UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE

SafeFITS documentation

Note

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Acknowledgements

Contents

User Manual

Welcome to the SafeFITS application

Congratulations, you are running the application. There are four tabs on the top navigation bar:

A. **Introduction**: Provides background information on SafeFITS development, as well as a disclaimer for the use of the results of the model and these user guidelines.

B. **Benchmark**: Provides an overall view of the database, specifically where a country stands in terms of policy inputs to the SafeFITS model with respect to other countries at a global level or with respect to countries in similar socio-economic circumstances.

C. **Forecast**: For the country that was selected in the previous step, users can choose three distinct groups of interventions and view tables and plots for the resulting projected fatality rates for the forecasting period.

When users change input parameters, the changed values in each intervention group are highlighted in the same colour, which is also the colour of the curve in the line graph. The graph itself shows the result of the model with an uncertainty band also plotted, which ranges from +/- 30 percent in 2031 – the final forecast year – to +/- 0 percent in 2013 – the baseline year.

Figure 1 Screenshot of *Forecast* tab
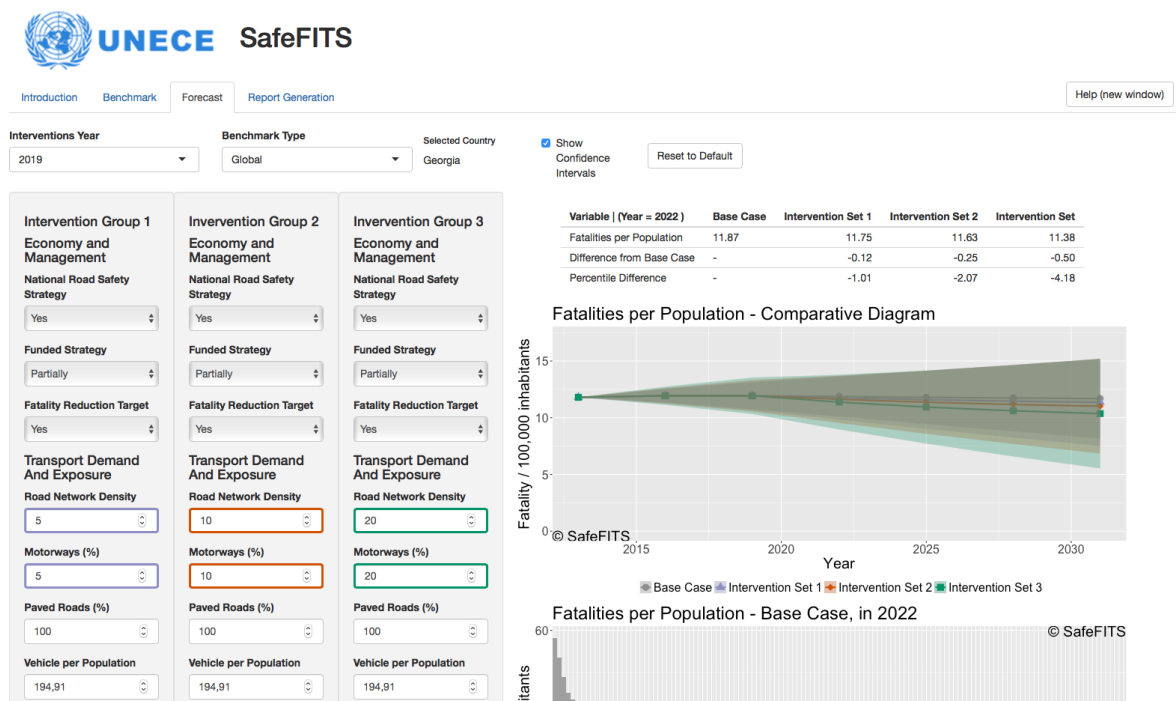
The bar charts below the line graph with the forecasts represent the position of the country of interest, within its socio-economic group or within the world, for each scenario ("Base case", each of the intervention sets) for the year "Interventions Year + 3". Therefore, we forecast to 2030 in the line graph, but only consider the situation for 3 years after the intervention, in how the ranking will be displayed into the future.

Similarly, the table above the line graph also shows the projections for "Interventions Year + 3" rather than the final forecast shown in the projections line graph.

To reset the form (retain the chosen country, simply return all values to the original ones from the database), click on the "reset to default" button (top of the form).
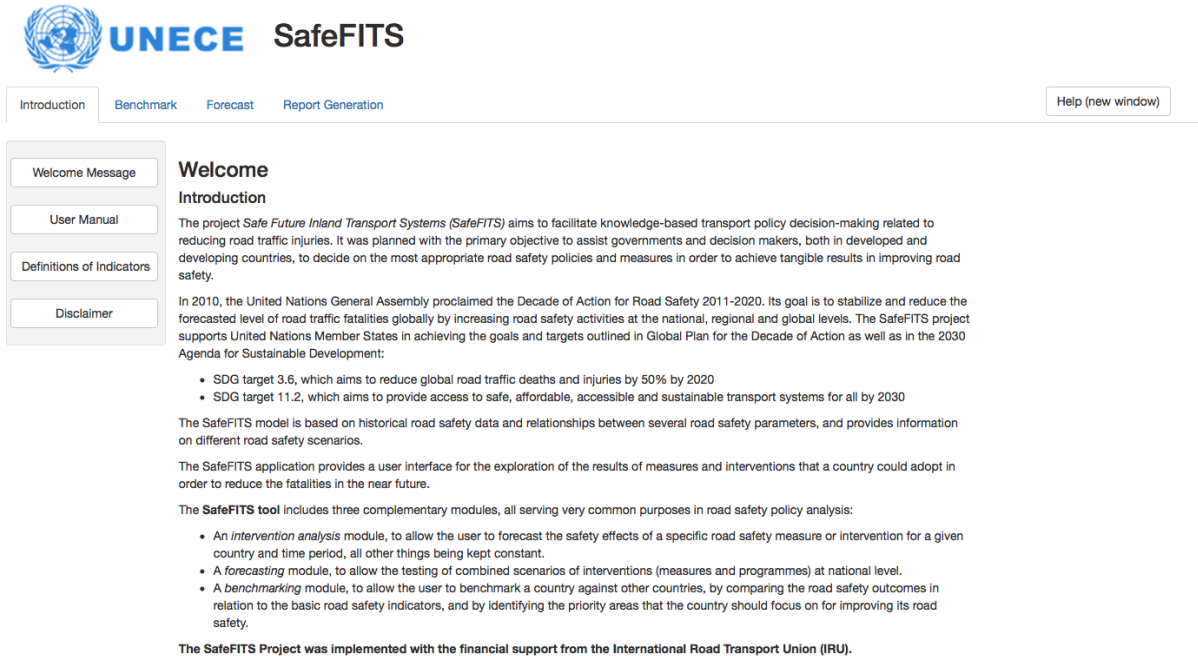
D. **Report Generation**: Produces customizable reports in three formats: PDF, HTML and MS Word.

These are explained in more detail in the next sections.

Introduction

The user is greeted with the following welcome page.

Figure 2 Screenshot of *Introduction* tab

There are four main options within the Introduction page:

- Welcome message (as shown in Figure 2);
- User Manual (this document);
- Definitions of Indicators: a user friendly, searchable list of definitions of all indicators (Figure 3);
- Disclaimer.

Figure 3 Screenshot of *Definitions of Indicators* tab

Benchmark

After choosing the "Benchmark" tab, the user is confronted with the following view.

Figure 4 Screenshot of *Benchmark* tab

Note: when loading, the User Interface uses an animation to indicate progress (Figure 5).

Figure 5 Screenshot of *Progress Indicator*

This view includes three drop-down menus at the top (shown in magnification in Figure 6), from which the user can select:

- **Country** for which the analysis will be performed;

- **Type of Indicators** that should be plotted (General Characteristics, Economy and Management, or Transport Demand and Exposure indicators);

- **Benchmark type**: Global or Socio-economic group, determining whether the country will be compared against the entire world, or a number of more related countries. The default is global, shown in Figure 4; Figure 7 shows the updated figures, when the benchmark type changes from Global to Country's Cluster.

Figure 6 Magnified screenshot of drop-down menus in *Benchmark* tab

Figure 7 Screenshot of benchmark type option in *Benchmark* tab
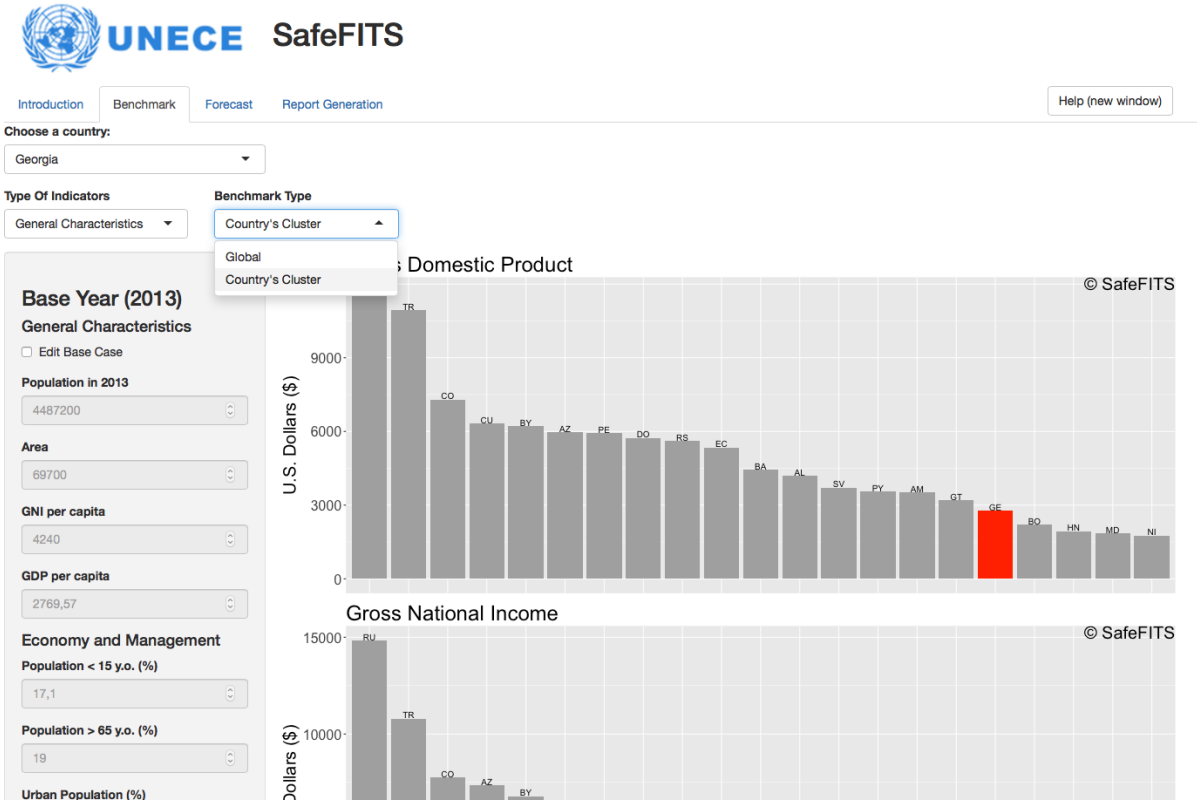
There is also the option to edit the Base Year data, solely for the purpose of seeing how these would change the position of the country within the other countries. To achieve this, check the "Edit Base Case" box. This will "unlock" the following fields and allow the user to edit these values. These values are not stored in the database, or used for subsequent analysis.

Figure 8 Comparison of screenshots of *Benchmark* tabs where *Base Case* characteristics can and cannot be edited
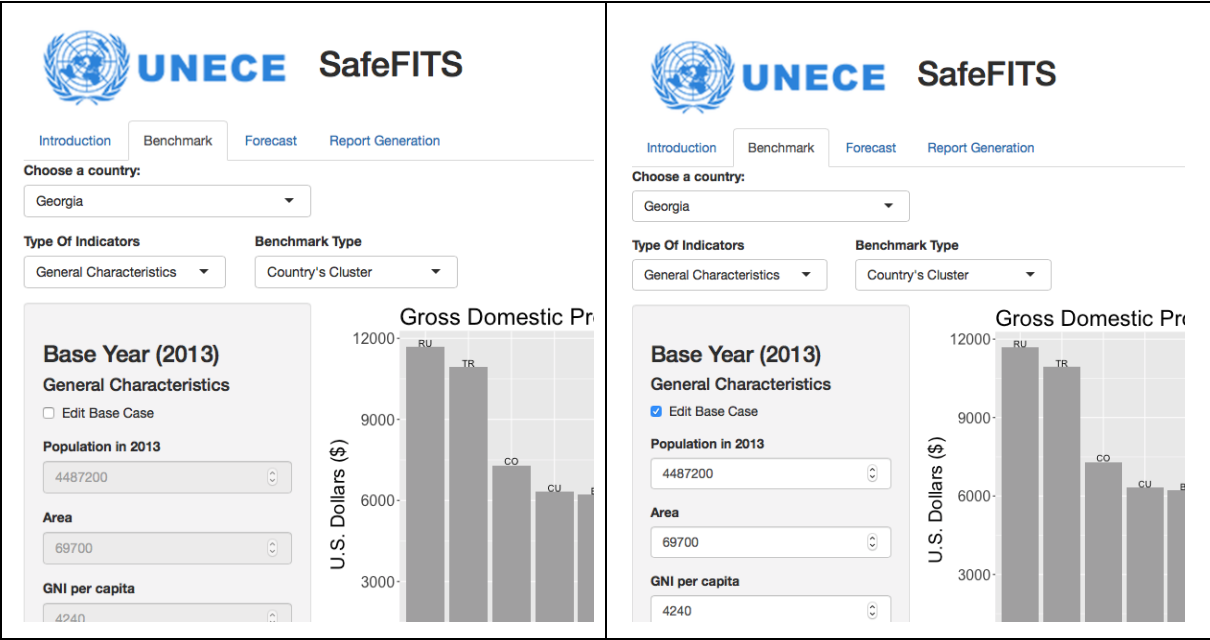
Forecast

When the user selects the third tab "Forecast", then the user is confronted with the main window of the SafeFITS application.

Figure 9 Screenshot of *Forecast* tab
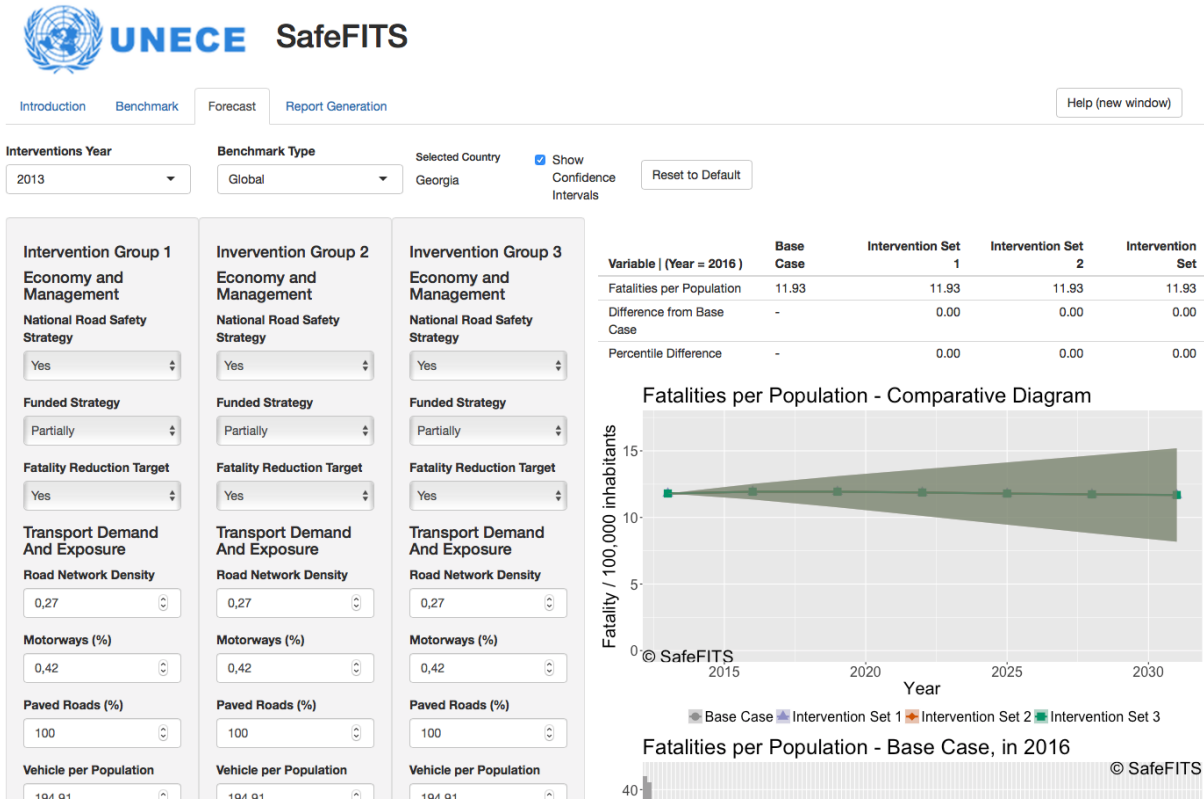
This tab has the following main elements, shown in Figure 10:

1. Choice of intervention year, benchmark type and country (already selected from the previous step);

2. Definition of the Intervention Groups (up to 3);

3. Comparative table; base case versus intervention scenarios;

4. Plots showing the various scenarios' forecasts, followed by plots showing the benchmarking of the country of interest, within the other countries for a time horizon three years after the intervention time;

5. Option to show (or not) the confidence intervals in the main forecast plot;

6. Option to reset the form and start over.

Figure 10 Main elements of *Forecast* tab
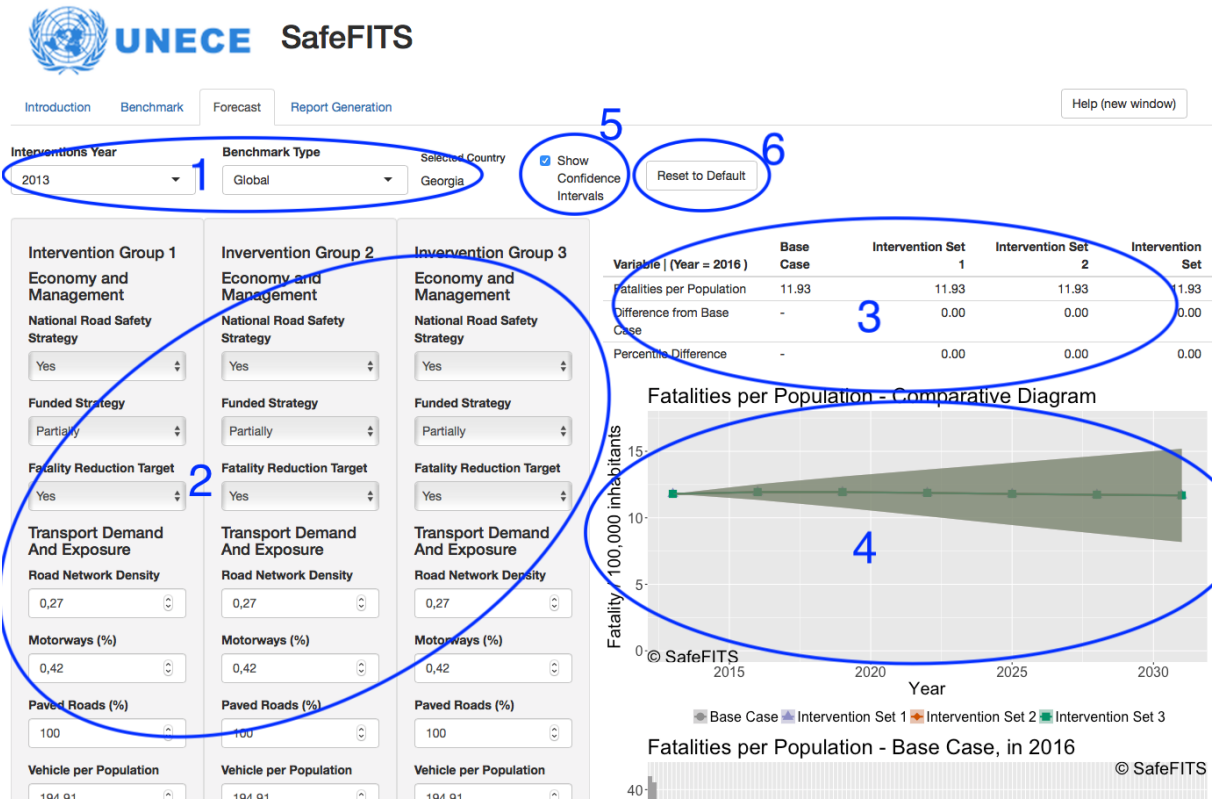
There are a number of features to support the analysts' work. For example, when one or more values are changed, the changed values in each intervention group are highlighted in the same colour (one colour per intervention group), which is also the colour of the curve in the figure. It is advisable to change only a reasonable number of values and consider likely interactions between these parameters.

The bar charts below the line graph with the forecasts represent the position of the country of interest, within its socio-economic group or the world, for each scenario ("Current trend", each of the intervention sets) for the year "Interventions Year + 3". That is, projections are shown to 2030 in the line graph, but bar graphs and tables only consider the situation for 3 years after the intervention.

Depending on the type of data for each input field, suitable input devices have been implemented. For example, for fields with only a few pre-specified options, drop-down menus have been implemented. For numerical fields, the use of arrows can be used to increase/decrease the value. The user can, of course, also directly enter the desired value.

The form also includes a number of logical tests, to prohibit the user from entering illogical values. Therefore, if an illogical value is entered (i.e. greater than 100 percent paved roads), then it is highlighted in red, and a dialog message is displayed to the user:

Figure 11 Dialog box for invalid input parameters
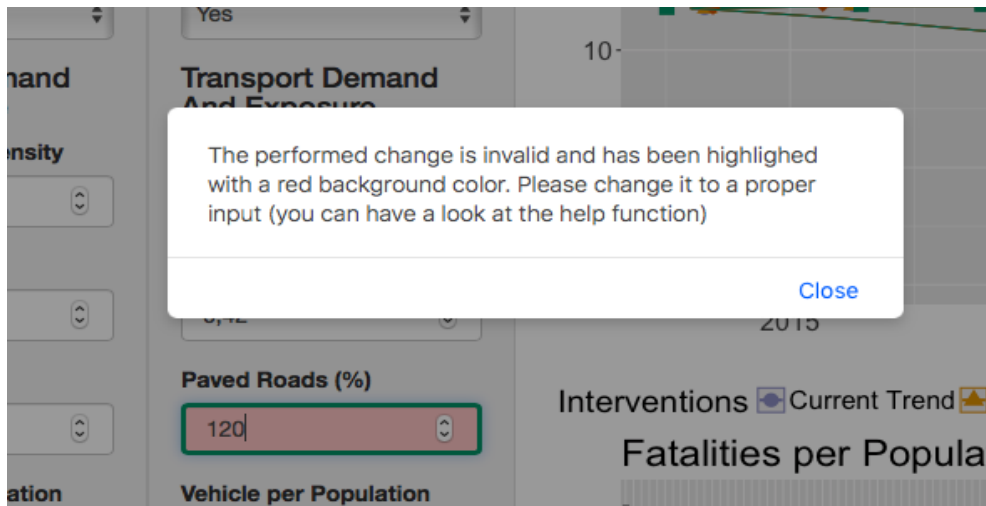
Another feature to support the work of the analyst is the use of "tooltips", i.e. helpful definitions and messages that appear when the mouse hovers over a field:

Figure 12 Example of tooltip definition
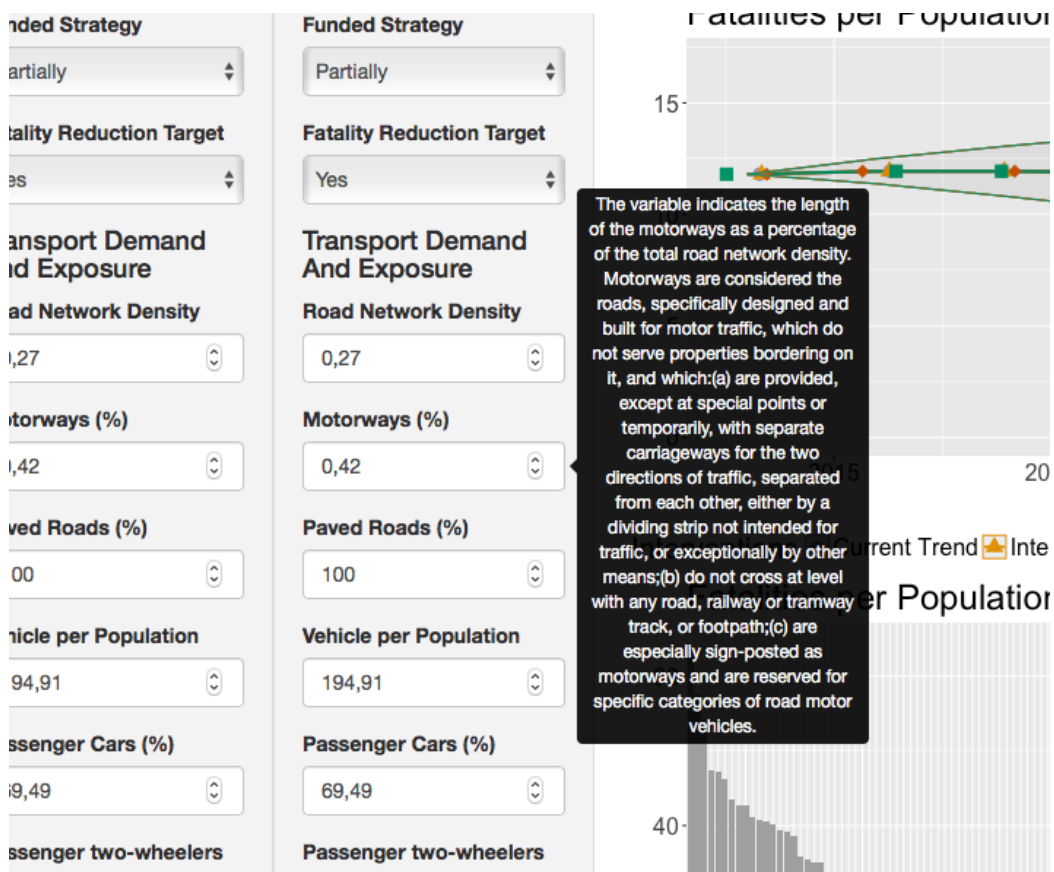
Report Generation

The final tab provides the opportunity to the analyst to generate output and store a report. The analyst can select which part of the analysis to include in the analysis. Furthermore, three different document formats are possible (PDF, HTML, and Word), as per the following figure.

Figure 13 Screenshot of the *Report Generation* tab
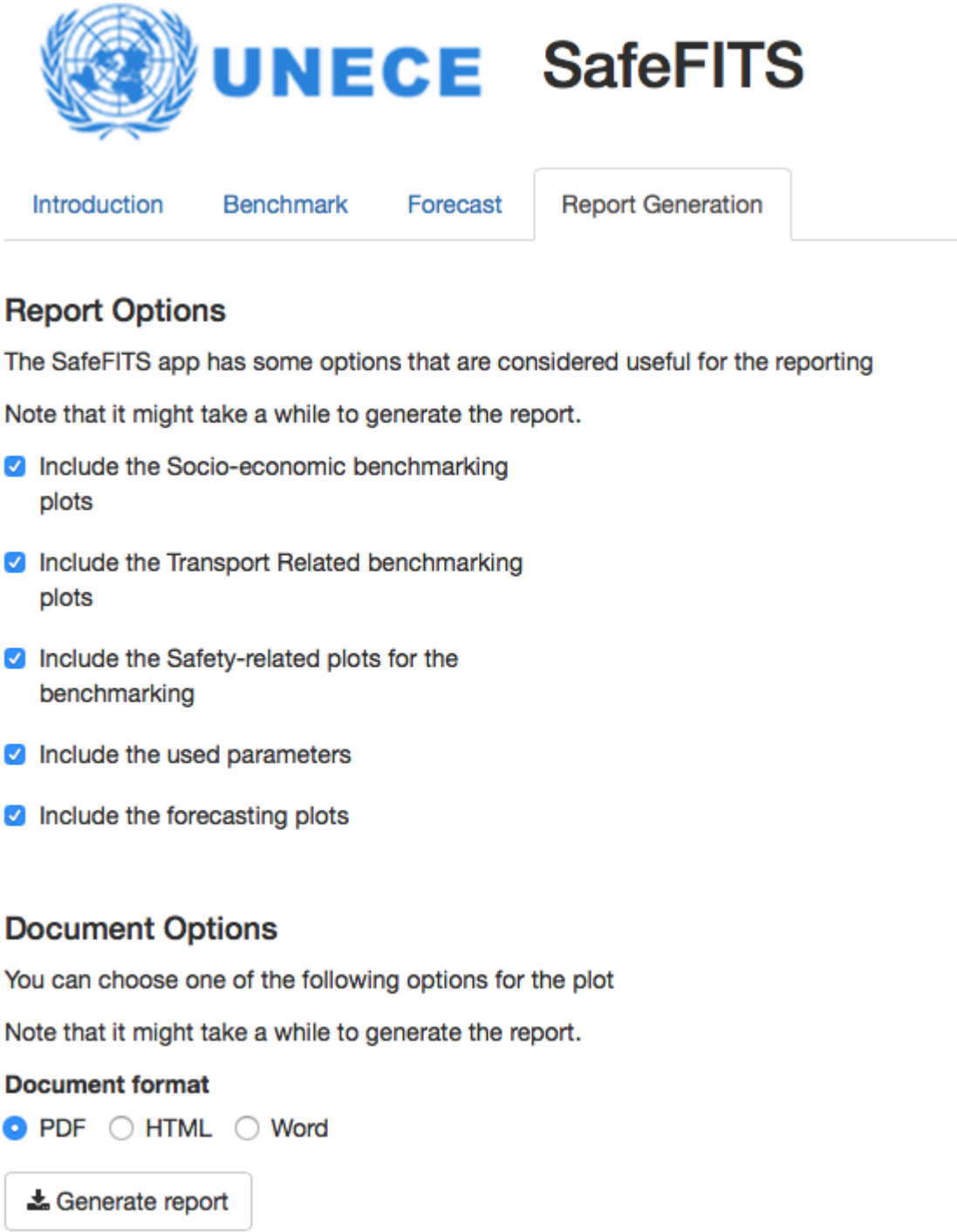
Frequently Asked Questions

Q1. I am missing the plots!

When the width of the browser window is not sufficiently wide, then the system automatically rearranges the elements. Most likely, the figures have been repositioned below the other (visible) elements. If your screen area allows, please increase the window width, to see if the graphs appear.

Q2. The system appears to be slow

Please keep in mind that this is a web application, and not a desktop application. Try to expect latency similar to that of websites, and not that of desktop applications.