

# 1 **State of pedestrian road safety in Uganda: are** 2 **interventions failing or absent?**

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## 15 **Abstract**

16 **Introduction:** In Uganda, pedestrians are the most frequently injured category of road  
17 users, accounting for 40% of road traffic fatalities and 25% of serious injuries every year. There  
18 is paucity of information on existing pedestrian interventions and challenges that affect their  
19 implementation in Uganda. In this paper, we ascertain the state of pedestrian road safety  
20 interventions in Uganda and explore the challenges in the process of design, implementation,  
21 monitoring and evaluation of existing interventions.

22 **Methods:** We conducted a qualitative study that started with a desk review of existing  
23 policy documents, police statistics, media reports, non-governmental organization reports, and  
24 published research. We supplemented the review with 14 key informant interviews and 4 focus  
25 group discussions. Participants were drawn from various agencies and stakeholders  
26 responsible for road safety. In total, we collected and synthesized data on the design,  
27 implementation, and evaluation of pedestrian safety interventions from 25 documents. Data  
28 were analyzed using qualitative thematic content analysis.

29 **Results:** The National Road Safety Council within the Ministry of Works and Transport is  
30 the lead agency tasked with coordinating all road safety efforts, while the Uganda Police is  
31 largely engaged in enforcing pedestrian safety. We identified several existing policies and  
32 regulations for pedestrian safety like the Non-Motorized Transport policy whose  
33 implementation has been inadequate. Implementation is constrained by weak institutional  
34 capacity and limited resources. Moreover, road safety stakeholders operated in silos and this  
35 hindered efforts to coordinate pedestrian safety activities. Interventions like road designs were  
36 implemented with limited reference to any supporting data and therefore did not cater for  
37 pedestrian needs.

38 **Conclusion:** There are interventions targeting pedestrian safety in Uganda, but  
39 effective implementation is lacking or failing due to constraints related to weak institutional  
40 capacity. This necessitates strategies to mobilize resources to strengthen the capacity of the  
41 lead agency to effectively coordinate road safety interventions.

42 **Key words:** Pedestrian, Intervention, Qualitative, Uganda

## 43 **Introduction**

44 Road safety receives inadequate attention, yet every year, the burden remains high at 1.35  
45 million deaths and up to 50 million injuries globally(1). The burden of road traffic injuries and  
46 deaths is more pronounced among vulnerable road users, especially those living in low-and  
47 middle-income countries (LMICs) (1-3). More than half of the global road traffic deaths are  
48 among pedestrians, cyclists and motorcyclists who are neglected in road safety management  
49 programs in many countries(1). Each year, more than 351,000 pedestrians and cyclists lose  
50 their lives on the world's roads(1). Moreover, between 2013 and 2016, no reductions in road  
51 traffic deaths were observed in any low-income country, while some reductions were observed  
52 in 48 middle and high income countries(1). Countries that have succeeded in addressing  
53 pedestrian road safety have achieved this through implementing a holistic road safety  
54 approach that encompasses infrastructure with provision for all categories of road users, a  
55 'forgiving' road environment, consistent enforcement of road and vehicle safety standards and  
56 regulations, promoting safe road user behaviour, and post-crash care(1).

57 The road traffic death rate in Uganda is still unacceptably high, estimated at 29 deaths per  
58 100,000 population compared to the global death rate which has remained fairly constant at  
59 18 death per 100,000 population over the past 15 years(1). Pedestrians comprise the largest  
60 group of road users killed in Uganda, accounting for about 40% of fatalities and 25% of serious  
61 injuries(4). There is pressure for low-income countries like Uganda to address the problem of  
62 road traffic crashes with special attention given to all categories of pedestrians and special

63 groups like children, the elderly and persons with disabilities (1). Uganda has a legal  
64 framework that underpins pedestrian road safety management under the Non-Motorized  
65 Transport policy and the Traffic and Road Safety Act 1998. Road safety interventions  
66 elsewhere have been ranked either as proven, promising, or having insufficient evidence in  
67 terms of improving pedestrian safety(5). In Uganda, interventions include pedestrian sidewalk,  
68 over passes, road safety campaigns and enforcement by Police on speed limits, and road user  
69 behaviour(4). However, progress in reducing the incidence of pedestrian road traffic injuries  
70 (RTIs) and deaths has been suboptimal, partly because the needs of pedestrians are often  
71 not catered for in the planning, design and operation of roads. Other factors associated with  
72 pedestrian injuries and deaths include; speed; inadequate pedestrian infrastructure; risk road  
73 use behaviour among pedestrian; poor visibility; age (e.g. young and elderly); driving under  
74 influence of alcohol; poor road condition; inadequate road safety enforcement; and driver  
75 distraction(6, 7).

76 Considerable research exists on a narrow range of pedestrian interventions and is largely  
77 focused on the magnitude, trends and patterns of pedestrian fatalities and injuries (8-12).  
78 Stimulating country action to address the problem of pedestrian safety requires an  
79 understanding of the wider policy environment and intervention impediments before prioritizing  
80 interventions and creating a plan of action. A clear understanding of the policies, guidelines,  
81 rules and regulations as well as contextual factors related to politics, environment, economics  
82 and capacity is needed for better design of effective pedestrian-targeted interventions in  
83 Uganda. This study ascertains the state of pedestrian road safety in Uganda, and explores  
84 key challenges in the process of design, implementation, monitoring and evaluation of existing  
85 interventions.

## 86 **Methods**

### 87 **Study design**

88 We conducted a qualitative study that utilized an ethnographic approach to understand the  
89 policy and programmatic aspects that underpinned existing road safety interventions in  
90 Uganda, with focus on pedestrians.

## 91 **Sampling and data collection**

92 Data were collected concurrently using three primary methods; document review, key  
93 informant interviews (KIIs) and focus group discussions (FGDs). The document review  
94 included documents from government, the private sector, government parastatals, and non-  
95 governmental organizations (NGOs) and international agencies working on road safety.  
96 Documents for review were provided by key informants in hardcopy, and softcopies were  
97 downloaded from websites of relevant institutions. Only documents with sections relevant to  
98 pedestrian road safety were included in the study (Figure 1 and Table 1). An inventory of all  
99 included documents was created for tracking purposes. Two reviewers then independently  
100 extracted data from all included documents using structured data extraction forms. The review  
101 focused on leadership and stakeholder engagement particularly examining their focus areas,  
102 interests, resources and relationships of various stakeholders and their current roles in road  
103 safety. In addition, we reviewed existing plans, policies and programs. We extracted data on  
104 pedestrian interventions, intervention implementation, and monitoring and evaluation.

105 **Figure 1. Flow diagram illustrating the document selection process**

106 **Table 1 Category of documents included for the review**

Source	Name of document
Insurance Regulatory Authority	✓ Motor vehicle insurance (third party risks) Act 1989
Kampala Capital City Authority (KCCA)	✓ Kampala physical development plan September 2012 ✓ The study on Greater Kampala road network and transport improvement in the republic of Uganda November 2010

	<ul style="list-style-type: none"> <li>✓ A detailed strategic implementation plan for the national transport master plan including the greater Kampala metropolitan area 2015-2023</li> <li>✓ National transport master plan including a transport master plan for the greater Kampala metropolitan area (NTMP/GKMA) August 2009</li> </ul>
Ministry of Lands, Housing and Urban Development (MoLHUD)	<ul style="list-style-type: none"> <li>✓ National physical planning standards and guidelines 2011</li> </ul>
Parliament	<ul style="list-style-type: none"> <li>✓ Uganda's Road Safety Legislative Action Plan 2018</li> </ul>
Uganda Police Force (UPF)	<ul style="list-style-type: none"> <li>✓ The Traffic and Road Safety Act, 1998</li> <li>✓ The highway code March 2009</li> </ul>
Ministry of Works and Transport (MoWT)	<ul style="list-style-type: none"> <li>✓ National road safety policy June 2017</li> <li>✓ International Road Assessment programme Uganda 2010 technical report</li> <li>✓ Ministry of Works and transport, Strategic plan (2011/12—2015/16)</li> <li>✓ Non-motorized transport policy October 2012</li> <li>✓ The traffic and road safety act ,1998 statutory instrument 361-10</li> <li>✓ The traffic and road safety (rules of the road) regulations, 2004.</li> <li>✓ The traffic and road safety (speed limits) regulations, 2004</li> </ul>
Uganda National Roads Authority (UNRA)	<ul style="list-style-type: none"> <li>✓ The Uganda national roads authority (general) regulations, 2017.</li> <li>✓ General specifications for road and bridge works</li> </ul>
Safe Way Right Way	<ul style="list-style-type: none"> <li>✓ Road safety quarterly news bulletin for Safe Way Right Way Uganda, issue no. 006: February 2016</li> <li>✓ Road safety quarterly news bulletin for Safe Way Right Way Uganda issue no. 005: October 2015</li> <li>✓ Safe Way Right Way quarterly newsletter: Jul-Sept 2017</li> <li>✓ Road safety inspection Kampala-Malaba highway (Document not dated)</li> <li>✓ Concept note: induction of the Parliamentary Forum for Road Safety (PAFROS) – December, 2017.</li> <li>✓ Road safety inspection of Kampala-Hoima road October 2015</li> </ul>
United Nations	<ul style="list-style-type: none"> <li>✓ Road safety performance review Uganda February 2018</li> </ul>

107 In-depth interviews were conducted with 14 purposively selected key informants using an  
108 interview guide. The key informants were drawn from stakeholders involved in pedestrian  
109 safety, and these included representatives from the Ministry of Works and Transport; Ministry  
110 of Lands, Housing, and Urban Development; Ministry of Education; Ministry of Health; the  
111 Uganda Traffic Police; the National Road Safety Council; Kampala Capital City Authority,  
112 Parliament, and road safety NGOs. We conducted 4 homogenous focus groups with one

113 group each for pedestrians, commuter taxi drivers, boda-boda (commercial motorcycle)  
114 drivers, and private car drivers. Focus group participants were purposively selected using  
115 convenience sampling. The guides were pretested incorporating feedback prior to data  
116 collection. Data was collected by the investigators and trained research assistants. The  
117 interview and focus group guides covered aspects on pedestrian safety interventions, impact  
118 of interventions, stakeholders involved in pedestrian safety, factors associated with pedestrian  
119 injuries and deaths, and challenges impeding implementation. The interviews and discussions  
120 were audio recorded after seeking permission from the participants and field notes taken.  
121 Probes were applied based on responses of the participants. We conducted key informant  
122 interviews and focus group discussions until no new data was attained and saturation was  
123 reached.

## 124 **Data management and analysis**

125 For the document review, a harmonized summary was created through consensus between  
126 the two reviewers and where there were still areas of disagreement, a third reviewer was  
127 consulted. The KIIs and FGDs were transcribed verbatim and cleaned. Where discussions  
128 were done in Luganda, these were directly translated into English in preparation for analysis.  
129 The transcripts were exported to ATLAS.ti Version 7 software tool for coding and analysis  
130 qualitative data. For both the KIIs and FGDs, topical codes were created from the guides while  
131 others emerged from the data. The codes were then applied by 2 groups in the study team to  
132 the transcripts using a qualitative thematic content analysis approach (13, 14) with categories  
133 and themes arising from the data.

## 134 **Results**

135 The results are presented in 2 thematic topics from the data analysis namely: the state of  
136 pedestrian safety in Uganda and challenges in implementing pedestrian safety interventions  
137 in Uganda. The categories and codes from which the themes arose are presented in Table 2.

138 **Table 2 Emerging themes from the Desk review, Key informant interviews and focus group discussions**

CODE	CATEGORY	THEME
<ul style="list-style-type: none"> <li>Lead agency is the Ministry of Works and Transport</li> <li>Parliamentary Forum for road safety</li> <li>Stakeholders (Uganda police, Kampala Capital City Authority, Uganda National Roads Authority, Non-governmental organizations, private sector, International agencies e.g. iRAP WHO, UN)</li> <li>Poor crash data systems for pedestrian crashes</li> </ul>	Road Safety Management	State of pedestrian safety
<ul style="list-style-type: none"> <li>Pedestrian safety infrastructure interventions</li> <li>Inadequate pedestrian facilities (Mixing of motorized and pedestrian traffic)</li> <li>Inadequate operation and maintenance of pedestrian facilities</li> <li>Road safety audits</li> </ul>	Safer Roads and Mobility	
<ul style="list-style-type: none"> <li>Legislation and policies (Non-motorized transport policy; Road safety act)</li> <li>Enforcement on speed limits</li> <li>Road safety campaigns and sensitization</li> <li>Intervention implementation and Evaluation</li> </ul>	Safer Road Users	
CODE	THEME	
<ul style="list-style-type: none"> <li>Low priority for pedestrian safety</li> <li>Political interference</li> <li>Financial constraints</li> <li>Lack of collaboration mechanism among stakeholders</li> <li>Limited community engagement in pedestrian safety</li> <li>Inadequate capacity by police to enforce</li> </ul>	Challenges in implementation	

139 **Theme 1: State of pedestrian safety in UGANDA**

140 We identified 3 categories that explained the state of pedestrian road safety in Uganda. Similar  
 141 codes were categorised under the pillars contained in the global plan for the UN Decade of



142 Action of road safety and they included a) Road safety management, b) Safer roads and  
143 mobility and c) safe road users (15, 16)

## 144 **Road safety management**

145 We found that the Ministry of Works and Transport was established as the lead government  
146 agency for coordination of all road safety activities operationalized by the National Road Safety  
147 Council(17). Uganda also has a parliamentary forum on road safety whose core mandate is  
148 to develop legislative action plans on road safety and participation in road safety campaigns.  
149 The Uganda Police was reported to be engaged in several enforcement activities such as  
150 vehicle inspection and enforcement on the road. We found several stakeholders including the  
151 Kampala Capital City Authority, Ministry of Health, Uganda National Roads Authority, civil  
152 society, the private sector, NGOs, international organizations who were directly or indirectly  
153 involved in pedestrian safety. We noted siloed implementation among the stakeholders with  
154 efforts to create multi-sectoral partnerships mostly visible during national events such as the  
155 United Nations and the Uganda national road safety weeks. We found that pedestrian safety  
156 activities within Kampala were largely done by Kampala Capital City Authority and the Uganda  
157 Police playing the key role of enforcement.

158 *“...Uganda Police give strategic directives to ensure that it achieves its mandate of*  
159 *reducing crashes and we do it by enforcing regulations educating road users and*  
160 *coordinating with other stake holders to ensure crashes are addressed in the country”.*

161 Key informant

162 *“It’s the traffic police officer who helps the pedestrians to cross the road”.* Commuter  
163 taxi driver—FGD participant

164 The document review revealed that data systems to support on-going monitoring and  
165 evaluation of pedestrian safety do not provide a true estimate of the burden of road traffic  
166 crashes, injuries, deaths, and their economic impact. Existing data management systems by  
167 the Ministry of Health and the police report different estimates for pedestrian injuries(17)

## 168 **Safer roads and mobility**

169 The pedestrian safety interventions and activities identified from the documents and interviews  
170 included operation and maintenance of road infrastructure, road audits, and provision of  
171 pedestrian facilities especially within urban areas. However, some roads were poorly  
172 maintained, lacked pedestrian crossings and markings, and delays were reported in carrying  
173 out periodic maintenance works. In some areas, roads were reported to be narrow with  
174 inadequate safe walking facilities. Roads were designed and constructed without considering  
175 the needs of pedestrians and other non-motorized modes of transport.

176 *“There are planners who think that roads are for vehicles and there are some designers*  
177 *who design with the thinking that roads are for vehicles only”*. Key informant

178 The pedestrian facilities are also encroached on by other activities like street vending, parking  
179 and motorists who drive on the few available pedestrian walkways. Competition for the limited  
180 space puts pedestrians at risk.

181 *“... Our roads are narrow and congested. For instance, there is mixing of hawkers,*  
182 *boda-boda riders, someone is crossing and as you try to dodge a pothole you knock*  
183 *pedestrians”*. Commuter taxi driver—FGD participant.

## 184 **Safer road users**

185 The Uganda National Road Safety policy and Non-Motorised Transport policy outline priority  
186 areas for action to improve road safety for vulnerable road users like pedestrians. The  
187 guidelines have provisions for safe pedestrian infrastructure. Pedestrian interventions include  
188 provision for pedestrian access routes, prohibition of parking on kerbs, and keeping walkways  
189 safe, clear, and well lit. For roads without provisions for pedestrians, it is stipulated that  
190 pedestrians walk as far as practically possible from vehicular traffic and against traffic flow.  
191 However, implementation of the Non-Motorised Transport policy has been limited. There is  
192 also a policy on compulsory insurance against third party risk which is used to make claims  
193 for post-crash care for pedestrian victims.

194 The Uganda Police was reported to be engaged in several enforcement activities like vehicle  
195 inspection, blood alcohol content limit and speeding checks. The “Fika Salama” operation (a  
196 road safety campaign launched by the Uganda Police in August 2016) was reported to have  
197 improved road use discipline although no evaluation on effectiveness was available.

198 *“...if the drivers know that the police officer is there, they reduce the speed”.*  
199 Commuter taxi driver—FGD participant.

200 *“When we started Fika Salama [a road safety intervention] you no longer hear people*  
201 *say that the accidents happen on some roads because they are slippery. They now*  
202 *agree that some of the crashes were due to poor road user behaviour”.* Key informant

203 Sensitization and road safety campaigns were carried out among car drivers, motorcycle  
204 drivers, and school children. Children were targeted through their curriculum on road safety  
205 because they were willing to learn and were an avenue for passing on pedestrian road safety  
206 information to their peers and parents. However, road safety awareness is sporadic and  
207 carried out whenever there is a pedestrian crash tragedy or during the national road safety  
208 week. The 2017 national road safety week was themed “Think! We are all pedestrians”

209 *“... These children of primary school when they learn to respect the road they grow*  
210 *with it [the road safety discipline]”.* Key informant

211 Uganda has several existing guidelines, rules and regulations (table 1) with a bearing on  
212 pedestrian safety that guide implementers during the design of road safety interventions as  
213 noted by the key informant. Sources of data that led to the formulation of various interventions  
214 include the Uganda Police traffic crash report and statistics from the United Nations and the  
215 World Health Organization. However, there are instances where interventions were  
216 implemented due to public demand e.g. if a spot has many pedestrian crash incidents then a  
217 hump is placed.

218 *“...usually when we are planning we use the physical planning standards and these*  
219 *standards have the size of the road, you know that the road should be of a minimum*  
220 *size, And we know that this road is in position to cater for a carriage way, to cater for*  
221 *services and infrastructure and even to cater for the pedestrians walk ways and so on*  
222 *depending on the planning which is available”.* Key Informant

223 *“If for example there is an accident spot and people are complaining about it many*  
224 *times, we come in with something [intervention] like a road hump to slow down traffic”.*  
225 Key informant

226 There is no formal monitoring and evaluation mechanism for the effectiveness of existing  
227 pedestrian safety interventions.

228 *“...there is quite some work to do in that area, we don’t have very robust monitoring*  
229 *and evaluation. All we know is that when we do some intervention we get some*  
230 *feedback from the public that now the danger has been averted”.* Key informant

## 231 **Theme 2: Challenges in implementation of pedestrian road** 232 **safety interventions**

233 Pedestrian safety is of low priority considering other public health threats and therefore  
234 vulnerable road users receive inadequate consideration during planning and resource  
235 allocation for interventions.

236 *“Government priority for road safety is still low. Let me tell you, about 30 or more people*  
237 *died last week in crashes. If these were from nodding disease [a disease that has*  
238 *affected children in parts of northern Uganda], Parliament would be up in arms for*  
239 *money for nodding disease”.* Key informant

240 Political interference was also identified as a deterrent in enforcement and implementation of  
241 pedestrian interventions. One of the participants reported that there were instances where

242           “...there are scenarios where the enforcement officers can go [to enforce road safety  
243           regulations], and they are not allowed to do that [by the politicians]” Key informant

244   The document review revealed weak institutional framework and low capacity at almost every  
245   level and this hindered implementation of many policies and regulations like the Non-  
246   Motorised Transport policy. Implementation for some pedestrian safety interventions was  
247   reported to have been done partially. Limited financial resources allocation was the major  
248   hindrance to the implementation of pedestrian safety interventions and policies.

249           “*The most common one [hindrance] would be finances because with road safety you  
250           need a lot of finances - you need posters, you need fliers, you need to write the  
251           message...*”. Key informant

252   The National Road Safety Council has limited capacity to coordinate all road safety activities  
253   including provisions for vulnerable road users. The lead agency did not have a concrete multi-  
254   sectoral action plan, and there were no targets for the reduction of pedestrian injuries and  
255   deaths in the country. In some instances, various stakeholders involved in pedestrian safety  
256   were reported to duplicate interventions already being implemented by others.

257           “*The challenge we get is that some of the interventions are not coordinated (hmmm)  
258           so you have this one [stakeholder] is doing something similar to another, so the  
259           programs are not coordinated. They all compete for visibility*”. Key informant

260   Community involvement in decision making about pedestrian road safety interventions was  
261   minimal as reported from the focus group discussion. Some interventions were implemented  
262   without community involvement and consultation and this affects their adoption.

263           “*There is a flyover which was put in Nakawa road for pedestrians to use but since they  
264           were not sensitized about its importance, they don't use it; they all use the road. The  
265           same applies to the Kalerwe roundabout, the pedestrians use the road yet a flyover is  
266           there, but generally, it was not well positioned, it would have been [better] near the  
267           market*”. Commuter taxi driver—FGD participant.

268 Document reviews indicated inadequate capacity and lack of equipment for the National Road  
269 Safety Council, other government agencies, and the police to implement and enforce  
270 pedestrian safety

## 271 **Discussion**

272 We found existing guidelines, regulations, and policies on pedestrian safety and these were  
273 reported to inform intervention design and implementation of road systems to a small extent.  
274 There were instances where public outcry on pedestrian crashes prompted implementation of  
275 traffic calming measures like humps. The existing sources of pedestrian crash information for  
276 designing interventions do not provide a true estimate of the burden of road traffic crashes,  
277 injuries, deaths, and their economic impact [10]. This is because the road safety data sources  
278 from police, hospitals and mortuary cannot be linked together. In LMICs like Uganda, road  
279 traffic data is collected from multiple sources which suffer data quality issues of completeness  
280 and underreporting(18). Data quality concerns are common in LMICs and yet the number of  
281 pedestrian RTIs and deaths is high in these countries (1, 19). This is not the case with high  
282 income countries that have invested in credible data systems(1).

283 The lack of a formal mechanism to guide in the design, implementation, monitoring and  
284 evaluation of intervention effectiveness is an indication that roads are designed and  
285 constructed with limited consideration given to the needs of pedestrians and other non-  
286 motorized modes of transport. The rationale in the design and implementation of road systems  
287 in high income countries is to provide safety of all road users and traffic management(20). The  
288 finding has implications for establishment of a formal mechanism to guide intervention design  
289 and implementation. There is need to monitor and evaluate intervention effectiveness using  
290 credible data sources as well as to document and disseminate good practices in the reduction  
291 of pedestrian injuries(15, 20).

292 There is evidence of reduction in pedestrian crashes especially when pedestrians are  
293 separated from motorised traffic(21). However, existing engineering measures in Uganda like

294 pedestrian sidewalks, and overpasses have shown limited evidence on improving pedestrian  
295 safety. Many times, the needs of pedestrians are not catered for in the planning, design and  
296 operation of roads in many LMICs (21). Pedestrian facilities in these countries are inadequate  
297 and poorly maintained. These are consistent with our findings, where some roads were  
298 reported to be narrow and lacking safe walking facilities to accommodate pedestrian volumes.  
299 As a result, pedestrians are forced to walk in the same space as motorised traffic which  
300 increases their risk of injury and death. This calls for availing of sidewalks and crossing points  
301 in areas where pedestrian volume and risk is highest.

302 The major barrier to implementation of pedestrian safety interventions and policies in Uganda  
303 are linked to the challenges of the National Road Safety Council, which is mandated to  
304 coordinate all road safety activities in the country. The limited capacity by the lead agency  
305 leads to failure in coordination among various stakeholders and hinders community  
306 involvement (22). Due to the inadequate coordination among stakeholders, there were  
307 instances where implementation of pedestrian safety activities was in silos or duplicated.  
308 Findings from other studies show that the absence of a clear empowered lead agency for road  
309 safety affects resource allocation which in the long run hinders the implementation of  
310 pedestrian safety interventions and policies(1). There is need to strengthen coordination of  
311 road safety through multisectoral collaboration and advocating for additional resources for  
312 road safety.

313 We noted that Pedestrian safety was a low priority in light of other public health challenges  
314 and often suffered political interference during implementation. This is contrary to high income  
315 countries that have political commitment and dedicated institutional effort to manage road  
316 safety (23). Dealing with pedestrian RTIs can be achieved through concerted efforts at  
317 national level(15). Achieving national pedestrian safety management requires political and  
318 economic commitment that is demonstrated through effective institutional leadership within  
319 responsible agencies for road safety(1, 23). The challenge in Uganda remains to generate  
320 sustained political will and long term investment programs for road safety.

321 One of the limitations of the study is that we did not use a comprehensive search strategy to  
322 identify the documents included in the review and might have missed out some literature on  
323 pedestrian safety in Uganda. However, we addressed this by supplementing the desk review  
324 with a qualitative component to obtain thick descriptions, utilising key informant interviews and  
325 focus groups with people knowledgeable and involved in pedestrian safety.

## 326 **Conclusion**

327 The study found existing interventions including a Non-Motorised Transport policy, and  
328 guidelines and regulations aimed at reducing the incidence of pedestrian road traffic injuries  
329 in Uganda. The lead agency did not have a concrete multi-sectoral action plan, and there were  
330 no targets for the reduction of pedestrian injuries and deaths in the country. Many interventions  
331 were being implemented with no evidence for their effectiveness, and no formal evaluations.  
332 This necessitates strategies to mobilize resources to strengthen the capacity of the lead  
333 agency to coordinate the planning and implementation of evidence-based interventions by all  
334 key stakeholders involved in pedestrian road safety.

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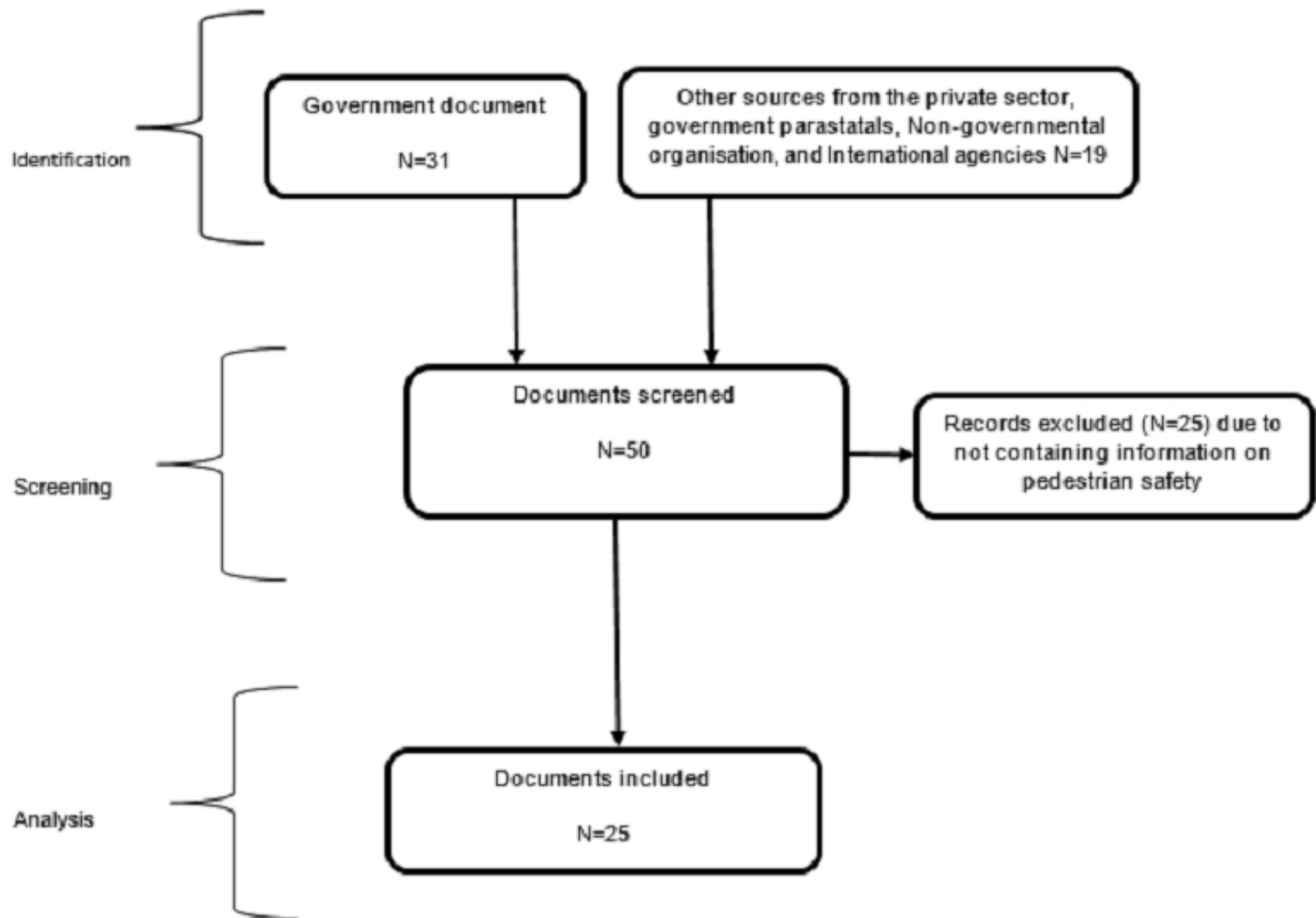
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