Guidelines and Standard Operating Procedure (SOP) for implementation of Bharatmala Pariyojana Program

The Cabinet Committee on Economic Affairs has approved the implementation of an umbrella programme for the National Highway Road Sector – "Bharatmala Pariyojana Phase-1", spanning over a period of 5 years (2017-2022) at an estimated outlay of Rs. 5,35,000 crore, as communicated by the Cabinet Secretariat vide its No. CCEA/26/2017(i) dated 26th October 2017.

I - OVERVIEW OF THE PROGRAM

1 About the Program:

- 1.1 The objective of the program is to optimize the efficiency of freight and passenger movement across the country by bridging critical infrastructure gaps through development of Economic Corridors, Inter Corridors and Feeder Routes, National Corridor Efficiency Improvement, Border and International connectivity roads, Coastal and Port connectivity roads and Green-field expressways.
- 1.2 Identification of the project stretches under the components of the proposed program is based on detailed Origin-Destination (O-D) study, freight flow projections and verification of the identified infrastructure gaps through geomapping.
- 1.3 Construction of a total length of about 24,800 kms is being taken up under Phase-I of Bharatmala Pariyojana. In addition, Phase-I would also include about 10,000 kms of residual works of National Highway Development Project (NHDP).

2 Components of the program and fund allocation:

2.1 As per the CCEA approval, Phase-I of Bharatmala Pariyojana program is to be implemented over a period of five years i.e. FY 2017-18 to FY -2021-22. The summary of components identified under Phase-I and the approved outlay for the same are as follows:

Sr. No.	Components	Length (in km)	Outlay – (Rs crore)
A.	Bharatmala		
1	Economic corridors development	9,000	1,20,000
2	Inter-corridor & feeder roads	6,000	80,000
3	National Corridors Efficiency improvements:	5,000	100,000
4	Border & International connectivity roads	2,000	25,000
5	Coastal & port connectivity roads	2,000	20,000

Sr. No.	Components	Length (in km)	Outlay – (Rs crore)
6	Expressways	800	40,000
	Sub-Total	24,800	385,000
B.	Balance road works under NHDP		1,50,000
	Total		5,35,000

Details on the various components and the criteria for selection are given in Annexure I(a) and Annexure I(b).

2.2 Minister (RT&H) has been authorized to substitute/ replace up to 15% length of 24,800 kms for Phase-I of the program by other suitable projects, if development of certain identified stretches under the program cannot be taken up on account of issues pertaining to alignment finalization, problems associated with land availability and other unforeseen factors.

3 Project allocation across Implementation Agencies:

- 3.1 Different components of the Bharatmala Pariyojana will be implemented by Ministry of Road Transport and Highways through various implementation agencies viz. the National Highways Authority of India (NHAI), National Highways and Infrastructure Development Corporation Limited (NHIDCL) and State Public Works Departments (PWDs)/ State Road Development Corporations (RDCs) through the Roads Wing of the Ministry.
- 3.2 NHAI shall be responsible for development/ upgradation and maintenance of Economic Corridors, Inter corridor and Feeder Routes, National Corridors (GQ, NS-EW) (including addressing choke points and congestion points), Border and International connectivity roads, Coastal and port connectivity roads and Greenfield expressways in the country except for projects implemented through the Roads Wing and the EAP Cell of Ministry [Refer Annexure II(a) II(i)].
- NHAI shall be responsible for development of logistics parks as in **Annexure II(j)**, for improving efficiency of the corridors, in line with the policy issued by the Department of Commerce, Ministry of Commerce and Industry. The NHAI Board (Authority) shall be competent to approve the concession agreement for the Logistics Parks. In the like manner, the NHAI shall be responsible for development of way-side amenities in the corridors.
- 3.4 NHAI shall complete the residual works of NHDP as in **Annexure III(a)**.
- 3.5 NHAI shall also develop other roads, entrusted to it (through letters vide no. NH-24028/01/2016 dated 04.04.2016 and NH-14013/6/2014-P&M(Pt) dated 17.10.2017 [Annexure III(d)]) which are not part of Bharatmala Pariyojana or NHDP through NH(0) and follow the extant appraisal and approval process for

these roads.

- 3.6 NHIDCL shall be responsible for development/ upgradation and maintenance of the projects in the North-Eastern States of the country i.e. economic corridors (No. 44), feeder routes (No. 46, 48, 49, 66, 101, 103, 110 and 116), international connectivity routes (No. 12, 14-20) and the border roads (No. 22-28) in the North Eastern states as per **Annexure III(b)**.
- 3.7 EAP Cell in the Ministry shall be responsible for development/ upgradation and maintenance of projects funded through any externally aided scheme including NHIIP scheme. The residual works to be undertaken, apart from those indicated under the Bharatmala corridors, are as per **Annexure III(c)**.
- 3.8 The Roads Wing of MoRTH shall be entrusted with the responsibility of development/ upgradation of other roads not entrusted to NHAI or NHIDCL or EAP Cell.
- 3.9 The Roads Wing of MoRTH shall also be responsible for development of roads connecting Backward districts and Religious & Tourist centres (Annexure III(e)) through NH(O) and follow the extant appraisal and approval process for these roads.
- 3.10 NHAI is also authorised to develop roads entrusted to it through the State PWDs/ State RDCs for effective implementation. In such cases, an agency fee of a maximum of 1% of the Total Project Cost (which the NHAI gets) shall be paid by NHAI to the executing State PWD/ State RDC.

4 Grand Challenge mechanism

- 4.1 Within the Bharatmala Pariyojana, 10% funds will be kept earmarked to take up projects under the 'Grand Challenge' mechanism on reducing balance basis visà-vis annual fund allocation for the Bharatmala Pariyojana to take up projects on fast track basis where sufficient and timely land is made available by the State Governments as per norms of MoRTH.
- 4.2 The detailed process for the Grand Challenge mechanism is given in **Annexure** IV.
- 4.3 In case certain projects are proposed by the States or are otherwise considered necessary and expedient to build, including Ring Roads or Bypasses, which are not part of Bharatmala Pariyojana Phase-I, then such new project(s) shall be taken up for consideration only if the State/ Agency is ready to bear at least 50% cost of the land acquisition.

II - ONLINE SYSTEMS FOR MONITORING AND PROCESS AUTOMATION

5 Use of Online Systems for Monitoring and Process Automation

- 5.1 The Implementation Agencies shall ensure the use of online systems for monitoring and process automation of various activities involved in preparation and execution of the projects under Bharatmala Pariyojana:
 - (i) Project Monitoring Information System (PMIS) shall be used for tracking of the status of all projects, preparation of reports and online upload of important project documents like DPRs and contract documents, etc.
 - (ii) **Bhoomi Raashi** system shall be used for preparation and submission of Land Acquisition related notifications.
 - (iii) Bidder Information Management System (BIMS) shall be used by all implementation agencies for maintenance of technical information of civil works of contractors/ concessionaires, and for online technical evaluation of civil works bids.
 - (iv) **Performance Management System "Lakshya"** shall be used by NHAI for setting construction and award targets for all technical officers.
 - (v) A comprehensive ERP system is being set up across MoRTH, NHAI and NHIDCL, to integrate all the individual systems/tools, to create a consolidated database of information, to digitize documents and records, and to enable electronic workflows. Once it is in place, the workflow shall entirely happen through that system.

III - PRE-PROJECT PREPARATION ACTIVITIES

6 DPR Preparation

- 6.1 Quality of a DPR has an important role in the execution time, cost and quality of the final project highway. Implementation agencies shall ensure that good quality DPRs are prepared for all projects under the Bharatmala Pariyojana program through the following interventions:
 - (i) DPRs shall be prepared in two parts first part relating to determination of alignment, land acquisition details and other pre-construction activities (utility shifting, forest & environment clearance etc.), while the second part shall deal with the designs, cost estimates etc., so as to ensure that work on the pre-construction activities is taken upfront without waiting for the second part.
 - (ii) While finalising the alignment, the DPR consultant shall duly assess the justification for widening of an existing road asset vis-à-vis a Greenfield

- Road keeping in view the comparable costs and time involved in land acquisition, utility shifting and forest related compliances. Wherever a Greenfield alignment is found to be preferable, the same shall be adopted.
- (iii) Technology shall be used wherever possible in DPR preparation, to enable increased accuracy of surveying and project design, as detailed in **Annexure V(a).**
- (iv) Project preparation shall be monitored at the various sub-stages as per **Annexure V(b)**, using detailed quality checklists that have been prescribed in the RFP document.
- (v) NHAI shall develop a detailed guidance document for DPR consultants to ensure quality design and quality preparation, including topics on use of technology in DPR, standard designs for structures, guidelines for access control.
- (vi) DPR consultants shall update the status of DPR preparation on the Project Monitoring Information System (PMIS) every 15 days. Further, copies of final reports corresponding to various sub-stages shall be uploaded on PMIS. PMIS certificate shall be presented by the DPR consultant when submitting invoices for payment.

7 Land Acquisition

- 7.1 Land Acquisition for National Highways will be governed by The National Highways Act, 1997 (Amended) in conjunction with The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement (RFCTLARR) Act, 2013, and the process shall be followed as per the guidelines issued by the Ministry and other implementation agencies.
- 7.2 Land Acquisition shall be closely managed and monitored to ensure that there are no resultant delays on the project implementation schedule, through the interventions listed in **Annexure V(c)**.
- 7.3 Bhoomi Raashi system shall be used by all field offices and HQ for preparation, review and approval of land notifications.

8 Clearances

- 8.1 Various projects under the Program will require certain clearances, depending on the alignment of the highway, including, Railways, Utilities, Environment, Forest and Wildlife Clearances.
- 8.2 Each clearance shall be obtained by the respective implementing agencies as per the extant guidelines.

- 8.3 Timely approval of Utility estimates by the implementation agencies shall be ensured by suitable delegation of powers.
- 8.4 To ensure accelerated approval of Railway clearances, the DPR consultant shall be mandated to use standard GADs prescribed by RDSO. The DPR consultant shall recommend non-standard design only in case of exception, and shall provide a detailed justification for the same.

IV - PROJECT APPRAISAL, APPROVAL AND CONTRACTING

9 Appraisal and approval of projects under the Program

9.1 NHAI and other implementation agencies shall decide the modal mix of the projects under Bharatmala Phase-I in line with the investment plan approved by CCEA as in **Annexure VI(a)**.

9.2 Project Appraisal and Approval by NHAI

- (i) The NHAI Board (Authority) shall approve the mechanism for mode selection of projects under its purview.
- (ii) NHAI's Board (Authority) shall have the discretion to modify the project implementation mode for projects under its purview subject to availability of funds and other required conditions.
- (iii) All EPC projects implemented by NHAI under this program are to be approved by NHAI Board (Authority) after proper appraisal within the budgeted financial resources approved under this program.
- (iv) All PPP BOT (Toll) projects, irrespective of the size and cost, where no grant (or VGF) is given to the concessionaire and the construction and maintenance is financed by toll revenues, shall be appraised and approved by the Board of NHAI (Authority).
- (v) All PPP projects, which entail VGF grants from Government, are to be appraised and approved as per extant guidelines of DEA applicable for VGF support.
- (vi) All PPP {BOT (Annuity) or BOT (HAM)} projects costing up to Rs. 2000 crore (TPC excluding land cost) are to be appraised by the SFC chaired by Secretary, MoRTH and approved by Minister (MoRTH).
- (vii) All PPP [BOT (Annuity) or BOT (HAM)] projects costing more than Rs. 2000 crore (TPC excluding land cost) are to be appraised by PPPAC chaired by Secretary, DEA and approved by the CCEA.
- (viii) The NHAI Board (Authority) is authorized to delegate its powers on Page 6 of 63

appraisal and approval of projects within NHAI, as deemed appropriate, for categories of projects where NHAI Board (Authority) is empowered to appraise and approve projects.

9.3 Project Appraisal and Approval by NHIDCL and State PWDs, and for non-Bharatmala projects under NHAI

- (i) For EPC projects to be implemented by MoRTH through State PWDs or other agencies, the extant guidelines will be followed i.e. all projects having civil cost (TPC excluding land cost) between Rs 100 crore to Rs 1,000 crore will be appraised by the SFC/EFC, chaired by Secretary (RT&H), and approved by the Minister (RT&H). Projects having civil costs beyond Rs 1000 crore (TPC excluding land cost) shall be appraised by the PIB chaired by Secretary, Expenditure (MoF) and approved by CCEA.
- (ii) For projects to be implemented in the North-East, the appraisal and approval mechanism will be the same as that applicable for projects under on-going SARDP-NE programs i.e. through the High Powered Committee (HPC) under the chairmanship of Secretary (RT&H).
- 9.4 All decisions regarding mode of execution will be taken by the Board of NHAI (Authority) or MoRTH, for their respective road projects subject to availability of funds and other required conditions.
- 9.5 Individual Projects under the program that involve Revised Cost Estimates shall be considered and approved by the concerned Authority which has accorded approval to the project as per above guidelines, subject to the cumulative financial commitments of all such projects remaining within the allocation approved for this program.
- 9.6 All projects implemented under the program, either by NHAI or MoRTH, shall be technically, financially and economically appraised by an empowered and well-equipped Project Appraisal & Technical Scrutiny Committee to be setup in NHAI and MoRTH. The Project Appraisal & Technical Scrutiny Committee for appraising projects under Bharatmala Pariyojana would comprise experts from NITI Aayog, Project and Finance Division and would be a dedicated unit which would place its recommendations on appraisal of projects to NHAI Board or Secretary, MoRTH, as the case may be, for approval.
 - (i) Composition of the Project Appraisal & Technical Scrutiny mechanism shall be decided and approved by the NHAI Board (Authority).
 - (ii) Composition of the Project Appraisal & Technical Scrutiny Committee at MoRTH - existing PPP Cell under Highways Wing shall continue with reinforcement through addition of Financial Consultant and such other

experts as may be required. As per extant mechanism, the PPP Cell solicits views/comments of NITI Aayog on project proposals.

- 9.7 Guidelines for scrutiny of individual projects which may be followed by all implementing agencies are at **Annexure VI(b)**.
- 9.8 The final approval to any project under Bharatmala shall be subject to full DPR being provided to the bidders while floating the Project RFP in accordance with the extant guidelines.

10 Project award, contracting and appointment

- 10.1 No project should be awarded without confirming availability of 80% of the Right of Way for PPP projects and 90% for EPC projects.
- 10.2 All implementation agencies shall be required to ensure that the conditions precedent regarding Right of Way are met prior to issuing the 'Appointed Date' for any project under their purview.
- 10.3 In order to ensure an efficient and transparent Bidding Process, the online Bidder Information Management System (BIMS) shall be used for management of bidder information and technical evaluation by all implementation agencies.

V - PROJECT IMPLEMENTATION

11 Monitoring of Projects

- 11.1 Project progress for all projects shall be monitored electronically through the Project Monitoring Information System (PMIS). Reports on project progress shall be prepared on a monthly basis through the system and submitted to the Ministry of Road Transport & Highways.
- 11.2 To ensure that latest project information is available in PMIS, all officers are directed to ensure the following latest by **5th of every month** -
 - (i) Completion of updation of all PMIS projects associated with the field office, and certification of the same.
 - (ii) Upload of associated monthly IE/ AE/ SC reports for the projects, as per standard format including the detailed strip plans.
 - (iii) Updation of the stage of the project, when a project is appraised and approved/awarded/appointed/completed.
 - (iv) Addition of any new project, where DPR has been initiated, which was not previously in the PMIS.

- 11.3 Between the 5th and 10th of each month, all **ROs and CGMs shall validate and verify all data** fed into the PMIS by the respective PIUs.
- 11.4 **Reviews using PMIS**: Progress reviews shall be at regular pre-defined intervals using PMIS by the respective implementation agencies.

12 Supervision of projects

- 12.1 Bids for selection of the IE/ AE for Under Construction projects shall be floated along with the bids for civil works. The IE/ AE shall be appointed within 3 months of issue of Letter of Award (LOA) to the successful bidder for civil works.
- 12.2 IE/ AE shall use latest technology for carrying out completion tests, since completion certificate is issued on the basis of results of these tests. IE/ SC shall similarly use latest technology for carrying out half-yearly inspections. Technology shall include but not limited to using Network Survey Vehicle (NSV) including laser profilometer for roughness, Falling Weight Deflectometer (FWD) for pavement strength, and Retro reflectometer to test effectiveness of signages.
- 12.3 The IE/ SC shall upload half-yearly reports on the Road Asset Management System (RAMS) and Indian Bridge Management System (IBMS).
- 12.4 The IE/ AE/ SC shall upload monthly progress reports as per the standard format specified in the RFP. PMIS certificate shall be presented by the IE/ AE/ SC when submitting invoices for payment.

13 Financial management at NHAI and NHIDCL

- 13.1 Given the scale of investment and consequent asset base creation, prudence in accounting and financial planning/ management is essential to meet fund requirements of current and future projects to be undertaken by NHAI & NHIDCL.
- 13.2 The system of **project-based accounting** shall be put in place to ensure that all costs incurred at all times during the life-cycle of the project are accurately captured:
 - (i) The costs include but are not limited to (a) Civil construction cost including expenses such as mobilization advance, delays and damages, retention money, (b) Land acquisition cost, (c) Utility shifting costs, (d) Operation and Maintenance costs, (e) Debt costs and other interest expenses.
 - (ii) Sources of revenue include but are not limited to (a) Toll fee collection monthly, (b) Premium or negative grant, (c) Damages or penalty collected

from the concessionaire.

- 13.3 The field offices shall ensure that all costs incurred and revenues received from any project are maintained as part of the Project based accounting system so as to assess the financials of any such project stretch. Profit-centres shall be defined and monitored at a project / stretch level, sub-corridor level, corridor level and network level.
- 13.4 A detailed twenty-year financial model shall be maintained by NHAI based on project-level accounting. The model shall calculate and project the funds generated from projects and fund requirements for projects over twenty years.
- 13.5 The model shall be updated every six months with the updated list of projects and revised assumptions for projecting future revenues and costs.

VI - ORGANIZATION

14 Staffing of field offices of NHAI

14.1 Since a majority of the program is to be implemented by NHAI, guidelines are being provided to ensure adequate staffing of field offices for proper project execution and management.

14.2 Standard Organization Structure and Manpower Requirements at Project Implementation Unit (PIU):

- (i) A PIU shall be headed by a Project Director (PD) of General Manager (GM) or Deputy General Manager (DGM) level officer;
- (ii) The number of Technical officers (apart from the PD) required at the PIU shall be assessed based on the total work-load handled by the PIU in terms of 'number of packages' and 'length of packages'.

14.3 Standard Organization Structure and Manpower Requirements at Project Implementation Unit (PIU):

- (i) Every State with 3 or more PIUs should have at least one Regional Office. Exceptions may be considered for reasons to be recorded. To maintain optimum span of control, a Regional Office may have no more than 9 PIUs under it and additional Regional Office may be setup in case there are more than 9 PIUs.
- (ii) Each Regional Office shall be headed by a Regional Officer of the level of Chief General Manager (CGM) or General Manager (GM).
- (iii) Apart from the Regional Officer, the number of Technical officers (GM/DGM/Manager/Deputy Manager) at the Regional Office shall be
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determined by the number of PIUs handled.

15 Monitoring of annual targets for award and construction

15.1 NHAI, NHIDCL and various State PWDs involved in the implementation of Bharatmala Pariyojana program, shall be required to further divide the agency-wide annual award and construction targets into field office targets, so that each field officer at his respective field office shall have clarity about his annual and monthly award and construction targets. This exercise shall be completed within a period of 60 days of issue of these guidelines.

VII - EXTERNAL MONITORING AND AUDIT

16 Monitoring & Audit Mechanism

- 16.1 PIB will review the progress of this program once in six (6) months with a view to avoid cost and time overruns.
- 16.2 MoRTH, in consultation with NHAI and NHIDCL, will bring out a consolidated Progress Report for all sub-projects contained in the approved Bharatmala Phase-I before the PIB (every December and June).
- 16.3 The Progress Report will include details of the variation in the parameters of the sub-projects, which increase the overall cost of the sub-projects or their financing patterns.
- 16.4 The Progress Report along with the Review Report of the PIB shall be placed before the CCEA for its information and guidance.
- 16.5 NHAI shall lay down outcome parameters like reduction in time of travel, fuel efficiency, accident reduction, riding comfort and user satisfaction, and periodically monitor the same for every corridor.
- 16.6 Audit of physical and technical parameters will be ensured for all such projects by MoRTH through appropriate independent agencies.
- 17 This issues with the approval of the Competent Authority.

(Debjani Chakrabarti) Director (Highways)

Yours faithfully,

Annexure I (a)

Components of Bharatmala Pariyojana Program

- (i) Economic Corridors: These are identified Highways Corridors of Economic importance, and are expected to carry 25% of freight in the coming years. Around 26,200 km of Economic corridors have been identified to be developed as Economic corridors, out of which 9,000 kms are being taken up in Phase-I of the program.
- (ii) Inter-corridor and feeder roads to National and Economic Corridors: Around 8,000 km of inter-corridor and around 7,500 km of feeder routes have been identified, out of which **6,000 kms** are being taken up in Phase-I of the program.
- (iii) National Corridors Efficiency Improvement: The Golden-Quadrilateral and NS-EW, corridors carry 35% of India's freight and would be declared as National corridors. Lane expansion, and de-congestion of existing National Corridors through Ring Roads and bypasses/ elevated corridors will be undertaken. Around 5,000 kms are being taken up under this category in Phase-I of the program.
- (iv) Border and International connectivity roads: Around 3,300 km of border roads have been identified to be built along the international border for their strategic importance. Around 2,000 km of roads are required for connecting India's major highway corridor to International trade points so as to facilitate Export-Import (EXIM) trade with neighbouring countries. Around 2,000 kms are being taken up under this category in Phase-I of the program.
- (v) Coastal and Port connectivity roads: Around 2,100 km of coastal roads have been identified to be built along the coast of India, to boost both tourism and industrial development of the coastal region. Around 2,000 km of port connectivity roads have been identified to facilitate EXIM trade with an emphasis to improve connectivity to non-major ports. Around 2,000 kms are being taken up under this category in Phase-I of the program.
- (vi) Green-field Expressways: Certain sections of National and economic corridors with traffic exceeding 50,000 PCUs have developed several choke points. Around 1,900 km of these stretches have been identified for development of green-field expressways. Around 800 kms are being taken up under this category in Phase-I of the program.

Annexure I (b)

Criteria for Selection of Stretches for Bharatmala Pariyojana Program

Sr. No.	Components of Bharatmala	Inter-se priority determination criteria for selection of stretches
	Pariyojana	
1	Economic Corridor Development	Economic corridor development program focuses on developing new corridors, in addition to existing Golden Quadrilateral (GQ) and North South-East West corridors (NS-EW). Criteria: Stretches with higher freight flow; Stretches with overall higher traffic; Stretches with ease of Land Acquisition and pre-construction activities and DPR preparation; Capacity augmentation from 4 to 6 lane would be taken in 2 nd phase.
2	Inter Corridor and feeder roads development	Stretches of roads connecting more than 2 corridors are classified as inter- corridors routes, while other routes connecting to 1 or 2 corridors are termed as feeder routes. Criteria: Stretches with less than 4 lane infrastructure leading to infrastructure asymmetry on the corridor; Higher traffic in terms of PCU; Stretches with ease of Land Acquisition and pre-construction activities and DPR preparation.
3	National Corridors Efficiency Improvement	National Corridor Efficiency Improvement program will focus on improving the efficiency of the existing corridors (GQ and NS-EW), by removing the congestion points through access control, uniform corridor tolling, bypasses, ring roads, etc. Criteria: Congestion records; Road safety consideration Higher traffic would be prioritized; Focus on Ring roads; mobilization/acquisition of land by State Governments Connectivity of Logistics Parks
4	Border and International connectivity roads	Criteria: Synergy with development of Integrated check post, Government priority; IMT/BIN/BIMSTEC MVAs Stretches of ease of Land Acquisition and pre-construction activities and DPR preparation
5	Coastal and Port connectivity roads	Criteria: Development status of Ports; Equity participation by Stake holders; Synchronization with other port development under Sagarmala; Ease of Land Acquisition and pre-construction activities and DPR preparation.
6.	Expressways	 Criteria: Constraint in capacity augmentation of important NHs where PCU > 50,000; Higher traffic would be prioritized; Synchronization with rapidly growing Industrial activities; Stretches with ease of Land Acquisition and pre-construction activities and DPR preparation.

Annexure II (a)

List of Economic Corridors with designated Implementation Agency

Sr. No.	Economic Corridor	Alignment	Length (km)	Implementation Agency
1	Mumbai-Kolkata	Mumbai (Thane) - Nashik - Aurangabad - Jalna - Karanja - Amravati - Nagpur - Raipur - Sambalpur - Deogarh - Kharagpur – Kolkata	1,854	NHAI
2	Mumbai- Kanyakumari	Mumbai (Panvel) - Mahad - Chiplun - Panjim - Karwar - Bhatkal - Udupi - Mangalore - Kannur - Kozhikode – Cochin - Alappazuha-Kollam- Thiruvananthapuram-Nagercoil-Kanyakumari	1,619	NHAI
3	Amritsar- Jamnagar	Amritsar – Faridkot – Bhatinda – Abohar – Sri Ganganagar – Bikaner – Nagaur – Jodhpur – Radhanpur – Samkhiyali – Jamnagar	1,316	NHAI
4	Kandla-Sagar	Kandla - Dhrangadhra - Ahmedabad - Godhra - Dahod - Indore - Dewas - Bhopal - Sagar	1,038	NHAI
5	Agra-Mumbai	Agra - Gwalior - Shivpuri - Guna - Biaora - Dewas - Indore - Sendhwa - Dhule - Malegaon - Nashik - Mumbai (Thane)	964	NHAI
6	Pune- Vijayawada	Pune - Solapur - Hyderabad – Vijaywada	906	NHAI
7	Raipur-Dhanbad	Raipur - Bilaspur - Gumla - Ranchi - Bokaro - Dhanbad	707	NHAI
8	Ludhiana – Ajmer	Ludhiana-Sangrur-Hisar-Sadulpur-Ajmer	618	NHAI
9	Surat-Nagpur	Surat - Bardoli - Dhule - Jalgaon - Khamgaon - Akola - Amravati – Nagpur	593	NHAI
10	Hyderabad- Panaji	Hyderabad - Mahbubnagar - Deosugur - Lingsugur - Bagalkot - Belagavi – Panjim	593	NHAI
11	Jaipur-Indore	Jaipur - Tonk - Bundi - Kota - Jhalawar - Ujjain – Indore	574	NHAI
12	Solapur – Nagpur	Solapur-Latur-Nanded-Yavatmal-Wardha- Nagpur	563	NHAI
13	Sagar-Varanasi	Sagar - Damoh - Katni - Rewa – Varanasi	524	NHAI
14	Kharagpur - Ghatal - Arambagh - Burdwar -		516	NHAI, EAP Wing, MoRTH ¹
15	Raipur - Vishakapatnam	Raipur-Kurud-Umerkote-Sunabeda-Salur- Vishakhapatnam	506	NHAI
16	Delhi - Lucknow	Delhi-Moradabad-Bareily-Shahjahanpur- Hardoi-Lucknow	494	NHAI
17	Chennai – Kurnool	Chennai – Puttur – Kadappa – Nandyal - Kurnool	482	NHAI

Sr. No.	Economic Corridor	Alignment	Length (km)	Implementation Agency
18	Indore-Nagpur	Indore - Harda - Betul - Nagpur	464	NHAI
19	Chennai – Madurai	Chennai - Tindivanam - Trichy - Madurai	464	NHAI
20	Mangalore- Raichur	Mangalore - Chitradurga - Bellari - Raichur	461	NHAI
21	Tuticorin – Cochin	Tuticorin - Aruppukottai - Madurai - Usilampatti - Theni - Bodi - Muvattupuzha - Cochin	443	NHAI
22	Solapur - Bellary - Gooty	Solapur - Bijapur - Kushtagi - Hospet - Bellary - Gooty	434	NHAI
23	Hyderabad - Aurangabad	Aurangabad-Jalna-Nanded-Degloor- Sangareddy-Hyderabad	427	NHAI
24	Delhi - Kanpur	Delhi - Ghaziabad - Aligarh - Kannauj - Kanpur	424	NHAI
25	Tharad-Phalodi	Phalodi - Balotra - Tharad	394	NHAI
26	Nagaur - Mandi Dabawli	Nagaur - Sujangarh - Ratangarh - Pallu - Rawatsar - Hanumangarh - Mandi Dabwali	387	NHAI
27	Sagar-Lucknow	Sagar - Banda - Chhatarpur - Mahoba - Kabrai - Hamirpur - Kanpur – Lucknow	361	NHAI
28	Sambalpur- Paradeep	Sambalpur – Angal – Dhenekal – Cuttack - Paradeep	360	NHAI
29	Amreli – Vadodra	Amreli - Bhavnagar - Tarapur - Borsad - Vadodara	341	NHAI
30	Godhra - Khargone	Godhra - Halol - Chote Udepur - Khargone	337	NHAI
31	Sambalpur- Ranchi	Sambalpur - Jharsuguda - Sundargarh - Rourkela - Simdega - Kolebira - Khunti – Ranchi	329	NHAI
32	Bangalore - Mallapuram	Bangalore - Mandya - Mysore - Nilgiri - Mallapuram	323	NHAI
33	Raisen - Pathariya	Raisen - Raisen - Udaipura - Shahpura - Jabalpur - Lakhnadaon - Pathariya	320	NHAI
34	Bangalore- Mangalore	Bangalore - Kunnigal - Hasan – Mangalore	319	NHAI
35	Chittaurgarh – Indore	Chittaurgarh-Pratapgarh-Ratlam-Indore	303	NHAI
36	Bilaspur - New Delhi	Bilaspur - Jagadhri - Yamunanagar - Saharanpur - Roorkhe - Muzzafarnagar - Meerut - Ghaziabad - Delhi	302	NHAI
37	Solapur - Mahabubnagar	Solapur-Akkalkot-Kalaburagi-Mahabubnagar	290	NHAI
38	Bangalore – Nellore	Bangalore-Kolar-Chittoor-Tirupati-Naidupeta- Nellore	286	NHAI
39	Ajmer - Udaipur	Ajmer - Beawar - Rajsamand - Udaipur	286	NHAI
40	Sirsa - Delhi	Sirsa - Hissar - Rohtak - Delhi	278	NHAI
41	Sirohi - Beawar	Sirohi - Sumerpur - Pali - Beawar	255	NHAI

Sr. No.	Economic Corridor	Alignment	Length (km)	Implementation Agency
42	Jaipur - Agra	Jaipur - Dausa - Bharatpur - Agra	240	NHAI
43	Pune - Aurangabad	Pune - Shirur - Ahmednagar - Shani Shignapur – Aurangabad	222	NHAI
44	North East Corridor	Bongaigaon – Guwahati – Nagaon – Tezpur – Dibrugarh – Margherita; Dudhnoi – William Nagar; Gohpur – Itanagar; Nagaon –Dimapur; Numaligarh – Dimapur – Kohima– Imphal; Kohima – Jessami – Ukhrul – Imphal; Jorabat — Jowai – Silchar – Karimganj — Agartala; Manu – Simlung – Aizawl – Imphal; Silchar – Aizawl; Silchar – Jiribam – Imphal	3,246	NHIDCL
	TOTAL		26,163	

Notes:

- Memar to Krishnanagar will be implemented under NHIIP, and the rest of the corridor will be under Bharatmala.
- 2. 9000 km of Economic Corridors (project length) would be implemented in Phase -1 of Bharatamala.

Annexure II (b)

List of Inter-corridor routes and designated Implementation Agency

Sr. No.	Inter Corridor Route	Length (km)	Implementation Agency
1	Sohela (on NH 53) – Khurda	334	NHAI
2	Mangalore – Huligundi	271	NHAI
3	Aurangabad-Darbhanga	271	NHAI, EAP Wing, MoRTH ¹
4	Solapur – Aurangabad	266	NHAI
5	Chandigarh - Rajpura - Patiala - Sangrur - Bhatinda	240	NHAI
6	Coimbatore - Trichy - Tanjore	235	NHAI
7	Hyderabad-Ongole	231	NHAI
8	Madurai – Kollam	227	NHAI
9	Ranchi-Kharagpur	218	NHAI
10	Jalgaon (Mukthiarpur on NH 53) - Indore	217	NHAI
11	Nagpur – Narsinghpur	212	NHAI
12	Gurgaon – Sikar	210	NHAI
13	Nashik-Pune	210	NHAI
14	Kadappa – Nellore	178	NHAI
15	Daund - Ahmednagar - Shirdi	177	NHAI
16	Lucknow - Rae Bareily - Allahabad	168	NHAI
17	Betul - Bhopal	166	NHAI
18	Sasaram (on NH 19) - Patna: Parallel to Aurangabad – Dharbhanga	143	NHAI
19	Vidisha – Mallthone	142	NHAI
20	Melur - Tanjore	142	NHAI
21	Rajkot – Viramgam	140	NHAI
22	Ahmedabad - Mehsana - Palanpur	138	NHAI
23	Keonjar – Chandikhol	136	NHAI
24	Hubli - Hospet	134	NHAI
25	Dhule – Aurangabad	134	NHAI
26	Hubli – Ankola	132	NHAI
27	Salem – Ulundurpet	130	NHAI
28	Nashik – Valsad	128	NHAI
29	Wardha – Karanja	122	NHAI
30	Nanded - Nirmal (on NH 44)	120	NHAI
31	Limkheda - Amarholi - Ratlam	120	NHAI
32	Hingoli – Mehkar	119	NHAI
33	Kozhikode - Mallapuram - Palakkad	114	NHAI
34	Agra - Mumbai to Surat - Nagpur	113	NHAI
35	Jaipur – Sikar	110	NHAI
36	Amritsar - Gurdaspur - Pathankhot	106	NHAI
37	Banda (on NH 66) - Sankeshwar (on NH 48)	104	NHAI
38	Ajmer - Nasirabad - Deoli	103	NHAI
39	Dewas - Ujjain – Ratlam	99	NHAI

Sr. No.	Inter Corridor Route	Length (km)	Implementation Agency
40	Kedgaon – Satara	96	NHAI
41	Junapani (on NH 47 Near Jhabua) - Ratlam	90	NHAI
42	Jaipur - Agra Branch (Bharatpur - Alwar)	86	NHAI
43	Malegaon - Shirdi	86	NHAI
44	Jharsuguda – Tileibaini	85	NHAI
45	Jharphokaria – Balasore	81	NHAI
46	Rohtak – Rewari	78	NHAI
47	Jhalawar - Mandola (on NH 27)	77	NHAI
48	Amritsar – Jalandar	73	NHAI
49	Vellakoil - Muthur - Erode - Sankakiri	71	NHAI
50	Vadodara - Halol – Godhra	66	NHAI
51	Rohtak – Panipat	56	NHAI
52	Rajkot – Dhrol	49	NHAI
53	Patna - Hajipur - Muzzafarpur	48	NHAI
54	Chitoor – Ranipet	47	NHAI
55	Kannod (NH 47) - Ashta	45	NHAI
56	Tiruchi – Namakkal	44	NHAI
57	Branch to Vadodara - Halol – Godhra	43	NHAI
58	Tirunelveli – Tuticorin	41	NHAI
59	Sohela (on NH 53) - Khurda Branch to Phulbani	36	NHAI
60	Hubli - Hospet Branch to Koppala (on NH 50)	25	NHAI
61	Kathlal – Nadiad	20	NHAI
62	Melur - Tanjore (Branch to Karaikudi)	20	NHAI
63	Jaipur - Agra Branch (Kiraoli - Kagarol)	15	NHAI
64	Ajmer - Udaipur Branch - Gudliya - Desuri - Branch 2	15	NHAI
65	Ajmer - Udaipur Branch - Gudliya - Desuri - Branch 1	11	NHAI
	TOTAL	7,964	

Note:

(1) Hajipur-Mushrigharari will be implemented under NHIIP and the rest of the corridor will be under Bharatmala.

Annexure II (c)

List of Feeder routes and designated Implementation Agency

Sr. No	Feeder Route	Length (km)	Implementation Agency
1	Ludhiana – Bhuntar	256	NHAI
2	Umaria - Beohari – Rewa	176	NHAI
3	Betul – Kandwa	168	NHAI
4	Sikandra - Rewari - Branch 1	163	NHAI
5	Solapur – Ahmednagar	162	NHAI
6	Armoor (on NH 44) – Ramagundam	149	NHAI
7	Chennai – Pondicherry	137	NHAI
8	Nagpur – Chandrapur	134	NHAI
9	Kashipur - Rudrapur - Philibit	134	NHAI
10	Karimnagar – Hyderabad	131	NHAI
11	Bhiwani – Narnaul	130	NHAI
12	Katni – Shahdol	124	NHAI
13	Angul – Kurda	121	NHAI
14	Godhra - Samalji – Ratanpur	121	NHAI
15	Raipura - Kalwari - Branch 1	120	NHAI
16	Jagtial – Warrangal	120	NHAI
17	Jodhpur – Lambiya	118	NHAI
18	Muzzafarpur – Begusarai	117	NHAI
19	Hyderabad – Warangal	116	NHAI
20	Tiruppur – Dindigul	116	NHAI
21	Gandhidham - Bhuj	113	NHAI
22	Karnal – Meerut	101	NHAI
23	Ludhiana - Moga – Jaito	99	NHAI
24	Ahmednagar – Nashik	97	NHAI
25	Bhajanpur - Araira (on NH 27)	95	NHAI
26	Rajahmundry link road	95	NHAI
27	Saraipali – Raigarh	94	NHAI
28	Dugiphar (on NH 53) – Balaghat	89	NHAI
29	Degloor – Bidar	88	NHAI
30	Ranchi – Hazaribhag	87	NHAI
31	Patehra (on NH 30) - Satna - Majhgawa	87	NHAI
32	Kheda – Vadodra	86	NHAI
33	Varanasi – Ghazipur	84	NHAI
34	Firozepur - Malout - Branch 1	84	NHAI
35	Jabalpur – Katni	83	NHAI
36	Parallel to Sangrur – Bhatinda	82	NHAI
37	Bhilwara – Rajsamad	80	NHAI
38	Jalandhar – Moga	78	NHAI
39	Sagar – Allahabad	78	NHAI
40	Sikandra - Rewari - Branch 2	76	NHAI
41	Ambala - Zirakpur – Baddi	76	NHAI

Sr. No	Feeder Route	Length (km)	Implementation Agency
42	Agra – Aligarh	76	NHAI
43	Ambala – Kaithal	76	NHAI
44	Ludhiana – Barnala	72	NHAI
45	Bongaigaon-Dhubri	71	NHIDCL
46	Sriganganagar – Hanumangarh	71	NHAI
47	Dimow Chairali-Sengajan	69	NHIDCL
48	Hatsinghimari-Dhubri	66	NHIDCL
49	Nagaur - Mandi Dabawli - Branch 3	65	NHAI
50	Patna – Sahebganj	65	NHAI
51	Bilaspur - New Delhi : Branch to Rishikesh and Dehradun	60	NHAI
52	Patran - Kaithal + Branch 1	60	NHAI
53	Panchkula - Shazadpur - Saha	59	NHAI
54	Gandhidham – Mundra	59	NHAI
55	Dharwad – Londa	58	NHAI
56	Rohtak – Jind	58	NHAI
57	Suryapet – Khammam	56	NHAI
58	Varanasi – Roberstganj	55	NHAI
59	Chapra – Patna	55	NHAI
60	Gurgaon - Pataudi – Rewari	55	NHAI
61	Firozepur - Malout - Branch 2	54	NHAI
62	Amreli - Vadodra - Branch 5	50	NHAI
63	Kolaghat – Haldia	49	NHAI
64	Ambala – Jagadhri	49	NHAI
65	Dibrugarh Ghat-Sengajan	48	NHIDCL
66	Vishakapatnam link road	47	NHAI
67	Raipura - Kalwari - Branch 4	45	NHAI
68	Jambusar – Bharuch	45	NHAI
69	Tumkur – Kunnigal	45	NHAI
70	Patran - Kaithal + Branch 2	42	NHAI
71	Karnal - Meerut : Branch to Muzzafarnagar	40	NHAI
72	Nagaur - Mandi Dabawli - Branch 4	40	NHAI
73	Ambala – Chandigarh	40	NHAI
74	Bhatinda - Mandi Dabwali	40	NHAI
75	Purilia - Chas (Bokoro)	39	NHAI
76	Bilaspur - New Delhi - Branch 3	39	NHAI
77	Firozepur - Malout - Branch 4	39	NHAI
78	Tharad-Phalodi	38	NHAI
79	Madurai – Natham	38	NHAI
80	Patran - Kaithal + Branch 3	38	NHAI
81	Nagaur - Mandi Dabawli - Branch 1	38	NHAI
82	Delhi - Sirsa (Branch to Bhiwani)	38	NHAI
83	Firozepur - Malout - Branch 3	38	NHAI
84	Gurgaon – Jhajjar	38	NHAI
85	Bareily – Philibit	35	NHAI
86	Nagaur - Mandi Dabawli - Branch 2	31	NHAI

Sr. No	Feeder Route	Length (km)	Implementation Agency
87	Hoshiarpur – Pagwara	30	NHAI
88	Fulbari – Khoribari	30	NHAI
89	Dharuhera - Sohna	28	NHAI
90	Bilaspur - New Delhi - Branch 1	26	NHAI
91	Surur – Panchgani	26	NHAI
92	Muzzafarpur -Sahebganj	25	NHAI
93	Jetpur – Junagadh	25	NHAI
94	Bhajanpur - Araira (on NH 27)- Branch to Kishanganj	24	NHAI
95	Raipura - Kalwari - Branch 2	24	NHAI
96	Delhi - Sirsa (Branch to Jhajjar)	23	NHAI
97	Vadkal (on NH 66) – Alibag	22	NHAI
98	Barapada - Padeghar (JNPT)	20	NHAL
99	Amreli - Vadodra - Branch 1	19	NHAI
100	Biswanath Chairali-Biswanath Ghat	19	NHIDCL
101	Raipura - Kalwari - Branch 3	18	NHAI
102	Kamargaon-Dibrugarh Ghat	15	NHIDCL
103	Bilaspur - New Delhi - Branch 4	15	NHAI
104	Amreli - Vadodra - Branch 4	14	NHAI
105	Batera – Pathariya	13	NHAI
106	Angul - Kurda - Branch	13	NHAI
107	Amreli - Vadodra - Branch 2	11	NHAI
108	Amreli - Vadodra - Branch 3	11	NHAI
109	Jorhat-Neamati	10	NHIDCL
110	Amreli - Vadodra - Branch 6	10	NHAI
111	Bilaspur - New Delhi - Branch 2	10	NHAI
115	Naltoli-Silghat	4	NHIDCL
	TOTAL	7,439	

Note: 6,000 km of Inter Corridor and Feeder Routes will be implemented in Phase I of Bharatmala Pariyojana.

Annexure II (d)

List of Choke Points and Congestion Points where interventions are required (ring roads, bypasses, etc.)

A) List of choke points and Interventions planned:

Sr. No.	Corridor	Town	Intervention	
1	N-S	Ludhiana	Bypass	
2	Kolkata - Delhi	Agra	Bypass	
3	Kolkata - Delhi	Varanasi	Bypass	
4	Mumbai-Kolkata	Aurangabad	Bypass	
5	Amritsar-Jamnagar	Amritsar	Bypass	
6	Agra-Mumbai	Gwalior	Bypass	
7	Pune-Vijayawada	Solapur	Bypass	
8	Solapur - Nagpur	Solapur	Bypass	
9	Solapur - Bellary	Solapur	Bypass	
10	Solapur - Mahabubnagar	Solapur	Bypass	
11	Solapur - Nagpur	Nanded	Bypass	
12	Hyderabad - Aurangabad	Nanded	Bypass	
13	N-S	Jalandhar	Bypass	
14	Kolkata - Delhi	Firozabad	Bypass	
15	E-W	Siliguri	Bypass	
16	Surat-Nagpur	Jalgaon	Bypass	
17	Mumbai-Cochin	Kozhikode	Bypass	
18	Chennai - Kurnool	Kurnool	Bypass	
19	Raipur-Dhanbad	Bokaro	Bypass	
20	Solapur - Bellary	Bellary	Bypass	
21	Surat-Nagpur	Dhule	Bypass	
22	Raipur-Dhanbad	Bilaspur	Bypass	
23	Kandla-Sagar	Dewas	Bypass	
24	Agra-Mumbai	Dewas	Bypass	
25	Mumbai-Kolkata	Jalna	Bypass	
26	Kandla-Sagar	Sagar	Bypass	
27	Sagar-Varanasi	Mirzapur	Bypass	
28	Mangalore-Raichur	Raichur	Bypass	
29	Amritsar-Jamnagar	Ganganagar	Bypass	
30	Mangalore-Raichur	Hospet	Bypass	
31	Chennai - Kolkata	Ongole	Bypass	
32	E-W	Morvi	Bypass	
33	Kolkata-Siliguri	Raiganj	Bypass	
34	Mumbai - Chennai	Panvel	Bypass	
35	Kandla-Sagar	Vidisha	Bypass	
36	Kolkata - Delhi	Sasaram	Bypass	
37	Sagar-Lucknow	Chhatarpur	Bypass	

Sr. No.	Corridor	Town	Intervention	
38	Hyderabad-Panaji	Bagalkot	Bypass	
39	Kandla-Sagar	Sehore	Bypass	
40	Aurangabad-Darbhanga	Jahanabad	Bypass	
41	Amritsar-Jamnagar	Nagaur	Bypass	
42	Chennai - Kolkata	Chilakaluripet	Bypass	
43	Bangalore - Nellore	Renigunta	Bypass	
44	Hyderabad - Aurangabad	Sangareddy	Bypass	
45	NER	Imphal	Bypass	
46	NER	Silchar	Bypass	
47	NER	Shillong	Bypass	
48	NER	Dibrugarh	Bypass	
49	NER	Dimapur	Bypass	
50	Delhi - Mumbai	Udaipur	Bypass / Ring Road	
51	N-S	Hinganghat	Bypass + ROB	
52	Mumbai - Chennai	Chitradurga	Bypass/ Ring Road	
53	E-W	Guwahati	Flyover	
54	N - S	Morena	Flyover	
55	Mumbai - Chennai	Kancheepuram	Flyover	
56	Kolkata - Delhi	Mughalsarai	Flyover + VUP	
57	Mumbai - Chennai	Ambur	Flyover + VUP + PUP	
58	Mumbai - Chennai	Pune	Flyovers	
59	E-W	Porbandar	Flyovers	
60	Kandla-Sagar	Bhopal	Lane Expansion	
61	Nashik-Pune	Nasik	Lane Expansion	
62	Jaipur-Indore	Ujjain	Lane Expansion	
63	N-S	Thrissur	Lane Expansion	
64	Aurangabad-Darbhanga	Hazipur	Lane Expansion	
65	Sagar-Varanasi	Damoh	Lane Expansion	
66	Chennai - Kolkata	Visakhapatnam	Lane Expansion + Flyover	
67	Mumbai-Cochin	Kochi	Lane Expansion + Flyover	
68	Tuticorin - Kochi	Kochi	Lane Expansion + Flyover	
69	Kolkata - Delhi	Fatehpur	Lane Expansion + Flyover	
70	Kolkata - Delhi	Shikohabad	Lane Expansion + Flyover	
71	Delhi - Mumbai	Bharuch	Lane Expansion + Flyover	
72	Kolkata - Delhi	Mathura	Lane Expansion + Flyover + VUP	
73	Kolkata - Delhi	Kulti	Lane Expansion + Flyover + VUP	
74	Kolkata - Delhi	Raniganj	Lane Expansion + Flyover + VUP	
75	Delhi - Mumbai	Mumbai	Lane Expansion + Flyovers	
76	Mumbai-Kolkata	Mumbai	Lane Expansion + Flyovers	
77	Mumbai-Cochin	Mumbai	Lane Expansion + Flyovers	
78	Agra-Mumbai	Mumbai	Lane Expansion + Flyovers	
79	Agra-Mumbai	Thane	Lane Expansion + flyovers	
80	Mumbai-Kolkata	Thane	Lane Expansion + flyovers	
81	Agra-Mumbai	Bhiwandi	Lane Expansion + flyovers	
82	Mumbai-Kolkata	Bhiwandi	Lane Expansion + flyovers	

Sr. No.	Corridor	Town	Intervention	
83	Sambalpur-Paradeep	Cuttack	Lane Expansion + flyovers	
84	Sambalpur-Ranchi	Rourkela	Lane Expansion + flyovers	
85	Sambalpur-Paradeep	Sambalpur	Lane Expansion + flyovers	
86	Mumbai-Kolkata	Sambalpur	Lane Expansion + flyovers	
87	Sambalpur-Ranchi	Sambalpur	Lane Expansion + flyovers	
88	Delhi - Mumbai	Mira Bhayander	Lane Expansion + Trumpet	
89	Kolkata - Delhi	Durgapur	Lane Expansion + VUP	
90	Kolkata - Delhi	Asansol	Lane Expansion + VUP	
91	Mumbai - Chennai	Tumkur	Lane Expansion + VUP	
92	Chennai - Kolkata	Kharagpur	Lane Expansion + VUP + ROB	
93	Ranchi-Kharagpur	Jamshedpur	Lane Expanstion	
94	N-S	Delhi	Ring Road	
95	Delhi - Mumbai	Delhi	Ring Road	
96	Delhi - Mumbai	Surat	Ring Road	
97	Sagar-Lucknow	Lucknow	Ring Road	
98	N-S	Nagpur	Ring Road	
99	Indore-Nagpur	Nagpur	Ring Road	
100	Surat-Nagpur	Nagpur	Ring Road	
101	Kandla-Sagar	Indore	Ring Road	
102	Aurangabad-Darbhanga	Patna	Ring Road	
103	N – S	Agra	Ring Road	
104	N-S	Srinagar	Ring Road	
105	Raipur-Dhanbad	Dhanbad	Ring Road	
106	Raipur-Dhanbad	Ranchi	Ring Road	
107	Pune-Vijayawada	Vijayawada	Ring Road	
108	N-S	Madurai	Ring Road	
109	Chennai - Madurai	Madurai	Ring Road	
110	Tuticorin - Kochi	Madurai	Ring Road	
111	E-W	Kota	Ring Road	
112	Jaipur-Indore	Kota	Ring Road	
113	Delhi - Mumbai	Gurgaon	Ring Road	
114	Chennai - Kolkata	Bhubaneshwar	Ring Road	
115	N-S	Noida	Ring Road	
116	Chennai - Kolkata	Baleshwar	ROB	
117	E-W	Shivpuri	Service Road + Access Control	
118	Mumbai - Chennai	Hosur	Shifting of Inter State Border Checkpost	
119	Nashik-Pune	Pimpri-Chinchwad	Study being done	
120	Mumbai-Kolkata	Raipur	Study being done	
121	Raipur-Dhanbad	Raipur	Study being done	
122	Mumbai-Kolkata	Bhilai	Study being done	
123	Mumbai-Kolkata	Durg	Study being done	
124	Chennai - Kolkata	Uluberia	Vehicular Under Pass	
125	Amritsar-Jamnagar	Deesa	Vehicular Under Pass	

B) List of congestion points where interventions are to be planned

Sr. No.	Corridor	Town	
1	N-S	Bangalore	
2	Mumbai – Chennai	Bangalore	
3	Bangalore-Mangalore	Bangalore	
4	Kandla-Sagar	Ahmedabad	
5	Mumbai – Chennai	Chennai	
6	Chennai – Madurai	Chennai	
7	Mumbai-Kolkata	Kolkata	
8	Kolkata-Siliguri	Kolkata	
9	Pune-Vijayawada	Pune	
10	Nashik-Pune	Pune	
11	Delhi – Mumbai	Jaipur	
12	Jaipur-Indore	Jaipur	
13	Sagar-Lucknow	Kanpur	
14	Jaipur-Indore	Indore	
15	Indore-Nagpur	Indore	
16	Agra-Mumbai	Nasik	
17	E-W	Rajkot	
18	N – S	Coimbatore	
19	Coimbatore-Dindigul	Coimbatore	
20	Amritsar-Jamnagar	Jodhpur	
21	Mumbai - Chennai	Hubli and Dharwad	
22	Coimbatore - Trichy - Tanjore	Tiruchirapalli	
23	N-S	Salem	
24	Amritsar-Jamnagar	Bikaner	
25	Mumbai - Chennai	Kolapur	
26	Ludhiana – Ajmer	Ajmer	
27	Mangalore-Raichur	Mangalore	
28	Bangalore-Mangalore	Mangalore	
29	Mumbai-Cochin	Mangalore	
30	Hyderabad-Panaji	Belgaum	
31	Agra-Mumbai	Dhule	
32	Kolkata – Delhi	Barddhaman	
33	Kolkata-Siliguri	Barddhaman	
34	N – S	Panipat	
35	NER	Aizawl	
36	Amritsar-Jamnagar	Bhatinda	
37	N – S	Sonipat	
38	Delhi – Mumbai	Kotputli	
39	Kandla-Sagar	Gandhidham	
40	Coimbatore - Trichy - Tanjore	Karur	
41	Amritsar-Jamnagar	Pali	
42	E – W	Jorabat	
43	Mumbai-Kolkata	Kharagpur	
44	Coimbatore-Dindigul	Dindigul	

Sr. No.	Corridor	Town	
45	Kolkata-Siliguri	English Bazar	
46	Mumbai – Chennai	Navi Mumbai Panvel Raigad	
47	E-W	Orai	
48	Agra-Mumbai	Guna	
49	Agra-Mumbai	Shivpuri	
50	Delhi – Mumbai	Navsari	
51	N-S	Kamptee-Kanhan	
52	Hyderabad-Panaji	Mahabubnagar	
53	N-S	Pathankot	
54	Amritsar-Jamnagar	Abohar	
55	Bangalore-Mangalore	Hassan	
56	N-S	Palakkad	
57	N-S	Khanna	
58	N-S	Dhaulpur	
59	Mumbai-Cochin	Udupi	
60	Amritsar-Jamnagar	Palanpur	
61	Mumbai – Chennai	Satara	
62	Delhi – Mumbai	Chittaurgarh	
63	Delhi – Mumbai	Valsad	
64	Chennai – Kolkata	Bhadrak	
65	Hyderabad-Ongole	Miryalaguda	
66	N – S	Datia	

Note: 5000 km of National Corridor Efficency Improvement (Project length) is to be implemented in Phase I of Bharatmala Pariyojana including 6 laning of national corridors, Congestion removal through Flyovers, Bypasses, Ringroads and Connectivity to Logistics Parks. All projects are to be implemented by NHAI under National Corridor Efficency Improvement.

Annexure II (e)

List of Border roads and designated Implementation Agency

Sr. No.	State	Project	Length (km)	Implementation Agency
1	Rajasthan	Munnabao - Sundra - Lunar - Dhanna - Bhuvana - Nawatala - Shahgarh - Asutar - Ghotan - Tanot	323	EAP Wing, MoRTH ¹
2	Rajasthan	Jaisalmer - Bhadasor - Ramgarh - Tanot	125	EAP Wing, MoRTH ¹
3	Rajasthan	Kishangarh - Bhutewala - Sarjam Tala - Dadoorewala - Bharewala	128	NHAI
4	Rajasthan	Gagaria - Baonkalam - Serwa - Satta - Gandhav	190	NHAI
5	Rajasthan	Jaisalmer – Myalijar	99	NHAI
6	Rajasthan	Jhaighat - Nedai Phata	49	Roads Wing, MoRTH
7	Rajasthan	Poogal - Dantor - Jaggasar - Tawarwala - Gokul - Godu - Rajatpura - Charanwala - Naukh – Bap	185	NHAI
8	Punjab	Khema Kara (Indo - Pak Border) - Bhikhiwind - Chabal Kalan - Amritsar - Ajnala - Ramdas - Dera Baba Nanak - Gurudaspur	162	NHAI
9	Punjab	Fazilka - Jalalabad - Mamdot - Firozpur	85	NHAI
10	Uttarakhand	Askot - Dharchula - Tawaghat - Sirkha - Malpa - Garbyang - Lipu Lekh Pass	80	NHIDCL
11	Uttarakhand	Simli - Narayanbagar - Kulsari Talwari - Gwaldan - Dangoli - Baijnath - Bageshwar - Balighat - Kapjot - Sama - Quiti - Birthi - Girgaon - Ratapani - Munsiyari - Darkot - Madkot - Sheraghat - Mawani - Jolljivi	306	EAP Wing, MoRTH ¹
12	Uttarakhand	Bhaironghati - Nelang - Naga - Angar - PDA - Medikay	70	NHIDCL
13	Uttarakhand	Mana - Mussapani - Gastoli - Rattakana - Manapass	63	NHIDCL
14	Uttarakhand	Joshimath – Malari	62	NHIDCL
15	Uttar Pradesh	Nangpara - Motipar - Sujauli - Katarnighat	68	NHAI
16	Uttar Pradesh	Naugarh - Geinsari - Tulsipur - Jarwa	72	Roads Wing, MoRTH
17	Bihar	Chakia – Bairgania	50	EAP Wing, MoRTH ¹
18	West Bengal	Jangipur - Katiamari - Sagarpara - Jalangi - Karimpur - Tehata - Krishnanagar - Bagula - Ganrapata - Bangaon - Swarup Nagar - Bashirhat	275	NHAI

Sr. No.	State	Project	Length (km)	Implementation Agency
19	West Bengal	Cooch Behar - Dinhata - Getaldah - Bangladesh Border	40	Roads Wing, MoRTH
20	West Bengal	Km 82.4 to km 99.5 and km 104.2 to km 106.6 on NH-512 to improve connectivity to Hili (Bangladesh Border)	19	Roads Wing, MoRTH
21	West Bengal	Km. 574 to Km 582 and Km. 569 to Km 574 of NH-31 to improve connectivity to Nepal and Bhutan Border	13	Roads Wing, MoRTH
22	Sikkim	Mangan - Kodyong - Chungtang - Lachung - Yumthang - Yume - Samdang - Border	90	NHIDCL
23	Sikkim	Chumtang - Lachen Monastry - Log Bridge - Pashi - Naku - Nakpolatok - Nakula	75	NHIDCL
24	Assam	Kochigain - Raimana - Jaigaon - Lamkapura - Birpara	123	NHIDCL
25	Meghalaya	Baghmara - Rongra - Mahadeo - Ranikor	206	NHIDCL
26	Manipur	Sangshak - Nampisha	90	NHIDCL
27	Tripura	Teliamar - Amarpur - Sabroom	216	NHIDCL
28	Tripura	Khowai – Agartala	55	NHIDCL
		TOTAL	3,319	

Note: (1) Border Roads No. 1, 2 and 17 shall be implemented under NHIIP (EAP Cell), but DPR is being prepared by NHAI.

Annexure II (f)

List of International Connectivity roads and designated Implementation Agency

Sr. No.	State	Project	Length (km)	Implementation Agency
1	Bihar	Raxaul-Mehsi	65	NHAI
2	Bihar	Jogbani - Forbesganj	15	NHAI
3	Uttar Pradesh	Rupaidiha-Lucknow	145	NHAI
4	Uttar Pradesh	Sonauli-Gorakhpur	94	NHAI
5	West Bengal	Petrapole – Kolkata	81	NHAI
6	West Bengal	Mahadipur-Susthani More	13	NHAI
7	West Bengal	Hili-Gazole	98	NHAI
8	West Bengal	Changrabandha – Siliguri	78	NHAI
9	West Bengal	Jaigaon - Dhupguri	66	NHAI
10	West Bengal	Panitanki – Siliguri	17	NHAI
11	West Bengal	Hili-Purnea	135	NHAI
12	Nagaland	Avakhung-Jessami	149	NHIDCL
13	Assam	Darranga-Guwahati	49	Roads Wing, MoRTH
14	Meghalaya	Dawki-Shillong	95	NHIDCL
15	Manipur	Imphal-Moreh	106	NHIDCL
16	Mizoram	Zorinpui-Lunglei	172	NHIDCL
17	Mizoram	Kawarpuchiah-Seling	294	NHIDCL
18	Tripura	Sabroom-Agartala	133	NHIDCL
19	Assam	Sutarkandi-Karimganj	14	NHIDCL
20	Mizoram	Zowkhathar-Kawlkulh	92	NHIDCL
		TOTAL	1,911	

Note: 2000km of Border and International Connectivity will be implemented in Phase I of Bharatmala Pariyojana

Annexure II (g)

List of Coastal roads and designated Implementation Agency

Sr. No.	State	Project	Length (km)	Implementation Agency
1	Gujarat	Somnath - Dwarka	237	NHAI
2	Gujarat	Dwarka – Jamnagar	132	NHAI
3	Maharashtra	Dighi port - Dabhol - Guhaghar - Jaigad port - Deogad - Malwan -Vengurla and Arunda	445	NHAI
4	Tamil Nadu	Karungulam - Tiruchendur - Kayalpattinam - Tuticorin - Tondi - Mimisal - Manalmelkudi - Tagattur - Vedaranniyam - Nagappatinam	427	NHAI
5	Andhra Pradesh	Digamarru to Ongole	270	NHAI
6	Orissa	Chhatarpur – Satapada	70	NHAI
7	Orissa	Konark - Astarand - Naugong - Paradeep Port - Ratanpur - Dharma - Basudevpur - Chandaneshwar – Digha	430	NHAI
		TOTAL	2,011	

Annexure II (h)

List of Port Connectivity roads and designated Implementation Agency

Sr. No.	State	Project	Length (km)	Implementation Agency
1	Gujarat	Providing alternative Road from Bhavnagar to Sosiya - Alang Ship Recycling Yard	35	NHAI
2	Gujarat	RoB on Kandla-Kutch Road	5	NHAI
3	Maharashtra	Karad-Chiplun-Jaigad port road enhancement SH-78: Karad- Chipun, SH-78:Chiplun-Modka Agar, SH – 4 Modka Agar to Jaigad Port	150	NHAI
4	Maharashtra	Connectivity to NH – 17 – Upgrading of SH 92, 96, 97 to connect NH17 to North and South banks of Dighi Port	96	NHAI
5	Maharashtra	JNPT - 6 to 8 laning of NH-4B, SH-54 and Amra Marg	44	NHAI
6	Maharashtra	Up gradation of SH 164 (Nivli to Jaigad) to connect Jaigad Port to NH 17 at Nivali	42	NHAI
7	Maharashtra	Sonurli (on NH 66) - Redi Port	29	NHAI
8	Maharashtra	Connectivity of Wadhavan to NH 8 through Tarapur-Boisar or Chinchani-Vangaon or Dahanu (25 km)	25	NHAI
9	Maharashtra	Linking of NH-4 & NH-8 by-passing Mumbra	20	NHAI
10	Maharashtra	6 laning for NH-4 from Kalamvoli to Mumbra	20	NHAI
11	Maharashtra	Expansion of NH 4 from Chinchwad to JNPT	10	NHAI
12	Maharashtra	Evacuation road for proposed standalone Container Terminal (330m extension to DPW terminal) at JNPT	5	NHAI
13	Maharashtra	Flyover for GTI Entry/Exit Over the Rail Tracks at JNPT	5	NHAI
14	Maharashtra	Flyover at Y Junction for Decongestion of Traffic Flow at JNPT	2	NHAI
15	Goa	Road circulation plan for ease of movement of break bulk cargo at Mormugao	3	NHAI
16	Karnataka	SH-2:Haveri-Yekambi(54km),SH-69:Yekambi- Kumta/Belekere	135	NHAI
17	Kerala	Azhikkal Port - Proposed NH – Bypass and widening of 2 km.	13	NHAI
18	Kerala	Widening of road connecting from Kollam port to NH	3	NHAI
19	Kerala	Development of river side port road to Beypore port	2	NHAI

Sr. No.	State	Project	Length (km)	Implementation Agency
20	Tamil Nadu	Four lane road from Northern gate of port to Thachur, outer ring corridor - 6 laning with service roads	30	NHAI
21	Tamil Nadu	Connectivity to Katupalli through Ponnani	20	NHAI
22	Tamil Nadu	Development of Coastal road to the East of container Terminal II at Chennai Port	10	NHAI
23	Tamil Nadu	Development of roads connectivity to Cuddalore Port	10	NHAI
24	Tamil Nadu	Connectivity to Enayam through Nagarcoil	10	NHAI
25	Tamil Nadu	Development of Container Corridor through Highway for quick evacuation in Chennai	8	NHAI
26	Tamil Nadu	Southern port Access road for connectivity to Ennore port	7	NHAI
27	Tamil Nadu	Road Connectivity to Hare island (Tuticorin Port)	5	NHAI
28	Andhra Pradesh	Upgrading of NH 65 from Vijayawada to the Machilipatnam Port	65	NHAI
29	Andhra Pradesh	Four lane road connectivity from the existing two lane road from Kakinada port to NH 16 at Rajanagaram in Godavri District in AP	<mark>55</mark>	NHAI
30	Andhra Pradesh	Four laning of Kakinada Anchorage Port Uppada beach road connection upto NH-16 in East Godavari District of Andhra Pradesh state	43	NHAI
31	Andhra Pradesh	Four Lane green field road to Krishnapatnam Port from Naidupeta in the State of Andhra Pradesh	37	NHAI
32	Andhra Pradesh	Four lane road connectivity from the existing two lane road from Achampeta Junction to joining NH 16 at Kathipudi in East Godavri District in AP	30	NHAI
33	Andhra Pradesh	Four lane Beach Road of 30.00 Km connecting Gangavaram Port to the SEZ proposed at Atchuthapuram in Visakhapatnam District in the State of Andhra Pradesh	30	NHAI
34	Andhra Pradesh	Up grading of existing R&B road from Chilakaru cross (NH-16) to Power Plants	26	NHAI
35	Andhra Pradesh	Upgrading of existing dedicated port connectivity from Krishnapatnam Port to NH 5 in SPSR Nellore District of Andhra Pradesh State	24	NHAI

Sr. No.	State	Project	Length (km)	Implementation Agency
36	Andhra Pradesh	Up grading of 24 km road to a 4 lane, that connects Nellore city to the Krishnapatnam port to NH 5 in SPSR Nellore District of AP	24	NHAI
37	Andhra Pradesh	Development of Four lane green field road from Machilipatnam South Port to NH-9 in the State of Andhra Pradesh	20	NHAI
38	Andhra Pradesh	Development of adequate road connectivity from Vizag Port-connectivity from Sheela Nagar junction to Anakapalli-Sabbavaram/Pendurti - Anandapuram road i.e. NH-16 (Former NH-5)	14	NHAI
39	Andhra Pradesh	Development of Four Lane green field road from Machilipatnam North Port to NH-SH-46 in the State of Andhra Pradesh	10	NHAI
40	Andhra Pradesh	Upgrading of Manginapudi Beach Road to a 4 lane road to connect to cater to Machilipatnam	10	NHAI
41	Andhra Pradesh	Development of greenfield bypass road for better connectivity of Gangavaram port in Visakhapatnam District (Lanes to be specified)	8	NHAI
42	Andhra Pradesh	Development of 7.2Km green field road connecting NH 65 to Machilipatnam Port in the State of Andhra Pradesh.	7	NHAI
43	Andhra Pradesh	Formation of a New by pass parallel road west of NFCL and CFL in Kakinada Port (Kakinada), AP	7	NHAI
44	Andhra Pradesh	Upgrading of the existing four lane road connecting to NH16 at Gajuwaka to Gangavaram Port in to six lane road in the State of Andhra Pradesh	5	NHAI
45	Andhra Pradesh	Development of 5 km Greenfield road connecting north and south industrial cluster of Khandaleru Creek near Krishnapatnam port	5	NHAI
46	Andhra Pradesh	Road Connectivity From Outer Harbour To Port Connectivity Junction (B) at Vizag port	5	NHAI
47	Andhra Pradesh	Connectivity of Vizag port to NH-16 (Phase II)	4	NHAI
48	Andhra Pradesh	Upgrading existing B.T Road in to C.C. pavement from Burmah Shell area to security gate near Sakthi Gas Plant at Kakinada Anchorage port, AP	3	NHAI

Sr. No.	State	Project	Length (km)	Implementation Agency
49	Andhra Pradesh	Flyover/RoB over ADB road (Kakinada Deep water port from Kumbhabhishek Temple to fishing Harbour) at Kakinada to avoid 6-7 level crossing in a span on 1 km which causes huge congestion	3	NHAI
50	Andhra Pradesh	Formation of new road from L-Arm road Junction to Dummulapeta Beach Road at NCS storage system including construction of bridge on Dummulapeta Creek at Kakinada Anchorage Port	3	NHAI
51	Andhra Pradesh	Development of Fly over bridge from Sea- horses junction area to dock area at Vizag Port	3	NHAI
52	Andhra Pradesh	RoB at Dummalapeta and Old Port Area (Kakinada)	2	NHAI
53	Andhra Pradesh	Construction of grade separator from H-7 area to Port connectivity Road by passing Convent Junction - Vizag Port	1	NHAI
54	Odisha	Road Connectivity to Dhamra Port (Four laning of Jamujhadi-Dhamra road)	58	NHAI
55	Odisha	Road Connectivity from Gopalpur Port to NH-5 from Chhatrapur	6	NHAI
56	West Bengal	Road connectivity between proposed Port at Sagar Island and Muriganga bridge ≬ Muriganga bridge and proposed Rail yard at Kashinagar.	24	NHAI
57	West Bengal	Improvement of existing road connecting Kolkata Port Trust to NH6 and Kolkata Port Trust to nearby Industrial Clusters	6	NHAI
58	West Bengal	Construction of RoB cum Flyover at Ranichak level crossing at Kolkata Port	5	NHAI
59	West Bengal	Kona elevated Expressway from 0.557 km to 7.163 km of NH-117	7	NHAI
		TOTAL	1,294	

Note: 2000 km of Coastal and Port Connectivity roads will be implemented in Phase I of Bharatmala Pariyojana

Annexure II (i)

List of Expressways and designated Implementation Agency

Sr. No.	Project	Length (km)	Implementation Agency
1	Ahmedabad –Dholera	110	NHAI
2	Vadodara – Mumbai	420	NHAI
3	Delhi-Meerut Expressway (to be executed as part of NHDP-VI)	96	NHAI
4	Kanpur – Lucknow	75	NHAI
5	Chennai – Bangalore	262	NHAI
6	Delhi - Amritsar – Katra	600	NHAI
7	Delhi – Jaipur	274	NHAI
	TOTAL	1,837	

Note: 800 Km of Expressways will be implemented in Phase I of Bharatmala Pariyojana

Annexure II (j)

List of Logistics Parks

Sr. No.	Location	
1	Delhi - NCR (Delhi, Gurgaon, Ghaziabad, Faridabad, Noida)	
2	Mumbai (Mumbai, Mumbai Suburbs, JNPT, Mumbai Port, Raigad District)	
3	North Gujarat (Ahmedabad and Vadodara)	
4	Hyderabad	
5	South Gujarat (Surat and Bharuch)	
6	South Punjab (Ludhiana, Sangrur, Patiala)	
7	North Punjab (Amritsar, Jalandhar, Gurudaspur)	
8	Jaipur	
9	Bangalore	
10	Pune	
11	Vijayawada	
12	Chennai	
13	Nagpur	
14	Indore	
15	Patna	
16	Kolkata	
17	Ambala	
18	Valsad	
19	Coimbatore	
20	Jagatsinghpur	
21	Nasik	

Sr. No.	Location
22	Guwahati
23	Kota
24	Panaji
25	Hisar
26	Visakhapatnam
27	Bhopal
28	Sundargarh
29	Bhatinda
30	Solan
31	Rajkot
32	Raipur
33	Jammu
34	Kandla
35	Cochin

Annexure III (a)

List of residual works to be implemented under NHDP

Sr. No.	Project	State	NHDP Phase	Implementation Agency	
1	Chilakaluripet - Nellore	Andhra Pradesh	NHDP-V	NHAI	
2	Giddalur – Cumbum – Thokapalli – Vinukonda – Narasaraopet - Guntur	Andhra Pradesh	NHDP-IV	NHAI	
3	Kadapa – Kurnool	Andhra Pradesh	NHDP-III	NHAI	
4	Madanpalli - Renigunta - Naidupeta & Chittoor - Tirupati	Andhra Pradesh	NHDP-III	NHAI	
5	Nalagampalli - AP/Karnataka Border	Andhra Pradesh	NHDP-IV	NHAI	
6	Ranasthalam-Anandapuram	Andhra Pradesh	NHDP-V	NHAI	
7	Vijayawada – Gundugolanu	Andhra Pradesh	NHDP-V	NHAI	
8	Vijayawada – Machilipatnam	Andhra Pradesh	NHDP-III	NHAI	
9	Atmakur – Nellore	Andhra Pradesh	NHDP-IV	MoRTH	
10	Dhindi – Digamaru	Andhra Pradesh	NHDP-IV	MoRTH	
11	Eeppurupalem – Ongole	Andhra Pradesh	NHDP-IV	MoRTH	
12	Gurajanapalli - Polekeru	Andhra Pradesh	NHDP-IV	MoRTH	
13	Karnataka/ AP Border - Gooty	Andhra Pradesh	NHDP-IV	MoRTH	
14	Kathipudi - Kakinada bypass	Andhra Pradesh	NHDP-IV	MoRTH	
15	Losari – Machavaram	Andhra Pradesh	NHDP-IV	MoRTH	
16		Andhra Pradesh	NHDP-IV		
17	Macchilipatnam - Avanigadda	CONTRACTOR OF THE PROPERTY OF	NHDP-IV	MoRTH	
	Nagarjunasagar Dam - Davulapally	Andhra Pradesh		MoRTH	
18	Pasarlapudi – Dindi	Andhra Pradesh	NHDP-IV	MoRTH	
19	Repalle – Eepurupalem	Andhra Pradesh	NHDP-IV	MoRTH	
20	Timmapuram - Granapalli	Andhra Pradesh	NHDP-IV	MoRTH	
21	Assam/ WB Border - Bijni	Assam	NHDP-II	NHAI	
22	Bijni - Assam/ WB Border	Assam	NHDP-II	NHAI	
23	Brahmaputra River Bridge	Assam	NHDP-II	NHAI	
24	Dharamtul – Sonapur	Assam	NHDP-II	NHAI	
25	Dharamtul to Raha	Assam	NHDP-II	NHAI	
26	Dharamtul to Sonapur	Assam	NHDP-II	NHAI	
27	Jatinga Junction-Harangajao	Assam	NHDP-II	NHAI	
28	Maibong-Lumding	Assam	NHDP-II	NHAI	
29	Maibong-Nrimbanglo	Assam	NHDP-II	NHAI	
30	Nalbari – Bijni	Assam	NHDP-II	NHAI	
31	Nrimbanglo-Jatinga	Assam	NHDP-II	NHAI	
32	Sonapur – Guwahati	Assam	NHDP-II	NHAI	
33	Udali-Manderdisa	Assam	NHDP-II	NHAI	
34	Aunta – Simaria	Bihar	NHDP-III	NHAI	
35	Bakhtiyarpur – Mokama	Bihar	NHDP-III	NHAI	
36	Bhojpur-Buxar	Bihar	NHDP-III	NHAI	
37	Biharsharif-Barbigha-Mokama	Bihar	NHDP-IV	NHAI	
38	Chhapra-Gopalganj	Bihar	NHDP-III	NHAI	
39	Chhapra-Hajipur	Bihar	NHDP-III	NHAI	
40	Chhapra-Rewaghat-Muzaffarpur	Bihar	NHDP-IV	NHAI	
41	Forbesganj-Jogbani	Bihar	NHDP-III	NHAI	
42	Hajipur-Muzaffarpur	Bihar	NHDP-III	NHAI	

Sr. No.	Project	State	NHDP Phase	Implementation Agency
43	Kashipur-Sitarganj	Bihar	NHDP-IV	NHAI
44	Khagaria-Purnea	Bihar	NHDP-III	NHAI
45	Koilwar-Bhojpur	Bihar	NHDP-III	NHAI
46	Maheshkhunt- Saharsa- Purnea (remaining packages)	Bihar	NHDP-IV	NHAI
47	Majhauli - Charout	Bihar	NHDP-IV	NHAI
48	Mokama-Munger	Bihar	NHDP-III	NHAI
49	Munger – Mirzachowki	Bihar	NHDP-IV	NHAI
50	Muzaffarpur-Sonbarsa	Bihar	NHDP-III	NHAI
51	Narenpur - Purnea	Bihar	NHDP-III	NHAI
52	Patna-Bakhtiyarpur	Bihar	NHDP-III	NHAI
53	Patna-Gaya-Dobhi	Bihar	NHDP-III	NHAI
54	Patna-Koilwar	Bihar	NHDP-III	NHAI
55	Piprakothi-Raxaul	Bihar	NHDP-III	NHAI
56	Simaria – Khagaria	Bihar	NHDP-III	NHAI
57	Singhara-Binjabahal	Bihar	NHDP-IV	NHAI
58	UP Border/Bathanakuti- Gopalganj	Bihar	NHDP-II	NHAI
59	Dhamtari – Kanker	Chhattisgarh	NHDP-IV	NHAI
60	Kodebod – Dhamtari	Chhattisgarh	NHDP-IV	NHAI
61	Orissa/Chattisgarh Boarder - Aurang	Chhattisgarh	NHDP-IV	NHAI
62	Raipur – Kodebod	Chhattisgarh	NHDP-IV	NHAI
63	Raipur – Simga	Chhattisgarh	NHDP-IV	NHAI
64	Sargain – Bilaspur	Chhattisgarh	NHDP-IV	NHAI
65	Simga – Sargaon	Chhattisgarh	NHDP-IV	NHAI
66	Ambikapur - Pathalgaon	Chhattisgarh	NHDP-IV	MoRTH
67	Banari - Masaniakala	Chhattisgarh	NHDP-IV	MoRTH
68	Bedma – Dahikonda	Chhattisgarh	NHDP-IV	MoRTH
69	Bedma – Jagdalpur	Chhattisgarh	NHDP-IV	MoRTH
70	Chilpi – Kawardha	Chhattisgarh	NHDP-IV	MoRTH
71	Darrighat – Banari	Chhattisgarh	NHDP-IV	MoRTH
72	Kanker – Bedma	Chhattisgarh	NHDP-IV	MoRTH
73	Katghora – Shivnagar	Chhattisgarh	NHDP-IV	MoRTH
74	Kunkuri - CG/ JH Border	Chhattisgarh	NHDP-IV	MoRTH
75	Masaniakala - Rengapalli	Chhattisgarh	NHDP-IV	MoRTH
76	Pathalgaon – Kunkuri	Chhattisgarh	NHDP-IV	MoRTH
77	Raigarh – Saraipalli	Chhattisgarh	NHDP-IV	MoRTH
78	Shivnagar – Ambikapur	Chhattisgarh	NHDP-IV	MoRTH
79	Goa/ Karnataka Border - Kundapur Section	Goa / Karnataka	NHDP-IV	NHAI
80	Ahmedabad- Godhra	Gujarat	NHDP-III	NHAI
81	Ahmedabad-Vadodara	Gujarat	NHDP-V	NHAI
82	Bhavanagar-Talaja	Gujarat	NHDP-IV	NHAI
83	Gadu-Porbandar	Gujarat	NHDP-IV	NHAI
84	Gandhidham (Kandla) - Mundra	Gujarat	NHDP-III	NHAI
85	Gujarat/Maharashtra Border - Surat- Hazira Port	Gujarat	NHDP-III	NHAI
86	Kagvadar – Una	Gujarat	NHDP-IV	NHAI
87	Kamrej – Chalthan	Gujarat	NHDP-V	NHAI
88	Kishangadh - Udaipur - Ahmedabad	Gujarat	NHDP-V	NHAI

Sr. No.	Project	State	NHDP Phase	Implementation Agency	
89	Kodinar – Veraval	Gujarat	NHDP-IV	NHAI	
90	Mahuva – Kagavadar	Gujarat	NHDP-IV	NHAI	
91	Rajasthan /Gujarat Borer to Ahmedabad	Gujarat	NHDP-V	NHAI	
92	Samakhiyali - Gandhidahm	Gujarat	NHDP-V	NHAI	
93	Surat-Dahisar	Gujarat	NHDP-V	NHAI	
94	Talaja – Mahuva	Gujarat	NHDP-IV	NHAI	
95	Una – Kodinar	Gujarat	NHDP-IV	NHAI	
96	Vadodara - Surat section extra dosed bridge across Narmada	Gujarat	NHDP-V	NHAI	
97	Ambala – Kaithal	Haryana	NHDP-III	NHAI	
98	Flyover and Underpass at Hero Honda Chowk	Haryana	NHDP-VII	NHAI	
99	Hisar – Dabwali	Haryana	NHDP-IV	NHAI	
100	Kaithal - Haryana/Raj. Border section	Haryana	NHDP-IV	NHAI	
101	Punjab / Haryana Border-Jind	Haryana	NHDP-IV	NHAI	
102	Rohtak – Jind	Haryana	NHDP-III	NHAI	
103	Yamunanagar - Panchkula	Haryana	NHDP-III	NHAI	
104	Gurgaon – Jaipur	Haryana / Rajasthan	NHDP-V	NHAI	
105	Kiratpur-Ner Chowk Section	Himachal Pradesh	NHDP-III	NHAI	
106	Kullu- Manali	Himachal Pradesh	NHDP-IV	NHAI	
107	Ner Chowk - Pandoh	Himachal Pradesh	NHDP-IV	NHAI	
108	Pandoh - Takoli	Himachal Pradesh	NHDP-IV	NHAI	
109	Parwanoo - Solan	Himachal Pradesh	NHDP-III	NHAI	
110	Shimla Bypass	Himachal Pradesh	NHDP-III	NHAI	
111	Solan - Kaithlighat	Himachal Pradesh	NHDP-III	NHAI	
112	Takoli - Kullu	Himachal Pradesh	NHDP-IV	NHAI	
113	Chenani-Nashri	Jammu and Kashmir	NHDP-II	NHAI	
114	Jammu – Udhampur	Jammu and Kashmir	NHDP-II	NHAI	
115	Quazigund – Banihal	Jammu and Kashmir	NHDP-II	NHAI	
116	Ramban – Banihal	Jammu and Kashmir	NHDP-II	NHAI	
117	Srinagar - Banihal section	Jammu and Kashmir	NHDP-II	NHAI	
118	Udhampur - Chenani Nashri – Ramban	Jammu and Kashmir	NHDP-II	NHAI	
119	Baharagora-Singhara	Jharkhand	NHDP-IV	NHAI	
120	Barhi – Rajauli	Jharkhand	NHDP-IV	NHAI	
121	Barhi-Hazaribag	Jharkhand	NHDP-III	NHAI	
122	Basukinath	Jharkhand	NHDP-IV	NHAI	
123	Chas – Ramgarh	Jharkhand	NHDP-IV	NHAI	
124	Chatra – Bagodar	Jharkhand	NHDP	NHAI	
125	Ganga Bridge - Sahibganj	Jharkhand	NHDP-IV	NHAI	
126	Gundu - Jaintgarh	Jharkhand	NHDP	NHAI	
127	Kuru - Nagar Utari	Jharkhand	NHDP	NHAI	
128	Kutchery Chowk Ranchi - Piska	Jharkhand	NHDP-IV	NHAI	

Sr. No.	Project	State	NHDP Phase	Implementation Agency
	More- Biju Para			
129	Mahulia-Baharagora-JH/WB Border	Jharkhand	NHDP-III	NHAI
130	Pirpainti – Hansdiha	Jharkhand	NHDP-IV	NHAI
131	Piska More – Palma	Jharkhand	NHDP-IV	NHAI
132	Rajganj-Maheshpur-Bhurangia-Chas to West Bengal Border	Jharkhand	NHDP-IV	NHAI
133	Ranchi-Mahulia	Jharkhand	NHDP-III	NHAI
134	Rudwa – Hariharganj	Jharkhand	NHDP-III	NHAI
135	Addahole to Bantwal Cross	Karnataka	NHDP-IV	NHAI
136	Attagulipura - KA/TN border	Karnataka	NHDP-IV	NHAI
137	Bijapur - Gulbarga - Humnabd	Karnataka	NHDP-IV	NHAI
138	Chitradurga - Davanagere	Karnataka	NHDP-V	NHAI
139	Dhavangere to Haveri	Karnataka	NHDP-V	NHAI
140	Hassan - Maranahally	Karnataka	NHDP-IV	NHAI
141	Haveri – Hubli	Karnataka	NHDP-V	NHAI
142	Hoskote - Dobbaspet	Karnataka	NHDP-IV	NHAI
143	Hospet - Bellary- Karnatka/ AP Border	Karnataka	NHDP-IV	NHAI
144	Hospet-Chitradurga	Karnataka	NHDP-III	NHAI
145	Hubli – Hospet	Karnataka	NHDP-IV	NHAI
146	Kundapur - Surathkal - Mangalore to Kerala Border Section	Karnataka	NHDP-III	NHAI
147	Sannur – Bikarnakatte	Karnataka	NHDP-IV	NHAI
148	Shimoga – Mangalore	Karnataka	NHDP-IV	NHAI
149	Tamilnadu/Karnataka border – Bengaluru	Karnataka	NHDP-IV	NHAI
150	Tumkur – Shimoga	Karnataka	NHDP-IV	NHAI
151	Chitradurga – Shimoga	Karnataka	NHDP-IV	MoRTH
152	Chengapalli - Tamilnadu / Kerala border	Kerala	NHDP-II	NHAI
153	Kazhakuttom - Mukkola Junction	Kerala	NHDP-III	NHAI
154	Mukkola - Kerala/Tamilnadu Border	Kerala	NHDP-III	NHAI
155	Vadakkanchery - Thrissur	Kerala	NHDP-II	NHAI
156	Bameetha – Khajuraho	Madhya Pradesh	NHDP-III	NHAI
157	Bhopal – Biaora	Madhya Pradesh	NHDP-III	NHAI
158	Bhopal - Sanchi	Madhya Pradesh	NHDP-III	NHAI
159	Biaora –Dewas	Madhya Pradesh	NHDP-IV	NHAI
160	Churhat bypass	Madhya Pradesh	NHDP-III	NHAI
161	Guna – Biaora	Madhya Pradesh	NHDP-IV	NHAI
162	Gwalior-Shivpuri	Madhya Pradesh	NHDP-IV	NHAI
163	Hiran River - Sindoor River	Madhya Pradesh	NHDP-IV	NHAI
164	Indore - MP/Guj. Border	Madhya Pradesh	NHDP-III	NHAI
165	Indore – Dewas	Madhya Pradesh	NHDP-V	NHAI
166	Jabalpur-Lakhnadon	Madhya Pradesh	NHDP-IV	NHAI
167	Jhansi-Khajuraho	Madhya Pradesh	NHDP-III	NHAI
168	Lakhnadon-Seoni	Madhya Pradesh	NHDP-II	NHAI
169	Rewa-Katni-Jabalpur	Madhya Pradesh	NHDP-IV	NHAI
170	Shivpuri-Guna	Madhya Pradesh	NHDP-IV	NHAI
171	Barela - Mandla	Madhya Pradesh	NHDP-IV	MoRTH

Sr. No.	Project	State	NHDP Phase	Implementation Agency
172	Bareli – Goharganj	Madhya Pradesh	NHDP-IV	MoRTH
173	Jabalpur – Barela	Madhya Pradesh	NHDP-IV	MoRTH
174	Katni – Umria	Madhya Pradesh	NHDP-IV	MoRTH
175	Madla - Chipli	Madhya Pradesh	NHDP-IV	MoRTH
176	Rewa - MP/UP Border	Madhya Pradesh	NHDP-IV	MoRTH
177	Shahdol - Anuppur - MP/ CG Border	Madhya Pradesh	NHDP-IV	MoRTH
178	Sindoor River – Bareli	Madhya Pradesh	NHDP-IV	MoRTH
179	Umaria – Shahdol	Madhya Pradesh	NHDP-IV	MoRTH
180	Gwalior-Jhansi	Madhya Pradesh/ Uttar Pradesh	NHDP-I	NHAI
181	Solapur-Maharashtra / Karnataka Border	Maharashtra	NHDP-III	NHAI
182	Amravati – Chikali	Maharashtra	NHDP-IV	NHAI
183	Aurangabad - Yedshi	Maharashtra	NHDP-IV	NHAI
184	Bodhre – Dhule	Maharashtra	NHDP-IV	NHAI
185	Boregaon - Watembhare	Maharashtra	NHDP-IV	NHAI
186	Bridge across Varsova Creek	Maharashtra	NHDP-V	NHAI
187	Chikli – Tarsod	Maharashtra	NHDP-IV	NHAI
188	Fagne – Maharashtra / Gujarat Borde	Maharashtra	NHDP-IV	NHAI
189	Hinghanghat ROB	Maharashtra	NHDP-II	NHAI
190	Kelapur - Pimpalkhatti	Maharashtra	NHDP-II	NHAI
191	Khed-Sinnar	Maharashtra	NHDP-IV	NHAI
192	Mahagaon-Yavatmal	Maharashtra	NHDP-IV	NHAI
193	Mangalwedha - Solapur	Maharashtra	NHDP-IV	NHAI
194	MP/ MH Border - Nagpur	Maharashtra	NHDP-II	NHAI
195	Nagpur – Kamptee	Maharashtra	NHDP-II	NHAI
196	Nagpur Ring Road	Maharashtra	NHDP-VII	NHAI
197	Nashik - Jawahar - Kasakhurd - Dahanu – Bordi	Maharashtra	NHDP-IV	NHAI
198	Panvel – Indapur	Maharashtra	NHDP-III	NHAI
199	Pune – Satara	Maharashtra	NHDP-V	NHAI
200	Ratnagiri – Kolhapur	Maharashtra	NHDP-IV	NHAI
201	Sangli - Boregaon	Maharashtra	NHDP-IV	NHAI
202	Solapur-Yedshi	Maharashtra	NHDP-IV	NHAI
203	Tarso – Fagne	Maharashtra	NHDP-IV	NHAI
204	Tuljapur – Ausa	Maharashtra	NHDP-IV	NHAI
205	Wadner- Devdhari	Maharashtra	NHDP-II	NHAI
206	Waranga Phata-Mahagaon	Maharashtra	NHDP-IV	NHAI
207	Wardha-Butibori	Maharashtra	NHDP-IV	NHAI
208	Watambhare - Mangalwedha	Maharashtra	NHDP-IV	NHAI
209	Yavatmal-Wardha	Maharashtra	NHDP-IV	NHAI
210	Ahmednagar - Kharwandi	Maharashtra	NHDP-IV	MoRTH
211	Arawali – Kante	Maharashtra	NHDP-IV	MoRTH
212	Barasgaon – Rahate	Maharashtra	NHDP-IV	MoRTH
213	Bhogaon – Khurd	Maharashtra	NHDP-IV	MoRTH
214	Golavali - Rajapur (Construction of Major/ Minor Bridges)	Maharashtra	NHDP-IV	MoRTH
215	Indapur – Wadpale	Maharashtra	NHDP-IV	MoRTH
216	Kalmath – Zarap	Maharashtra	NHDP-IV	MoRTH

Sr. No.	Project	State	NHDP Phase	Implementation Agency MoRTH	
217	Kante – Wakad	Maharashtra	NHDP-IV		
218	Kashedi - Parshuram Ghat	Maharashtra	NHDP-IV	MoRTH	
219	Kashedi - Tural (Construction of Major/ Minor Bridges)	Maharashtra	NHDP-IV	MoRTH	
220	Nasratpur – Barasgaon	Maharashtra	NHDP-IV	MoRTH	
221	Parshuram Ghat - Arawali	Maharashtra	NHDP-IV	MoRTH	
222	Section of NH-222 from junction with NH - 211 to Manwath(Tadborgaon)	Maharashtra	NHDP-IV	MoRTH	
223	Sinnar Town of Pune - Nashik section of NH-60	Maharashtra	NHDP-IV	MoRTH	
224	Talgaon – Kamath	Maharashtra	NHDP-IV	MoRTH	
225	Unhale - Zarap (Construction of Major/ Minor Bridges)	Maharashtra	NHDP-IV	MoRTH	
226	Watul – Talgaon	Maharashtra	NHDP-IV	MoRTH	
227	Nagpur-Saoner-Betul	Maharashtra / Madhya Pradesh	NHDP-IV	NHAI	
228	Jowai-Ratacherra	Meghalaya	NHDP-III	NHAI	
229	Angul-Sambalpur	Orissa	NHDP-IV	NHAI	
230	Baleshwar-Baripada-Jharpokharia	Orissa	NHDP-IV	NHAI	
231	Bhubaneshwar-Puri	Orissa	NHDP-III	NHAI	
232	Binjabahal-Teleibani	Orissa	NHDP-IV	NHAI	
233	Biramitrapur - Rajamunda	Orissa	NHDP-IV	NHAI	
234	Birmitrapur - Brahmani Bypass including bridge over River Brahmani	Orissa	NHDP-IV	NHAI	
235	Chandikhol-Jagatpur-Bhubaneshwar	Orissa	NHDP-V	NHAI	
236	Paniloili-Rimuli	Orissa	NHDP-III	NHAI	
237	Rajamunda – Barkote	Orissa	NHDP-IV	NHAI	
238	Rimoli - Roxy - Rajamunda	Orissa	NHDP-III	NHAI	
239	Talcha - Duburi - Chandikhal	Orissa	NHDP-III	NHAI	
240	Teleibani-Sambalpur	Orissa	NHDP-IV	NHAI	
241	Kanaktora – Jharsuguda	Orissa	NHDP-IV	MoRTH	
242	Pallahara – Pitiri	Orissa	NHDP-IV	MoRTH	
243	Bidhipur – Dhilwan	Punjab	NHDP-II	NHAI	
244	Chandigarh – Kharar	Punjab	NHDP-V	NHAI	
245	Elevated Highway from Samrala Chowk	Punjab	NHDP-IV	NHAI	
246	Kharar-Ludhiana	Punjab	NHDP-V	NHAI	
247	Laddowal Bypass	Punjab	NHDP-VII	NHAI	
248	Ludhiana – Talwandi	Punjab	NHDP-III	NHAI	
249	Panipat – Jalandhar	Punjab	NHDP-V	NHAI	
250	Amritsar - Tarn Taran	Punjab	NHDP-IV	MoRTH	
251	Dogal Kalan - PB/ HR Border	Punjab	NHDP-IV	MoRTH	
252	Faridkot - Kotkapura - Bathinda	Punjab	NHDP-IV	MoRTH	
253	Harike - Zira - Faridkot	Punjab	NHDP-IV	MoRTH	
254	Harike Bypass	Punjab	NHDP-IV	MoRTH	
255	Jalandhar – Hoshiarpur	Punjab	NHDP-IV	MoRTH	
256	Lambra – Shahkot	Punjab	NHDP-IV	MoRTH	
257	Moga – Tallewal	Punjab	NHDP-IV	MoRTH	
258	Shahkot – Moga	Punjab	NHDP-IV	MoRTH	

Sr. No.	Project	State	NHDP Phase	Implementation Agency	
259	Tallewal – Barnala	Punjab	NHDP-IV	MoRTH	
260	Tapa – Bhatindi	Punjab	NHDP-IV	MoRTH	
261	Zirakpur – Patiala	Punjab	NHDP-IV	MoRTH	
262	Bar-Bilara-Jodhpur	Rajasthan	NHDP-IV	NHAI	
263	Barmer-Sanchore-Gujrat Border	Rajasthan	NHDP-IV	NHAI	
264	Bhilwara – Ladpura	Rajasthan	NHDP-IV	NHAI	
265	Bikaner - Phalodi	Rajasthan	NHDP-IV	NHAI	
266	Chittorgarh – Udaipur	Rajasthan	NHDP-V	NHAI	
267	Chmbal Bridge on Kota Bypass	Rajasthan	NHDP-II	NHAI	
268	Dausa-Lalsot-Kothoon	Rajasthan	NHDP-IV	NHAI	
269	Deoli – Kota	Rajasthan	NHDP-III	NHAI	
270	Gulabpura – Chittorgarh	Rajasthan	NHDP-V	NHAI	
271	Gulabpura – Uniara	Rajasthan	NHDP-IV	NHAI	
272	Jaisalmer-Barmer	Rajasthan	NHDP-IV	NHAI	
273	Jodhpur – Pachpadra	Rajasthan	NHDP-IV	NHAI	
274	Jodhpur – Pokaran	Rajasthan	NHDP-IV	NHAI	
275	Karauli – Dholpur	Rajasthan	NHDP-IV	NHAI	
276	Kishangarh – Gulabpura	Rajasthan	NHDP-V	NHAI	
277	Manoharpur - Dausa	Rajasthan	NHDP-IV	NHAI	
278	Manoharpur – Dausa	Rajasthan	NHDP-IV	NHAI	
279	Padhi – Dahod	Rajasthan	NHDP-IV	NHAI	
280	Phalodi –Jaisalmer	Rajasthan	NHDP-IV	NHAI	
281	Raj./Har border - Fatepur - Salasar	Rajasthan	NHDP-IV	NHAI	
282		Rajasthan	NHDP-IV	NHAI	
	Salasar – Nagaur	Rajasthan	NHDP-IV	NHAI	
283	Tonk - Sawai Madhopur		The second secon		
284	Udaipur Bypass	Rajasthan	NHDP-V	NHAI	
285	Udaipur-Dungarpur-Shamlaji	Rajasthan	NHDP-V	NHAI	
286	Uncha Nagla – Dholpur	Rajasthan	NHDP-IV	NHAI	
287	Ajmer-Nagaur	Rajasthan	NHDP-IV	MoRTH	
288	Beawar – Gomti	Rajasthan	NHDP-IV	MoRTH	
289	Bikaner-Suratgarh	Rajasthan	NHDP-IV	MoRTH	
290	Chittorgarh-Neemach-Nimbahera- Partapgarh	Rajasthan	NHDP-IV	MoRTH	
291	Jodhpur – Pali	Rajasthan	NHDP-IV	MoRTH	
292	Kota Bypass	Rajasthan	NHDP-IV	MoRTH	
293	Nagaur - Bikaner	Rajasthan	NHDP-IV	MoRTH	
294	Nagaur Bypass	Rajasthan	NHDP-IV	MoRTH	
295	Nagaur Bypass - Netra Village	Rajasthan	NHDP-IV	MoRTH	
296	Netra Village – Mandore	Rajasthan	NHDP-IV	MoRTH	
297	Sikar – Bikaner	Rajasthan	NHDP-IV	MoRTH	
298	Suratgarh - Sriganganagar	Rajasthan	NHDP-IV	MoRTH	
299	Dindigul - Coimbatore - Tamilnadu / Karnataka Border	Tamil Nadu	NHDP-IV	NHAI	
300	Dindigul - Theni - Kumuli	Tamil Nadu	NHDP-III	NHAI	
301	Hosur – Krishnagiri	Tamil Nadu	NHDP-V	NHAI	
302	Kerala / Tamil Nadu border - Villukkuri	Tamil Nadu	NHDP-III	NHAI	
303	Krishnagiri - Walajahpet	Tamil Nadu	NHDP-V	NHAI	
304	Madurai - Paramakudi & Paramakudi	Tamil Nadu	NHDP-III	NHAI	

Sr. No.	Project	State	NHDP Phase	Implementation Agency
	- Ramanathapuram			
305	Nagapattinam - Thanjavur	Tamil Nadu	NHDP-III	NHAI
306	Pollachi – Coimbatore	Tamil Nadu	NHDP-IV	NHAI
307	Thanjavur - Pudukkottai	Tamil Nadu	NHDP-IV	NHAI
308	Tindivanam - Krishnagiri	Tamil Nadu	NHDP-III	NHAI
309	Tirupathi – Chennai	Tamil Nadu	NHDP-III	NHAI
310	Trichy - Chidambaram	Tamil Nadu	NHDP-IV	NHAI
311	Trichy – Dindigul	Tamil Nadu	NHDP-III	NHAI
312	Trichy – Karaikudi	Tamil Nadu	NHDP-III	NHAI
313	Trichy – Karur	Tamil Nadu	NHDP-III	NHAI
314	Villukkuri - Kanyakumari	Tamil Nadu	NHDP-III	NHAI
315	Villupuram – Nagaptnam	Tamil Nadu	NHDP-IV	NHAI
316	Khammam - Ashwaraopet	Telangana	NHDP-IV	NHAI
317	Kodad – Khammam	Telangana	NHDP-IV	NHAI
318	Mancherial - Chandrapur	Telangana	NHDP-IV	NHAI
319	MH/KNT Border - Sangareddy	Telangana	NHDP-III	NHAI
320	Yadagiri-Warangal	Telangana	NHDP-IV	NHAI
321	Haggari – Jadcherla	Telangana	NHDP-IV	MoRTH
322	Kolha – Nasratpur	Telangana	NHDP-IV	MoRTH
323	Nakrekai - Nagarjusagar Dam	Telangana	NHDP-IV	MoRTH
324	Nakrekal – Tanamcherla	Telangana	NHDP-IV	MoRTH
325	Vijayawada - Jagdalpur - Rudrampur	Telangana	NHDP-IV	MoRTH
326	Agra Etawah Bypass	Uttar Pradesh	NHDP-V	NHAI
327	Aligarh – Moradabad	Uttar Pradesh	NHDP-IV	NHAI
328	Bareilly-Sitapur	Uttar Pradesh	NHDP-III	NHAI
329	Delhi – Agra	Uttar Pradesh	NHDP-V	NHAI
330	Delhi - Meerut Expressway	Uttar Pradesh	NHDP-VI	NHAI
331	Eastern Peripheral Expressway	Uttar Pradesh	NHDP-VI	NHAI
332	Gagalheri-Saharanpur-Yamunanagar (UP/Haryana border)	Uttar Pradesh	NHDP-IV	NHAI
333	Ghaghara Bridge - Varanasi	Uttar Pradesh	NHDP-IV	NHAI
334	Ghaziabad-Aligarh	Uttar Pradesh	NHDP-III	NHAI
335	Gorakhpur Bypass	Uttar Pradesh	NHDP-IV	NHAI
337	Handia – Rajatalab	Uttar Pradesh	NHDP-IV/V	NHAI
338	Lucknow – Sutanpur	Uttar Pradesh	NHDP-IV	NHAI
339	Lucknow Ring Road	Uttar Pradesh	NHDP-VII	NHAI
340	Meerut – Bulandshahar	Uttar Pradesh	NHDP-IV	NHAI
341	Moradabad – Bareilly	Uttar Pradesh	NHDP-III	NHAI
342	Raebareilly-Allahabad	Uttar Pradesh	NHDP-IV	NHAI
343	Sitarganj-Bareilly	Uttar Pradesh	NHDP-IV	NHAI
344	Unnao – Lalganj	Uttar Pradesh	NHDP-IV	NHAI
345	Varanasi – Gorakhpur	Uttar Pradesh	NHDP-IV	NHAI
346	Varanasi - Sidhaura - Jaunpur - Akbarpur - Ayodhya	Uttar Pradesh	NHDP-IV	NHAI
347	Varanasi – Sultanpur	Uttar Pradesh	NHDP-IV	NHAI
348	Varanasi Bypass	Uttar Pradesh	NHDP-IV	NHAI
349	Varranuram - Hagapttion	Uttar Pradesh	NHDP-IV	NHAI
350	Barabanki – Jarwal	Uttar Pradesh	NHDP-IV	MoRTH
351	Indo - Nepal Border/ Rudhauli	Uttar Pradesh	NHDP-IV	MoRTH

Sr. No.	Project	State	NHDP Phase	Implementation Agency	
352	Rudhauli – Basti	ludhauli – Basti Uttar Pradesh		MoRTH	
353	Sonauli – Gorakhpur	Uttar Pradesh	NHDP-IV	MoRTH	
354	UP/MP. Border Section of NH-27 From km 4.285 to 45.627	Uttar Pradesh	NHDP-IV	MoRTH	
355	Varanasi-Aurangabad	Uttar Pradesh/ Bihar	NHDP-V	NHAI	
356	Haridwar-Nagina	Uttar Pradesh/ Uttarakhand	NHDP-IV	NHAI	
357	Muzaffarnagar-Haridwar	Uttar Pradesh/ Uttarakhand	NHDP-III	NHAI	
358	Roorkee-Chutmalpur-Ganeshpur- Gagalheri	Uttar Pradesh/ Uttarakhand	NHDP-IV	NHAI	
359	Haridwar-Dehradun	Uttarakhand	NHDP-III	NHAI	
360	Rampur-Rudrapur	Uttarakhand	NHDP-III	NHAI	
361	Rudrapur-Kathgodam	Uttarakhand	NHDP-III	NHAI	
362	Sitarganj-Tanakpur	Uttarakhand	NHDP-IV	NHAI	
363	Barwa-Adda-Panagarh	West Bengal	NHDP-V	NHAI	
364	Berhampore – Farakka	West Bengal	NHDP-III	NHAI	
365	Chichira-Kharagpur	West Bengal	NHDP-III	NHAI	
366	Dankuni – Kharagpur	West Bengal	NHDP-V	NHAI	
367	Farakka – Raiganj	West Bengal	NHDP-III	NHAI	
368	Ghoshpukur – Salsalabari	West Bengal	NHDP-II	NHAI	
369	Islampur Bypass	West Bengal	NHDP-II	NHAI	
370	JHR/WB Border -Purulia – Balarampur	West Bengal	NHDP-IV	NHAI	
371	Krishnanagar-Baharampur	West Bengal	NHDP-III	NHAI	

Annexure III (b)

List of corridors where NHIDCL shall be responsible for development / upgradation

Sr. No.	Corridor Type	Corridor / Road	Length (km)	Implementation Agency
1	Economic Corridor	Bongaigaon – Guwahati – Nagaon – Tezpur – Dibrugarh – Margherita; Dudhnoi – William Nagar; Gohpur – Itanagar; Nagaon –Dimapur; Numaligarh – Dimapur – Kohima– Imphal; Kohima – Jessami – Ukhrul – Imphal; Jorabat — Jowai – Silchar – Karimganj – – Agartala; Manu – Simlung – Aizawl – Imphal; Silchar – Aizawl; Silchar – Jiribam – Imphal	3,246	NHIDCL
2	Feeder Road	Bongaigaon-Dhubri	71	NHIDCL
3	Feeder Road	Dimow Chairali-Sengajan	69	NHIDCL
4	Feeder Road	Hatsinghimari-Dhubri	66	NHIDCL
5	Feeder Road	Dibrugarh Ghat-Sengajan	48	NHIDCL
6	Feeder Road	Biswanath Chairali-Biswanath Ghat	19	NHIDCL
7	Feeder Road	Kamargaon-Dibrugarh Ghat	15	NHIDCL
8	Feeder Road	Jorhat-Neamati	10	NHIDCL
9	Feeder Road	Naltoli-Silghat	4	NHIDCL
10	Border Road	Mangan - Kodyong - Chungtang - Lachung - Yumthang - Yume - Samdang - Border	90	NHIDCL
11	Border Road	Chumtang - Lachen Monastry - Log Bridge - Pashi - Naku - Nakpolatok - Nakula	75	NHIDCL
12	Border Road	Kochigain - Raimana - Jaigaon - Lamkapura - Birpara	123	NHIDCL
13	Border Road	Baghmara - Rongra - Mahadeo - Ranikor	206	NHIDCL
14	Border Road	Sangshak – Nampisha	90	NHIDCL
15	Border Road	Teliamar - Amarpur - Sabroom	216	NHIDCL
16	Border Road	Khowai – Agartala	55	NHIDCL
17	Border Road	Askot - Dharchula - Tawaghat - Sirkha - Malpa - Garbyang - Lipu Lekh Pass	80	NHIDCL
18	Border Road	Bhaironghati - Nelang - Naga - Angar - PDA - Medikay	70	NHIDCL
19	Border Road	Mana - Mussapani - Gastoli - Rattakana - Manapass	63	NHIDCL
20	Border Road	Joshimath – Malari	62	NHIDCL
21	International Connectivity	Avakhung-Jessami	149	NHIDCL
22	International Connectivity	Dawki-Shillong	95	NHIDCL
23	International Connectivity	Imphal-Moreh	106	NHIDCL
24	International Connectivity	Zorinpui-Lunglei	172	NHIDCL

Sr. No.	Corridor Type	Corridor / Road	Length (km)	Implementation Agency
25	International Connectivity	Kawarpuchiah-Seling	294	NHIDCL
26	International Connectivity	Sabroom-Agartala	133	NHIDCL
27	International Connectivity	Sutarkandi-Karimganj	14	NHIDCL
28	International Connectivity	Zowkhathar-Kawlkulh	92	NHIDCL
		TOTAL	5,458	

Annexure III (c)

List of residual projects to be implemented under NHIIP

Sr. No.	Corridor	State	NH No	Length	Implementation Agency	
1	Barmer-Ramsar-Munabab	Rajasthan	25E	117	EAP Wing, MORTH	
2	Araria-Supaul (km 112 to km 194 except km 154 to km 166)	Bihar	327 E	70	EAP Wing, MORTH	
3	Rohru-Kotkai	Himachal Pradesh	705	138	EAP Wing, MORTH	
4	Hamirpur-Mandi(km 141- km 265)	Himachal Pradesh	70	124	EAP Wing, MORTH	
5	Purulia to Kulti	West Bengal		76	EAP Wing, MORTH	
	Total			525		

Note: These residual works are additional to the works mentioned in the Bharatmala Pariyojana corridors list, where the Implementation Agency is EAP Wing, MoRTH

Annexure III (d)

List of projects to be awarded by NHAI under NH (0)

S. No.	Project	State	NH number	Length (km)	Implementation Agency
1	Palamaneru - Krishnagiri	Andhra Pradesh	42	90	NHAI
2	Anantpur – Gidulur	Andhra Pradesh	544D	202	NHAI
3	Kurnool – Dornala	Andhra Pradesh	340C	90	NHAI
4	Jadcheralla - Kalwakurthy – Mallepalli	Telangana	New NH	100	NHAI
5	Brahmapuri - Armori		353D	140	NHAI
6	Umred - Bhiai - Chimur - Varora - Vani and Gondhkari – Kalmeshwar – Dhapaweda - Saoner	Maharashtra	353E, 930E, 547E	156	NHAI
7	Malegaon/ Jahangir - Akhola	Maharashtra	161	40	NHAI
8	Akkalkot - Gulbarga	Maharashtra	150E	102	NHAI
9	Shavli - Nizampur - Chhadvel - Nandurbar - Taloda - Akkalkura - Dedipada - Netrang	Maharashtra	753B	180	NHAI
10	Alandi - Pune - Phaltan - Pandarpur	Maharashtra	965	260	NHAI
11	Kohlapur – Sangli	Maharashtra	166	47	NHAI
12	Bargarh-Barpali (km0 to km20)	Odisha	26	20	NHAI
13	Barapal to Gondhibanda	Odisha	149 and 53	16	NHAI
14	Kalasandhapur - Berhampur	Odisha	59	40	NHAI
15	Jeypore - Koraput	Odisha	26	24	NHAI
16	Joka to Namkhana	West Bengal	117	90	NHAI
17	Mirhati – Naopara (km 26 to km 31.5 in Barasad)	West Bengal	34	7	NHAI
18	Kharagpur - Morgram	West Bengal	60	307	NHAI
19	Ghospukur to Sevoke Army Cantonment in Darjeeling	West Bengal	31	25	NHAI
20	Sarjapura - Hoskote	Karnataka	207/ 647	42	NHAI
21	Karnataka - Maharashtra border (Kamlanagar) to Naubad city	rnataka - Maharashtra border Karnataka 50 54		54	NHAI
22	Naubad city - Humnabad city	Karnataka	50	47	NHAI
23	Ravoor – Kenchargalli	Karnataka	150	37	NHAI
24	Kalaburgi - Ramasamudra	Karnataka	150	90	NHAI
25	Dhadasagur – Ballary	Karnataka	150A	52	NHAI

S. No.	Project	State	NH number	Length (km)	Implementation Agency
26	Chunchinahalli - Hosamane Cross	Karnataka	150A	8	NHAI
27	Kalaburgi - KNT/MH Border/ Balurgi	Karnataka	150E	74	NHAI
28	Mirzachowki - Farakka	Jharkhand	33	93	NHAI
29	Kolebira/ Jamtola – Gumla	Jharkhand	23, 43	48	NHAI
30	Ghazipur-Balia- UP Bihar border	Uttar Pradesh	31	128	NHAI
31	Allahabad bypass road junction to Allahabad city	Uttar Pradesh	330	17	NHAI
32	Jagdishpur – Faizabad	Uttar Pradesh	330A	61	NHAI
33	Naini junction to Tikri	Uttar Pradesh	35	50	NHAI
34	Tikri road to Jangi road	Uttar Pradesh	35	37	NHAI
35	Shevli - Nizampur, Chhadvel, Nandurbar, Taloda, Akkalkura in MH, Dediapada – Netrang in Gujarat	Gujarat	753B	58	NHAI
36	Radhanpur Kamalpur Khakhal, Roda, Dunawada, Patan, Chanasama, Mahesana, Kherva, Gojariya, Sama, Churada, Kuvadara, Prantij	Gujarat	68	55	NHAI
37	Mahuva, Saverkumdla, Amreli, Bagasara Jetput	Gujarat	351	20	NHAI
38	Doraji, Jamkandorna, Kalavad Jamnagar	Gujarat	927D	41	NHAI
39	Sanchore - Dhanera - Deesa & Tharad – Dhanera - Panthvada	Gujarat	168A & 168	31	NHAI
40	Limda/ Dhasa – Libmdi	Gujarat	51	90	NHAI
41	Thanjavur connecting Thiruvaiyaru, Kunnam, Pereli, Perambalur bypass Naduvalur, Thodavur, Krishnapuram, Veepanthattai and terminating at Athoor bypass	Tamil Nadu	136	126	NHAI
42	Salem - Ayothiapattinam, Pappireddipatti, Harur, Uthangarai, Thirupathur - Vaniyambadi	Tamil Nadu	179A	135	NHAI

S. No.	Project	State	NH number	Length (km)	Implementation Agency
43	Thoppur connecting Mechcheri, Mettur, Ammapettai, Nerinchipettai, Chittar Bhavani and terminating at Erode road	Tamil Nadu	544H	135	NHAI
	Total			3,465	

Annexure III (e)
List of roads for connectivity of Backward districts and Religious and Tourist Centres

Sr. No.	Project	State	Length (km)	Implementation Agency
1	Malkangiri on NH 326- Chintapalle-Naripattanam-Waddai-Chodavaram-Sabbavaram-Gandigudam-NH-16 near Tallavalasa	Andhra Pradesh	280	Roads Wing, MoRTH
2	(i) Siwam – Madhubani – Sitamarhi – Indo/Nepal border. (ii) Rampur Khajuriya (NH-28) – Kesaria – end on NH-722	Bihar	258	Roads Wing, MoRTH
3	Umagaon-Basopatti-Benipatti-Rahika-Madubani- Rampatti-Awam-Loufa-Bheja-Supaul-Saharsa	Bihar	160	Roads Wing, MoRTH
4	(i) Pathalgaon on NH-43-Dharmjaygarh-Sithra- Munund-Chhal on NH-49. (ii) Gondia on NH-753 – Balaghat – Lamta – Nainpur-Mandla on NH-30	Chttissgarrh	273	Roads Wing, MoRTH
5	(i) Bodeli (NH-56) – Champaner Pavagadh Archeological Park - Halol. (ii) Abu Road (NH-27) – Mount Abu	Gujarat	90	Roads Wing, MoRTH
6	Hospet (NH-67) – Hampi – Kamlapu – Gangavathi	Karnataka	95	Roads Wing, MoRTH
7	(i) Satna – Kotar – Semaria – Sirmaur – Jawa – on NH 35 near Shankargarh. (ii) Chitrakoot (NH- 35) - Rajapur – Manjhanpur – Palhana (NH-19)	Madhya Pradesh/ Uttar Pradesh	205	Roads Wing, MoRTH
8	(i) Poladpur (NH-66) – Mahabaleshwaram – Panchgam – Wai – on NH-48. (ii) Saralgaon Near NH-61 – Bhimashankar – Wafda-Khed	Maharashtra	145	Roads Wing, MoRTH
9	Dharni-Khamla-Achalpur-Amravati-Yavatmal- Umri-Karnji on NH-44	Madhya Pradesh/ Maharashtra	268	Roads Wing, MoRTH
10	(i)Anandpur on NH-20-Satkosia-Thakumunda- Kaplipada-Udala-Baripada on NH-18. (ii)Khordha (NH-57) – Chandka – Cuttack. (iii)Baleshwar on NH-18 extend to Chandipur	Odisha	189	Roads Wing, MoRTH
11	Panposh on NH-143-Kumarkera-Bargaon- Sundargarh-Ujalpur-Sarapgarh-Tildega-Konpara- Bagbahar-Lundang on NH-43.	Odisha/ Chattisgarh	200	Roads Wing, MoRTH
12	(i) Chengalpattu near NH-32 – Mamallapuram. (ii) Kodaighat (NH-183) – Kodaikanal – Palani	Tamil Nadu	120	Roads Wing, MoRTH
13	Junction of Manakpur-Gonda Rd. with NH-30 via Manakpur-Gonda Rd. &Bhabhan- (Manakpur Rd Swaminarayan Chhaaiya& terminating at	Uttar Pradesh	70	Roads Wing, MoRTH

Sr. No.	Project	State	Length (km)	Implementation Agency
	Bhabhana Rly. Stn. – Haraya (NH-27).			
14	Kaanauj – Bilgram – Hardoi – Baghauli – Misrikh- Sitapur.	Uttar Pradesh	110	Roads Wing, MoRTH
15	Barabanki – Dewa Sharif – Fatehpur – Mahmudabad – Biswan – Laharpur – Lakhimpur	Uttar Pradesh	139	Roads Wing, MoRTH
16	(i) Varanasi – Sindhora – Jaunpur – Akbarpur – Ayodhya Road. (ii) Mirzapur (NH-35) – Aurai (NH-19)	Uttar Pradesh	240	Roads Wing, MoRTH
17	Ayodhya – Chhawani – Ghanghata – Barhalganj – Barhaj – Siwan	Uttar Pradesh	255	Roads Wing, MoRTH
18	Bagdora-Simana-Lamahata- Kalimpong- Damlin Gitaldah-Dinhata-Alipurduar-BuxaDuar (iii) Kashinagar-Kuchuberia-Gangasagar	West Bengal	281	Roads Wing, MoRTH
19	(i) Nandgaon nearNH-66 to Devgarg.(ii) Kudal near NH-66 to Sindhudurg.(iii) Kudal near NH-66 to Malwan.(iv) Kankauli near NH-66 to Achara	Maharashtra	148	Roads Wing, MoRTH
20	Nashik – Jawahar – Kasakhurd (NH-48) – Dahanu – Bordi	Maharashtra	110	Roads Wing, MoRTH
21	Route Starting from Nh-565-Gotlagattu-Podile- Uppalapadu-Chimakurti-Ongloe on NH-16.	Andhra Pradesh	75	Roads Wing, MoRTH
22	Talaja (NH-8E) – Palitana – Sihor	Gujarat	64	Roads Wing, MoRTH
23	Sonbersa-Raxual	Bihar	90	Roads Wing, MoRTH
24	Ganganagar (NH-62)- Raisinghnagar- Rojhri - Awa – Poogal & Anupgarh – Surat Garh, Rajasthan	Rajasthan	275	Roads Wing, MoRTH
25	Pugal Aladin K Bera- Berivanwala, Rajasthan	Rajasthan	75	Roads Wing, MoRTH
26	Jaisalmer (NH-11) – Kanod- Ghantiali- Nachna- Chinnu-Naukh	Rajasthan	165	Roads Wing, MoRTH
27	Bhadasar – Sarkaritala – upto Pakistan Border, Rajasthan	Rajasthan	80	Roads Wing, MoRTH
28	Nachna-Balan (Babla) and Nachna- Bharewala, Rajasthan	Rajasthan	87	Roads Wing, MoRTH
29	2(a) Bap-Kansar-Chinu 2(b) Bap-Shekhasar-Ramdevra	Rajasthan	102.7	Roads Wing, MoRTH

Sr. No.	Project	State	Length (km)	Implementation Agency
30	3(a) Pokharan-Fassund-Undu/Kashmir-Nimbala on NH-15 3(b) Harsana-Phata to Uttarlai Aire base	Rajasthan	150.6	Roads Wing, MoRTH
31	Firozpur – Khema Karan (Indo-Pak Border)	Punjab	23	Roads Wing, MoRTH
32	1(a)Aau-Bhojasar-Bhiyansar-Padiyal-Jamba-Bap 1(b) NH 15 Kansingh ki sid-Jamba-Saitan Singh Nagar-Lohawat-Dechu (Phalodi-Ramji ki Gol Megha Highway	Rajasthan	166.7	Roads Wing, MoRTH
	Total		4,990	

Annexure IV

Grand Challenge Mechanism

- (i) Under the Grand Challenge Mechanism, a maximum of two stretches of roads not exceeding 100 kms will be allowed from any one State in a particular financial year.
- (ii) States will have to indicate their preference for a stretch from the final list of the roads included in the Bharatmala Pariyojana in the month of April every year.
- (iii) Once such an intention has been shown by a State, MoRTH will send a preliminary confirmation to the particular state and proceed to finalize the alignment and prepare the DPR.
- (iv) If a State has acquired 50% of the land by the time the DPR is ready, then such DPRs will be put on fast track mode and MoRTH will send secondary confirmation to State Government.
- (v) From amongst such DPRs/projects, those projects will be taken up for bidding where additional 30% of the land is acquired by the time of bidding of the projects.
- (vi) From such successful bids, those projects will be awarded where 90% land has already been acquired at the time of award of the project.
- (vii) If the above milestone is satisfied, the implementation of the said project in the said State will be taken on priority.
- (viii) If there are competing projects with the above credentials, then those projects which are connecting to Ports and/or Industrial or commercial hubs and other economically and strategically important locations will be given priority.
- (ix) In addition, if the concerned State Government provides at least 25% of the Land Acquisition cost for 'Ring Road or Bypass' projects, such projects will be taken up for construction by NHAI on priority basis.
- (x) After the award of the road project, if there is no progress in the said project for one year on account of RoW issues including availability of land, utility shifting/tree felling issues, encroachment issues etc, then the said allocation of funds for the said project will stand cancelled on the expiry of one year.

Annexure V (a)

Technology to be used in DPR Preparation

Technology shall be used wherever possible in DPR preparation, to enable increased accuracy of surveying and project design, including but not limited to:

- (i) Topographic survey using mobile/ aerial LiDAR or equivalent or better technology.
- (ii) Sub-surface utility mapping using Ground Penetrating Radar (GPR), Induction Locator or better technologies.
- (iii) Traffic count survey using Automated Traffic Count and Classification (ATCC) systems.
- (iv) Digitization of cadastral maps relevant to the project alignment.
- (v) Digital elevation models, remote sensing land use maps and 3D engineered models for visualizing and reviewing alignment options and making alignment choices.
- (vi) Pavement condition testing using Network Survey Vehicle and laser profilometer and pavement strength testing using Falling Weight Deflectometer.
- (vii) In addition to the technologies mentioned, the implementation agencies may identify, from time to time, the additional aspects of DPR preparation where technology may be introduced.

Annexure V (b)

Sub-stages in DPR Preparation

Sr. No.	Stage	Key activities	Report/ deliverable submitted			
	Part-I					
1	Inception	Project planning and mobilization	Inception report and QAP			
2	Feasibility	Alignment finalization, preliminary surveys	Alignment options report and feasibility report			
3	LA and clearances I	LA, utilities identification; creation of draft notifications and proposals	Strip plan, LA report (3a, 3A), clearances and utility shifting proposals			
4	LA and clearances II	Land acquisition process, obtaining final utilities estimates and required clearances	JMS and 3D report, final project clearances and utilities report			
	Part-II					
5	LA III- award determination	Land acquisition award determination	3G report			
6	DPR	Detailed design of highway, preparation of detailed project report with drawings	Draft DPR report, Final DPR report, documents and drawings			
7	Technical schedules	Preparation of bid documents and technical schedules	Civil works contract agreement and schedules			
8	LA IV- possession	Obtaining possession of land	Land possession report			

Annexure V (c)

Interventions to accelerate Land Acquisition

- 1. At least 1 Land Acquisition Support Officer shall be hired at an RO level on contract basis, per 10-15 CALA under the RO, to assist in coordination of Land Acquisition.
- 2. **Bhoomi Raashi** shall be used by all field offices and HQ for preparation, review and approval of land notifications.
- The State Government shall be requested to propose appointment of an additional CALA in districts where the quantum of land acquisition exceeds 140 Ha, to ensure expeditious land acquisition.
- 4. Tight monitoring of the funds shall be ensured in the CALA accounts to ensure timely disbursement by the CALA. At NHAI, the centralized single CALA account shall be used to ensure optimal monitoring of disbursement and to prevent interest loss to money lying in savings and current accounts.
- 5. The services of DPR consultant shall be used by the implementation agency to assist in the Land Acquisition process till possession of land through preparation of draft LA notification, surveys and valuation, provision of manpower, resources required for land acquisition etc.
- MoRTH shall appoint Arbitrators, serving officers or retired officers on full time basis, in consultation with the State Governments in districts with pendency of large number of references.

Annexure VI(a)

Projected Fund Requirement for Highway Sector including Bharatmala Phase I and ongoing schemes for next 5 years

Sr.	Programmes						
No.	Programmes	2017-18	2018-19	2019-20	2020-21	2021-22	Grand Total
	Bharatmala Phase I						
	Economic corridors						
la	development						
	Inter corridor and feeder roads						
В	development						
	National corridor efficiency						
C	improvements	1 06 140	94.070	01 101	1 10 575	1 24 107	
	Border and International	1,06,148	84,979	91,101	1,18,575	1,34,197	
D	connectivity roads						
	Coastal and Port connectivity						
E	roads						
F	Expressways						
G	Ongoing Projects of NHDP						
	Sub Total Bharatmala Phase I		1 4 2				
	[I(a) to I(g)]	1,06,148	84,979	91,101	1,18,575	1,34,197	5,35,000
	Other Schemes						
II (a)	NH(O)						
(b)	SARDP-NE						
(c)	LWE	24,390	31,113	36,576	31,600	33,645	
(d)	VRC						
(e)	EAP						
	Sub Total Existing Schemes						
	plan [ll(a) to ll(e)]	24,390	31,113	36,576	31,600	33,645	1,57,324
	Grand Total	1,30,538	1,16,092	1,27,677	1,50,175	1,67,842	6,92,324

				Sou	irce of Funds			
Financial Year	Fund Allocation	CRF earmarked for NH*	GBS (SARDP, EAP Counter Part etc.)#	Expected monetisation of NHs through TOT (Toll- Operate- Transfer)	PBFF (Toll- NHAI)**	Market Borrowings	Private Investment (PPP)^	Total (Bharatmala Pariyojana Ph I + Existing)
Year 2017-18	Bharatmala Pariyojana Ph I	22,407		1,000	8,462	59,279	15,000	1,06,148
	Other Schemes	16,417	7,973					24,390
	Sub Total	38,824	7,973	1,000	8,462	59,279	15,000	1,30,538
2018-19	Bharatmala Pariyojana Ph I	21,093		3,000	8,885	35,000	17,000	84,979
	Other Schemes	21,613	9,500					31,113
	Sub Total	42,706	9,500	3,000	8,885	35,000	17,000	1,16,092
2019-20	Bharatmala Pariyojana Ph I	21,901		5,000	9,200	35,000	20,000	91,101
2019-20	Other Schemes	25,076	11,500					36,576
	Sub Total	46,977	11,500	5,000	9,200	35,000	0 20,000 20,000	1,27,677
2020.21	Bharatmala Pariyojana Ph I	34,075		10,000	9,500	40,000	25,000	1,18,575
2017-18 - 2018-19 - 2019-20 - 2020-21 -	Other Schemes	17,600	14,000					31,600
	Sub Total	51,675	14,000	10,000	9,500	40,000	25,000	1,50,175
2024 22	Bharatmala Pariyojana Ph I	40,197		15,000	10,000	40,000	29,000	1,34,197
2021-22	Other Schemes	16,645	17,000					33,645
	Sub Total	56,842	17,000	15,000	10,000	40,000	29,000	1,67,842
Total	Bharatmala Pariyojana Ph I	1,39,673		34,000	46,048	2,09,279	1,06,000	5,35,000
lotal	Other Schemes	97,351	59,973					1,57,324
2018-19 2019-20 2020-21	Grand Total	2,37,024	59,973	34,000	46,048	2,09,279	1,06,000	6,92,324

Annexure VI(b)

Guidelines for scrutiny of Individual projects under Bharatmala Pariyojana

Following are the guidelines for scrutiny of individual projects under the programme Bharatmala Pariyojana posed before PIB on 16.6.2017:-

- Status of Land Acquisition, Rehabilitation & Resettlement, shifting of Utilities and obtaining of Environmental Clearances, etc., should be stated upfront, together with the likely date of completion of these activities. No project is to be awarded without confirming availability of 80% of the land for PPP projects and 90% for EPC projects. Similarly, clear conditions precedent may be laid down for DPR preparation, inviting bids, award of project and declaring the appointed date. The officers/agencies responsible for these activities should be clearly identified and indicated in the proposal to the Competent Authority.
- Nodal Officers responsible for the implementation of each project/package and names of officers and agencies responsible for site investigations, preparation of detailed designs for important activities (for example, construction of important bridges), preparation of BOQs, etc., need to be indicated, identified and trained before the start of the project/package.
- Investment proposals should be based on the Detailed Project Reports and cost estimates should be based on the price level not beyond six months from the date of consideration of the proposal by the Concerned Authority.
- 4. Proposals should give separately details of the costs of 4/6 laning, ROBs and 'Major' bridges, along with the comparative costs of the latest approved/awarded projects on a like-to-like basis. In case of substantive variations/deviations in scope of work or rates, specific justification should be given in the DPR and approval by the Concerned Authority requires to be solicited.
- 5. The supervision consultancy, agency and other charges incurred by implementing agencies would be applicable as per extant guidelines and circulars of MoRTH and must not exceed the prescribed limits.
- Supervision consultancy contracts should be based on specific items of work or man months
 requirement assessed on objective criteria rather than being based on the cost of the project or civil
 works.
- 7. Provision for physical contingencies should normally not exceed 2.8% of the cost of civil works.
- 8. EIRR and FIRR should be worked out on the lines of PAMD methodology, using discounted cash flows and without assuming annual/periodical escalation in revenues/savings in VOC's or time. Based on the EIRR/FIRR and other findings, each DPR shall also recommend the model suitable for that particular sub-project as BOT (Toll) or BOT (Annuity projects) or HAM or EPC.
- 9. Proposals to be brought before the concerned authority should have clearly identified milestones, time schedule based on resource based PERT chart to meet those milestones, persons/agencies responsible for achieving the milestones, and firm details of component –wise cost details.

- 10. Mode of implementation and monitoring of the project by concerned authority needs to be indicated, clearly identifying the areas of responsibilities for concerned agencies/persons.
- MoRTH and implementing agencies should evolve an internal mechanism for periodic review of the progress of projects/packages under Bharatmala, identification of the slippages, if any, suggesting under Bharatmala, identification of the slippages, if any, suggesting corrective interventions and for fixing responsibility. A comprehensive monitoring mechanism within NHAI shall be established for tracking and reviewing progress of projects under the programme, including problem solving, timely completion, quality of construction, O&M and timeliness in completion of the created /improved highway assets, safety aspects and commuters inconvenience. IT-enabled PMIS is already operational, for monitoring of NH projects on real time basis, shall be suitably used for projects under the programme. Further, for effective monitoring purposes independent agencies with adequate experience shall be engaged, wherever required.
- 12. BOT (Toll)/BOT (Annuity projects)/HAM projects should conform to the guidelines laid down by PPPAC/CCEA and the proposed concession agreements should be in accordance with the stipulated guidelines. For these projects, benchmarking of critical parameters should be done. If any deviations from the concession agreements /guidelines approved by the Competent Authority are needed, due institutional framework as approved by CCEA for amendments in MCA for Highway projects shall be followed.
- 13. Financing arrangements should be fully tied up. For every project MoRTH/NHAI should indicate commitments on existing ongoing projects, additional commitments already made and how additional commitments on the proposal under consideration and new projects in the pipeline are to be financed. Sources of funding including Internal Resources, Borrowings, etc. and cash flow statements for the next 5 years highlighting the debt servicing/cash flow problems faced by the implementing organizations shall be reviewed; and remedial action required to overcome the problems faced shall be taken promptly.
- 14. Each DPR should clearly indicate the details of expected revenue from toll and other sources including leases rentals, value capture, etc. cost of collection, arrangements for collection, etc. Variations, if any from the government approved toll norms, and the reasons for the same should be brought out.
- 15. During implementation of any project, if approval of revised cost estimates are necessitated due to time and cost overrun, proposal should be considered and approved by the concerned authority, and it would fix responsibility for time and cost overrun, wherever necessary.
- 16. Intelligent Transportation Systems (ITS) may be deployed in high density corridors to enable better revenues and road safety, subject to viability.