

Sector Overview

Road Infrastructure (Tolling)



Pakistan | Existing Road Infrastructure

Road Infrastructure of Pakistan (Kms)

Years	Punjab	Sindh	KPK	Baluchistan	GB & AJK	Aggregate
FY18	108,304*	81,794*	43,210*	29,858*	1,599*	264,797*
FY17	108,155	81,681	43,151	29,817	1,597	264,401
FY16	107,718	81,624	42,945	29,490	1,579	263,356
FY15	107,992	81,543	43,072	29,742	1,593	263,942
FY14	107,973	81,493	43,035	29,692	1,592	263,785
FY13	107,805	81,385	42,980	29,655	1,590	263,415

- Depiction of existing road infrastructure, over last five years, highlights Punjab province enjoys the major chunk of developed roads being most populous province

National Highway Authority | Rehabilitation of Roads

NHA Network	39 National Highways, Motorways, expressways and strategic roads
Length of Network	12,131 Kms
Annual Maintenance Plan (AMP)	Funded through NHA's resources 665 Kms has been rehabilitated
Existing Development Portfolio	72 ongoing projects
Cost of on-going Projects	PKR 305bln
	<i>Foreign Exchange Component - PKR 86bln</i>
	<i>Local component - PKR 218bln</i>
PSDP 2017-18	Another 13 schemes with total estimated cost of PKR 14bln are planned

Motorways/ Expressways | Pakistan

Sr. #	Motorway/ Expressways	Length (Km)	Status
1.	Islamabad – Peshawar (M-1)	156	Completed
2.	Lahore – Islamabad (M-2)	357	Completed
3.	Havelian – Mansehra	39	Under Construction
4.	Hazara Motorway (E-35)	59	Under Construction
5.	Hakla – D.I.Khan	285	Completion – Dec19
6.	Sialkot – Lahore	91	Completion – Dec18
7.	Lahore – Multan (M-3)	230	Completion – Aug18
8.	Faisalabad – Gojra (M-4)	58	Completed
9.	Gojra – Shorkot (M-4)	62	Completion – Aug18
10.	Shorkot – Khanewal (M-4)	64	Completion – Aug18
11.	Khanewal – Multan (M-4 Extension)	56	Completed
12.	Sukkur – Multan (M-5)	392	Completion 2019
13.	Hyderabad – Sukkur (M-6)	296	Procurement under process
14.	Karachi – Hyderabad (M-9)	136	Under Completion June 2018
Total		2,281	

Development Partners Projects | Pakistan

Asian Development Bank

- Flood Rehabilitation Project, Phase I (343KM), Under Construction
- Construction of Gojra-Khanewal M-4, 126 KM, Under Process
- Flood Rehabilitation Project, Phase II – 335KM, Under Construction
- Baluchistan: 1) Zhob – MughalKot Section of N-50, 80 KM, Under Construction, 2) Qilla Saifullah – Waigum – Rud Section of N-70, 124 KM, Under Construction
- Burhan – Havelian Expressway (E-35), 59 KM, Under Construction

Islamic Development Bank

Multan Khanewal Section – M4 Extension, 57 KM, Completed

Japan International Cooperation Agency

- Sehwan – Ratodero Section (200km), N-55 (Completed)
- Rakhi Gajj – Bewata Section (34 km), N-70, (Under Construction)

Development Partners Projects | Pakistan

Korean
Exim
Bank

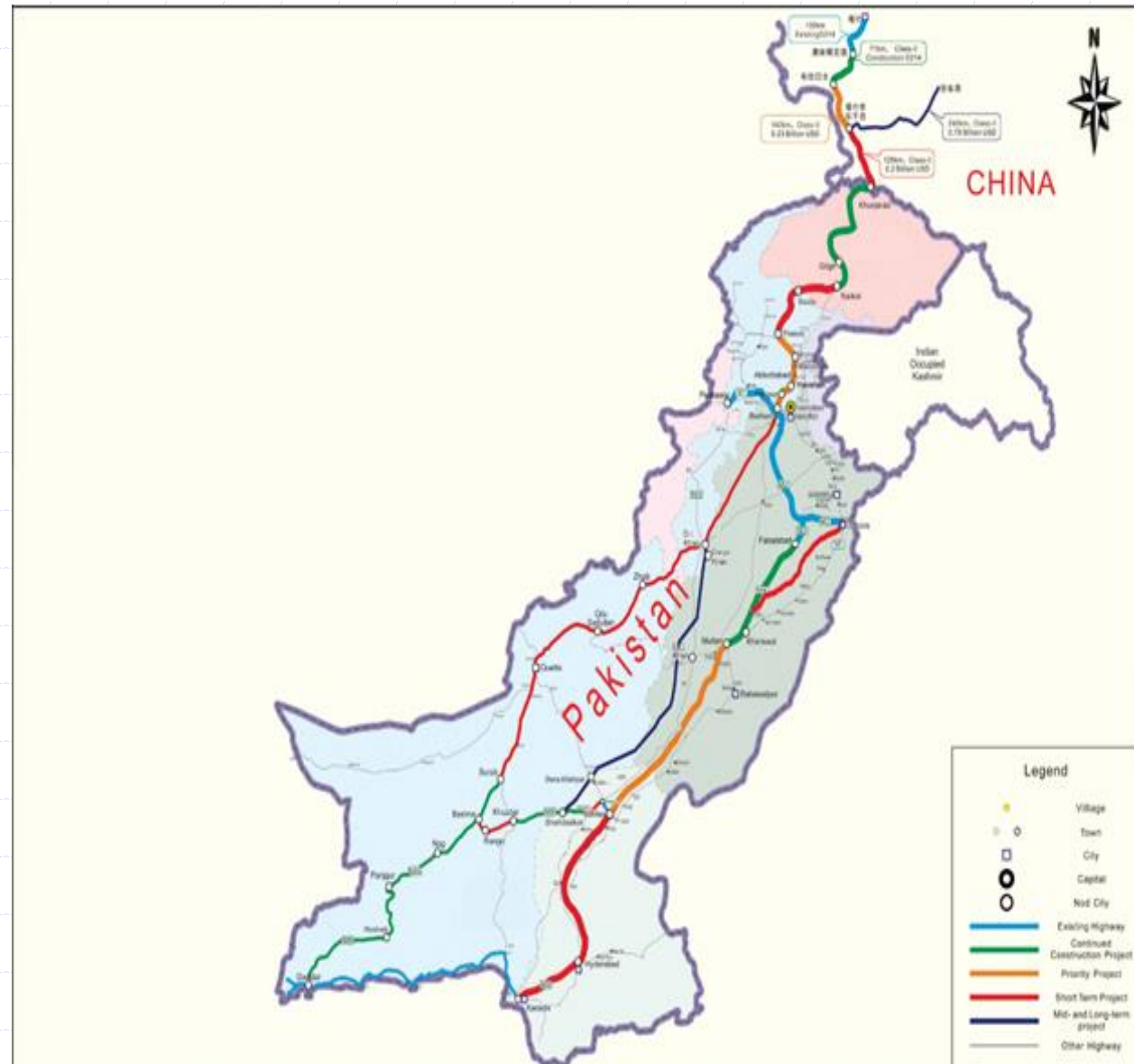
US AID Grant

Chinese

- Chakdarra - Chitral Section (141 km) of N-45 (Procurement stage)
- Malakand Tunnel (Procurement stage)
- Quetta - Chaman Section of N-25 (120 km) (Completed)
- Peshawar - Torkham Section of N-5 (45 km) (PC-I is in process of approval)
- Raikot - Thakot Section of KKH (276 km) (Loan arrangement is under process)
- Multan - Sukhar (M-5) (392 km) (Completion June 2018)

Pakistan | CPEC Road Map

- Adjacent map outlines the construction projects under CPEC
- Motorways under construction include Havelian – Manserah and Hazara Motorway (E-35)
- Short to Medium term projects includes Hakla-Yarik, Yarik – Zhob (N-50), Zhob – Quetta (N-50), Quetta – Khuzdar (N-25), Surab – Hoshab (N-85) , Hoshab – Gwadar (M-8)
- Mid-term to long term projects include D.I. Khan – DG Khan, DG Khan – Dera Allah Yar, Dera Allah Yar – Wangu Hills



Eastern Alignment | Highways & Motorways

Sr. #	Starting Point	Ending Point	Length	Status	Indicative Plan Period
1.	Khunjrab	Raikot	335	Completed	-
2.	Raikot	Thakot (N-35)	270	Planning stage	2018-23
3.	Thakot	Havelian (E-35)	118	Under Construction	2013-20
4.	Havelian (M1)	Burhan (E-35)	59	Completed	2013-19
5.	M1	Gojra (M1, M2, M4)	402	Completed	-
6.	Gojra	Khanewal (M4)	127	Under Construction	2013-18
7.	Khanewal	Multan (M4 Ext)	57	Completed	-
8.	Multan	Sukkur (M-5)	392	Under Construction	2013-19
9.	Sukkur	Hyderabad (M-6)	296	Under Procurement	2018-23
10.	Hyderabad	Karachi (M-9)	136	Substantially Completed	2013-18
11.	Sukkur	Shikarpur (N-65)	40	Completed	-
12.	Shikarpur	RatoDero (N-55)	49	FS for dualization commenced	2018-23
13.	RatoDero	Quba Saeed Khan (M-8)	59	Completed	2013-18
14.	Quba Saeed Khan	Wangu Hills (M8)	42	Near to Completion	2013-18
15.	Wangu Hills	Khuzdar(M-8)	113	Near to Completion	2013-18
16.	Khuzdar	Basima (N-30)	110	PC-I approved	2018-20
17.	Basima-Hoshab	Gwadar	400	Completed	-
Total			3,005		

Western Alignment | Highways & Motorways

Sr. #	Starting Point	Ending Point	Length	Status	Indicative Planned Period
1.	Hakla (Islamabad)	Yarik (D.I. Khan)	285	Under Construction	2013-19
2.	Yarik	Zhob (N-50)	235	PC-I approved	2018-23
3.	Zhob (N-50)	Quetta	331	Planning Stage	2018-23
4.	Quetta	Khuzdar (N-25)	306	Design in process	2018-23
5.	Surab	Hoshab (N-85)	449	Completed	-
6.	Hoshab	Gwadar (M-8)	193	Completed	-
Total			1,799		

- Eastern alignment comes under short term projects
- Western alignment comes under short to medium term projects under CPEC

Central Alignment | Highways & Motorways

Sr. #	Starting Point	Ending Point	Length	Status	Indicative Planned Period
1.	D.I. Khan	D.G. Khan	229	Planned	2023-28
2.	D.G. Khan	Dera Allah Yar	303	Planned	2023-28
3.	Dera Allah Yar	Wangu Hills	94	Planned	2023-28
Total Length			626		

- Central alignment comes under medium to long term projects under CPEC

CPEC | Infrastructure Projects

Sr. #	Project Name	Length (KM)	Estimated Cost (US \$ mln)	Indicative Planned Period	Financing
1.	KKH Phase – II	118	1,315	Mar-20	Governmental Concessional loan
2.	Peshawar-Karachi Motorway (Multan-Sukkur Section)	392	2,889	Aug-19	Governmental Concessional loan
3.	Khuzdar-Basima Road N-30	110	PKR 19.1bln	-	-
4.	Upgradation of D.I.Khan (Yarik) - Zhob, N-50 Phase-I	210	195	-	-
5.	KKH Thakot-Raikot N35 remaining portion	136	PKR 8.15bln	-	-

Road Rehabilitation | BOT/ PPP

The Public Private Partnership (PPP) or Build, Operate & Transfer (BOT) are arrangements between Government (NHA) and the private sector with following procedure;

- **Competitive Bidding:** successful bidder from the private sector incorporates a Project Company – Special Purpose Vehicle (SPV)
- **Concession Agreement** between NHA-SPV: includes, inter alia, the accepted bid parameters, scope of work, concession period and other detail necessary which deemed for implementing the project under PPP/BOT arrangement
- **Financing arrangements:** SPV
- **Design, Construction, Operation and Maintenance:** SPV
- **Right on Toll/other revenue for a certain period of the project:** SPV (which is long enough to recover its investment with reasonable profit)
- **Transfer back** to NHA at the end of concession period

Risk factors | BOT/ PPP Arrangements

- ◆ **Execution Risk** | Delays in securing lands/related approvals | in case of new roads
- ◆ **Completion Risk** | Ensuring timely delivery of project | EPC Contractor profile | Regular Monitoring
- ◆ **Operations & Maintenance Risk** | O&M Operator | Adherence to performance parameters
- ◆ **Revenue Risk** | Traffic volume and Toll rates
- ◆ **Sponsor Risk** | Financial muscle and Reputation | Profile and Past record

BOT/ PPP | Key projects

Sr. #	Project Name	Length (Km)	Project Details	Status
1.	Service Areas 10 Nos. (M-2)	-	10 service areas under 15 years concession period	Handed over to M/s MORE as part of M-2 concession
2.	Overlay & modernization of Lahore-Islamabad (M-2)	357	Total solution/ intelligent Transportation System (ITS) on M-2	Concessionaire: M/s MORE, Pakistan – Under Construction
3.	Habibabad bridge (N-5)	2	New 4-lane Railway Overhead Bridge on N-5 with 2 km approach roads	M/s HOME, Pakistan – Construction Completed
4.	Karachi-Hyderabad Motorway (M-9)	136	Conversion of existing 4-lane to 6-lane motorway	M/s SCORE – Under Construction
5.	Hyderabad- Sukkur Motorway	296	Construction of new 6 lane	Project Preparation Stage
6.	Karachi Northern Bypass (M-10)	50	Construction of existing 2-lane highway into 4-lane divided facility	Project Preparation Stage
7.	Lakpass Tunnel (N-25)	0.18	Tunnel is operational under a 25 year's concession	M/s IBEX Construction Co., Pakistan

In addition to these BOT projects, NHA has planned projects on Public Private Partnership basis (PPP) worth PKR 210,000 mln to be started in near future.

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