IRF World Road Statistics

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Summary

The International Road Federation (IRF) maintains a database known as World Road Statistics (WRS), comprising over 200 series for over 200 countries. The database is a tremendous resource for infrastructure data, specifically transportation network data. WRS contains information on total road length, but also contains filters to view paved vs. unpaved roads, the kinds of traffic (commercial vs. private), the vehicles using the roadway, accidents and the consequences of them, and more.

To IFs, the IRF provides an important window into the transportation infrastructure of a country. A robust, paved road network makes it easier for a country's exporters to access ports, and for its citizens to find jobs if they are scarce locally. IFs uses three preprocessors from this data source: RoadsPavedKm, the total length of paved roads in a country measured in kilometers; RoadsTotalNetwork, the total length of roads paved or unpaved; and RoadsPaved%, the proportion of the total network which is paved.

Another table is usually updated with these three preprocessors: RuralAccessIndex. Yhe Rural Access Index measures the proportion of the rural population who live within 2 km of an all-season road. It is included in the Sustainable Development Goals as indicator 9.1.1., providing a way of measuring progress towards Goal 9 and Target 9.1. This table is pulled from the World Bank.

The latest update in IFs was in April 2025.

Tables In IFs

Table	Definition	Extended Source Definition	Unit	Years	Source	Name in Source	Preprocessor Name
SeriesRoadRuralAccessIndex	Rural Access Index, proportion of the rural population who live within 2 km (25 minute walk) of all-weather road	RAI estimates the number of people who live within 2 kilometers (or about 25 minutes walking time) of the nearest all-weather road (Roberts, KC, and Rastogi 2006)	Index	1993-2004,2009-2022	Rural Access Index, World Bank	Rural Access Index	INFRASTRUCTURE
SeriesRoadsTotalNetwork	Roads, total network, kilometers	some values are filled from CIA's World Factbook, significantly inconsistent values are manually deleted.	Kilometers	1960-2022	World Road Statistics, International Road Federation	Total Road Network - All Road Types - Total	INFRASTRUCTURE
SeriesRoadsPaved%	Paved roads as a percent of total roads	some values are filled from CIA's World Factbook, significantly inconsistent values are manually deleted.	Percent	1990-2022	World Road Statistics, International Road Federation	Paved Network Ratio	INFRASTRUCTURE
SeriesRoadPavedKm	Length of paved roads, kilometers	No Extended Source	Kilometers	1990-2010,2017-2022	World Road Statistics, International Road Federation	Total Road Network- All Road Types - Paved	INFRASTRUCTURE

Data Pulling Instructions

Step 1) Navigate to https://datawarehouse.worldroadstatistics.org/users/login. If necessary, register. The registration process is short, and provides immediate access to the data warehouse

IRF World Road Statistics Login Page

Step 2) Select "Country Comparison - Multiple Years" under Chart Type.
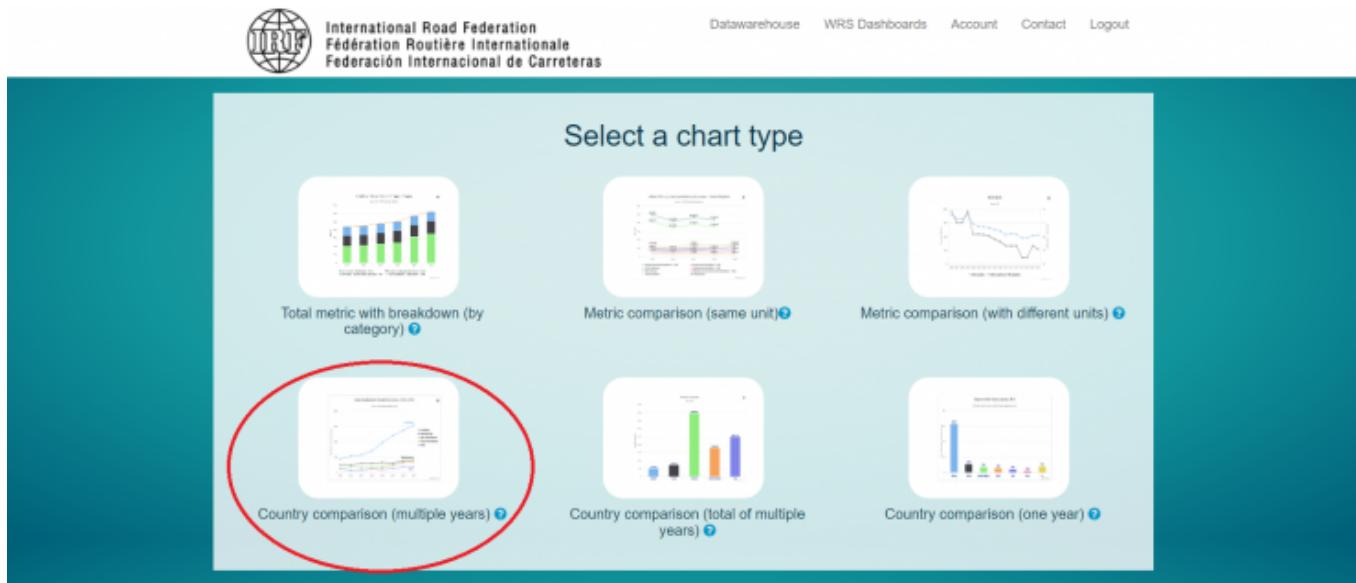
Select Country Comparison (Multiple Years)

Step 3) Manually select each continent in the selection box.

Select each continent manually

Step 4) In the countries box, select "all countries".

Select "All countries"

Step 5) Under themes, select an option. Most IFs preprocessors will be under "Road Network". This example will continue with that selection.
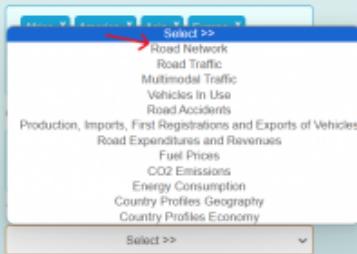
Select desired option under "Themes"

Step 6) Under "Metrics", select desired series.

- For the preprocessor RoadPavedKm, select "Total Road Network- All Road Types - Paved"
- For the preprocessor RoadsTotalNetwork, select "Total Road Network- All Road Types - Total"
- For the preprocessor RoadsPaved%, select "Paved Network Ratio"

Select desired series under "Metrics"

Step 7) After those four selections are complete, the Country comparison page will look like this. Select "Show Graph".

Country completion page after selection

Step 8) A new page will populate.
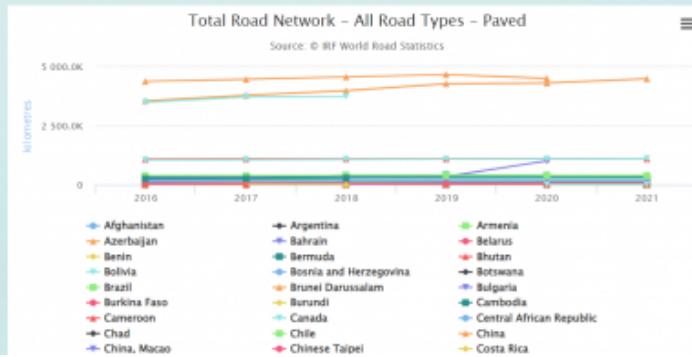
WRS Graph Page

Step 9) Click on the three bar menu in the upper right corner of the graph, then "download as CSV" or "download as XLS".
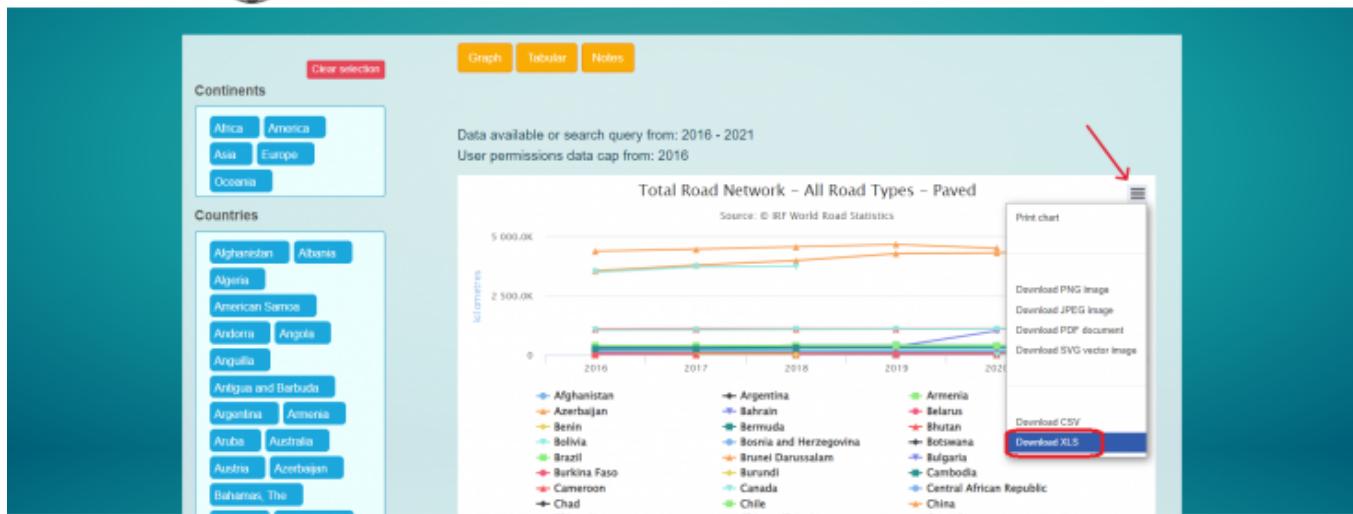
Download the data series

Step 10) An Excel sheet will download. The downloaded spreadsheet is in time series data. If necessary, pivot the Excel sheet to bring it into IFs import format. Now you can format the data to upload it into IFs. To import data into IFs, please follow the instructions found in the Importing Data (general instructions) page.

Data Notes