)	(GST inc)	All rates increase by 5.3% (GST inc)			
					Proposed Rate	Change (%)	Over / Under Recovery	% of the CAM rate
		Each 1000kg more than 20,000kg	\$ 0.30	\$ 0.37	\$ 0.32	5.3%	-\$ 0.06	84%
699	Self-powered all-terrain cranes with six axles	1000	\$ 0.80	\$ 1.07	\$ 0.84	5.3%	-\$ 0.23	79%
		2000	\$ 0.89	\$ 1.18	\$ 0.94	5.3%	-\$ 0.25	79%
		3000	\$ 0.98	\$ 1.30	\$ 1.03	5.3%	-\$ 0.27	79%
		4000	\$ 1.10	\$ 1.43	\$ 1.16	5.3%	-\$ 0.27	81%
		5000	\$ 1.20	\$ 1.57	\$ 1.26	5.3%	-\$ 0.30	81%
		6000	\$ 1.33	\$ 1.71	\$ 1.40	5.3%	-\$ 0.31	82%
		7000	\$ 1.46	\$ 1.87	\$ 1.54	5.3%	-\$ 0.33	82%
		8000	\$ 1.58	\$ 2.03	\$ 1.66	5.3%	-\$ 0.37	82%
		9000	\$ 1.73	\$ 2.20	\$ 1.82	5.3%	-\$ 0.38	83%
		10,000	\$ 1.87	\$ 2.39	\$ 1.97	5.3%	-\$ 0.42	83%
		11,000	\$ 2.04	\$ 2.58	\$ 2.15	5.3%	-\$ 0.43	83%
		12,000	\$ 2.20	\$ 2.78	\$ 2.32	5.3%	-\$ 0.47	83%
		13,000	\$ 2.38	\$ 3.00	\$ 2.51	5.3%	-\$ 0.50	84%
		14,000	\$ 2.57	\$ 3.23	\$ 2.71	5.3%	-\$ 0.52	84%
		15,000	\$ 2.75	\$ 3.47	\$ 2.90	5.3%	-\$ 0.57	83%
		16,000	\$ 2.96	\$ 3.72	\$ 3.12	5.3%	-\$ 0.61	84%
		17,000	\$ 3.19	\$ 3.99	\$ 3.36	5.3%	-\$ 0.63	84%
		18,000	\$ 3.41	\$ 4.27	\$ 3.59	5.3%	-\$ 0.68	84%
19,000	\$ 3.66	\$ 4.56	\$ 3.85	5.3%	-\$ 0.71	84%		
20,000	\$ 3.91	\$ 4.87	\$ 4.12	5.3%	-\$ 0.75	85%		
		Each 1000kg more than 20,000kg	\$ 0.26	\$ 0.32	\$ 0.27	5.3%	-\$ 0.05	85%
799	Self-powered all-terrain cranes with seven axles	1000	\$ 0.94	\$ 1.25	\$ 0.99	5.3%	-\$ 0.26	79%
		2000	\$ 1.03	\$ 1.36	\$ 1.08	5.3%	-\$ 0.27	80%
		3000	\$ 1.13	\$ 1.47	\$ 1.19	5.3%	-\$ 0.28	81%
		4000	\$ 1.23	\$ 1.59	\$ 1.30	5.3%	-\$ 0.30	81%

Vehicle type		Additional Weight (KGs)	Current RUC rate	2020 CAM rate	2020 Proposed approach:			
			(GST inc)	(GST inc)	All rates increase by 5.3% (GST inc)			
					Proposed Rate	Change (%)	Over / Under Recovery	% of the CAM rate
	5000	\$ 1.33	\$ 1.72	\$ 1.40	5.3%	-\$ 0.32	81%	
	6000	\$ 1.46	\$ 1.86	\$ 1.54	5.3%	-\$ 0.32	83%	
	7000	\$ 1.56	\$ 2.01	\$ 1.64	5.3%	-\$ 0.36	82%	
	8000	\$ 1.69	\$ 2.16	\$ 1.78	5.3%	-\$ 0.38	82%	
	9000	\$ 1.81	\$ 2.32	\$ 1.91	5.3%	-\$ 0.41	82%	
	10,000	\$ 1.96	\$ 2.49	\$ 2.06	5.3%	-\$ 0.42	83%	
	11,000	\$ 2.11	\$ 2.67	\$ 2.22	5.3%	-\$ 0.44	83%	
	12,000	\$ 2.26	\$ 2.85	\$ 2.38	5.3%	-\$ 0.47	83%	
	13,000	\$ 2.42	\$ 3.05	\$ 2.55	5.3%	-\$ 0.50	84%	
	14,000	\$ 2.58	\$ 3.25	\$ 2.72	5.3%	-\$ 0.54	84%	
	15,000	\$ 2.75	\$ 3.47	\$ 2.90	5.3%	-\$ 0.57	84%	
	16,000	\$ 2.93	\$ 3.69	\$ 3.09	5.3%	-\$ 0.61	84%	
	17,000	\$ 3.13	\$ 3.93	\$ 3.30	5.3%	-\$ 0.63	84%	
	18,000	\$ 3.33	\$ 4.17	\$ 3.51	5.3%	-\$ 0.67	84%	
	19,000	\$ 3.54	\$ 4.43	\$ 3.73	5.3%	-\$ 0.70	84%	
	20,000	\$ 3.76	\$ 4.70	\$ 3.96	5.3%	-\$ 0.74	84%	
		Each 1000kg more than 20,000kg	\$ 0.23	\$ 0.28	\$ 0.24	5.3%	-\$ 0.04	87%
5 axle combination	1000	\$ 1.12	\$ 1.17	\$ 1.18	5.3%	\$ 0.01	100%	
	2000	\$ 1.12	\$ 1.29	\$ 1.18	5.3%	-\$ 0.11	91%	
	3000	\$ 1.12	\$ 1.42	\$ 1.18	5.3%	-\$ 0.24	83%	
	4000	\$ 1.67	\$ 1.55	\$ 1.76	5.3%	\$ 0.20	113%	
	5000	\$ 1.67	\$ 1.70	\$ 1.76	5.3%	\$ 0.06	103%	
	6000	\$ 1.67	\$ 1.86	\$ 1.76	5.3%	-\$ 0.10	95%	
	7000	\$ 2.08	\$ 2.03	\$ 2.19	5.3%	\$ 0.16	108%	
	8000	\$ 2.08	\$ 2.21	\$ 2.19	5.3%	-\$ 0.02	99%	
	9000	\$ 2.58	\$ 2.40	\$ 2.72	5.3%	\$ 0.31	113%	
	10,000	\$ 2.85	\$ 2.61	\$ 3.00	5.3%	\$ 0.39	115%	

Vehicle type		Additional Weight (KGs)	Current RUC rate	2020 CAM rate	2020 Proposed approach:			
			(GST inc)	(GST inc)	All rates increase by 5.3% (GST inc)			
					Proposed Rate	Change (%)	Over / Under Recovery	% of the CAM rate
		11,000	\$ 3.14	\$ 2.83	\$ 3.31	5.3%	\$ 0.47	117%
		12,000	\$ 3.45	\$ 3.07	\$ 3.63	5.3%	\$ 0.56	118%
		13,000	\$ 3.78	\$ 3.32	\$ 3.98	5.3%	\$ 0.66	120%
		14,000	\$ 4.13	\$ 3.59	\$ 4.35	5.3%	\$ 0.76	121%
		15,000	\$ 4.50	\$ 3.87	\$ 4.74	5.3%	\$ 0.87	122%
		16,000	\$ 4.90	\$ 4.17	\$ 5.16	5.3%	\$ 0.99	124%
		17,000	\$ 5.32	\$ 4.49	\$ 5.60	5.3%	\$ 1.11	125%
		18,000	\$ 5.75	\$ 4.82	\$ 6.05	5.3%	\$ 1.23	126%
		19,000	\$ 6.21	\$ 5.18	\$ 6.54	5.3%	\$ 1.36	126%
		20,000	\$ 6.71	\$ 5.55	\$ 7.07	5.3%	\$ 1.51	127%
		Each 1000kg more than 20,000kg	\$ 0.52	\$ 0.40	\$ 0.55	5.3%	\$ 0.15	138%
6 axle combination		1000	\$ 0.62	\$ 0.94	\$ 0.65	5.3%	-\$ 0.29	69%
		2000	\$ 0.62	\$ 1.02	\$ 0.65	5.3%	-\$ 0.37	64%
		3000	\$ 0.62	\$ 1.11	\$ 0.65	5.3%	-\$ 0.46	59%
		4000	\$ 0.84	\$ 1.21	\$ 0.88	5.3%	-\$ 0.32	73%
		5000	\$ 0.84	\$ 1.31	\$ 0.88	5.3%	-\$ 0.42	68%
		6000	\$ 1.23	\$ 1.41	\$ 1.30	5.3%	-\$ 0.12	92%
		7000	\$ 1.23	\$ 1.53	\$ 1.30	5.3%	-\$ 0.23	85%
		8000	\$ 1.23	\$ 1.65	\$ 1.30	5.3%	-\$ 0.35	79%
		9000	\$ 1.23	\$ 1.78	\$ 1.30	5.3%	-\$ 0.48	73%
		10,000	\$ 1.71	\$ 1.91	\$ 1.80	5.3%	-\$ 0.11	94%
		11,000	\$ 1.89	\$ 2.06	\$ 1.99	5.3%	-\$ 0.07	97%
		12,000	\$ 2.08	\$ 2.21	\$ 2.19	5.3%	-\$ 0.02	99%
		13,000	\$ 2.28	\$ 2.38	\$ 2.40	5.3%	\$ 0.03	101%
		14,000	\$ 2.49	\$ 2.55	\$ 2.62	5.3%	\$ 0.07	103%
		15,000	\$ 2.72	\$ 2.73	\$ 2.86	5.3%	\$ 0.13	105%
	16,000	\$ 2.96	\$ 2.92	\$ 3.12	5.3%	\$ 0.20	107%	

Vehicle type		Additional Weight (KGs)	Current RUC rate	2020 CAM rate	2020 Proposed approach:			
			(GST inc)	(GST inc)	All rates increase by 5.3% (GST inc)			
					Proposed Rate	Change (%)	Over / Under Recovery	% of the CAM rate
	17,000	\$ 3.21	\$ 3.12	\$ 3.38	5.3%	\$ 0.26	108%	
	18,000	\$ 3.48	\$ 3.34	\$ 3.66	5.3%	\$ 0.33	110%	
	19,000	\$ 3.76	\$ 3.56	\$ 3.96	5.3%	\$ 0.40	111%	
	20,000	\$ 4.05	\$ 3.80	\$ 4.26	5.3%	\$ 0.47	112%	
	Each 1000kg more than 20,000kg	\$ 0.31	\$ 0.25	\$ 0.33	5.3%	\$ 0.08	131%	
7 axle combination	1000	\$ 0.41	\$ 0.85	\$ 0.43	5.3%	-\$ 0.42	51%	
	2000	\$ 0.41	\$ 0.92	\$ 0.43	5.3%	-\$ 0.49	47%	
	3000	\$ 0.41	\$ 0.99	\$ 0.43	5.3%	-\$ 0.56	43%	
	4000	\$ 0.68	\$ 1.07	\$ 0.72	5.3%	-\$ 0.35	67%	
	5000	\$ 0.68	\$ 1.15	\$ 0.72	5.3%	-\$ 0.44	62%	
	6000	\$ 0.68	\$ 1.24	\$ 0.72	5.3%	-\$ 0.52	58%	
	7000	\$ 0.68	\$ 1.33	\$ 0.72	5.3%	-\$ 0.61	54%	
	8000	\$ 1.01	\$ 1.43	\$ 1.06	5.3%	-\$ 0.37	74%	
	9000	\$ 1.01	\$ 1.53	\$ 1.06	5.3%	-\$ 0.47	69%	
	10,000	\$ 1.40	\$ 1.64	\$ 1.47	5.3%	-\$ 0.17	90%	
	11,000	\$ 1.40	\$ 1.76	\$ 1.47	5.3%	-\$ 0.29	84%	
	12,000	\$ 1.40	\$ 1.88	\$ 1.47	5.3%	-\$ 0.41	78%	
	13,000	\$ 1.71	\$ 2.01	\$ 1.80	5.3%	-\$ 0.21	89%	
	14,000	\$ 1.88	\$ 2.15	\$ 1.98	5.3%	-\$ 0.17	92%	
	15,000	\$ 2.05	\$ 2.29	\$ 2.16	5.3%	-\$ 0.13	94%	
	16,000	\$ 2.23	\$ 2.45	\$ 2.35	5.3%	-\$ 0.10	96%	
	17,000	\$ 2.43	\$ 2.61	\$ 2.56	5.3%	-\$ 0.05	98%	
	18,000	\$ 2.63	\$ 2.77	\$ 2.77	5.3%	-\$ 0.00	100%	
19,000	\$ 2.84	\$ 2.95	\$ 2.99	5.3%	\$ 0.04	101%		
20,000	\$ 3.07	\$ 3.14	\$ 3.23	5.3%	\$ 0.10	103%		
Each 1000kg more than 20,000kg	\$ 0.23	\$ 0.19	\$ 0.24	5.3%	\$ 0.05	125%		

Vehicle type		Additional Weight (KGs)	Current RUC rate	2020 CAM rate	2020 Proposed approach:			
			(GST inc)	(GST inc)	All rates increase by 5.3% (GST inc)			
					Proposed Rate	Change (%)	Over / Under Recovery	% of the CAM rate
8 axle combination		1000	\$ 0.35	\$ 0.70	\$ 0.37	5.3%	-\$ 0.33	53%
		2000	\$ 0.35	\$ 0.75	\$ 0.37	5.3%	-\$ 0.38	49%
		3000	\$ 0.35	\$ 0.80	\$ 0.37	5.3%	-\$ 0.44	46%
		4000	\$ 0.35	\$ 0.86	\$ 0.37	5.3%	-\$ 0.49	43%
		5000	\$ 0.75	\$ 0.92	\$ 0.79	5.3%	-\$ 0.13	86%
		6000	\$ 0.75	\$ 0.99	\$ 0.79	5.3%	-\$ 0.20	80%
		7000	\$ 0.75	\$ 1.06	\$ 0.79	5.3%	-\$ 0.27	75%
		8000	\$ 0.75	\$ 1.13	\$ 0.79	5.3%	-\$ 0.34	70%
		9000	\$ 0.75	\$ 1.21	\$ 0.79	5.3%	-\$ 0.42	65%
		10,000	\$ 1.29	\$ 1.29	\$ 1.36	5.3%	\$ 0.07	105%
		11,000	\$ 1.29	\$ 1.37	\$ 1.36	5.3%	-\$ 0.02	99%
		12,000	\$ 1.29	\$ 1.47	\$ 1.36	5.3%	-\$ 0.11	93%
		13,000	\$ 1.29	\$ 1.56	\$ 1.36	5.3%	-\$ 0.20	87%
		14,000	\$ 1.29	\$ 1.66	\$ 1.36	5.3%	-\$ 0.30	82%
		15,000	\$ 1.69	\$ 1.77	\$ 1.78	5.3%	\$ 0.01	101%
		16,000	\$ 1.83	\$ 1.88	\$ 1.93	5.3%	\$ 0.05	102%
		17,000	\$ 1.98	\$ 2.00	\$ 2.08	5.3%	\$ 0.09	104%
		18,000	\$ 2.14	\$ 2.12	\$ 2.25	5.3%	\$ 0.13	106%
		19,000	\$ 2.31	\$ 2.25	\$ 2.43	5.3%	\$ 0.18	108%
	20,000	\$ 2.49	\$ 2.39	\$ 2.62	5.3%	\$ 0.24	110%	
	Each 1000kg more than 20,000kg	\$ 0.19	\$ 0.14	\$ 0.20	5.3%	\$ 0.06	141%	
9 axle combination		1000	\$ 0.02	\$ 0.45	\$ 0.02	5.3%	-\$ 0.43	5%
		2000	\$ 0.02	\$ 0.48	\$ 0.02	5.3%	-\$ 0.46	4%
		3000	\$ 0.02	\$ 0.51	\$ 0.02	5.3%	-\$ 0.49	4%
		4000	\$ 0.02	\$ 0.54	\$ 0.02	5.3%	-\$ 0.52	4%
		5000	\$ 0.02	\$ 0.57	\$ 0.02	5.3%	-\$ 0.55	4%
		6000	\$ 0.02	\$ 0.61	\$ 0.02	5.3%	-\$ 0.59	3%

Vehicle type		Additional Weight (KGs)	Current RUC rate	2020 CAM rate	2020 Proposed approach:			
			(GST inc)	(GST inc)	All rates increase by 5.3% (GST inc)			
					Proposed Rate	Change (%)	Over / Under Recovery	% of the CAM rate
	7000	\$ 0.21	\$ 0.65	\$ 0.22	5.3%	-\$ 0.42	34%	
	8000	\$ 0.21	\$ 0.69	\$ 0.22	5.3%	-\$ 0.46	32%	
	9000	\$ 0.21	\$ 0.73	\$ 0.22	5.3%	-\$ 0.51	30%	
	10,000	\$ 0.21	\$ 0.77	\$ 0.22	5.3%	-\$ 0.55	29%	
	11,000	\$ 0.45	\$ 0.82	\$ 0.47	5.3%	-\$ 0.34	58%	
	12,000	\$ 0.45	\$ 0.87	\$ 0.47	5.3%	-\$ 0.39	55%	
	13,000	\$ 0.45	\$ 0.92	\$ 0.47	5.3%	-\$ 0.45	52%	
	14,000	\$ 0.45	\$ 0.97	\$ 0.47	5.3%	-\$ 0.50	49%	
	15,000	\$ 0.66	\$ 1.03	\$ 0.69	5.3%	-\$ 0.34	67%	
	16,000	\$ 0.75	\$ 1.09	\$ 0.79	5.3%	-\$ 0.30	72%	
	17,000	\$ 0.83	\$ 1.16	\$ 0.87	5.3%	-\$ 0.28	76%	
	18,000	\$ 0.92	\$ 1.22	\$ 0.97	5.3%	-\$ 0.25	79%	
	19,000	\$ 1.01	\$ 1.29	\$ 1.06	5.3%	-\$ 0.23	82%	
	20,000	\$ 1.11	\$ 1.37	\$ 1.17	5.3%	-\$ 0.20	86%	
	Each 1000kg more than 20,000kg	\$ 0.11	\$ 0.08	\$ 0.12	5.3%	\$ 0.04	151%	
10 axle combination	1000	\$ 0.03	\$ 0.39	\$ 0.03	5.3%	-\$ 0.35	8%	
	2000	\$ 0.03	\$ 0.41	\$ 0.03	5.3%	-\$ 0.38	8%	
	3000	\$ 0.03	\$ 0.43	\$ 0.03	5.3%	-\$ 0.40	7%	
	4000	\$ 0.03	\$ 0.45	\$ 0.03	5.3%	-\$ 0.42	7%	
	5000	\$ 0.03	\$ 0.48	\$ 0.03	5.3%	-\$ 0.45	7%	
	6000	\$ 0.03	\$ 0.51	\$ 0.03	5.3%	-\$ 0.48	6%	
	7000	\$ 0.03	\$ 0.54	\$ 0.03	5.3%	-\$ 0.51	6%	
	8000	\$ 0.03	\$ 0.57	\$ 0.03	5.3%	-\$ 0.54	6%	
	9000	\$ 0.03	\$ 0.60	\$ 0.03	5.3%	-\$ 0.57	5%	
	10,000	\$ 0.03	\$ 0.64	\$ 0.03	5.3%	-\$ 0.60	5%	
	11,000	\$ 0.03	\$ 0.67	\$ 0.03	5.3%	-\$ 0.64	5%	
	12,000	\$ 0.31	\$ 0.71	\$ 0.33	5.3%	-\$ 0.38	46%	

Vehicle type		Additional Weight (KGs)	Current RUC rate	2020 CAM rate	2020 Proposed approach:			
			(GST inc)	(GST inc)	All rates increase by 5.3% (GST inc)			
					Proposed Rate	Change (%)	Over / Under Recovery	% of the CAM rate
	13,000	\$ 0.31	\$ 0.75	\$ 0.33	5.3%	-\$ 0.42	43%	
	14,000	\$ 0.31	\$ 0.79	\$ 0.33	5.3%	-\$ 0.47	41%	
	15,000	\$ 0.31	\$ 0.84	\$ 0.33	5.3%	-\$ 0.51	39%	
	16,000	\$ 0.31	\$ 0.89	\$ 0.33	5.3%	-\$ 0.56	37%	
	17,000	\$ 0.52	\$ 0.94	\$ 0.55	5.3%	-\$ 0.39	59%	
	18,000	\$ 0.52	\$ 0.99	\$ 0.55	5.3%	-\$ 0.44	55%	
	19,000	\$ 0.52	\$ 1.04	\$ 0.55	5.3%	-\$ 0.49	53%	
	20,000	\$ 0.60	\$ 1.10	\$ 0.63	5.3%	-\$ 0.47	58%	
	Each 1000kg more than 20,000kg	\$ 0.07	\$ 0.06	\$ 0.07	5.3%	\$ 0.01	124%	
11 axle combination	1000	\$ 0.04	\$ 0.31	\$ 0.04	5.3%	-\$ 0.27	14%	
	2000	\$ 0.04	\$ 0.33	\$ 0.04	5.3%	-\$ 0.28	13%	
	3000	\$ 0.04	\$ 0.34	\$ 0.04	5.3%	-\$ 0.30	12%	
	4000	\$ 0.04	\$ 0.36	\$ 0.04	5.3%	-\$ 0.32	12%	
	5000	\$ 0.04	\$ 0.38	\$ 0.04	5.3%	-\$ 0.33	11%	
	6000	\$ 0.04	\$ 0.40	\$ 0.04	5.3%	-\$ 0.35	11%	
	7000	\$ 0.04	\$ 0.42	\$ 0.04	5.3%	-\$ 0.37	10%	
	8000	\$ 0.04	\$ 0.44	\$ 0.04	5.3%	-\$ 0.39	10%	
	9000	\$ 0.04	\$ 0.46	\$ 0.04	5.3%	-\$ 0.42	9%	
	10,000	\$ 0.04	\$ 0.48	\$ 0.04	5.3%	-\$ 0.44	9%	
	11,000	\$ 0.04	\$ 0.51	\$ 0.04	5.3%	-\$ 0.47	8%	
	12,000	\$ 0.04	\$ 0.53	\$ 0.04	5.3%	-\$ 0.49	8%	
	13,000	\$ 0.04	\$ 0.56	\$ 0.04	5.3%	-\$ 0.52	8%	
	14,000	\$ 0.04	\$ 0.59	\$ 0.04	5.3%	-\$ 0.55	7%	
	15,000	\$ 0.04	\$ 0.62	\$ 0.04	5.3%	-\$ 0.58	7%	
	16,000	\$ 0.04	\$ 0.65	\$ 0.04	5.3%	-\$ 0.61	6%	
17,000	\$ 0.18	\$ 0.69	\$ 0.19	5.3%	-\$ 0.50	28%		
18,000	\$ 0.18	\$ 0.72	\$ 0.19	5.3%	-\$ 0.53	26%		

Vehicle type			Current RUC rate	2020 CAM rate	2020 Proposed approach:			
					All rates increase by 5.3% (GST inc)			
					Additional Weight (KGs)	(GST inc)	(GST inc)	Proposed Rate
		19,000	\$ 0.18	\$ 0.76	\$ 0.19	5.3%	-\$ 0.57	25%
		20,000	\$ 0.22	\$ 0.80	\$ 0.23	5.3%	-\$ 0.56	29%
		Each 1000kg more than 20,000kg	\$ 0.05	\$ 0.04	\$ 0.05	5.3%	\$ 0.01	131%

Appendix B - Explanation of the Methodology for determining Road User charges rates (the Ministry of Transport Cost Allocation Model)

RUC is long-established, stable, and remains world-leading

60. New Zealand's road user charges (RUC) regime was first set in place in 1977. There have been multiple substantive reviews and analysis of the system since its inception. However, throughout the time it has been in place its core concept, that charges are derived based on a vehicle's distance travelled and contribution to road wear, remains unchanged.
61. A comprehensive review of the entire RUC system was carried out by an independent review group in 2008/09. This led to replacement of the 1977 legislation with the Road User Charges Act 2012 and associated regulations⁵. The main reform under this legislation was to change the way that vehicle weights are defined for RUC purposes from operator nominated laden weight to a fixed "RUC weight" based on the vehicle's maximum legal on-road weight.
62. Since the 2012 reforms the Government has continued to review and assess the RUC scheme. While individual vehicle owners may have concerns over specific elements of the RUC system⁶, an independent evaluation of the 2012 Act⁷ that concluded in 2016, found no serious concerns with RUC from either a policy perspective or a user perspective. One area where there may be opportunity for future reform is that RUC still largely requires manual transactions and paper labels. This was reasonable in 1977 but seems dated in 2020.
63. Despite its age, New Zealand's RUC system is considered world-leading. Many jurisdictions around the world are now looking to move away from fuel taxes to distance based charges as a way to ensure their future revenue streams. The Ministry of Transport is regularly asked to speak to international delegations and conferences about our system.

The RUC system is intended to recover charges from vehicles in proportion to the costs they generate

64. Petrol excise duty (PED) and RUC are the two major sources of revenue for the Government's National Land Transport Fund (NLTF). Revenue from PED and RUC provide the NLTF with sufficient revenue to deliver the Government's land transport priorities. The prescribed RUC rates are set to recover charges from vehicle operators in proportion to the costs their vehicle's generate, as well as providing the share of revenue from these vehicles that is needed to meet the Government's overall transport priorities.

⁵ www.transport.govt.nz/land/road-user-charges-ruc-and-petrol-excise-duty-ped/roaduserchargeslegislationchanges/

⁶ For example owners of fuel efficient diesel vehicles may be concerned they are paying more tax than equivalent petrol vehicles, and owners of mobile homes also feel that they are overcharged due to their different usage patterns from commercial vehicles.

⁷ www.transport.govt.nz/assets/Uploads/News/Documents/d72418c14d/RUC-Evaluation-Cycle-3.pdf

65. Depending on their axle configuration and weight, different types of vehicle contribute differently to each of the costs of the transport system. For this reason, vehicles are grouped into RUC vehicle types and each vehicle type is charged a different rate based on key attributes.
66. The largest RUC vehicle type are light RUC vehicles. These are vehicles that do not use petrol as their primary fuel⁸ and which have a gross vehicle mass up to 3.5 tonnes. Light RUC vehicles are almost all commercial vehicles, such as vans, utes and SUVs. Unlike Europe, there are relatively few diesel passenger cars in New Zealand, which may be a reflection of effects of having to pay RUC. There were approximately 750,000 light RUC vehicles in the New Zealand vehicle fleet at the end of 2018.
67. Vehicles weighing less than around 6 tonnes do almost no damage to roads and so they impose very similar costs on the road network. For this reason all light RUC vehicles pay the same RUC rate - \$72.00 per 1,000 kilometres (incl GST) as at 1 July 2019. It is proposed that this will be raised to be \$76 from 1 July 2020.
68. Since 2012, the amount of RUC paid by light vehicles has been set so it is equivalent to that paid in PED by a petrol vehicle consuming the average amount of fuel (9.5l/100km). Petrol vehicles with a fuel consumption more than 9.5l/100km will pay more excise duty to use the road network than vehicles that pay RUC, and those that use less than 9.5l/100km will pay less.
69. Heavy vehicles, of which there are approximately 190,000, including heavy trailers, vary much more in weight and axle configuration than light vehicles. The wide range of RUC vehicle types means that a wide range of RUC rates apply to these. However, most heavy vehicles, however, fall into one of four standard powered vehicle types and five trailer types.
70. As well as recovering the 'common costs' faced by all road users (see blow), there are a number of additional factors that are used to determine the RUC rate for heavy vehicles, including:
 - 70.1. the damage and wear a vehicle causes to the road surfaces
 - 70.2. the stress that vehicle weight places on bridges and other structures
 - 70.3. the space a vehicle takes up on the road
 - 70.4. the costs of enforcing heavy vehicle rules and regulations.
71. Each vehicle contributes differently to each of these costs depending on its axle configuration and weight. Vehicles are grouped into RUC vehicle types, some of which are in turn divided into weight bands (eg there are four weight bands within vehicle type 2, which includes most two axle trucks). Each vehicle type and weight band is charged a different rate.

⁸ LPG and CNG are considered as being 'petrol' as they pay fuel excise directly. Electric vehicles are currently exempted from paying RUC but light electric vehicles will commence paying RUC in 2022 and heavy vehicles in 2026. Vehicles using other fuels, such as hydrogen, are already subject to RUC.

RUC rates are based on Cost Allocation Model calculations

72. To calculate the appropriate RUC rate for each RUC vehicle type (and weight band where applicable) the Ministry of Transport uses a cost allocation model (CAM). The CAM is a cost recovery model based on a set of physical engineering principles and engineering expert based judgements. The model is also broadly consistent with cost accounting and economic principles.
73. The current CAM is a spreadsheet-based model that has been used by the Ministry of Transport to set RUC rates for each RUC vehicle type. While some elements of the CAM have been questioned (especially the fourth power rule discussed further below), all assessments have accepted its general fitness for use. A 2008 report by Infometrics that summarised previous reviews of the CAM concluded:
- “The CAM has served its purpose rather well. Structurally it represents a sound approach to dealing with recovering the costs of road use and presenting users with prices that are a reasonable representation of long run marginal costs.”⁹*
74. To determine the appropriate allocation of costs, the CAM assigns a share of the expenditure from the National Land Transport Programme (NLTP)¹⁰ to each kilometre travelled by each vehicle¹¹. These assumptions and engineering principles are explained below.
75. The CAM’s RUC calculation is driven by three key inputs:
- 75.1. Expenditure by activity class and work category. Since 2019, the CAM has used forecast expenditure as set out in the NLTP. This ensures that vehicle charges reflect the expected costs that occur in the year in which the RUC is paid¹².
- 75.2. Forecast vehicle kilometres travelled (VKT) by each RUC vehicle type for the year for which the rates are being set.
- 75.3. Revenue from other sources. The most significant other source is PED. Others are motor vehicle registration and licensing fees along with other minor fees and charges and excise duty on CNG and LPG.
76. Base rates are calculated by the CAM to allocate costs fairly and equitably, consistent with the five cost categories discussed below, across all vehicle types.
77. Engineering principles are used to classify planned expenditure set out in the NLTP into five categories of costs. These categories are then allocated by the CAM to the individual RUC vehicle types. Figure 1 below shows how the NLTP expenditure is allocated to RUC.¹³

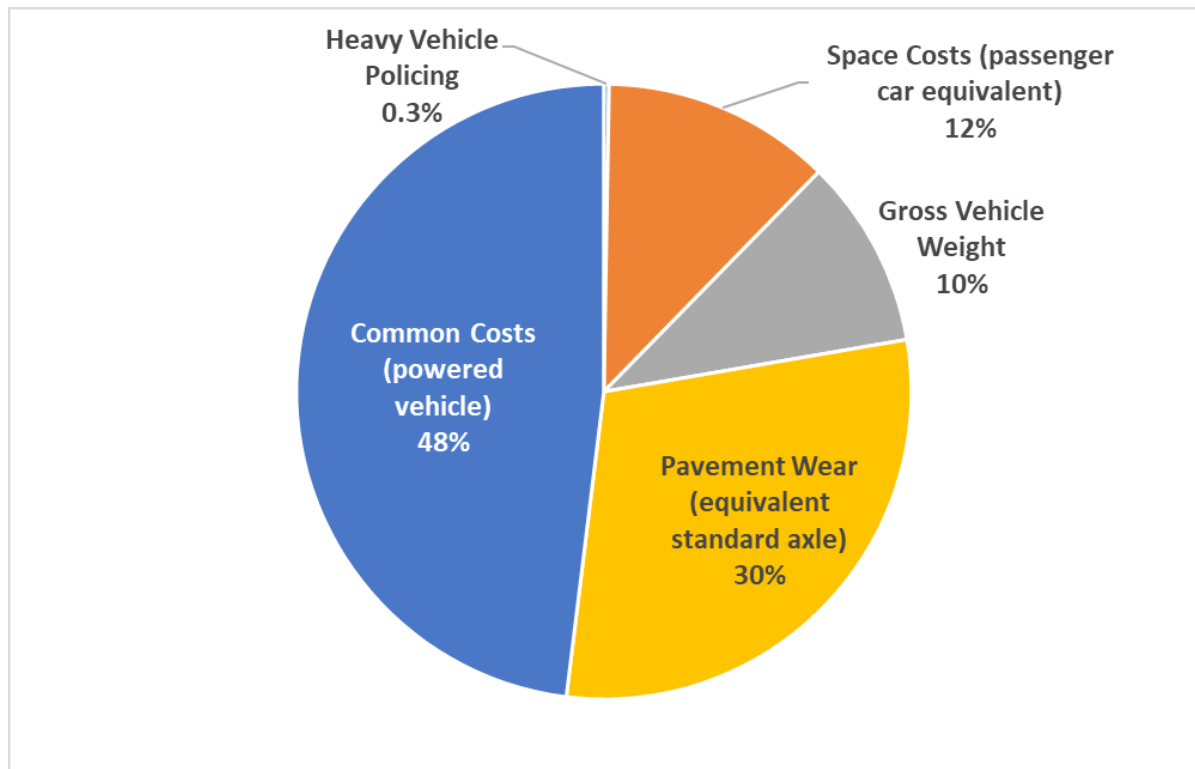
⁹ Economic Assessment of the Cost Allocation Model, Infometrics 2008

¹⁰ www.nzta.govt.nz/planning-and-investment/national-land-transport-programme/2018-21-nltp/

¹¹ This includes assigning a share of NLTP expenditure to petrol (PED) vehicles. It is forecast for 2019/20 that PED will fund 37% of the NLTP and RUC 31%. The rest of the NLTP expenditure is offset by rate payer funding, motor vehicle licensing and other Crown revenue.

¹² Distortions can emerge if the actual expenditure varies significantly from that forecast

Figure 1: 2019/20 NLTP expenditure by cost category as percentage of total RUC revenue



78. The five cost categories and method of allocation are described below¹⁴:

78.1. **Pavement wear costs (referred to in the model as “equivalent standard axle (ESA)”)** are allocated using a formula that calculates a wear index for a vehicle based on its assumed average laden weight, and tyre and axle layout. Essentially this is an assessment of the damage that the vehicle does to the road surface.

For 2020/21 there are about \$512 million of pavement wear costs allocated to heavy RUC vehicles, 93% of total pavement wear costs (\$552 million). The category of pavement wear costs includes pavement maintenance, resurfacing and rehabilitation. It also includes the estimated costs of adding wear resistance to pavements intended to carry heavy traffic.

78.2. **Space related costs** are allocated according to a vehicle’s classification in terms of “passenger car equivalents”. For example, a rigid truck is considered to be equal to two passenger vehicle equivalents. A truck towing a heavy trailer is equal to three passenger vehicle equivalents.

¹³ The classification does not include externalities such as congestion, noise, and emissions. These costs are not directly part of the roading system.

¹⁴ Cost allocations are based on international engineering best practice and evidence, and has been adapted for a New Zealand context. The Ministry last had this methodology independently reviewed in November 2010 (*Advice on the Allocation of National Land Transport Programme Costs* (GHD, ARRB Group, 2010)), and the Ministry believes that it remains sound.

For 2020/21 there are \$76 million of space related costs allocated to heavy RUC vehicles, 15% of total space related costs (\$518 million). Most of these costs are for State highway construction, property purchases and local road construction.

78.3. **Gross vehicle weight related costs** are allocated in proportion to the average laden weight of vehicles in each RUC vehicle class. Gross vehicle weight is used because it is based on the average laden weight of the vehicle in use, not its maximum allowable weight. Gross vehicle weight costs are related to the required structural strength of bridges and other structures and are assumed to vary according to kilometres travelled by the vehicle type multiplied by the total gross vehicle weight.

78.4. For 2020/21 there are \$115 million of gross weight related costs allocated to heavy RUC vehicles, 40% of the total of such costs (\$287 million). This includes significant shares of sealed road resurfacing and new roads, especially bridges.

78.5. **Heavy vehicle policing costs** are attributed equally to all vehicles over six tonne gross vehicle mass (GVM).

For 2020/21 there are \$28 million of heavy vehicle costs allocated to heavy RUC vehicles. Most of these costs relate to enforcement of regulations specific to heavy vehicles by the New Zealand Police's Commercial Vehicle Safety Team.

78.6. **Common costs (powered vehicle costs)** are shared equally between all on-road powered vehicles. Powered vehicles include both petrol and non-petrol vehicles, but not pedal cycles, for example. Costs are allocated to all RUC vehicle types at the same rate per kilometre travelled. Common costs are costs that are not related to road wear, vehicle weight, or vehicle size. They include public transport subsidies¹⁵, general road policing (not the specific heavy vehicle enforcement noted above), road signs and marking, emergency works, and most routine road maintenance. They also include 45 percent of the costs of building new State highways and 68% of the costs of new local roads.

78.7. For 2020/21 common costs are forecast to be \$4.49 billion, less fixed revenue of \$1.55 billion made up of ratepayer funding, motor vehicle registration and licensing fees and other Crown revenue, which leaves almost \$3 billion of common costs to be recovered from RUC and PED. RUC is allocated \$941 million of these costs, of which \$207 million relates to heavy vehicles¹⁶.

79. Figure 2 below shows the resulting output of the CAM for how the costs are made up for three common vehicle types: a diesel light RUC vehicle, a medium sized truck, and a large truck and trailer combination. This shows that for a heavy vehicle road wear costs are significantly greater and contribute to a larger percentage of the overall base rate compared to light RUC vehicles.

¹⁵ Public transport benefits road users by reducing congestion.

¹⁶ The percentage of common (powered vehicle) costs allocated to heavy vehicles relates directly to their share of powered vehicle kilometres travelled (about 7%)

Figure 2: Allocation of costs making up RUC rates for three vehicle types (GST exclusive)¹⁷



80. By separating the costs by RUC vehicle type and the features of these vehicles, the CAM calculates RUC base rates in a way that ensures that heavy vehicle operators pay fairly for the additional road maintenance and construction costs that they generate.

The pavement wear assumption may not be valid for all roads in New Zealand

81. Increased weight leading to increased damage to the road pavement is the principal driver of increased RUC costs for heavy vehicles. This can clearly be seen in figure 2 above. It is well accepted that increased axle weight affects pavements exponentially ie, a doubling of axle weight does much more than double the damage. The assumption of increased weight leading to significantly greater road wear is the most important concept in the CAM.

82. The weight related damage costs are allocated according to the so called “4th power rule”. This is written as $ESA = (\text{laden weight}/\text{axle factor})^4 \times \text{load factor} \times \text{number of axles}$. The “4th power rule” is based on historical research from the USA, South Africa and NZ, and is widely accepted as a rule of thumb for road design.¹⁸ The CAM uses a single pavement damage calculation for all roads.

¹⁷ The allocation is done with GST exclusive amounts and then the total GST exclusive rate is rounded to the nearest whole dollar once GST has been added.

¹⁸ www.nzta.govt.nz/resources/research/reports/603/

83. Given that the strength of pavements varies between different types of roads, and in different parts of the country depending on the underlying geology, there has been some debate over the correct exponent (power) to use. Using a single exponent necessarily means that some vehicles may pay too much RUC and others may pay too little, depending on exactly where they travel.
84. Research has suggested that for most of our State highways a “2nd power rule” might better reflect pavement wear on well engineered roads.¹⁹ As most heavy vehicles spend most of their travel time on State highways some people argue that they may be paying too much for the damage they cause. On the other hand, many local roads and some State highways are much more vulnerable to heavy axle loads, in which case a “6th power rule” might be more appropriate for those roads.
85. For vehicles with a gross vehicle mass up to 6 tonnes, the CAM’s assessment of their contribution to pavement wear is probably correct as they do little damage regardless of the nature of the road. This is reflected in the very low RUC component for road wear (see figure 2).
86. Given the variability of pavement strengths, especially outside urban areas, that the concept is generally accepted by the heavy vehicle sector and that past reviews have found that is a valid measure, the 4th power rule remains the most appropriate assumption for road wear across the whole road network. If a future revenue collection system captured vehicle location, then the road wear factor may be able to be calculated for each section of road with similar properties, rather than all roads being average to the 4th power rule as they are now. The implications of this for RUC paid by heavy vehicle operators in different locations could, however, be very significant.

Prescribed RUC rates can differ from those determined by the Cost Allocation Model

87. While the CAM’s output is used as the basis for setting RUC rates, variations between the CAM’s base rates and the prescribed RUC rates have always existed and these have tended to increase in recent years. Some prescribed rates are currently less than the CAM indicates they should be (including the RUC rate for light vehicles) and some rates for classes of heavy vehicles are greater, sometimes significantly so. This has arisen over a number of years for the following reasons:
 - 87.1. prescribed rates have never been reduced²⁰
 - 87.2. for the last decade, the maximum increase to a prescribed RUC rate has been capped at ten percent in order to deliver a degree of stability and certainty to vehicle operators

¹⁹ Broadly speaking, the effect of using a “2nd power rule” to calculate road wear costs for RUC purposes would result in reductions in RUC for vehicles of over 9 tonnes weight capacity and increases for those falling into lower weight bands. It would also increase costs allocated to petrol powered cars.

²⁰ The approach taken to date is that RUC rates only ever increase or remain static even in circumstances where the CAM suggests they should be reduced. For example, if expenditure one year moves from State highway improvements to public transport, there will be a shift from the weight based allocated costs towards common costs. In this situation the CAM suggests that some base rates should be lower while others should be higher

- 87.3. On some occasions, desired revenue increases have been achieved by either setting a minimum percentage increase for all rates, or increasing all RUC rates by the same percentage.

The CAM does not model or allocate externalities

88. Although the CAM is considered a sound basis for allocating costs set out in the NLTP, there are costs that it does not take into account. These can include any additional risks to road safety that are specific to heavy vehicles, environmental costs associated with air pollution, climate change or water run off, along with issues like contribution to congestion and road noise. The CAM is not intended to model or allocate these costs.
89. Most such externalities, apply to all motor vehicle use and although heavy vehicles contribute more than light vehicles, per kilometre, the difference is not always on the same exponential scale as road wear.
90. The lack of an ability to assess and recover costs for negative externalities is a reason some people consider heavy vehicles may not pay their full share of costs.