



GOVERNMENT OF INDIA
MINISTRY OF ROAD TRANSPORT & HIGHWAYS
AN ISO 9001:2008 CERTIFIED MINISTRY
S&R(R) ZONE

IAHE Campus,
A-5, Sector-62,
Noida-201301.

F. No. RW/NH- 33044/01/2017/S&R (R)

Dated: 28th February, 2017

To

1. All Engineers-in-Chief and Chief Engineers of Public Works Department of States/ UTs dealing with National Highways, other centrally sponsored schemes.
2. The Director General (Border Roads), Seema Sadak Bhawan, Ring Road, New Delhi-110 010.
3. The Chairman, National Highways Authority of India, G-5 & 6, Sector-10, Dwarka, New Delhi-110 075.
4. The Managing Director, NHIDCL, PTI Building, New Delhi-110001.

Subject: Format for Inventory data of National Highways.

The Ministry requires the various details pertaining to National Highways for replying Parliament Matters, VIP References, and Speeches for Conferences and Seminars, Review Meetings etc. There is no centralized data base at Head Quarter as well as at Regional Offices of the Ministry. The information is collected as and when the need arises which carries precious time. Moreover, the authenticity of the information received is also a big question mark. Earlier, there was practice of keeping road register at division level under the custody of concerned Executive Engineer/Project Director of executing Agency wherein kilometre wise details of various features of roads and bridges were recorded and regularly updated. But it is observed that this practice is either discontinued or not updated due to one or other reasons.

Due to discontinuity in keeping/updating the road register it has not been possible to have the Technical as well as Administrative details of all National Highways in the Ministry. These details are mostly available with the Implementing Agencies and that to in haphazard/staggered manner. In order to streamline the requisite information a necessity and importance of Inventory Format for National Highways is required. These details may also prove to be of immense importance for managing roads / bridges scientifically.

2. In view of the above, a format for collecting, recording and updating of inventory data in respect of National Highways is **Annexed** for further necessary actions.

3. The following administrative hierarchy should be followed to collect, store and update the above mentioned data field :

- (i) At field level these inventory items may be stored in a Microsoft Excel Format at division / PIU level of the executing agencies.
- (ii) At 2nd level the division wise data obtained from divisions/PIUs would be integrated and validated at Chief Engineer of state PWDs or BRO / Regional officer of NHAI and NHIDCL as the case may be. Thereafter, the Regional officer of MoRTH would integrate and validate the data obtained from various agencies in the state.
- (iii) At Ministry level monitoring zone will obtain the data from all the Regional Officers/ELOs of Ministry and would integrate, validate and generate the various reports for the purpose of monitoring and decision making.

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4. All the implementing Agencies are hereby directed to start the compilation of information available in prescribed format and as mentioned in para-3 above may be sent to the concerned officers within three months from the date of issue of this circular.

Yours faithfully,



(Manoj Kumar)

Executive Engineer (NFSG), (SR&T) (Roads)
For Director General (Road Development) & Special Secretary

Copy for information and necessary actions to:

1. All officers of the Ministry at HQ
2. All ROs and ELO of the Ministry
3. Technical circular file of S&R (R) Section
4. NIC-for uploading on Ministry's website under "What's new"

Copy for information to:

1. Sr. PPS to Secretary, RT&H
2. PPS to DG (RD) & SS
3. PS to ADG (MK)
4. PS to ADG (BNS)

1. Administrative

Sl. No.	Data Field	Remarks
1	Name of the State/UT	
2	Category of the Road (EW/NH/SH/MDR/ODR/VR/UR....)	
3	Road No.	
4	Popular/Official Name	
5	Starting Location	Chainage 0 km
6	End Location	Chainage ...km
7	Total Length in km	Chainage details State wise
8	No. of Lanes (Single/Intermediate/2/4/6/8...)	Chainage details State wise
9	Name of the Agency (Ministry/NHAI/NHIDCL/BRO/PWD/Any Other...)	
10	Source of Funding: Budgetary Resources/Cess/PPP/WB/ADB/JICA/BRICS/Any Other...)	Chainage details State wise
11	Jurisdiction (Region/Circle/Division/PIU/Subdivision/Section)	
12	Latitude, Longitude & Altitude	GIS based
13	Length of alternate route, if any in km	Secondary

I. Engineering

Sl. No.	Data Field	Remarks
	Basic Features	To be given km to km
1	Alignment (Straight/Undulating/...	
2	Gradient in %	
3	Type of Pavement (Rigid/Flexible/...)	
4	Width of Carriageway in m	Chainage details
5	Type of Shoulder (Hard/Paved/Gravel/Bricks/Earthen/Other...)	
6	Width of Shoulder in m	Chainage details
7	Type of the Median, if any (Hard/Covered/Soil etc)	
8	Width of Median in m	Chainage details
9	Type of the Kerb (Concrete/Stone/Other...)	
10	Median Openings	Chainage details
11	Type of the Service Road (Rigid/Flexible)	
12	Length of Service Road in km	Chainage details
13	Width of Service Road in km	Chainage details
14	Type of Side Drain (Concrete/Earthen/...)	
15	Length of Side Drain in km	Chainage details
16	Width of Drain in m	Chainage details
17	Width of ROW in m	Chainage details

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18	Type of Footpath (Hard/Paved)	
19	Length of Footpath in km	
20	Width of Footpath in m	Chainage details
21	Width of Formation in m	
22	Pavement Characteristics	
23	Year of Construction/Last Treatment	Chainage details
24	Scheme (NH(O)/EPC/Item Rate/NHDP Phase I-VII/ LWE/NHIIP/SARDP-NE/BOT/(Toll) /BOT(Annuity)/DBFO/IRQP/PR/LWE/ Bharat Mala/SR/Any Other...)	
25	Design Traffic Volume in msa	
26	Design Life in Years	
27	Design Speed in kmph	
28	Embankment/Cutting	Chainage details
29	Height of Embankment/Depth of Cutting in m	"
30	Subgrade (Earth Work) in mm	"
31	WBM in mm	"
32	GSB in mm	"
33	WMM in mm	"
34	DBM in mm	"
35	BM in mm	"
36	BC in mm	"
37	Seal Coat in mm	"
38	DLC in mm	"
39	Cement Concrete Thickness in mm	"
40	Transverse Joints	Interval in m
41	Longitudinal Joints	"
42	Total Pavement Thickness in mm	
43	Camber Type (Straight/Parabolic/...)	
44	Camber %	
45	Curves (Horizontal/Vertical)	
46	Type of Curves (Circular/...)	
47	Location	Chainage km
48	Radius in m	Extra Widening?
49	Sight Distance in m	
50	Length of Curve in m	
51	Rises & Fall (in Nos. & %)	
52	Super Elevation %	
53	Type of Slope Protection (Grass/Pitching/...)	
54	Railing/Crash Barriers/Guard Rails / Cat Eyes/Studs/Delineators /Road Side Furniture/Parapet Wall/Boundary Stones/Km Stones/Markings/Signages/Light Post/Retaining Structures/Any Other...?	For each Location, Chainage, Type, Left/Right etc...

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2. Utilities

Sl. No.	Data Field	Remarks
1	Type of Utility (Water/Gas/Electrical/OFC/Sewerage/Drains/Petroleum/Telephone/Any other...)	
2	Owner of the Utility Private/Government/Public Sector/Any other...	
3	Contact Details of Controlling Authority	
4	Location of the Utility (Right/Left)	
5	Distance from Edge of the Carriageway in m	
6	Chainage (km to km)	
7	Total Length of Utility in km	
8	Year of Laying	
9	Details of Permission	

3. Way Side Amenities/Rest Houses/Recreation Centres/Parking & Service Areas/ Lay byes/Any Other... (Adjoining only)

Sl. No.	Data Field	Remarks
1	Type	
2	Location	Chainage km & place
3	Whether Left/Right	
4	Whether Government/Private/NGO/Any other...	
5	Contact Details	

4. Land Use

Sl. No.	Data Field	Remarks
1	Type (Rural/Urban/Industrial/Built up/Semi built up /Agricultural/Reserved/Forest/Wild life Sanctuaries/Any other...)	Within ROW
2	Location	Chainage km & place left/right
3	Whether Government/Private	

5. Materials (Borrow Areas/Quarries/Refineries/Cement Plants/ Plants & Machineries / Any Other ... (Nearby) for Each

Sl. No.	Data Field	Remarks
1	Types of Material (Soil/Moorum/Stone Aggregate/Fly Ash/ Lime/ Stone dust / Any other...	
2	Location (Left/ Right)	Chainage
3	Name of Place	
4	Distance from road in km	

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5	Whether Government / Private	
6	Quantum (Area / Volume)	
7	Contact Details	

6. Encroachments

Sl. No.	Data Field	Remarks
1	Type	Within Building Lines
2	Location (Left / Right)	Chainage km & place left/right
3	Whether Government/Private	

7. Retail Outlets/Hospitals/Fuel Stations/Private properties/Static Weigh Bridge /Any other...(For each)

Sl. No.	Data Field	Remarks
1	Type	
2	Location	Chainage km & place left/right
3	Whether Government/Private	
4	Whether access permitted?	Year
5	Contact Details (Name. Address/Telephone...)	

8. Traffic Counting Stations

Sl. No.	Data Field	Remarks
1	Location	Chainage km
2	Name of Nearest Place	
3	Traffic Details....	To be as per IRC

9. Villages/Towns/Cities/Bypasses/...(Secondary Data)For each...

Sl. No.	Data Field	Remarks
1	Name	Chainage km
2	Location	
3	Whether left/right/both?	
4	Length covered in km	
5	Population in Nos.	
6	Importance, if any	

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10. Toll Plazas

Sl. No.	Data Field	Remarks
1	Location of Toll plaza	Chainage km
2	Name of the Nearest Place	
3	Length covered in km	Chainage km to km
4	Name of the Project	
5	Date of COD/Start	
6	Period of Tolling in years	
7	Name of the Owner/Contractor/Concessionaire	
8	Contact details (Name. Address/Telephone...)	
9	Number of lanes in each direction	
10	Width of the lane for each lane in each direction at the toll plaza.	
11	Number of Toll Booths at toll plaza.	
12	Toll collection system (e.g. manual, semi- automatic, automatic) at the toll plaza.	
13	Operation status of the toll plaza.(e.g. open, closed)	
14	Restriction at the toll plaza including: vehicle type; dimension; weight, etc.	
15	Year when rates were last revised per vehicle type.	
16	Vehicle wise Toll rate in Rupees.	
17	Vehicle wise Single Journey Toll rate in Rupees.	
18	Vehicle wise Return Journey Toll rate in Rupees.	
19	Vehicle wise Monthly pass Toll rate in Rupees.	
20	Vehicle wise Toll rate in Rupees for Commercial Vehicle Registered within the district of plaza.	
21	Helpline Number	
22	Nearest Police Station	
23	Highway Administrator (Project Director): Name and contact details	
24	Representative of Concessionaire:	
25	Representative of Consultant:	

11. Land Records

Sl. No.	Data Field	Remarks
1	Name of the State/UT/Region/Circle/Division/Sub-division/Section	
2	Length covered in km	Chainage km to km
3	Area in Ha.	
4	Whether Agriculture/Industrial/Urban/Restricted/Forest/Wild life/Sanctuaries/Any other...	Chainage km to km
5	Year of holding/transfer (Date of Mutation)	
6	Contact details	

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12. Tree and Arboriculture

Sl. No.	Data Field	Remarks
1	Name of the State/UT/Region/Circle/Division/Sub-division/Section	
2	No. of Tress (Left/Right) (km to km)	
3	Details of Tree (size etc.) (km to km)	
4	Road Arboriculture (km to km)	
5	Contact details	

13. Religious and Tourist Places / Any other (For each)

Sl. No.	Data Field	Remarks
1	Name	
2	Location km	Chainage km, Left/Right
3	Importance	Brief...

14. Forest/Wild Life Sanctuaries/National Parks/ Industrial parks/Markets/ Missing Links/ Any other... (for each)

Sl. No.	Data Field	Remarks
1	Name	
2	Location km	Chainage km to km
3	Importance	Brief...
4	Length covered in km	

15. Drainage Pattern

Sl. No.	Data Field	Remarks
1	Type of Terrain (Hilly/Mountainous/Plain/Meandering/...	Chainage km to km
2	Whether Marshy/Protected...?	
3	Area in Ha.	
4	Average Rainfall in mm for each month	
5	Length under Submergence in km	Chainage km to km
6	Length under Water logging in km	Chainage km to km

16. Soil Pattern

Sl. No.	Data Field	Remarks
1	Type of Soil (Soft/Granular/Sandy/BC/Moorum/Clay/ Silty/Sandy/Any other..	
2	Location km	Chainage km to km

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3	Length covered in km	
4	Importance	Brief...

17. Accidents Data

Sl. No.	Data Field	Remarks
1	Location km	Chainage km to km
2	Length covered in km	
3	Reasons for	
4	Measures taken	
5	Brief description of accident classification e.g. Fatal, Grievous Injury, etc.	
6	Brief description of accident nature e.g. Overturning, Head on collision, etc...	

18. Environmental Data (Air/Water/Temperature/Humidity/Noise...)

Sl. No.	Data Field	Remarks
1	Temperature (Daily/Monthly/Average	Chainage km to km
2	Humidity	
3	Air Quality	
4	Snow fall duration/Thickness	
5	Earthquake Zone	
6	Climatic Zone	
7	Name of the meteorological station assigned by Indian meteorological department. e. g. Chitradurga	

19. Railway Crossings/ROBs/RUBs/VUP/Intersections/Grade Separators/Flyovers /Any other... (for each)

Sl. No.	Data Field	Remarks
1	Type	
2	Name	
3	Location km	Chainage/ km
4	Length in km	
5	Traffic Volume (Through/Crossing)	PCU
6	Maximum Horizontal Clearance in m	
7	Maximum Vertical Clearance in m	
8	Year of Construction	

20. Culverts & Bridges/Lakes/Reservoirs/Streams/Rivers/Canals...

Sl. No.	Data Field	Remarks
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1	Type	
2	Name	
3	Location km	Chainage/ km
4	Length in km	
5	Traffic Volume (Through/Crossing)	PCU
6	Maximum Horizontal Clearance in m	
7	Maximum Vertical Clearance in m	
8	Year of Construction	

21. Contact Details (HQ/RO/Agencies(CE/SE/EE/SDE/JE..)/Police/Any other...

22. Any other...?

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