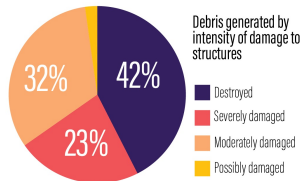


This initial quantification of conflict generated debris in the Gaza Strip is derived from UNOSAT Comprehensive Damage Assessment from 1 December 2024, in conjunction with updated building footprint as of May 2023 based on the national statistical office data. Damaged building footprints were enriched through zonal statistics with an above surface height model, derived from the difference between a DTM (SRTM) and a DSM (ALOS World 3D) as provided by the European Commission in the GHS-Built H product.

For modelling purposes, minimum building height is considered to be 3m. Each built sq. meter is considered to have generated 1t of debris. Results are aggregated into an hexagonal grid where each cell is 250m wide.

Total debris quantity **50,773,494 t**

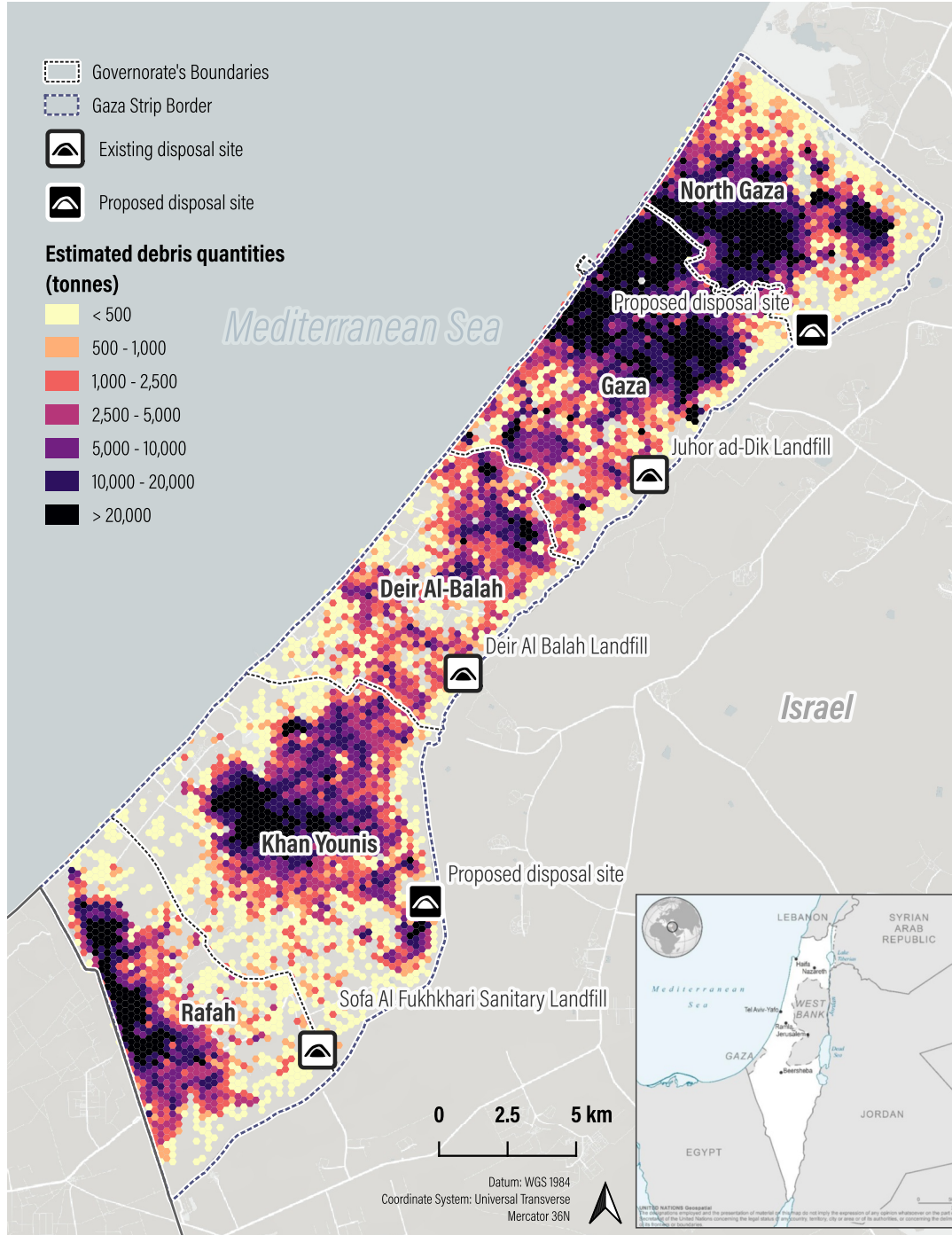
According to UNOSAT damage assessment, a total of 170,835 structures were damaged in the Gaza Strip as of 1 December 2024.



For the debris optioneering the following scenarios were developed and applied:

A. Disposal of all debris at a debris disposal site located centrally in each of the following zones: North Gaza, Gaza, Deir Al-Balah, Khan Younis and Rafah;

B. 50% disposal of the debris to locations as above scenario A, and 50% recycling of the debris at the following sites using 105 trucks: 1 centralised debris recycling in North Gaza, 1 centralised debris recycling in Gaza, 1 centralised debris recycling in Khan Younis that serves Deir Al-Balah, Khan Younis and Rafah.



SCENARIO 1 - ALL TO DISPOSAL Debris Management Outputs

Time to clear with 105 trucks (years)	21	Time to clear with 105 trucks (years)	21
Time to recycle (years)	0	Time to recycle (years)	176
Total time to clear and recycle (years)	21	Total time to clear and recycle (years)	21
Total cost to clear (US\$) including project management	970,945,431	Total cost to clear (US\$) including project management	1,178,530,908
Revenue from recycling (US\$)	0	Revenue from recycling (US\$)	380,801,205
Cost less revenue (US\$)	970,945,431	Cost less revenue (US\$)	797,729,703
Total distance covered (km)	24,034,860	Total distance covered (km)	24,034,860
CO2e from trucking (tCO2)	82,319	CO2e from trucking (tCO2)	82,319
Cost of haulage (US\$)	710,828,916	Cost of haulage (US\$)	710,828,916
Material recovered for reconstruction (tonnes)	0	Material recovered for reconstruction (tonnes)	25,386,747
Material recovered for reconstruction (%)	0	Material recovered for reconstruction (%)	50
Cost of processing of debris (US\$)	0	Cost of processing of debris (US\$)	177,707,229
Value of recovered material in market (US\$)	0	Value of recovered material in market (US\$)	380,801,205
Total cost of natural raw materials substituted (US\$)	0	Total cost of natural raw materials substituted (US\$)	685,442,169
Material disposed	50,773,494 t (100%)	Material disposed	25,386,747 t (50%)
Total space required for disposal (ha/donum)	600 / 6,000	Total space required for disposal (ha/donum)	300 / 3,004
Value of land taken by disposal (US\$/5 years)	6,008,698	Value of land taken by disposal (US\$/5 years)	3,004,349