

Analysis question

In the event of a Flood, what length of Roads might be affected?

General report

Estimated length of roads affected per hazard zone

Hazard Zone	Length (m)
High	102,000
Medium	32,100
Low	43,100
Total Exposed	177,000

Roads	Length (m)
Affected	134,000
Not Affected	43,100
Not Exposed	4,778,000

- **Affected:** An exposure element (e.g. people, roads, buildings, land cover) that experiences a hazard (e.g. tsunami, flood, earthquake) and endures consequences (e.g. damage, evacuation, displacement, death) due to that hazard.

Analysis detail

Estimated length of roads (m) affected by road type

Road type	Affected			Not affected		Total not exposed	Total
	High	Medium	Total affected	Low	Total not affected		
Vicinal	5,900	2,300	8,200	3,800	3,800	943,000	955,000
Primary	13,400	3,500	16,800	3,600	3,600	979,000	999,000
Secondary	10,000	3,900	13,900	6,200	6,200	676,000	696,000
Tertiary	57,600	21,700	79,300	28,700	28,700	1,481,000	1,589,000
Other	14,700	804	15,500	980	980	701,000	717,000
Total	102,000	32,100	134,000	43,100	43,100	4,778,000	4,955,000

Aggregation result

Estimated length of roads (m) affected by aggregation area

Aggregation area	Secondary	Other	Tertiary	Vicinal	Primary	Total
Macuze	0	0	600	180	0	780

Campo	0	0	1,600	337	226	2,200
Mopeia	0	14,100	19,800	2,400	634	36,900
Gile	4	0	486	0	0	490
Namarroi	0	0	0	1,600	0	1,600
Maquival	0	0	0	492	0	492
Cidade_de_quelimane	0	401	0	0	609	1,100
Muabanama	0	0	0	1,600	0	1,600
Ile	0	0	828	0	0	828
Inhassunge	0	0	0	521	0	521
Mulevala	0	0	108	0	0	108
Gonhane	176	0	0	0	0	176
Naburi	604	0	0	0	0	604
Micaune	7,500	0	0	0	0	7,500
Tacuane	0	0	288	0	0	288
Luabo	0	0	34,400	0	0	34,400
Munhamade	0	0	42	198	0	240
Mualama	691	0	0	288	0	979
Chinde	0	0	7,900	0	0	7,900
Chire	0	953	2,100	0	0	3,100
Lioma	0	0	215	0	0	215
Nauela	250	0	0	0	0	250
Pebane	224	0	0	0	0	224
Alto_ligonha	489	0	0	0	1,200	1,600
Mocubela	179	0	0	0	0	179
Mepuagiu	0	0	0	0	310	310
Derre	0	0	454	0	0	454
Alto_molocue	147	0	435	0	231	813
Socone	0	0	0	0	372	372
Mocuba	127	0	263	0	395	785
Morrumbala	0	0	0	0	90	90
Molumbo	0	0	0	133	0	133
Maganja	427	0	3,500	0	0	3,900
Nante	241	0	3,800	433	0	4,500

Megaza	2,900	0	95	0	0	3,000
Regone	0	0	0	167	0	167
Nicoadala	0	0	0	0	11,700	11,700
Namacurra	0	0	2,600	0	1,100	3,700
Total	13,900	15,500	79,300	8,200	16,800	134,000

Notes and assumptions

Analysis notes

- Columns and rows containing only 0 or "No data" values are excluded from the tables.

Road exposure general notes

- The impacts on roads, people, buildings and other exposure elements may be underestimated if the exposure data are incomplete.
- Numbers for road lengths have been rounded to the nearest 10 metres if the total is less than 1,000; nearest 100 metres if more than 1,000 and less than 100,000; and nearest 1000 metres if more than 100,000.
- Rounding is applied to all road lengths, which may cause discrepancies between subtotals and totals.
- Note that report rows containing totals are calculated from the entire analysis area totals and then rounded, whereas the subtotal rows are calculated from the aggregation areas and then rounded. Using this approach we avoid adding already rounded numbers and in so doing compounding the rounding.
- Roads marked as not affected may still be unusable due to network isolation. Roads marked as affected may still be usable if they are elevated above the local landscape.
- Roads are closed if they are affected.
- Roads are open if they are not affected.

Flood general notes

- The extent and severity of the mapped scenario or hazard zones may not be consistent with future events.
- The impacts on roads, people, buildings and other exposure elements may differ from the analysis results due to local conditions such as terrain and infrastructure type.
- The analysis extent is limited to the extent of the aggregation layer or analysis extent. Hazard and exposure data outside the analysis extent are not included in the impact layer, impact map or impact reports.

Affected notes

- Exposures in the following hazard classes are considered affected: High, Medium

Analysis details

Hazard source Flood - 100 year return period - source not available -

Exposure source Classified Road Network - ANE -

Aggregation source Aggregation by Post - Zambezia Province - CENACARTA -

Impact Function Flood Raster On Roads Line