# TRANSPORT GOVERNANCE IN PAKISTAN: A CASE STUDY OF FEDERAL TRANSPORT MINISTRIES


*By*

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## CERTIFICATE

This is to certify that this thesis entitled: **"Transport Governance in Pakistan: A Case Study of Federal Transport Ministries."** submitted by Muhammad Suleman Seemab is accepted in its present form by the PIDE School Policy, Development and Governance, Pakistan Institute of Development Economics (PIDE), Islamabad as satisfying the requirements for partial fulfillment of the degree in Master of Philosophy in Development Studies.

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## Author's Declaration

I, **Muhammad Suleman Seemab**, hereby state that my MPhil thesis titled, **Transport Governance in Pakistan: A Case Study of Federal Transport Ministries**, is my own work, and it has not been submitted previously, by me, for taking any degree from Pakistan Institute of Development Economics, or anywhere else in the country/world.

At any time, if my statement is found to be incorrect, even after my graduation, the university has the right to withdraw my MPhil degree.

Date: 29-10-2025 Muhammad Suleman Seemab

***Dedication***

*To my family,*
*especially parents,*
*who, even in my adulthood,*
*had to take care of me*
*as an infant is taken care of!*

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This research is aligned with the research mandate of the NTRC. I, probably, would have chosen another topic if I had not been working at this Centre. I, contrary to what my well-wishers think, am not striving for perfection. Rather, I try to improve the system, wherever I work, even if by making incremental changes rather than creating revolutionary disruptions [I am too miniscule for that], with the hope to leave things in a better condition, rather than keeping the status-quo, or making things worse for the people.

My heart quivers seeing people suffering at the hands of misgovernance; be it socio-political, economic, and legal. I hope that this tiny effort in helping to improve the transport governance in Pakistan may play a bit of its part in transforming the current governance landscape, and the future generations will not have to go through the same ordeals that we, and our predecessors, had to face.

# ABSTRACT

This study examined the fragmented governance of Pakistan's federal transport sector which results in inefficiencies, policy misalignment, and poor coordination between the separate ministries responsible for road, rail, maritime, and aviation transport. The study involved the qualitative exploratory case research, where the ‘in-depth interviews’, with the key respondents, were conducted including the officers of federal ministries, policymakers, and academic scholars in a semi-structured form alongside an analysis of national transport related policies, and related documents. Some important themes were identified by the study like institutional fragmentation, inter-ministerial coordination, policy overlap, and historical evolution of transport ministries.

The results showed that the breaking up of the ‘Ministry of Communications’ resulted in competing priorities, and fragmentation. The subsequent transport ministries are not well coordinated, as there is no central coordinating body, resulting in occasional coordination, redundant undertakings, especially in the freight, and infrastructure development. Although, there are policies, such as the ‘National Transport Policy of Pakistan (2018)’, whose implementation is hampered by the lack of permanent coordination mechanisms among the ministries, leading to a relatively reactive, as opposed to proactive, alignment across transport modes, in terms of policy.

The study findings noted that the recent tensions could have been overcome by establishing a ‘Ministry of Transport’, or a permanent ‘central coordinating agency’, by merging transport ministries to coordinate policy, and developing a ‘National Transport Master Plan’ to harmonize transport strategies in the country, and to enhance the economy, efficiency, and effectiveness of the overall governance.



Keywords: Transport governance, fragmentation, inter-ministerial coordination, policy overlap, ‘National Transport Policy’, Pakistan.

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| | |
|---|---|
| AAA | American Anthropological Association |
| AC | Air Conditioned |
| BRTS | Bus Rapid Transit System |
| BSA | British Sociological Association |
| CCA | Central Coordinating Agency |
| CMLA | Chief Martial Law Administrator |
| CNG | Compressed Natural Gas |
| CPEC | China-Pakistan Economic Corridor |
| CoP | The Constitution of the Islamic Republic of Pakistan, 1973 |
| FGD | Focus-group Discussion |
| FLL | Federal Legislative List |
| FTG | Federal Transport Governance |
| FTMs | Federal Transport Ministries |
| FYP | Five Year Plan |
| ICAO | International Civil Aviation Organization |
| ICT | Information and Communications Technology |
| IDIs | In-depth Interviews |
| ITS | Integrated Transport System |
| IWT | Inland Water Transport |
| JICA | Japan International Cooperation Agency |
| MoA | Ministry of Aviation |
| MoC | Ministry of Communications |
| MoD | Ministry of Defence |
| MoLT | Ministry of Land Transport |
| MoMA | Ministry of Maritime Affairs |
| MoP&S | Ministry of Ports and Shipping |
| MoR | Ministry of Railways |
| MoT | Ministry of Transport |

| | |
|---|---|
| NAP | National Aviation Policy, 2023 |
| NFLP | National Freight and Logistics Policy, 2020 |
| NHA | National Highway Authority |
| NHMP | National Highways and Motorway Police |
| NMP | National Maritime Policy |
| NTDO | National Transport Data Observatory |
| NTMP | National Transport Master Plan |
| NTP | National Transport Policy of Pakistan, 2018 |
| NTRC | National Transport Research Centre |
| OECD | The Organisation for Economic Co-operation and Development |
| PC | Planning Commission of Pakistan |
| PCAA | Pakistan Civil Aviation Authority |
| PIDE | Pakistan Institute of Development Economics |
| PM | Particulate Matter |
| PPP | Public-Private Partnership |
| PR | Pakistan Railways |
| QAU | Quaid-i-Azam University |
| RoB | The Rules of Business, 1973 |
| TCA | Thematic Content Analysis |
| US | The United States |
| USDOT | US Department of Transportation |
| VECM | Vector Error Correction Model |
| WB | The World Bank |

# CHAPTER 1
# INTRODUCTION

The need of transport is very fundamental in economic, social, and strategic progress of any given nation. An efficient transport system does not only assist in the transfer of goods, people, and services, but also promotes integration of the regions, competitiveness in trade, as well as social inclusion. On the economic front, the transport infrastructure facilitates growth in industries, and expansion of trade by linking production centers with markets within a country, or overseas (Ivanova & Masarova, 2013). As an example, the road network in Pakistan has played a major role in facilitating trade because the country is at a strategic location in regard to 'China, India, Afghanistan, and Iran' (Ding, 2013).

Transport sector is also a major contributor to the employment, since it aids with the logistics, and tourism sectors, as well as maintenance sector (Litman, 2018). Transport is socially beneficial in developing ease of access to basic needs like education, and health, particularly with regard to underdeveloped, or rural, areas. People in rural Pakistan, to give one example, have gained better access roads that have directly led to higher levels of school attendance, and lower maternal morality (Simon, 2003). In terms of strategy, transport infrastructure improves national security, and connectivity beyond borders. Pakistan sits at the intersection of 'South Asia, Central Asia and the Middle East', and it is a critical region of cooperation, and trade; such as 'China-Pakistan Economic Corridor' (CPEC), and the 'Central Asia Regional Economic Cooperation Program' (Afzal & Naseem, 2018; 'Ministry of Communications, Government of Pakistan', 2020).

This research study, however, does not seek to assess performance, or physical quality, of transport infrastructure. Neither does it concern about urban planning, development of the provinces, in terms of transport, i.e. 'center-province' relations, and even the ability of provinces to govern themselves. Therefore, it is neither about transport only, nor only about governance. Rather, the focus of this study is the specific research referring to the 'federal transport governance' (FTG) in Pakistan, with a particular focus on 'federal transport ministries' (FTMs). This difference is essential, since the governance systems, as the distribution of responsibilities, policies, and administrative

roles, constitute a pivotal factor in ensuring that the transport systems, in a country, work efficiently, and inclusively, or not (Jaimurzina, 2018).

This study examines the way governance is structured among the various federal ministries involved in transport, how the duplication of functions, and disaggregation of policy at the ministry level, combined with a lack of coordination across transport ministries has led to inefficiencies, and instances of governance failure. It does not involve complaints of federalism, or center-province de-concentration, and, hence, leaves out the debate of 'centralization vs. decentralization', or the power-sharing that can arise in aftermath of the 18th amendment to the 'Constitution of the Islamic Republic of Pakistan' (CoP), 1973. It is purely at the federal institutional level, where how transport modes are under the governance of various ministries, and what are the impacts of such an arrangement is studied.

At present, transport governance by the federal government, in Pakistan, is disintegrated into several ministries namely the 'Ministry of Communications' (MoC), the 'Ministry of Railways' (MoR), the 'Ministry of Maritime Affairs' (MoMA), and the 'Ministry of Defence' (MoD) for the Aviation. These ministries were historically derived from a one single MoC that looked after all the transport modes, however, they have, as of now, been granted individual mandates regarding each mode separately, under the 'Federal Legislative List' (FLL) of the CoP, and the 'Rules of Business' (RoB), 1973 (UK Parliament, 1946; Chohan et al., 2011; 'Parliament of Pakistan', 2018; 'Cabinet Division, Government of Pakistan', 2025).

Although, the modal split may have been supposed to contribute to the specialization, and efficiency, actually, it has resulted in a lack of coherence in the modal policies, lack of coordination between institutions, and poor inter-ministerial cooperation. Most ministries conduct most of their activities in silos, which makes the national transport strategies to be disjointed. For an example, a policy developed by the MoR may not integrate with road expansion projects of the MoC, so a duplication, or conflicting deployment of policies may arise (Estache, 1995; Masood et al., 2011). This kind of fragmentation may postpone project implementation, disorient the pattern of accountabilities, and lead to loss of multimodal integration opportunities. Thus, this study highlights inter-ministerial coordination as a major governance issue, and explores how greater consistency, and connectivity, in federal governance might increase the effectiveness, and efficiency of the transport sector.

## 1.1 Background of the Study

The contemporary political dynamics of transport governance has shifted in many countries to a more concerted, coordinated, and policy-oriented approach, as the pre-existing politics of transport was characterized as one of fragmented, and localized governance. During the early stages of transport development in the 'Industrial Revolution' era, transport infrastructure like roads, canals, and railways were built mainly by the private actors, or the local governments, which led to a highly disaggregated governance system (Khisty, 1993). Such arrangements were not consistent in terms of standards; the long-term perspective, and intermodal coordination was needed.

Later on, the logic of decentralized governance, and power, in many countries became obvious, and many of them switched to the centralized system of state-led governance over the time, especially in the 19$^{th}$ and 20$^{th}$ centuries, when the role of national economy increased, and the state-building efforts became stronger (Estache, 1995). In such models, centralized ministries, or departments, were created with the aim of controlling various ways of transport, unified planning, and better results of infrastructure investment.

Increasingly in recent decades, there has been the focus on governance that considers balance between coordination, and engagement of the stakeholders, integrates environmental, and social, objectives, and enhances the institutional capacity-building (Button & Hensher, 2005; Litman, 2018). The question of multimodal integration is now more of a strategic concern in many OECD, as well as developing, countries, where the model is usually centered on one national transport ministry, legislation, and regulation with close interagency collaboration. The field of transport governance, in the context of Pakistan, has changed over the years since the country gained its sovereignty in 1947. First, all forms of transportation were tied to the MoC, which is a national hub that was supposed to control the national transport agenda founded on the colonial period models of planning (UK Parliament, 1946).

Nevertheless, over time the MoC have undergone a case of institutional dilution due to the restructuring of its various departments, and divisions, in timely successions to form individual ministries like the MoR, the MoMA, and the Aviation (MoD). Such changes were conditioned by a variety of causes, as well as by the supposed necessity to

specialize in the sector, political pressures, and prescriptions of donor agencies attaching more weight to the disaggregated type of administration (Chohan et al., 2011; Siddiqui & Pant, 2007). These respective ministries did not develop strong coordination mechanisms at the time of their formation, which has rendered them to have a fragmented governance, and mandate overlap, and lack of policy linkup. As such, the government intends to develop infrastructure in the road sector under the MoC, but this may not be in tandem with freight movement strategies under the MoR, or with seaports authorities, hence, there are some redundancies, and inefficiencies (Estache, 1995; Masood et al., 2011).

Good governance in the context of public transport comes out more and more in terms of theory, and discussions by policy makers. Governance with regard to this matter implies the institutional structures, regulation systems, and decision-making mechanisms, according to which, transport policies are conceived, created, and tested. Accountability and transparency, coordination and responsiveness, and stakeholder inclusion are characteristics of good governance in the transport sector (Jaimurzina, 2018). Weak governance has often been denoted among the key issues that have led to the poor performance of transport systems, and inefficient investments, as well as dissatisfaction by the people in developing countries.

Conversely, effective governance systems, and systems that are well integrated, tend to achieve the much-desired national development, and transport demands in terms of the needs of the people (Schiller et al., 2010). In the case of Pakistan, where there are so many transport-related problems; such as road congestion, less railway infrastructure, as well as environmental degradation; the key to the resolution of these problems is governance. According to Litman (2018), the enhancement of governance tools in transport sector directly influences the economic growth, regional equity, and environmental sustainability.

## 1.2 Statement of the Problem

The institutional structure of transport governance in Pakistan is fragmented, and has a separate ministry controlling road, rail, maritime and air transport with poor integration. Although, this division may have been meant to enhance focus of bureaucratic division of labor in these sub-sectors for efficiency, it has brought major integration problems within the federal transport mechanisms. Ministries are operating more or less in silos

with their own priorities, budgeting processes, mechanisms, and regulatory frameworks, which has led to policy silos that limit strategic integration. As an example, the MoR might focus on expansion of rail freight services without considering road freight policies of the MoC. Such rifts, between institutions, lead to time lapse within the projects, ineffective use of the available resources, and areas of conflict in planning, and execution of transport projects (Masood et al., 2011; Estache, 1995).

One of the biggest effects of this fragmentation is the discrepancy in policy, and overlap in administration. Lack of a defined inter-ministerial coordination mechanism has also seen the duplication of responsibilities, lack of consistency in planning standards, programs, and disintegration in service delivery. A strategic planning document like the 'National Transport Policy of Pakistan' (NTP), 2018 suggests multimodal planning, but it is only on paper, as the various ministries working in different sub-sectors are still operating independently, and no consolidated implementation plan is still in effect ('Planning Commission, Ministry of Planning, Development & Reform, Government of Pakistan', 2018). Such failures of synchronization are particularly undesirable in situations, where there is a necessity of coordination, such as in freights, regional connectivity, and infrastructure investment choices. Furthermore, administrative overlapping tends to cause conflicting regulatory structures, and unnecessary bureaucratic processes, thus, becoming less efficient, and confusing accountability. Engagement with foreign partners can also be impaired by this institutional ambiguity, since, similar interests can be represented by numerous ministries with a lack of a joint voice, and integrated approach (Jaimurzina, 2018; Rye et al., 2018).

Behind these problems lies the fact that there is no central governance mechanism at the federal level to control, and co-ordinate the multimodal transport sector. Contrary to most other countries, who have a single 'Ministry of Transport' (MoT), whose main idea is to consolidate, or coordinate, all forms of transportation under a unifying umbrella, the governance model in Pakistan is sporadic, and reactive. There is no lead institution which would draft, administer, and control the process of cross-modal transport policies, and their implementation, and there is no federal body which coordinates the strategic planning, and inter-ministerial collaboration with respect to transport sector. What has been created is a structurally disjointed, operationally inefficient, and strategically detached system. Unless, this structure of governance is transformed, Pakistan will remain incapable of developing a unified, effective, and

sustainable national transport structure to attain its long-term economic, and developmental goals (Button & Hensher, 2005; Litman, 2018).

## 1.3 Research Problem

The essence of this study is focused on the division of transport governance within the federal government of Pakistan, and how this institutional split, among the participating ministries, is disadvantageous to the viability, consistency, and responsiveness of the aggregate transport. In Pakistan, the various means of transport; road, rail, maritime, and aviation are under separate federal ministries. Although, this institutional design may originally have been followed to enable the sub-sectoral concentration, and specialization, the result has been the development of a de-centralized governance structure that has little means of coordination (Estache, 1995; Masood et al., 2011).

Such fragmentation does not only result in duplication of functions, and heaving distribution of decision-making authority, which has not only plagued the bureaucracy, but it also frustrates the development, and implementation of a single, coherent, and multimodal transport policy. Another weakness, observed in the existing FTG, is that the policy making related to any sub-sector is the responsibility of the concerned ministry, however, these ministries do not have the technical experts, nor the capacity, to create such frameworks, which comply with the emerging ideas, and latest technologies cropping-up in that particular sub-sector. Therefore, they usually place complete reliance on their concerned attached departments/authorities, and sometimes on external consultants. Moreover, there is dearth of reliable data related to any sub-sector of transport, and its use in the evidence-based policy, and decision making. Still, the policy making in our ministries is being done, based on the assumptions, or unverifiable data, or information.

The lack of a central coordinating organ means the ministries attempt to execute their individual sub-sectoral mandates, a fact that brings overlapped jurisdictions, and inappropriate values. An example of this can be seen through the development of road transport infrastructure, which could be constructed without proper consideration of its effect on rail freight, and its connectivity with seaports, and airports, which results in allocations of resources, that are ineffective, and policy gaps (Button & Hensher, 2005). This inability to coordinate the planning process dissipates the effects, which strategic decision-making would have, on the more efficient performance of the federal

institutions, and on its capacity to quickly keep up with the national, and international transportation dynamics. In addition to that, a lack of homogeneous governance structure influences the responsiveness of federal organizations to emerging issues like rapid urbanization, logistics, and climate-resistant infrastructure (Jaimurzina, 2018).

This study analyzes this fragmentation at the federal level of governance, determines how this scenario affects institutional collaboration, and offers potential solutions to a reasonable setup of a coordinated, and integrated, system of transport governance in Pakistan. The factors that have motivated the undertaking of the study are; the emergence of weaknesses in the existing administrative structure, and the determination of the repercussions of fragmented policymaking, which the research intends to address in the process of designing a stronger governance structure, consistent with the national development aspirations, and standards of best practices on the international front.

## 1.4 Research Questions

1. What is the structure of transport governance at the federal level in Pakistan?
2. Why do separate ministries exist for different transport modes?
3. What could be a more effective 'federal transport governance' structure?

## 1.5 Research Objectives

1. To explore and document the current 'federal transport governance' structure in Pakistan.
2. To analyze the causes, and consequences, of fragmentation among 'federal transport ministries'.
3. To suggest a more integrated, and effective, transport governance structure.

## 1.6 Key Concepts and Terminology

To analyze the nature of governance in Pakistan's federal transport system, proper understanding of the crucial concepts is pertinent. Transport governance is used as a term describing institutional frameworks, regulatory institutions, and policy procedures by which transportation systems are governed, planned, and coordinated (Jaimurzina, 2018). It is more than a development of infrastructure, and encompasses the processes involved in taking action, who makes what decision, and the way action is implemented, and followed up. As of the Pakistani situation, the structure of the regulating transport is divided among various ministries of the federation, with specific sub-sectoral interests, which creates governance fragmentation as denoted by scholars.

The concept of governance fragmentation refers to the structural, and functional, separation, and disconnection, of the institutes that are in charge of similar areas of policy. Fragmentation, in terms of transport governance, exists, whereby each ministry controls separate modes of transport with little, or no, linkages of harmonization arrangements. The result of it is disjointed policymaking, inefficiencies, and lack of accountability (Button & Hensher, 2005; Estache, 1995).

Institutional coordination is a systematic process, practice, or policy that enables inter-agency, or inter-ministerial, cooperation, and alignment that share overlapping, or interdependent, roles, or authorities (Rye et al., 2018). Good coordination makes the activity of various institutions to serve common goals, avoid redundancies, and generate more coherence in policies.

Finally, there is a model of transport governance, multimodal transport governance, which takes into account the interdependence of transport modes, and seeks to coordinate them within the policy at the same level. It includes synchronized planning, infrastructure building, and service delivery in the road, rail, air, and maritime transport systems, to bolster efficiency, and limit bottlenecks, in the transport system (Schiller et al., 2010; 'Planning Commission, Ministry of Planning, Development & Reform, Government of Pakistan', 2018). Though in Pakistan, NTP (2018) has the concept of multimodal integration, however, the state of integration is hampered by the existing fractious institutional environment.

***Table 1.1:*** Key Concepts and Terminology

| Term | Definition | Context in Policy/Literature |
|---|---|---|
| **Transport Governance** | Institutional frameworks, and regulatory processes that guide planning, implementation, and monitoring of transport systems. | Jaimurzina (2018); focuses on who makes decisions, how, and with what coordination. |
| **Governance Fragmentation** | Structural, and functional, separation of policymaking bodies, leading to uncoordinated, and inefficient outcomes. | Button & Hensher (2005); Estache (1995); highlights inefficiencies in transport setups. |
| **Institutional Coordination** | Mechanisms for ensuring collaboration, and coherence, among multiple institutions with shared, or overlapping mandates. | Rye et al. (2018); crucial for integrating planning across rail, road, maritime, and air transport. |
| **Multimodal Transport Governance** | Governance approach, integrating all transport modes into a single strategic framework for unified planning, and service delivery. | Schiller et al. (2010); 'Planning Commission, Ministry of Planning, Development & Reform, Government of Pakistan', (2018); promoted in Pakistan's NTP (2018). |

## 1.7 Significance of the Study

The study is both conceptual, and practical, in its application to transport governance, and public administration. On a scholarly note, this research activity adds to the sparse pool of knowledge regarding the governance framework of the transport sector in the developing countries, and especially those, following a federal structure, such as Pakistan. The available research on transport in Pakistan inclines to center mostly on the following issues: infrastructure deficiencies, economic assistance, and urban mobility (Imran & Low, 2005; Masood et al., 2011). Reasonably, little is said about the

architecture of governance, namely, how rules are determined, who should do so, and under which institutional arrangements. Traversing the reorganization of federal-level functions, and its perception on the performance of the policy, the study helps bridging the gap, and expands the knowledge about governance as a factor that partly determines the performance of the transport sector (Button & Hensher, 2005; Jaimurzina, 2018).

Pragmatically, the research provides practical information to the ministries, and agencies, that are directly involved in the policymaking of transport, such as the MoC, the MoR, the MoMA, and the MoD (Aviation Wing). In many cases, such institutions work in silos, with overlapping, or ill-coordinated mandates, and cause inefficiencies, and the loss of chances to incorporate multimodal integration ('Planning Commission, Ministry of Planning, Development & Reform, Government of Pakistan', 2018). With this finding of the particular gaps in coordination, and the provisions of models of better transport governance, the study informs policymakers on how to reconsider institutional settings, and how to enhance alignment between agencies. This is especially topical in the backdrop of implementing largescale cross-modal initiatives like the ones within the CPEC that require coordinated action from various ministries (Afzal & Naseem, 2018).

The results are likely to have wider applications concerning reorganization of the FTMs, with increased intermodal coordination, and policy coherence. This is also a problem within the provinces that pursue similar, or related functions in federal arrangements, wherein various agencies do not have cohesive structures of governance resulting in duplication of efforts, contradictory policies, and lack of responsiveness. For example, 'Government of the Punjab' has established the 'IWT Development Company' outside its provincial 'Transport and Masstransit Department' leading to modal fragmentation at the provincial level ('Inland Water Transport Development Company, Government of the Punjab', n.d.).

Therefore, consolidation of fragmented transport sector at the federal level may also result in consolidation of transport at the provincial levels for the realization of multimodal transportation. This study highlights the need to promote integrated mechanisms of transport governance that can be used to streamline transport planning, development, and operations to ensure that transport policy is used to help national development processes in an efficient manner (Estache, 1995; Litman, 2018).

Finally, the study will be of great significance to the current debates on reforms in the public sector, and streamlining of the institutions at federal scale. With Pakistan, still in the process of modernizing its public administration, and the state of infrastructure governance, the debate of how best to organize the ministries, and regulatory bodies, shall always be front and center. The recommendations in the study are evidence-based, and can be helpful to the reform agendas focused on promoting accountability, eliminating duplication, and increasing coherence of the policies within the federal government (Jaimurzina, 2018; Rye et al., 2018).

## 1.8 Organization of the Study

This thesis is structured into five chapters, each designed to address the research objectives in a logical, and coherent, sequence. Chapter 1 introduces the study by outlining the background, problem statement, research problem, objectives, key concepts, significance, and scope. Chapter 2 reviews the relevant literature, situating the study within the existing body of knowledge on transport governance, institutional fragmentation, and inter-ministerial coordination, while also identifying the research gap that this thesis aims to address.

Chapter 3 explains the research methodology, including the qualitative exploratory approach, case study design, data collection methods, sampling approach, data analysis techniques, and ethical considerations. Chapter 4 presents the results and analysis, beginning with a historical overview of the FTMs, followed by thematic findings derived from interviews, a policy analysis of key national transport related policies, and a comparison with the international models, concluding with a synthesizing discussion.

Finally, Chapter 5 provides the overall conclusion of the thesis, along with recommendations for improving the FTG in Pakistan, based on both, the study's findings, and the international best practices.

# CHAPTER 2
# LITERATURE REVIEW

## 2.1 Introduction

The issue of transport governance has become an important issue in the policy making, and scholarly debates, especially in developing nations where institutional frameworks tend to have a greater influence on the outcomes of infrastructure than the financial and technical limitations. The Pakistani case suggests that in the country, much has been done regarding the development of transport infrastructure, which addressed the issue of urban mobility and transport policymaking and its environmental consequences.

On the other hand, insufficient attention was drawn to the governance architecture, which supports the transport policymaking process. Pre-existing research has covered areas of concern relating to the sector mostly in terms of transport economics, road infrastructure, road safety, poor management of the public transport system and even the policy formulation itself, but the study of how the fragmentation of institutions at the federal level affects the policy coherence, and policy implementation, is largely absent. This chapter critically assesses national, and international, transport governance literature revolving around the theme of institutional coordination, policy integration, bureaucratic activities, and sectoral planning, in order to determine conceptual, and empirical knowledge within the context of the governance of the FTMs in Pakistan.

## 2.1 Literature Review

Malik (1962) examined both, the development, and the early problems of Pakistan's transport sector, mainly concentrating on the railways. He said that inefficiencies in the system hinder links between villages, and cities, thereby hampering both, agricultural, and industrial growth in the country. In addition, the unusual political context of the country made transportation even more complicated. This research provided knowledge about how the transport sector in the country started to develop.

Swati (1977) wrote a seminal brief, 'NTRC-13', titled as '*Re-Organization of Administrative Control of Transport*'. He not only proposed formation of an MoT, and transfer of the 'National Transport Research Centre' (NTRC) from the 'Planning Commission of Pakistan' (PC) to that MoT, but he also made a detailed blue print of the new organizational set-up. He explained the problems of fragmentation, and

institutional silos along with planning deficiencies, thus, rationalized the proposed set-up on the lines of the European, and the 'United States' (US) models of transport governance. This study shows that the transport professionals not only understood the problems of the FTG in Pakistan, but also articulated sound solutions, given the circumstances at that time. After almost half a century, it seems that their advice was never heeded to, unfortunately, by the concerned quarters, resulting in aggravation of problems with the FTG in Pakistan.

Majeed (1978) wrote a study note, NTRC-15, titled as '*Transport Requirements — Shortage of Buses*'. He lamented the absence of trained economists, and statisticians, in transport agencies resulting in the lack of requisite data for analysis and planning of transport services to the public. He responded to the questions of the CMLA by analyzing the available data, despite its inadequacy, through the supply-demand lens of economics. He concluded that there always will be some shortage during peak hours, if that shortage is removed, it will create economically unviable idle capacity. However, to alleviate the problems of urban transport, consideration should be given to purchase second-hand public transport buses from London.

Akhter (2002) provided a comprehensive country report covering road transport in Pakistan, and its connectivity with the 'Asian Highways' network for the 'United Nations' Economic and Social Commission for Asia and the Pacific' in the NTRC-246 study. This covered all aspects from road infrastructure, its cross-modal, and international, connectivity, road traffic, mainly motorized vehicles, road safety, road regulations and standards, transit trade agreements, and institutional arrangements at that time. He recommended to install new 'Roads Management System' to efficiently remove the maintenance backlogs, establishment of a road database by the federation, and provinces at respective levels with continuous updated regarding all aspects of roads. Another important recommendation was dedication of 1% of annual infrastructure development budgets for research by the federal, and provincial governments. He also suggested that uniform standard should be followed while constructing a road from its origin point to the end point. However, no recommendation was made change in the institutional arrangements regarding the FTG.

Imran and Low (2005) examined the reasons why the early decisions in Pakistan's transport planning developed into policies that mainly benefit private vehicles, and roads. They explained the sizeable gap between reality, and ideal, in urban transport

planning, brought about by actions of global agencies in Pakistan. The main subject of this study was to examine why changes towards a more sustainable transport policy were being resisted. For this research, the idea of "path-dependence" was used. This study was done before 18th amendment, and the scope was limited to only one aspect, i.e. urban politics of transport policy.

Khan (2006) in her article, *'Flaws in the flow'*, based her criticism of the sociopolitical and symbolic aspects of the flow of roads, and road infrastructure, and modernization of transport in Pakistan. With the help of the cultural, and ethnographic, approach, the author shedded light on the fact that roads are not simply material structure; they are part of political discourse, centralized power, and everyday lives of people. She considered those contradictions in the discourse of development, where the promotion of the roads is associated with progress on the one hand and, at the same time, the sign of profound structural imperfection in planning, and governance, as well as in accessibility. The article relies on certain political happenings, and infrastructure schemes, to show the attempts of the state to transform the transportation industry, it regularly disregards the matter of equity, informality, and local requirements. She concluded that we need to investigate transport in Pakistan beyond the technical fix, to embrace a more sensitive understanding of the political, and cultural associations, and meanings of roads, and the different incoherent, and asymmetrical modes of mobility governance.

Siddiqui and Pant (2007) provided an analysis of the transportation policies during the early years of independence in Pakistan, shedding light on the historical context of the country's transport sector fragmentation. They elucidated that the underlying justification for establishing distinct departments, or ministries, for varied transportation modes, such as railways, aviation, and roads, was motivated by the necessity to concentrate on the advancement of each mode in isolation. Expectations were that this approach would increase speed in building infrastructure, fix each sub-sector related problems, and make better use of available resources.

Qureshi and Huapu (2007) presented the study of the problems, and possible approaches to the realization of sustainable transport within the cities, in the context of Karachi, Pakistan. To investigate the causes of transport-related inefficiencies in the city, the authors used a written case study approach that not only analyzed transport policies, urban planning documents, but the empirical evidence as well. They have

carried it using both, the literature review, and analyzing policies to determine how the high rate of urbanization, poor institutional planning, and lack of 'integrated transport systems' (ITSs) impact congestion, environmental degradation, and social inequities. Their findings reaffirmed the necessity of an integrated, and long-term approach to transport through investment in mass-transit systems, better management of road networks, and compact governance structure. They found that it is only possible to attain sustainable urban mobility in Karachi with proper planning, stakeholder participation, and long-term policy orientations by the local, and national governments.

The study by Imran (2009) is a critical review of the policy on the topic of public transport in Pakistan as it developed in the past during the British colonial era to the modern world of cities. In his research study, the author adopted a policy analysis approach, where he looked at the governmental records, transport plans in urban areas, and the literature in other parts of the world, in investigating the failure of the Pakistani cities to innovate, and create effective public transport systems. According to him, several factors, which include weak governance, and lack of institutional capacity, along with decentralization of responsibilities among the federal, provincial and the local governments, are critical elements resulting in poor public transport output. The results pointed out that the policy initiatives have mostly been directed towards developing infrastructure without any related concentration on the regulatory measures, and the quality of services. In making this conclusion, he delivered a broad recommendation that is multidimensional; it involves a combination of governance reforms, institutional capacity building, and long-term planning of sustainable, and inclusive, public transport, in order to make improvements with respect to urban mobility in Pakistan.

Schiller et al. (2010) provided a framework for understanding the principles of sustainable transportation, and how they can be applied in the context of policy-making, planning, and implementation. The book's focus on integrated approaches, stakeholder engagement, and coordination, aligned with the need for a more holistic, and efficient, transport governance structure. The book's insights, and recommendations, provided a theoretical foundation, and practical considerations, for developing sustainable transport policies, and strategies.

Imran (2010) addressed the institutional processes that mutually constitute urban transport planning in Pakistan, particularly in Lahore. Applying policy analysis, and

institutional review, as a research methodology (qualitative design), the study discusses the gap between NTP mechanisms, and the mobility requirements of people in urban areas. According to him, this demonstrates that modern city sprawl has a big mismatch, because there is poor institutional coordination, old planning models, and the prevalence of car-oriented investment in the infrastructure. Through the analysis of governance systems, and planning procedures, the author was able to show that urban transport policies in Pakistan do not necessarily meet the needs of urban transport users, pedestrians, and people with low income. The results provided a need to formulate context-sensitive, and integrated, policies for the consistent transport planning, with sophisticated urban development, and equity objectives. He came to a conclusion that institutional reforms, community-based planning, and capacity development are the absolute necessity of creating sustainable urban transportation in such cities, like Lahore.

Masood et al. (2011) critically reviewed the issue of urban transportation in the developing world, giving example of Pakistan. Through qualitative policy analysis, and contextual review, the author pointed out that despite high costs being incurred, in terms of urban transport infrastructure, Pakistan is still struggling with major fluctuations (congestion, pollution, ineffective public transport, fragmented institutions) to a large extent. They cited poor governance, outmoded planning perspectives, and absence of protracted sustainable plans, as some of the factors causing an escalating urban transport predicament. The research reiterates the fact that in a country such as Pakistan, solving the transportation problem will need more than investments, but the ability to extensively strategize, liaise with stakeholders, and political commitment to rollout inclusive, and affordable, transport systems. They deduced that the current situation of urban mobility, in Pakistan, will not improve, unless, the existing institutions are modified to promote sustainable transport rationale.

The article of Batool et al. (2012) explored the case study of road safety issues in Pakistan, in Lahore, with a focus on how poor governance, and institutional deficiency has led to the annual highest rate of accidents, and insecure transportation conditions. The authors proceeded with a mixed-method approach, namely, analyzing accident statistics, and interviewing major stakeholders to determine the viability of road safety measures, and institutional set-ups. They found out that the uncoordinated governance structure, the inability of transport ministries to cooperate, and the non-existence of an

adopted NTP are the greatest obstacles on the way to enhancing road safety. According to them, despite increased awareness about the road safety problem, institutional inertia, and political apathy remain the bane of Pakistan in executing proactive measures to tackle the issue. This research, thus, proves that the best quality outcome in terms of road safety would involve a comprehensive policy package, special institutional management, as well as dedication by national, and provincial governments.

Stough (2012) in his work raised concern over the transport governance system in Pakistan, and how the country lacks an effective NTP, and thereby inefficiencies in administration. The author also presented a detailed case study analysis of Pakistan regarding the challenges to have an integrated policy development because of the fragmentation of responsibilities of different sectors; railways, air travel, ports, shipping, and road transport. Based on a qualitative case study approach, he examined the institutional structures, and governance systems, in order to evaluate the link between fragmentation, and the outcome of transport policies. This research established that lack of inter-agency coordination, duplication of mandate, and institutional weaknesses undermine the formulation, and realization, of an integrated transport policy. Finally, he provided a solution, and rejected the existing situation, by promoting changes among the institutions, and the higher levels of cooperation between the ministries, to enable an efficient, and encompassing NTP that would be able to manage the transport demands of Pakistan.

Hull (2012) in his book, *'Government of Paper'*, went through an ethnographic inquiry on the material, and bureaucratic processes that ended up defining urban governance in Pakistan, specifically, he seeked to understand the power of paper work, and documentation, in the formation of state power, and the administration of everyday. He, using fieldwork, and archive researches, described how various documents made of paper (including maps, and forms of bureaucracy), shape urban infrastructure, and transport systems. Though, this is not exclusively about transportation, in his analysis, we can see how the institutional practices; viz. record-keeping, file movement, and administrative delays, also have their impact on the operations of urban facilities, including the modeling, and provision of transit. He claimed that the materiality of bureaucracy is vital to the development of interactions of citizens with the state, and in maintaining the forms of governance that seem to be inefficient, or divided, in many cases. He came to the conclusion that any attempt, to transform the governance of city

transport system in Pakistan, should also focus on the bureaucratic cultures, and paper-based systems, on which the governance of the country is based.

In the book *'Institutional Barriers to Sustainable Transport'*, Curtis and Low (2012) gave a comparative analysis of the institutional barriers that obstruct the integration of policies of urban planning, and sustainable transport, in different cities around the world. Their findings may not be specific to Pakistan, but these are very crucial in explaining the related governance outcomes in developing countries. The methodology employed by the authors was of the multi-case type, as the international material has been used to illustrate the point; how fragmented functions of transport, land use regulations, and environmental control agencies, frequently prevent the realization of a coherent, and sustainable transport system. According to them, the successful policy integration process also implies that the changes should take place on the level of structural reforms that do not exist right now along the level of the institutional culture shift, engagement of the stakeholders, and political will. The context of their conclusion was the need to develop systemic changes to governance, to facilitate the provision of more sustainable, inclusive, and resilient transport systems.

Yousaf (2013) investigated how regions in Pakistan have affected the development of its fragmented transportation sector. According to him, the diverse terrain, and political organization in the country have led to the division of transport administration. When resources, and power, were distributed among regions, the government created separate ministries/departments, for each type of transportation, which gave the authorities of each region a stronger say in transportation matters. It was thought that decentralization would help balance regions, and let communities play a bigger role in decision making.

Pradhan and Bagchi (2013) looked at how growth, in Indian economy, is affected by road, and rail, transport infrastructure. They argued that if transport infrastructure (road, and rail) is developed, and gross capital formation increases, it will result in major growth for the economy. As a result, they recommended holding onto an effective transportation policy to help grow India's infrastructure, and economy, responsibly. This study can be replicated in Pakistan to compare, whether there is a similar trend in relationship between transport infrastructure, and development of two neighboring countries.

Siemiatycki (2013) discussed the performance of transportation PPPs ('public-private partnerships'), that are spreading worldwide, in terms of how integrated governance regimes, and international supply chains are redesigning infrastructure delivery in both, developed, and developing economies. The author examined the motives of adopting PPP in the transport sector by conducting a review of the global case studies; these factors include the fiscal limitation, the advantage of risk sharing, and efficiency seeking. He stated that the PPPs are potentially capable of providing innovative financing solutions, and management solutions; these can be very successful when institutional capacity, and regulatory frameworks are coupled with sound governance. Based on his findings, it is seen that PPPs tend to represent larger political, and economic ideologies, and without managing, and accounting for the requirements of the people, these can create outcomes that would be disadvantageous, or it may cause overruns. The paper comes to the conclusion that PPPs need to be effectively implemented in the transport sector, in particular, on the territory of developing countries, and to do so, there must be efficient regulatory bodies, and clear governance procedures.

In their study, Swamy et al. (2015) investigated the effect of various modes of urban transport in 'Ahmedabad, India', on the exposure of residents/commuters to 'fine particulate matter' (fine PM2.5), which is a major air pollutant that causes respiratory, and cardiovascular health risks. They implemented a comparative methodology by monitoring live, in real-time, a 10.5 km span, the nine transport modes, like 'Air Conditioned Bus Rapid Transit System' (AC BRTS) buses, to walking, and cycling, across three seasons. The analyzed data showed lower PM2.5 exposure rates occupied by AC BRTS buses by 76 percent, in comparison with non-air-conditioned carriers, and 25 percent, in comparison with AC automobiles. The amount of exposure also differed large across seasons (greatest in winter), time of day (greatest in evenings), and height of commuter (higher heights spent less time exposed). Road type, and segregation also affected exposure. The researchers concluded that urban transport planning, focusing on AC, segregated public transport, such as BRTS, can dramatically minimize health hazards, and these studies can be used to direct the future policy.

Lin and Ahmad (2016) evaluated the potential of energy substitution to be used in the transport sector, in Pakistan, through the use of the trans-log production model. The authors were driven by the increasing energy consumption in the sector through rapid

industrialization, and urbanization, where they applied econometric analysis of the national time-series data, to analyze the extent, to which substitution exists among the various sources of energy, namely; petroleum, electricity, and gas, to meet the demand of transport-related activities. What they found is, that the consumption of energy in transport, in Pakistan, continues to be dominated by petroleum products, with a statistically significant potential to be substituted with cleaner forms of energy, when properly incentivized by policy. They claimed that the development of diversified energy techniques, such as the advancement of renewable, and alternative fuels, may improve the efficiency of energy, and lower environmental footprint. The research paper determines that there is a need to realign energy policy, within the transport sector, to sustainability, by investing in alternative fuels, adaptation of the infrastructure, and establishment of better institutions.

In the introductory chapter of their book, *'The Urban Transport Crisis in Emerging Economies'*, Pojani and Stead (2017) walk us through the systemic nature of the challenges met by urban transport systems, in the rapidly urbanizing regions. The main problems were described by the authors; such as inefficient land-use patterns, increase in the purchase of private vehicles, small expenditure on operational public transport, and poor institutional capacity to govern urban transport. Using global case studies, they pointed out the fact that the emerging economies are bogged down in their disjointed system of decision-making, poor source of financing, and absence of integrated planning. According to them, there is a holistic approach to the issue of curbing the urban transport crisis, which entails institutional reforms, the development of sustainable infrastructure, and an inclusive approach to making policies. The introduction prefigures greater analysis in later chapters that place priority on establishing governance frameworks, capable of dealing with the complexity, and interconnectedness, of the problems of urban mobility in the developing world.

Shah et al. (2018) used a comparative approach to road safety management, and policy on the 'low-, middle-, and high-income Asian countries', including Pakistan. The authors made use of a policy analysis, and risk assessment framework, to assess how transport policies in the country are solving the problem of road safety without undermining the issue of sustainable mobility. The paper relies on secondary literature, policy reports, and statistical markers to check the efficacy of safety interventions that are currently in place. According to them, 'low- and middle-income economies',

including Pakistan, frequently do not have extensive road safety planning in place, and their enforcement, infrastructure, and inter-agency collaborations are weak. According to the authors, though, road safety can, and should, be linked to the wider sustainability agenda, including supporting public transport, and cutting emissions, which provides the means to achieve less fragile, and more inclusive, transport networks. At the end of the study, it is concluded that road safety outcomes would increase when cross-sector collaboration, and evidence-based policy-change, occur across different levels of income in Asia.

The article by Pojani and Stead (2018) draws on the understanding of policy design with regard to the area of sustainable urban transport in the 'Global South', and outlines the decisive contribution of governance structures, political will, and institutional capacity to the development of transport outcomes. The authors applied policy design framework to implement the analysis of the reasons that why broken responsibilities, planning on short-term perspectives, and poor involvement of stakeholders can commonly diminish the achievement of sustainable transport strategies in the developing world. Based on their comparative case studies, and practices of global policies, they suggested that urban transport reform in the 'Global South' can only be made effective, when flexible policy approaches, as well as policies, that are inclusive of local needs are used. This holds that integrated planning of land use, and transport community participation, and an active leadership is vital in reinforcing sustainable mobility, which was their conclusion. The article ends with the recommendation to ensure greater context sensitivity of the existing policy tools, that need to crack both, technical, and institutional, challenges of urban transport reforms.

Marsden and Docherty (2019) conducted an evidence review for the 'UK's Government Office for Science'. They said that placing transport under a single ministry helps bring together different resources, and ideas. When resources are gathered, the sector spends less, improves the provided services, and becomes stronger in negotiating with third-parties. Moreover, when decisions are made in a central location, policies are usually put into practice the same way everywhere. When transportation is centralized, reaching economies of scale, and scope, considered an advantage, is much easier.

Hussain (2019) explored how transport infrastructure development affected the tourism, and the livelihood strategies, of the remote communities of Gilgit-Baltistan, as part of his doctoral thesis. He used a mixed-methods research, which focused both; on

household surveys, interviews, and an analysis of documents, to study the ways in which better transport connectivity altered the socio-economic status, mobility patterns, and tourism-based development in remote mountainous regions. He discovered that, as new roads infrastructure led to a better access to markets, and services, it also brought about many issues, or challenges, that included cultural dislocation, environmental destruction, and unequal economic advantages. The thesis of the discussion is that the development of transport should be inclusive, where the local communities ensure that they are integral in decision-making process, and this enhanced connectivity is equitably distributed. He ended with a conclusion that to plan sustainable transport in Gilgit-Baltistan, it is needed to realize the balance between growing infrastructure, and protecting cultural survival with considerations of environmental safety, and enhancing the communal bonds.

Tehsin and Nasir (2019) evaluated the potential role of 'inland water transport' (IWT) in Pakistan with regard to the 'Indus River System', and its strategic significance as an alternative transport. Applying the policy-based approach of a qualitative research method via secondary data analysis, the authors critiqued the current condition, past sidelines, and outlook of IWT in the general transport infrastructure of Pakistan. According to them, even though inland waterways are promising both; environmentally, and economically, including fuel efficiency, and the absence of congestion, this mode is not fully used due to institutional inertia, lack of investments, and planning integration. This article also shows, through appropriate policy facilitation, infrastructure preparation, and intra-sector integration, IWT may certainly come out as a potential part of Pakistan's sustainable transport plan. Along with this, the authors concluded that in order to realize the potential of IWT, there has to be a serious political will, and reform in governance to break down historic barriers, and to release its socio-economic potential.

Shirwani et al. (2020) examined the innovative ways of managing the vehicular emissions in the transportation sector of Pakistan with Lahore as a case study. In order to evaluate the feasibility of hydrogen as an alternative fuel, the authors employed technical, and policy analysis, method in assessing both; the environmental, and economic aspects of this form of alternative fuel. The analysis, and comparison of the available transport data, the rates of emissions, and energy consumption trends helped the study to compare hydrogen to conventional fuels, such as diesel and 'Compressed

Natural Gas' (CNG). The results indicated that although CNG has managed success, partially, in lessening emissions in Lahore, an introduction to hydrogen fuel may have better long-term, and sustainable outputs. Based on the findings, they concluded that a government policy, and infrastructure development, to adopt hydrogen technologies, in public transport, can greatly decrease the emission levels by the automobiles to make city environment cleaner.

Verma et al. (2021) conducted a review, and analysis, of changes in urban transportation policies in India, which has great relevance to urban development studies in other developing countries, especially to Pakistan. They also covered many issues related to developing sound urban transportation policies. A policy review approach was used by the authors to follow the gradual changes in transport policy in India, where, in recent years, policies aimed at fostering more sustainable, and inclusive transport systems have taken hold of the road-focused, and personal automobile directed policy of the past. This paper identifies major policy tools, governing structures, and institutional changes as some of the factors that have shaped the urban transport system. The three authors established that alongside the creation of progressive policy developments like the 'National Urban Transport Policy'; implementation gaps, chain of command, and coordination channels between agencies, also remain as key constraints. Based on this, the authors concluded that urban transport can only be transformed meaningfully through the commitment, capacity building, and integration in the planning, to ensure that policies lead to sustainable, and equitable transport systems.

Mohmand et al. (2021) analyzed, and discussed, the causal nature of transport infrastructure, economic growth, and transport, in terms of carbon emissions in Pakistan. Through the application of econometric analysis, the authors examined time-series data to determine 'short-, and long-term dynamics' between the variables using 'Vector Error Correction Model' (VECM). The results determined that there is a strong short-term causality between transport infrastructure, and economic growth, transport fuel consumption, and transport related emissions. Nevertheless, the study also exhibits the fact that, unless, there are proper regulatory, and environmental protection, mechanisms, infrastructure-led growth can make the situation of environmental decay worse. They reasoned that Pakistan should embrace a harmonized strategy that balances infrastructure building with environmental sustainability, through the investment in low-carbon transport technologies, and coordinated planning. The research indicates

that the transport policy would require the future orientation on sustainability, which implies taking care of economic, and ecological aspects of development.

In their book titled *'Karachi's Public Transport: Origins, Evolution and Future Planning'*, Hasan et al. (2021) provided a comprehensive description of structural, and governance-related issues plaguing urban transportation in the Pakistani megalopolis. Lack of coordination among different transport related institutions, turf sharing, and lack of consistency in policy frameworks have been identified as persistent issues, in the book, that has culminated into inefficient service delivery, and the failure of reforms. Their discussion highlights the issue that decentralization, donor-sponsored projects, and diffused state management role may act in a coordinated fashion to threaten intelligent planning, and control of transport. Though, the involved analysis is highly localized to Karachi, the study presents an excellent case study that explains systemic issues relating to the governance, that are also present at the federal level, such as redundant institutions within ministries, as well as other agencies. The work aids the position that, in the Pakistani context, the scope of transport governance is not about the infrastructure, or capital outlay only; rather, it is highly connected with the administration system, and politics of negotiations, which makes the approach to the study of the FTG, based on its qualitative, and institutional aspects, incredibly relevant.

In a review article published in 2022, Kaiser and Barstow assessed the current situation with rural transportation infrastructure in 'low-, and middle-income countries' regarding its socio-economic consequences, institutional effects, and interventions that can be offered. With a synthesis of empirical materials, and policy resources, it was within the scope of the authors that they could look into how rural transport infrastructure can make a difference when it comes to access to services, economic opportunities, and regional development. They emphasized that, generally, poor governance issues, such as financial constraints, institutional fragmentation, and poor capacity pose a great problem to planning, implementation, and maintenance of the rural roads. According to them, the benefits associated with rural transport improvements may be of significant development value, but all too frequently, this comes to a detriment due to ineffectively planned governance, and lack of long-term funding. This paper concludes that there is a need to have targeted intervention strategies; including decentralization, community involvement, and unified planning

models, to offer increased sustainability, and equity, in the framework of transport systems in the development arena.

Anwar (2025) in her working paper titled *"A Review of Logistics and Transport Studies in Pakistan: Hard or Soft Infrastructure"* conducted a 'systematic literature review' using 3 databases, i.e. JSTOR, 'Google Scholar', 'SciSpace AI'. Most of the research studies focus on hard infrastructural projects due to extant data available regarding soft infrastructure. She concluded that despite recommendations of various studies regarding soft infrastructure, and reconfiguration of institutional mechanisms, Pakistan is still investing more in the hard infrastructure, that too, inefficiently. She also identified the unavailability of research studies in certain related areas like freight forwarders, and pipeline transport etc.

## 2.2 Research Gap

Although, quite a few studies were conducted on the issue of transport in Pakistan, the current literature mainly focuses on the shortage of infrastructure, congestion or sustainability questions without critically examining institutional framework of transport governance (Anwar, 2025). In particular, Qureshi and Huapu (2007) and Imran (2009, 2010) emphasized inefficiencies in planning, and the prevalence of car-oriented policies, whereas Masood et al. (2011), and Batool et al. (2012), focused on safety, and operational issues. Nevertheless, these pieces usually take governance, organizational forms, as a collateral influence, instead of the key subject of consideration.

Additionally, when institutional fragmentation is covered, it is only briefly mentioned in majority cases, either in studies by scholars like Stough (2012), or Hull (2012), who looked at institutional fragmentation, approaching it ethnographically, or symbolically, rather than taking a more extensive perspective, and covering how the division of duties between the various ministries impacts the process of coordination, and strategic coherence in realm of the FTG. The exception here is Swati (1977), who wrote a brief monograph of 10 pages, which, unfortunately, has not been implemented by the government.

This research contributes to fulfilling that gap by directly concentrating on disjointed governance of transport at federal level in Pakistan. Its aims are; (1) to describe the current institutional framework, and its evolutionary development, (2) examine the

reasons, and implications of inter-ministerial fragmentation, and (3) suggest a mechanisms of integrated governance that can enhance coordination, and the effectiveness of policies. This way, the study provides evidence that will work in helping to fill the tenable gap in the literature, in offering a governance centered, institutional analysis of transport administration within a developing federal environment.

# CHAPTER 3
# RESEARCH METHODOLOGY

## 3.1 Research Strategy

The qualitative exploratory approach was used in the study as the major form of analysis. The choice of qualitative approach could be attributed to the study issue, as the study aimed to learn the governance fragmentation, and institutional processes, in the FTMs of Pakistan. Qualitative approach, especially, facilitated the description of subtle institutional acts, investigated the process of decision-making that cuts across ministerial boundaries, as well as the recording of perceptions, and the ways in which the stakeholders approach the established regulation patterns (Creswell & Poth, 2018). The qualitative strategy made it possible to capture a detailed, interpretive means of understanding of the issues at hand that would not have been completely possible to capture using quantitative criteria, since the study involved institutional processes, inter-ministerial coordination, and administrative logic (Mason, 2002).

The explicative character of the research design was also adopted, since the nature of the inquiry is explorative, and also because the phenomenon of fragmentation, within the FTG in Pakistan, has not received enough attention in the literature. Exploratory methods come in handy when the distinct sets of theories, or frameworks, are incapable of explaining emergent problems of governance (Stebbins, 2001). In the case of Pakistan, it was especially relevant, as most of the literature on transport focuses on either discussing infrastructure, investment, or planning, with the FTG not being discussed enough.

## 3.2 Research Design

The exploratory case study design was used in this study to analyze the governance structure of Pakistan's transport sector at the federal level. The selection of a case study would be acceptable because the research focus was bounded; i.e. how; the MoC, the MoR, the MoMA, and the MoD (Aviation Wing), operate, and coordinate. The study was not meant to analyze the quality of infrastructure, the output of the sub-sectors, or the service delivery performance, but to investigate the systemic issues associated with the transport governance. So, it was the institutional, and administrative procedures that became the qualitative entity under consideration, and not necessarily the physical infrastructures, or the results of the service-based outputs that could be measured.

The case study method made it possible to examine in depth, in a context-relevant way, how governance decisions are arrived at, how institutions relate (or do not relate) with each other, and how they lead to consequences related to the present structure of transport decision-making responsibilities under the federal government. Yin (2018) presented that the case study research is especially valuable, where people begin by asking how, and why, about modern events, on the background of real life, in which the researcher has less control over what is happening. This is what exactly happened in this study, since it focused on the emergence, and persistence, of ministerial fragmentation, and the reasons of why it challenged the ability of policymaking in a concerted manner.

Since, the issue of inter-ministerial fragmentation in the Pakistani system of transport governance has not been explored at length, the terminologies associated with exploratory research also conditioned the design of the research. According to Stebbins (2001) exploratory researches are particularly useful in cases, where there is not much past scholarly research on a topic of study, and the researcher is not out, to carry out a research to test some prior ideas, but seeks to have some fresh information. This study attempted to create conceptual, and empirical, understanding of the various dimensions of the FTG in Pakistan by conceptualizing it as an understudied institutional phenomenon, and by conducting 'in-depth interviews' (IDIs), and a 'focus-group discussion' (FGD), with the stakeholders, and analyzing the relevant documents available.

Additionally, the design did not aim at assessing performance of transport ministries on the basis of service delivery, or infrastructure development. Rather, it aimed at knowing the governance systems, administrative territories, and the decision-making regimes that characterize the operation of the transport sector at the federal level. Such a difference assisted in maintaining the study within its minimum objective of examining governance mechanisms, and their repercussions on the inter-ministerial synchrony, and policy coherence.

### 3.3 Methods of Data Collection

Primary data was collected by holding in-depth, semi-structured, interviews with main stakeholders in the governance of transport sector in Pakistan. Secondary data was collected from governmental reports, academic articles, and relevant policy documents.

Semi-structured interviews allow for flexibility in the questioning process, facilitating in-depth responses. Secondary data provides contextual understanding, and benchmarking opportunities (Bernard, 1988/2017).

### 3.3.1 Primary Data: 'In-depth Interviews' (IDIs) and 'Focus-group Discussion' (FGD)

Semi-structured IDI was the main technique of primary data collection in this study. This methodology enabled the researcher to assume a structure of his fundamental questions, whilst giving freedom to inquire more, depending on the way the participants answered the questions. It is generally acknowledged that semi-structured IDIs are an efficient technique to acquire more in-depth, and contextual knowledge, especially in domains that may be described as complex, institutional, and governance, in nature (Brinkmann & Kvale, 1996/2015; Bernard, 1988/2017).

A total of 19 participants were engaged through one-on-one IDIs, and an FGD. Only one, out of these 19, was a female, and that may have been a sample selection issue, however, the transport sector is, mostly, dominated by males; be it governance, policy making, planning, operations, and research. These 19 participants included:

- 1 officer from the MoC,
- 4 officers from the MoR,
- 1 FGD with 3 officers at the MoMA,
- 1 officer from the MoD (Aviation Wing),
- 1 officer from the 'National Highway Authority' (NHA),
- 2 officers from the PC,
- 2 officers from the NTRC,
- 1 academic from the 'Quaid-i-Azam University' (QAU),
- 1 academic from the 'Pakistan Institute of Development Economics' (PIDE),
- 4 retired officers, including;
    - 1 from the PC,
    - 2 from the NTRC, and
    - 1 from 'Pakistan Navy', participant of the FGD.

The purposive sampling strategy was used to identify all participants of the IDIs. It was the right strategy in qualitative research that seeks to collect the expert knowledge among a relatively small, and highly knowledgeable population (Patton, 2002). IDIs were based on the matters of administrative boundaries, formulation of policies, inter-agency coordination, and institutional reforms.

### 3.3.2 Secondary Data: Documents

Alongside the IDIs, document analysis served as means of complementing, and triangulating qualitative data. Document analysis is a key concept of qualitative research, since, it makes use of historical, and institutional background, and locates the findings of an IDI based on the use of publicly available, or internal, documentary material (Bowen, 2009).

The following documents were reviewed:

- The CoP (1973), especially the FLL, to identify federal jurisdiction over transport-related matters (‘Parliament of Pakistan’, 2018).
- The RoB (1973) issued by the ‘Cabinet Division’, to understand the legally defined responsibilities of each ministry, and division (‘Cabinet Division, Government of Pakistan’, 2021; ‘Cabinet Division, Government of Pakistan’, 2024a; ‘Cabinet Division, Government of Pakistan’, 2025).
- Executive orders related to the historical separation of the MoC into separate ministries; such as Railways, Maritime Affairs, and Aviation etc. (‘Cabinet Division, Government of Pakistan’, 1974; ‘Cabinet Division, Government of Pakistan’, 2004).
- The NTP (2018), which serves as an overarching policy framework for all transport modes (‘Planning Commission, Ministry of Planning, Development & Reform, Government of Pakistan’, 2018).
- Sub-sectoral policies; such as the ‘National Aviation Policy’ (NAP), 2023; and the ‘National Freight and Logistics Policy’ (NFLP), 2020 for their congruence to, or divergence from, the NTP (2018) (‘Government of Pakistan’, 2023; ‘Ministry of Communications, Government of Pakistan’, 2020).

- Other supporting documents, including ministry-level briefings, the PC's 'Five Year Plans' (FYP), and other reports were consulted to contextualize governance challenges, and policy responses.

The analysis of documents played a pivotal role in singling out, not only the formal organization of the FTG, but the normative arguments regarding federal institutional arrangements among the institutions. It was also possible to trace the history, in evolution of the RoB, and analyze the logic, that was applied within the ministries for administration, organization, and restructuring.

### 3.4 Units of Data Collection

The individuals were key stakeholders that directly, or indirectly, participated in the development, implementation, and review of transport policies. Officers of the state, in the ministries, and departments, based in the federal government; including the MoC, the MoR, the MoMA, the MoD (Aviation Wing), the PC, the NTRC, the NHA, and academic organizations, like PIDE, and QAU, were interviewed on the basis of a semi-structured interview guide, along with an FGD. Also, former officers that had served in various institutions offered great longitudinal insights into the institutional changes, as well as inter-ministerial dynamics. They were also consulted on issues pertaining to the 'international best practices'. It is a strategy that has guaranteed variety in views, since, there is policy perspective, technical operations, and oversight (Creswell & Poth, 2018).

The second key unit consisted of documents, both; the politico-legal, and the policies. The basic documents including the CoP (1973), especially the FLL, and the RoB (1973) were examined to draw the legal distribution of responsibilities among the ministries within the federal government. On the same note, principal sectoral policies, such as the NTP (2018), the NAP (2023), and the NFLP (2020) have been reviewed to know the planning priorities, and the institutional mandates. It was observed that where applicable, executive orders in relation to the formation of new transport ministries, or the bifurcations of the divisions, out of the MoC were zeroed-in upon, to chart the institutional changes.

Such combination of the two units of data collection; the interviews with the knowledgeable people, and documentary study of the basic materials, made possible the data triangulation that raised the validity of findings, and it enabled to have a big

picture of the overwhelming, and even overlapping, FTG structure in Pakistan (Denzin, 1970/1978; Bowen, 2009).

### 3.5 Sampling

This study used purposive sampling, which is a nonprobability sampling method that enabled the researcher to make a deliberate choice of individuals, and documents that would give the most appropriate, and informed, opinions on the FTG in Pakistan. This approach was appropriate in view of the exploratory, and qualitative, theme of the research, and the fact that the study was intended to produce rich knowledge on how institutions may work, fragment, and coordinate with each other, rather than statistical generalization (Palinkas et al., 2015).

The IDI and the FGD participants were chosen, relying on their area of expertise, their official capacity, and their direct experience dealing with transport policy, governance, and research. These were serving, and retired officers of the FTMs (Communications, Railways, Maritime Affairs, and Aviation), People representing planning, and research institutions (e.g. the PC, the NTRC, PIDE, QAU), and technical officers who had cross-departmental experience. The help of several informants, within different levels of administration, contributed to enriching the range of opinions, and so, the study revealed the high level of policy framing, and the bottom level of implementation problematics.

There was also inclination in the way that documents have been chosen purposively on the basis of their relevance to the structure, responsibilities, and evolution of the FTG. The CoP (1973), the RoB (1973), the NTP (2018), and sub-sectoral policies (the NAP, 2023; the NFLP, 2020), and relevant executive orders; involving the bifurcation, or breakup of transport-related ministries were considered as core documents.

The usefulness of purposive sampling was attributed to the assessment of quality, depth, and abstract data that would answer the research questions on inefficiency of governance, overlap of institutions, and disintegration of policies, within FTMs in Pakistan. One type of purposive sampling, expert sampling, is particularly accepted, when the investigation requires the input of people with substantial domain expertise, as opposed to a most visible image of a large segment of the populace (Marshall, 1996).

## 3.6 Data Analysis

The qualitative 'thematic content analysis' (TCA) was applied to the data gathered through IDIs, FGD, and the documents. It was a way to identify, organize, and interpret the most important themes found in the data, in this specific case driven by institutional fragmentation, inter-ministerial coordination, and overall coherence between the governance of the Pakistani FTMs. TCA seemed, especially, fitting to this work because it is, a rather, common method in the research, in the field of public administration, and policy, as it allows investigating complicated patterns of governance, and attitude of the stakeholders (Braun & Clarke, 2006; Nowell et al., 2017).

### 3.6.1 'Thematic Content Analysis' (TCA)

To precisely code all transcribed interviews, and important documents (i.e. policy frameworks, executive orders, and regulatory tools), an inductive thematic approach was followed. The information was manually analyzed, in order to recognize duplicated patterns, and themes, amongst various stakeholders, and sources of documents. Specific attention was paid to themes, such as:

- Ministerial overlaps, and fragmentation
- Coordination challenges across transport modes
- Absence of policy alignment between sectoral, and sub-sectoral frameworks
- Perceptions of institutional silos, and reform bottlenecks

TCA followed a six-step proposed framework involving familiarization, coding, theme development, theme review, definition, and reporting (Braun and Clarke, 2006). This approach guaranteed rigor of analysis, and allowed the subtlety of the way fragmentation manifests in formally developed rules, and administrative practices to be understood.

### 3.6.2 Narrative Description

The qualitative results were then structured in a narrative manner, with respect to the themes that emerged in the analysis. All the themes were represented through detailed discussion with the help of chosen snippets of interviews, or summed up information in the official documents. This conversational form of presentation made it possible to present the data with rich context that did not shut out the voices of the stakeholders' lived experiences, as well as keeping their views within the premise of the formal policy

framework (Riessman, 2008). The storyline was arranged to show how fragmentation, coordination problems, and policy dissonance were interconnected with one another at the federal level.

### 3.6.3 Triangulation

Data triangulation was conducted at several levels in order to improve the credibility, and validity of the findings. To begin with, policy triangulation was carried out through the correlation of the data related to the interviews with other documents like the RoB (1973), the NTP (2018) etc. In this way, primary data was triangulated with the secondary data, which was useful in establishing areas of harmony, and differences between the formal system of governance, and administrative practice (Bowen, 2009).

## 3.7 Research Locale and Rationale

There are a number of reasons why the federal level of governance was selected as the target of this study. To begin with, the ministries, and organizations responsible for transport; like the MoC, the MoR, the MoMA, and the MoD (Aviation) are purely federal, and all are located at Islamabad, and Rawalpindi[1]. These ministries are crucial in national level transport governance, as they are charged with the tasks of policy making, and regulation. Secondly, this modal split in these ministries has not been fully examined in the scope of transport governance analysis.

Although, a substantial amount of the literature reviews, available, have dealt with infrastructure shortages, and urban mobility, or funding. Few studies have been done regarding the transport governance architecture that determines how these ministries operate, and the implications of the same (Imran & Low, 2005; Rye et al., 2018). Third, transport in Pakistan is becoming a concern of international actors like the 'World Bank' (WB), 'Japan International Cooperation Agency' (JICA) and the 'Asian Infrastructure Investment Bank', which are in operation only with the federal agencies, or with the consent of the federal government, leaving the governance capacities of the bodies in question, as a national, and international issue (Chohan et al., 2011).

[1] When this study was being planned, the Aviation was part of the Cabinet Secretariat as 'Aviation Division', and it was also based in Islamabad. However, during the course of this study, it was merged with the MoD, which is based in Rawalpindi, hence, the Aviation was shifted from Islamabad to Rawalpindi.

Last but not least, as attention on multimodal integration increases, the necessity of inter-ministerial coordination, and strategic alignment has never been higher, and such a union can never be established without first grasping, and transforming the FTG.

### 3.8 Conceptual Framework

Since, it is an exploratory study, therefore, instead of applying a predefined model, this research tried to unearth the idea of 'transport governance' embedded in the legal, and policy documents through document analysis, while the IDIs and the FGD provided data about how the experts, practitioners, and policymakers understand, and critique, if any, this idea. This approach helped in conceptualization of this idea in the Pakistani context leading to a bottom-up approach for determining an efficacious FTG system in Pakistan.

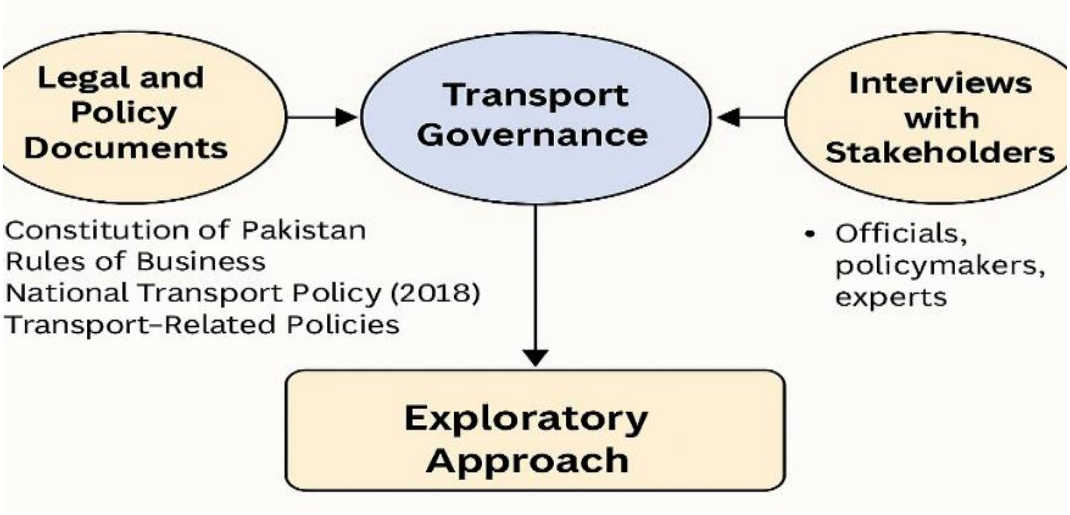



***Figure 3.1:*** Conceptual Framework

### 3.9 Ethical Considerations

This study followed all standard ethical guidelines in social science research to uphold the right, and privacy, of research participants. In the request of ethical clearance, it is done in line with the guidelines of the institution, and also all the participants were presented with informed consent statement before gathering the data. This statement provided details of the study, and how they are going to participate in the study, and that they were entitled to withdraw at any stage. They were also alerted of the way the research data would be utilized, meaning that their engagement with the research was not involuntary, but involving good knowledge of what the study was all about (Creswell & Poth, 2018).

In order to maintain confidentiality, and anonymity, the names, and/or official designations, were not used to identify participants in the transcribed interviews, and/or field notes, and coded identifiers were used. This was especially significant considering that the current, and former, officers of the federal government, who worked in sensitive ministries, and agencies, were involved. When it came to the reporting of results, special care was taken, so that, no data could be found that would identify participants, unless, this was already in the public domain, or had been expressly given.

The interview recordings, together with their transcriptions, were stored in digital files of high security, and only accessed by the main researcher, on devices with a password. The research procedure followed the international guidelines of the AAA (‘American Anthropological Association’, 2025), and the BSA (‘British Sociological Association’, 2017), in that, the research must respect, be non-harmful to the participants, and promote the integrity of the research.

Since, the emphasis was on federal institutions, and processes of governance, extra care was taken to confirm that the research did not jeopardize the identity of the institutions, or government departments in the eyes of people. Results were presented in an objective, and respectful, tone of writing, basing on evidence, and policy analysis, instead of personal criticism. These ethical measures were important because they were aimed at developing trust with the respondents, and making the process of the research credible, and reliable (Orb et al., 2001).

# CHAPTER 4
# FINDINGS AND ANALYSIS

## 4.1 Introduction

This chapter provides the findings, and analysis, of the study of FTG in Pakistan, and the research objectives guide it to investigate how the FTMs developed over time, and through the research objectives, the study investigates how the FTG fragmentation harms policy coherence, and policy coordination, as well as exploring possible solutions to poor inter-ministerial integration. These results are based on the qualitative data that has been obtained by using semi-structured IDIs with key stakeholders, senior representatives of the FTMs, policy experts, academicians, and secondary sources of information; like official notifications, policies, documentation, the CoP (1973), and the RoB (1973).

TCA was utilized to identify patterns, and insights, that are recurring, which was also triangulated with documentary evidence, so that, they could be validated, and contextualized. This chapter will have five broad sections; 1) a historical overview of the FTMs, 2) thematic findings of interviews, and document review, 3) a critical assessment of key transport related policies, 4) an overview of international best practices of transport governance, 5) and a concluding discussion that will offer synthesis of findings by relating the key findings to the research questions.

## 4.2 Historical Overview of the 'Federal Transport Ministries' (FTMs)

As per the 'Cabinet Mission Plan of 1946', a proposition was put forth for keeping the MoC with the Centre (UK Parliament, 1946). Subsequent to the attainment of independence by Pakistan, in 1947, and passage of the CoP (1973), the aforementioned central ministry underwent a process of fragmentation, resulting in the establishment of distinct departments, and ministries for each respective mode of transportation overtime. The dilution in question appears to have been influenced by a variety of factors, including historical, political, and practical considerations, as suggested by the findings of Chohan et al. (2011).

The primary emphasis was placed on the establishment of transportation infrastructure, specifically roads network, with the objective of linking significant urban centers, and municipalities. Throughout the years, the transportation infrastructure has undergone

significant expansion, incorporating air, and maritime modes of transportation. This expansion is evidenced by the establishment of 'Pakistan International Airlines' in 1955, and the development of major ports in Karachi, and Gwadar, as reported by Imran and Ahmed (2021).

### 4.2.1 'Ministry of Communications' (MoC)

The MoC was inherited from the British Raj, at the time of independence, in the year 1947, by the federal, then central, government of Pakistan, and tasked with the administration of a wide scope of responsibilities; including roads, telecommunications, and postal services, and general transport as well as administration. During the first few decades after independence, the mandate of the ministry significantly grew in scope, in line with the then prevailing national agenda to build the nation, and consequently, necessitating the enhancement of communications network, and transport infrastructure to unify the newly established state (Qureshi & Huapu, 2007).

This growth incorporated the roles of making policies, regulations, and management of various means of transport, and control of the postal, and telecommunication services, which were presumed to be primary, to the economic growth, and administrative union during the formative years (Stough, 2012). Such a wide range of activities, however, with time, may have posed operational inefficiencies, since these various roles demanded different kinds of technical skills, and specific administrative systems. The resultant effect was the slow fragmentation, where specialized divisions were detached to become stand-alone ministries.

In 1974, the MoR was created to manage strictly rail-transport ('Cabinet Division, Government of Pakistan', 1974), and the 'Ministry of Ports and Shipping' (MoP&S) in 2004 ('Cabinet Division, Government of Pakistan', 2004), later renamed, the MoMA in 2017 ('Cabinet Division, Government of Pakistan', 2017), and the 'Ministry of Aviation' (MoA) in 2024 ('Cabinet Division, Government of Pakistan', 2024a), were created as independent entities. These separations diminished portfolio of the MoC to a more confined area of road infrastructure, as 'road transport and postal services' only. Since, the focus of this study is on the transport part of the MoC only, therefore, separation of different communication modes has not been discussed here. However, it is pertinent to mention that only postal service has remained under the purview of the MoC from the communications part.

Even though, the role of multimodal, and *'road transport'* has been mentioned as mandate of the MoC in the RoB (1973), however, neither the federal secretary of the MoC has been given any special powers, or authority, over their colleagues in other FTMs to call them for multimodal projects, and planning, because they also work at the same level of administration in their respective FTMs, nor after the '18th amendment' to the CoP (1973), and removal of the 'Concurrent List' containing the subject of 'Mechanically Propelled Vehicles', they have the powers to deal with the motorized transport, which is dealt under respective provincial motor vehicle laws.

As it is currently, most of the ministry's core roles are limited to managing the processes of the national highway system, including motorways and strategic roads, and monitoring of the NHA, the NHMP, and the NTRC (Cabinet Division, Government of Pakistan, 2025). Although, its mandate, today, is leaner than its original form, the dispersion has also led to the problems of coordination between transport modes, and narrowed the ability to unify transport policy-making at the federal level.

### 4.2.2 'Ministry of Railways' (MoR)

The MoR came into formal existence in the year 1974 when it was carved out of the MoC, and its main purpose was to accord specific administrative supervision, and policy guidance, over the rail transport sector in Pakistan. The mandate of the ministry has changed with time, over the decades, as economic patterns, and infrastructural issues have changed. During the early years of its operations, the ministry presided over the growth of the rail network, and the interconnection between the cities in the course of the 'national development planning'. But since the 1980s, the situation began to change with a steady reduction of the freight market share of 'Pakistan Railways' (PR) facing stiff competition by the road, and poor investment in rolling stocks, and tracks, coupled with poor governance (Qureshi & Huapu, 2007). This slump necessitated occasional administrative reform (corporatization efforts, and structures of PPPs) that could work towards enhancing effectiveness of operations, and financial well-being.

At present, the MoR has been involved in developing rail infrastructure, regulating the services, and strategically managing the PR as a state corporation ('Cabinet Division, Government of Pakistan', 2025). Although, it has a very narrow specialized capacity, the ministry is still fraught with some serious operational issues, such as incessant budget deficits, archaic infrastructure, and inadequate intermodal connections to

roadways, and maritime systems. The system of governance is such, that chances of multimodal coordination are lacking. According to literature on transport policy, such institutional fragmentation tends to erode the possibility of integrated logistic planning, and fail to achieve overall national transport goal (Stough, 2012).

### 4.2.3 'Ministry of Maritime Affairs' (MoMA)

The MoMA was created in 2004, as MoP&S, and later renamed in 2017, by separating 'Ports and Shipping' from the MoC. This choice, probably, was motivated by the strategic significance of the sector to international trade, connectivity in the region, and economic growth, especially taking into consideration the geographical position, or planning of Pakistan, as well as the fact that most of its imports, and exports, depend on seaborne trade (Stough, 2012).

The mandate of the ministry is the regulation, and control, of ports, facilitation of shipping services, and coordination with other international maritime bodies. Since its inception, some major initiatives have been introduced by the ministry in the field of port modernization, liberalization of the shipping sector, and convergence of Pakistani maritime regulations with international laws, such as that of the 'International Maritime Organization'. Reforms at the institutional level have been geared towards increasing efficiency in the operations of the key ports, and specifically, the modernization of 'Karachi Port', 'Port Qasim', and the growing role of 'Gwadar Port' as part of the CPEC ('Planning Commission, Ministry of Planning, Development & Reform, Government of Pakistan', 2018).

Under its current duties, the ministry has the responsibility to supervise, and govern the activities of ports, support investments in maritime infrastructure, and provision of safety, security, and environmental standards. Nevertheless, there are still issues pertaining to governance, such as poor intermodal connectivity between the ports, and the inward transport network, shortage of space in the established ports, and red-tapism that can delay the implementation of projects (Qureshi & Huapu, 2007). This is because the ministry is relatively new, and it is, still, institutionally developing, but notably, its focus has been to enhance the coordination with other FTMs with the aim to reach an integrated national transport, and logistics system.

### 4.2.4 ‘Ministry of Defence’ (Aviation Wing)

The original document regarding separation of the aviation from the MoC was not found, however, whatever I gathered from oral history, it seems that it became part of the MoD after enactment of the CoP (1973). Later on, it was brought back to, first, the ‘Establishment Division’, and then as the ‘Aviation Division’ under the ‘Cabinet Secretariat’ (‘Cabinet Division, Government of Pakistan’, 2021).

The MoA was created in 2024, however, this short-lived MoA was merged again with the MoD in 2025, by not only abolishing the ministry, but the Aviation Division was also dismantled, instead of keeping it as a separate division in the MoD, like it was under the ‘Cabinet Secretariat’ before (‘Cabinet Division, Government of Pakistan’, 2025).

This merger comes with great implications to governance, especially in its balance between civil, and defense priorities, protection of adherence to ‘International Civil Aviation Organization’ (ICAO) standards, as well as coherence of policy between it, and other FTMs. The may increase potential threat of civil aviation development to be taken over by defense-oriented strategies, as identified by Stough (2012) earlier.

The major remit of the aviation is controlling civil aviation services, airport operations, and compliance with the standards. This wing of the MoD works to build aviation infrastructure, and improve the quality of services by bringing them in line with the approved standards as laid down by the ICAO. It also takes on an all-encompassing role, involving policy-making of the civil aviation sector, as well as airport management by the newly established ‘Pakistan Airports Authority’, and ‘Pakistan Civil Aviation Authority’ (PCAA), regulation of airline operations, and alignment with the safety, and security, standards adopted by the international communities among others (‘Cabinet Division, Government of Pakistan’, 2025). Significant policy actions occurred as a result of initiating air traffic improvement, open skies, investments on modernizing of airport infrastructure. It also tried to market Pakistan as regional aviation hub, but this was not always in the full swing due to the same institutional inefficiencies, and the similar competence areas of the regulatory authorities (Qureshi & Huapu, 2007).

## 4.3 Thematic Findings

### 4.3.1 Understanding Transport Governance

Respondents offered varied, yet complementary, interpretations of what transport governance entails, reflecting both, theoretical understanding, and practical experience in Pakistan's transport sector. While some participants approached the concept from a regulatory, and institutional perspective, others emphasized its role in coordination, service delivery, and policy execution across multiple modes.

One policymaker (R15) explained, *"Transport governance is about how decisions are made in the transport sector… who has the authority, how the processes are structured, and how coordination happens between different institutions."* This definition captures governance as a procedural, and decision-making framework, stressing institutional roles, and the mechanisms through which authority is exercised.

Another respondent (R1) added, *"It's not just about building roads, running trains, or operating ports—governance means aligning the national laws with the UN Conventions, and best international practices, setting public policies, framing frameworks for regulators, ensuring safety, brining efficiency, and aligning the sector with national economic goals set in the short-, medium-, and long-term planning."* Here, governance is framed as an overarching process that goes beyond infrastructure development to include regulation, policy coherence, and strategic alignment with broader development objectives.

Another respondent (R5) further articulated, *"Good governance ensures that all transport modes are integrated, resources are used efficiently, and policies are consistent across ministries… without governance, you only have fragmented operations."* This perspective emphasizes governance as the key enabler of integration, efficiency, and consistency, directly linking it to the problem of fragmentation observed in Pakistan's current system.

One participant (R14) noted, *"In Pakistan, governance is often misunderstood as just management… but true governance includes planning, policymaking, implementation, and monitoring, involving multiple stakeholders at federal, and provincial levels."* This distinction points to a conceptual gap in the sector, where governance is sometimes reduced to day-to-day operations, rather than being understood as a structured, multi-level system of oversight, and accountability.

Collectively, these viewpoints suggest that respondents see transport governance as a multi-dimensional concept encompassing institutional frameworks, decision-making processes, coordination mechanisms, regulatory oversight, and strategic integration across modes. The emphasis on coordination, and integration recurs in many accounts, reflecting a shared recognition that governance determines the effectiveness, and sustainability of transport systems.

The literature aligns with this understanding. Jaimurzina (2018) defined transport governance as the set of institutional frameworks, regulatory mechanisms, and policy procedures that govern, plan, and coordinate transportation systems. Button and Hensher (2005) highlighted that governance is broader than infrastructure provision, encompassing the policies, regulations, and institutional relationships that shape service delivery. Rye et al. (2018) stressed that effective governance requires systematic inter-institutional coordination, ensuring that shared mandates are harmonized, and redundancy is minimized. These scholarly definitions support respondents' interpretations, confirming that governance is not merely about infrastructure management, but it is fundamentally about structured decision-making, coordination, and policy coherence across the transport sector.

### 4.3.2 Historical Evolution of the 'Federal Transport Ministries' (FTMs)

Various interviewees made clear reports on the changes, which transformed the unified form of FTG in Pakistan to the current system of independent ministries. Their stories show the political, administrative, and sectoral interests in the fragmentation, and the consequences of the same to coordination, and policy-making.

One respondent (R2) recalled, *"After independence, we had one Ministry of Communications which was responsible for roads, railways, ports, and aviation. The logic was to have one central body to manage all transport modes, but over time, specialized divisions were carved out — first railways in the 1970s, then ports and shipping, and aviation later. Each new ministry came with the argument that specialized focus would improve performance."* This illustrates the initial rationale for a unified structure, and the subsequent belief that specialization would deliver sectoral improvements.

Another participant (R11) explained, *"The Ministry of Railways was established in the early 1970s because rail operations had become too complex to be managed as just a*

*division. Ports and shipping were separated in the 2000s due to the growing importance of maritime trade. Aviation became its own ministry, to comply with international regulatory requirements, and to better manage the Civil Aviation Authority."* This account shows that fragmentation was driven not only by domestic administrative considerations, but also by international obligations, and sector-specific growth.

A senior officer (R18) noted, *"In those days, decisions to split ministries were often political rather than technical. Separate ministries meant separate budgets, more control for ministers, and more bureaucratic positions. This political incentive was stronger the argument for specialization."* This observation indicates that political economy factors also determined institutional restructuring, and not just the administrative reasons.

There is a clear picture of how this trend has been characterized by slow fragmentation over the years; the united ministry of post-independence that had control of all modes, to where the situation is in the present with rail, maritime, aviation and roads being controlled under different ministries. Technical specialization demands combined with political gain, and changing international regulatory situations led to the shaping of the process.

Most of what the respondents have explained, it can be found in literature. Stough (2012) has highlighted that sectoral specialization within the governance of transport is generally created to meet complex operational needs, whereas Qureshi and Huapu (2007) have pointed out that in Pakistan, this specialization has given rise to more silos of administrative effort, instead of integration.

### 4.3.3 Current Structure of the 'Federal Transport Governance' (FTG)

Pakistani stakeholders view the present system of the FTG as highly fragmented, with no clear structure to provide a coherent approach to the various modes of transport. In the past, the country started with a unified MoC, by having all its activities consolidated across road-, rail-, port-, and airways. This organization, however, over the years has been split apart into other ministries, each focusing on a single mode. Although, this type of specialization is supposed to have been done to enhance efficiency, however, most of the respondents claimed that it has actually been mostly done due to political expediency, rather than on technical grounds based on research, and this has caused

repetition of work, opposing/competing priorities, and lack of a cohesive policy-making process.

A senior officer (R1) noted, "*Off course! The National Transport Policy was approved by the Cabinet in 2018. For implementation, and achieving the necessary coordination among related sub-sectoral ministries; like MoC, M/o Railways, Maritime Affairs, and Aviation Division, the lead Ministry designated by the Cabinet was Ministry of Planning and Development. However, no mechanism was achieved for coordination between the M/o P&D, and other related ministries, therefore, the needed strategies, and subsequent National Transport Plan, drafted in 2020, by M/o P&D were not approved, and implemented."* They also reflected on the institutional evolution by stating, *"Different modes are managed by separate ministries… there is no central governing body… the initial single Ministry of Communications was later fragmented into Maritime Affairs, Railways, and Aviation"*. This observation highlights the shift in the original integrated framework to a segregated governance model, in which each ministry works in its respective silo to a great extent. This lack of centralized power, highlighted by the respondent, problematize planning of infrastructure interlinking various forms, which in effect, retards proceeding towards achievement of transport goals in the country.

Another respondent elaborated on the operational implications of this fragmentation, noting, *"The Ministry of Railways works in isolation from road, aviation, and maritime authorities… inter-ministerial coordination meetings are rare, and mostly reactive"* (R4). Their point of view also emphasized that not only the ministries operate in isolation, but also there are few chances of proactive planning, and frequent cooperation. There is only a coordination, when there are some urgencies at hand, and therefore, there is not much integration of policy, and infrastructure in the long term. In his opinion, this reactive system hinders multimodal schemes by slowing them down, and undermines the capacity to solve transport issues holistically.

On the same note, another respondent, who is well experienced in the federal government said, *"In the existing system, individual ministries act in isolation… this is breeding duplication of efforts, and conflicting priorities among transport modes"* (R9). What worried them was the fact that the ministries tend to have divergent, and competing, interests without a binding mechanism of governance. This may bring about the duplication of projects, lack of coordination of investments, and even conflicting

regulations. This kind of redundancy is wasteful, and it makes the expenditure from the public exchequer less productive, especially in a developing economy, where transport infrastructure developments, especially in rail, and water transport, is already strained.

One Officer (R14) pronounced, *"The current state of transport governance in Pakistan is reflective of our overall political system, and governance, you cannot see one separately from another, both are marred by the same issues of non-transparency, instability, and fragmentation"*.

Collectively, these perspectives describe a system of governance in which specialization is being tried at the expense of integration. Another consistent stress, that was put on by the respondents, was the lack of a unified, central policy organ to steer inter-ministerial integration. In place of trying to cooperate, to achieve shared transport objectives, it is the tendency of the ministries to take a single-minded approach of concentrating on the mandates under their jurisdiction, thus, the potential of achieving a truly multimodal, and tightly knit transport system still remains a distant dream.

The reflections presented by these respondents are very close to what the literature has already established on the transport governance in Pakistan. Similar structural challenges were also identified by Stough (2012), who pointed out the fragmentation of institutions in Pakistan which negates a coherent policy-making, and the effectiveness of operations. Qureshi and Huapu (2007) also emphasized that such a structure of isolated decision-making does not contribute to sustainable development of transport, especially in urban settings, where integration with multimodal transport is a fundamental issue.

What is more, its very vision of the coordinated, and effective transport network, as stated in the NTP (2018), proves impossible without the institutional reforms aimed at the integration of the transport systems. Both, scholarly and policy-based, observations corroborate the statements made by the respondents, which allows one to conclude that the fragmentation of governance is a major obstacle to the realization of policy coherence, elimination of duplication, and streamlining the delivery of transport services at the federal level.

### 4.3.4 Challenges in the Current Governance Model

It was noted multiple times by respondents that the current model of FTG in Pakistan is systemically challenged, which restrains efficiency, policy coherence, and service

delivery. These issues are based on institutional fragmentation, political factors, and inability to plan long-term.

One respondent (R8) stated, *"Each ministry is focused on its own agenda. There is little coordination, and this leads to duplication of work, and wastage of resources. For example, road, and rail projects are planned separately, even when they could complement each other."* This underscores a lack of integrated planning, where opportunities for multimodal synergy are lost, because ministries operate in silos.

A policymaker (R19) remarked, *"In our ministry, we often face delays in approvals because other ministries do not prioritize our projects. Even when projects need joint effort — like improving port access to roads — there is no clear authority to compel action."* This reflects the operational delays, and inefficiencies, caused by the absence of a central coordinating authority.

Another respondent (R3) described the governance environment as highly politicized, noting, *"Appointments, and decisions, are often political, rather than, merit-based. This affects continuity of policies, and reduces the professional capacity of ministries."* Here, the concern extends beyond structure to the quality of governance, where short-term political priorities can override strategic transport planning.

Another participant (R14) identified capacity, and resource, issues: *"Some ministries simply do not have the staff, or technical expertise, to handle their mandate. They depend on consultants, or donor agencies, which is not sustainable in the long term."* This emphasizes the weaknesses of institutions, wherein capacity gaps undermine the development of policy, implementation, and monitoring.

Such obstacles are in line with academic developments. According to Stough (2012), the cauterized FTG in Pakistan is seen to cause overlapping mandates, uneven priorities, and interagency coordination. Qureshi and Huapu (2007) also emphasized that a lack of sustainable transport development is due to inefficiency of the institutions, and political influence, as well as ineffective technical capacity. Such governance constraints are also recognized in the NTP (2018), and it demands a coherent national platform to eliminate duplication, improve coordination, and enhance institutional capacity.

### 4.3.5 Policy Fragmentation and Overlap

One of the major themes, which came out strongly in the interviews, was that policy formulation in the transport sector, in Pakistan, is highly fragmented, and overlapping. Several ministries relate to various ways of transport, and their policies are commonly created out in a vacuum, resulting in duplication of goals, regulatory disparities, and lack of cross connection opportunities. Respondents reported incidences of the FTMs having different approaches that, not only, could not align, but in some cases, were in conflict with each other.

One respondent (R13) stated, *"Each ministry has its own policy. The Maritime Affairs has its maritime policy, Aviation has its own, and the Ministry of Communications looks after road transport. These policies are not harmonized. Sometimes, you see duplication of projects — for example, both; railways, and roads, targeting the same freight corridors without coordination. This wastes resources, and creates inefficiencies."* This highlights that siloed policy development often results in overlapping investments, with no overarching framework to prioritize modes, based on efficiency, or national interest.

They also elaborated, having experience of working with donor-funded projects, *"Donors also prepare sector-specific plans with the ministries, but there is no one at the federal level to integrate these into a unified transport strategy. The National Transport Policy (2018) tried to address this, but since its adoption, ministries continue to follow their own plans. This means that in freight, passenger, and logistics planning, you will find multiple disconnected initiatives."* This statement underscores the disconnect between high-level policy visions, and operational implementation, as well as the inability of existing frameworks to enforce integration.

A respondent (R14) observed, *"Policy overlap is not only a matter of duplication; it also creates conflicts. For example, the aviation sector may prioritize airport cargo expansion, while railways try to capture the same freight market. Without coordination, such competition between public-sector entities is counterproductive."* The point, that this remark draws attention to, is the side effects of fragmentation, wherein ministries end-up competing with each other unintentionally, instead of working in cooperation towards supporting each other's efforts.

All of that being said, these insights show that fragmentation is not merely an administrative problem, but it is also a fundamental policy challenge. Lack of central

coordinating authority implies that there is creation of sub-sectoral policies in silos, which is deemed inefficient, and may involve duplication, contradictory priorities, and misuse of government funding.

Both studies, by Stough (2012), and Qureshi and Lu (2007), acclaimed incoherence in policy as a common stumbling block in the Pakistan's transport governance, given that, there is no binding process, or mechanism, through which ministries hold each other accountable to act in line with the policy. The NTP (2018), even itself, recognizes the dangers of individually planned modes of transport, but still, it has not provided a unified system with which to enforce integration.

International experience, especially in countries where transport is primarily administered by single transport ministries, is that concerted policy guidance can greatly eliminate overlap, enhance resource allocation, and ensure coordination in strategies, with different aims, wherever possible. These results are highly affirmed by the views of the respondents as well, which justifies the direction that policy fragmentation, and overlap, are indeed one of the most urgent issues relating to the FTG in Pakistan.

### 4.3.6 Rationale of Fragmentation

Mixed opinions were given by the respondents with regards to the reasons, as to why the unified MoC was gradually divided into various sub-sectoral ministries. Their narrations give manifestation to the official explanations, and political/institutional motifs of fragmentation.

A respondent (R5) recalled, *"The main reason given was that each mode — railways, maritime, aviation, and roads — had unique technical, regulatory, and operational needs. The Ministry of Communications could not give focused attention to all at once, so splitting them was supposed to enhance [sub-] sectoral performance."* This statement reflects the formal narrative that specialization would lead to improved efficiency, and policy outcomes, for each transport mode.

Another participant (R14) noted, *"In aviation, the push came because of ICAO compliance, and the need for specialized safety oversight. For ports; globalization, and rising cargo volumes required a ministry focused only on maritime affairs. For railways, it was the operational crisis of the 1970s that convinced policymakers, that it needed*

*independent management."* Here, the emphasis is on how international standards, trade growth, and operational challenges influenced the separation of ministries.

A policymaker (R2) offered a more political interpretation, stating, *"Fragmentation also happened because ministers, and bureaucrats, wanted more control, and separate budgets. Every new ministry meant new positions, new influence, and more bargaining power in the cabinet."* This account points toward the political economy of institutional restructuring, where governance reforms may be shaped, as much by power considerations, as by technical needs.

Several respondents stressed that while specialization was the stated goal, the process lacked a framework for ensuring post-fragmentation coordination. As one interviewee (R4) put it, *"The focus was on breaking up the ministry, not on creating a mechanism to keep them working together."* This indicates that there were reforms in institutions, without similar efforts towards integration, as previously noted in the gaps in governance.

Such observations largely coincide with the literature. Stough (2012) shared a similar view with Qureshi and Huapu (2007) that specialization is capable of enhancing the technical focus, but lacks cross-sectoral coordination mechanisms, which is most likely lead to policy silos. The fragmentation rational was framed in terms of efficiency, adherence to the international regulations, and sector-specificity confirmed by the historical policy records, e.g. the NTP (2018). Nevertheless, these sources also recognize that when there is lack of a general body of integration, intra-national transport governance becomes less coherent.

### 4.3.7 Inter-Ministerial Coordination Mechanisms

The participants repeatedly brought up such an issue as the absence of well-organized, and efficient coordination mechanisms among the FTMs. Although, others were willing to admit that formal committees, and inter-ministerial meetings, technically exist, most referred to them as ad-hoc, unresponsive, and too small-scaled. Such mechanisms are not likely to support continued cooperation, but usually, these are activated only by a direct operational crisis, or donor-initiated projects. This establishes a policy environment in which cross-modal integration is merely envisaged than actually realized.

One respondent explained, *"Coordination between ministries is mostly ad-hoc. For example, if a project needs inputs from different transport modes, meetings are held, but there are no standing arrangements to coordinate policies on a regular basis. The Ministry of Railways works in isolation from the road, and maritime sectors. We do not have a permanent body that brings everyone together to plan multimodal connectivity"* (R4). This statement highlights the absence of institutionalized structures for routine engagement, leading to fragmented planning processes.

Another respondent reflected on the limitations of existing arrangements, stating, *"There is a National Transport Policy that talks about integration, but in reality, ministries rarely sit together, unless it is absolutely necessary. The coordination is reactive, not proactive. Even the National Transport Research Centre, which could play a central role, is underutilized in bringing ministries together"* (R13). This points to the gap between policy aspirations, and practice, with coordinating agencies failing to fulfill their intended mandates.

A third participant, drawing from the experiences across multiple ministries, noted, *"I have seen coordination attempts during my time in the Ministry of Communications, and later in Railways, but they are mostly ceremonial. The real decision-making still happens within the silos of each ministry. Even when donor agencies like the World Bank, or JICA, push for joint committees, the follow-up is weak, and nothing changes in the long run"* (R2). This perspective underlines that though donor-led activities can temporarily unite ministries, the congregation could lack continuity, or political ownership.

All in all, this data points to a one uniform picture, where formal coordinating mechanisms are in place, but these can hardly be, effectively, applied in their practice. The meetings tend to be irregular, integration does not form part of the everyday governance procedures, and the donor-driven arrangements are not sustainable.

Comparing to the literature, these observations support earlier conclusion. Stough (2012) accentuated the idea that in fragmented governance systems, the coordination is usually ad-hoc, and project specific, instead of becoming embedded in institutional routines. Qureshi and Huapu (2007) also noted that the transport governance in Pakistan lacks the element of continuous dialogue between ministries, a situation that affects the building of unified, and durable, transport systems. In trying to establish this concern,

the NTP (2018) specifically notes inter-ministerial coordination as one of the priorities, but it has not provided strong mechanisms to ensure that it is followed. Therefore, the evaluation of the respondents is strikingly close to the scholarly, and policy criticisms, which means that unless proactive, and institutionalized, coordination tools are established, multimodal integration will not be achieved as a policy objective of the FTG in Pakistan.

### 4.3.8 Proposed Reforms for Better Coordination

A number of the respondents suggested reforms that would address, and transcend, the institutional silos, and the poor coordination between different agencies that define the FTG in Pakistan. Although, the nature of their recommendations differed, most agreed that there should be increased central supervision, unified policy systems, and formal, and permanent inter-ministerial infrastructures.

One policymaker (R15) suggested, *"There should be a central transport authority under the Prime Minister's Office, or the Planning Commission, that can coordinate all modes. This body should have the legal mandate to make binding decisions on cross-modal projects."* This proposal reflects a recognition that without an empowered central body, coordination will remain ad-hoc, and dependent on individual ministries' willingness to collaborate.

Another respondent (R14) advocated for formalized collaboration channels: *"Regular inter-ministerial meetings should be mandatory, not optional. There should be a calendar of joint planning sessions, and project review meetings, so coordination is institutionalized, rather than left to chance."* This approach emphasizes procedural reforms, ensuring that coordination is routinized, and predictable.

An officer (R19) proposed an integrated policy approach: *"All transport modes should be addressed in one national master plan. Each ministry can then align its projects with the bigger picture, avoiding duplication."* This reflects the need for a policy-level framework that transcends individual sub-sectoral agendas.

Another officer (R2) offered a political-administrative solution: *"Divisions should remain separate, each headed by its own secretary, but in a single ministry headed by a Secretary-General. This would allow specialization while ensuring coordination and information sharing."* This recommendation is an understanding of the advantages of

specialization, whereby it tries to counter the disadvantages of this specialization by creating administrative infrastructure that is shared.

Such reform concepts are in line with what has been suggested in the literature. Stough (2012) suggested centralizing strategic transport governance to solve the predicaments of fragmentation, and duplication. Even in the NTP (2018), it was required to form a 'Cabinet Committee on Transport', and a 'Federal Ministry of Transport' *"may be considered"* in the mid- to long-term, to maintain coherence in the policy across modes ('Planning Commission, Ministry of Planning, Development & Reform, Government of Pakistan', 2018). This is a fact that international best practices have expressed, like the unified federal 'Department of Transportation' (USDOT) in the US, and the centralized MoT in China, and it has proven that coordination methods, that exist within institutions, could be much more effective in efficiency, integration, and strategic planning.

### 4.3.9 Lessons from International Models

Fragmented transport governance in Pakistan was often compared by the respondents with more integrated systems instituted in other countries. Such considerations provoked a sense of the ways that a reform can be realized which is based on best practices around the world.

A senior officer (R13) noted, *"In India, the Ministry of Surface Transport handles almost all surface transport issues, and they coordinate closely with railways through a cabinet-level mechanism. Pakistan could adopt something similar to streamline decision-making."* This comment highlights the perception that a consolidated structure reduces bureaucratic bottlenecks, and enables faster execution of cross-sector projects. However, as of now, India has reverted back to the model of separate ministry for each mode of transportation.

A respondent (R3) emphasized the Chinese example: *"China's Ministry of Transport oversees rail, road, waterways, and ports under one roof. This allows them to implement integrated logistics corridors efficiently. We could replicate aspects of this without necessarily merging all ministries."* The suggestion points to adapting, not fully replicating, China's centralization, focusing on the integration of planning, and execution, rather than wholesale structural changes.

Another respondent (R11) reflected on the US system: *"In the US, the Department of Transportation brings together highways, rail, aviation, and maritime under one federal umbrella. It's not perfect, but it ensures that national priorities drive each sector's plans."*

An expert (R18) referenced European models: *"In the EU, multimodal transport policies are binding for member states, with common infrastructure priorities. Pakistan could benefit from similar binding frameworks among its own ministries."* This draws attention to the role of binding agreements, and policy obligations, in enforcing cooperation.

Such observations highlight the ability that an overall department/ministry of the federal government can offer sub-sectoral strategies towards national goals. This respondent's viewpoint is highly proved through the literature. Indeed, as made by Gwilliam (2008), and Stough (2012), it is through centralized, or highly coordinated, ministries that multimodal integration, decreased redundancies, and increased policy coherence can be achieved.

The comparative governance research has also revealed that countries, that have merged the ministries of transport, such as China and the US, have been more effective in carrying out long-term infrastructure projects, and logistic plans. In the case of Pakistan, such a limited commitment to particular characteristics adopted, as in the central planning authority, or obligatory coordinating structures, would resolve most of the inefficiencies noted in the preceding themes, without, in all likelihood, necessitating the destruction of present organization in the ministerial ranks.

### 4.3.10 Future Directions for the 'Federal Transport Governance' (FTG)

The interviews with respondents ended with conclusions about what the future of the transport governance, as practiced by the federal transport authorities in Pakistan, could, and should be. There were also numerous reports emphasizing the need to, not only reform the structure, but also to plan strategically towards a long-term solution to the current problems, and not just simply fixing them in the short-run.

One respondent (R14) stated, *"There needs to be a permanent federal transport authority that sits above the ministries, and ensures all modes work under a single vision. Without such an authority, fragmentation will keep pulling us in different directions."* This recommendation points toward the creation of an institutional

mechanism that could centralize planning, and policy oversight, without necessarily dismantling existing ministries.

Another senior officer with donor engagement experience (R13) suggested, *"The [federal transport] ministries should share a joint five-year multimodal plan, updated annually, that aligns budgets, projects, and timelines. This would give Pakistan a clear direction instead of disjointed initiatives."* Here, the emphasis is on strategic planning tools that force inter-ministerial alignment, while allowing flexibility to adjust to the emerging needs.

A respondent (R5) argued, *"Technology-driven coordination platforms should be adopted. We can have a digital monitoring dashboard where each ministry's projects, deadlines, and dependencies are visible in real time. This would increase transparency through data-sharing, accountability, and prevent duplication."* This reflects a forward-looking approach that integrates governance reforms with digital transformation.

Several respondents stressed the importance of political will in implementing any reform. A senior officer (R2) noted, *"Even the best structures will fail if there's no political commitment to follow the plan. Governance reform has to be a political priority, not just a bureaucratic exercise."* Such a warning correlates with governance literature that considers leadership, and political support, as preconditions to reforms' success.

These calls of strategic, and integrated, reforms can be heard in the academic literature as well. According to Stough (2012), and Qureshi and Huapu (2007), transport governance reforms can easily be short-lived without the long-term institutional arrangements, and political ownership. It can also be concluded based on comparative experiences in other countries, such as Singapore, and South Korea, that future-oriented systems of governance are essentially more dependent upon centralized planning units, a coordinated ICT infrastructure, and a continued political momentum. In the case of Pakistan, the way ahead might have to involve a sort of a hybrid approach, where much specialized divisions are maintained, but are coordinated with very powerful coordinating structures, digital integration, and enforceable shared planning projections.

## 4.4 Policy Analysis

The NTP (2018) is the first, and only, such national policy that has been issued by the PC. The MoC, and the MoR do not have sub-sectoral national policies, like the 'National Roads Policy', or the 'National Rail Transport Policy', apart from the NTP (2018). However, the MoC does have the NFLP (2020), which specifically attempts in catering logistics. The MoMA is working on the 'National Maritime Policy-2025' (NMP), however, even after more than 20 years of the formation of this ministry in 2004, mandate of NMP is with the MoD as per the RoB (1973), therefore, the MoMA has not been able to issue any NMP yet ('Cabinet Division, Government of Pakistan', 2025).

Following is the analysis of each available, and currently in force, post 2018 national policy directly linked to the transportation. The previous policies have not been included in this analysis because there was no NTP in force before 2018, and sub-sectoral policies that came in force afterwards, unless replaced by an updated one like NAP (2019) was replaced by NAP (2023), only those policies can be compared with the NTP to check the policy coherence.

### 4.4.1 'National Transport Policy of Pakistan' (NTP), 2018

NTP (2018) was a critical milestone in the journey of Pakistan to transform its transport sector through a long-term vision of multimodal integration, and sustainable mobility. Its strongest point is that it expressly acknowledges the interdependence between various transport modes, or in other words; the road, rail, air and maritime transport, and the necessity to integrate all of these modes. The policy is consistent with the dynamics of transport systems of developed countries in the world, which are encouraged by organizations; like the WB, and the 'International Transport Forum' etc., considering sustainability principles by focusing on cleaner technologies, lesser environmental effects, and higher level of safety.

In addition, the policy also places the transport sector as a pathway to socioeconomic development, revealing the explicit connection of infrastructure development with reduction in poverty, improved access to necessary amenities, and better chances of competing within the international marketplace. The fact, that it incorporates urban mobility projects; like BRTSs, and rural connectivity programs, is another indication of its interest in providing equitable access via transport opportunities throughout Pakistan.

Nevertheless, irrespective of these strengths, the policy has some significant weaknesses, the worst being, that it fails to deal with the systemic institutional fragmentation, which renders successful implementation difficult. Although, it requires ITSs, the FTG system in Pakistan is fragmented, with various ministries playing different roles concerning transport. This is fragmentation, which manifests itself in lack of consistency in planning, and execution. Since ministries sign up to similar, or overlapping projects, which have not been planned in tandem.

The mechanisms of implementing the policy are also weak in scope, as they depend on the already existing institutional structures with inadequate programs, and insufficiently coordinated to meet the volume, and complexity, of reforms proposed. Unless, there is a significant adjustment in the current structures, the policy could be left as a revolutionary policy document, but lacking the machinery of implementation to realize its goals. Missing links in the NTP (2018) are especially reflected in the absence of a clear system of inter-ministerial coordination, and indicators of the monitoring process.

Although, the document recognizes the necessity to develop effective coordination among the agencies, there are not any formal mechanisms, shared committees, and binding protocols, which could guarantee a long-term coordination of ministries, and provincial departments. Likewise, the policy fails to identify performance benchmarks, and monitoring systems to monitor developments, as time goes by. This lack, of accountability systems, means that it is hard to assess the effectiveness of the policy measures that have been undertaken, determine the areas of poor performance, and make corrections accordingly. Therefore, the ambitious vision of the policy of achieving the coordinated, efficient, and sustainable transport system can be sensitive to the same structural, and operational, failures that inhibited Pakistan's transport governance in the past.

### 4.4.2 'National Freight and Logistics Policy' (NFLP), 2020

The NFLP (2020) symbolizes an overall effort in modernizing the transportation, and logistics of freight operations in Pakistan, specifically, dealing with incongruities, and obstructions in the freight, and logistical transportation system. Among its major strengths lies the fact, that it acknowledges openly the tendency to over-depend considerably on road travel, to transport cargo in the country, as it stood in 2020, approximately 94 percent of all the freights are moved through road network, therefore,

this policy focuses its efforts on the reactivation of other means, such as rail, and maritime etc., in the hinterland.

One of the global best practices presented in the policy is the commitment to create multimodal logistics hubs, integrate transport sector, and support the smooth supply chains, which will ensure reduced cost of logistics, and the increased competitiveness in trade. It also lays much emphasis on encouraging the growth of the private sector involvement in the development of infrastructure; such as warehousing, cold storage, freight terminals, among others, that are essential towards alleviating postharvest losses, and facilitating agricultural exports. Also, environmental sustainability is deeply recognized in the policy with references to encouraging cleaner transport technologies, and mitigation of the greenhouse gas emissions; the development of logistics, in Pakistan, is oriented on the world climate commitments.

With all these strengths, there are important weaknesses that constrain the transformative capacity of the NFLP (2020). Among the biggest challenges, the vested institutional fragmentation, which is experienced in almost all the transport governance systems in Pakistan, is particularly a serious issue. The policy recognizes the possibility to develop harmonized regulatory frameworks, however; no clear plan of addressing overlapping jurisdictions between ministries, and agencies, both, at the federal, and provincial levels is presented. In the absence of a coordinated mechanism of governance, there is high chance of slackness, or inconsistency of policy implementation.

Even though, the document also lends credence to investment in infrastructure development (rail, and maritime transportation in particular), this investment is historically underdone causing doubts with regards to the ability of achieving high modal shift targets. The policy also relies on the investment of the privately owned enterprises without comprehensively discussing regulatory barriers, investment risks, and market limits to discourage the participation.

The weakest areas in the NFLP (2020) are in terms of its few mechanisms of institutional, and operational, integration. Although, the policy suggests the creation of a ‘National Transport Data Observatory’ (NTDO), there is no clear definition of what this will cover, a schedule, or resource allocation plan of how the policy is going to be implemented. Furthermore, it is a local policy without any binding institutional

arrangements to promote intra-sectoral cooperation, amid the freight operators, infrastructure developers, and regulatory agencies.

Enforcement mechanisms with regard to the realization of environmental targets are also outlined scantly, and sustainability goals are exposed to the risk of being pushed aside in reaction to short term cost implications. As it is the case with the NTP (2018), the ultimate success of the NFLP (2020) will depend on the establishment of a strong, and centralized, regulatory, and supervisory system, without which the NFLP (2020) vision of an efficient, multimodal freight system can stay as a dream, and not becoming an everyday reality.

### 4.4.3 'National Aviation Policy' (NAP), 2023

The NAP (2023) is a high-end policy that aims to bring the aviation sector in Pakistan to the international sphere of aviation sector standards, and excellence, especially those of the ICAO. Another strength relates to its thoroughgoing complete safety, and security, and regulatory compliance issues, and the PCAA having the central role in control, and realization, of such compliances. The policy not only provides measures concerning anticipatory hazard identification, and risk mitigation, but also on improved consumer protection, such as clarification on the rights of the passengers in situations of delay, cancellation, and other service related problems.

The other key element is infrastructural development, as there are plans to improve the airports, upgrade air navigation facilities, and upgrade their aircraft support facilities to international standards of operation. The fact that it incorporates the use of emerging technologies, like the 'unmanned aircraft systems', and 'vertical take-off and landing aircraft', reflects well in forming the foresight, in addressing the dynamics of the changing aviation scene. Besides, economic policies adopted in the policy include; adjusting aeronautical, and non-aeronautical charges, limiting over taxation, and incentives on specific areas that can help in getting investments in the private sector that would support competitiveness within the domestic and international markets.

Nonetheless, the policy does not lack in weaknesses. The first is, that it lacks integration with other modes of transport, and transport policies, and so might not be as effective in adding value to a genuinely multimodal transport network. Although, the aviation industry cannot operate separately, the NAP refers very little about correlations with road, rail, and sea transport policies, and could generate silos across operational, and

policy areas. Another factor, upon which the policy has rested, is the efficiency, and independence of the PCAA, and limitations in institutional capacities, and bureaucratic slowdowns in Pakistan, in the past, have made such agencies unable to deliver on their mandates.

Moreover, the policy has very ambitious environmental sustainability objectives, where some of them are on incorporating green aviation avenues, yet, it fails to lay down practical measures, tangible targets, and sources of funds to be used in meeting the objectives. This is further complicated by the recent merger, in 2025, of the MoA in the MoD, where there are concerns of how the interests, and priorities, of civilian aviation would be harmonized with the defense issues.

Regarding gaps, the NAP does not have a strong inter-ministerial coordination system that will ensure that the development of the aviation sector is strategically oriented towards national transport, and economic policies. Although, it forms an 'Aviation Oversight Committee', its role, authority, and operational procedures remain obscure, which can fail as a governance mechanism. The policy has also failed to give a defined monitoring, and evaluation, framework using performance measures that can be used to track its progress, or demonstrate accountability.

Moreover, there is currently no long-term plan to deal with skills gaps in aviation human resources, whereas the policy takes into consideration the necessity to develop the human resources. In the final analysis, the success of the NAP will be limited to, and depends more on, how its system will fit into a larger centralized system of transport governance in Pakistan, as well as the political will, and the institutional capacity to bring about change in a coordinated, and timely, manner.

### 4.5 Comparison with International Models

Examining of international transport governance models can be instructive, as an illustration of how institutional frameworks can be used to improve policy coherence, eliminate duplication, and facilitate long-term policy. The FTG system in Pakistan remains disconnected, with various ministries in the country, yet, elsewhere, countries have gone to different levels of integration, although, there have been both, federally coordinated systems, and fully centralized ministries. Knowledge of these models can enable Pakistan to find viable reforms that can solve its governance issues, and that also fit into its politico-administrative milieu.

### 4.5.1 China

China offers the most centralized form of transport governance in the globe. Its MoT, which was created in 2008 as a super ministry, is in charge of postal services, roads, railways, ports, shipping, and aviation. The ministry has direct control over all modes of transport planning, investment, regulation, and safety. Such a unified structure makes it possible to have unified policy objectives across the sub-sectors, and leads to the development of integrated infrastructure systems, like the 'Belt and Road Initiative', where there is a series of connected rails, and ports.

Centralization also means that transport planning can be integrated with overall economic planning in China, so that, investments (in high-speed rails, expressways, and maritime logistics hubs) reinforce each other. Moreover, the MoT manages the environmental levels, and embraces technology use, which allows changing the whole system (including electrification, and digitalization) of the transport sector as a whole. Although, the strong state capacity, and political centralization is a powerful factor in China, the negative experience in the country determines the merits of a single governing body in eliminating bureaucratic red-tape, countering policy inconsistency, and supporting multimodal initiatives of a large scale.

### 4.5.2 'The United States' (US)

The US uses the semi-centralized model by having the USDOT established on 1st April 1967 through an act of the 'US Congress', with its administrations under one federal umbrella. These are 'Federal Aviation Administration', 'Federal Highway Administration', 'Federal Railroad Administration', 'Maritime Administration', and 'Pipeline and Hazardous Materials Safety Administration', including other related agencies.

All of the administrations maintain an expertise related to their sub-sector, and operational independence, though, each of them is under the overall policy direction, and budgetary structure, of the USDOT. This engineering makes it easier to implement uniform safety code across modes, coordinated investment planning as it applies to infrastructure, and harmonized data platforms. As an example, the 'Freight Policy Council' of the USDOT attempts to coordinate priorities in the sphere of aviation, railways, highways, and seas in order to boost national supply chains. The US model

proves that sectoral agencies can be technically focused, and at the same time enjoy the benefits of central policy guidance, and coordination at the federal level.

### 4.5.3 Lessons for Pakistan

The lesson that could be learnt out of Chinese, and the US experiences is manifold with regards to the FTG in Pakistan. First, institutional integration, either in a fully centralized ministry like in China, or in a coordinated federal department like in the US, enhances the policy coherence, eliminates duplication efforts, and eases project planning across modes. Second, centralized/coordinated structures enable the determination of integrated monitoring systems, performance metrics, and environmental norms, something that are not in place in the fragmented system operating in Pakistan. Lastly, these models reveal that FTG reforms should be backed by law with robust technical capacities, evidence-based decision making process, and political appeal to long term planning.

In the case of Pakistan, a hybrid model can be the most realistic one, where we have a hybrid form of combining the model of the sub-sectoral divisions within a powerful federal ministry that has a centralized power of influence over multimodal policy integration, resource allocation, and monitoring. This would also be consistent with what has been suggested in the 5$^{th}$ FYP (1978-83), and the NTP (2018) regarding integrated governance through formation of MoT, as well as using the best praxes, as is being witnessed in China, and the US (‘Planning Commission, Government of Pakistan’, 1978; ‘Planning Commission, Ministry of Planning, Development & Reform, Government of Pakistan’, 2018). These reforms can deal with the existing inefficiencies due to fragmentation, and put in place a more consistent, sustainable, and comprehensive transport system.

## 4.6 Discussion

The research conclusions of this chapter synthesize historical information, thematic results of the interview with the stakeholders, and assessment of policies, as well as international experience, and develop an overall picture of the FTG in Pakistan. Collectively, these factors fulfilled the three research objectives: (1) to study the historical development, and the current composition of the FTMs in Pakistan; (2) to evaluate strengths, weaknesses, and policy gaps of the existing FTG; and (3) to suggest

the course of enhancing coordination, and integration, on the basis of both, the local scenario, and international best praxes.

The historical overview (Section 4.2) also shows that the FTG in Pakistan had started with an integrated MoC in 1947, which controlled various transport modes as well as the postal, and telecommunication segments. Decades of fragmentation had seen the scope of this ministry increasingly diminished to form other ministries, namely the MoR (1974), the MoMA (2004), and the MoA (2024, merged with the MoD in 2025) including other ministries related to telecom, and broadcasting. Although, the creation of specialized ministries may have been rationalized in terms of better/targeted technical expertise, and sub-sectoral development (while in actuality, it just seems to be a product of political expediency), the resulting effect has been a governance environment of institutional silos, reduced coordination, and duplication of effort in terms of policy directives. This historical trajectory squarely tackles the first research objective, as it chronicles the history through which the structures, decisions, and reforms have evolved into what is currently the case.

This was elaborated through the thematic analysis (Section 4.3) which involved 19 respondents (R1 to R19), who have experience in transport governance, policymaking, research, and/or operations. In all themes, including the current structure of the FTG, inter-ministerial coordination mechanisms, policy fragmentation, and overlap, rationales of fragmentation, and proposed reforms in order to improve coordination.

The respondents also articulated the systemic challenges; these were the repetition of tasks, the lack of a focal coordinator, the coordination being reactive, instead of proactive, and a lack of coordination between ministries due to issues of fiscal priorities. Some respondents admitted that the element of specialization brought some advantages towards building up of the technical capacity, but they were overshadowed by the inefficiencies, and loss of strategic unity that fragmentation brought. This qualitative data is confirmatory, and refines the historical account with illustration of how the governance arrangements work on the ground, and the impressions of the same on its insiders, and its stakes.

Under policy analysis (Section 4.4), it discussed three of the most influential national policies, which include the NTP (2018), NFLP (2020), and the NAP (2023). Although, the three policies present ambitious visions (focusing on sustainability, multimodal

integration, and competitiveness), they have been surrounded by difficulty in implementation as a result of institutional fragmentation. As an illustration, the NTP (2018) requires an integrated planning without any inter-ministerial coordination as a binding mechanism, or without any defined monitoring indicators.

The NFLP (2020) acknowledges that it is important to rebalance between modal shares, but its success relies on achieving an alignment between rail, maritime, and road strategies, which is undermined by structural divisions at the moment. On the same note, the NAP (2023) proposes valuable avenues of reforms regarding safety, environmental sustainability, and technological adaptation, although, the synergy between the NAP, and other policies is weak, and it becomes more questionable after the MoA merger in the MoD. This analysis responds to the second objective, by recognizing not just strengths of the currently applicable policy frameworks, but also governance-related weaknesses, and gaps that undermine their effect.

The comparison with international models (Section 4.5) proves to be a welcome external point of reference through which the issues that ail the transport governance of Pakistan could be seen, and appraised. The well-established MoT is fully centralized in China, which can explain the benefits of consistent policy, and integrated infrastructures' maintenance under a single authority. The USDOT presents a case of how the technical autonomy in specialized agencies can be applied, despite achieving a coordinated, and unified strategic position.

The cases provide tangible lessons for Pakistan, which implies that integrating different institutional parts will be ideal in terms of coherence, though, it may be difficult, politically, or administratively, in the short run. The specialized divisions within the MoT, working as their central coordinating authority, will result in the preservation of specialized divisions, and a strengthened central coordinating authority may be possible, and effective. The third objective is achieved through this comparative analysis, as it renders into context-specific guidelines, and the international best praxes, for Pakistan.

When analyzed collectively, the evidence of the four strands of analysis has demonstrated that there is a consistent trend pointing towards the fragmented FTG, Pakistan currently operates, that this cannot be sustained in the long term. Unless a single policy integration, and implementation mechanism is designed, the country will lose more resources, and opportunities, to have a 21$^{st}$ century multimodal transport

system. This is especially important in the light of the economic, and demographic, trends of the country, where the growing freight demands, urbanization, and international trade aspirations will demand high degrees of coordination between the modes of transport.

Looking at the findings as a policy, and governance, reform, there are implications with regards to what it could entail. On the one hand, it is urgent to institutionalize routine, and formal intermodal co-ordination, with possibly creation of MoT, or the 'National Transport Coordination Council', or a 'Federal Transport Commission' that possesses binding power concerning cross-modal schemes.

Second, transport data systems need to be harmonized in order to enable evidence-based decision-making, which are in line with the NFLP recommendations of a NTDO, which can be established within the NTRC, by reassigning the NTRC its original mandate, i.e. covering all modes of transport, that it had, when it was constituted under the PC in 1974, before it was transferred to the MoC in 1992.

Third, policy frameworks should contain clear performance indicators, and processes of monitoring, so that, it is possible to regularly survey the achievements made towards multimodal integration, meeting environmental target levels, and keeping in view the sustainability, and quality of transport services. Fourth, there is the evidence of how China, and the US, learnt in big complex systems, that it is vital to have alignment in strategic priorities under one policy direction, and a controlling organization, to prevent duplication, and conflicting investments.

## 4.7 Suggestions for Future Research

As for the future research considerations, the following gaps detected in this chapter reveal the areas of further research. As an example, institutional mapping that is both, comprehensive, and detailed may be able to indicate precisely the inter-ministerial processes, where bottlenecks have occurred, and cost-benefit analyses may help quantify economic costs of duplication, and policy misalignment. There is also the issue of vertical integration problems from federal to provincial to local transport governance, that was outside the scope of the current study, but essential to a comprehensive reform package, that comparative work on local, provincial and federal coordination in transport governance might highlight federal-provincial, and provincial-local issues.

# CHAPTER 5
# CONCLUSION AND RECOMMENDATIONS

## 5.1 Conclusion

This thesis has attempted to analyze the governance arrangement of the FTMs in Pakistan, with reference to the way, in which institutional fragmentation affects efficiency, policy coherence, and responsiveness. Starting with the research problem, it was established that the FTG was once unified when the MoC was inherited at the time of independence in 1947, but eventually turned into a disjointed structure with individual ministries of roads, railways, maritime affairs, and aviation. Although, this structural evolution may have been aimed at enhancing technical specialization, and modal focus, initial observations, and the available literature, reveal that this has been associated with different mechanisms of governance; such as repetition of efforts, insufficient coordination, and misplaced/vague policies.

The study employed the 'qualitative exploratory case study' research methodology, which involved the use of purposive sampling to collect the views of federal officers, scholars, and important policy documents. The qualitative interviews, and documentary analysis, gave highly contextual evidence that made it possible to interpret the qualitative data in thematic form, which permitted a deeper look into the processes, and mechanisms of governance, coordination, historical evolution, and reform strategies regarding the FTG. The approach contributed to the fact that the insights of relevant stakeholders were accommodated, presenting an objective picture of the institutional history, and the contemporary challenges.

The historical overview was a chronicle of how the FTMs were designed, and redesigned, with all major political decisions, policy changes, and administrative reforms being followed. The thematic analysis was conducted to identify nine key themes; such as disjointed governance system, poor inter-ministerial coordination, overlapping roles, and policies, lack of clarity on rationale behind fragmentation, the problem with the current system, and suggested reforms. Lack of a central coordinating authority, and lack of formal, and systematic, plans to collaborate on a regular basis, and in a proactive manner, by the FTMs was continuously reported as a major problem by the respondents.

In the policy analysis of the NTP (2018), the NFLP (2020), and the NAP (2023), it was identified that, although all these policies have ambitious, and progressive visions, on their path to practicality, they are hindered by poor implementation frameworks that are weak, and due to fragmented institutional conditions. There are no measurable monitoring indicators, or readily identifiable inter-ministerial coordination framework, that can strengthen the policies adequately.

The international comparison was very informative. The benefits of a comparatively unitary transport ministry/department with inbuilt sharing of all modes to allow consistent, long-term strategic planning, and avoidance of duplication, in countries such as China, and the US. The Pakistan can learn significant lessons through these cases as the merging of institutions, simplification of governance, and developing formal channels of coordination remain to be fulfilled. It can also help in the current government's efforts in restructuring, and streamlining, federal ministries, and divisions, *"for reducing the size of the Federal Government"* through a 'High-Powered Committee on Rightsizing of the Federal Government' and 'Institutional Reforms Cell' (Cabinet Division, Government of Pakistan, 2024b).

The results displayed in the chapters are comparable to the research objectives. The historical overview, and thematic analysis allowed accomplishing the first objective, which was the mapping, and analysis, of the governance structure of the FTMs. The second objective; to see the rationale, and consequences of institutional fragmentation, was achieved using the opinion of the stakeholders, as well as historical facts in the documents. The third objective, which was to determine possibilities of better governance through international best praxes, and alteration to policies, it was achieved through policy analysis, and by providing the examples of China, and the US.

To sum up, this study illustrates that the current system of governance, in the FTMs of Pakistan, is not conducive to its long-term future. Lack of institutional integration prevents the achievement of policy objectives, limiting its efficiency, and weakened capacity of the country in developing a truly multimodal transport network. Governance change is necessary in order to make Pakistan achieve its transport, trade, and economic development expectations. This involves developing an integrated, or more coordinated, transport governance regime, improving the cross-modal co-operation, having measurable monitoring regime, and making sure that there is a coherence between the implementation of policies, and what is outlined in official strategies.

This study is valuable as it also adds to the extant body of knowledge by providing a rich qualitative discussion of transport governance in Pakistan. It also offers some practical ideas to policy makers, development partners, and proponents of institutional reforms. Future studies that would build on the current study may involve provincial transport governance structures, financial consequences of fragmentation, and comparative studies across 'Greater South Asian' states to arrive at the context-specific path to reforms.

## 5.2 Recommendations

This study supported by the views of the respondents, as well as international best praxes, has come up with the facts that governance of transport, in Pakistan, is structurally fragmented, policy-misaligned, and lacks the element of coordination. Such problems damage the effectiveness, slowdown infrastructure integration, and make policy performance weaker. In order to curb these hurdles, and shift towards a more cohesive, ecological, and sustainable transport governance system, the following suggestions are given:

1. Amend the 'Fourth Schedule' of 'the Constitution of the Islamic Republic of Pakistan' (CoP), 1973, by adding subject of *'Transport'* in Part II of the 'Federal Legislative List' (FLL) by removing the transport related subjects from the FLL, so that, this new subject will come under the purview of the 'Council of Common Interests' as per article 154(1) of the CoP (1973), and the harmonization, not just at the federal level, but also between various levels of governments can also be achieved, it may also improve, and cement, centre-province relations. Otherwise, at least, the subject of *'Road Transport'* shall be added in the FLL which has never been part of the CoP (1973) since it was promulgated. The amendment will also make it difficult to roll-back the newly established transport governance structure on political whims of any one particular government.
2. Establish a 'Ministry of Transport' (MoT) by merging all the current 'federal transport ministries' (FTMs), and by covering all modes of transportation including the pipelines. This can be done either on the US model by creating specialized agencies for each mode, like the 'National Highway Authority' (NHA) in Pakistan is already working as a specialized agency for road infrastructure, or it can be done on the Chinese model of a super ministry, by keeping even the posts in the MoT. Each mode can be retained in a separate division headed by a federal

secretary, while designating the ministry executive, i.e. the top-most bureaucrat, as *'Secretary-General to the Government of Pakistan'*, this post already exists in the federal government, it just has to be used. The formation of MoT will minimize duplication of efforts at cross-modal level, and maximize policy compatibilities in the transport sector of Pakistan.

3. Develop a 'central coordinating agency' (CCA) at the federal level, in the absence of MoT, like 'Federal Transport Commission', or 'National Transport Coordination Council', preferably within the 'Prime Minister's Office', to harmonize all forms of transport, and to have a form of uniformity in the planning, investment, and policy-making.
4. Quarterly inter-ministerial coordination meetings shall be held, until MoT is formed, which can help to align the infrastructure projects, regulations, and workout operational overlaps of the different transport ministries.
5. Create a 'Ministry of Land Transport' (MoLT), in the absence of MoT, and even in the presence of a CCA, by merging the 'Ministry of Communications' (MoC), and the 'Ministry of Railways' to ensure complementary, and not competitive, development, at least, in this mode of transport.
6. In the absence of an MoT, or an MoLT, at least, rename the MoC to the 'Ministry of Roads' by separating the postal services from it, to remove the misnomer of communications, and make this ministry's name reflective of its mandate as per the FLL of the CoP (1973).
7. Amend the 'Rules of Business', 1973, to transfer the subject of 'National Maritime Policy' (NMP) from the 'Ministry of Defence' to the 'Ministry of Maritime Affairs' (MoMA), so that, the MoMA can issue its already drafted NMP-2025 after its approval.
8. Formulate a 'National Transport Master Plan' (NTMP) as per the requirements of the 'National Transport Policy of Pakistan' (NTP), 2018, or approve the NTMP already formed, and lying there, since 2020, in the 'Ministry of Planning, Development & Special Initiatives' after updating it; that integrates road, rail, maritime, and aviation into a multimodal framework of economic corridors, and other forms of ecologically, and economically, sustainable development.
9. Enhance the mechanism of policy execution by designing clear roadmaps, quantifiable evaluation metrics, and designated responsibilities of each, and every, stakeholder in each policy; including, but not limited to, the NTP (2018), the

'National Freight and Logistics Policy', 2020, and the 'National Aviation Policy', 2023.

10. Create an evidence-based planning, monitoring, and evaluation mechanism by establishing a 'National Transport Data Observatory', preferably within the 'National Transport Research Centre', to normalize, and use transport-related data, that is spread across the FTMs.
11. Involve provincial governments, operators in the private sector, universities, and civil society in developing, and revising, transport policies with an aim of being inclusive, and locally related, to ensure cross-regional compatibility, harmonization of standards relating to the transportation sector; including, but not limited to, roads, highways, and vehicles' registration/deregistration etc.
12. Establish the cross-funding of multimodal bodies, and allowances of monetary assets, to be used by these on the projects that need inter-ministerial collaboration.
13. Develop capacity by offering specialized training to the ministry personnel in integrated transport planning, project management, regulatory, and sustainable transport technologies. It can also be done by providing government funded higher education, and research opportunities, on a priority basis, for the personnel, and other Pakistanis to observe, study, and learn from the international models of best praxes in the transportation sector for their adaptation, and application, in Pakistan.
14. Introduce common online systems, dashboards, to enable real-time coordination, sharing of data, tracking of projects, and communication among the FTMs, and related agencies.
15. Ensure that regular review of all major transport policies is institutionalized, once every five years, at the same time, checking it with regard to dynamic, and ever transitioning, trends in trade, climate, and technology.
16. Introduce a specialized group of 'Transport Management' for the MoT, on the lines of 'Railways (Commercial and Transportation) Group' in the 'Central Superior Services', if the NHA model is not to be adopted for each mode, or specialized group for each mode if an MoT is not to be formed any time soon, so that, instead of the current model of the generalists becoming agency executives, federal secretaries, briefly for such technical transport divisions, specialized agency executives can be put in place. This can also be achieved by promoting

ex-cadre personnel, or lateral induction of professionals, with modal expertise, and experience, to act as agency executives of the relevant divisions.

17. Look to increase sustainable transport through low-emission chains in freight, strengthen, and increase public transport that uses clean energy to reduce reliance on private vehicles, and use climate-resilient infrastructure in all modes.

# REFERENCES


Afzal, S., & Naseem, A. (2018). China Pakistan Economic Corridor (CPEC): Challenges and Prospects. *Pakistan Administrative Review*, *2*(1), 209–222. Social Science Open Access Repository. https://www.ssoar.info/ssoar/handle/document/57053?style=bibtex

Akhter, H. (2002). *Country Report Islamic Republic of Pakistan for Economic and Social Commission for Asia and the Pacific (ESCAP): Vol. NTRC-246*. National Transport Research Centre, Ministry of Communications, Government of Pakistan. http://www.ntrc.gov.pk/ntrc_studies/COUNTRY%20REPORT%20ISLAMIC%20REPUBLIC%20OF%20PAKISTAN%20FOR%20ECONOMIC%20AND%20SOCIAL%20COMMISSION%20FOR%20ASIA%20AND%20THE%20PACIFIC%20(ESCAP)%20(NTRC-246)%20(JULY%202002).pdf

American Anthropological Association. (2025, January 10). *AAA Statement on Ethics: Principles of Professional Responsibility*. https://americananthro.org/about/policies/statement-on-ethics/#principles-of-professional-responsibility

Anwar, S. (2025). *A Review of Logistics and Transport Studies in Pakistan: Hard or Soft Infrastructure? Vol. PIDE Working Papers No. 2025:7*. Pakistan Institute of Development Economics. https://pide.org.pk/research/a-review-of-logistics-and-transport-studies-in-pakistan-hard-or-soft-infrastructure/

Batool, Z., Carsten, O., & Jopson, A. (2012). Road safety issues in Pakistan: a case study of Lahore. *Transportation Planning and Technology*, *35*(1), 31–48. IDEAS/RePEc. https://doi.org/10.1080/03081060.2012.635415

Bernard, H. R. (2017). *Research Methods in Anthropology: Qualitative and Quantitative Approaches* (6th ed.). Rowman & Littlefield. (Original work published 1988)

Bowen, G. A. (2009). Document Analysis as a Qualitative Research Method. *Qualitative Research Journal*, *9*(2), 27–40. https://doi.org/10.3316/QRJ0902027

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative*

*Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Brinkmann, S., & Kvale, S. (2015). *InterViews: Learning the Craft of Qualitative Research Interviewing* (3rd ed.). SAGE Publications, Inc. (Original work published 1996)

British Sociological Association. (2017). *Statement of Ethical Practice*. https://www.britsoc.co.uk/media/24310/bsa_statement_of_ethical_practice.pdf

Button, K. J., & Hensher, D. A. (Eds.). (2005). *Handbook of Transport Strategy, Policy and Institutions*. Elsevier.

Cabinet Division, Government of Pakistan. (1974, August 30). *OFFICE MEMORANDUM NO. 104/40/74-Min.*. Formation of Ministry of Railways by bifurcating Ministry of Communications.

Cabinet Division, Government of Pakistan. (2004, September 2). *MEMORANDUM No. 4-20/2004-Min.I.*. Formation of Ministry of Ports and Shipping.

Cabinet Division, Government of Pakistan. (2017, October 19). *MEMORANDUM No. 4-2/2016-Min-I*. Re-naming of "Ministry of Ports and Shipping" as "Ministry of Maritime Affairs".

Cabinet Division, Government of Pakistan. (2021). *Rules of Business, 1973 (As Amended up to 1st December, 2021)*. https://cabinet.gov.pk/SiteImage/Misc/files/ROB%2C%201973/ROB%20(As%20amended%20up%20to%201st%20December%2C%202021).pdf

Cabinet Division, Government of Pakistan. (2024a). *Rules of Business, 1973 (As Amended up to 11th September, 2024)*. https://cabinet.gov.pk/SiteImage/Misc/files/ROB%2C%201973/Rules%20of%20Business%2C%201973%20(as%20amended%20upto%2011th%20Sep%2C%202024).pdf

Cabinet Division, Government of Pakistan. (2024b, June 14). *Notification No. 9-148/2024(II)-Min-II*. https://cabinet.gov.pk/SiteImage/Misc/files/Rightsizing.pdf

Cabinet Division, Government of Pakistan. (2025). *Rules of Business, 1973 (As Amended up to 2nd June, 2025)*.

https://cabinet.gov.pk/SiteImage/Misc/files/ROB%2C%201973/ROB1973%20(as%20amended%20upto%202nd%20June%2C2025).pdf

Chohan, B., Imran, M., & Cheyne, C. (2011). Roads for economic development: An analysis of urban transport policies of New Zealand and Pakistan. *Australasian Transport Research Forum 2011 Proceedings*. Australasian Transport Research Forum 2011, Adelaide, Australia.

Creswell, J. W., & Poth, C. N. (2018). *Qualitative Inquiry & Research Design: Choosing Among Five Approaches* (4th ed.). SAGE Publication, Inc.

Curtis, C., & Low, N. (2012). *Institutional Barriers to Sustainable Transport*. Ashgate.

Denzin, N. K. (1978). *The Research Act: A Theoretical Introduction to Sociological Methods* (2nd ed.). Mcgraw-Hill Book Company. (Original work published 1970)

Ding, C. (2013). Transport Development, Regional Concentration and Economic Growth. *Urban Studies*, *50*(2), 312–328. JSTOR. https://doi.org/10.2307/26144207

Estache, A. (Ed.). (1995). *Decentralizing Infrastructure: Advantages and Limitations* (World Bank Discussion Papers, Vol. 290). World Bank.

Government of Pakistan. (2023). *National Aviation Policy*. https://www.aviation.gov.pk/SiteImage/Misc/files/Approved%20NAP-2023.pdf

Gwilliam, K. (2008). A review of issues in transit economics. *Research in Transportation Economics*, *23*(1), 4–22. ScienceDirect. https://doi.org/10.1016/j.retrec.2008.10.002

Hasan, A., Raza, M., & Urban Resource Centre. (2021). *Karachi's Public Transport: Origins, Evolution, and Future Planning*. Oxford University Press.

Hull, M. S. (2012). *Government of Paper: The Materiality of Bureaucracy in Urban Pakistan*. University of California Press.

Hussain, A. (2019). *Transport Infrastructure Development, Tourism and Livelihood Strategies: An Analysis of Isolated Communities of Gilgit-Baltistan, Pakistan*

[Unpublished Doctoral (PhD) Thesis]. https://hdl.handle.net/10182/11270

Imran, M. (2009). Public Transport in Pakistan: A Critical Overview. *Journal of Public Transportation*, *12*(2), 53–83. ScienceDirect. https://doi.org/10.5038/2375-0901.12.2.4

Imran, M. (2010). Sustainable Urban Transport in Pakistan: An Institutional Analysis. *International Planning Studies*, *15*(2), 119–141. Taylor & Francis Online. https://doi.org/10.1080/13563475.2010.490668

Imran, M., & Ahmed, W. (2021). Pakistan's Railways: A Painful History? In G. Nayak (Ed.), *The Railways in Colonial South Asia* (pp. 115–140). Routledge.

Imran, M., & Low, N. (2005). Sustainable urban transport in Pakistan: threats and opportunities. *Management of Environmental Quality: An International Journal*, *16*(5), 505–529. https://doi.org/10.1108/14777830510614367

Inland Water Transport Development Company, Government of the Punjab. (n.d.). *The Company*. Iwt.punjab.gov.pk. https://iwt.punjab.gov.pk/the_company

Ivanova, E., & Masarova, J. (2013). Importance of Road Infrastructure in the Economic Development and Competitiveness. *Economics and Management*, *18*(2), 263–274. https://doi.org/10.5755/j01.em.18.2.4253

Jaimurzina, A. (2018). *Transport Governance: theoretical and policy perspectives | CEPAL*. Cepal.org; Economic Commission for Latin America and the Caribbean. https://www.cepal.org/en/publications/44246-transport-governance-theoretical-and-policy-perspectives

Kaiser, N., & Barstow, C. K. (2022). Rural Transportation Infrastructure in Low- and Middle-Income Countries: A Review of Impacts, Implications, and Interventions. *Sustainability*, *14*(4). MDPI. https://doi.org/10.3390/su14042149

Khan, N. (2006). Flaws in the Flow: ROADS AND THEIR MODERNITY IN PAKISTAN. *Social Text*, *24*(4), 87–113. https://doi.org/10.1215/01642472-2006-012

Khisty, C. J. (1993). Transportation in Developing Countries: Obvious Problems, Possible Solutions. *Transportation Research Record*, *1396*, 44–49. http://onlinepubs.trb.org/Onlinepubs/trr/1993/1396/1396-009.pdf

Lin, B., & Ahmad, I. (2016). Energy substitution effect on transport sector of Pakistan based on trans-log production function. *Renewable and Sustainable Energy Reviews*, *56*, 1182–1193. ScienceDirect. https://doi.org/10.1016/j.rser.2015.12.012

Litman, T. (2018). Evaluating Transportation Economic Development Impacts. In *vtpi.org*. Victoria Transport Policy Institute. https://www.vtpi.org/econ_dev.pdf

Majeed, A. (1978). *Transport Requirements — Shortage of Buses: Vol. NTRC-15*. National Transport Research Centre, Planning Commission, Government of Pakistan. http://www.ntrc.gov.pk/ntrc_studies/TRANSPORT%20REQUIREMENTS%20SHORTAGE%20OF%20BUSES%20(NTRC-15)%20(OCTOBER,1978).pdf

Malik, R. A. (1962). Pakistan's Intra-Regional Pattern of Transportation. *Journal of Geography*, *61*(5), 209–214. https://doi.org/10.1080/00221346208982146

Marsden, G., & Docherty, I. (2019). *Governance of UK Transport Infrastructures*. Government Office for Science.

Marshall, M. N. (1996). Sampling for qualitative research. *Family Practice*, *13*(6), 522–525. https://doi.org/10.1093/fampra/13.6.522

Mason, J. (2002). *Qualitative Researching* (2nd ed.). SAGE Publications Ltd.

Masood, M. T., Khan, A., & Naqvi, H. A. (2011). Transportation Problems in Developing Countries Pakistan: A Case-in-Point. *International Journal of Business and Management*, *6*(11), 256–266. https://doi.org/10.5539/ijbm.v6n11p256

Ministry of Communications, Government of Pakistan. (2020). *National Freight and Logistics Policy*. https://communication.gov.pk/SiteImage/Policy/NFLP%20Main%20Document%20(Final)%2013%20September%202020-converted.pdf

Mohmand, Y. T., Mehmood, F., Mughal, K. S., & Aslam, F. (2021). Investigating the causal relationship between transport infrastructure, economic growth and transport emissions in Pakistan. *Research in Transportation Economics*, *88*. ScienceDirect. https://doi.org/10.1016/j.retrec.2020.100972

Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic Analysis:

Striving to Meet the Trustworthiness Criteria. *International Journal of Qualitative Methods*, *16*. Sage Journals. https://doi.org/10.1177/1609406917733847

Orb, A., Eisenhauer, L., & Wynaden, D. (2001). Ethics in Qualitative Research. *Journal of Nursing Scholarship*, *33*(1), 93–96. https://doi.org/10.1111/j.1547-5069.2001.00093.x

Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful Sampling for Qualitative Data Collection and Analysis in Mixed Method Implementation Research. *Administration and Policy in Mental Health and Mental Health Services Research*, *42*(5), 533–544. Springer Nature. https://doi.org/10.1007/s10488-013-0528-y

Parliament of Pakistan. (2018). Fourth Schedule-Legislative Lists. In *The Constitution of the Islamic Republic of Pakistan, 1973* (pp. 204–210). National Assembly of Pakistan. https://na.gov.pk/uploads/documents/640b00c9009d8_878.pdf

Patton, M. Q. (2002). *Qualitative Research & Evaluation Methods* (3rd ed.). SAGE Publications, Inc.

Planning Commission, Government of Pakistan. (1978). Chapter 6: Transport and Communications. In *The Fifth Plan (1978-83): Sectoral Programs (Part-II)* (p. 251). https://pc.gov.pk/uploads/plans/5th_5year_plan_1978-83_part_2.pdf

Planning Commission, Ministry of Planning, Development & Reform, Government of Pakistan. (2018). *National Transport Policy of Pakistan*. https://pc.gov.pk/uploads/downloads/policy.pdf

Pojani, D., & Stead, D. (2017). The Urban Transport Crisis in Emerging Economies: An Introduction. In D. Pojani & D. Stead (Eds.), *The Urban Transport Crisis in Emerging Economies* (pp. 1–10). Springer Nature.

Pojani, D., & Stead, D. (2018). Policy design for sustainable urban transport in the global south. *Policy Design and Practice*, *1*(2), 90–102. Taylor & Francis Online. https://doi.org/10.1080/25741292.2018.1454291

Pradhan, R. P., & Bagchi, T. P. (2013). Effect of transportation infrastructure on economic growth in India: The VECM approach. *Research in Transportation Economics*, *38*(1), 139–148. https://doi.org/10.1016/j.retrec.2012.05.008

Qureshi, I. A., & Huapu, L. (2007). Urban Transport and Sustainable Transport Strategies: A Case Study of Karachi, Pakistan. *Tsinghua Science and Technology*, *12*(3), 309–317. ScienceDirect. https://doi.org/10.1016/s1007-0214(07)70046-9

Riessman, C. K. (2008). *Narrative Methods for the Human Sciences*. SAGE Publications, Inc.

Rye, T., Monios, J., Hrelja, R., & Isaksson, K. (2018). The relationship between formal and informal institutions for governance of public transport. *Journal of Transport Geography*, *69*, 196–206. Elsevier. https://doi.org/10.1016/j.jtrangeo.2018.04.025

Schiller, P. L., Bruun, E. C., & Kenworthy, J. R. (2010). *An Introduction to Sustainable Transportation: Policy, Planning and Implementation*. Earthscan.

Shah, S. A. R., Ahmad, N., Shen, Y., Pirdavani, A., Basheer, M. A., & Brijs, T. (2018). Road Safety Risk Assessment: An Analysis of Transport Policy and Management for Low-, Middle-, and High-Income Asian Countries. *Sustainability*, *10*(2). MDPI. https://doi.org/10.3390/su10020389

Shirwani, R., Gulzar, S., Asim, M., Umair, M., & Al-Rashid, M. A. (2020). Control of vehicular emission using innovative energy solutions comprising of hydrogen for transportation sector in Pakistan: A case study of Lahore City. *International Journal of Hydrogen Energy*, *45*(32), 16287–16297. ScienceDirect. https://doi.org/10.1016/j.ijhydene.2019.02.173

Siddiqui, R., & Pant, K. P. (2007). Quantifying the Impact of Development of the Transport Sector in Pakistan [with Comments]. *The Pakistan Development Review*, *46*(4), 779–802. JSTOR. https://doi.org/10.2307/41261196

Siemiatycki, M. (2013). The Global Production of Transportation Public-Private Partnerships. *International Journal of Urban and Regional Research*, *37*(4), 1254–1272. Wiley Online Library. https://doi.org/10.1111/j.1468-2427.2012.01126.x

Simon, D. (2003). *Transport and Development in the Third World*. Routledge. (Original work published 1996)

Stebbins, R. A. (2001). *Exploratory Research in the Social Sciences* (SAGE

University Papers on Qualitative Research Methods Series, Vol. 48). SAGE Publications, Inc.

Stough, R. R. (2012). A national transport policy: the case of Pakistan. In R. Stimson & K. E. Haynes (Eds.), *Studies in Applied Geography and Spatial Analysis: Addressing Real World Issues* (pp. 34–54). Edward Elgar Publishing.

Swamy, S., Pai, M., & Kulshrestha, S. (2015). IMPACT OF BUS RAPID TRANSIT ON URBAN AIR POLLUTION: COMMUTER'S EXPOSURE TO PM 2.5 IN AHMEDABAD. *Transport and Communications Bulletin for Asia and the Pacific*, *85*, 8–22. UN ESCAP Repository. https://www.unescap.org/publications/transport-and-communications-bulletin-asia-and-pacific-no-85-sustainable-and-inclusive

Swati, M. S. (1977). *Re-Organization of Administrative Control of Transport: Vol. NTRC-13*. National Transport Research Centre, Planning Commission, Government of Pakistan. http://www.ntrc.gov.pk/ntrc_studies/Re-Organization%20of%20Administrative%20Control%20of%20Transport%20(NTRC-13)%20(OCT,1977).pdf

Tehsin, M., & Nasir, S. I. (2019). Inland Water Transport in Pakistan: Limits and Prospects. *Global Social Sciences Review*, *IV*(I), 441–448. https://doi.org/10.31703/gssr.2019(iv-i).57

UK Parliament. (1946, May 16). *India: Statement by the Cabinet Mission. (Hansard, 16 May 1946)*. Api.parliament.uk; UK Parliament. https://api.parliament.uk/historic-hansard/lords/1946/may/16/india-statement-by-the-cabinet-mission

Verma, A., Harsha, V., & Subramanian, G. H. (2021). Evolution of Urban Transportation Policies in India: A Review and Analysis. *Transportation in Developing Economies*, *7*(2). Springer Nature Link. https://doi.org/10.1007/s40890-021-00136-1

Yin, R. K. (2018). *Case Study Research and Applications: Design and Methods* (6th ed.). SAGE Publications, Inc.

Yousaf, M. H. (2013). *Role of Transportation Infrastructure in Promoting Economic Development: A Case Study of Pakistan* [Unpublished MS (Economics) Research Project].

# APPENDICES

**Appendix A**

## Interview Guide

**Introduction for the Interviewee**

Thank you sparing your time for this interview. This research is for my MPhil thesis, titled, 'Transport Governance in Pakistan: A Case Study of Federal Transport Ministries'. The study is meant to explore the governance structure of federal transport ministries, find out its rationale and propose improvements. Hopefully, this interview will be completed within 30 to 45 minutes. I need your permission to audio-record this conversation, as this will help in transcribing it later, and ensuring that not even the minutest points are missed. All your data will stay confidential and will be used only for the purposes of this research.

**Section 1: Interviewee's Background**

1. Please describe your role and main responsibilities in the transportation sector.
2. How long have you been connected to transport policy, governance, research or operations?
3. Can you elaborate what transport governance is, as per your understanding?

**Section 2: Present Structure of Transport Governance in Pakistan**

4. How do you see the present system of governance used in the federal transport ministries in Pakistan?
5. What is your opinion about how the ministries manage to work together and their coordination mechanisms?
6. What do you think are the pros and cons of the current governance structure?

**Section 3: Historical and Policy Context of the Current Structure**

7. What do you think influenced Pakistan's decision to establish separate ministries for transport, rather than keeping the single ministry?
8. Which particular events or polices led to the formation of this structure?

**Section 4: Towards an Effective Transport Governance in Pakistan**

9. What, in your view, would be the best way to organize federal transport ministries in Pakistan?
11. Which changes (in the way ministries work) might make transport policies coherent and transportation services easier to access?

**Section 5: Final Suggestions and Concluding Thoughts**

11. Which changes could make coordination among different government transport ministries better?
12. Which models from other countries could Pakistan use in its approach to transport governance?
13. Is there more that you would like to say about transport governance in Pakistan??

**Section 6: Ministry-Specific History (for Ministry Representatives only after section 3)**

14. Can you briefly describe the history and evolution of your ministry since 1947, or since its establishment, to date?
15. How was your ministry established—through an executive order, act of Parliament or something else?
16. What reasons were presented for breaking it off from the Ministry of Communications or another parent ministry?
17. Are there any formal notifications/documents for establishing this ministry that can be shared?

**Appendix B**

IMMEDIATE

Government of Pakistan
Cabinet Secretariat
(Cabinet Division)
*****

NO. 104/40/74-Min. Rawalpindi, the 30th August, 1974

**OFFICE MEMORANDUM**

Subject: - Allocation of subjects to the newly constituted Ministry of Railways

The undersigned is directed to state that it has been decided to bifurcate the existing Ministry of Communications into two Ministries to be called as Ministry of Communications and Ministry of Railways with immediate effect.

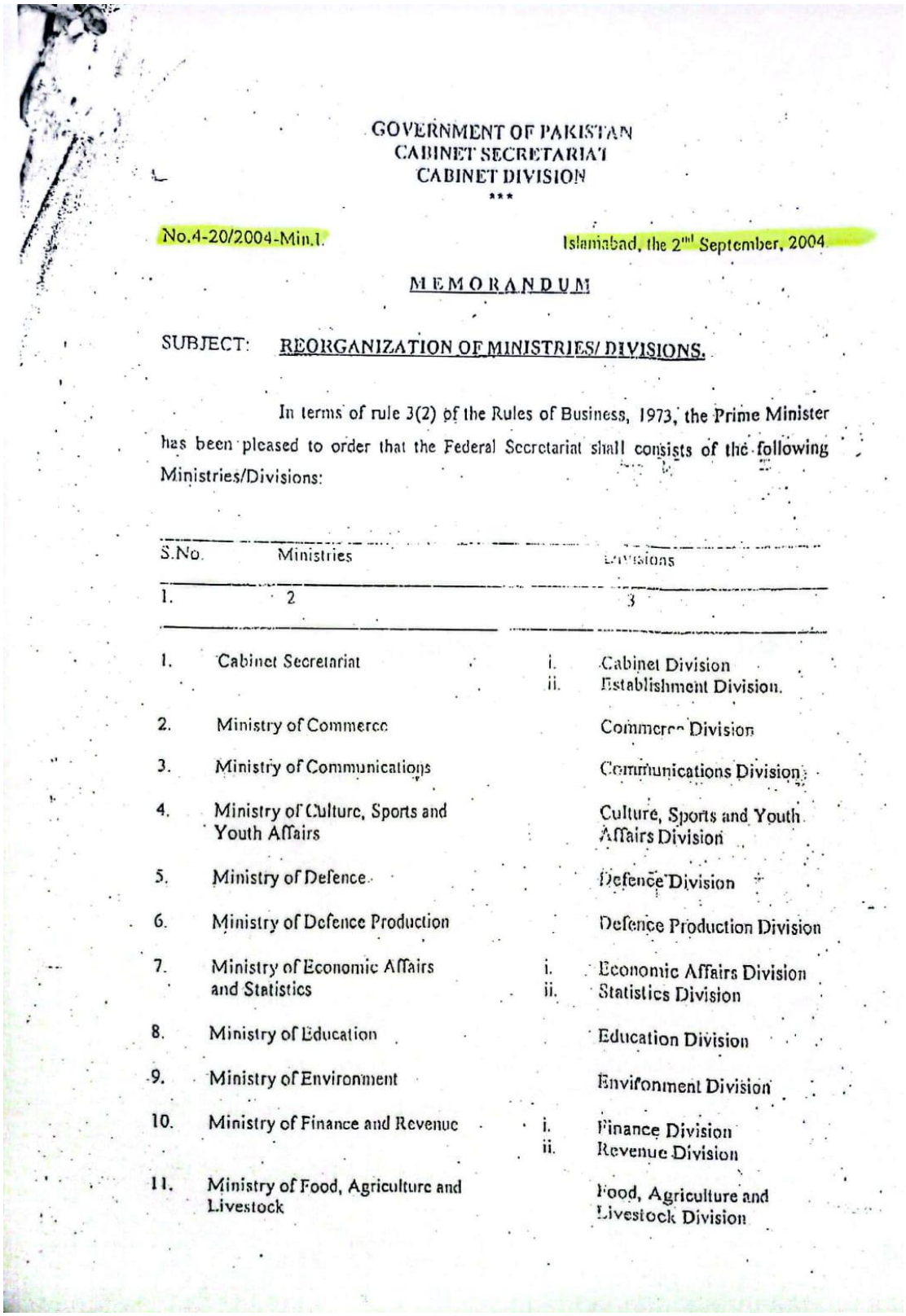
2. The new Ministry of Railways will deal with all the matters pertaining to Pakistan Railways, in addition to the following subjects.

1. Movement and priority in respect of Defence traffic.
2. Maintenance of Railway lines for strategic reasons.
3. Negotiations with international organizations and other countries and implementation of agreements with them.
4. Coordination of development projects of railway as a part of the national development programme.
5. Standardizations and specifications of materials and stores.
6. Overall efficiency and safety of railways.
7. Coordination of rail movements into and from Ports.

3. Necessary amendment to this effect will be made in the Rules of Business in due course.

Sd/-xxx
(S. Niaz Ahmad)

## Appendix C[2]



GOVERNMENT OF PAKISTAN
CABINET SECRETARIAT
CABINET DIVISION
***

No.4-20/2004-Min.I. Islamabad, the 2nd September, 2004

MEMORANDUM

SUBJECT: REORGANIZATION OF MINISTRIES/ DIVISIONS.

In terms of rule 3(2) of the Rules of Business, 1973, the Prime Minister has been pleased to order that the Federal Secretariat shall consists of the following Ministries/Divisions:

| S.No. | Ministries | Divisions |
|---|---|---|
| 1. | 2 | 3 |
| 1. | Cabinet Secretariat | i. Cabinet Division<br>ii. Establishment Division. |
| 2. | Ministry of Commerce | Commerce Division |
| 3. | Ministry of Communications | Communications Division |
| 4. | Ministry of Culture, Sports and Youth Affairs | Culture, Sports and Youth Affairs Division |
| 5. | Ministry of Defence | Defence Division |
| 6. | Ministry of Defence Production | Defence Production Division |
| 7. | Ministry of Economic Affairs and Statistics | i. Economic Affairs Division<br>ii. Statistics Division |
| 8. | Ministry of Education | Education Division |
| 9. | Ministry of Environment | Environment Division |
| 10. | Ministry of Finance and Revenue | i. Finance Division<br>ii. Revenue Division |
| 11. | Ministry of Food, Agriculture and Livestock | Food, Agriculture and Livestock Division |

[2] Formation of the 'Ministry of Ports and Shipping' out of the 'Ministry of Communications'.

| | | |
|---|---|---|
| 12 | Ministry of Foreign Affairs | Foreign Affairs Division |
| 13. | Ministry of Health | Health Division |
| 14. | Ministry of Housing and Works | Housing and Works Division |
| 15. | Ministry of Industries, Production and Special Initiatives. | Industries, Production and Special Initiatives Division. |
| 16. | Ministry of Information and Broadcasting. | Information and Broadcasting Division. |
| 17. | Ministry of Information Technology. | Information Technology and Telecommunications Division. |
| 18. | Ministry of Interior | Interior Division |
| 19. | Ministry of Kashmir Affairs and Northern Areas. | Kashmir Affairs and Northern Areas Division. |
| 20. | Ministry of Labour, Manpower and Overseas Pakistanis | Labour, Manpower and Overseas Pakistanis Division. |
| 21. | Ministry of Law, Justice and Human Rights | Law, Justice and Human Rights Division |
| 22. | Ministry of Local Government and Rural Development | Local Government and Rural Development Division. |
| 23. | Ministry of Minorities. | Minorities Affairs Division. |
| 24. | Ministry of Narcotics Control | Narcotics Control Division. |
| 25. | Ministry of Parliamentary Affairs | Parliamentary Affairs Division. |
| 26. | Ministry of Petroleum and Natural Resources | Petroleum and Natural Resources Division. |
| 27. | Ministry of Planning and Development | Planning and Development Division. |
| 28. | Ministry of Population Welfare | Population Welfare Division. |
| 29. | Ministry of Privatization and Investment | Privatization and Investment Division. |
| 30. | Ministry of Ports and Shipping. | Ports and Shipping Division. |

| | | |
|---|---|---|
| 31. | Ministry of Railways | Railways Division |
| 32. | Ministry of Religious Affairs & Zakat and Ushr | Religious Affairs & Zakat and Ushr Division |
| 33. | Ministry of Science and Technology | Scientific and Technological Research Division |
| 34. | Ministry of Social Welfare and Special Education | Social Welfare and Special Education Division |
| 35. | Ministry of States and Frontier Regions | States and Frontier Regions Division |
| 36. | Ministry of Textile Industry. | Textile Industry Division |
| 37. | Ministry of Tourism | Tourism Division |
| 38 | Ministry of Water and Power | Water and Power Division |
| 39. | Ministry of Women Development | Women Development Division. |

2. Necessary amendments in the Rules of Business, 1973 will be made in due course.

(Mohammad Abbas)
Senior Joint Secretary to the Cabinet
Tel: 9202918

1. COS to the President.
2. Principal Secretary to the Prime Minister
3. Secretaries/Additional Secretaries Incharge of Ministries/Divisions.
4. Secretaries Senate/National Assembly Secretariats, Islamabad.
5. Chief Secretaries of the Provincial Governors.

**Appendix D**

GOVERNMENT OF PAKISTAN
CABINET SECRETARIAT
CABINET DIVISION
****

No.4-2/2016-Min-I Islamabad, the 19th October, 2017

## M E M O R A N D U M

Subject:- **RE-NAMING OF "MINISTRY OF PORTS AND SHIPPING" AS "MINISTRY OF MARITIME AFFAIRS".**

The Federal Government has been pleased to approve changing the nomenclature of Ministry of Ports and Shipping as "Ministry of Maritime Affairs". Consequently, the nomenclature of "Ports and Sipping Division" has also been changed as "Maritime Affairs Division".

2. Necessary amendments in the Rules of Business, 1973 will be made in due course.

Rizwan Ahmed
**(Rizwan Ahmed)**
Additional Secretary
Ph: 9211152

**Secretaries / Additional Secretaries In-Charge of Ministries / Divisions.**

**Copy to the:-**

(i) Secretary to the President
(ii) Secretary to the Prime Minister
(iii) Secretaries Senate / National Assembly Secretariats.
(iv) Chief Secretaries of the Provincial Governments.

Rizwan Ahmed
**(Rizwan Ahmed)**
Additional Secretary

## Appendix E[3]

**SCHEDULE I**

***[See rule 3(1)]***

**LIST OF MINISTRIES AND DIVISIONS**

| Sr. No. | Ministries | Divisions | |
|---|---|---|---|
| (1) | (2) | (3) | |
| 1. | Cabinet Secretariat | (a) | Aviation Division |
| | | (b) | Cabinet Division |
| | | (c) | Establishment Division |
| | | (d) | National Security Division |
| | | (e) | Poverty Alleviation and Social Safety Division |
| 2. | Ministry of Climate Change | | Climate Change Division |
| 3. | [1]Ministry of Commerce | | Commerce Division |
| 4. | Ministry of Communications | | Communications Division |
| 5. | Ministry of Defence | | Defence Division |
| 6. | Ministry of Defence Production | | Defence Production Division |
| [2]6A. | Ministry of Economic Affairs | | Economic Affairs Division |
| 7. | Ministry of Energy | (a) | Power Division |
| | | (b) | Petroleum Division |
| 8. | [3]Ministry of Federal Education, Professional Training, National Heritage and Culture | (a) | Federal Education and Professional Training Division |
| | | (b) | [4]National Heritage and Culture Division |
| 9. | [5]Ministry of Finance and Revenue | (a) | Finance Division |
| | | (b) | Revenue Division |
| 10. | Ministry of Foreign Affairs | | Foreign Affairs Division |
| 11. | Ministry of Housing and Works | | Housing and Works Division |
| 12. | Ministry of Human Rights | | Human Rights Division |
| 13. | Ministry of Industries and Production | | Industries and Production Division |
| 14. | Ministry of Information and Broadcasting | | Information and Broadcasting Division |

[1] Substituted vide SRO 1025 (1)/2020 dated 8th October, 2020
[2] Inserted vide SRO 1025 (1)/2020 dated 8th October, 2020
[3] Substituted vide SRO 1025 (1)/2020 dated 8th October, 2020
[4] Substituted vide SRO 1025 (1)/2020 dated 8th October, 2020
[5] Substituted vide SRO 1025 (1)/2020 dated 8th October, 2020

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[3] The 'Aviation Division' under the 'Cabinet Secretariat'.

## Appendix F[4]

**SCHEDULE I**

***[See rule 3(1)]***

**LIST OF MINISTRIES AND DIVISIONS**

| Sr. No. | Ministries | Divisions | |
|---|---|---|---|
| (1) | (2) | (3) | |
| 1. | [1]Cabinet Secretariat | (a) | Cabinet Division |
| | | (b) | Establishment Division |
| | | (c) | Intelligence Bureau Division |
| | | (d) | National Security Division |
| 1A | [2]Ministry of Aviation | | Aviation Division |
| 2. | [3]Ministry of Climate Change and Environmental Coordination | | Climate Change and Environmental Coordination Division |
| 3. | [4]Ministry of Commerce | | Commerce Division |
| 4. | Ministry of Communications | | Communications Division |
| 5. | Ministry of Defence | | Defence Division |
| 6. | Ministry of Defence Production | | Defence Production Division |
| [5]6A. | Ministry of Economic Affairs | | Economic Affairs Division |
| 7. | Ministry of Energy | (a) | Power Division |
| | | (b) | Petroleum Division |
| 8. | [6]Ministry of Federal Education, Professional Training, National Heritage and Culture | (a) | Federal Education and Professional Training Division |
| | | (b) | [7]National Heritage and Culture Division |
| 9. | [8]Ministry of Finance and Revenue | (a) | Finance Division |
| | | (b) | Revenue Division |
| 10. | Ministry of Foreign Affairs | | Foreign Affairs Division |
| 11. | Ministry of Housing and Works | | Housing and Works Division |
| 12. | Ministry of Human Rights | | Human Rights Division |
| 13. | Ministry of Industries and Production | | Industries and Production Division |

[1] Substituted vide SRO 1434 (I)/2024 dated 11-09-2024
[2] Inserted vide SRO 1434 (I)/2024 dated 11-09-2024
[3] Substituted vide SRO 1434 (I)/2024 dated 11-09-2024
[4] Substituted vide SRO 1025 (1)/2020 dated 8th October, 2020
[5] Inserted vide SRO 1025 (1)/2020 dated 8th October, 2020
[6] Substituted vide SRO 1025 (1)/2020 dated 8th October, 2020
[7] Substituted vide SRO 1025 (1)/2020 dated 8th October, 2020
[8] Substituted vide SRO 1025 (1)/2020 dated 8th October, 2020

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[4] Formation of the 'Ministry of Aviation' by separating the 'Aviation Division' from the 'Cabinet Secretariat'.

## Appendix G[5]

**SCHEDULE I**

***[See rule 3(1)]***

**LIST OF MINISTRIES AND DIVISIONS**

| Sr. No. | Ministries | Divisions | |
|---|---|---|---|
| (1) | (2) | (3) | |
| 1. | [1]Cabinet Secretariat | (a) | Cabinet Division |
| | | (b) | Establishment Division |
| | | (c) | Intelligence Bureau Division |
| | | (d) | National Security Division |
| | | (e) | [2]Special Investment Facilitation Council (SIFC) Division |
| 1A | Omitted vide SRO 83(I)/2025 dated 4th February, 2025 | | Omitted vide SRO 83(I)/2025 dated 4th February, 2025 |
| 2. | [3]Ministry of Climate Change and Environmental Coordination | | Climate Change and Environmental Coordination Division |
| 3. | [4]Ministry of Commerce | | Commerce Division |
| 4. | Ministry of Communications | | Communications Division |
| 5. | Ministry of Defence | | Defence Division |
| 6. | Ministry of Defence Production | | Defence Production Division |
| [5]6A. | Ministry of Economic Affairs | | Economic Affairs Division |
| 7. | Ministry of Energy | (a) | Power Division |
| | | (b) | Petroleum Division |
| 8. | [6]Ministry of Federal Education, Professional Training, National Heritage and Culture | (a) | Federal Education and Professional Training Division |
| | | (b) | [7]National Heritage and Culture Division |
| 9. | [8]Ministry of Finance and Revenue | (a) | Finance Division |
| | | (b) | Revenue Division |
| 10. | Ministry of Foreign Affairs | | Foreign Affairs Division |
| 11. | Ministry of Housing and Works | | Housing and Works Division |
| 12. | Ministry of Human Rights | | Human Rights Division |

[1] Substituted vide SRO 1434 (I)/2024 dated 11-09-2024
[2] Inserted vide SRO 1986 (I)/2024 dated 05-12-2024
[3] Substituted vide SRO 1434 (I)/2024 dated 11-09-2024
[4] Substituted vide SRO 1025 (1)/2020 dated 8th October, 2020
[5] Inserted vide SRO 1025 (1)/2020 dated 8th October, 2020
[6] Substituted vide SRO 1025 (1)/2020 dated 8th October, 2020
[7] Substituted vide SRO 1025 (1)/2020 dated 8th October, 2020
[8] Substituted vide SRO 1025 (1)/2020 dated 8th October, 2020

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[5] Dissolution of the 'Ministry of Aviation' and the 'Aviation Division'.

**Appendix H[6]**

REGISTERED No. M - 302
L.-7646

The Gazette of Pakistan

EXTRAORDINARY
PUBLISHED BY AUTHORITY

ISLAMABAD, TUESDAY, FEBRUARY 4, 2025

PART II

**Statutory Notifications (S. R. O.)**

GOVERNMENT OF PAKISTAN
**CABINET SECRETARIAT**

**(Cabinet Division)**

NOTIFICATION

*Islamabad, the 4th February, 2025*

S.R.O. 83 (I)/2025.—In exercise of the powers conferred by Articles 90 and 99 of the Constitution of the Islamic Republic of Pakistan, the Federal Government is pleased to direct that the following further amendments shall be made in the Rules of Business, 1973, namely:—

In the aforesaid Rules,—

(1) in SCHEDULE-I, in column (1),—

(a) Sr. No. 1A, and the corresponding entries relating thereto in columns (2) and (3) shall be omitted;



*Price: Rs. 10.00*

[127(2025) /Ex. Gaz.]

[6] SRO regarding dissolution of the 'Ministry of Aviation' and the 'Aviation Division'.

(b) against Sr. No. 16, for the existing entries in columns (2) and (3), the following entries shall be respectively substituted, namely:—

| | |
|---|---|
| "Ministry of Interior and Narcotics Control | Interior and Narcotics Control Division"; |

(c) against Sr. No. 18, for the existing entries relating thereto in columns (2) and (3), the following shall be substituted, namely:—

| | |
|---|---|
| "Ministry of Kashmir Affairs, Gilgit-Baltistan and States and Frontier Regions | Kashmir Affairs, Gilgit-Baltistan and States and Frontier Regions Division"; |

(d) Sr. No. 20 and the corresponding entries relating thereto in columns (2) and (3) shall be omitted; and

(e) against Sr. No. 32, the existing entries relating thereto in columns (2) and (3) shall be omitted.

(2) in SCHEDULE-II,—

(a) item 1 and the corresponding entries relating thereto shall be omitted;

(b) under item 7, for entry 31, the following shall be substituted, namely:—

"31. Administrative functions in respect of the following laws, namely:—

(a) the National University of Pakistan Act, 2023 (XV of 2023);

(b) the Pakistan Airports Authority Act, 2023 (XLV of 2023);

(c) the Pakistan Civil Aviation Act, 2023 (XLIX of 2023);

(d) the Pakistan Air Safety Investigation Act, 2023 (L of 2023); and

(e) the National Logistics Corporation Act, 2023 (LII of 2023).

7

[7] These institutions are being put under control of the 'Ministry of Defence'.

32. Aircraft and air navigation.

33. Development of civil aviation in Pakistan.

34. Provision of aerodromes.

35. Airports Development Agency.

36. Regulation, organization and safety of air traffic and of aerodromes and administration of Airports Security Force.

37. Pakistan International Airlines Corporation.

38. Air Service agreements with other countries; liaison with International Civil Aviation Organization and other international agencies concerned with aviation.

39. Federal Meteorological Organizations and Meteorological observatories; World Meteorological Organizations.";

(c) in item 17, entry 9 shall be omitted;

(d) in item 18,—

(A) for the Heading, the following shall be substituted, namely:—

"**Interior and Narcotics Control Division**";

(B) under entry 43,—

(i) in sub-entry (e), the word " and" at the end shall be omitted;

(ii) in sub-entry (f), for full stop at the end, the expression ";and" shall be substituted;

(iii) after sub-entry (f), amended as aforesaid, the following new sub-entry (g) shall be added, namely :—

"(g) the Prevention of Electronic Crimes Act, 2016 (XL of 2016) and the rules made thereunder.";

8

[8] These institutions are being put under control of the 'Ministry of Defence'. **It is concerning that despite having the 'Ministry of Climate Change and Environmental Coordination', the 'Federal Meteorological Organizations' including 'Pakistan Meteorological Department' has** always been attached, and **moved**, with the Aviation; from the 'Communications Division' to the 'Defence Division' to the 'Establishment Division' to the 'Cabinet Secretariat' to the 'Aviation Division', and now again **to the 'Defence Division'**.

(C) after entry 43, amended as aforesaid, the following new entries 44 to 51 shall be added, namely;—

"44. Policy on all aspects of narcotics and dangerous drugs, such as production, processing, marketing, import, export and transhipment, prevention of trafficking, etc. in conformity with national objectives, laws and international conventions and agreements.

45. Legislation covering all aspects of narcotics and psychotropic substances, and matters ancillary thereto, in consultation with the concerned Divisions, etc.

46. Bilateral and multilateral cooperation with foreign countries against narcotics trafficking and all other international aspects of narcotics including negotiations for bilateral and multilateral agreements for mutual assistance and cooperation in the field of enforcement of narcotics laws.

47. Coordination of aid and assistance from foreign countries and of narcotics control interdiction for poppy crop substitution.

48. Policy on drug education, treatment and rehabilitation of narcotics and drugs addicts and grants-in-aid to Non-Governmental Organizations (NGOs) engaged in these fields.

49. Inter-Provincial coordination on all aspects of narcotics and dangerous drugs.

50. Monitoring of the implementation of policies on all aspects of narcotics and dangerous drugs.

51. Regulation of administrative, budgetary and other matters of Pakistan Narcotics Control Board.";

(e) in item 20,—

(A) for the existing heading **"Kashmir Affairs and Gilgit-Baltistan Division"**, the heading **"Kashmir Affairs, Gilgit-Baltistan and States and Frontier Regions Division"** shall be substituted;

(B) entries (8) and (9) shall be omitted;

(C) after entry (9), omitted as aforesaid, the following new entries shall be added, namely:—

"10. Coordinate with the Federal Public Service Commission in recruitment of various departments of Gilgit-Baltistan.

11. Assisting Judicial Commissions on Boundary Disputes in ascertaining facts which are directly related with the national interests of Pakistan.

12. Afghan Refugees.

13. Affairs of the former and acceding States.";

(f) item 22 and entries relating thereto shall be omitted; and

(g) item 37 and entries relating thereto shall be omitted; and

(3) in SCHEDULE-III, in column (1),—

(a) S. Nos. 1 and 2 and the corresponding entries relating thereto in columns (2) and (3) shall be omitted;

(b) after S. No. 16 and corresponding entry relating thereto in column (2), the following new S. Nos. 16A and 16B and corresponding entries relating thereto in column (2) shall be inserted, namely:—

"16A. Pakistan Meteorological Department

16B. Headquarters of Airports Security Force";

(c) after S. No. 49A and corresponding entry relating thereto in column (2), the following new S. No. 49B and corresponding entry relating thereto shall be inserted, namely:-

"49B. Anti-Narcotics Force";

(d) against S. Nos. 39 to 49B, in column (3), for the word "Interior", the words "Interior and Narcotics Control" shall be substituted;

9

[9] These departments are being attached with the 'Defence Division' after dissolution of the 'Aviation Division'.

(e) after S. No. 50 and corresponding entries relating thereto in columns (2) and (3), the following new S. Nos. and corresponding entries relating thereto shall be inserted, namely:—

| | | |
|---|---|---|
| "50A | Chief Commissionerate for Afghan Refugees, Islamabad | Kashmir Affairs, Gilgit-Baltistan and States and Frontier Regions" ;and |
| 50B | Jammu and Kashmir Properties, Pakistan | |
| 50C | Directorate of Health Services (AK) | |

(f) S. No. 53, the corresponding entries relating thereto in columns (2) and (3) shall be omitted; and

(4) In SCHEDULE-V-A, in the first column, against S. Nos. 11 and 12, in the second column, for the heading "INTERIOR DIVISION", the heading "INTERIOR AND NARCOTICS CONTROL DIVISION" shall be substituted; and

(5) In SCHEDULE-V-B, in the first column, against S. Nos. 25 to 27, in the second column, for the heading "INTERIOR DIVISION", the heading "INTERIOR AND NARCOTICS CONTROL DIVISION" shall be substituted.

[F.No.4-2/2024-Min-I.]

MUHAMMAD MEESAM,
*Section Officer (Ministerial-I).*

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## Appendix I[10]

**7. Defence Division**

1. Defence of the Federation or any part thereof in peace or war including:--
   - (i) Army, naval and air forces of the Federation and any other armed forces raised or maintained by the Federation; and armed forces which are not the forces of the Federation but are attached to or operating with any of the armed forces of the Federation;
   - (ii) army, naval and air force works.
2. Civilian employees paid from the Defence estimates.

[1] Inserted vide SRO 1434 (I)/2024 dated 11-09-2024
[2] Inserted vide SRO 1434 (I)/2024 dated 11-09-2024

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3. (i) Defence matters pertaining to treaties and agreements with other Governments except those relating to purchase of stores; and
   (ii) Matters regarding military assistance to foreign countries.
4. Stores and stationery for the Defence Services, other than those dealt with by the Defence Production Division.
5. (i) Administrative control of Northern Light Infantry; and
   (ii) Administration of National Guards Act, 1973.
6. International Red Cross and Geneva Conventions in so far as they effect belligerents.
7. Military awards and decorations.
8. Welfare of ex-servicemen.
9. Cantonment areas including--
   - (i) the delimitation of such areas;
   - (ii) Local Self-Government in such areas, the constitution of local authorities for such areas and the functions and powers of such authorities; and
   - (iii) the regulation of housing accommodation (including control of rent) in such areas.
10. Acquisition or requisitioning of property for Defence Services; imposition of restrictions upon the use of lands in the vicinity of such property and of works of Defence.
11. Pardons, reprieves and respites, etc., of all personnel belonging to the Armed Forces.
12. Survey of Pakistan.
13. Administrative and budgetary control of Federal Government Educational Institutions (Cantonments/Garrisons) Directorate and its Institutions.
14. Administration of Military Lands and Cantonments Group.

15 to 22. Omitted vide S.R.O. 622 (I)/2013, dated 28.06.2013.

23. National Maritime policy.
24. (i) Matters relating to security of resources of the Maritime Zones of Pakistan including protection of human life and property.
    (ii) Pakistan Maritime Security Agency.
25. (i) National coordination of maritime activities.
    (ii) National Maritime Affairs Coordination Committee.
26. Marine surveys and elimination of dangers to navigation.
27. Promotion of maritime disciplines.
28. International aspects:
    - (i) Matters arising out of the implementation of law of the Sea pertaining to Maritime Affairs.
    - (ii) International negotiations, agreements and treaties (excluding those handled by other Divisions).
    - (iii) Liaison with International Sea Bed Authorities and other International

40

[10] Mandate for 'National Maritime Policy' (NMP) is with the 'Ministry of Defence' instead of the 'Ministry of Maritime Affairs' (MoMA), and that is why the MoMA is unable to issue the 'NMP-2025' after getting it approved.