

REPORT SUMMARY

THE
NEW ZEALAND
INITIATIVE

Driving Change

How Road Pricing Can Improve Our Roads

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New Zealand's transport system is at a critical juncture. Our current transport funding model, heavily reliant on fuel excise duty (FED), is not just creaking under the strain – it is fundamentally broken. This report proposes an innovative solution: a comprehensive, distance-based road pricing system called Smart Road User Charges (Smart RUC).

Key points:

1. Introduces "Smart Road User Charges" (Smart RUC) as a replacement for fuel excise duty.
2. Smart RUC would charge vehicles based on distance travelled, time of day, location, and vehicle type and weight.
3. Aims to manage congestion through variable pricing.
4. Designed to ensure sustainable funding for road maintenance.
5. Presents a 5-year, gradual implementation plan.

Smart RUC: A New Approach to Transport Funding

Smart RUC revolutionizes transport funding by implementing distance-based charges for all vehicles. This system applies fees based on distance travelled, vehicle type and weight, and time of day.

Two payment options are available: an automated "pay-as-you-drive" (PAYD) system and a pre-purchase RUC license. This flexible approach ensures fair contribution from all road users while accommodating different preferences.

Benefits of Smart RUC

Smart RUC addresses two critical issues in New Zealand's transport network: congestion and road maintenance. To manage congestion, Smart RUC implements variable pricing based on time of day and location. This reduces traffic in urban areas during peak hours. Commuters save time, and decreased traffic leads to lower emissions and improved air quality.

For road maintenance, Smart RUC provides a stable and sustainable funding source. Charges are directly linked to road use, generating revenue for infrastructure improvements. This allows for timely and effective road maintenance. As a result, road quality is preserved and long-term maintenance costs are reduced.

The overall outcome is a safer, more efficient road network for all users. Smart RUC's approach to both congestion and maintenance creates a more responsive and sustainable transport system for New Zealand.

International Examples

The report examines several successful road pricing schemes from around the world. Singapore's Electronic Road Pricing (ERP) system has effectively managed congestion since 1975. Meanwhile, Stockholm's congestion charging scheme gained public support through effective public engagement and demonstrable benefits. These

examples demonstrate that Smart RUC can lead to smoother traffic, reduced travel times, and improved urban mobility. They also provide valuable implementation lessons for New Zealand, emphasising the importance of clear communication and measurable outcomes.

Implementation Strategy

The report outlines a detailed 5-year plan for transitioning to Smart RUC, including:

- Gradual increases in RUC rates and decreases in FED
- Public awareness campaigns
- Partnerships with RUC service providers
- Development of IT infrastructure
- Integration with insurance products
- Refinement of enforcement practices

This gradual approach allows for a smooth transition, giving drivers time to adapt to the new system while ensuring that the shift towards a more technologically sophisticated model gathers pace over time.

Conclusion

Smart RUC represents a necessary shift towards a more sustainable, efficient, and equitable transport funding system for New Zealand. While the transition may present challenges, the long-term benefits to infrastructure, economy, and quality of life justify the effort. By adopting comprehensive road pricing, New Zealand can modernise its transport funding approach, aligning with economic principles and technological advancements. Smart RUC offers a path to a more responsive and sustainable transport system, better suited to meet the needs of a growing nation.

ABOUT THE AUTHOR

Dr Matthew Birchall is a Senior Fellow at The New Zealand Initiative, focusing on infrastructure and transport policy.

A historian by training, Matthew's writing on the British Empire has been published in the *Journal of Global History* and *Global Intellectual History*. He was awarded the Royal Historical Society's prestigious Alexander Prize in 2021 for the best scholarly article based upon original historical research.

Matthew holds an MA (Hons) in International Relations & Modern History from the University of St Andrews, an M.Phil. in Political Thought & Intellectual History from the University of Cambridge and a PhD in history, also from the University of Cambridge.