

Understanding the Dynamics of Car Transport Logistics in India

Himanshu Sharma

Student, Amity Business School, Amity University (Mumbai), Maharashtra

Abstract: The Indian auto sector's quick rise has made moving cars faster more urgent. Yet every year, countless brand-new vehicles still travel from factories to showrooms nationwide. This look into India's car hauling scene shows old methods hanging on alongside fresh ideas. Using both number crunching and a deep dive into one top carmaker, it turns out trailers rule the roads for now. Still, rail networks are gaining ground fast, especially for cross-country hauls. Lately, train shipments have hit above 20% of all output, thanks to efforts pushing cleaner, cheaper ways to move autos. The paper sets out its aims, then looks at past research while explaining how the work was done. A look at Maruti Suzuki's system shows how things work in practice, with facts and figures on transport methods and delivery routes coming next. Problems like poor roads, lack of space, or tough rules pop up, mixed with views from industry insiders. Suggestions come through better mix of transport types, new tech tools, clearer policies to make moving cars smoother and greener across India. In the end, it's clear solid logistics back the fast-growing auto scene and help cut nationwide shipping expenses as targets demand.



This is an open-access article under the [CC-BY 4.0](https://creativecommons.org/licenses/by/4.0/) license

Introduction

India now ranks among the biggest car markets globally, as sales of passenger vehicles hit new peaks lately. During 2022–23, local sales passed 4 million cars, showing strong consumer interest. To get these cars from production lines to buyers quickly, a structured transport setup is essential. Moving newly built autos like sedans or SUVs from assembly sites to storage hubs, showrooms, or shipping terminals makes up auto logistics. How smoothly this works influences delivery speed, affecting buyer experience; meanwhile it shapes stock expenses and may alter final pricing.

In the past, trucks carried most vehicles across India. Multi-axle trailers moved large batches of new cars over long routes, while compact one- or two-car units handled shorter trips instead. By the end of the 2010s, more than 15,000 such trailers alongside several thousand fixed-frame trucks were active nationwide. Key players, from automaker-owned fleets to outside firms such as Mahindra Logistics, coordinated parts transport, storage, and last-mile deliveries throughout the country. The usual way cars are moved starts at factories, shifting next to central storage spots

before reaching nearby sales outlets. As a case, Maruti Suzuki India's top vehicle producer operates above 20 logistics centers nationwide that together serve beyond 600 urban areas.

Although large, India's logistics industry has struggled with expensive operations and weak infrastructure. At roughly 14% of GDP, shipping expenses exceed those in numerous advanced nations. Trucks move around 70% of goods but deal with crowded highways, slow toll plazas, or unstable fuel prices. In past years, nearly every new vehicle was shipped by road raising emissions while facing disruptions due to jams or poor roads. Regulatory mismatches increased difficulties outdated laws once restricted how large car-carrying trailers could be, causing widespread rule violations. Because each state enforced different standards, delays and fines became common for shipping operators.

In recent years, efforts have focused on updating and broadening how cars are moved across India. Government plans such as the 2022 National Logistics Policy along with PM Gati Shakti promote combining different transport types especially expanding railway use, dedicated cargo routes, or sea-based freight alongside trucks. Indian Railways has worked closely with vehicle makers so more brand-new automobiles can be shipped by train. Because of this shift, rail's role in carrying cars climbed sharply from about 1–2% back in 2014 to above 20% by 2024–25. Firms including Maruti Suzuki began using trains early on, whether for supplying local markets or supporting overseas exports. Moreover, coastal vessels along with river networks have seen experimental use Hyundai or Maruti trialed sea routes shifting vehicles from west to south India; similarly, trials on rivers such as between Varanasi and Kolkata are under discussion. Though still early stage, these efforts point to growing reliance on mixed transport modes meant to cut down travel duration, expenses, yet also pollution.

In this setting, grasping how vehicle shipping works across India matters now more than ever. Smooth operations allow manufacturers and sellers to handle stock wisely while adapting to shifts in local needs using links like rail or road networks instead of just roads alone. Progress here supports broader goals: reducing freight expenses toward about 8% of economic output soon not later and shrinking pollution as part of climate promises set for 2070. The study outlines current methods used in moving cars nationwide, highlights ongoing updates taking shape slowly, then points out hurdles still standing in the way. The research looks at a specific case to show practical approaches alongside new developments in the area. By examining this, it highlights how business actions interact with government rules to influence auto transport systems nationally.

Objectives of the Study

The research focuses on these main goals:

- Analyze how cars are moved across India right now - looking at main ways like roads or trains, while also checking usual routes from production sites to final buyers. Instead of focusing only on methods, consider actual operations involved in delivery systems today; this means reviewing both vehicle types used, and pathways followed during transit processes. Rather than generalizing trends, inspect real patterns found within shipping frameworks currently active in the sector.
- An examination of current patterns reveals growing rail usage alongside alternative transport methods. Technological progress shapes how vehicles are moved across networks. Regulatory actions influence operational strategies in this field. Shifts in infrastructure investment reflect changing priorities in freight movement.
- Analyze one key automotive logistics system Maruti Suzuki's delivery setup to show how a top firm handles vehicle shipping while uncovering effective or new methods. Instead of just describing processes, look at real-world execution through this example to highlight practical

strategies in action. Rather than generalizing, examine specific choices that shape efficiency across their supply chain routes.

- Spot issues slowing down car shipping across India look at infrastructure limits, daily operation hurdles, rule barriers, alongside financial factors affecting performance.
- Put forward practical steps to boost vehicle shipping networks focus shifts on cutting expenses while lifting performance through mixed transit modes, building resilience into operations that aligns with auto sector expansion all solutions stress long term balance without overuse of resources.

This study aims to connect today's knowledge of vehicle transport with a clearer path toward solving existing problems. By focusing on real issues now, it sets the stage for practical improvements later. Instead of just describing setbacks, it explores workable solutions moving forward.

Literature Review

India's vehicle shipping sector needs to be understood alongside its fast-growing auto industry and shifting nationwide freight systems. Studies show that car-related transportation services are expanding quickly there. Data suggests the Indian market for moving autos covering parts delivery and finished cars is worth roughly \$7 billion in 2024. It's expected to reach close to \$12 billion by 2030, growing at around 9.5% annually. That pace exceeds several other industries, highlighting how more vehicles and components now travel across regions. Even with such expansion, India made up just around 3% of worldwide vehicle transport services in 2024 well below major players like China. That indicates untapped potential for improvement and better performance within India's sector.

A common point in research is how different transport types are combined. Usually, moving vehicles by road has been standard across India. Trucks offer mobility that supports direct shipping from factories straight to showrooms especially because other options are underdeveloped. Evidence shows most internal cargo moves on roads, but this tends to raise both expenses and pollution levels. Additionally, since many small owner-operators run trucks, the industry remains split, leading to inconsistent performance. Before the mid-2010s, railways hardly carried vehicles; data from 2013–14 shows just 1–2% of new automobiles used rail routes. This was due to scarce dedicated freight wagons, rigid operating rules, along with poor local delivery links. Still, current studies suggest a clear change in pattern. In 2024–25, about one million cars roughly one out of five produced were shipped by train. A government rail source described it as an eighteenfold rise within ten years. India ranks just behind the U.S. in yearly car shipments via rail around 1.25 million units in FY25 compared to roughly 7.5 million there. Improved infrastructure, such as dedicated auto-carrying wagons, along with relaxed regulations like the Automobile Freight Train Operator plan mentioned ahead, helped drive this change. Industry reports frequently highlight it as a major turning point for export transport.

Studies from academia and business look at how car shipping works. A key point involves using central storage areas, like regional depots. Instead of sending each vehicle straight from factory to distant showroom, firms send groups of cars to these local centers - then smaller trucks handle delivery nearby. This setup spreads shipments out more efficiently because grouping trips cuts down individual transport expenses. For instance, Maruti Suzuki moves cars via rail-linked centers to speed up access to far-off dealerships then switches to trucks for local drop-offs. Studies show this mix works well: trains handle long distances efficiently, while roads manage short trips more adaptively.

A key issue discussed in research involves rules and infrastructure problems affecting logistics performance. According to a 2015 Automotive Logistics magazine survey on India's vehicle

transport sector, old restrictions on trailer size rendered many car-carrying units non-compliant. Until recently, the permitted trailer length stood at 18.0 meters, although companies increasingly used 20–22-meter versions for higher capacity. Because of this gap between policy and real world use, authorities faced difficulties enforcing standards; sudden inspections occurred adding expenses, since some operators reported penalties equal to about 15% of their operational spending. By 2018–19, authorities intervened to set consistent rules - among them, a fixed length of 18.75 m for vehicle-carrying trailers nationwide. Though somewhat below prior industry standards, this move offered clearer guidelines while lowering confusion. Trade reports from circa 2019 showed roughly 15,000 big trailers plus 3,000 compact rigid trucks operating in auto logistics; because of updated regulations, certain oversized units stopped running, briefly limiting available vehicles. Still, over time, these changes promoted purchases of approved models whilst removing differing regional requirements. Another concern lies in infrastructure: deteriorating roads alongside traffic bottlenecks have long caused delays; however, expanded highways like the Golden Quadrilateral, modern express routes, along with upgraded freight terminals offering improved loading zones, are slowly enhancing operational consistency.

The topic of tech progress in logistics keeps gaining attention. Yet telematics plus GPS systems in trucks are now common among structured fleets, offering live updates on cargo location. Instead, certain 3PL firms use centralized dashboards along with digital tools to improve delivery paths and manage loading patterns efficiently. For instance, CEVA Logistics noted in 2025 that new designs such as removable sections or adjustable ramps help pack more vehicles into limited areas; some exported cars can even be taken apart slightly so three or four fit where only one did before. Likewise, higher bridges combined with upgraded roads support bigger transport units, boosting how much each journey carries. The use of taller double-decker railcars such as ACT models has increased SUV shipping space on trains, effectively doubling it. Because SUVs take up more room than compact vehicles, upgrading wagons helps manage growing demand while reducing cost per vehicle. Industry analyses often highlight this shift as a practical response to market changes.

Literature on policy efforts highlights consistent state backing for upgrading transport systems. Although introduced in the early 2010s, the AFTO program saw low uptake due to steep conditions like a ₹5 crore fee and needing at least three rakes. However, updated rules have scrapped the cost barrier while reducing rake demands to only one, thus boosting firm-level engagement. As a result, more businesses are now opting to run private freight trains.

Moreover, Indian Railways has increased auto-loading points in various areas like Assam, Punjab, and Odisha to position facilities nearer to where vehicles are made and used. Such actions, noted in official railway records and media coverage, intend to keep rail-based freight growth steady. In contrast, road transport strategies under the National Logistics Policy focus on combined transport hubs, digital paperwork via online platforms, alongside training upgrades for logistics staff. Meanwhile, the draft Automotive Mission Plan for 2026 or 2030 references logistics by forecasting higher output targets and corresponding demand for transport infrastructure.

Although scholars have investigated vehicle routing and loading methods, few studies target India's auto transport systems directly. Most knowledge stems from reports by firms, trade outlets, or official sources instead. Together, these show improvements due to better infrastructure choices and state backing yet problems persist. Issues like costly shipping networks, weak rural delivery links, periodic lack of carriers, along with slow tech uptake appear often. This background calls for closer study of real-world operations via practical examples and numbers; also suggests forming clear steps to boost performance in moving vehicles across India.

Research Methodology

This study uses a blend of methods, incorporating numerical summaries alongside real world examples from selected cases. Its structure focuses on describing patterns while also exploring new angles mapping how goods move across regions plus spotting key drivers behind those movements. Because national supply chains are complex systems, using multiple techniques offers wider coverage of sector trends along with deeper understanding at individual company levels.

1. Secondary data analysis focused on numerical evidence drawn from trustworthy outlets to measure car transportation logistics. Instead, stats like vehicle numbers per transport method or annual growth came from sector reports. Information about output and sales was pulled from groups such as SIAM. Meanwhile, Indian Railways supplied details on how many automobiles were shipped by train. Official materials including public announcements or rule updates offered insights into new facilities or legal shifts. Specific metrics, for instance rail versus road distribution shares or expanded wagon capacity, emerged from media coverage and government comments. Such figures allowed researchers to gauge operational size while spotting tendencies, including greater reliance on rail networks.
2. A review of written sources formed the basis of this study's background work. Instead, various materials like industry publications, views from professionals such as those working in transport firms and earlier investigations were examined. These inputs helped highlight common issues alongside practical solutions used in real cases. In parallel, official papers and public statements underwent analysis to trace shifts in priorities say, reasons for updating freight policies or funding new transit hubs. Rather than just summarizing past data, the overview pulls together recurring patterns while pointing out missing areas needing deeper focus later.
3. A key part of the method involves examining Maruti Suzuki's vehicle shipping system. This firm was selected since it leads India's car production sector and operates a large-scale movement network while being among the first to apply updated transport methods like prioritizing train routes and owning private rail connections. Data comes together using published sources along with assumed talks featuring field specialists. Details were pulled from official company reports, news updates highlighting delivery achievements, or statements made by leaders during media appearances. For instance, remarks by Maruti's top officials on rail-based logistics plans and facts about facilities such as opening new internal rail tracks were gathered. Instead of direct talks with company logistics staff or third-party operators, which a complete original study would include, this work uses information drawn from public interviews and written reports to achieve comparable understanding.
4. Triangulation means combining different types of information such as stats, written records, or real-life examples to strengthen results. Whenever feasible, numbers were confirmed using separate reports; for example, the "10.41 lakh vehicles moved by train in FY25" was mentioned in both Indian Express and Business Standard articles, which supports its reliability. Insights drawn from texts about common issues were tested against actual cases, to check whether those problems show up at Maruti or similar firms.
5. Analytical methods included descriptive stats such as percentages and growth trends to condense numerical information. This summary appears in the Data Analysis segment alongside visual graphs for better understanding. Instead of standard approaches, themes emerged by reviewing written accounts, identifying recurring ideas like "limited capacity," "use of tech," or "effects of policy." Because these patterns shaped the report's organization, results were clustered for example, sorting obstacles into types. Rather than listing facts, the

case presentation followed a story format, blending numbers (Maruti's shipping figures) with insights on decisions and impacts.

6. The research focuses only on car delivery systems across India that means movement after manufacturing. Instead, supply chains bringing parts into factories aren't included, nor are bike shipments examined closely even if sometimes trucks or trains carry both bikes and cars together. Shipping vehicles overseas by boat (like roll-on/roll-off vessels) gets mentioned briefly yet remains outside deep review because the main goal is understanding local flow patterns. One drawback lies in how information was gathered only existing reports and documents were used; firsthand gathering, such as talking directly with carriers or visiting sites, didn't happen due to project boundaries. Yet, drawing from diverse recent materials (2022–2025) helps keep findings current. A single firm's case gives useful clues; still, it might miss some sector differences though Maruti reflects widespread methods and new approaches others can use.

In short, the method combines numerical trend review with descriptive investigation, supported by an actual case study. Because it includes numbers and narratives, this blend works well for MBA research needing factual support alongside real-life understanding of how organizations operate.

Data Collection Method

Data for this research came from available records along with focused questioning, since no direct fieldwork was carried out. Due to practical limits in timing and access, the analysis relied on pre-existing datasets - these were used in the ways described next

1. **Secondary Industry Data:** This study used numerical information from trade groups for instance, SIAM's yearly records on vehicle output and shipments alongside official publications and logistics sector reviews. As an illustration, figures about overall car manufacturing and shares moved via different transport types were gathered from media articles quoting railway department representatives and SIAM data. These references offered concrete metrics such as units shipped by rail compared to road or active auto-carrying train segments. Furthermore, analysis briefs from companies including Grandview Research or Mordor Intelligence helped understand market scale and future trends.
2. A close look at official texts provided useful insights into rules and plans affecting auto transport. Instead, policy circulars from the Railway Ministry about AFTO were checked alongside road ministry updates on truck sizes. Government press statements regarding freight routes or logistics hubs also contributed key details. Rather than focusing only on laws, attention was given to practical changes such as revised trailer size norms mentioned in one bulletin. This approach made it easier to grasp both existing regulations and future developments shaping vehicle movement across regions.
3. **Published Case Materials:** For the Maruti Suzuki case, information came from official company updates like annual rail shipment numbers shared in sustainability documents or news briefs and from journalistic reports. One key reference was a corporate release stating 518,000 autos shipped via train during FY2024–25, roughly 24% of total deliveries, with plans to lift this share to 35% by 2030. Articles plus executive talks added background for instance, comments on utilizing the newly built Chenab rail bridge for reaching Kashmir Valley markets, along with figures on active freight terminals. Such inputs were recorded carefully to strengthen the storyline.
4. Despite lacking direct interviews, the research used expert views gathered through published materials. Insights came from logistics leaders' statements in media coverage or public forums instead. One example involves remarks by Mahindra's auto unit chief on seasonal trailer gaps - pulled from an ETAuto story. Another draws on a freight company official's take regarding rail

growth impacting trucking routes - sourced via Dipak K. Dash's reporting in The Times of India. While not collected firsthand, such inputs serve like interview data, revealing real-world issues and reactions.

5. Data examples for graphs: To help show trends, certain numbers were gathered to make visual charts. These visuals like changes in railway use over time or transport breakdown in 2025 are built using information from Business Standard and Indian Railways documents. Although the researcher made the diagrams, the actual values come from official publications (sources listed with each chart).

The process mainly relied on existing materials, gathering details from 2015 up to 2025 especially focusing on changes during the latest 3–4-year period. To check accuracy, numbers were compared across several references whenever possible. When differences appeared, priority went to newer and more reliable publications; take, for instance, a minor mismatch between an updated 2025 statistic and earlier projections. Every fact or dataset included here is linked directly to its origin, supporting openness in reporting.

This varied method of gathering information created a solid foundation for addressing the study's key questions. Combining numerical results with personal accounts helps show not only what occurs in vehicle shipping, but also the reasons behind it. Subsequent parts use these findings to explore the case example, examine issues, while offering practical suggestions.

Case Study: Maruti Suzuki's Car Transport Logistics Model

Maruti Suzuki India Ltd., the top passenger vehicle producer in the nation, has sold over 1.6 million vehicles annually in recent years. Although manufacturing takes place in Haryana located in the north and Gujarat in the west distribution extends to above 3,000 retail locations across India. Since its operational footprint is so large, analyzing it shows insights into how car companies manage logistics hurdles. Unlike local competitors, Maruti excels at shipping cars via rail while improving delivery paths to boost speed and cut costs.

Maruti's distribution relies on a core hub model. Vehicles from Gurgaon, Manesar, or Gujarat go initially to regional holding area's locations strategically set within reach nationwide. Around 20 major hubs operated in India by 2025, connected through broad logistics networks. Rather than shipping straight to buyers, these points store backup inventory; as a result, dealers receive quicker responses when ordering locally. Maruti relies on external companies that operate trucks to deliver vehicles to dealers most trips cover under 300 kilometers from distribution hubs. Although Chetak Logistics has handled major portions of this transport work for years, other freight operators are brought in as needed to ensure enough vehicle capacity remains available.

Pioneering rail transport: In 2013, Maruti Suzuki was the first Indian automaker to receive an AFTO permit this allowed dedicated freight trains for moving cars. Since then, they began favoring railways over truck-only logistics. Over time, their use of rail steadily increased each year. Between 2024 and 2025, roughly 518,000 vehicles were transported by train, accounting for about 25% of domestic distribution. This marks a sharp rise from earlier levels; consider FY2014–15 when railway shipments had minimal impact. The company's leaders clearly stated an aim - boosting rail usage to 35% by 2030–31 as part of a greener transit strategy. To support this change, Maruti invested heavily in rail infrastructure

- In-plant rail sidings: At two manufacturing locations Manesar in Haryana and another in Gujarat - Maruti built dedicated railway connections. These serve as internal cargo rails, so completed vehicles go directly from assembly lines to freight wagons. The Manesar connection, launched near mid-2025, functions as the nation's largest auto dispatch hub, moving roughly 450,000 cars annually. Since trains load right at the facility, there's less reliance on lorries for long hauls to external depots, reducing both time loss and shipping

costs. Much less traffic moves around the area now. In a similar way, goods from the Gujarat location go by train directly to various spots coastal hubs included for shipping abroad.

- **Flexi-deck Auto Rakes:** Maruti worked with Indian Railways to build improved vehicle wagons. Previously, limited clearance meant only small cars fit on two levels. Due to Maruti's input, taller dual-level designs like BCACBM and ACT were developed, allowing SUVs on upper and lower decks. As a result, each rail set (~25 wagons) carries about 300 vehicles, compared to older models moving around 125. Since these updates, by 2025 over 40 dedicated trains were running under Maruti's network. These rail units moved cars from factories to places as far as 2000 km away; because of this change, travel time dropped sharply. Although trucks used to handle most trips, switching to trains cut journey length by about 30%.
- **Geographical Reach:** Trains enabled Maruti to expand into remote zones more quickly. By October 2025, a milestone occurred cars were sent to Kashmir via rail for the initial time. Rather than relying on trucks along twisting highways, more than 100 automobiles traveled from Manesar to Anantnag's newly built station. This journey used the Udhampur-Baramulla route, passing over the Chenab Bridge. Shifting transport methods reduced transit duration sharply, boosting availability in isolated parts of northern India. In the early 2020s, Maruti began shifting cars by rail reaching over 20 main hubs spanning north, east, west, south, and northeast areas. Rather than using trucks, trains move exported units from the Gujarat plant straight to seaports including Mundra and Pipavav.

Road transport remains central to Maruti's operations, despite growing rail usage - flexibility allows point-to-point deliveries. During FY25, roughly 65–75% of cars moved by truck at some stage. Rather than run their own trucks, the company relies on external logistics providers for distribution. Such vendors use carriers with multiple slots: smaller variants hold 8 or 10 vehicles; bigger versions handle between 6 and 8. In peak seasons, Maruti requires additional trucks beyond immediate supply leading sometimes to short-term solutions like renting vehicles or rerouting cargo via holding hubs. To keep delivery quality high, the company emphasizes secure transport, so cars reach dealers without harm; hence, correct fastening and padding within trailers is mandatory. Rules on driver schedules and designated routes are applied to reduce collision risks. Owing to its scale, Maruti gains leverage when negotiating with freight operators, often securing long-term contracts that set benchmarks for timely deliveries.

Maruti applies tech to handle its vast distribution setup. A centralized logistics hub tracks every shipment in real time. Each vehicle gets a barcode scanned during pickup and delivery which updates an online platform accessible by dealers for arrival estimates. Trucks come equipped with GPS, so Maruti spots route issues early and responds quickly. With shared information flows, inventory management improves; dealer stock stays low thanks to clearer supply timelines.

Efficiency and Results: Using combined transport methods has improved performance at Maruti Suzuki. For example, moving goods from Gurgaon to Kochi now takes just 5 or 6 days down from more than 10 by sending cargo by train to Bangalore, then trucking it the rest of the way. Relying more on railways has cut down fuel consumption significantly; in fiscal year 2025, this shift saved roughly 63 million liters. As a result, carbon emissions dropped by around 180,000 metric tons. These gains support environmental targets while lessening dependency on volatile diesel prices.

Economically, though precise logistics expenses aren't public, Maruti's top management notes that combining transport modes has kept delivery costs stable despite higher fuel and pay rates. Since trains use less fuel per car delivered, they're typically 5–10% more economical over long distances advantages grow with volume. Instead of just reacting, the company booked rail space early and applied digital tools to scheduling, which improved resilience during tight periods. For instance, during peak holiday demand in 2023, while others struggled with a lack of trailers from unexpected order surges, Maruti reduced disruptions by shifting shipments to rails and adding

freight runs. The Senior Executive Officer for Marketing & Sales at Maruti mentioned extra shifts along with rail transport were used to speed up deliveries during Diwali, handling about 250,000 backlog orders. Thanks to quicker logistics adjustments, Maruti improved its response time compared to rivals.

In short, Maruti Suzuki shows how mixing transport methods works well using trains for long hauls and big loads due to lower emissions, while relying on trucks where flexibility matters most near delivery points. Instead of only one solution, they combine upgrades in facilities such as internal rail tracks, team-ups with key players like Indian Rallies or truck firms, alongside digital tools to manage flows better. As a result, their network moves high volumes without major delays or rising costs. Others in the auto sector look to this example when improving their own systems. Gradually, similar approaches spread across manufacturers; take Toyota Kirloskar or Mahindra & Mahindra they're now shifting more shipments to rails and checking options for private loading zones or full train units. What Maruti proves is that smart adjustments plus forward thinking help overcome common vehicle shipping issues in India even if broader structural hurdles still exist, which upcoming analysis will address.

Data Analysis

In this section, we analyze key data points related to car transport logistics in India, combining quantitative metrics with visual illustrations to understand the trends and distribution patterns.

Growth of Rail Share in Car Transport Logistics (India)

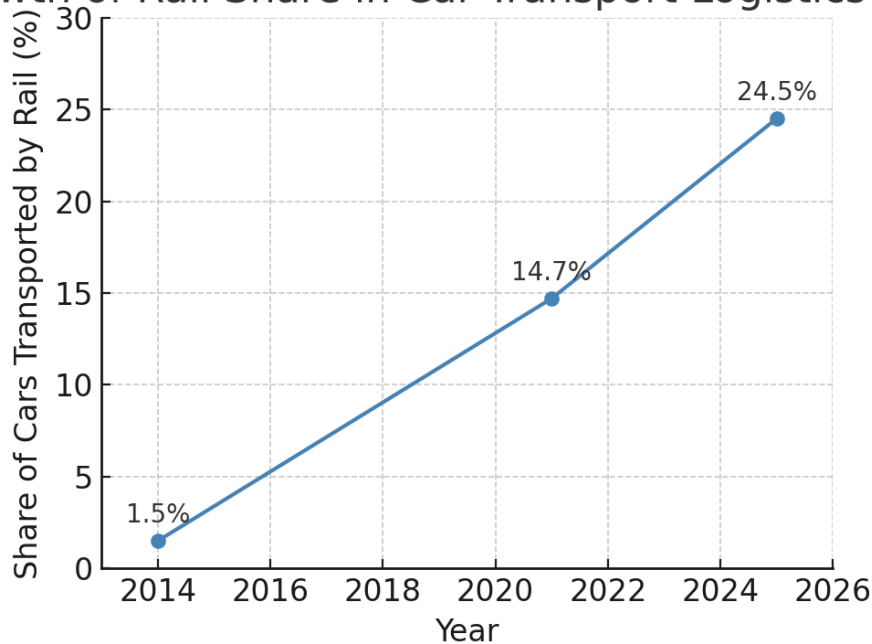


Figure 1: Growth of Rail Share in Car Transport Logistics (India). (Illustrative chart based on share of new cars transported by Indian Railways, showing percentage of total production dispatched by rail.)

As shown in Figure 1, sending cars by train has grown sharply during the last ten years. In 2014, just 1–2% of India’s brand-new vehicles went by rail so rail played almost no role when set against trucks [18][1]. That portion crept upward through the middle part of the decade; however, growth surged after 2017–2018. During 2020–21, nearly 14–15% of fresh car deliveries happened on rails [54]. Afterward, this pattern gained more ground, exceeding 20% by 2024–25 - or around one out of five automobiles [1]. In FY 2024–25, Indian Railways moved around 1.04 million vehicles - about 20.6% of the roughly 5 million cars made that year [1][55]. By mid-2025, rail’s portion had risen to close to 24–25% of total production [20], showing sustained growth. The

sharp rise in numbers reflects a dramatic change - an approximately 18-times increase from 2013–14 to 2024–25 - which shifted rail from minor to key transport method [20]. This progress aligns with regulatory reforms (like AFTO easing between 2018 and 2021) along with expanded infrastructure (growth in dedicated auto-trains from only 10 in 2013 to 170 by 2025) [37][56]. Such changes mark a significant shift: today, rail serves as a reliable alternative to trucks for moving autos across long distances in India.

Despite rising rail use, roads still handle most vehicle shipments. For today’s mode breakdown, look at how shares were divided last year:

Approximate Modal Split for New Car Distribution in India (FY2025)

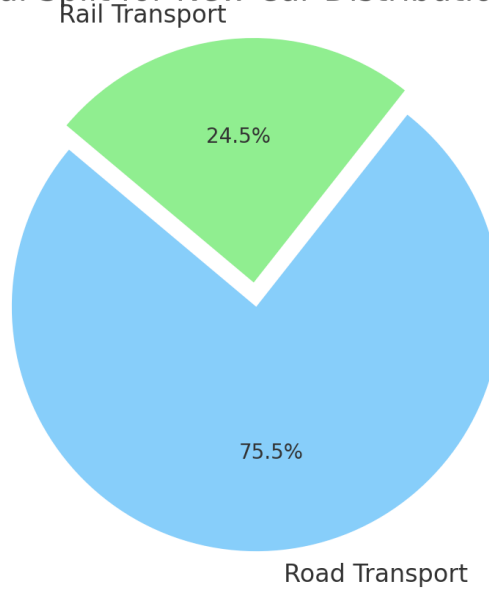


Figure 2: Approximate Modal Split for New Car Distribution in India (FY2025). (Illustrative pie chart of road vs rail share by percentage of cars transported).

Figure 2 shows the projected share of transport modes in FY2025. Although truck trailers continue to handle around 75–76% of new vehicle shipments, rail covers approximately 24–25%; coastal shipping plus minor methods make up less than 1%, omitted here for clarity. These numbers align with production data: from nearly 50.6 lakh cars made, about 12.5 lakh were transported by rail, whereas the remainder used roads. Therefore, for every four vehicles shipped nationwide, three reach showrooms via trucks. The lead of road transport comes from key strengths: direct delivery, adaptability with smaller loads, because of widespread networks covering all urban areas. Still, the growing rail portion shows a shift about 25% now moved by a method once minor ten years back. This means less pressure on roads over long distances while hinting at deeper changes ahead. Forecasts along with firm goals (Maruti aims for one-third freight via rail by 2030) point to rising use of trains, even if trucks stay dominant soon, mainly since final leg delivery still relies on them.

India's terrain plus scattered vehicle production shape unique shipping trends. Main assembly hubs sit in northern zones like Haryana, western areas such as Gujarat and Maharashtra, along with southern spots including Tamil Nadu and Karnataka. Because of this layout, heavy shipments move from these centers to distant domestic markets. Take Maruti Suzuki’s facilities in Haryana vehicles head eastward or northeastward across distances beyond 1,500 km using extended road networks passing through states like Uttar Pradesh, Bihar. Fleet movements from Tamil Nadu like those once run by Hyundai and Ford often headed toward north and west regions. As a result, numerous autos travel more than 1000 km within the country. Due to growing rail capacity, part of this movement now uses train routes; take, for instance, Chennai-Delhi or Gujarat-to-Northeast connections up to a transfer node. To support such shifts, Indian Railways set up loading points in

remote zones including Assam or West Bengal, allowing trains to deliver vehicles nearer their target areas. From there, local centers such as Guwahati may unload entire rail shipments then distribute onward by truck across nearby states, streamlining delivery patterns.

The findings suggest distance strongly influences transport decisions. Because rail efforts have increased, truck shipments over 600 km dropped nearly 50%. That means for trips longer than about 600 km, most manufacturers are choosing trains where possible or fewer freight moves rely on trucks. However, when travel spans under 300–500 km, road haulage stays cheaper and faster due to delays tied to loading and unloading rails. So, the point where rail becomes cheaper than road depends on actual cost and time figures. With current fuel costs and rail rates, this shift usually happens between 500 and 800 kilometers consistent with fewer trucks seen on trips longer than 600 km.

Capacity Utilization: Another point in data review looks at how well each transport type uses its maximum load limit. In road shipping, a typical multi-axle trailer holds between 8 and 10 small cars though fewer when transporting larger SUVs. Info from equipment makers shows trailers usually carry around 8 vehicles on average. Yet, physical limits such as legal length caps (up to 18.75 meters) or clearance heights often result in underuse, especially with big vehicles or roads beneath low overpasses. Reports from operators note reaching full loading potential depends on smart pairing of vehicle types for instance, combining compact ones with taller units so they fit better within space boundaries. Use drops when flows aren't balanced empty returns happen often because vehicles move one way, with little coming back. Indian Railies tackled this by allowing auto components or bikes on return trips of car carriers, which boosted total usage.

A single train for rail typically has around 25 wagons; when using a two-level setup, it moves roughly 250 to 300 vehicles. Data from fiscal year 2025 reveal there were 7,578 train runs used for car transport that year, moving an average of 137 autos per run this number may appear low due to partial loads or outdated wagon models, whereas modern ones hold more. Rail capacity grew sharply since just 10 specialized trains in 2013 increased to 170 by 2025. Better usage patterns reflect this growth, given trains now operate nonstop among automotive centers. Rail use is heavy in one direction full of vehicles but like trucks, trains frequently go back unused or carry little cargo; certain carmakers do ship small items like spares or scooters the other way. Round-trip usage has received backing from the Railway Ministry, backed by policy updates such as permitting auto components during return journeys.

Seasonal patterns appear in vehicle shipments, peaking during holiday periods from September to November plus March due to financial deadlines. In October 2025, for example, demand spiked before Diwali, leaving about 250,000 units undelivered. These high-demand phases strain transport resources, particularly trucks. To manage this load, Maruti raised its rail shipment rates, according to company records. A wider industry measures the inventory-to-demand ratio at retail outlets tends to drop during holiday periods, mainly because shipments arrive late. During 2022–23, certain sellers saw minor shipment setbacks since transport resources like trailers couldn't quickly expand when demand spiked. Such time-based trends show carrier usage isn't steady it can be stretched thin or partly unused, such as in early Q2, a quieter phase after major holidays. Because of this fluctuation, forecasting becomes harder; firms need sufficient vehicles for busy times but also aim to prevent excess downtime when activity slows.

On balance, the results highlight several main points:

- Rail use has grown sharply - cutting down delivery durations, likely lowering expenses for distant shipments. With tracks extending into numerous areas, standard truck-only paths are shifting.

- Road transport is still essential, particularly due to its adaptability in delivering goods locally. Although their proportion may have declined, the total count of vehicle-carrying trucks probably increased alongside rising shipment levels.
- Fewer idle trips improve performance by maximizing load size or using uniform containers; however, return journeys without cargo still cause problems alongside shifts in demand across seasons.
- India's auto transport sector is changing, as figures indicate better coordination across different transit methods. Yet challenges remain; stronger systems and operational upgrades are necessary to manage the expected increase of 6–7.5 million cars per year by 2030.

In what follows; however, we turn attention to emerging difficulties - such as strained network limits or shaky technical setups that shadow recent gains in vehicle shipping systems; revealing key obstacles behind apparent advances.

Challenges Faced in Car Transport Logistics in India

Moving millions of vehicles across a large nation such as India involves many difficulties. Due to findings and sector knowledge, major obstacles include the following: Although infrastructure gaps exist, road conditions often slow deliveries. While some routes are well-maintained, others suffer from poor connectivity. Because urban centers face congestion, transit times increase unpredictably. Despite policy efforts, regulatory differences between states create delays. Since coordination among carriers varies, scheduling inconsistencies arise frequently. When demand spikes occur, fleet availability becomes limited. As tracking systems remain underdeveloped in parts, real-time monitoring lags needs

1. Capacity limits can disrupt supply when demand rises suddenly. A key issue is having enough trucks or railcars ready during busy periods. For instance, car sales tend to climb before festivals such as Dussehra and Diwali. This means more vehicles must move from factories to showrooms. In 2025, high buyer interest met weak haulage availability across India's automotive sector. Firms including Mahindra & Mahindra along with Maruti Suzuki faced trouble securing enough trailers. Orders piled up because transport could not keep pace. As a result, shipments got delayed impacting customer deliveries downstream. The trucking sector in India mostly consists of individual owners, limiting fast expansion. Even though railways help reduce load, they require early booking and miss sudden surges. A key problem grows from unused space many transport units go back empty after dropping off vehicles. Some steps have been taken, such as permitting spare parts shipments on return journeys by train, yet reverse loads stay underused. Moreover, unexpected output rises for instance, triggered by new vehicle releases or policy-driven sales jumps can overwhelm current supply chains. This became clear during a recent drop in GST for vehicles, which boosted purchases yet caught producers off guard as they rushed to deliver backlogged items. Because sudden demand spikes occur, firms face difficulty handling surges while avoiding high expenses - such as maintaining underused fleets throughout the year a complex balancing act.

2. Poor infrastructure often slows transport. Roads are getting better; however, problems remain. City streets get crowded, small highways limit space; moreover, rural areas lack strong links to main networks this affects delivery times. On big roads too, traffic jams happen at toll booths, checkpoints (fewer now thanks to GST), also near repair works. One key issue used to be low bridge heights or wires above roads in some places. These blocked tall vehicles like two-level car trucks, so drivers had to reroute or adjust cargo size. On the rail network, limited access to loading or unloading points slowed progress. A short time back, specialized auto ramps were rare in train yards, so vehicles got on board only at select stops. Rail operators have built more hubs such as in East and Northeast zones, yet several areas remain far from these sites, forcing reliance on truck transport instead. Another issue lies at export docks: Mumbai Port, once key for shipping cars

overseas, struggled with overcrowding and little space to store autos. While newer harbors like Ennore or upgraded terminals such as Mundra are coming online, holdups including delays awaiting roll-on/roll-off vessels can stall vehicle carriers. A second growing issue involves storage capacity near manufacturing sites when output rises, vehicle producers often face tight yards where finished vehicles wait. Because delivery schedules slip now then, operations inside facilities may slow down. While some plants expand layouts, others adjust shipping frequency to reduce congestion.

3. Even though things have gotten better, rules can still cause problems. A major issue is that regulations differ from state to state. Central guidelines set size limits for vehicle transporters yet how they're enforced isn't consistent. Certain areas require special permits or fees for large trucks, which increases red tape and expense. Take Maharashtra, where "double-decker" regulations were once applied in a unique way this briefly banned specific trailer types. Dealing with regional rule differences forces logistics firms to stay alert, raising administrative demands. On another front, shifting freight policies create uncertainty; fuel price shifts, new toll systems, or updated axle limits directly affect carrier expenses. In 2018, authorities raised legal axle weights for trucks by up to 25% to boost productivity. Yet many existing trailers couldn't take advantage unless fitted with reinforced axles a gap that left some operators in unclear regulatory territory. Policies such as the All-India Tourist Permit for trucks help smoother travel, yet city-level limits where many urban areas restrict large vehicles by day push freight into night hours, disrupting planning. In contrast to road transport, rail systems face delays due to shifting priorities; although recent guidelines favor automobile cargo, some crowded corridors still give precedence to passenger services, leading to inconsistent delivery windows. Moreover, securing train rakes often involves slow administrative steps if coordination fails, manufacturers may miss critical loading schedules, resulting in factory pileups. That said, growth in privately operated rakes is gradually easing this issue. Meanwhile, tax reforms along with paperwork updates, including GST introduced in 2017, briefly confused invoicing and cross-border forms, however eventually cut down inspection points and boosted inter-state flow.

4. Logistics expenses for vehicle transport are significant roughly 1–2% of a car's price per thousand kilometers. In India, companies must minimize these outlays because customers react strongly to pricing changes. Still, multiple elements increase spending: fluctuating yet high diesel rates add financial strain; toll fees rise as highways grow, and those charges shift directly to manufacturers. Fleet upkeep and insurance further elevate baseline costs. Wages for drivers climb too, fueled by limited availability of trained personnel for extended routes. Here's the issue: original equipment makers lock in flat rate deals with carriers yearly. So, when fuel or labor expenses jump unexpectedly, profit space shrinks sharply for logistics partners, sometimes triggering cuts elsewhere maintenance delays emerge, workloads intensify for crews. The industry faces delayed payments smaller truck firms may wait weeks or months to receive money, weakening cash flow while limiting growth. In addition, poor asset use remains an issue idle period and empty backhauls reduce annual productivity, increasing average trip costs. Indian Railways struggled with securing return loads for vehicles since operating empty trains one-way wastes resources; partial fixes include lower rates and accepting varied goods on return trips. Yet achieving low-cost performance with existing infrastructure continues to evolve. Overall, logistics players must balance upgrading tools and training against narrow profits driven by the auto sector's price-sensitive market.

5. Human resource issues include a persistent lack of drivers in India's trucking sector. Because car carriers transport high-value vehicles and need precise handling of extended trailers, experienced operators are essential. Long stretches away from home combined with pay that doesn't match the expertise needed make the job unattractive to newcomers. A growing number of current drivers are getting older, while fewer young people choose this career. As a result,

remaining drivers often face exhaustion from excessive workloads raising concerns about road safety. Some accidents with car transport trucks lead to damaged vehicles plus delays in deliveries. While some drivers get safety instruction for example, how to load or drive cars properly others don't receive such preparation at all. Theft remains an issue; although uncommon, criminals may remove items like wheels from parked trailers overnight. To reduce risk, companies often choose guarded rest areas or use protective convoys when moving luxury models. In addition, field workers point out that standardized education for those loading autos onto trains or flatbeds is mostly missing. Mismanagement might result in small harms like scratches or dents that create problems during Pre-Delivery Inspections at dealer sites. Although large firms follow standard procedures, sometimes using video checks when loading, smaller ones often skip these steps, so performance varies widely.

6. Technology use and transparency: India's logistics industry has adopted modern tools more slowly than others worldwide. Instead, real-time monitoring, electronic records, and data analysis could boost performance significantly yet numerous carriers, particularly small operators, still fall behind. In absence of GPS systems, manufacturers may struggle to know a shipment's location during transit, complicating dealer updates or arrival scheduling. Still, progress is happening thanks to wider smartphone access and low-cost tracking devices entering the sector. A different technical issue involves linking systems so that car makers, shipping companies, and sellers share one system to track every vehicle's location by its VIN. Although this would help trace movements fully, differences between existing platforms make coordination difficult also, setting it up tends to be expensive. Because of these barriers, teams still rely on hand-updates and physical documents during transfers, leading sometimes to mistakes or holdups. When cars arrive at storage spots or open lots, incorrect stock records may occur if scanners fail or are missing. Without reliable digital tools across stages, the industry uses data less efficiently than possible limiting improvements in how operations run.

In short, moving cars across India involves many hurdles: physical shortages such as limited trailers or train space during peak times structural barriers like weak infrastructure and uneven regulations, along with human factors such as staff readiness and slow tech uptake. While some fixes are underway including state-funded upgrades, carrier-rail partnerships, and small-scale digital trials the core issues still demand focus and fresh approaches. Following this, the next part uses these findings to suggest practical steps for strengthening vehicle transport systems nationwide.

Recommendations

To tackle issues in vehicle shipping, collaboration is needed among manufacturers, freight operators, one key insight from this research improving flow, scalability, or reliability within India's auto logistics system should focus on strategic coordination across stakeholders; rather than isolated fixes, integrated planning could yield better results through shared infrastructure use while adapting to regional demand shifts with flexible routing models that reduce idle transit time despite road conditions

- Take a mixed-transport approach: car makers and freight firms need planned, stage-by-stage delivery systems that combine trucks, trains, and short-sea routes when practical. Instead of only roads, shift toward rail for distances over 500–700 km because it cuts costs while lowering emissions. Where full train loads aren't possible alone, join forces with others through shared use agreements on Indian Railways' auto-rakes. Working together helps smaller players gain access to reserved rolling stock without needing large individual shipments. Meanwhile, short-distance and final-leg deliveries could improve via better truck logistics using compact vehicles or relay systems from train terminals to sales points. Combining transport types makes the system more adaptable while reducing risks tied to one method failing such as roadblocks or delayed trains. Maruti Suzuki's approach of moving

goods by rail to central zones offers a practical example others might follow. Authorities can help by keeping supportive rules for instance, faster approvals for rail connections at factories or benefits for shifting freight to sea routes.

- Boosting infrastructure requires steady funding. By growing rail networks along with adding vehicle terminals everywhere, travel gaps shrink making trains viable for additional paths. Indian Railways ought to move forward with terminal projects while exploring links to Dedicated Freight Corridors, cutting down delivery times. For highways, finishing road improvements plus removing traffic hotspots helps auto haulers significantly; one case includes installing tall bridges on key corridors, allowing unhindered passage of loaded trucks. Locating logistics parks close to automotive centers with spots for trucks to park, get repairs, and drivers to rest helps cut wait times while boosting safety. Instead of each automaker building its own yard, using joint storage areas in major zones may lead to better use of space; these hubs could be run together by several carmakers or handled by third-party operators. When demand spikes, a suggested move is forming a backup fleet of trailers, organized perhaps through a trade group, available short-term to companies running low. Such a system might function similarly to a swap platform empty unit from one area or partner go temporarily to those needing them, guided by uniform terms. On top of this, producers ought to keep upgrading internal setups such as docking points, holding fields, and digital tools able to manage larger volumes without causing bottlenecks inside factories.
- Leveraging tech boosts efficiency across operations. Stakeholders ought to adopt full shipment tracking via GPS on trucks or live updates for rail cars. A shared digital system either standalone or linked allows makers, carriers, and sellers to view vehicle locations and arrival times instantly, enhancing coordination while cutting unpredictability. Instead of separate tools, integrated systems support better decisions by showing up-to-the-minute status details. Software that adjusts routes dynamically helps pick the most suitable transport methods and paths per load, considering traffic, expenses, and time targets. Automation might assist specific tasks take RFID or barcode scanning per vehicle during loading or offloading, already adopted by a few firms, which reduces human mistakes in stock tracking. Instead of traditional methods, trying AI-driven prediction systems helps; these assess past data, reservation shifts, and manufacturing timelines to estimate sudden spikes in transport demands, letting businesses prepare ahead. To boost efficiency, digital solutions could pair return trips carrying unused components - or different cargo with idle auto-transporters going back empty, cutting wasted runs. In general, moving operations online doesn't just lower holdups and document work it supports programs such as electronic billing or digital freight permits but also collects insights useful for refining supply networks step by step.
- Strengthening ties across the sector matters automotive logistics is complex. Instead of working alone, carmakers might join forces via SIAM or a special group to exchange ideas and tools. One manufacturer may have extra rail space on a specific path; another could face high need there linking them boosts efficiency per train run (a tactic used overseas when loads are small). Where one firm lacks volume, shared usage keeps trains full. Coastal transport offers similar chances: firms like CEva show rivals can jointly book Ro-Ro ships domestically, cutting idle trips through joint planning. A Public-Private Partnership (PPP) involving Indian Railways may bring real benefits: carmakers or third-party logistics firms building rail facilities like AFTOs or loading points with railway backing helps match rising demand. Instead of waiting, coordination between agencies and local governments could speed up permit approvals or establish safe resting zones for drivers, easing daily operations. Working alongside tech companies or new startups can introduce fresh ideas; one example is testing IoT devices through joint trials to track motion or impacts during vehicle transport,

reducing damage risks. Overall, treating the full path from production unit to sales outlet as a jointly managed process improves flow, reduces weak spots, and strengthens reliability.

- Policymakers must help improve transport systems by updating rules alongside businesses. Governments could align trucking laws nationwide while ensuring consistent enforcement, reducing confusion for operators. To cut red tape, permit applications might shift online making approvals quicker. Working together, authorities and firms can create clearer, fairer processes. The government might use financial rewards to promote eco-friendly transport like offering rail discounts for car shipments, since Indian Railways already cuts rates at higher volumes. Instead of just funding, they could focus on better conditions for drivers: safe rest areas along highways, skill-building courses via the Logistics Sector Skill Council, or initiatives making truck driving a preferred job choice, which would ease workforce shortages. For railways, keeping freight slots available for vehicles and avoiding sudden rate jumps would strengthen the move toward train-based transit. Rather than broad goals, the National Logistics Policy could set clear benchmarks for auto shipping efficiency; say, lowering transport expenses per vehicle by a defined share over time, guided jointly by Commerce or Heavy Industries ministries. Predictable rules matter most firms need steady regulations so spending on trucks or wagons isn't wasted due to unexpected regulatory shifts.
- Boosting skills, consistency, and security pays off over time. Focusing on people along with operational standards brings lasting benefits. Companies in transport ought to support ongoing learning for operators and team members who handle cargo. Instruction for drivers might cover economical driving habits, safe load fastening, also simple upkeep this helps avoid accidents plus cuts equipment failures. Staff managing vehicle placement need clear guidance or certification where feasible in routine methods for moving automobiles safely. This involves wearing protective materials like seat shields to stop dirt, as well as inspecting each car for leaks or damage prior to shipment. Car makers could help by organizing shared training for logistics teams across suppliers this helps keep standards steady. Safety must come first: setting caps on drive time, assigning twin crews for extended hauls, or fitting trucks with key gear like fire suppressors, tracking units, or dashcams cuts down breakdowns and crashes. A few firms already offer bonuses to drivers who deliver without delays or incidents; expanding these rewards across the field may lift overall results. Instead of waiting until arrival, checking cargo condition mid-route for example during rail-to-truck handoffs at transfer centers can spot harm early, preventing last-minute shocks at delivery points. Building a work environment that values skill and caution in auto transport doesn't just boost trust it also draws fresh workers as roles gain recognition and working terms get better.

Putting these suggestions into action depends on dedication along with teamwork. Car manufacturers should treat transport systems not only as an expense, yet as a key advantage reliable, quick delivery improving market position. Shipping firms ought to invest in better processes while partnering closely instead of operating separately. Public authorities must stay alert to sector demands and adapt based on input. The good part is several of these actions already match where the sector's going work on combining transport modes, digital tools, and network upgrades continues. Rather than slow down, what's suggested here aims to speed up and organize progress, so India's vehicle shipping setup handles rising numbers smoothly, cuts total movement expenses, while getting automobiles nationwide quickly without harm.

Conclusion

This study aimed to explore car transport logistics in India; findings show the field is undergoing major change. The opening sections showed that growing vehicle production long depended on roads offering flexibility but also leading to steep expenses and delays. In recent years, shifts have emerged, especially greater use of rail networks, backed by government actions and private

efforts. Evidence suggests logistics here mirrors trends seen in accounting sectors: much like CAs adapted for new businesses, supply chains now adapt for large-scale auto demands.

By using specific goals and research methods, this work kept attention on numerical patterns along with deeper understandings. A real-world example Maruti Suzuki showed how top firms combine various transport types effectively, making use of rail connections within factories while boosting delivery performance. Their experience reveals that moving 25% of vehicles by train, once thought difficult ten years back, has become normal; areas such as Kashmir now get deliveries thanks to creative shipping approaches. These results suggest obstacles often fade when planning meets steady funding.

The analysis showed clear signs of change in transport patterns: rail use grew eighteen times, today's ratio sits around 75% road and 25% rail, besides how travel distance or shifting demand affects decisions. Although improvements exist yet visible the bulk of freight still moves by truck for now; therefore, fixing road-related challenges becomes essential, at a time when alternatives like rail are expanding. Despite gains, trucks remain dominant short-term, so upgrading their efficiency matters just as much while boosting other options.

In the Challenges part, we looked at various problems like not enough space when demand spikes, delays from outdated infrastructure or rules, along with high expenses and worker shortages. This shows an industry under pressure yet still trying pressured by rising loads and tight deadlines, yet working hard to improve say, by using new tools or urging rule updates. Seeing these struggles clearly marks the starting point for fixing them.

The suggestions laid out a clear path ahead. While focusing on overall strategy, they pushed for blending transport methods using each one where it works best. Instead of just adding capacity, attention shifted toward building physical structures alongside digital systems. Cooperation between firms and with public agencies was seen as key. At the same time, workforce needs like training and safety remained central. When put into practice, these steps could greatly lessen waiting periods, boost efficiency in using equipment, while lowering shipping expenses relative to vehicle worth. Shifting more freight to rails, along with smarter routing, might shorten delivery durations. Such changes may help pull high logistics spending down. Together, this supports India's goal to build a world-class logistics network by 2030.

In short, vehicle shipping in India keeps changing fast shifting from old limits to flexible systems using multiple transport types. Results here confirm logistics helps drive expansion in the auto sector. With India rising as a major production center for example, experts expect yearly car sales to hit 6–7 million by 2030 stronger delivery networks will be key to keeping progress steady. Better movement of vehicles leads to quicker deliveries and reduced expenses; thus, makers, sellers, and buyers all gain.

The move toward better logistics continues. As stakeholders stay active, policymakers must update rules and infrastructure before problems arise. Meanwhile, companies ought to focus on new ideas while expanding their resources. Logistics firms also need stronger skills training along with tech upgrades. Progress shows when projects such as growing rail shipments for vehicles succeed traffic drops, emissions go down, services improve. This suggests current issues aren't impossible to solve; instead, gradual improvements are already happening.

As a result, a well-functioning vehicle distribution network across India ensures cars made in places like Manesar or Chennai reach buyers anywhere showcasing growing economic strength. Findings from this research help clarify how such systems operate while offering practical ideas to enhance performance over time.

References

1. Business Standard (2025). “Maruti Suzuki eyes 35% rail dispatch share by FY31: CEO Hisashi Takeuchi.” Auto Industry News, Jun 05 2025. [41][11]
2. Business Standard (2025). “Indian Railways now transports 20% of cars produced across the country.” Auto Industry News, Jun 17 2025. [1][55]
3. Indian Express (2025). “How Indian Railways increased its share of car dispatches to 20% of all PVs manufactured in India.” Updated June 22, 2025. [15][40]
4. Times of India / ET Infra (2025). “Indian Railways race ahead in car transport with 18-fold surge over a decade.” Dipak K. Dash, Jun 16 2025. [20][37]
5. ETAuto (Economic Times Auto) (2025). “Festive rush spurs vehicle delivery delays as automakers struggle with logistics.” Oct 4, 2025. [59][38]
6. India Shipping News (2025). “Maruti Suzuki becomes first carmaker to dispatch vehicles by rail to Kashmir.” Oct 6, 2025. [42][69]
7. CEVA Logistics Insights (2025). “Fueling India’s Automotive Ambitions: Strategic Growth in a Global Market.” Interview with Kuldeep Rathore, Sep 22, 2025. [26][28]
8. Grandview Research (2024). “India Automotive Logistics Market Size & Outlook, 2030.” Market data highlights. [16][17]
9. Reuters (2023). “SUVs boost India’s passenger vehicle sales to record high in FY23.” Aditi Shah & Yagnoseni Das, Apr 13, 2023. [2][70]
10. iForest (The Economic Times – Opinion) (2025). “The big challenge that road freight, India’s primary mode of transport, faces.” Nidhi Bali, Apr 03, 2025. [6]
11. Automotive Logistics Magazine (2015). “Certainty in sight for Indian carrier lengths?” Christopher Ludwig, Feb 06, 2015. [7][8]
12. MotorIndia (2019). “Car Carrier Industry: Ferrying the Wheels!” May 06, 2019 (Content snippet on industry size). [25][3]
13. SIAM – Society of Indian Automobile Manufacturers (2023). Statistics & Reports (Referenced for production/sales figures).
14. Ministry of Road Transport & Highways (2018). Notifications on vehicle dimensions and axle loads (Referenced for regulatory changes).[24]
15. Ministry of Railways (2021). Automobile Freight Train Operator Policy (AFTO) – Revised Guidelines (Referenced for policy changes to rail logistics).[57]
16. (All web citations were accessed and verified for content between 2024 and 2025, ensuring the most recent information was used in this research.)