



# **INAUGURAL SESSION OF THE SMART MOBILITY WORKING GROUP**

## **PAKISTAN'S SMART MOBILITY LANDSCAPE: PROGRESS, CHALLENGES, AND OPPORTUNITIES FOR REGIONAL COLLABORATION**

**Manila, Philippines**  
**21 May 2026**

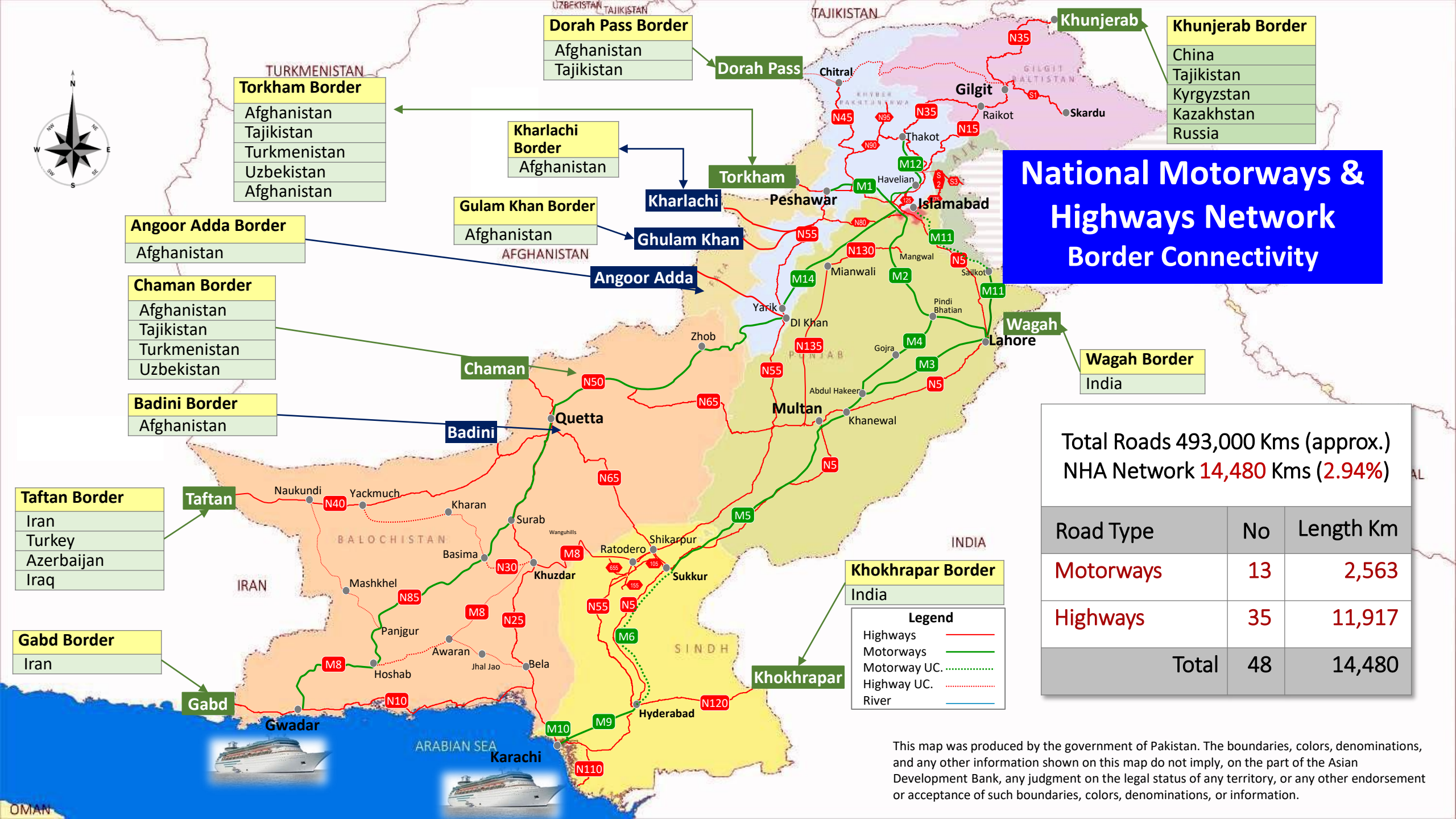
# Understanding Smart Mobility in Pakistan's Context

## Pakistan's Approach to Smart Mobility: Key Focus Areas

- Intelligent and safer transport systems
- Digitalization of transport operations
- Efficient freight and corridor management
- Data-driven transport planning
- Sustainable and climate-resilient mobility
- Pakistan's geographic position places it at the crossroads of regional connectivity within the CAREC region

# CAREC Multimodal Corridors





# National Motorways & Highways Network Border Connectivity

Khunjerab Border
China
Tajikistan
Kyrgyzstan
Kazakhstan
Russia

Dorah Pass Border
Afghanistan
Tajikistan

Torkham Border
Afghanistan
Tajikistan
Turkmenistan
Uzbekistan
Afghanistan

Kharlachi Border
Afghanistan

Gulam Khan Border
Afghanistan

Angoor Adda Border
Afghanistan

Chaman Border
Afghanistan
Tajikistan
Turkmenistan
Uzbekistan

Badini Border
Afghanistan

Wagah Border
India

Taftan Border
Iran
Turkey
Azerbaijan
Iraq

Gabd Border
Iran

Khokhrapar Border
India

Total Roads 493,000 Kms (approx.)		
NHA Network 14,480 Kms (2.94%)		
Road Type	No	Length Km
Motorways	13	2,563
Highways	35	11,917
<b>Total</b>	<b>48</b>	<b>14,480</b>

Legend	
Highways	
Motorways	
Motorway UC.	
Highway UC.	
River	

This map was produced by the government of Pakistan. The boundaries, colors, denominations, and any other information shown on this map do not imply, on the part of the Asian Development Bank, any judgment on the legal status of any territory, or any other endorsement or acceptance of such boundaries, colors, denominations, or information.

# NHA - Overview



NHA is managing ~14,480 km (2.94% of Pakistan Total Road Network of 493,000 Kms) of cross-border and inter-provincial road network across Pakistan under Ministry of Communications

## Network - assets built



**14,480km**

Length of road network



**48**

32 Highways, 13 Motorways & 03 Strategic Roads



**PKR 5.8Tr**

In asset value

## Mandate



**100%**

Provincial & Cross Border connectivity



**81%**

Motorway Network connectivity



**82%**

Maintenance: Fair to Good

# Mobility & Logistics Challenges

## Key bottlenecks limiting transport efficiency in Pakistan

- Corridor congestion on major urban and intercity highways
- Increasing freight pressure on key national and CAREC routes
- Delays at border crossings affecting trade movement
- Predominantly manual clearance and logistics processes
- Limited ITS deployment and fragmented traffic systems
- Lack of real-time corridor monitoring and control
- Weak enforcement mechanisms for speed and axle load control
- Presence of high-risk blackspots along major corridors
- Absence of a unified national transport data platform
- Limited use of data-driven planning and analytics



# Smart Mobility Interventions in Pakistan

## Gradual shift towards digital and corridor-based transport management

- Deployment of Intelligent Transport Systems (ITS) on key highways
- Introduction of weigh-in-motion and axle load enforcement systems
- Expansion of electronic toll collection (ETC) initiatives
- Corridor-based traffic monitoring and management systems
- Use of GIS and digital tools for transport planning
- Ongoing efforts to improve road safety enforcement mechanisms

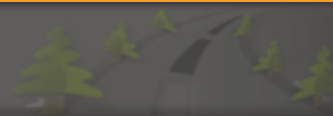


# Smart Mobility Gaps & Opportunities

Need for integrated and system-wide transport transformation

- ITS implementation remains fragmented across corridors and agencies
- Limited real-time data integration for traffic and freight management
- Lack of a national integrated transport data platform
- Need for harmonized digital border and logistics systems
- Limited interoperability of transport technologies across regions
- Opportunity for end-to-end smart corridor development

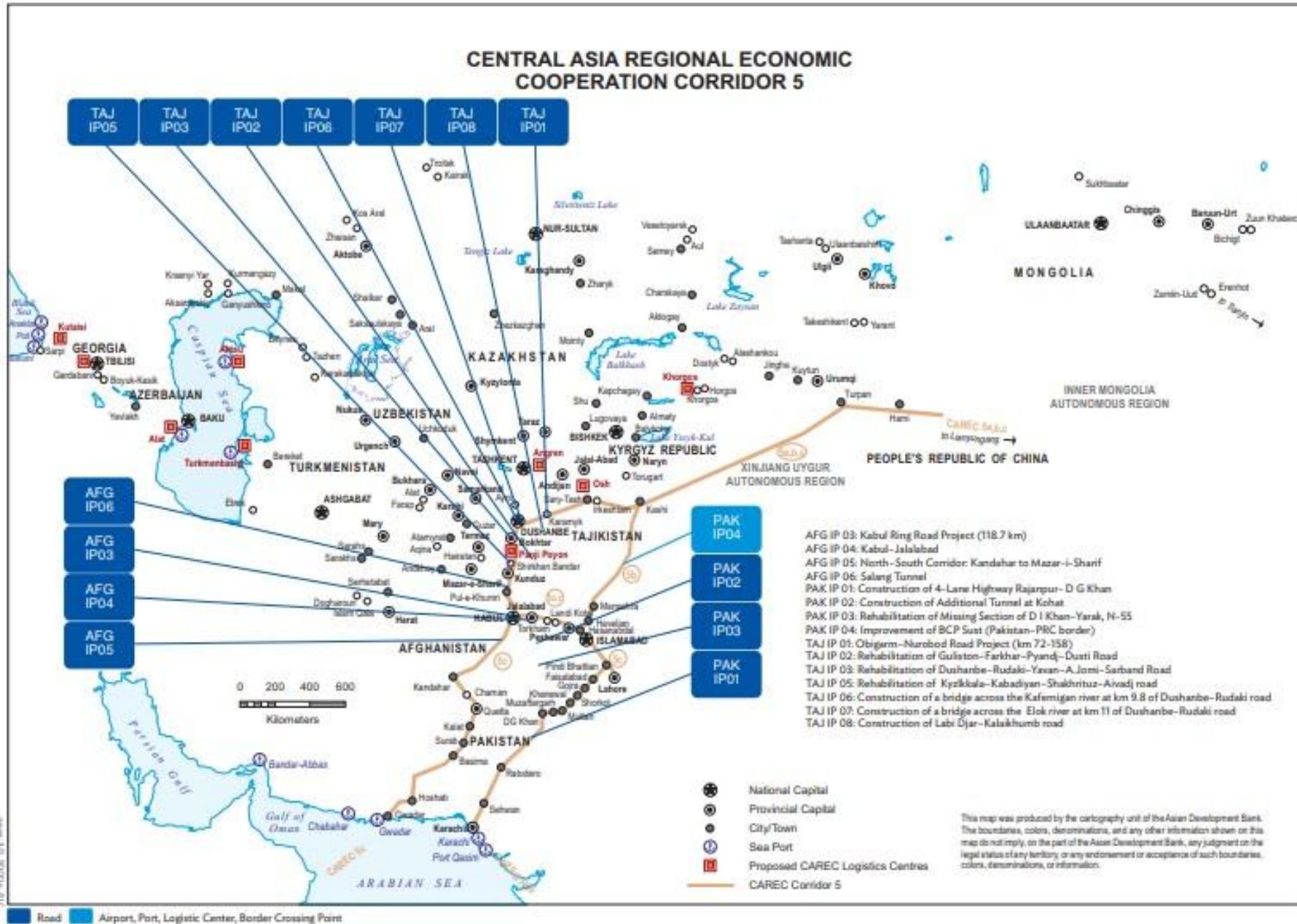
# CAREC Alignment & Regional Value



## Pakistan as a strategic connectivity node in CAREC region

- Pakistan serves as a key transit corridor between Central and South Asia
- Multiple CAREC corridors pass through national transport network
- Strong potential for cross-border trade facilitation improvements
- Importance of harmonized transport systems across CAREC countries
- Opportunity to enhance regional freight efficiency and predictability
- Need for shared digital infrastructure and standards

# CAREC Alignment & Regional Value

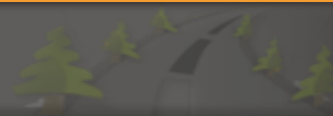


# Proposed Focus Areas for CAREC Collaboration

Priority interventions for smart and seamless mobility

- Development of smart corridor pilots along CAREC routes in Pakistan
- Integrated freight and border management systems
- Expansion of ITS coverage on major national highways (N-5, CPEC routes)
- Establishment of regional transport data sharing frameworks
- Standardization of digital transport systems across CAREC region
- Capacity building in smart mobility and transport analytics

# Commitment



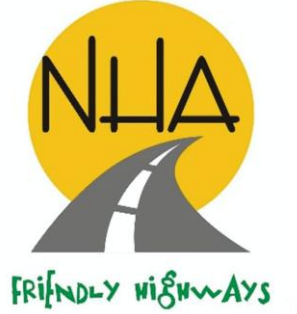
## Pakistan's commitment to CAREC Smart Mobility agenda

- Strong commitment to regional cooperation under CAREC framework
- Readiness to support pilot projects for smart mobility systems
- Emphasis on digital transformation of transport sector
- Focus on safe, efficient and integrated corridor development
- Willingness to collaborate on knowledge sharing and innovation



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**THANK YOU**

