



In the name of Allah, the beneficent the merciful

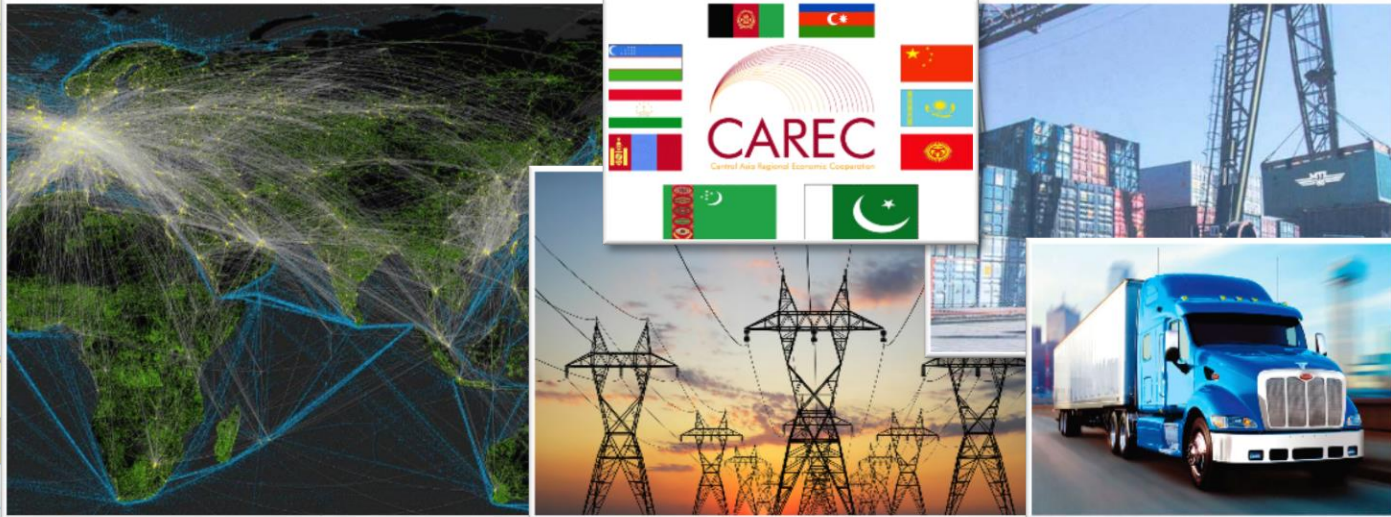
Start



GOVERNMENT OF PAKISTAN

MINISTRY OF COMMUNICATIONS

NATIONAL HIGHWAY AUTHORITY



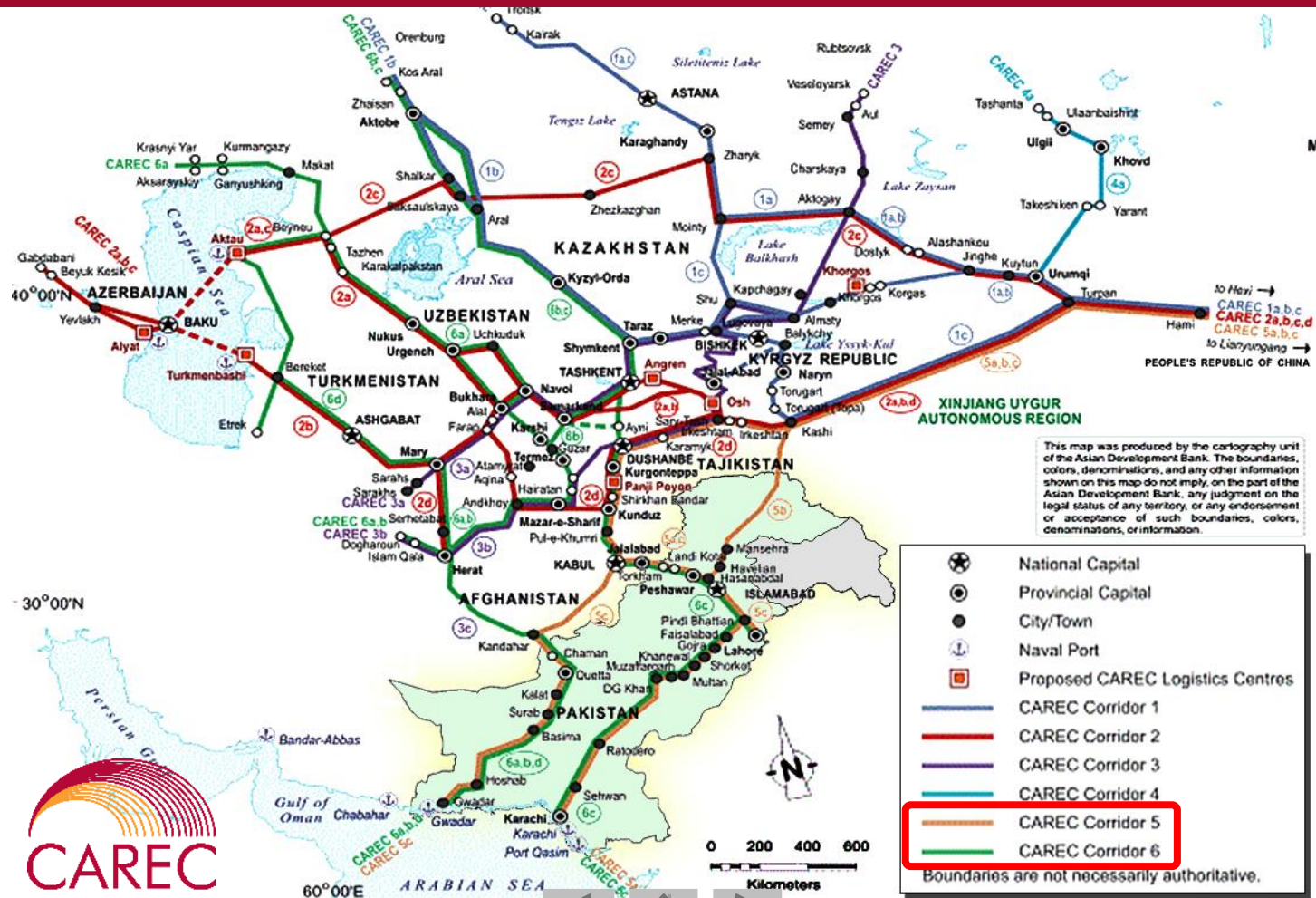
17th Meeting of Transport Sector Coordinating Committee (TSCC)

Road Safety Engineering Workshop Istanbul, Turkey

April, 2018



CENTRAL ASIA REGIONAL ECONOMIC COOPERATION (CAREC)



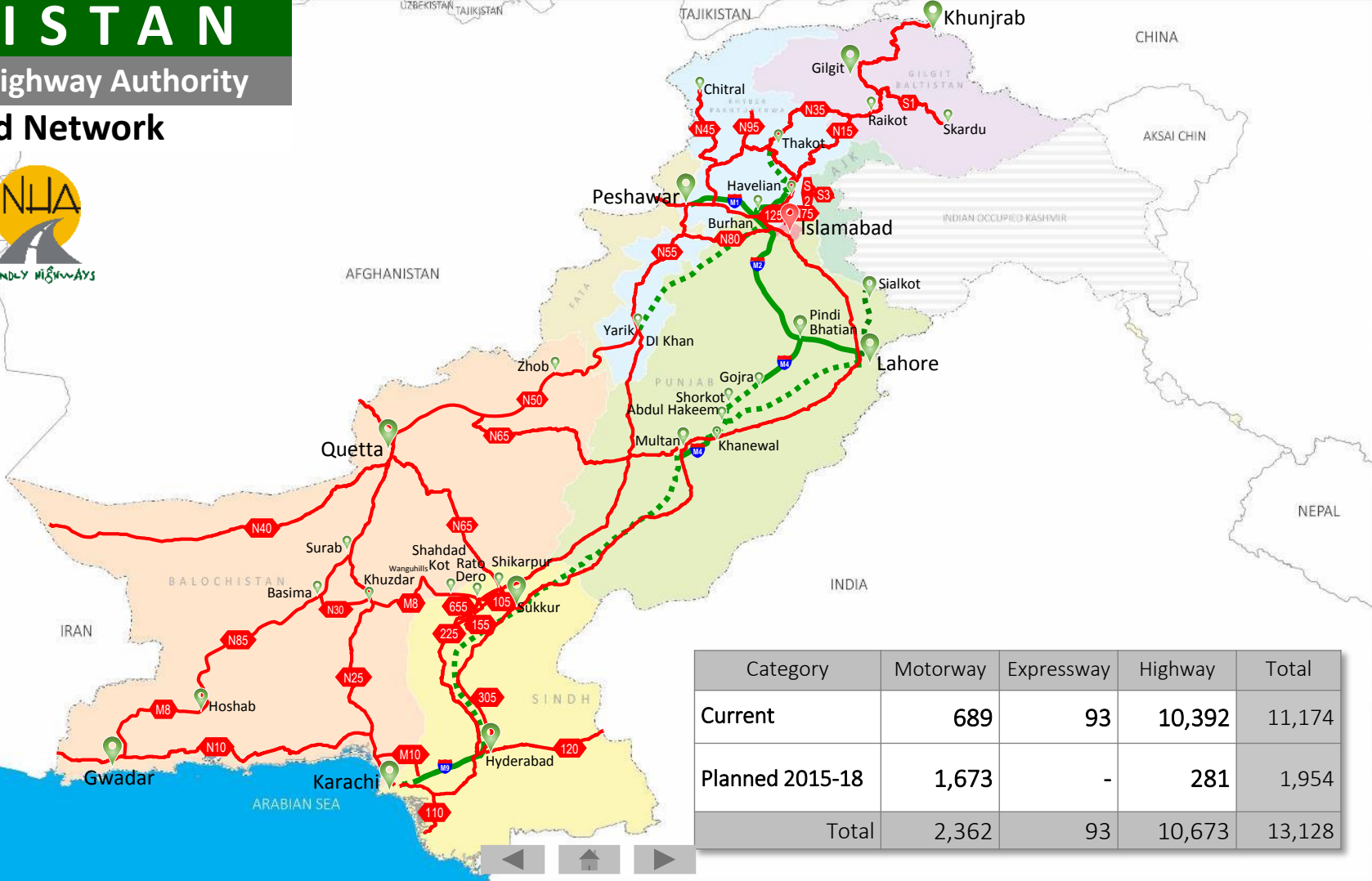
In a historic moment, Gwadar Port starts commercial shipping service 7 Mar, 2018



PAKISTAN

National Highway Authority

Road Network



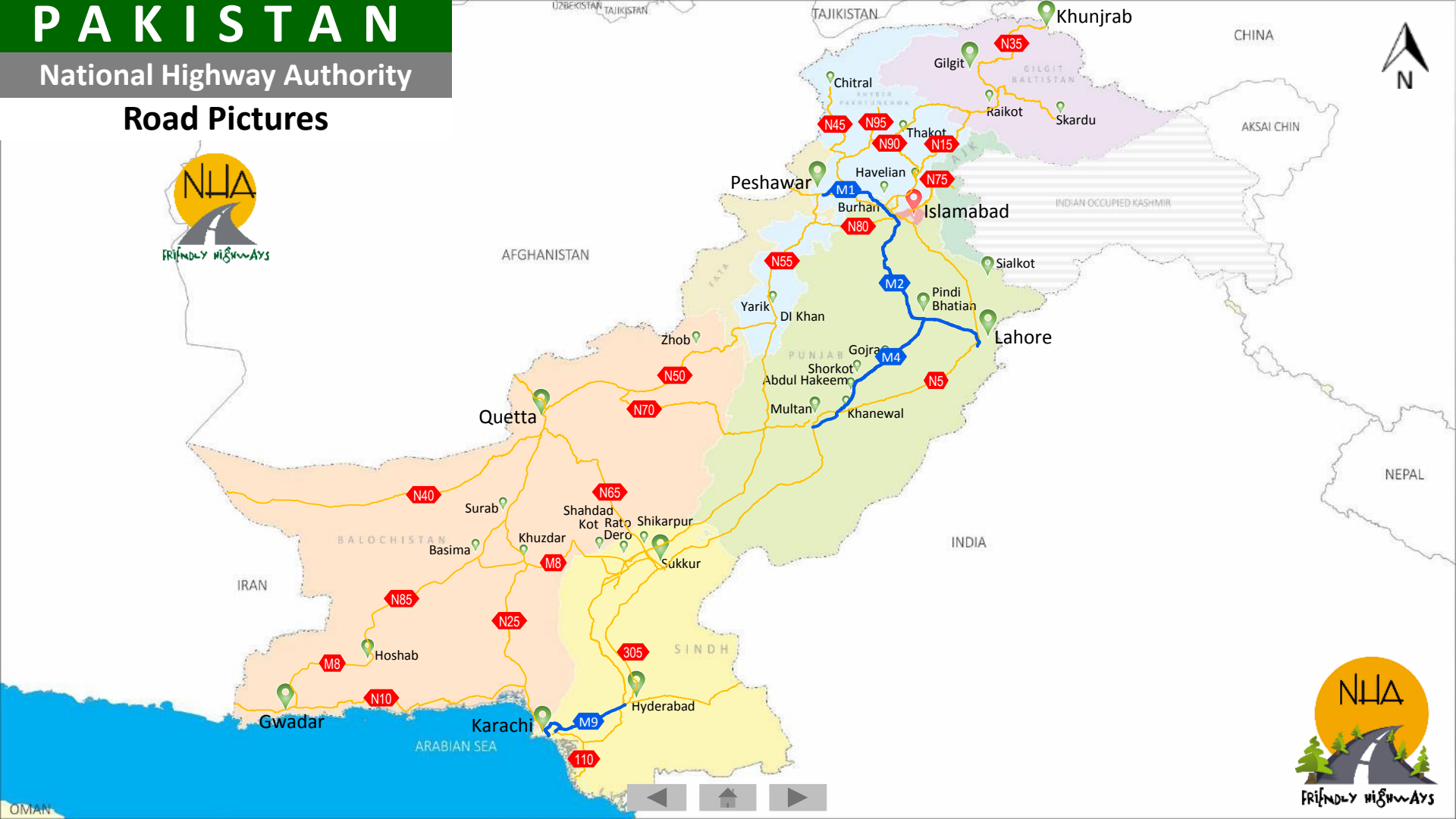
Category	Motorway	Expressway	Highway	Total
Current	689	93	10,392	11,174
Planned 2015-18	1,673	-	281	1,954
Total	2,362	93	10,673	13,128



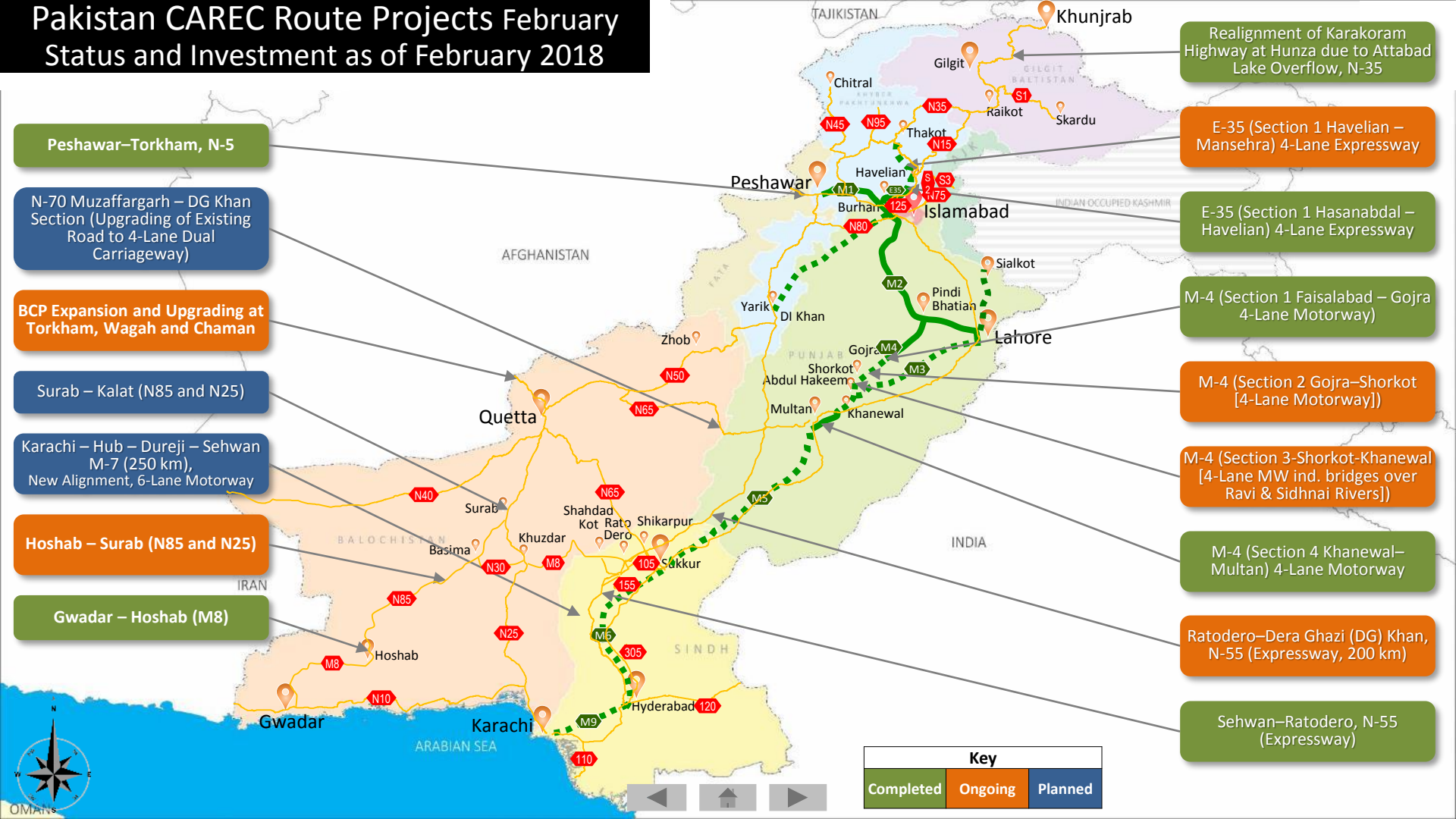
PAKISTAN

National Highway Authority

Road Pictures



Pakistan CAREC Route Projects February Status and Investment as of February 2018



Peshawar–Torkham, N-5

N-70 Muzaffargarh – DG Khan Section (Upgrading of Existing Road to 4-Lane Dual Carriageway)

BCP Expansion and Upgrading at Torkham, Wagah and Chaman

Surab – Kalat (N85 and N25)

Karachi – Hub – Dureji – Sehwan M-7 (250 km), New Alignment, 6-Lane Motorway

Hoshab – Surab (N85 and N25)

Gwadar – Hoshab (M8)

Realignment of Karakoram Highway at Hunza due to Attabad Lake Overflow, N-35

E-35 (Section 1 Havelian – Mansehra) 4-Lane Expressway

E-35 (Section 1 Hasanabdal – Havelian) 4-Lane Expressway

M-4 (Section 1 Faisalabad – Gojra 4-Lane Motorway)

M-4 (Section 2 Gojra–Shorkot [4-Lane Motorway])

M-4 (Section 3-Shorkot-Khanewal [4-Lane MW ind. bridges over Ravi & Sidhnaï Rivers])

M-4 (Section 4 Khanewal–Multan) 4-Lane Motorway

Ratodero–Dera Ghazi (DG) Khan, N-55 (Expressway, 200 km)

Sehwan–Ratodero, N-55 (Expressway)

Key		
Completed	Ongoing	Planned



- In last four years, Pakistan has initiated an ambitious program of US\$ 13.63 Billion
- Complete North – South Motorway Link
- Strengthen East – West Connectivity i.e. Baluchistan
- Revival of Sick Mega Projects
- Largest BoT Regime under PPP Mode US\$ 3.4 Billion
- Off budget financing and cost saving of US\$ 4.43 Billion
- Contribution to GDP Growth i.e. 1.0% to 1.5%





Thank You

National Highway Authority

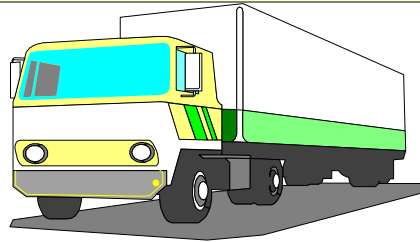
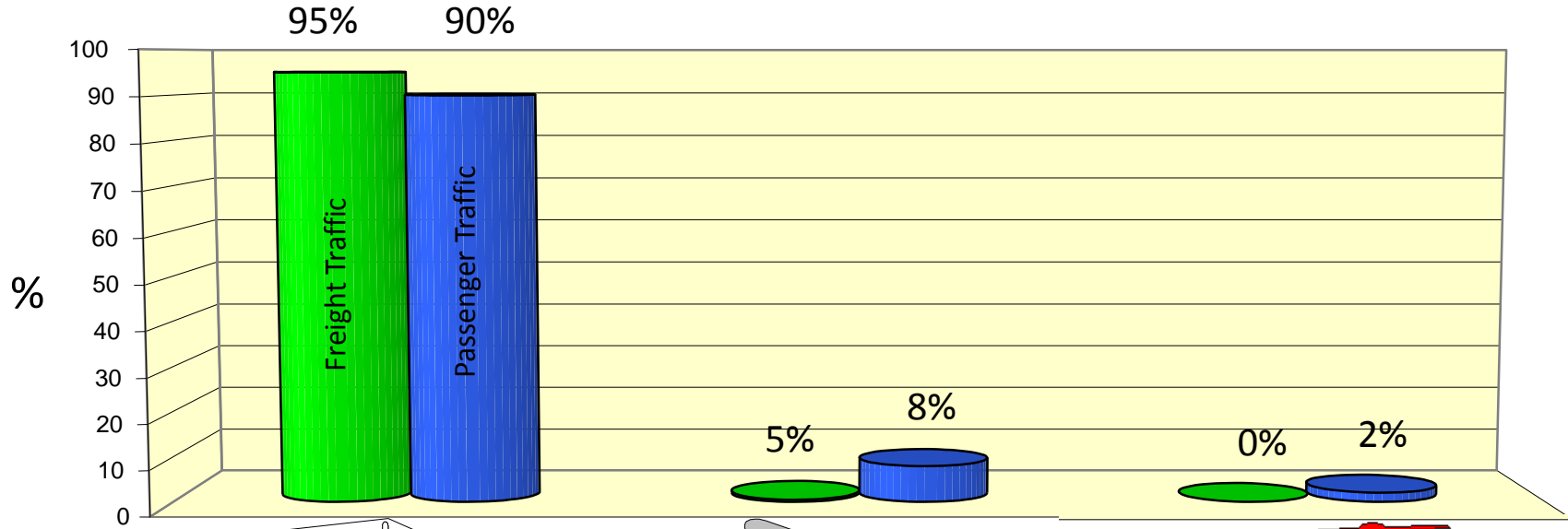
نیشنل ہائی وے اتھارٹی

Trade & Transport Sector Vision

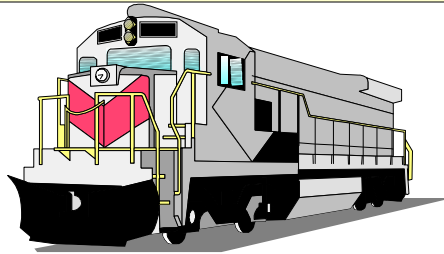
- **Improve trade competitiveness**
- Establish efficient / well integrated transport system
- **Reduce transport costs**
- Enhance road density from 0.32 to 0.64 Km / Km²
- **Develop Pakistan as hub of sub regional connectivity**



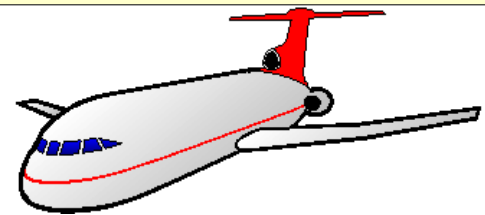
Reliance on Road Network



ROAD



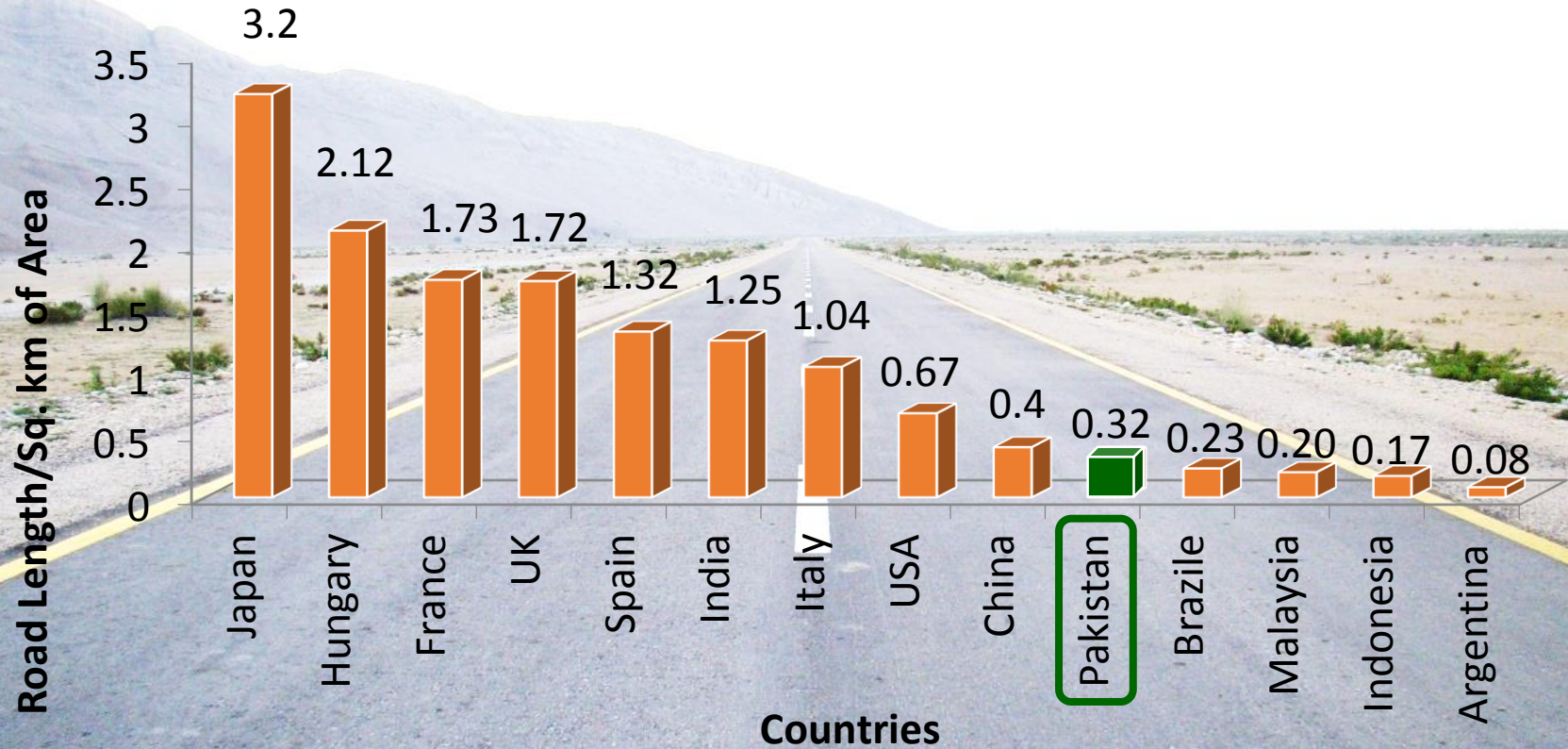
RAIL



AIR

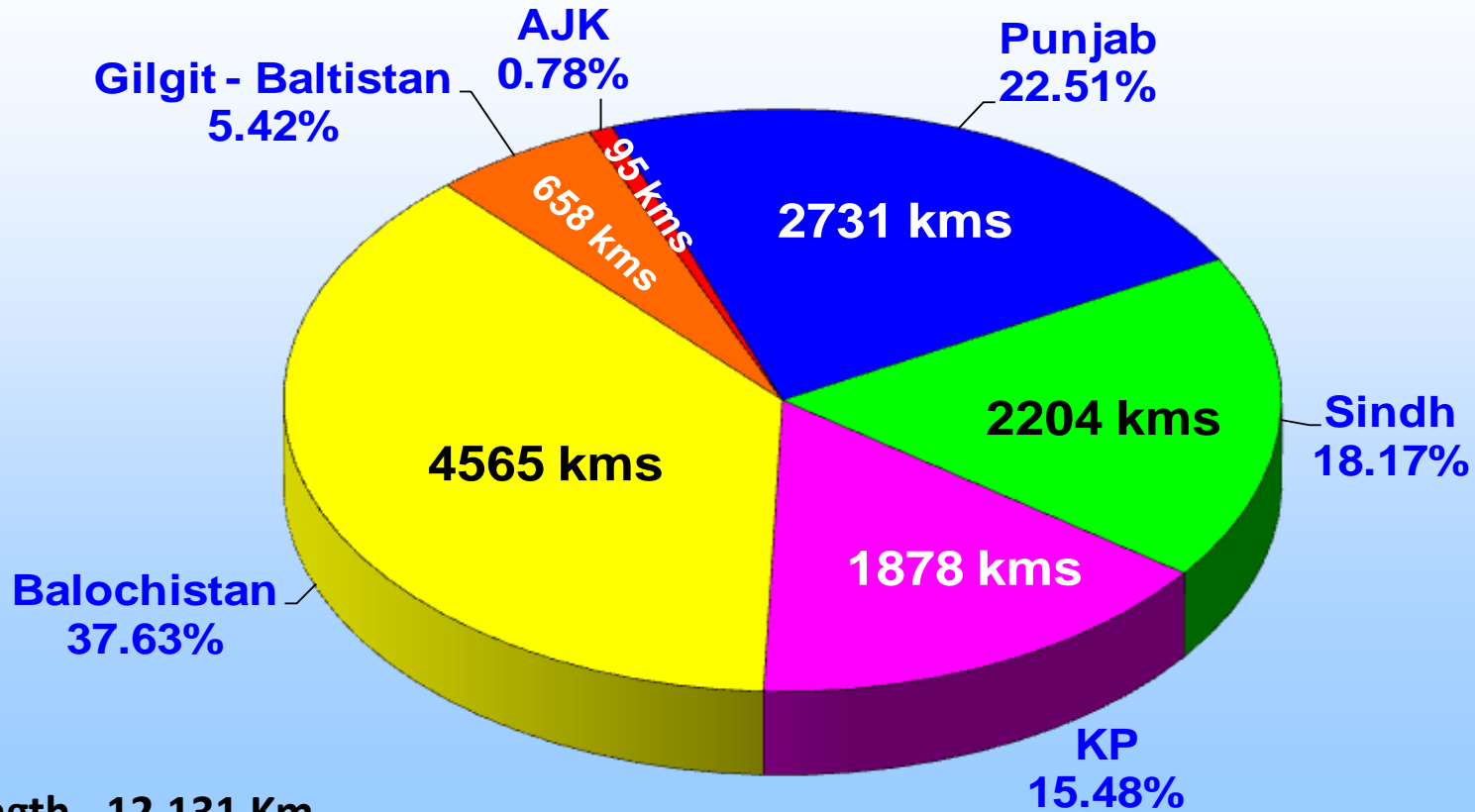


Road Density Comparison



Existing National Highways Network

Province Wise Length



Total Length - 12,131 Km



Existing National Highways Network

Sr. No.	Route No.	Road Description	Length in Kilometers		
			Motoway	Expressway	Highway
1	N-5	Karachi-Lahore-Peshwar-Torkham	-	-	1819
2	N-10	Makran-coastal; liari-Ormara-Gwadar-Jiwani	-	-	653
3	N-15	Mansehra-Naran-Jalkhad	-	-	240
4	N-25	Karachi-Kalat-Quetta-Chaman	-	-	813
5	N-30	Basima – Khuzdar	-	-	110
6	N-35	Hassanabdal-Thakot-Khunjrab	-	-	806
7	N-40	Lakpass-Dalbandin-Taftan	-	-	610
8	N-45	Nowsehra-Dir-Chitral	-	-	309
9	N-50	Kuchlack-Zhob-D.I.Khan	-	-	531
10	N-55	Kotri-Larkana-D.G.Khan-D.I.Khan-Peshawar	-	-	1264
11	N-65	Sukkur-Sibi-Quetta	-	-	385
12	N-70	Multan-D.G.Khan-Loralai-Qali Saifullah	-	-	447
13	N-75	Islamabad-Satra Mile-Lower Topa-Kohala	-	54	
14	N-80	Tarnol-Fateh Jang-Jand-Khushal Garh-Kohat	-	-	146
15	N-85	Hoshab-Panjgur-Nag-Baseema-Sorab	-	-	487
16	N-90	Khwazakhela – Besham	-	-	64
17	N-95	Chakdara – Kalam	-	-	135
18	N-105	Larkana - Naudero – Lakhi	-	-	61
19	N-110	Gharo - Keti Bunder	-	-	90

Existing National Highways Network

Sr. No.	Route No.	Road Description	Length in Kilometers		
			Motorway	Expressway	Highway
20	N-120	Hyderabad - Mirpukhas - Khokhrapar	-	-	220
21	N-125	Taxila - Khanpur – Hairpur	-	-	44
22	N-155	Larkana - Moenjo Daro Road	-	-	28
23	N-255	Larkana - Nasirabad via RasheedWagan	-	-	34
24	N-305	Sakrand - Shaheed Benazirabad	-	-	35
25	N-455	Larkana - Kamber – Shahdadt	-	-	50
26	N-655	Ratodero - Naudero Road	-	-	18
27	S-1	KKH-Skardu Road (Strategic Road)	-	-	167
28	S-2	Kohala-Muzaffarabad	-	-	40
29	S-3	Muzaffarabad – Chakothi	-	-	55
30	M-1	Islamabad-Peshawar Motorway	155	-	-
31	M-2	Lahore-Islamabad Motorway incl. 32 Km	367	-	-
32	M-3	Pindi Bhattian-Faisalabad Motorway	53	-	-
33	M-4	Faisalabad - Khanewal - Multan 241	115	-	-
34	N-5A	Khanewal – Lodhran	-	-	102
35	M-8	Gwadar-Hoshab-Khuzdar-Ratodero	-	-	436
36	M-9	Karachi-Hyderabad Motorway	-	-	136
37	M-10	Karachi Northern Bypass	-	-	57
38	-	Layari Expressway	-	39	-
Total (Current National Highways)			690	93	10392

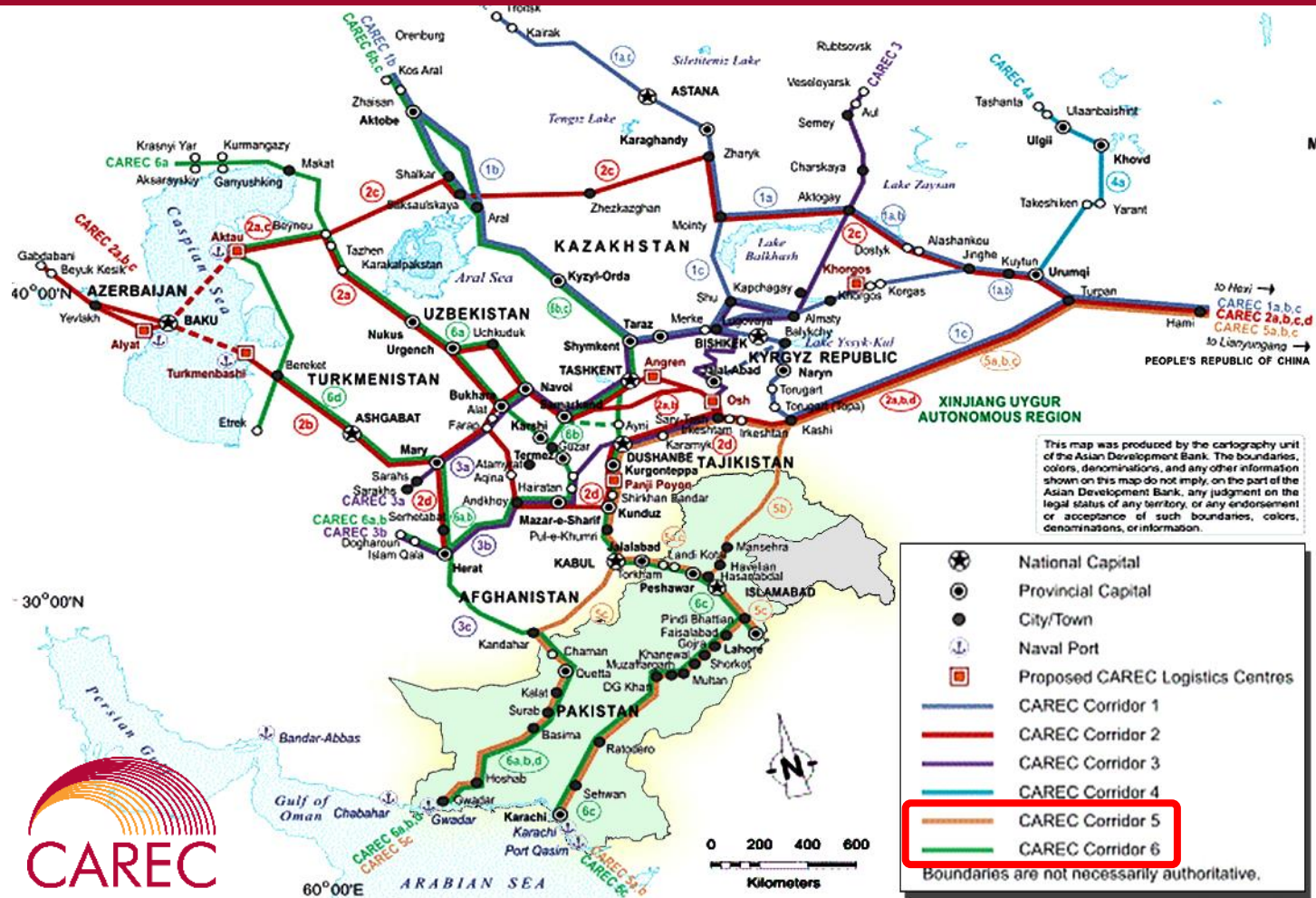
Planned 2016-18

Sr. No.	Route No.	Road Description	Length in Kilometers		
			Motoway	Expressway	Highway
1	KLM	Hyderabad – Sukkur	296	-	-
2	KLM	Sukkur - Multan	387	-	-
3	KLM	Abdul Hakeem – Lahore	230	-	-
4	E-35	Burhan - Havalian	60	-	-
5	CPEC	Havalian - Thakot	39	-	81
6	M-4	Gojra - Khanewal	124	-	-
7	SLM	Lahore - Sialkot	-	91	-
8	-	Yakmach - Kharan	-	-	200
9	CPEC	Islamabad – DIKhan	-	210	-
10	M-9	Karachi - Hyderabad	136	-	-
11	MMM	Muzaffarabad – Mangla - Mirpur	-	174	-
Total (Planned 2016-18)			1,272	475	281

LINK SLIDES



CENTRAL ASIA REGIONAL ECONOMIC COOPERATION (CAREC)



N-35 (KKH) Khunjrab – Hassanabdal (806 km)



N-35 (KKH) Khunjrab – Hassanabdal (806 km)



N-35 (KKH) Atta Abad Barrier Lake



M-1 Peshawar – Islamabad Motorway (155 Km)



M-2 Lahore – Islamabad Motorway (357 Km)



M-4 Pindi Bhattian - Faisalabad Motorways (53 Kms)



M-4 Faisalabad – Gojra Motorway (59 Kms)



N-5 (Grand Trunk Road) Karachi – Peshawar 1,819 km



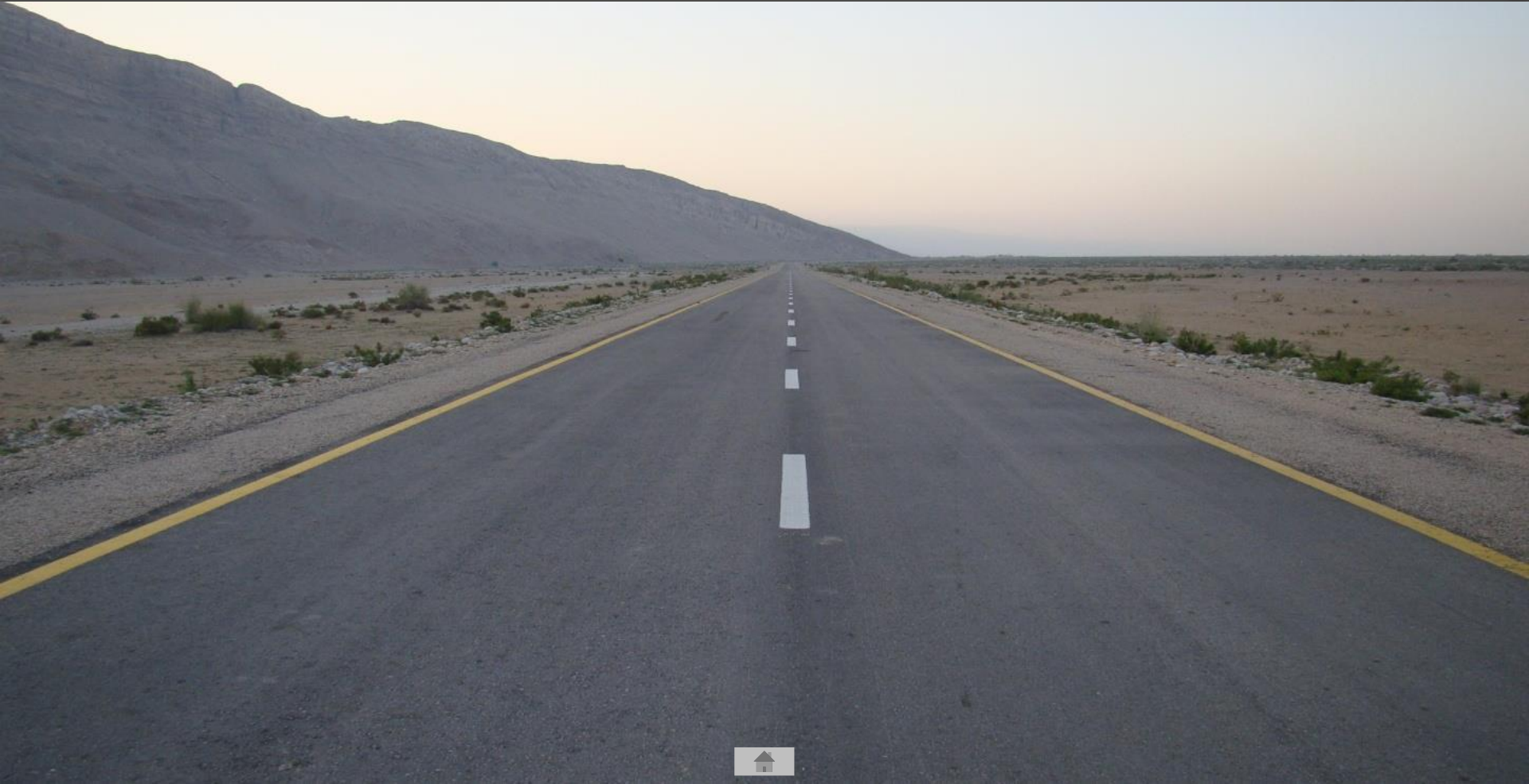
N-75 (Islamabad – Murree Dual Carriage Way) 54 km



N-10 (Makran Coastal) 653 km



M-8 (Gwadar – Turbat – Hoshab) 193 Km



M-9 (Hyderabad – Karachi) 136 Km



N-25 (Karachi – Kalat – Quetta – Chaman) 813 Km



N-40 Quetta – Taftan (Iran Border)



N-70 (DG Khan – Loralai)



N-85 (Sura – Basima – Hoshab)



N-45 (Nowsehra – Dir – Chitral) 309 km



N-90 (Khwazakhela – Besham) 64 km



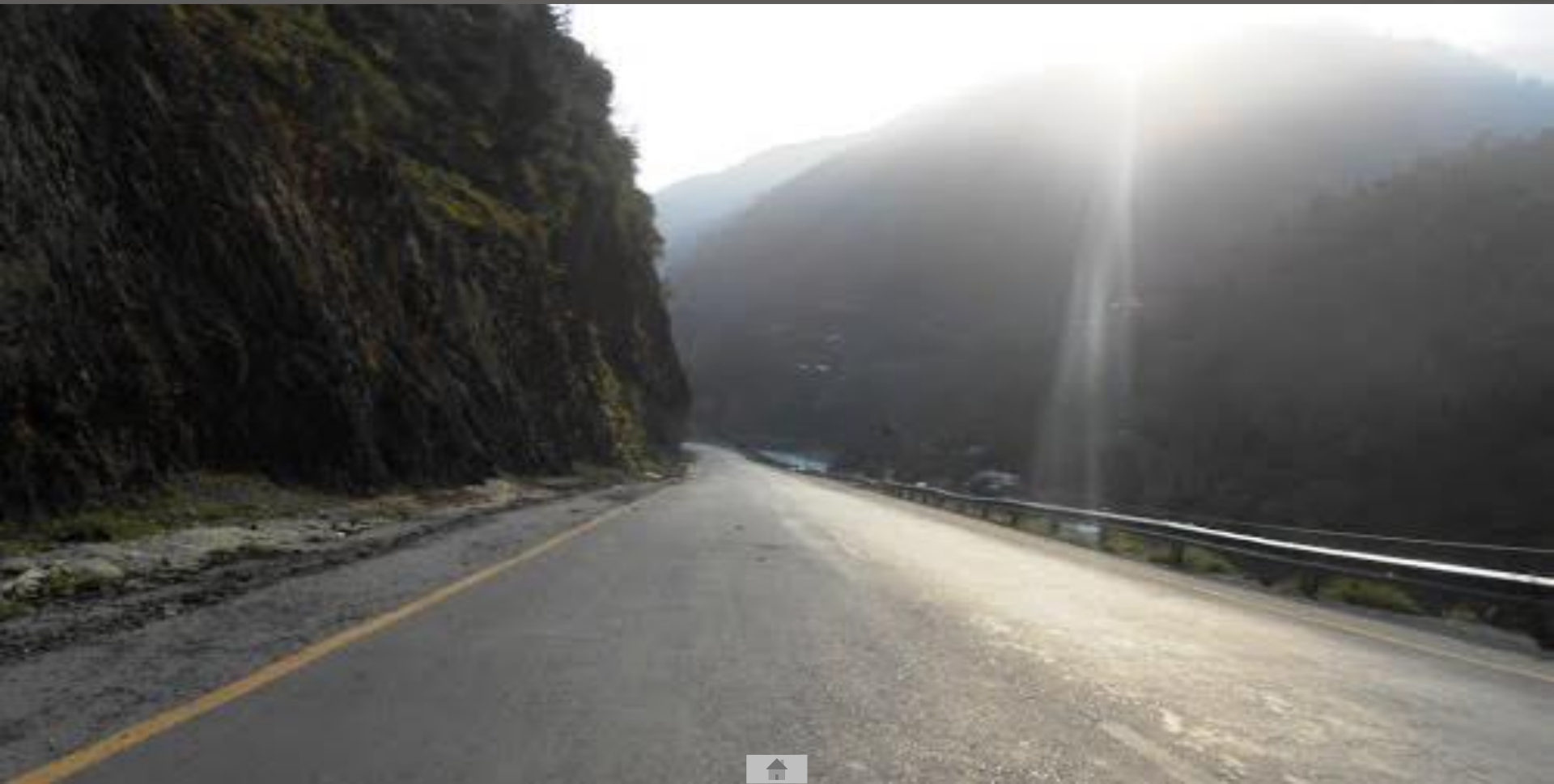
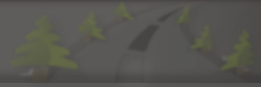
N-95 (Chakdara – Kalam) 135 km



N-15



N-15

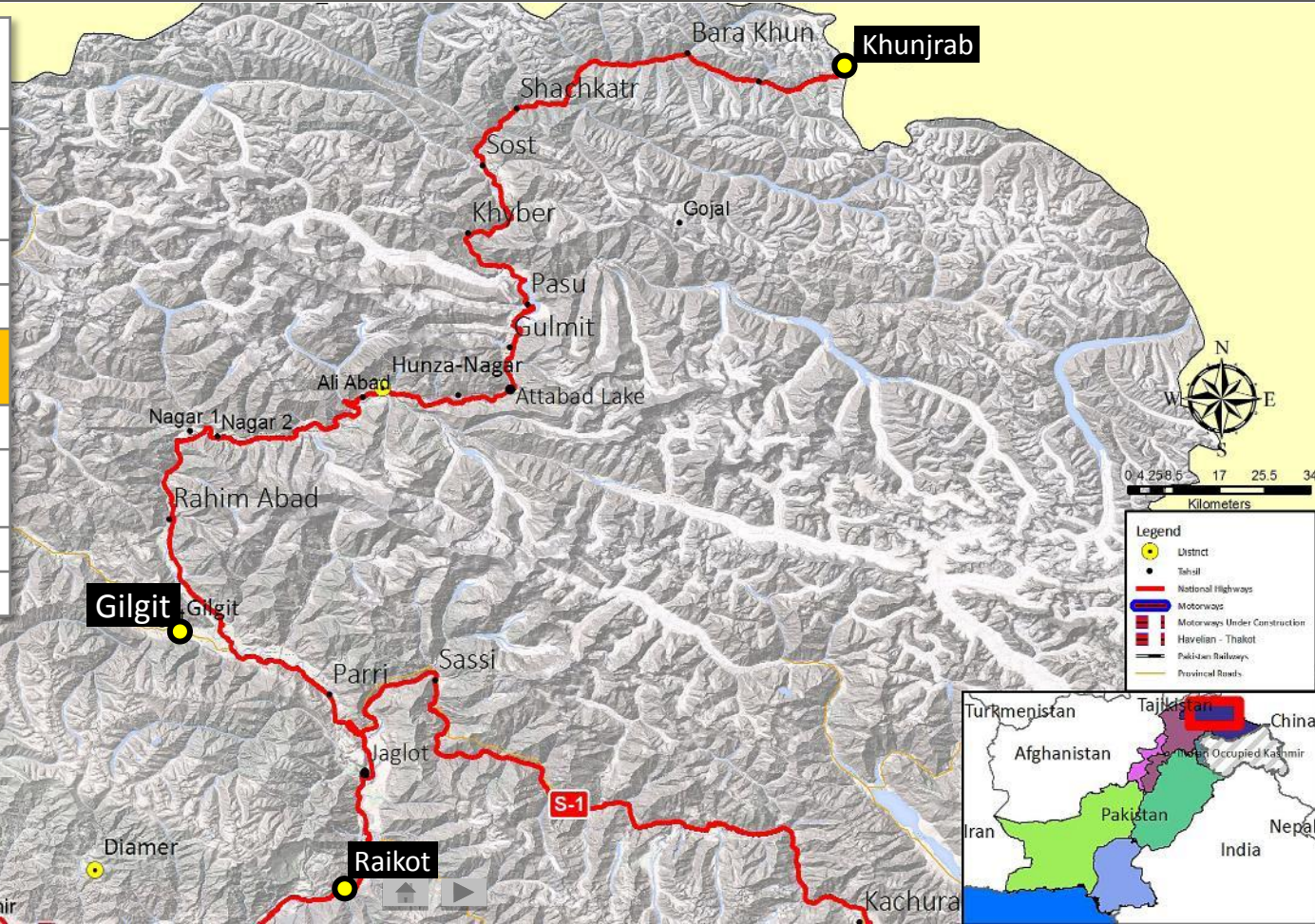


Link Slides



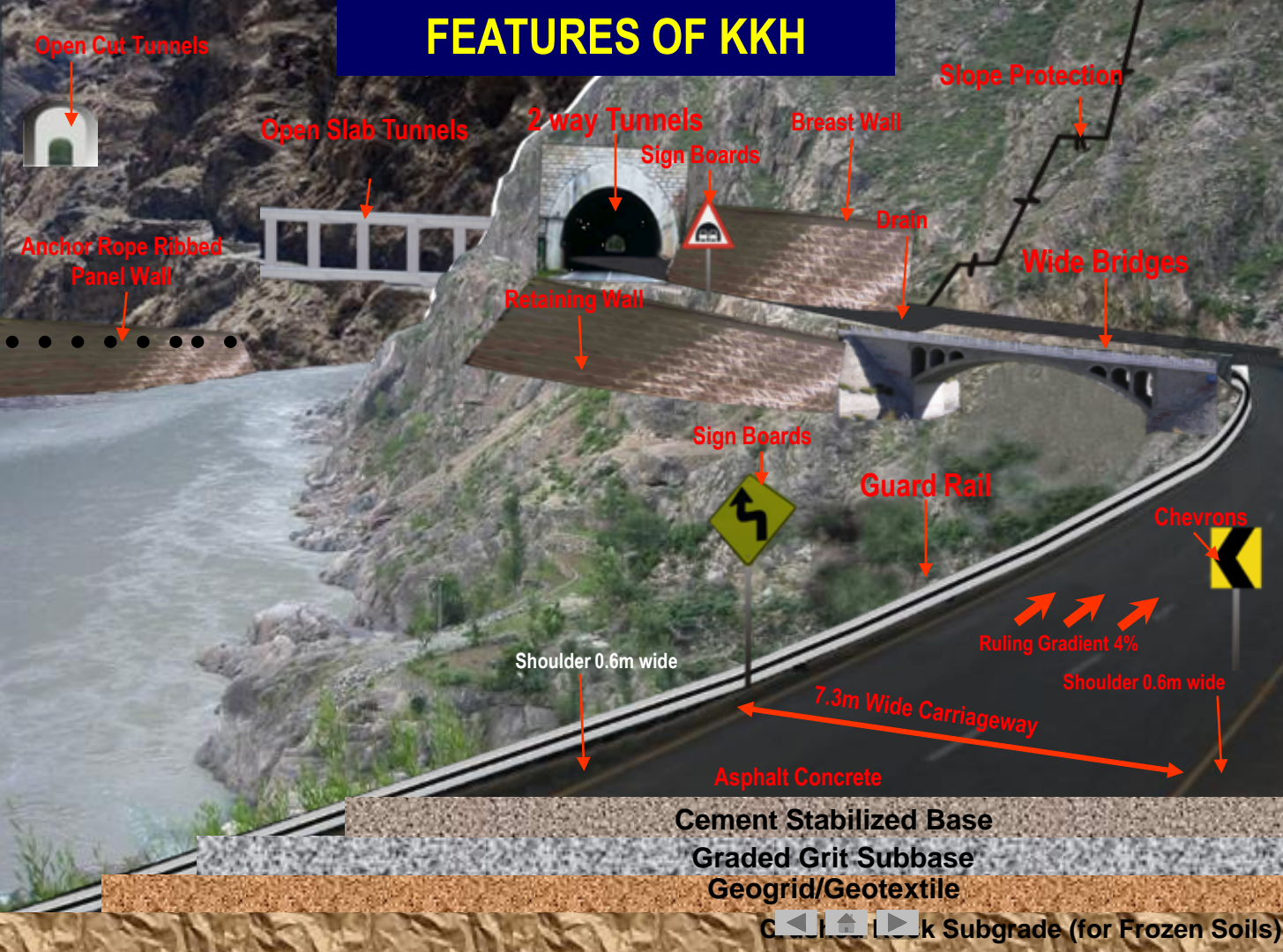
KKH Improvement / Up-gradation Project (Raikot – Khunjerab Section) 335 Km

Contractor	China Road and Bridge Corporation (CRBC)
Mode of Contract	Engineer, Procure, Construct-Contract (EPC/ Turnkey)
Total Project Cost	US\$ 510.42 Million
Date of Comm.	August 01, 2008
Date of Completion	Nov 30 th , 2013 (64 Calendar Months)
Tunnel (Mined)	02-697 meter
Tunnel (Open cut/Shed)	16 No's
Bridges (New)	35 No's
Culverts (New)	1,040 Nos.

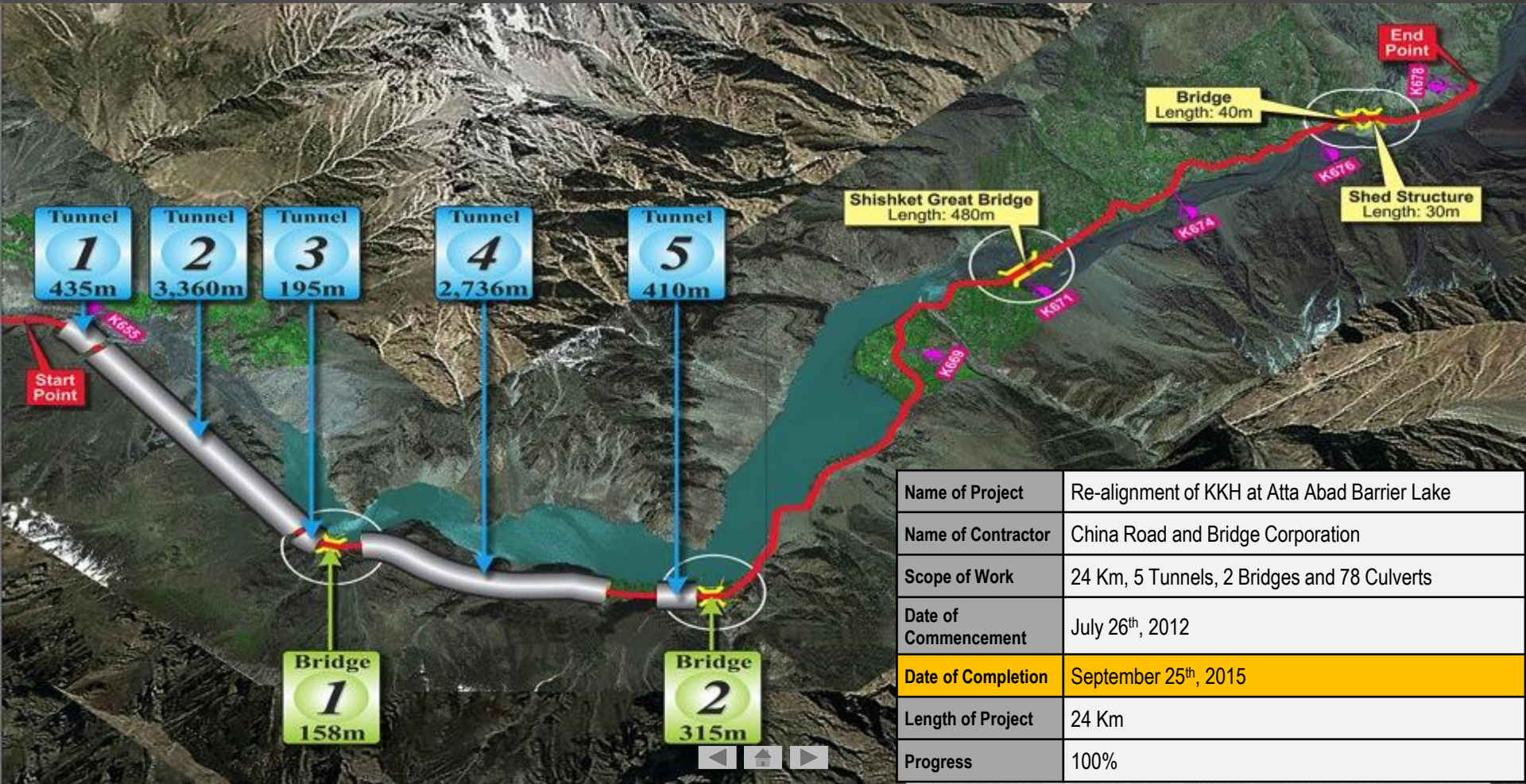


Completed
CAREC: 5b

FEATURES OF KKH



Atta Abad Barrier Lake



Name of Project	Re-alignment of KKH at Atta Abad Barrier Lake
Name of Contractor	China Road and Bridge Corporation
Scope of Work	24 Km, 5 Tunnels, 2 Bridges and 78 Culverts
Date of Commencement	July 26 th , 2012
Date of Completion	September 25 th , 2015
Length of Project	24 Km
Progress	100%

Atta Abad Barrier Lake (KKH)



Atta Abad Barrier Lake (KKH)

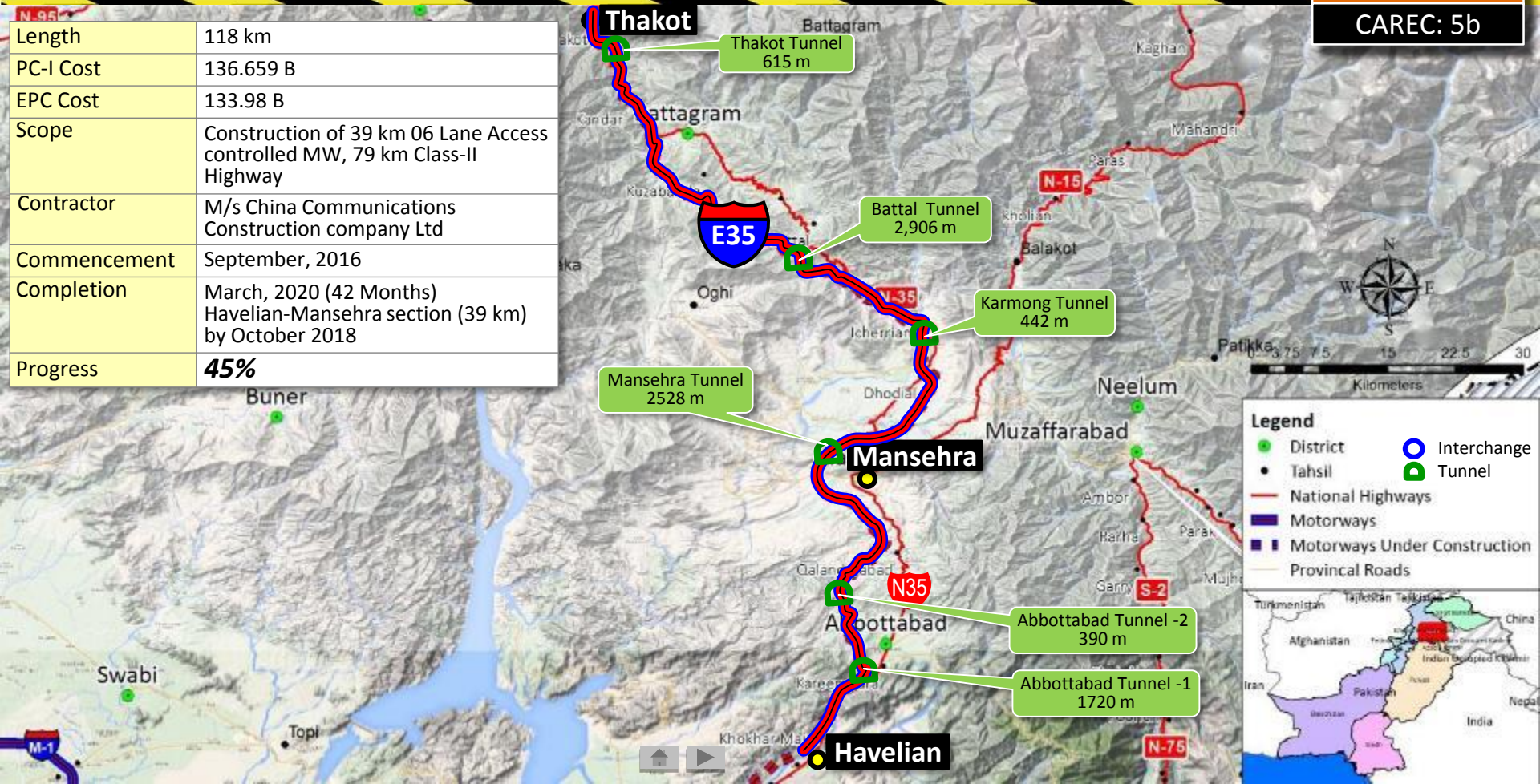


Havelian – Thakot Section (CPEC)

Ongoing

CAREC: 5b

Length	118 km
PC-I Cost	136.659 B
EPC Cost	133.98 B
Scope	Construction of 39 km 06 Lane Access controlled MW, 79 km Class-II Highway
Contractor	M/s China Communications Construction company Ltd
Commencement	September, 2016
Completion	March, 2020 (42 Months) Havelian-Mansehra section (39 km) by October 2018
Progress	45%



Salient Features

Length	118 Km
Contractor	M/s China Communications construction company Ltd
Type of Road	Expressway/ Access Controlled Highway (Class-II)
PC-I cost (Works)	PKR 136.65 Billion
PC-I cost (Land) Original Under Revision	7.267 Billion 13.178 Billion
Contract Cost	PKR 133.98 Billion
Start Point	Havelian
End Point	Thakot
ROW	a. Havelian – Abbottabad 60 M b. Abbottabad – Mansehra 60 M c. Mansehra – Battagram 40 M d. Battagram –Thakot Section 40 M

TECHINICAL FEATURES OF THE PROJECT

Sr. No.	Item	Unit	Technical Standards and Sections		
1	Highway classification	-	Expressway (Havelian – Abbottabad) (27.601 KM)	Expressway (Abbottabad – Mansehra) (11.910 KM)	Class II Highway (Mansehra – Battagram) (79.170 KM)
2	No of Lanes	Nos.	06	06	02
3	Design speed	KM/h	100	80	60
4	Minimum radius of horizontal curve	m	437	252	125
5	Maximum longitudinal slope	%	4~6	4~6	6
6	Pavement structure	-	Flexible pavement	Flexible pavement	Flexible pavement

Detail of Structures

Sr. No.	Structure Description	Total Numbers
1.	Tunnels	06 No's (02x in Section-I&II having length of 2,110 meters and 04x in Section-III with length of 6,491 meters)
2.	Interchanges	03 No's
3.	Bridges	101 No's (Total Length= 12.769 KM)
4.	Culverts	440 No's
5.	Underpasses/Cattle creeps	29 No's
6.	Toll Plazas	07 No's
7.	Weigh Stations	07 No's
8.	Service Areas	02 No's

Tunnels Progress

S#	TUNNEL NAME	Description	Entrance Excavation Length (Meters)	Exit Excavation Length (Meters)	Total completed length (Meters)	Total length (Meters)	% completed length (Meters)
1	Abbotabad 1 # Tunnel	K73+260-K75+025	450.7	645.3	1096	1765	62.10%
		ZK73+316-ZK75+040	305.1	655.1	960.2	1724	55.70%
2	Abbotabad 2 # Tunnel	K78+260-K78+660	24.6	375.4	400	400	100.00%
		ZK78+253-ZK78+625	29	343	372	372	100.00%
3	Mansehra Tunnel	K100+922-K103+450	413	580	993	2528	39.28%
4	Karmang Tunnel	K13+227-K136+669	0	0	0	442	0.00%
5	Battal Tunnel	K144+874-K147+780	750	704	1454	2906	50.03%
6	Thakot Tunnel	K176+125-K176+640	565.5	0	565.5	615	91.95%

Abbottabad Tunnel No. 1 Entrance



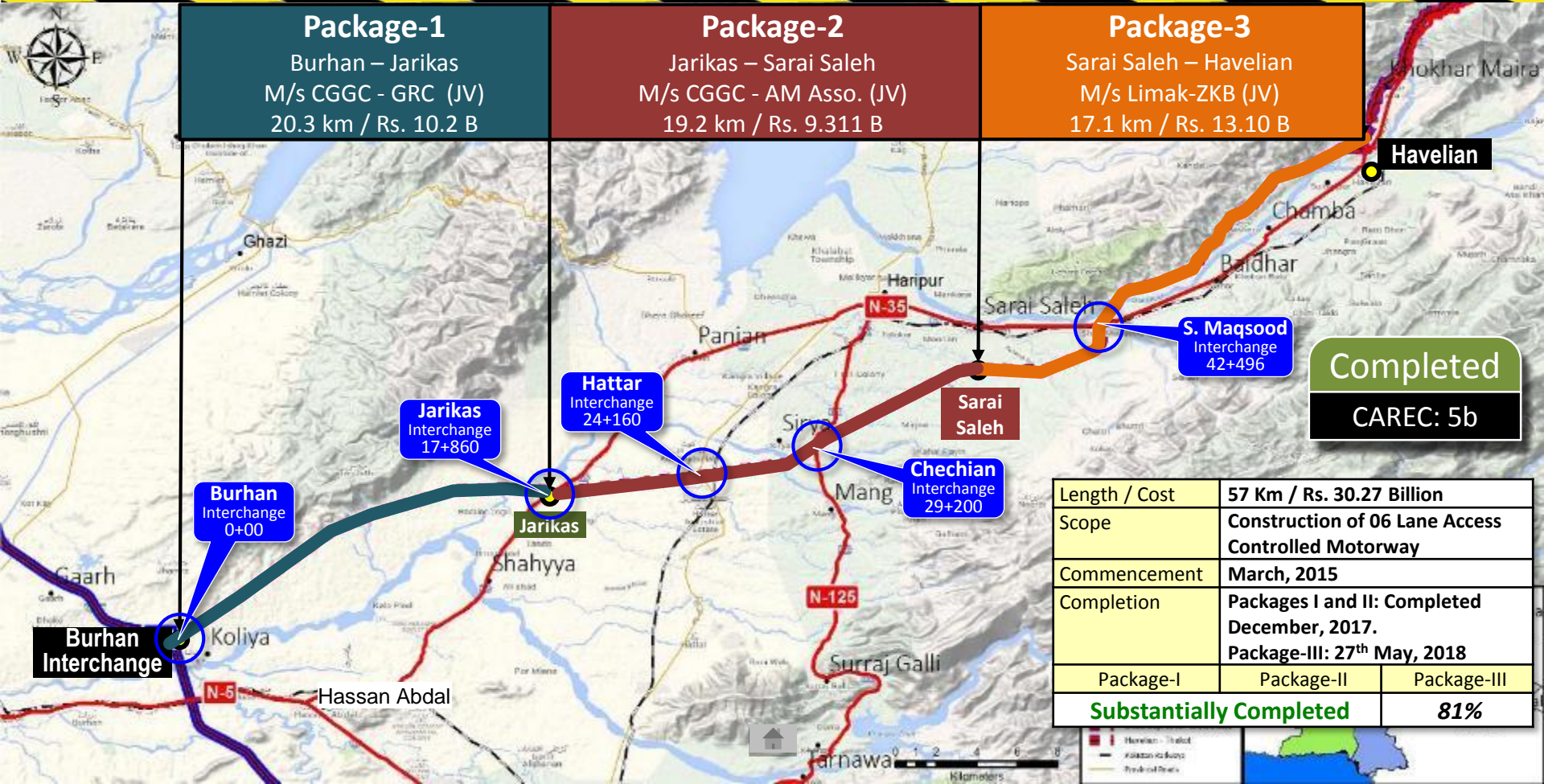
Abbottabad Tunnel No. 1 Exit



Abbottabad Tunnel No. 1 Exit



ADB Funded Burhan to Havelian (Hazara Motorway) 6 Lanes



Package-1
 Burhan – Jarikas
 M/s CGGC - GRC (JV)
 20.3 km / Rs. 10.2 B

Package-2
 Jarikas – Sarai Saleh
 M/s CGGC - AM Asso. (JV)
 19.2 km / Rs. 9.311 B

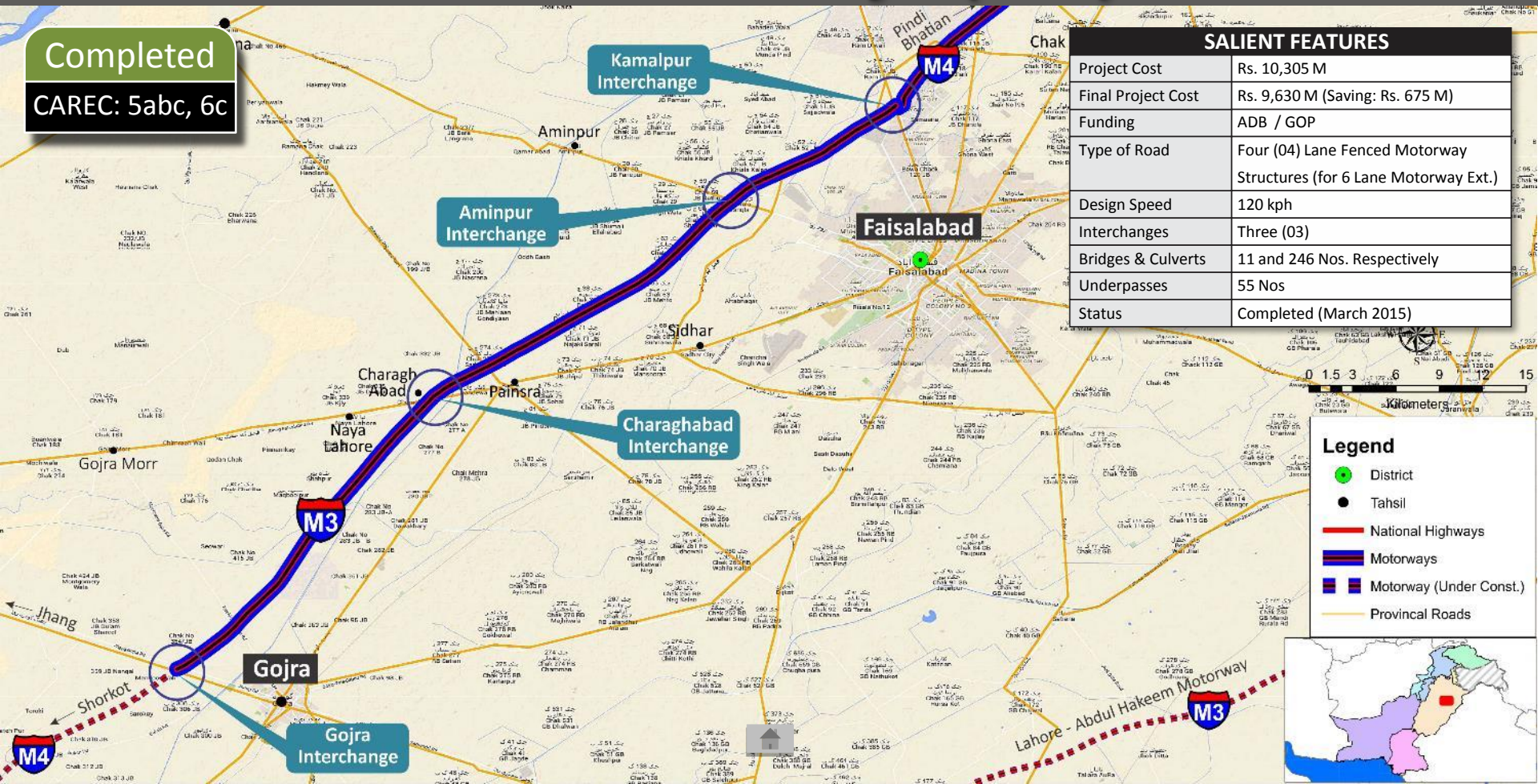
Package-3
 Sarai Saleh – Havelian
 M/s Limak-ZKB (JV)
 17.1 km / Rs. 13.10 B

Completed
 CAREC: 5b

Length / Cost	57 Km / Rs. 30.27 Billion	
Scope	Construction of 06 Lane Access Controlled Motorway	
Commencement	March, 2015	
Completion	Packages I and II: Completed December, 2017. Package-III: 27 th May, 2018	
	Package-I	Package-II
	Substantially Completed	
		81%

Faisalabad – Gojra (M-4)

Completed
CAREC: 5abc, 6c



SALIENT FEATURES	
Project Cost	Rs. 10,305 M
Final Project Cost	Rs. 9,630 M (Saving: Rs. 675 M)
Funding	ADB / GOP
Type of Road	Four (04) Lane Fenced Motorway Structures (for 6 Lane Motorway Ext.)
Design Speed	120 kph
Interchanges	Three (03)
Bridges & Culverts	11 and 246 Nos. Respectively
Underpasses	55 Nos
Status	Completed (March 2015)

Legend

- District
- Tahsil
- National Highways
- Motorways
- Motorway (Under Const.)
- Provincial Roads



ADB Funded Gojra – Shorkot Section (62 Km)

Gojra – Shorkot Section (62 Km)		Project Details
Section/Package	Section-2A Gojra-Jamani	Section-2B Jamani-Shorkot
Length	31 km	31 km
Contract Cost	8.35 Billion	8.83 Billion
Scope	Construction of 04 Lane Access Controlled Motorway With 06 Lane Structures.	
Contractor	M/s Xinjiang Beixin	M/s China Railways 1 ST Group
Commencement	March, 2016	
Completion	2018	2018
Progress	62%	50%

Ongoing
CAREC: 5abc, 6c



Shorkot

Jamani

Toba Tek Singh

Gojra

To Lahore

To Faisalabad

To Khanewal

To Abdul Hakim

M3

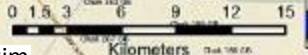
Gojra Interchange

T.T. Singh Interchange

Waryamwala Interchange

Shorkot Interchange

Rajana



ADB Funded Shorkot – Khanewal (M-4) 65 Km

Shorkot – Khanewal (M-4) 65 Km		Project Details
Section / Package	Section-3A Shorkot-Dinpur	Section-3B Dinpur-Khanewal
Length	31 km	34 km
Contract Cost	11.22 Billion	10.82 Billion
Scope	Construction of 04 Lane Access Controlled Motorway With 06 Lane Structures.	
Contractor	M/s China Gezhouba -GRC JV	M/s Xinjiang Beixin
Commencement	December, 2016	
Completion	September, 2018	
Progress	39%	32%

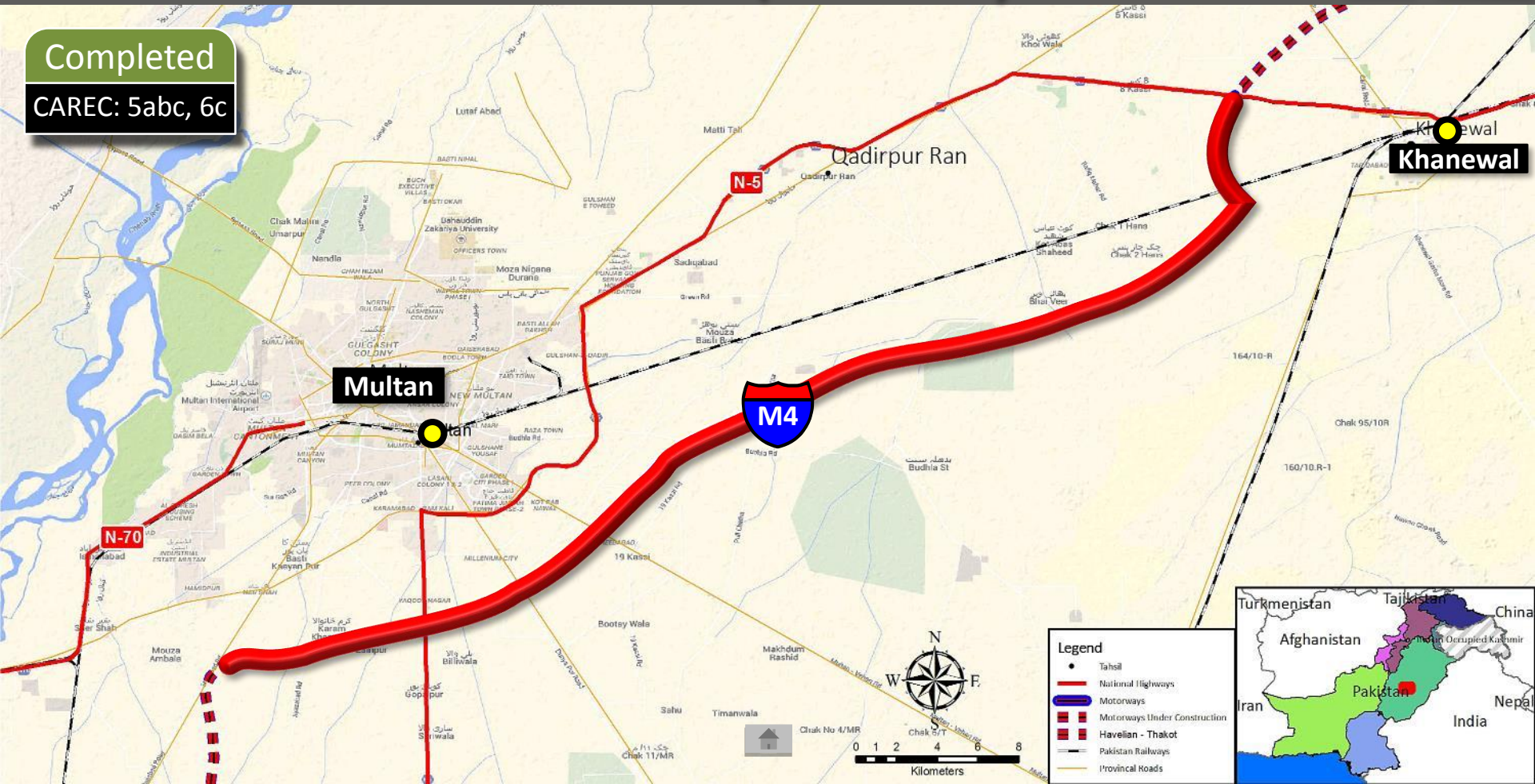
Ongoing
CAREC: 5abc, 6c



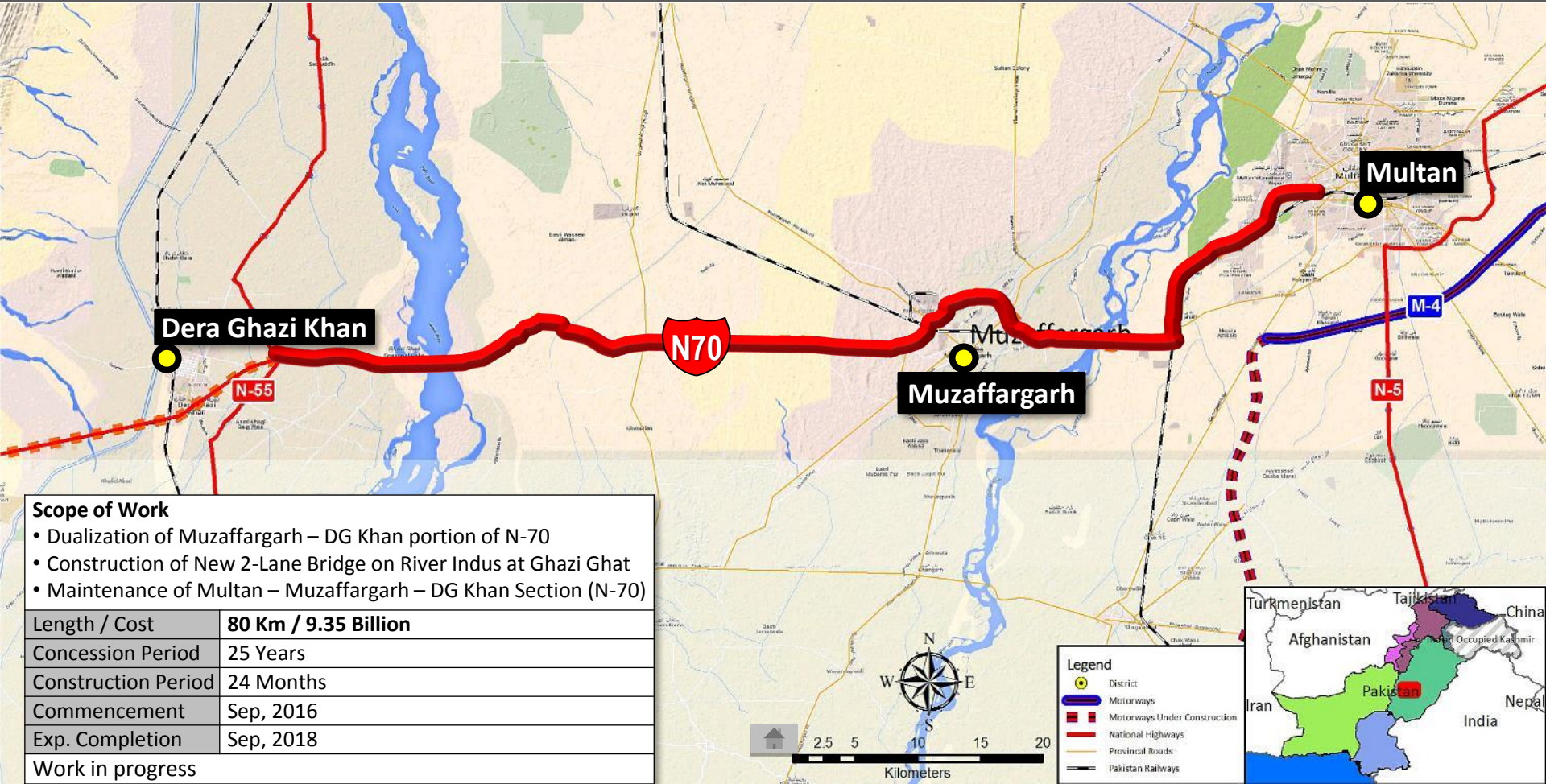
Khanewal – Multan (M-4 Ext.) 55.6 Kms

Completed

CAREC: 5abc, 6c



Multan – Muzaffargarh – DG Khan (N-70)



Scope of Work

- Dualization of Muzaffargarh – DG Khan portion of N-70
- Construction of New 2-Lane Bridge on River Indus at Ghazi Ghat
- Maintenance of Multan – Muzaffargarh – DG Khan Section (N-70)

Length / Cost **80 Km / 9.35 Billion**

Concession Period **25 Years**

Construction Period **24 Months**

Commencement **Sep, 2016**

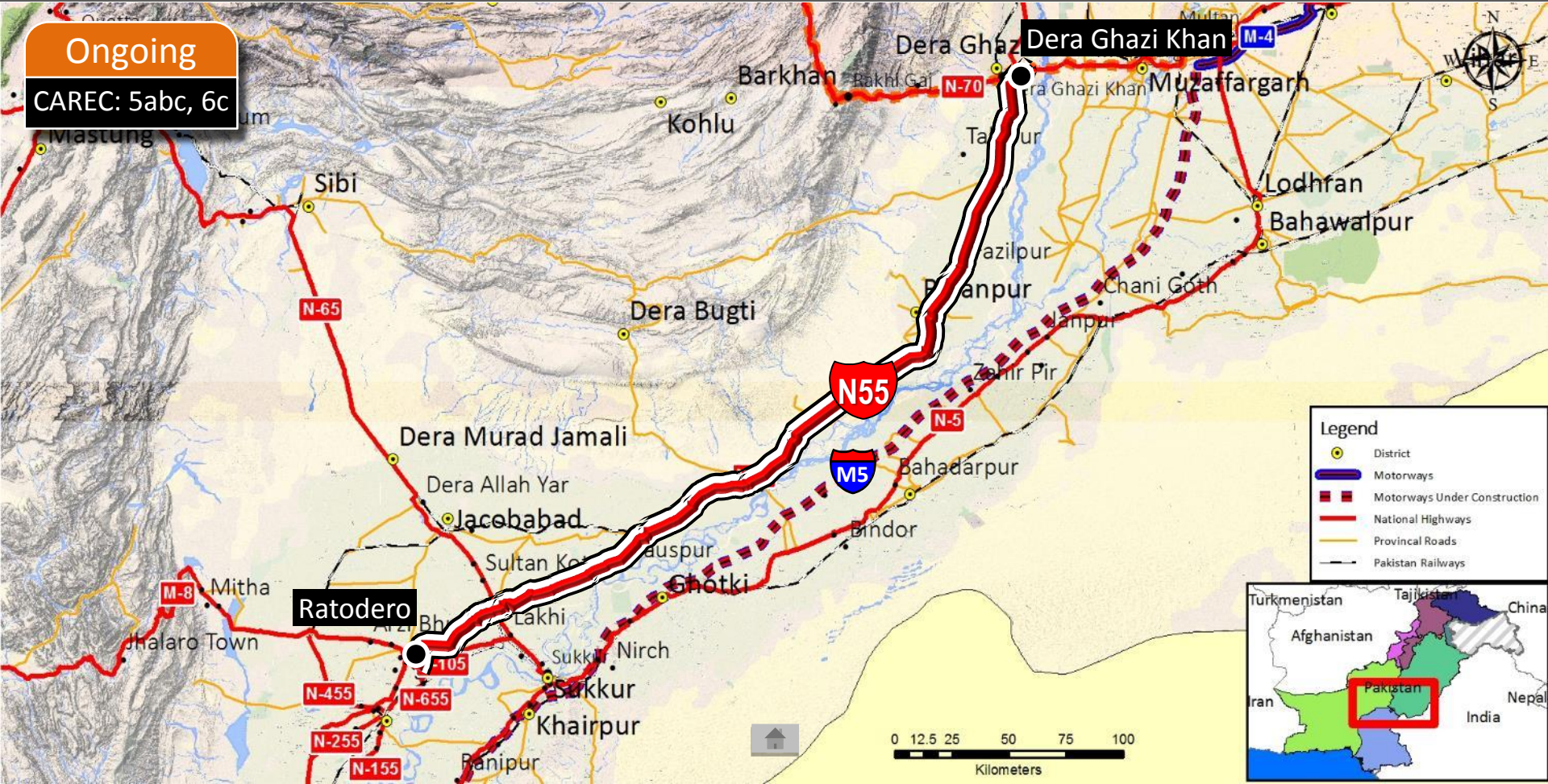
Exp. Completion **Sep, 2018**

Work in progress

Ratodero - Dera Ghazi Khan (N-55) (Expressway - 200 Km)

Ongoing

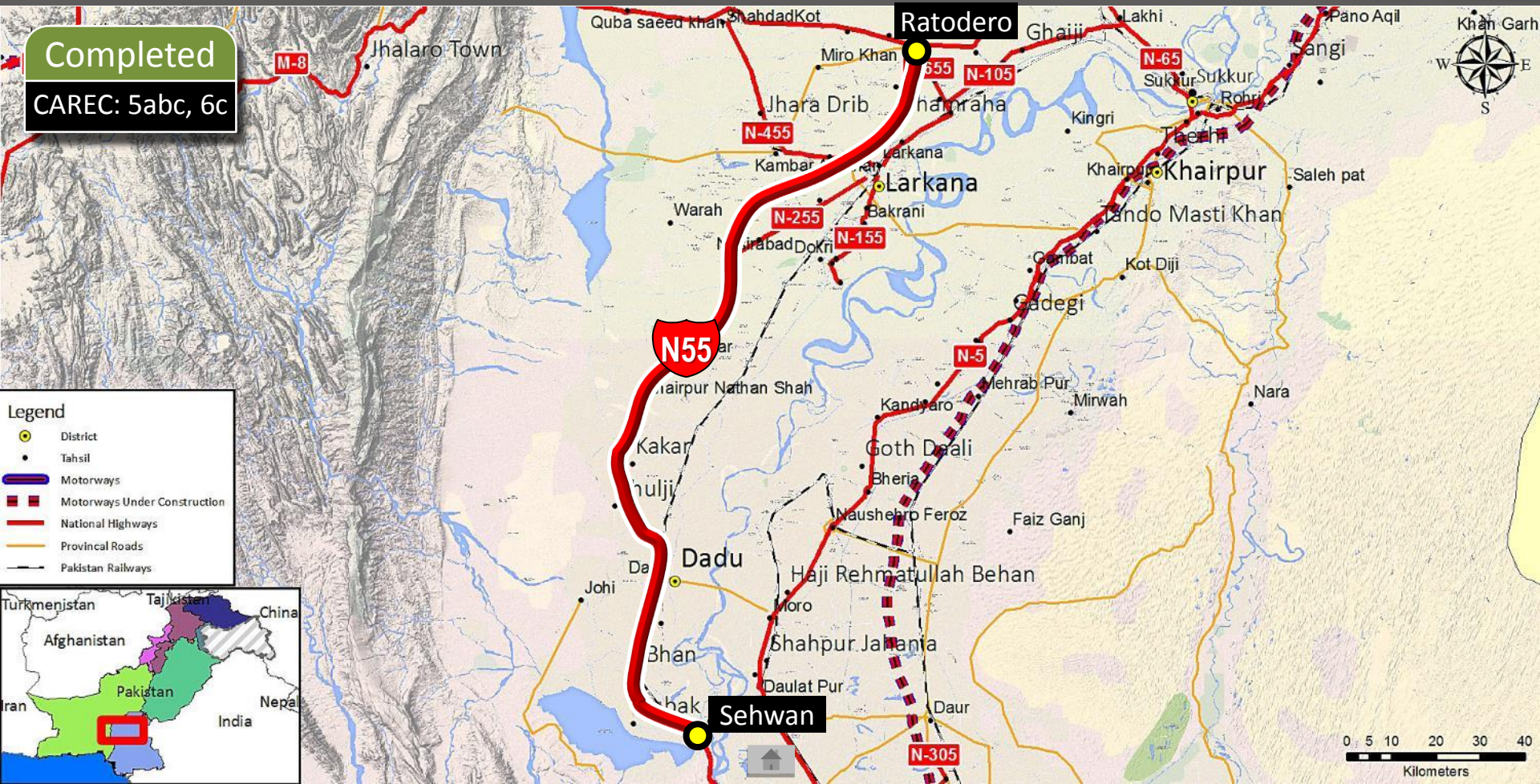
CAREC: 5abc, 6c



Sehwan - Ratodero (N-55) (Expressway -199 Km) – (JBIC & GOP)

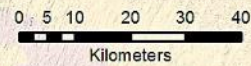
Completed

CAREC: 5abc, 6c

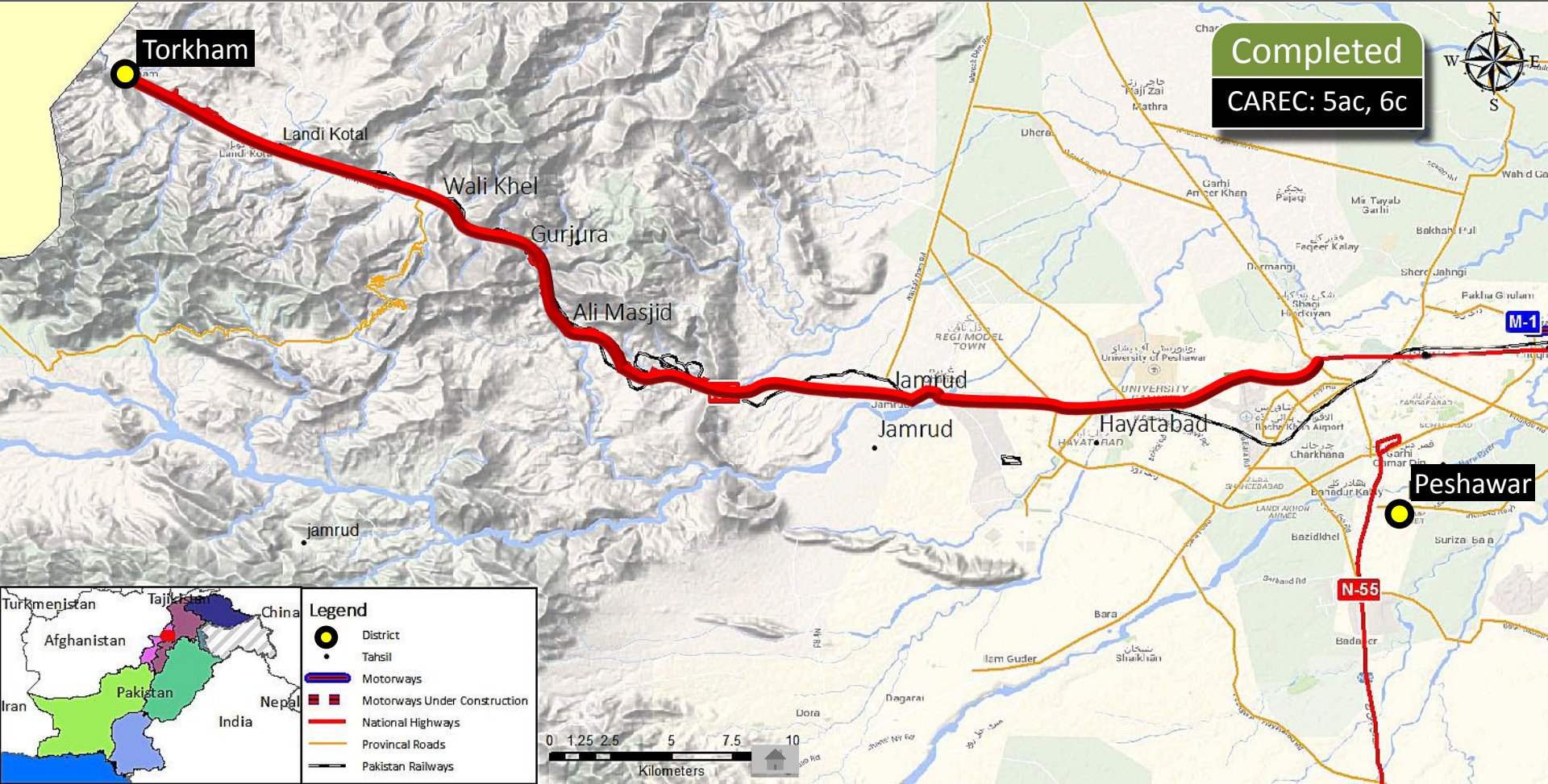


Legend

- District
- Tahsil
- Motorways
- - - Motorways Under Construction
- National Highways
- Provincial Roads
- Pakistan Railways

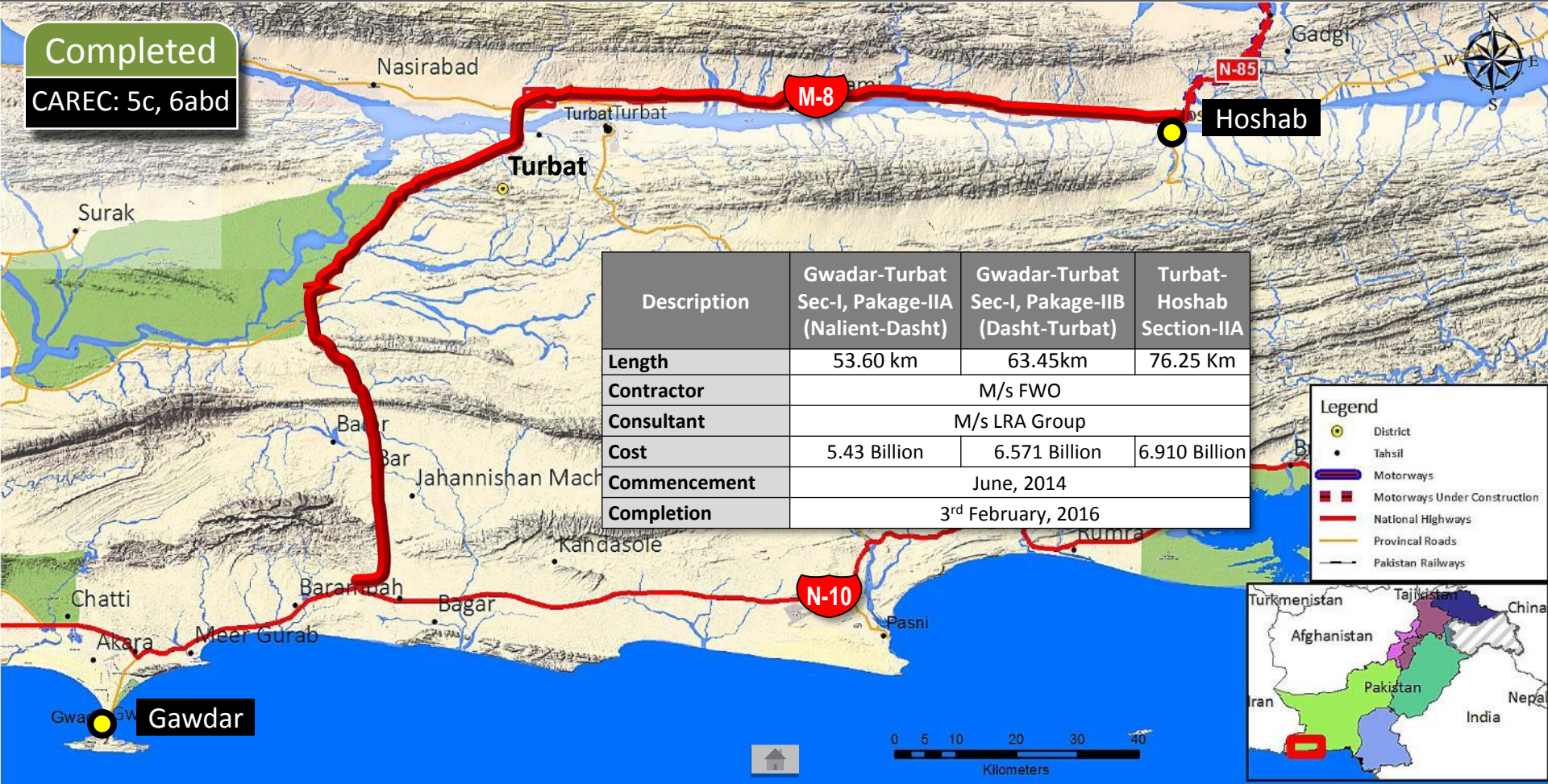


Peshawar - Torkham N-5 (47 km) USAID



Gwadar – Hoshab Motorway (M-8) GoP

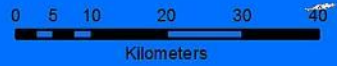
Completed
CAREC: 5c, 6abd



Description	Gwadar-Turbat Sec-I, Package-IIA (Nalient-Dasht)	Gwadar-Turbat Sec-I, Package-IIB (Dasht-Turbat)	Turbat-Hoshab Section-IIA
Length	53.60 km	63.45km	76.25 Km
Contractor	M/s FWO		
Consultant	M/s LRA Group		
Cost	5.43 Billion	6.571 Billion	6.910 Billion
Commencement	June, 2014		
Completion	3 rd February, 2016		

Legend

- District
- Tahsil
- Motorways
- Motorways Under Construction
- National Highways
- Provincial Roads
- Pakistan Railways

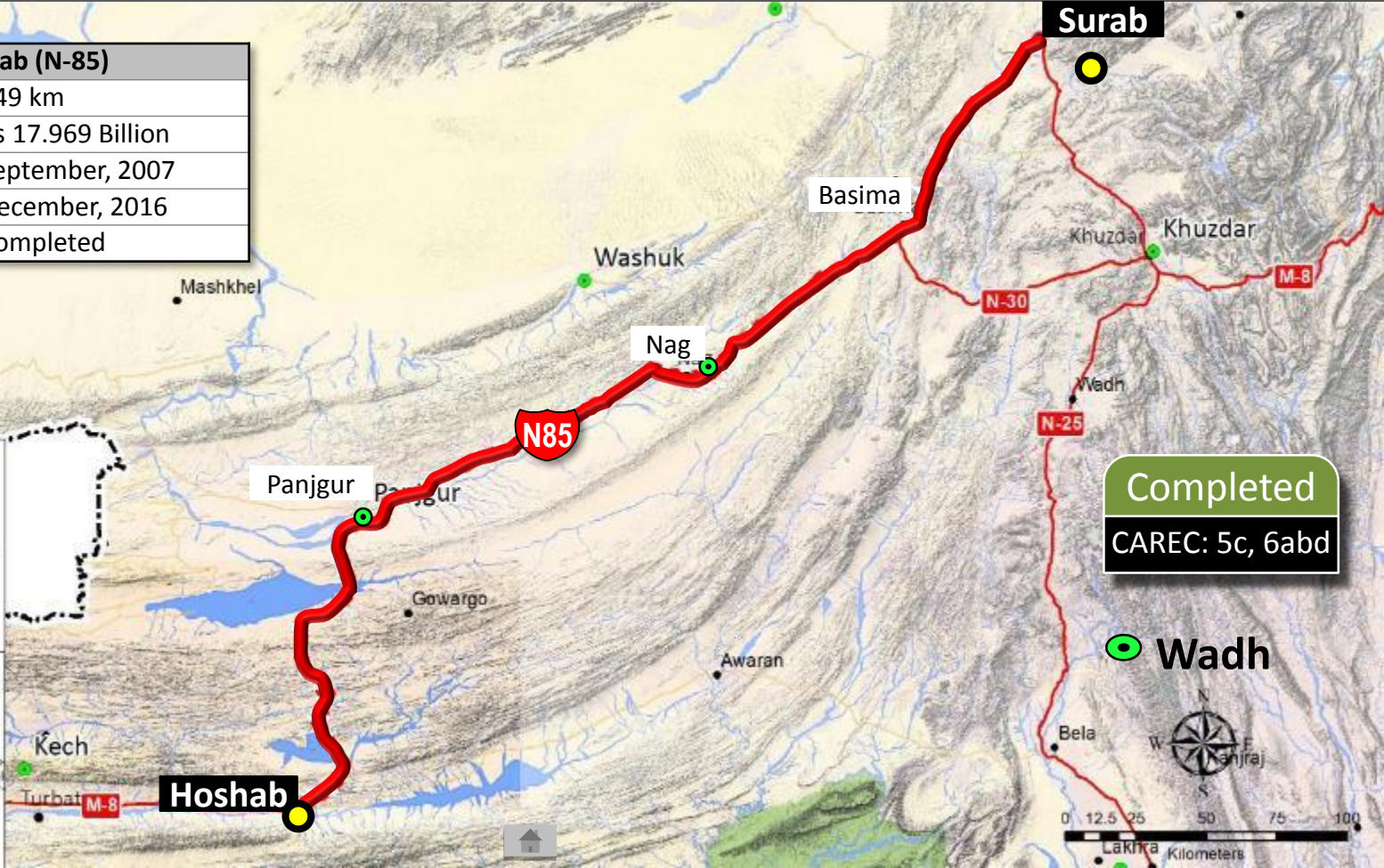


Surab – Hoshab (N-85)

Surab-Hoshab (N-85)	
Length	449 km
Cost	Rs 17.969 Billion
Commencement	September, 2007
Completion	December, 2016
Status	Completed

Legend

- District
- Tahsil
- ▬ Motorways Under Construction
- ▬ National Highways
- ▬ Motorways
- ▬ Provincial Roads



Completed
CAREC: 5c, 6abd

Wadh

Khuzdar-Kalat-Quetta– Chaman Section (N-25)

Jungle-PirAlizai -Chaman
existing 2 lane carriageway
56 km

Existing Carriageway

Balance work of Kalat – Quetta - Chaman (N-25) 226 km	
Length / Cost	116 (Pckg. II & IV) / 90 MUSD
Contractor	M/s FWO(EPC)
Commencement	June, 2014
Completion	June, 2016

Additional works of 4xbridges, toll plazas, Wiegh bridges and Kuchlack Bypass are underway and shall be completed 2018

Completed
CAREC: 5c, 6abd

Additional Carriageway (Khuzdar – Chaman)

Length	431 km
--------	--------

- FS completed/ Detailed Design underway

