



PRESENTATION BY THE CHAIRMAN
NATIONAL HIGHWAY AUTHORITY
FOR
PAKISTAN DEVELOPMENT FORUM-2005

ROADS NETWORK
DEVELOPMENT

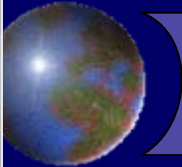
26.04.2005



TRAFFIC LOAD SHARE IN PAKISTAN

<u>MODE</u>	<u>PASSENGERS</u>	<u>FREIGHT *</u>
ROADS	90%	107,000
RAIL	8%	5,000
AIR	2%	25

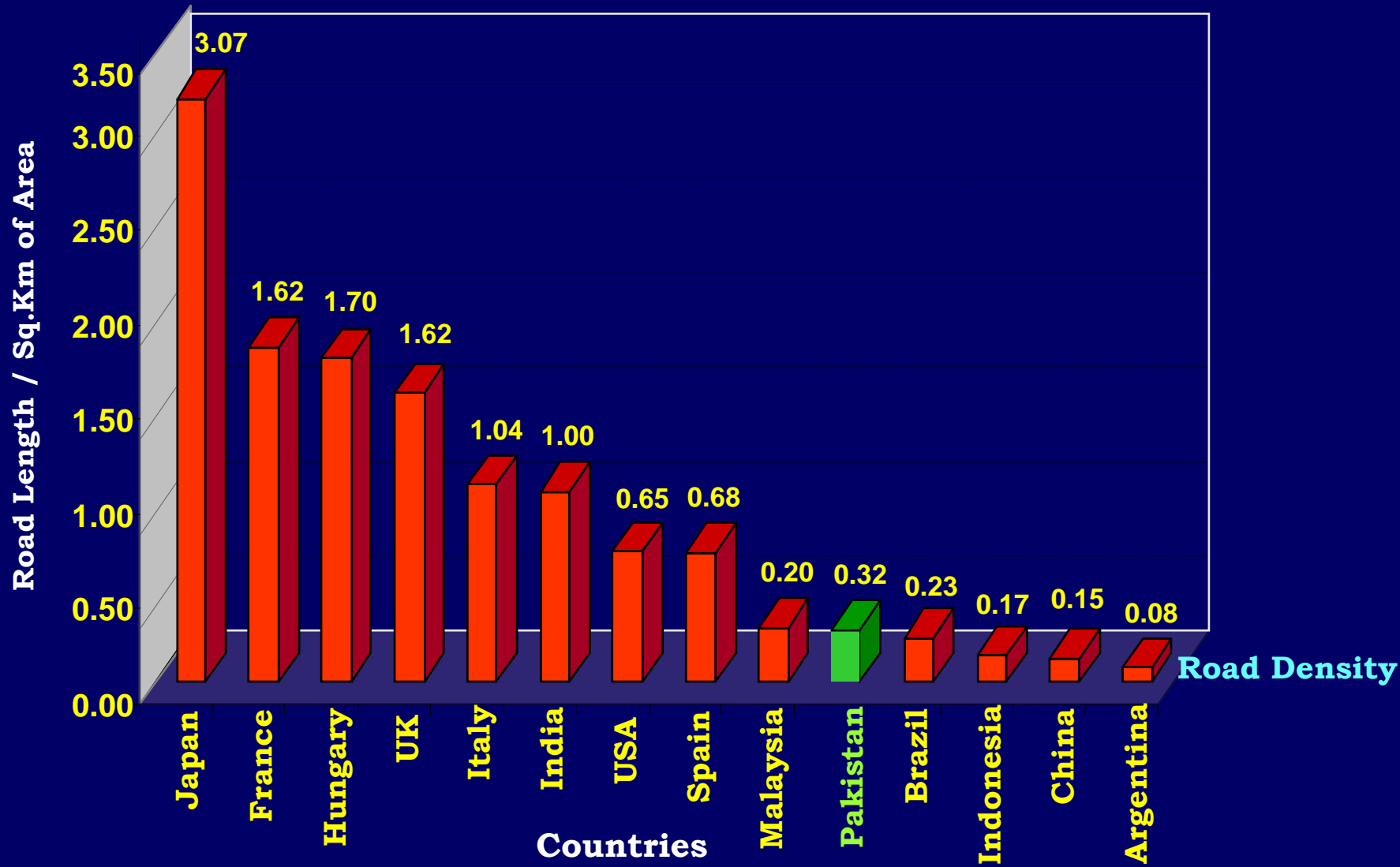
* NOTE:
FREIGHT IN MILLION TON KM PER ANNUM



ROAD TRANSPORT DATA COMPARISON

	<u>UNIT</u>	<u>1947</u>	<u>2005</u>
TOTAL ROADS	KM	50,367	258,000 ⁺
REGD VEHICLES	NO	21,209	5,000,000 ⁺
MOTORWAYS	KM	NIL	457
NAT HIGHWAYS	KM	NIL	9031
DENSITY	KM / KM²	0.06	0.32

ROAD DENSITY COMPARISON





MISSION STATEMENT

NHA is a relatively new institution established under an Act of the Parliament in 1991. It's mission statement is

**TO SECURE DELIVERY OF EFFICIENT
RELIABLE SAFE AND ENVIRONMENT
FRIENDLY NATIONAL HIGHWAY NETWORK
WITH THE VIEW TO IMPROVE QUALITY OF
LIFE IN PAKISTAN**



NHA - FIRST DECADE

THRUST WAS ON CONSTRUCTION OF NEW ROADS / HIGHWAYS AND DUALIZATION OF EXISTING HIGHWAYS PARTICULARLY N-5



NHA - SECOND DECADE

- **NHA HAS MATURED AND GAINED RECOGNITION BECAUSE OF SIGNIFICANT DEVELOPMENT AND IMPROVEMENT OF PAKISTAN'S INTER-PROVINCIAL NATIONAL HIGHWAY NETWORK. NHA'S CURRENT YEAR'S PSDP ALLOCATION IS Rs 17 BILLION PLUS**
- **CURRENT THRUST IS ON CONSTRUCTION OF PROJECTS LINKING REMOTE AREAS PARTICULARLY ON WEST OF RIVER INDUS & PROVISION OF LINKAGES BETWEEN GWADAR AND CENTRAL ASIA**
- **THRUST IS ALSO ON MAINTENANCE, OPERATION AND PRESERVATION OF ROAD ASSETS FOR HIGH QUALITY SERVICE**

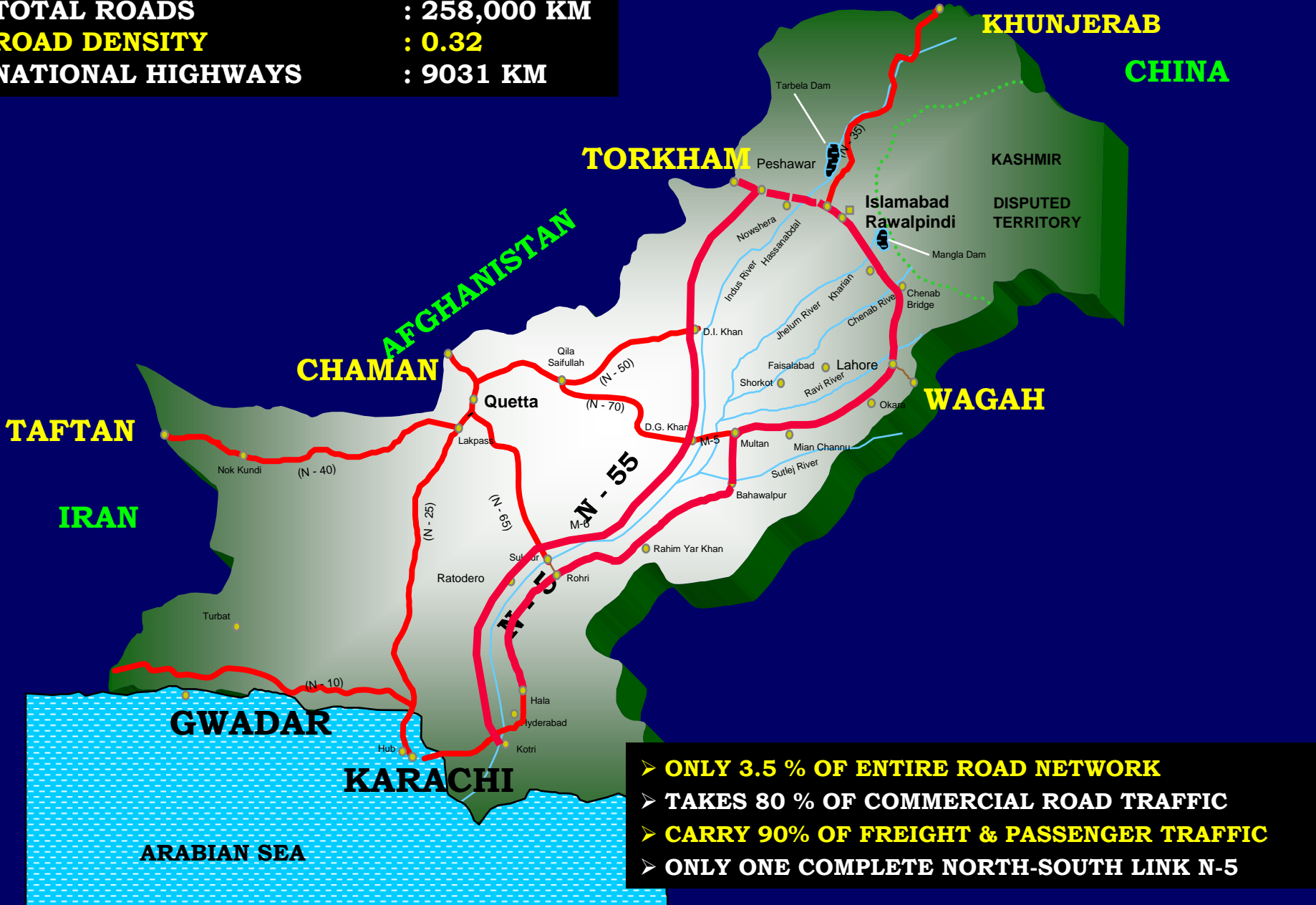
PAKISTAN'S GEO-STRATEGIC LOCATION



In the current geo-political & socio-economic situation, Pakistan is ideally located to cater for the emerging economic challenges at regional/ international level

NATIONAL HIGHWAYS

TOTAL ROADS : 258,000 KM
ROAD DENSITY : 0.32
NATIONAL HIGHWAYS : 9031 KM



- **ONLY 3.5 % OF ENTIRE ROAD NETWORK**
- **TAKES 80 % OF COMMERCIAL ROAD TRAFFIC**
- **CARRY 90% OF FREIGHT & PASSENGER TRAFFIC**
- **ONLY ONE COMPLETE NORTH-SOUTH LINK N-5**

MOTORWAYS

ACCESS CONTROLLED, SAFE, FAST, GRADE-SEPARATED HIGHWAYS CONNECTING MAJOR CITIES WITHIN THE MAIN TRANSPORT CORRIDOR THROUGH SHORTEST POSSIBLE ROUTE

HINA

COMPLETED

M-1 ISLAMABAD - BURHAN	37
M-1 RASHAKAI -CHARSADDA	23
M-2 LAHORE - ISLAMABAD	367
M-3 PINDI BHATTIAN-FAISALABAD	53
ONGOING	
M-1: BURHAN - PESHAWAR	94

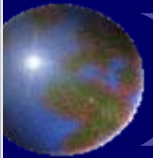


PLANNED

M-4: FAISALABAD-MULTAN	243
(LAND ACQUISITION HAS COMMENCED)	
M-5: MULTAN-DG KHAN	84
M-6: DG KHAN - KAKKAR	467
M-7: KAKKAR - KARACHI	280
M-8: RATODERO - GWADAR	895
M-9: KARACHI-HYDERABAD	136

ARABIAN SEA

IRAN



NATIONAL HIGHWAY N-5 (1819 KM)



CHINA

KASHMIR
DISPUTED
TERRITORY
RAWALPINDI

LAHORE

MULTAN

INDIA

IRAN

ARABIAN SEA KARACHI

HYDERABAD



NATIONAL HIGHWAY (N-5)

- ONLY DUALIZED SOUTH - NORTH LINK FROM KARACHI TO TORKHAM THAT CARRIES ABOUT 65% OF GOODS AND PASSENGERS TRAFFIC OF THE COUNTRY AND CATERS FOR 80% OF PAKISTAN'S ECONOMIC ACTIVITY
- IT IS COUNTRY'S MAIN ECONOMIC LIFELINE AS MOST OF THE INTER-PROVINCIAL NATIONAL HIGHWAYS EITHER TAKE OFF FROM OR TERMINATE ON IT
- RESURFACING / STRENGTHENING OF 306 KM AND REHABILITATION OF 550 KM HAS BEEN UNDERTAKEN UNDER THE WORLD BANK'S ASSISTED NATIONAL HIGHWAY IMPROVEMENT PROGRAM (NHIP)
- CONSTRUCTION OF PESHAWAR – TORKHAM EXPRESSWAY HAS BEEN PLANNED

NOTE

CONSTRUCTION OF TORKHAM – JALALABAD ROAD IS ALREADY IN HAND

EAST WEST CORRIDOR CREATED BY RIVER INDUS

WEST CORRIDOR

- VITAL MISSING/SUBSTANDARD LINKS
- GWADAR PORT PROJECT
- LINKAGES TO AFGHANISTAN

CHINA

AFGHANISTAN

INDIA

IRAN

EAST CORRIDOR

HISTORICALLY AND RELATIVELY MORE DEVELOPED

ARABIAN SEA

FUTURE PROJECTS CONCEPT - DEVELOPMENT OF LINKS AMONG NATIONAL HIGHWAYS ON BOTH SIDES OF RIVER INDUS FOR COMFORT, SPEED & SAFETY PARTICULARLY FREIGHT MOVEMENT

BALUCHISTAN ROAD LINKAGES



DEVELOPMENT PLANS OF THESE LINKAGES ARE SHOWN ON THE NEXT FEW SLIDES



BALUCHISTAN ROAD LINKAGES

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PLANNED WIDENING AND IMPROVEMENT OF RCD HIGHWAY (N-25) :-

- KALAT- QUETTA - CHAMAN (247 KM) THROUGH ADB FINANCING
- HUB-UTHAL (98 KM) FOR REHAB ON AVAILABILITY OF FUNDS
- KARARO - WAD (96 KM) THROUGH JAPANESE ASSISTANCE

WIDENING AND IMPROVEMENT OF SUKKUR - QUETTA LINK (N-65):-

ONGOING PROJECTS

- JACOBABAD-DERA ALLAH YAR BYPASS (27 KM)
- NUTTAL-SIBI (86 KM) CURRENT PROGRESS IS 65 % RECENTLY EXTENDED BY 25 KM UPTO DHADAR

PLANNED PROJECTS

- JACOBABAD BYPASS - SUKKUR (79 KM) DESIGNING IN PROCESS
- DHADAR - QUETTA (135 KM) PC-1 IS BEING PREPARED



BALUCHISTAN ROAD LINKAGES

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WIDENING AND IMPROVEMENT OF MULTAN - DG KHAN - QILA SAIFULLAH HIGHWAY (N-70) :-

ONGOING PROJECTS

- **BEWATA-KHAJURI (68 KM) PROGRESS IS 90%**
- **KHAJURI-WIAGUM RUD SECTION (64 KM) PROGRESS IS 32%**
- **4-LANE SHERSHAH BRIDGE CONSTRUCTION HAS COMMENCED**

PLANNED PROJECTS

- **MULTAN – MUZAFARGARH DUALIZATION**
- **4-LANE MUZAFARGARH NORTHERN BYPASS**
- **MUZAFARGARH – DG KHAN – BEWATA**
- **SECOND RIVER INDUS BRIDGE AT GHAZI GHAT**



BALUCHISTAN ROAD LINKAGES

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WIDENING AND IMPROVEMENT OF DI KHAN – KUCHLAC (NEAR QUETTA) HIGHWAY (N-50):-

ONGOING PROJECTS

- **DI KHAN-MUGHALKOT (124 KM) PROGRESS IS 71%**
- **ZIARAT MORE-KHANOZAI (9 KM) CONTRACT RECENTLY AWARDED**

CONSTRUCTION OF BRIDGES IN HAND

- **FIVE ON ZAM TOWER - MUGHALKOT SECTION**
- **SIX ON ZHOB - MUGHALKOT SECTION**
- **DESIGNING OF ANOTHER 13 BRIDGES/ CAUSEWAYS IN PROCESS**

PLANNED PROJECTS

- **KUCHLAC-ZHOB (306 KM) PC-1 COST IS RS 3556 M**

GWADAR LINKAGES

**KHUZDAR-KHORI
(35 KM)
COMPLETED**

**SORAB-BASIMA-NAG (192 KM)
NEARING COMPLETION BY
ADB ASSISTANCE**

**KALAT-QUETTA-
CHAMAN (247 KM)
(ADB FINANCED)**

**NAG-PANJGUR-HOSHAB (295 KM)
ALSO PLANNED THROUGH
ADB ASSISTANCE**

**GWADAR-TURBAT-HOSHAB
AWARDED**

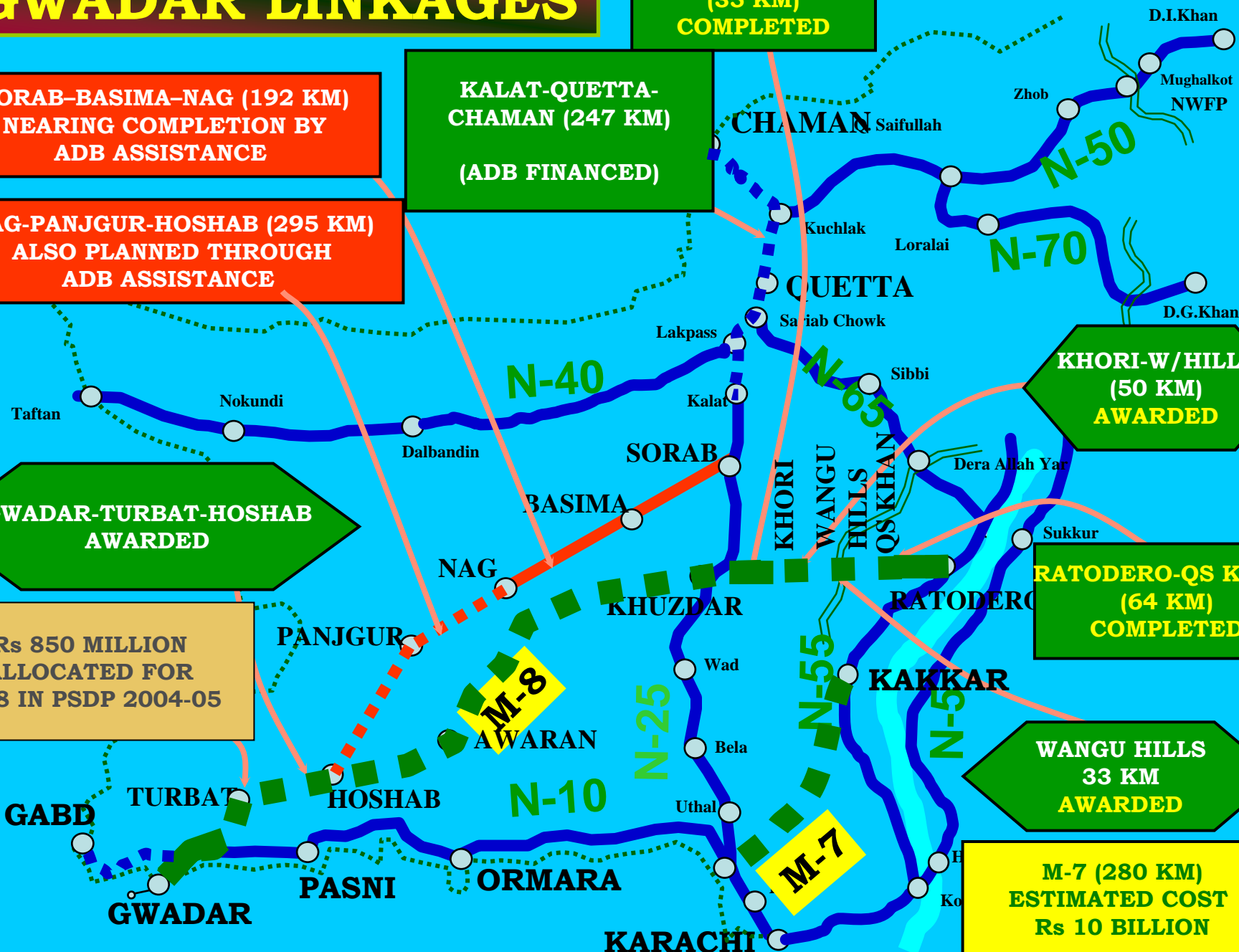
**Rs 850 MILLION
ALLOCATED FOR
M-8 IN PSDP 2004-05**

**KHORI-W/HILLS
(50 KM)
AWARDED**

**RATODERO-QS KHAN
(64 KM)
COMPLETED**

**WANGU HILLS
33 KM
AWARDED**

**M-7 (280 KM)
ESTIMATED COST
Rs 10 BILLION**



COMPLETED PROJECTS

- **MAKRAN COASTAL HIGHWAY (533 KM)**
- **KHUZDAR-KHORI (35 KM)**
- **RATODERO-QS KHAN (64 KM)**

ONGOING PROJECTS

- **GWADAR-TURBAT-HOSHAB (193 KM) IN 3 SECTIONS**
- **KHORI-WANGU HILLS (50 KM)**
- **WANGU HILLS REACH (33 KM)**

ONGOING PROJECT (LONG TERM)

- **HOSHAB -RATODERO (410 KM)**

ONGOING PROVINCIAL PROJECT (ADB FUNDING)

- **SORAB-BASIMA-NAG (192 KM) NEARING COMPLETION**

PLANNED PROVINCIAL PROJECT (ADB FUNDING)

- **NAG-PANJGUR-HOSHAB (295 KM)**

INDUS HIGHWAY (N-55, 1265 KM)



COMPLETED ———

PLANNED ———



INDUS HIGHWAY (N-55)

COMPLETED PROJECTS (JAPANESE ASSISTANCE)

- 757 KM LENGTH IN PHASES 1 & 2
- KOHAT TUNNEL

ONGOING PROJECTS

- DI KHAN – CRB CANAL (14 KM) PROGRESS 52 %
- RAJANPUR – DG KHAN (107 KM) 3 SECTIONS PROGRESS 12 %

PLANNED PROJECTS

- MALANA – SARA-E-GAMBILA (117 KM) ADB FUNDING
- DARRA ADAM KHEL – BADABHER (29 KM) DCW ADB FUNDING
- SEHWAN – DADU – MEHR - LARKANA - RATODERO (200 KM) IN 4 SECTIONS (JBIC HAS EXPRESSED INTEREST)

ANOTHER PLANNED LINK

- SARA-E-GAMBILA - GHULAM KHAN (118 KM) ADB FUNDING



SOME OTHER DEVELOPMENT PROJECTS

- **THE ROAD LINKING RAWALPINDI WITH KOHAT (N-80) HAS RECENTLY BEEN FEDERALIZED. NHA HAS PLANNED ITS UPGRADATION TO NHA STANDARD INCLUDING CONSTRUCTION OF BRIDGE OVER RIVER INDUS AT KHUSHALGARH**
- **NHA HAS PLANNED DUALIZATION OF HASANABDAL - ABBOTTABAD - MANSEHRA SECTION (90 KM) OF THE KARAKORAM HIGHWAY. ADB IS WILLING TO FINANCE**
- **CONSTRUCTION OF MINI RAIL TUNNEL AT LOWARI PASS (N-45) FOR LINKING CHITRAL VALLEY SHALL COMMENCE SOON**
- **CONSTRUCTION OF MANSEHRA - NARAN SECTION (124 KM) HAS ALREADY BEEN COMPLETED AND THAT ON NARAN - JHALKHAD SECTION (48 KM) IS IN HAND (PROGRESS 70%). CONSTRUCTION OF JHALKHAD-CHILLAS SECTION (68 KM) SHALL COMMENCE SOON**
- **CONSTRUCTION OF ISLAMABAD - SATRA MILE - LOWER TOPA EXPRESWAY (43 KM, N-75) IS IN HAND (PROGRESS 76%)**
- **CONSTRUCTION OF KARACHI NORTHERN BYPASS AND LYARI EXPRESSWAY IS IN PROCESS**



Basic Planning Parameters

- At least 50% programs to be based on Economic Internal Rate of Return (EIRR)
- **Balanced geographic distribution of investment with stress on uniform/standardized specifications of all highways irrespective of traffic volume**
- Socio-political condition and opening of remote/new areas to major economic centers for inter-provincial harmony
- **Development of an alternate North South, fast track, planned economic corridor (Motorways)**
- Poverty alleviation through enhanced economic activities
- **Provision of environment friendly and safe road network**
- Meeting strategic & defence requirements



Corporate Culture

- **Road construction and maintenance has now become very expensive**
- **NHA is fully aware that government funding alone cannot suffice to meet the growing demands of the network**
- **NHA has organized itself as a corporate entity through introduction of various measures**



NHA Role as a Service Provider

- **NHA has introduced the fee-for-service concept in line with provisions of NHA Act**
- **NHA has adopted a service provider role and transformed itself into a real public service entity**
- **Under service provider role, NHA introduced the road user fee ie toll**
- **Toll is imposed on good quality road sections only and NHA ensures that the quality is always maintained and improved to a specified minimum standard**
- **Road users particularly heavy commercial vehicle operators have accepted the fact that payment of toll is imperative for using a good quality road**



Road Asset Management

- **NHA has established the Road Asset Management Directorate (RAMD)**
- **Focus is on preservation of existing network through quality maintenance by utilizing toll revenue**
- **NHA has developed state-of-the-art methodology for maintenance and is moving towards self sufficiency in this field**



Axle Load Management

To safeguard the national highway network from the damages caused by overloading weigh stations have been installed

Planned	:	55
Installed	:	45



Highway Safety

- To control accidents and achieve best flow of traffic more attention and resources are being diverted to highway safety
- **Highway safety devices and signs of international standard have been and are being installed throughout the network**
- Through better engineering and management techniques safety on roads is being enhanced
- **Repeated public awareness campaigns are launched**
- **National Highways Safety Ordinance was promulgated in 2000**
- **More and more national highway sections are being covered by the National Highway Police**



**“NATIONS DO NOT BUILD
THE ROADS; IT IS
ROADS THAT BUILD THE
NATIONS”**