WORLD TRADE CENTER®
MUMBAI

MVIRDC®

Connecting Business Globally!
Prosperity through Trade and Business.

By MVIRDC World Trade Center Mumbai

Insights on India's Toll Tax Policy and Its Implications on Economic Growth

2025

Bharat Ratna Sir M. Visvesvaraya

(15 September, 1860 - 14 April, 1962)

55 years MVIRDC

M. Visvesvaraya Industrial Research and Development Centre

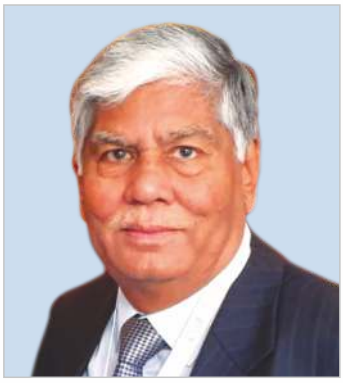
Estd 1970

FIFTY FIVE YEARS AND COUNTING

M. Visvesvaraya Industrial Research and Development Centre (MVIRDC) is a non-profit company registered and licensed under Section 25 of the Companies Act, 1956 (currently Section 8 of the Companies Act, 2013). On 26 June, 2025, MVIRDC will complete 55 years of continuous service in the promotion of trade and industry.

MVIRDC became a member of the World Trade Centers Association, New York, in 1971 and established the World Trade Center Mumbai, which is the first World Trade Center (WTC) in India. MVIRDC, having spearheaded the movement of World Trade Centers in India with the establishment of WTCs at Bhubaneswar, Goa and Jaipur, is assisting MSMEs in these regions through various Trade Research, Trade Promotion, Trade Infrastructure including Commercial Offices, Business Center, Trade Facilitation Services and Trade Education Programmes.

Foreword



India's road infrastructure has been a critical driver of connectivity, trade, and economic growth. With a national highway network spanning over 1.46 lakh kilometres, toll taxation has emerged as one of the most important, yet contentious, mechanisms for financing the expansion and upkeep of this network. Often described as a "silent tax," tolls are borne daily by commuters, logistics operators, and businesses, shaping both household budgets and industrial competitiveness.

Over the last decade, toll collections have risen sharply, from 17,759 crore in FY 2015–16 to nearly 61,500 crore in FY 2024–25, reflecting both the growth of India's highway network and the increasing financial burden on road users. The introduction of FASTag has streamlined toll collection and enhanced compliance, yet inflation-linked toll revisions and frequent hikes have raised concerns about affordability, fairness, and accountability. For logistics operators, rising toll costs have translated into higher freight rates, reducing India's export competitiveness. For households and SMEs, these increases have become recurring expenses that erode affordability and profitability.

The economic implications are far-reaching. Road transport already accounts for over two-thirds of freight movement in India, despite being significantly more expensive than rail or inland waterways. Rising tolls carry inflationary consequences, raising food and manufacturing costs, while traffic diversion to routes that do not collect toll worsens congestion, fuel consumption, and environmental outcomes.

Policy responses are beginning to emerge. Judicial interventions have emphasized accountability by ruling against tolls on poorly maintained highways, while proposals such as performance-linked tolling, stronger audit mechanisms, and structured asset monetization point the way to a more balanced system. At the same time, states such as Maharashtra are aligning toll incentives with green transport goals, offering exemptions for electric vehicles and low-emission freight.

The World Trade Center Mumbai, through this report seeks to provide a comprehensive view of India's toll tax policy, its design, challenges, and broader economic implications. It underlines that toll taxation is not just a matter of revenue collection, but of equity, efficiency, and long-term competitiveness. By rethinking the tolling framework to balance infrastructure financing with user welfare, India can ensure that its highways remain not only engines of mobility but also catalysts of sustainable economic growth.

Dr. Vijay Kalantri
Chairman
MVIRDC World Trade Center Mumbai

Introduction

Toll tax is a fee charged for using certain roads, particularly National Highways and Expressways. Road charges, commonly termed as 'tolls,' are levied on passengers for accessing various road services such as tunnels, bridges, and both national and state highways. Unlike widely discussed direct and indirect taxes such as income tax or GST, toll is often described as a "silent tax," borne regularly by commuters and businesses without the same public visibility. With India's National Highway network extending over 146,195 kilometres, toll taxation has emerged as a vital but contentious source of revenue for the government.

India's Toll Tax Policy

India's toll tax policy is a critical component of the nation's highway financing framework, designed to recover construction and maintenance costs while facilitating infrastructure expansion. Governed primarily by the National Highways Fee (Determination of Rates and Collection) Rules, 2008, tolls are collected on National Highways through both public-funded projects and private concession models, including Build-Operate-Transfer (BOT) and Operations, Maintenance, and Transfer (OMT) arrangements. The policy mandates fixed toll rates for specified stretches, annual inflation-linked revisions, and exemptions for certain categories of vehicles, while the responsibility for collection may lie with NHAI, contractors, or private concessionaires depending on the project model. While tolls provide a vital revenue stream for highway development, the policy has also been subject to criticism over rising costs for commuters, inequitable burdens on frequent users, and instances where charges are applied despite substandard road quality. Judicial interventions, parliamentary audits, and ongoing debates highlight the tension between cost recovery, public accountability, and user fairness, setting the stage for reforms such as performance-linked tolling that aim to align infrastructure incentives with citizen welfare.

Revenue Allocation: Maintaining and Expanding Highways

The funds collected through tolls are used for multiple purposes. A major share is directed towards the maintenance and repair of roads, including resurfacing, repairs, and ensuring the smooth operation of highways. Tolls also cover operational expenses such as manpower, machinery, and digital systems like FASTag. Beyond upkeep, toll revenue finances the construction and expansion of highways and expressways, and in public-private partnership projects such as Build-Operate-Transfer (BOT), it helps concessionaires recover costs and service debt. In this way, tolls serve as both a cost-recovery mechanism and a means to ensure the financial viability of India's road infrastructure program.

Rising Burden: Impact on Commuters and Businesses

Over the past decade, toll collections on India's National Highways have ballooned from about ₹17,759 crore in FY 2015–16 to nearly ₹61,500 crore in FY 2024–25, placing an increasingly heavy burden on commuters and businesses. While this growth is often presented as a sign of better compliance and highway expansion, in reality it reflects a steady transfer of costs onto everyday road users. The rise was gradual until FY 2020–21, but since FY 2021–22 collections have spiked dramatically, jumping from ₹34,743 crore to over 48,000 crore in just one year, and then further climbing year after year. For passengers, these hikes mean that what once felt like a minor road fee has become a recurring expense that eats into household budgets. Out of India's 1.46 lakh km national highway network, nearly two-thirds (≈94,000 km) are either under private concession or maintenance coverage. This means users are directly paying for road quality and upkeep through tolls. With 38,842 km of new developments entering the concession system, coupled with annual inflation-linked revisions, toll prices are structurally rising year on year. For logistics operators, every toll hike compound transport costs, raising freight rates and ultimately pushing up prices for consumers. The automatic, inflation-linked mechanism of annual toll increases ensures that charges rise even when road quality is poor or incomplete, leaving commuters frustrated with paying more for less. In short, while toll collections have become a convenient revenue stream for the government, they are eroding affordability for millions of daily users and undermining the very purpose of highways as public infrastructure meant to improve mobility and reduce economic friction.

➢ Key Trends

Years	Total Collection (in crores)	Growth Rate (in %)
2015-2016	17759.12	-
2016-2017	18511.69	4%
2017-2018	22664.5	22%
2018-2019	25145.19	11%
2019-2020	27654.84	10%
2020-2021	27923.22	1%
2021-2022	33907.71	21%
2022-2023	48028.19	42%
2023-2024	54811	14%
2024-2025	61500	12%
2025-2026 (estimated)	72500	18%

Source: National Highways Authority of India (NHAI Reports) and MVIRDC World Trade Center Mumbai Research

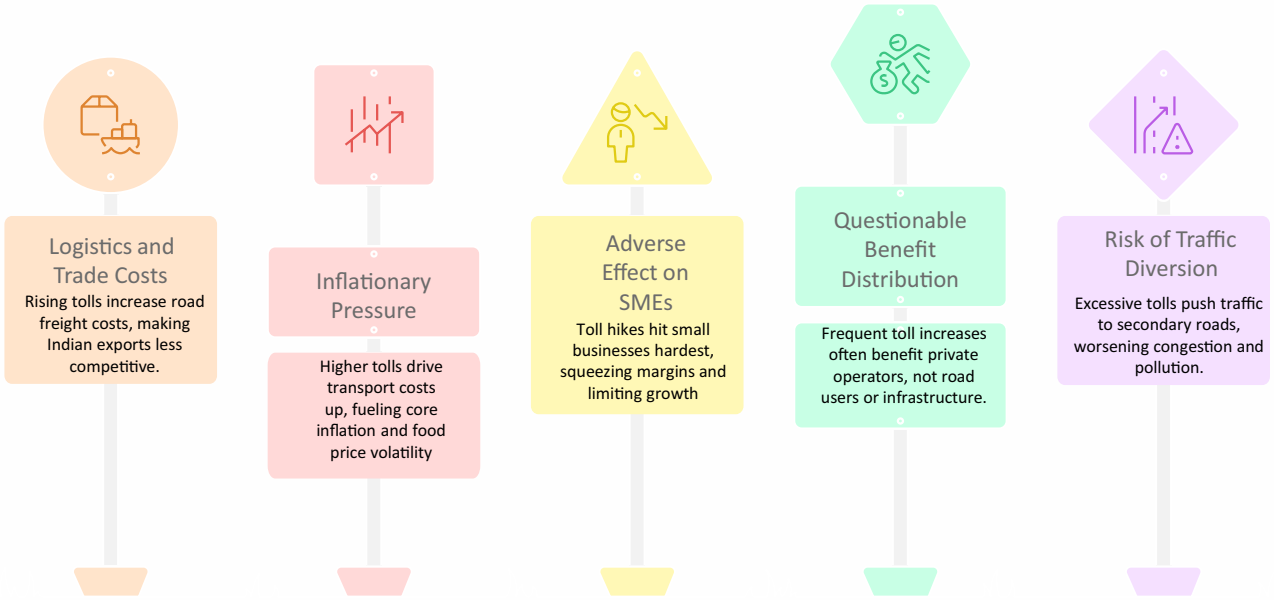
FASTag was introduced in 2016, marking a significant step toward automated toll collection on India's National Highways. Since its implementation, toll collections have shown a consistent upward trend, with estimated revenues reaching higher levels, driven by both a 4–5% increase in toll rates and higher FASTag compliance. Transporters note that even this modest increase in toll rates can translate into nearly 10% higher freight charges, impacting competitiveness and contributing to inflationary pressures. While FASTag has greatly improved efficiency and transparency in toll collection, the system is not without flaws. Instances of "false deductions" have been reported, where money is wrongly debited from accounts due to technical glitches, incorrect vehicle detection, duplicate charging, or other system errors.

Expert and industry views remain divided. Proponents argue that tolls are necessary for cost recovery and infrastructure expansion. Yet, judicial interventions such as the Jammu and Kashmir High Court ruling in 2025 highlight that it is unfair to charge full tolls when roads are poorly maintained. Passenger transport operators, including bus and taxi associations, have protested the rising burden, noting that without fare hikes, services may become unsustainable. Political parties and civil society groups have also criticized toll increases, citing broken promises such as Maharashtra's earlier pledge of a "toll-free state."

1. Impact on Logistics and Trade Costs

Public data confirms that Road transportation is more costly than other modes of transportation especially for logistics. In 2025, road freight in India costs about 2.28 per ton-km, making it significantly more expensive than both rail and inland waterways. Rail transport, at 1.40 per ton-km, is around 39% cheaper than road, while inland water transport (IWT), at 1.20 per ton-km, is nearly 47% cheaper. Despite these cost efficiencies, road continues to dominate India's freight movement, carrying roughly 66–71% of total ton-km according to NITI Aayog and EY reports. This makes road not only the costliest mode of transport but also the most heavily relied upon, underscoring the imbalance in India's freight logistics system.

Toll Tax Increase and the Impact on the Economy



Amidst tariff pressures and India's heavy reliance on road transportation of goods, frequent increases in toll rates risk raising logistics costs and eroding the competitiveness of products.

Studies have shown that transport cost increases of even 5–10% can reduce competitiveness of Indian exports in price-sensitive markets. Toll rates on expressways like Mumbai-Pune or Pune-Nashik corridors have risen multiple times, affecting both industrial and agricultural goods movement, increasing inflationary pressure on food and manufacturing goods.

2. Inflationary Pressure

While Higher tolls are linked to inflation and the Wholesale Price Index, the linking can e a vicious cycle where a rise in transportation prices due to the increasing toll rates is what is leading to higher inflation especially in core inflation products with volatility in food prices, one which is inelastic in nature.

3. Adverse Effect on SMEs:

Small and medium enterprises (SMEs) are among the most vulnerable to toll hikes because they operate on very thin profit margins. Even modest increases in toll rates can raise transportation costs significantly, which directly cuts into their profitability. For instance, a small logistics company transporting goods from Pune to Mumbai may see its monthly costs rise by several thousand rupees simply due to toll revisions. This added burden not only makes their services less competitive compared to larger firms with greater resources but also discourages smaller businesses from expanding their operations. In the long run, such toll hikes can stifle entrepreneurship and limit the growth of SMEs that form the backbone of India's economy.

4. Questionable Equity and Benefit Distribution:

Another major concern is that frequent toll hikes often do not translate into better infrastructure or improved user experience. Instead, they tend to disproportionately benefit private concessionaires who are already making substantial returns. Reports have shown that many national highway projects under private operators have achieved financial closure, meaning construction and funding costs are fully covered, yet toll rates continue to rise annually. This raises serious equity questions: why should road users keep paying more when the highways are already profitable? In this setup, the public bears an increasing financial burden, while much of the benefit accrues to private investors rather than being reinvested into the infrastructure itself.

5. Risk of Traffic Diversion and Inefficiency:

Rising toll rates can also lead to unintended inefficiencies in the broader transport system. When tolls become too expensive, many drivers, especially those from cost-sensitive sectors, are likely to divert to alternative, non-tolled routes. This shift increases congestion on secondary roads, slows down traffic movement, and often leads to higher fuel consumption. The additional fuel burned not only raises logistics costs but also worsens air pollution, contributing to negative social and environmental outcomes. Instead of improving road network efficiency, excessive toll hikes risk undermining it by shifting traffic away from highways that were originally built to decongest and streamline travel.

Recommendations

- **Performance-Linked Tolling**

India can adopt the Australian Peninsula Link model for future highway projects by implementing Availability-based Public-Private Partnerships (PPP), where private operators are paid by the government based on performance rather than directly collecting tolls from users. Under this approach, payments are linked to pre-defined key performance indicators (KPIs), including road maintenance, traffic availability, safety standards, and environmental compliance. Regular audits by government and independent agencies would ensure transparency in fund utilization and adherence to quality standards, while digital monitoring systems can track road conditions and operational efficiency. By decoupling toll collection from users and tying revenue to performance, India can create future-proof highways that incentivize high-quality construction, long-term maintenance, and reliable service, reducing public burden and enhancing accountability. Judicial interventions, such as the Supreme Court upholding the Kerala High Court's order in NHAI vs. O.J Janeesh & Ors. (Paliyekkara Toll Plaza, NH-544), affirm that citizens cannot be charged tolls for poorly maintained or unsafe highways, showing that when accountability fails, commuters can seek justice in courts. A performance-linked model would align private incentives with public welfare while reducing the need for frequent legal battles by embedding fairness into the tolling framework itself.

- **Regular Audits & Transparency**

In India, toll revenue management is overseen through a combination of internal audits by NHAI, independent audits by the Comptroller and Auditor General (CAG), and oversight by the Public Accounts Committee (PAC). These audits examine whether toll collections and public funds are being used efficiently for road maintenance, upgrades, and operational expenses, and whether any mismanagement or overcharging is occurring. Technologies like FASTag enhance transparency by automating collection and reducing human error. With toll collections reaching over 54,800 crore in early

February 2025, audits provide a critical check on whether additional toll hikes are justified, ensuring that revenues are fully utilized for infrastructure purposes and preventing arbitrary or excessive increases.

India can enhance the efficiency and sustainability of its road infrastructure by adopting annual public reporting and a structured asset monetization strategy. By mandating yearly disclosure of maintenance expenditures, road conditions, and performance outcomes, agencies like NHAI can ensure funds are being effectively utilized and hold private operators accountable for quality standards.

- **Diversifying Asset Monetization Beyond ToT**

TOT, InvIT, and Project-Based Financing Collections in India (2018–2024)

In parallel, monetizing road assets through upfront payments from private investors under frameworks like Toll-Operate-Transfer (ToT) or Infrastructure Investment Trusts (InvITs) can reduce dependency on incremental toll increases. In the ToT model, the National Highways Authority of India (NHAI) receives a lump-sum payment from private concessionaires who, in turn, collect tolls from users during the concession period—allowing NHAI to unlock capital without directly burdening the government. However, since private operators pay a large upfront sum to NHAI, they have an incentive to recover their investment and earn profits, which may lead to faster toll increases for consumers. The data indicates that NHAI has relied heavily on ToT for monetization compared to other instruments like InvITs and project-based financing. Over FY2018–19 to FY2023–24, ToT contributed ₹42,334 crore, about 38% of the total ₹1.1 lakh crore mobilized, while InvITs and project-based financing accounted for ₹25,900 crore and ₹42,207 crore, respectively. Although InvITs and project financing have gained traction since FY2021–22, ToT continues to provide a major share of upfront liquidity. This underscores the need to diversify monetization avenues beyond ToT to balance financial sustainability with consumer affordability and long-term infrastructure development.

Year	ToT	InvIT	Project Based Financing	Total (in crores)
2018-2019	9682			9682
2019-2020				0
2020-2021	5011		9731	14742
2021-2022	1011	7350	14006	22367
2022-2023	10662	2850	9824	23336
2023-2024	15968	15700	8646	40314
Total	42334	25900	42207	110441

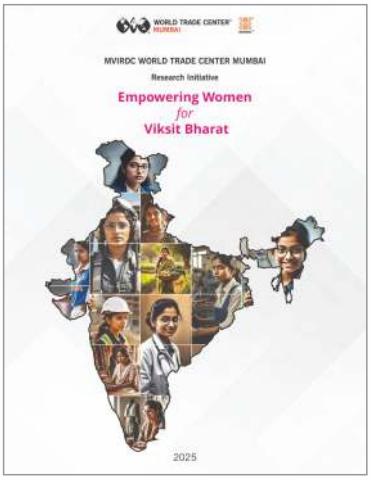
Source: Ministry of Road Transport and Highways Annual Report 2024-25 Amount in ₹ crore

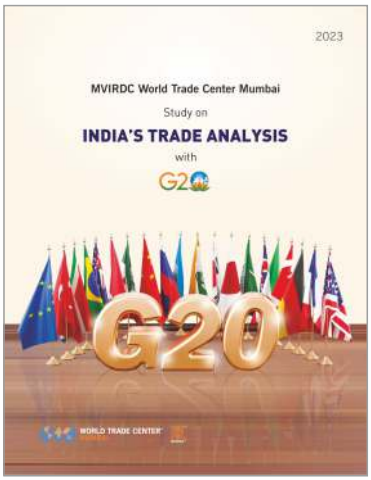
- **Environmental Considerations: Incentivizing Green Transport**

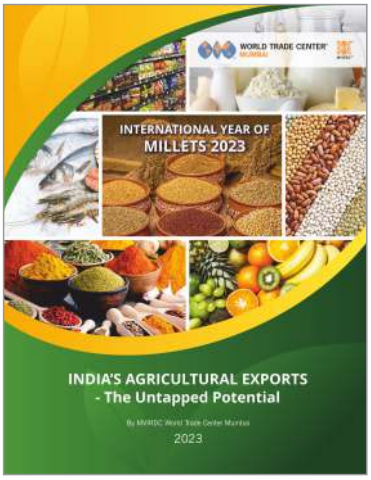
Aligning toll policies with sustainability goals can encourage the adoption of electric vehicles (EVs) and low-emission freight operators. For instance, Maharashtra's Electric Vehicle Policy 2025 provides a five-year toll exemption for electric vehicles on major expressways such as the Mumbai-Pune Expressway and the Mumbai-Nagpur Samruddhi Expressway. This initiative not only reduces vehicular emissions and promotes cleaner transportation but also demonstrates how toll incentives can support environmental objectives while easing the financial burden on road users.

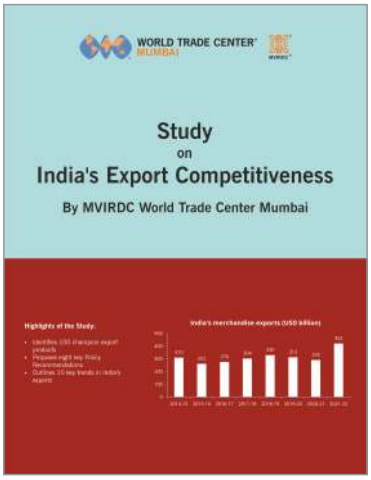
MVIRDC World Trade Center Mumbai

Research Publications









MVIRDC World Trade Center Mumbai

31st Floor, Center 1, World Trade Center Mumbai, Cuffe Parade, Mumbai - 400 005

T: 022 6638 7272 / 347 | **E**: research@wtcmumbai.org | **W**: www.wtcmumbai.org

WORLD TRADE CENTER MUMBAI

WE PROMOTE SHOWCASE RESEARCH TEACH FACILITATE TRADE

India's Preferred Catalyst for World Trade Development

World Trade Center Mumbai
31st Floor, Center 1, World Trade Center Mumbai,
Cuffe Parade, Mumbai - 400 005
T: 022 6638 7272 | **E**: wtc@wtcmumbai.org

www.wtcmumbai.org