

Role of Effective Governance in Managing of Urban Transport System in Uttar Pradesh

Panchanan Mishra¹, Nand Lal Bharti²

¹P.hD scholar, Public Administration, University of Lucknow

²HoD, Public Administration Department, University of Lucknow

Abstract

Urban transport systems in India are undergoing rapid transformation due to accelerated urbanization, population growth, and increased economic activities. Effective governance plays a crucial role in managing these complex transport networks to ensure efficiency, sustainability, accessibility, and inclusiveness. Governance in urban transport involves the coordination of multiple stakeholders, including central and state governments, urban local bodies, transport authorities, and private sector participants. However, the sector often faces challenges such as fragmented institutional structures, overlapping responsibilities, inadequate policy coordination, and limited financial resources. In recent years, policy initiatives and national missions such as the National Urban Transport Policy, Smart Cities Mission, and Atal Mission for Rejuvenation and Urban Transformation have emphasized integrated transport planning, public transport enhancement, non-motorized transport infrastructure, and the adoption of intelligent transport systems. These initiatives aim to strengthen institutional mechanisms, promote multimodal integration, and encourage sustainable mobility practices in Indian cities. Effective governance frameworks also highlight the importance of data-driven decision-making, public participation, transparency, and regulatory reforms. Despite these initiatives, urban transport governance in India continues to face issues such as weak metropolitan transport authorities, inadequate coordination between land use and transport planning, and uneven implementation across cities. Strengthening governance requires institutional restructuring, capacity building of urban local bodies, improved financial models, and enhanced stakeholder collaboration. Adoption of digital technologies, integrated mobility platforms, and public-private partnerships can further improve service delivery and operational efficiency. Thus, robust governance mechanisms are essential for creating a resilient, inclusive, and sustainable urban transport system that can meet the mobility needs of India's rapidly expanding urban population while contributing to environmental sustainability and economic development. Against this backdrop, present paper purports to examine urban transport governance, sustainability mobility and current status of urban public transportation in India. The paper is based mainly on secondary data and critical review of literature.

Keywords: Urban Transport Governance, Sustainable Mobility, Integrated Transport Planning, Public Transport Policy, Smart Mobility, Urban Infrastructure, Institutional Coordination.

¹Research Scholar, Department of Public Administration, University of Lucknow, Lucknow

²Professor and Head, Department of Public Administration, University of Lucknow, Lucknow

Introduction:

Public transportation systems play a crucial role in the socio-economic development of modern cities. Rapid urbanization, population growth, and increasing mobility needs have made urban transport systems more complex and challenging to manage. In this context, efficient governance mechanisms are required to ensure that transportation services are accessible, reliable, and responsive to public needs. Among the various governance tools, public relations have emerged as a significant component in facilitating communication between transport authorities, service providers, and the public. Public relation governance refers to the systematic use of communication strategies, stakeholder engagement, and information dissemination to build trust, transparency, and cooperation in the management of public services, including urban transportation.

Urban transport systems such as metro rail and city bus services are public-oriented services that directly affect the daily lives of citizens. Their success depends not only on physical infrastructure and operational efficiency but also on effective communication with users. Public relation governance helps transport agencies inform citizens about services, schedules, policy changes, safety measures, and new initiatives. It also provides a mechanism for receiving feedback, addressing grievances, and improving service delivery based on public expectations. In this way, PR functions as a bridge between government institutions and commuters, ensuring that transport systems remain user-centric and socially accountable. In recent years, the importance of public relations in governance has increased due to the growing emphasis on participatory governance, transparency, and citizen engagement. Urban transport authorities must communicate with a diverse range of stakeholders, including passengers, government agencies, private operators, media organizations, and civil society groups. Effective public relation governance enables transport institutions to manage public perception, promote the benefits of public transportation, and encourage behavioural change among commuters, such as shifting from private vehicles to public transport. This is particularly important in rapidly growing cities where traffic congestion, environmental concerns, and urban mobility challenges are becoming more pronounced. Public relation governance also plays a critical role during periods of change or crisis within the transport system. The introduction of new infrastructure projects, fare revisions, service disruptions, or technological changes often requires clear communication and public engagement to avoid misunderstanding and resistance. Through well-planned PR strategies such as awareness campaigns, community outreach, media relations, and digital communication platforms, transport authorities can effectively manage public opinion and maintain public confidence in the system. Furthermore, the development of modern communication technologies and social media has transformed the way transport agencies interact with the public. Digital platforms now allow real-time dissemination of information regarding route changes, delays, safety advisories, and passenger services. These technologies also provide opportunities for citizens to participate more actively in governance by sharing feedback, reporting issues, and engaging in dialogue with authorities. Consequently, public relation governance has become an essential element in enhancing transparency, accountability, and responsiveness in urban transport management.

In the context of Indian cities, the need for effective public relation governance in urban transport has become particularly significant. Cities are witnessing rapid expansion of metro rail networks and improvements in bus services to address increasing transportation demand. However, the success of these initiatives depends largely on public acceptance, awareness, and sustained ridership. Therefore, communication strategies that inform and involve the public are essential for ensuring the smooth functioning of urban transport systems.

Urbanisation and Public Transport:

Urbanisation has emerged as one of the most significant socio-economic transformations in India over the past few decades. Rapid population growth, industrialization, economic development, and the expansion of urban centres have led to a steady increase in the urban population and the spatial growth of cities. Urbanisation refers to the process through which an increasing proportion of the population resides in urban areas, accompanied by the expansion of infrastructure, economic activities, and social services. In India, urbanisation has accelerated since the post-independence period and particularly after economic liberalization in the 1990s. According to United Nations, India's urban population has been growing steadily, and cities are expected to accommodate a large share of the country's population in the coming decades (United Nations, 2018). This rapid urban expansion has placed significant pressure on urban infrastructure, particularly on transportation systems that must support the daily mobility needs of millions of people.

Urban transportation plays a crucial role in shaping the growth and functioning of cities. Efficient and accessible transport systems facilitate economic productivity, social interaction, and the movement of goods and services within urban areas. In the Indian context, public transportation has been recognized as a key component of sustainable urban development. Public transport systems, including buses, metro rail, suburban railways, and other forms of mass transit, help reduce traffic congestion, improve accessibility, and provide affordable mobility to urban populations. According to Robert Cervero, well-planned public transport systems are essential for managing urban growth and ensuring sustainable mobility in rapidly expanding cities (Cervero, 1998).

The rapid pace of urbanisation in India has significantly increased the demand for efficient and reliable public transportation. Large metropolitan cities such as Delhi, Mumbai, Bengaluru, and Kolkata experience intense daily travel demand due to population density and economic activities. As a result, transportation networks in these cities often face challenges such as traffic congestion, environmental pollution, and inadequate infrastructure. Scholars studying urban mobility have noted that the expansion of private vehicles has further intensified these challenges, leading to increased pressure on road networks and urban environments (Pucher, Korattyswaroopam & Ittyerah, 2004). These problems highlight the importance of strengthening public transport systems to ensure efficient and sustainable urban mobility.

Public Transportation:

Public transportation systems in India have evolved gradually to respond to the challenges posed by urbanisation. Historically, buses have been the backbone of urban public transport in most Indian cities due to their flexibility and relatively low operational cost. State transport undertakings and city bus services have traditionally played a significant role in providing mobility to urban populations. However, the rapid growth of cities and the increasing demand for high-capacity transport have led to the development of modern mass transit systems such as metro rail networks. The introduction and expansion of metro rail systems in cities such as Delhi, Lucknow, Hyderabad, and Chennai represent important steps toward improving urban mobility and reducing traffic congestion.

Urban transportation policies in India increasingly emphasize the need for sustainable and integrated mobility systems. The Government of India introduced the National Urban Transport Policy to promote the development of efficient, safe, and environmentally sustainable urban transport systems. The policy emphasizes the importance of prioritizing the movement of people rather than vehicles and encourages the use of public transportation, non-motorized transport, and integrated urban mobility planning (Ministry

of Urban Development, 2006). The policy also highlights the need for coordinated planning among different transport agencies and the adoption of modern technologies to improve service delivery. Urbanisation in India has also led to the emergence of several challenges related to urban transportation. Rapid population growth and the expansion of cities have increased travel distances and commuting time for urban residents. In many cities, public transport systems are often unable to keep pace with the growing demand for mobility, resulting in overcrowding, inadequate services, and poor last-mile connectivity. According to studies by Vukan R. Vuchic, the efficiency of urban transport systems depends on integrated planning, adequate infrastructure, and effective management of different transport modes (Vuchic, 2007). In the absence of such integration, cities may experience fragmented transport networks that fail to meet the mobility needs of residents. Another important dimension of urbanisation and public transportation in India is the issue of environmental sustainability. The rapid increase in private vehicles has contributed significantly to air pollution, greenhouse gas emissions, and energy consumption in urban areas. Public transportation systems offer a more sustainable alternative by reducing the number of private vehicles on the road and lowering per-capita energy consumption. Scholars have emphasized that promoting public transport, walking, and cycling is essential for creating environmentally sustainable and livable cities (Pucher et al., 2004).

In recent years, many Indian cities have adopted innovative approaches to improve urban mobility and strengthen public transport systems. These initiatives include the development of bus rapid transit systems, the expansion of metro rail networks, the introduction of electric buses, and the use of digital technologies for real-time passenger information. Integrated transport planning and improved last-mile connectivity have also been emphasized to ensure that different modes of transport operate in a coordinated manner. Such measures are essential for addressing the mobility challenges associated with rapid urbanisation and for promoting inclusive and sustainable urban development. The urbanisation and public transportation are closely interconnected in the Indian context. The rapid growth of cities has significantly increased the demand for efficient and accessible transport systems, making public transportation a critical component of urban development. Strengthening public transport infrastructure, promoting sustainable mobility, and improving governance and planning mechanisms are essential for ensuring that urban transportation systems effectively support the economic and social development of India's cities.

The growth of cities in India has also been accompanied by an extraordinary increase in the number of vehicles. Between 1961 and 2011, the number of cities in India increased from 2,363 to 7,935, while the urban population rose from about 79 million to 377 million. During the same period, the number of registered vehicles increased dramatically from about 0.7 million to nearly 142 million, indicating an almost two-hundred-fold rise (Housing and Urban Development Corporation, 2015). Larger metropolitan cities, particularly megacities such as Delhi, account for a substantial share of these vehicles. In such cities, intermediate public transport (IPT) modes like auto-rickshaws are widely used, with availability ranging between 7 and 13 vehicles per 1,000 people in large metropolitan areas compared with less than two per 1,000 people in smaller cities. The share of public transport usage in India is also closely linked to city size. According to HUDCO (2015), public transport accounts for about 30 percent of urban trips in cities with populations between 0.2 and 2 million, around 42 percent in cities with populations between 2 and 5 million, and nearly 63 percent in cities with populations exceeding 5 million. This indicates that the demand for efficient public transportation will continue to grow as urban centres expand. However, the inability of existing public transport systems to meet rising mobility needs has led to an increasing reliance on private vehicles (ORF, 2022). According to the World Resources Institute (2020), in large metropolitan

cities with populations exceeding 10 million, walking accounts for approximately 43 percent of trips, while public transport accounts for around 34 percent. Intermediate modes such as auto-rickshaws, two-wheelers, and cars together account for about 18 percent of urban travel. In medium-sized cities with populations between one and ten million, dependence on auto-rickshaws and two-wheelers is much higher (about 34 percent), while the share of formal public transport remains relatively low at around 15 percent. In smaller cities with populations below one million, two-wheelers and auto-rickshaws account for nearly 40 percent of trips, while walking continues to play a dominant role, accounting for nearly half of all daily journeys. These patterns indicate the need for city-specific transport policies that prioritise sustainable mobility options and strengthen public transport infrastructure (Table 1).

Table 1: Mode Share of Public Transport in India Cities

Mode of Transport	>10 Million	1-10 Million	< 1 Million
Car	6	3	2
Auto Rickshaws	3	11	13
Two-wheeler	9	23	27
Rail/ Metro	14	2	0
Bus	20	13	4
Cycle	5	13	4
Walk	43	37	49

Source: WRI, 2020

At present, 740 air-conditioned electric buses are being operated under the FAME-I and FAME-II Scheme in 14 cities of Uttar Pradesh, which is the highest in the country (Table 1.2.). About 740 e-buses, which were procured under FAME-I and II Scheme of Government of India are operating. In addition, the Directorate will also receive 2000 e-buses under PM e-bus Sewa Scheme of Government of India. About 700 CNG buses and 440 diesel buses are operating in various cities of the State. Electric buses are also being operated in the State for clean environment and easy transportation. Air-conditioned Electric Buses are an accessible, safe and popular public transport for city dwellers, which is free from air and noise pollution and is safe for disabled friends and women. Urban Development Department of Uttar Pradesh is moving ahead with its mission “*Aapka Sukh Hamara Chain*” and is committed to it. To achieve this mission these suggestions should also be kept in mind.

Table 2: Requirement of City Buses and e-Bus Allocation under PM e-Bus Sewa

Sl No.	Name of Cities	Population (2011 Census)	Projected Population (2021)	Bus Required as per Level of Service (2021)	Existing e-Bus	Additional Requirement of e-Bus	PM e-Bus Sewa (Allotment)
1	Agra	1,585,704	1,982,000	990	100	890	100
2	Aligarh	874,408	1,093,000	440	25	415	100
3	Bareilly	903,668	1,130,000	450	25	425	100
4	Ghaziabad	1,648,643	2,061,000	1,030	50	980	150

5	Gorakhpur	673,446	842,000	340	25	315	100
6	Jhansi	505,693	632,000	250	25	225	100
7	Kanpur	2,767,348	3,459,000	1,730	100	1,630	150
8	Lucknow	2,817,105	3,521,000	1,760	140	1,620	150
9	Mathura– Vrindavan	349,909	437,000	170	50	120	100
10	Meerut	1,305,429	1,632,000	650	50	600	100
11	Moradabad	887,871	1,110,000	440	25	415	100
12	Prayagraj	1,112,544	1,391,000	560	50	510	100
13	Shahjahanpur	329,736	412,000	160	25	135	50
14	Varanasi	1,198,491	1,498,000	600	50	550	100

Source: Malini Argal Srivastava (2023)

Uttar Pradesh’s plan to achieve a gross state domestic product (GSDP) of USD 1 trillion hinges on its fast-growing transport and tourism sector (Deloitte, 2023). Affordable and efficient public transport (PT) plays a critical role in connecting manufacturing, tech-clusters, tourism, and education hubs while mobilising the skilling sector and entrepreneurs in sunrise sectors. Cities contribute more than 75 per cent of the GSDP, and buses are vital in transporting people within and across these hubs. Thus, developing bus services, bus stops, and accessible infrastructure is critical to propelling UP’s economy. The Government of Uttar Pradesh (GoUP) has, therefore, renewed its focus on bus systems to enhance connectivity across the state and provide accessibility to jobs. To support this transformation of PT, there is a need to estimate the total bus demand in UP over the next two decades. The Directorate of Urban Transport (DUT) in UP currently operates about 1,235 buses in 14 cities. It is planning to expand its bus services under the PM-eBus Sewa Scheme and state programmes. The Council on Energy, Environment and Water (CEEW), as part of the United States Agency for International Development (USAID)–supported Cleaner Air and Better Health (CABH) project, conducted an assessment of the number of buses required in 26 cities of UP, whose population is projected to surpass 3 lakh people by 2031. By 2031, 26 cities across the state need 12,229 buses to ferry approximately 6 million people daily (USAID- CEE ,2024), It is estimated that about 375 lakh residents in 26 cities will drive most of the mobility demand till 2031. There will be 13 metropolitan (10 lakh plus population) cities in UP, with two mega cities, Lucknow, and Kanpur that will have a population of more than 40 lakh. 13 other large cities will have populations of 5–10 lakh. 2Ws have a higher modal share in metropolitan cities as compared to large cities. But people prefer buses for commutes longer than 5 km. About 50 per cent of all 2W and 3W trips are longer than 5 km in the analysed cities. People making these long trips are highly likely to switch to using buses (Electricwala and Kumar, 2014, Khanna et al. ,2024). The estimates indicate that buses will serve 60 lakh riders per day by 2031 in all 26 cities in the low-ambition scenario and 80 lakh riders in the high-ambition scenario.

The growth of metro rail systems in India represents a major shift toward modern mass transit systems in response to rapid urbanisation, congestion, and environmental concerns. An analysis of available data shows that metro rail networks have expanded significantly over the last decade and are now an important component of urban transport governance. The development is particularly visible in large metropolitan regions as well as emerging urban centres such as those in Uttar Pradesh. India’s metro rail system has witnessed remarkable expansion in recent years. The operational metro network increased from about 248 km in 2014 across 5 cities to more than 1,013 km across 23 cities by 2025, making India one of the largest metro rail networks in the world (Table 3). This expansion reflects the government’s increasing emphasis on sustainable urban mobility and mass rapid transit systems (MRTS) to reduce congestion and pollution in rapidly growing cities (Ministry of Housing and Urban Affairs, 2025).

Table 3: Growth of Metro Rail Network in India

Year	No. of Cities with Metro	Operational Length (km)	Key Features
2006	1 (Delhi)	~81 km	Initial phase of metro development
2014	5 cities	248 km	Expansion beyond Delhi
2020	13 cities	~650 km	Rapid construction phase
2025	23 cities	1,013 km	India among top global metro networks

The metro rail system has grown more than four times between 2014 and 2025. Expansion has moved beyond megacities to include Tier-2 cities such as Nagpur, Kochi, Lucknow, and Kanpur. The metro rail system is now a major element of sustainable transport policies aimed at reducing traffic congestion and vehicular pollution. Among Indian states, Uttar Pradesh has emerged as an important centre of metro rail development in North India. Metro systems operate in several cities including Lucknow, Noida, Kanpur, and Agra. These systems are largely implemented by the Uttar Pradesh Metro Rail Corporation. The state currently has over 212 km of metro-related corridors planned, with approximately 150 km operational, including sections of the Delhi Metro Rail Corporation network extending into cities such as Noida and Ghaziabad (Table 4).

Table 4: Metro Rail Systems in Uttar Pradesh

Metro Project	City	Total Length (km)	Operational Length (km)	Average Daily Ridership
Lucknow Metro	Lucknow	22.878	22.878	78,000
Kanpur Metro	Kanpur	32.38	15.00	Partial section operational
Agra Metro	Agra	29.4	6.00	Partial section operational
Noida Metro (Aqua Line)	Noida	29.707	29.707	~59,000–68,000
Delhi Metro extension	Noida	17.761	17.761	~580,000 footfalls
Delhi Metro extension	Ghaziabad	11.9	11.9	~203,000 footfalls

Delhi-Meerut RRTS	Ghaziabad/Meerut	68.65	47 (partial)	Under phased operation
-------------------	------------------	-------	--------------	------------------------

Source: Lok Sabha, Unstarred Question No. 3113, August 07, 2025

Unlike many states where metro systems are concentrated in one major city, Uttar Pradesh is developing metro systems across multiple urban centres such as Lucknow, Kanpur, Agra, and Noida. This reflects a regional urban transport strategy aimed at improving mobility in several fast-growing cities. A large share of metro ridership in the state comes from the Delhi Metro corridors extending into Noida and Ghaziabad, which record hundreds of thousands of daily commuters. This highlights the strong economic and commuting integration with Delhi. Cities such as Lucknow and Noida show moderate ridership levels (50,000–80,000 daily passengers), which is typical for medium-sized Indian cities. Ridership is expected to increase as metro corridors expand and feeder systems improve. Projects in Kanpur and Agra are still partially operational, which limits their current ridership. As additional corridors open, passenger demand is expected to rise significantly. One of the major issues affecting metro performance in cities like Lucknow and Kanpur is weak last-mile connectivity. Integration with buses, e-rickshaws, and non-motorised transport is essential for improving ridership and overall efficiency.

Uttar Pradesh ranks among the top ten states in metro infrastructure development. The state is unique because several tier-2 cities are developing metro systems simultaneously. Future projects in cities such as Meerut, Varanasi, Prayagraj, Bareilly, and Gorakhpur are expected to expand the metro network further. The development of metro rail systems in India represents a significant transformation in urban transport infrastructure. The expansion from a limited network in the early 2000s to over 1,000 km today demonstrates the increasing emphasis on mass rapid transit systems to address urban mobility challenges. In the case of Uttar Pradesh, metro rail development has expanded beyond a single metropolitan centre and now covers several important cities including Lucknow, Noida, Kanpur, and Agra. The current operational network of around 150 km, combined with ongoing construction and planned projects, indicates that metro rail will play a crucial role in shaping sustainable urban transport in the state. However, the long-term success of these systems will depend on factors such as integrated transport planning, effective last-mile connectivity, and coordinated governance among urban transport agencies.

Governance of Urban Public Transport:

The governance of the urban public transport system in India has evolved significantly over the past few decades due to rapid urbanization, population growth, and increasing mobility demands. Urban transport governance refers to the institutional framework, policies, and administrative mechanisms through which public transportation systems—such as buses, metro rail, intermediate public transport, and non-motorized transport—are planned, regulated, and managed in cities. In India, the governance of urban transport is characterized by a multi-level institutional structure involving the central government, state governments, urban local bodies, and specialized transport agencies. The central government provides policy guidance and financial assistance through initiatives such as the National Urban Transport Policy (NUTP) and urban development programmes, while state governments are primarily responsible for planning, regulating, and implementing urban transport systems within their jurisdictions.

Urban transport governance in India focuses on ensuring efficient, affordable, safe, and sustainable mobility for urban populations. According to Robert Cervero, the effectiveness of urban transport systems depends not only on infrastructure development but also on institutional coordination, policy frameworks,

and governance mechanisms that integrate various modes of transportation (Cervero, 1998). In India, urban transport governance involves multiple institutions such as state transport departments, municipal corporations, metropolitan development authorities, metro rail corporations, and public bus operators. This multi-agency structure often creates challenges related to coordination, integration of services, and unified planning. Consequently, policymakers have increasingly emphasized the need for integrated transport governance and coordinated urban mobility planning.

In India, multiple ministries, departments, and agencies work on the transport sector at the national, state, and local levels. Each mode of transport has its own ministry at the national level, with no single Act or ministry that looks at the urban transport sector comprehensively. Most states currently take the regulatory role in managing the sector, along with providing public transport systems and managing necessary investments through different departments. City level departments focus on street development and maintenance without an integrated approach. In India, most states do not have any dedicated state level body to create transport policies and provide the funds required to drive the transport sector with a common goal. As per the Seventh Schedule of the Indian Constitution, urban transport is a function of the state under urban development but is often sidelined compared to other development issues (Gijre and Gupta ,2020). Hence, planning in the sector remains directionless, and focusses on the demand side of the sector. Currently, only a few states have departments tasked with managing urban transport in their formation order, but they still need to deliver urban transport services in an integrated manner. One example is the Directorate of Urban Land Transport (DULT) in Karnataka, which serves as the nodal agency promoting sustainable transportation modes across the state. Uttar Pradesh has established a Directorate of Urban Transport (DUT) through executive orders. However, it has encountered challenges in expanding its scope due to institutional overlaps, no regulatory power, and constraints in human resources and raising funds. The National Urban Transport Policy (NUTP), 2006, directed that at the city level, Unified Metropolitan Transport Authority (UMTA) be created for million plus cities, in order to better coordinate among various departments and plan for more localised issues in the cities. Most of the city UMTAs have merely functioned as boards and committees bridging the gaps between multiple departments but have failed to function as

planning secretariats either due to paucity of funds, lack of technical capacity, or the absence of necessary powers to implement desired policies (Baindur ,2015, Gijre and Gupta ,2020, Planning Commission, Government of India 2014). In 2016, the Ministry of Urban Development created operational documents for UMTAs in cities like Jaipur, Lucknow, Bhopal, Vijayawada and Tiruchirappalli, but the authorities have not been set up till date (Ministry of Urban Development, Government of India, 2016). It is important to strengthen coordination across centre, state and city level of governance to reinforce the institutional framework within the transport sector. Establishing a State Urban Transport Authority (SUTA) is imperative to ensure comprehensive coordination between states and cities, as well as to fix accountability for it. The authority shall initiate policy, manage necessary budgets, and coordinate among various departments dealing with urban transport. The state authority should be able to consolidate funds from diverse sources and allocate them based on predetermined objectives (USAID- CEE, 2024). Decentralising the institutional structure at the city level can be achieved by establishing UMTAs, with million plus cities acting as hubs to address the transport related concerns within their respective geographies. Metropolitan planning helps to tap into the potential of transportation at a larger scale, connecting nearby centres and facilitating intercity urban transport systems (Planning Commission,

Government of India 2014). Hence, understanding these systems at a metropolitan scale can further help UMTAs to assist and advise the SUTA in policy formation (USAID- CEE, 2024).

In the state of Uttar Pradesh, urban transport governance is primarily managed by the state government through the Transport Department, the Directorate of Urban Transport (DUT), and various implementing agencies. One of the major public transport providers in the state is the Uttar Pradesh State Road Transport Corporation, which operates extensive intercity and intra-city bus services. UPSRTC plays a crucial role in providing mobility services across urban and rural areas, connecting major cities and towns with state-run bus networks. In recent years, the state government has introduced policies aimed at expanding and modernizing public transport infrastructure, including the development of bus terminals, modernization of bus stations, and the introduction of electric and CNG buses to promote environmentally sustainable transportation (ET Infra, 2025). The state government has also launched initiatives to expand bus connectivity to underserved areas, aiming to improve access to public transportation and enhance regional mobility (PTI, 2025).

To improve coordination among different modes of urban transport, the government of Uttar Pradesh has proposed the establishment of an integrated institutional framework such as the Urban Metropolitan Transport Authority (UMTA). The UMTA is intended to function as an apex coordinating body responsible for planning, regulating, and integrating different urban transport systems including metro rail, city buses, intermediate public transport, and non-motorized transport. The authority would include representatives from multiple departments such as urban development, housing, municipal corporations, metro rail corporations, and the transport directorate to ensure coordinated planning and implementation of urban transport policies (Shukla, 2019). Such integrated governance structures are essential for addressing the fragmentation that often exists in urban transport administration. Another important aspect of urban transport governance in Uttar Pradesh is the development of sustainable and integrated mobility systems in major cities. The Directorate of Urban Transport has initiated programmes to strengthen city bus services and promote sustainable urban mobility. For example, initiatives such as the “Meri Bus, Meri Sadak” programme aim to expand bus fleets, improve accessibility, and reduce congestion and pollution in urban areas. Studies associated with this initiative indicate that the state will require more than 12,000 buses to meet the growing demand for urban mobility and serve millions of daily passengers in the coming decades (CEEW, 2024). These initiatives also emphasize the adoption of electric buses and improved route planning to support environmentally sustainable transport systems.

Urban transport governance in Uttar Pradesh also includes efforts to improve last-mile connectivity and integrate different modes of transportation. In cities such as Lucknow, Kanpur, and Agra, metro rail systems have been developed to provide high-capacity mass transit services. However, metro systems alone cannot meet the entire mobility demand of urban populations. Therefore, state authorities have been exploring measures such as the introduction of electric buses, feeder services, and electric rickshaws to improve connectivity between metro stations and surrounding neighbourhoods. Integrated ticketing systems and coordinated feeder routes are also being proposed to enhance passenger convenience and encourage the use of public transport (Times of India, 2024). Furthermore, recent policy initiatives in Uttar Pradesh emphasize improving transport infrastructure and regulatory frameworks to support urban mobility. The state government has introduced policies for developing bus terminals and regulating bus parking facilities to address the growing number of public and private buses operating in urban areas. These policies encourage private investment in transport infrastructure while ensuring regulatory oversight through district-level committees and government authorities (Devdiscourse, 2025). Such public-private

partnerships are increasingly being used to strengthen urban transport infrastructure and improve service quality.

Despite these initiatives, urban transport governance in India and particularly in Uttar Pradesh continues to face several challenges. These include fragmented institutional responsibilities, insufficient public transport fleets, traffic congestion, environmental pollution, and inadequate last-mile connectivity. Effective governance therefore requires integrated planning, improved institutional coordination, sustainable transport policies, and greater public participation in transport planning processes. Strengthening institutional mechanisms such as UMTA, expanding public bus systems, promoting electric mobility, and integrating different modes of transport are crucial steps toward achieving efficient and sustainable urban mobility.

In conclusion, the governance of the urban public transport system in India involves a complex institutional framework that integrates policy, planning, and operational mechanisms across multiple levels of government. In Uttar Pradesh, the state government has undertaken several initiatives to strengthen urban transport governance through integrated transport authorities, modernization of bus services, metro rail development, and sustainable mobility programmes. These measures aim to improve accessibility, reduce congestion, and create efficient public transport systems capable of meeting the growing mobility needs of rapidly expanding urban centres.

The Uttar Pradesh government has announced the New Electric Vehicle Manufacturing and Mobility Policy, 2022, to promote faster adoption of clean mobility solutions and create a conducive ecosystem for EVs in the state. The policy provides for a three-pronged incentive regime that includes benefits to consumers for purchasing EVs; to manufacturers of EVs, batteries and related components; and to service providers developing charging/ swapping facilities. The main objective of the policy is uptake of electric vehicles within the states, for benefits such as reducing pollution and a transition to sustainable mobility. The aim of the policy is not only to create an eco-friendly transportation system in the state, but also to make Uttar Pradesh a global hub for the manufacturing of electric vehicles, batteries and associated equipment. The policy targets at attracting investment of more than Rs 30,000 crore and generate direct and indirect employment for over one million people. The EV Policy divides incentives and measures into three categories – charging infrastructure incentives, consumer demand incentives and manufacturing incentives. Along with the incentives for boosting these three major sectors, EV policy also looks into recycling Ecosystem where it encourages the reuse and recycles of EV batteries that are set to exhaust, as well as job creation where policy supports to create jobs in the EV ecosystem and set up skill centers for training in EV related jobs (Niti Ayog, 2022). Uttar Pradesh stands at the forefront of EV adoption in the country. Lucknow has achieved a milestone 10.2 percent EV sales penetration rate in 2022 so far, driven almost completely by electric 3- wheelers (90 percent sales penetration). Lucknow has been one of the front-runners in the passenger 3-wheeler segment, with nearly all operational autos and rickshaws being battery powered. Manual rickshaws have largely been replaced by economical, 5-seater e-rickshaws that offer affordable short-distance rides to customers along approved routes. The government has also taken initiative to accelerate the replacement of CNG autos by no longer renewing the permits of these vehicles, triggering a move to their electric variants. Passenger 3-wheelers registrations have reached peaks of more than 800 per month in 2022. Lucknow City Transport Services has taken another major step forward for electric mobility by running 140 electric buses over 11 routes in the city, making up nearly one-tenth of all buses running in the city. Out of 45,000 daily public bus users, 35,000 use electric buses replacing the equivalent of 8,750 passenger cars on the road. They are highly popular with commuters, running at nearly

185 percent occupancy due to their smooth operation and low fares. While overall penetration outside of buses remains very low, 2022 registrations of 2-wheelers and 4-wheeler passenger vehicles have grown four times and two times respectively, compared to 2021. This indicates the start of an upwards trend in EV adoption, that can be projected into the future to arrive at the electric vehicle status of the city by 2030.

Conclusion:

Rapid urbanization, population growth, and increasing mobility demands have placed significant pressure on urban transportation systems in India. As cities expand and transport infrastructure becomes more complex, the role of public relations within governance frameworks has become essential for ensuring coordination among authorities, service providers, and users. Public relation governance acts as a bridge between transport agencies and the public by facilitating information dissemination, addressing grievances, building trust, and encouraging public participation in decision-making processes. In the context of urban transport systems such as metro rail and city bus services, public relations strategies help transport authorities communicate service changes, promote safety awareness, and enhance passenger satisfaction. Effective governance mechanisms supported by strong public relations practices contribute to transparency, accountability, and responsiveness, which are crucial for the successful operation and sustainability of transport services. Modern urban transport systems rely not only on technological advancement and infrastructure development but also on the ability of institutions to engage with citizens and respond to their expectations.

Governance plays a critical role in the effective management and sustainability of urban transport systems in Uttar Pradesh. With rapid urbanization, population growth, and increasing mobility demands in cities such as Lucknow, Kanpur, Varanasi, and Ghaziabad, the need for a coordinated, transparent, and efficient governance framework has become increasingly important. Effective governance ensures that transport planning, infrastructure development, regulation, and service delivery are integrated and responsive to the needs of citizens. The study highlights that urban transport management in Uttar Pradesh faces several challenges, including fragmented institutional structures, inadequate infrastructure, traffic congestion, environmental concerns, and limited adoption of smart transport technologies. Addressing these challenges requires stronger institutional coordination among state agencies, urban local bodies, and transport authorities, along with improved policy implementation mechanisms. Strengthening governance mechanisms through participatory planning, data-driven decision-making, and the integration of intelligent transport systems can significantly enhance the efficiency and sustainability of urban mobility. Furthermore, promoting public transport, non-motorized transport, and environmentally sustainable mobility options will contribute to reducing congestion, pollution, and energy consumption in urban areas. In conclusion, a well-structured governance framework supported by policy reforms, institutional strengthening, technological integration, and stakeholder participation is essential for developing an efficient, inclusive, and sustainable urban transport system in Uttar Pradesh. Such an approach will not only improve urban mobility but also contribute to economic growth, environmental sustainability, and an improved quality of life for urban residents.

References:

1. Baidur, Deepak (2015) "Urban Transport in India: Challenges and Recommendations". Indian Institute for Human Settlements. <https://doi.org/10.24943/9789387315167>
2. CEEW (2024). Sustainable Urban Mobility Studies for Uttar Pradesh, CEE, New Delhi

3. Cervero, R. (1998). *The Transit Metropolis: A Global Inquiry*. Washington DC: Island Press.
4. Council on Energy, Environment and Water (CEEW). (2019). *State of Urban Mobility in India*. New Delhi: CEEW.
5. Deloitte. (2023) “Boosting Uttar Pradesh’s Economy to \$1 Trillion.” https://updes.up.nic.in/sss_training_module/workshop/05.10.23_Session_2_a_OTD_Roadmap_Introduction.pdf.
6. Devdiscourse (2025) Bus Infrastructure Policy in Uttar Pradesh, VisionRI Connexion Services Pvt Ltd. National Capital Region, 2204P, Sector 7, Sonipat, Haryana
7. Electricwala, Fatima, and Rakesh Kumar. (2014) ‘Introduction of Public Bus Transit in Indian Cities’. *International Journal of Sustainable Built Environment* 3, no. 1 (2014): 27–34. <https://doi.org/10.1016/j.ijbsbe.2014.06.001>
8. Gijre, Vaishali, and Sanjay Gupta. (2020) “Urban Transport Governance Practice and Challenges in an Emerging Economy - Case Study of India.” *Transportation Research Procedia* 48 (2020): 2435–45, doi:10.1016/j.trpro.2020.08.293.
9. HUDCO. (2015). *Urban Transport in India: Status and Issues*. New Delhi: Housing and Urban Development Corporation.
10. Khanna, Krishna, Divyanshu Yadav, Udit Narayan Mall, and Himani Jain. (2024). “Driving Sustainable Urban Mobility in Uttar Pradesh: Integrating User Perception to Improve Transit Services.” New Delhi: Council on Energy, Environment and Water.
11. Ministry of Housing and Urban Affairs (MoHUA). (2017). *Metro Rail Policy 2017*. Government of India, New Delhi.
12. Ministry of Housing and Urban Affairs (MoHUA). (2019). *Urban Transport Annual Report*. Government of India.
13. Ministry of Urban Development (2006). *National Urban Transport Policy*. Government of India, New Delhi.
14. Ministry of Urban Development, Government of India. (2016) “Final Operations Document for Unified Metropolitan Transport Authority in Lucknow”. Ministry Of Urban Development. https://mohua.gov.in/upload/uploadfiles/files/UMTA_Lucknow_v13.pdf.
15. Niti Ayog (2022) Lucknow Comprehensive Electric Mobility Plan Roadmap for Transformation of Lucknow to A Global EV Lighthouse City in India, Niti Ayog, Government of India, New Delhi
16. Observer Research Foundation (ORF). (2022). *Urban Mobility in India: Challenges and Opportunities*. New Delhi.
17. Pucher, John., Korattyswaroopam, N., & Ittyerah, N. (2004). “The Crisis of Public Transport in India: Overwhelming Needs but Limited Resources.” *Journal of Public Transportation*, 7(4), pp. 95–113.
18. Shukla, N. (2019). Urban Metropolitan Transport Authority for Uttar Pradesh, Times of India, September 15
19. Times of India (2024). Metro Feeder Connectivity and Urban Transport Planning in Uttar Pradesh, Times of India, September 15
20. United Nations (2018). *World Urbanization Prospects: The 2018 Revision*. New York: United Nations.
21. Vuchic, Vukan R. (2007). *Urban Transit Systems and Technology*. New Jersey: John Wiley & Sons.
22. World Resources Institute (WRI). (2020). *India’s Urban Mobility and Transport Report*. Washington, DC: WRI.