West Africa Coastal Vulnerability Mapping:

Subset of OpenStreetMap (OSM) Roads

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DESCRIPTION

This data set was used as an indicator in the analysis presented in the report, "Mapping the Exposure of Socioeconomic and Natural Systems of West Africa to Coastal Climate Stressors" (de Sherbinin et al., 2014; de Sherbinin et al., 2015). The table below provides information about the indicator as it was used in the analysis, including a description of the input data (where relevant) and of the processing completed to produce the indicator.

Title:	Road Network
Indicator Code:	ROAD
Component:	Economic System
Rationale:	Roads link rural production to urban markets, and represent an important exposed infrastructure asset for all countries.
Data Set:	OpenStreetMap (OSM) is a crowdsourced, free and open data set of roads and other infrastructure. The data were downloaded via http://export.hotosm.org/en/wizard_area by drawing a box, naming the area, and selecting "Create Job". On the next screen, "Highways" were selected from the "Select Preset File" drop down. "Add Default Tags?" was unchecked and the

	download was "Saved". Due to the size limitations of the bounding box, it was necessary to draw six boxes to capture the regions of interest. For each box, the data was downloaded and then merged in ArcGIS. Data downloaded in March 2014. Input data source citation: © OpenStreetMap contributors. OpenStreetMap® is open data, licensed under the Open Data Commons Open Database License (ODbL) by the OpenStreetMap Foundation (OSMF). http://www.openstreetmap.org/.
Units:	There are multiple road classes in the "highways" tag.
Limitations:	OSM data are crowdsourced and are of uncertain accuracy.
Spatial Extent:	The spatial extent of the Subset of OpenStreetMap (OSM) Roads data set is the 200 km coastal zone of the ten Guinea Current countries of coastal West Africa: Guinea-Bissau, Guinea, Sierra Leone, Liberia, Cote d'Ivoire, Ghana, Togo, Benin, Nigeria, Cameroon.
Spatial Resolution:	
Time Period:	Variable. Data downloaded in March 2014.
Additional Notes:	

ACCESSING THE DATA

SEDAC URL: http://sedac.ciesin.columbia.edu/data/collection/wacvm.

Permanent URL: https://doi.org/10.7927/H4MS3QP8.

The data are available as compressed zipfiles of GeoTIFFs or shapefiles. Downloaded files need to be uncompressed in a single folder using either WinZip (Windows file compression utility) or similar application before they can be accessed by your GIS software package. Users should expect an increase in the size of downloaded data after decompression.

The data are stored in geographic coordinates of decimal degrees based on the World Geodetic System spheroid of 1984 (WGS84).

DISCLAIMER

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USE CONSTRAINTS

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RECOMMENDED CITATION(S)

Data set:

OpenStreetMap contributors. 2018. West Africa Coastal Vulnerability Mapping: Subset of OpenStreetMap (OSM) Roads. Palisades, NY: NASA Socioeconomic Data and Applications Center (SEDAC). https://doi.org/10.7927/H4MS3QP8. Accessed DAY MONTH YEAR.

REFERENCES

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de Sherbinin, A, T. Chai-Onn, M. Jaiteh, V. Mara, L. Pistolesi, E. Schnarr, and S. Trzaska. 2015. Data Integration for Climate Vulnerability Mapping in West Africa. ISPRS International Journal of Geo-Information 4(4):2561-2582. https://doi.org/10.3390/ijgi4042561.