

Checklist of Repetitive Engineering Issues

S. No.	Common Road Engineering Causal Factors	Primary Road System		Secondary Road System		Tertiary Road System	
		Expressway	National Highway	State Highway	Major District Roads	Other District Roads	Village Roads
01	Absent traffic sign boards	✓	✓	✓	✓	✓	✓
02	Inadequate safety treatment in built-up areas		✓	✓	✓	✓	✓
03	Inadequate safety treatments at major and minor Intersections		✓	✓	✓	✓	✓
04	Inadequate safety treatments for the hard structures within the clear zone	✓	✓	✓	✓	✓	✓
05	Untreated/ Inadequate treatment of gap to service and access roads		✓	✓	✓	✓	✓
06	Inadequate safety restrictions at locations with limited sight distance (curves and intersections)	✓	✓	✓	✓	✓	✓
07	Absent/faded pavement markings and rumble strips	✓	✓	✓	✓	✓	✓
08	Inadequate treatment of the deteriorated pavement sections	✓	✓	✓	✓	✓	✓
09	Absent/Inadequate shoulder	✓	✓	✓	✓	✓	✓
10	Inadequate safety treatments at median openings	✓	✓	✓			
11	Absent crash barriers on the edge and median side of the high-speed corridors	✓	✓	✓			
12	Absent/Inadequate illumination of the carriageway	✓	✓	✓	✓	✓	✓
13	Absent/damaged road delineation on the carriageway	✓	✓	✓	✓	✓	✓
14	Inadequate provision of safe stopping/parking facilities	✓	✓	✓	✓	✓	✓
15	Absent/discontinuous pedestrian sidewalk and crosswalk		✓	✓	✓	✓	

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16	Absence of designated and safe bus stops		✓	✓	✓	✓	✓
17	Roadside or carriageway encroachment		✓	✓	✓	✓	✓
18	Inadequate safety treatments for the trees within the clear zone	✓	✓	✓	✓	✓	✓
19	Unsafe edge drop at shoulders	✓	✓	✓	✓	✓	✓
20	Unsafe lane drop on the carriageway	✓	✓	✓	✓	✓	✓
21	Inadequate safety treatments for the narrow road sections		✓	✓	✓	✓	✓
22	Inadequate safety treatments for the narrow bridge sections		✓	✓	✓	✓	✓
23	Inadequate warning before speed hump/speed table		✓	✓	✓	✓	✓
24	Damaged or incorrect traffic sign boards	✓	✓	✓	✓	✓	✓
25	Inadequate safety treatment at school and hospital zones		✓	✓	✓	✓	✓
26	Absent/broken pedestrian guard rails		✓	✓	✓	✓	
27	Damaged medians	✓	✓	✓			
28	Inappropriate transition and termination of crash barriers	✓	✓	✓			
29	Inappropriate height and length of crash barrier	✓	✓	✓			
30	Inappropriate placement of crash barrier	✓	✓	✓			
31	Damaged crash barriers	✓	✓	✓			
32	Inadequate safety treatment at construction zones	✓	✓	✓	✓	✓	✓
33	Unsafe maintenance activities on carriageway	✓	✓	✓	✓	✓	✓