## Government of India Ministry of Road Transport & Highways (Road Safety Engineering Zone) Transport Bhawan, 1, Parliament Street, New Delhi-110001

RW/NH/RSCE/SCCORS/2023

Dated: 14th March 2023

## OFFICE MEMORANDUM

Sub: Action plan to undertake pedestrian count study and reduce pedestrian deaths based on directions of Supreme Court Committee on Road Safety (SCCoRS) - reg.

This is in reference to MoRT&H's OM no RT-25035/08/2023-RS(219765) dated 22.02.2023 (Copy enclosed) regarding the subject mentioned above wherein it is directed to implement action plan for undertaking pedestrian count study to reduce pedestrians fatalities on NHs.

- 2. Development of pedestrian facilities and their proper implementation at all stages of a road project (design, construction and O&M) is paramount for safety of road users. While planning and design the pedestrian facilities, the overall objectives would be continuity, comfort and safety of pedestrians thereby reducing pedestrian fatalities while ensuring obstruction free mobility of traffic.
- 3. Pedestrians facilities should be planned in an integrated manner with an aim to reduce pedestrian conflicts with vehicular traffic to the minimum and to ensure safe and smooth pedestrian flow. This necessitates road engineering interventions for pedestrians as per IRC 103:2012 Guidelines for Pedestrian Facilities, IRC 35, IRC 67, and Manual for 2/4/6 laning of NHs. Some of the pedestrian friendly provisions are mentioned below:
- a) Sidewalks: Obstruction free side-walks should be provided on both sides of the road wherever possible and above the level of the carriageway separated by kerbs. The raised footpath shall be depressed at suitable intervals to provide for convenient use of physically challenged persons. On bridges, pedestrian path with crash barrier to segregate from fast moving NH traffic shall be provisioned.
- b) Guardrails: Use of pedestrian guardrails at the edge of the foot paths for the protection / safety of pedestrians and for regulated exit of the pedestrians at designated pre-fixed locations. For prevention of indiscriminate crossing of pedestrians, central median railing of adequate height (say 1.5m) can be provided making jumping across the railing non-feasible.
- c) Pedestrian Crossings: At-grade pedestrian crossings shall be provided for all intersections of cross roads with service roads or entry exit ramps. At-grade pedestrian crossings shall be controlled. Controlled form of crossing shall be achieved through provision of Zebra Crossings, whether at signalized intersection

or pedestrian actuated signal. Road studs shall be provided at corners of all block of Zebra crossing markings. The pedestrian crossings (PUP/FOB) shall have provision for movement of physically challenged persons. Table-top pedestrian crossings may also be included suitably. Openings in pedestrian guard rails are to be given at selected locations duly integrating them with openings in central median railings, table top pedestrian crossings / Zebra crossings / stop lines etc.

- d) **Street Lighting:** Lighting must be provided every 20-30 m interval, focusing light on the pedestrian and bicycle lanes and not on the car lanes. Pedestrian lighting should illuminate the pedestrian walkway; appropriate lighting fixtures not exceeding a height of 4m from ground grade level should be provided. When street lights are provided at suitable heights (say 5m to 6m) separate lights for pedestrian walkways are not required.
- e) Provision of Pedestrian Under Pass (PUPs), sign boards as per IRC 67, traffic signals with additional cycle time for pedestrian crossings, Provision of zigzag road markings for vulnerable road sections as specified in clause 11.4 of IRC 35, Bus bays and passenger shelters, special paving to link pedestrian path with the transit stop etc., speed-limit signage in areas with heavy pedestrian traffic shall be installed as per IRC 67 "Code of Practice for Road Signs"
- f) FOB: The width of Foot over bridges should be as generous as possible. Escalators may also be considered as an option for inclusive mobility. Approach to subways and footbridges should comprise of ramps/elevator or inclinators and steps.
- g) Elevator/Lift: A carefully designed lift makes a huge contribution to the accessibility of a subway/FOB for persons with disabilities and reduced mobility. Minimum lift car space should be 1500 mm x 1500 mm. Doors should be 900 mm wide and closing mechanism is to be adjusted to give adequate entry time. A clear landing area of minimum dimensions 1500 mm x 1500 mm in front of the lift doors should be provided. Whenever street lights / escalators / lifts are provided, their safe and uninterrupted operation is highly essential. Therefore suitable under taking from the concerned local bodies / State Government to bear the energy charges and the maintenance of such equipment / facilities like street lights / escalators / lifts are to be obtained as it is not feasible for NH authorities to take care of these operations especially in far off locations.
- 4.1) Pedestrian count survey may be conducted through consultants or third party contracts using Automated or Manual methods. For NH projects at DPR stage, designs may be done only after taking into consideration the pedestrian counts at major junctions and in stretches of significant pedestrian movements. Suggestions received from schools, local administration, resident associations, panchayats, local bodies, institutions, industry owners, citizens and other stakeholders shall also be considered in design and site selection of the pedestrian facility.

- 4.2) Based on such surveys, Foot over bridges, pedestrian underpasses, lighting, pedestrian signals, traffic calming, road markings etc., in vulnerable road sections shall be implemented. Dedicated pedestrian track facility or in combination with cycle tracks may also be proposed on NHs in identified stretches to segregate pedestrians from high speed NH traffic.
- 4.3) It is also necessary to maintain and upkeep the provisioned pedestrian facilities to provide satisfactory level of service to pedestrians. Routine and specific inspections by NH officials and AE/IE shall cover the above aspects and also removal of encroachments identified on pedestrian facilities.
- 5.) Accordingly, ROs, PIUs and RSOs of MoRT&H are directed to complete pedestrians surveys and inspections in first quarter of FY 2023-24 to ensure proper development, implementation and maintenance of pedestrian facilities as per IRC 103:2012 and IRC manual for 2/4/6 laning in all NH projects under their jurisdiction. Incorporation of above mentioned pedestrian safety provisions is to be ensured and verified in all stages of Road Safety Audits. Based on pedestrians' surveys and inspections, estimates may be framed and pedestrian friendly specific works may be proposed as change of scope proposals or as standalone works for inclusion in Road Safety Annual Plan 2023-24.
- 6.) This issue with the approval of DG(RD)&SS.

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(Kishor Chandwani) Superintending Engineer (RSE) For DG (RD) & SS

To: All ROs/RSOs/ELOs/PIUs in Ministry of Road Transport & Highways

Copy for kind information to:

- Sr PPS to Secretary(RT&H)
- 2. Sr PPS to DG(RD)&SS
- 3. Sr PPS to AS(RS)
- 4. PPS to Director(RSC)

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