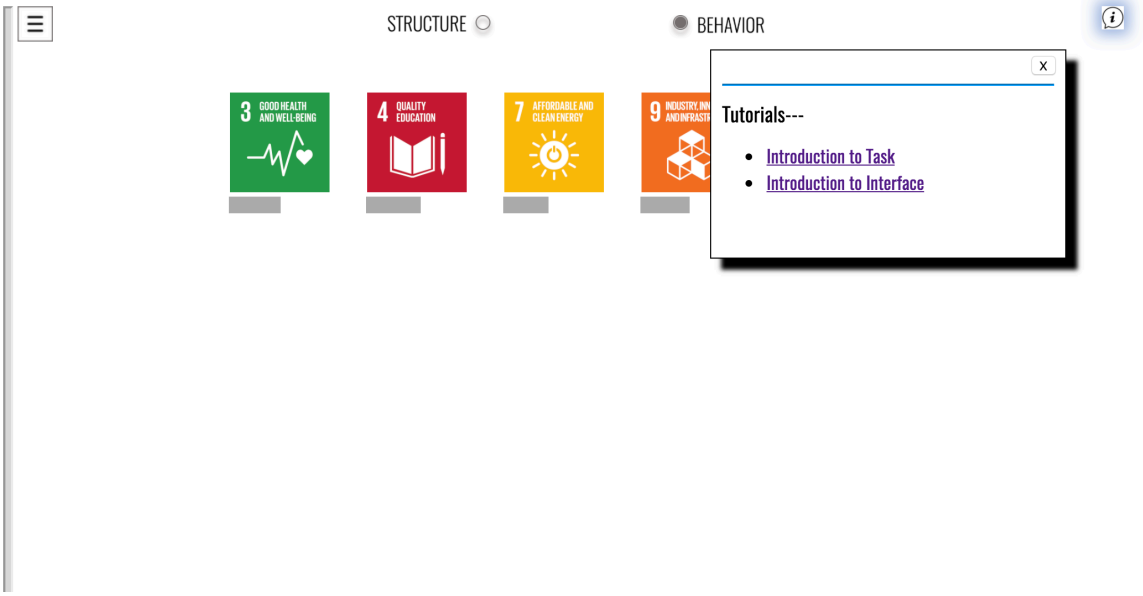
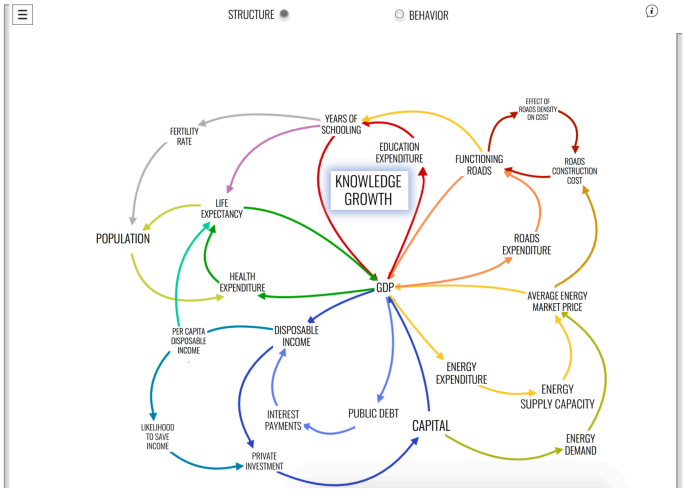
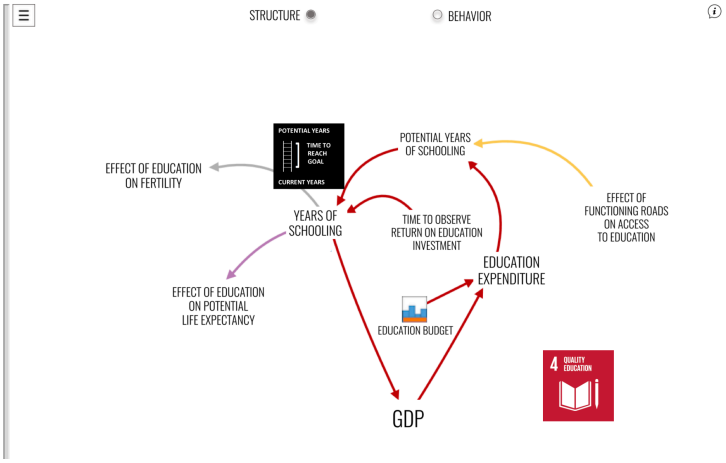
We'll start by looking at the main page of the interface by scanning it horizontally from left to right.



Information: The top right "information" icon will bring you to a popup which contains the "introduction to the task + interface" instructions.





STRUCTURE

In the Structure section you will find a Causal Loop Diagram of the model's structure. When you mouse-over the various loops, titles of the loops will appear, and you will notice here the five main loops which drive economic growth in this model. You will also see that there are SUB-LOOPS off of these main loops AND LOOPS BETWEEN THESE FIVE MAIN sectors.

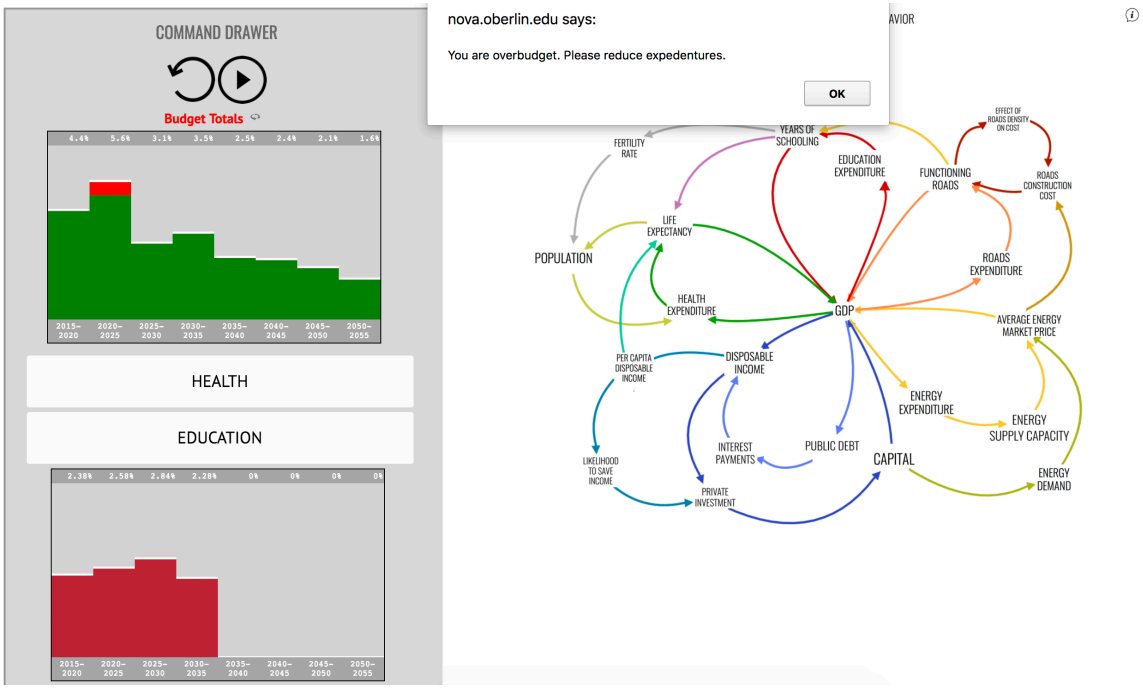
- Clicking on any of the titles will bring you to a second tier with a more detailed CLD for each sub-section. *Mousing over* each variable will show you more information about the relationships in the model, such as *equations, delay times, and images displaying non-linear structures*.
- The ^ symbol represents an elasticity, or a "weighting factor" which shows how sensitively a variable will respond to a change in another variable. Here we see the sensitivity of education to roads growth is .1. When we look at how sensitive fertility rate is to a change in education, we see .4, a larger sensitivity.
- A ***click*** on the goal icon will take you *back to the full diagram*.

DECISION DRAWER

- The **Budget Total** is at the top which sums all of the money you allocated between the first 4 sectors (not including financing), You have no limit on the amount of financing you choose.
- the **Budget Profile** will show you the relative contributions of each of the individual budgets to that total budget through the colors that represent the goals
- The **reset budget** will erase the decisions you made and return values to BAU
- the **run simulation** button will simulate your choices.

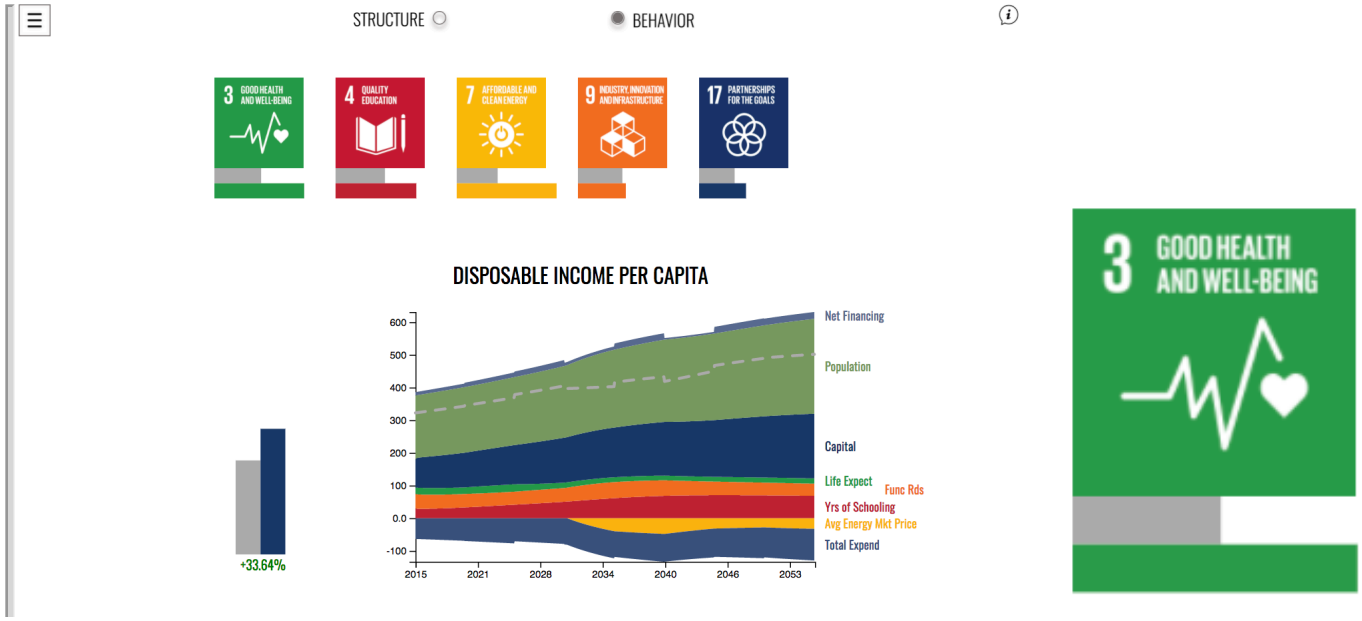
The Decision Drawer contains all of the commands to run and experiment with the simulation.

- As for the decisions you can make, there are five budget sectors: Health, Education, Energy, Roads, and Financing. If you look at the numbers in each of these folders you see there is a timeline from 2015 to 2055, and you will make a decision for the budget every five years, one decision for 2015 – 2019, another for 2020 to 2024, etc, eight decisions in total… for each of the five sectors.



It looks like we've gone over **our budget**, and will have to take away from that last allocation

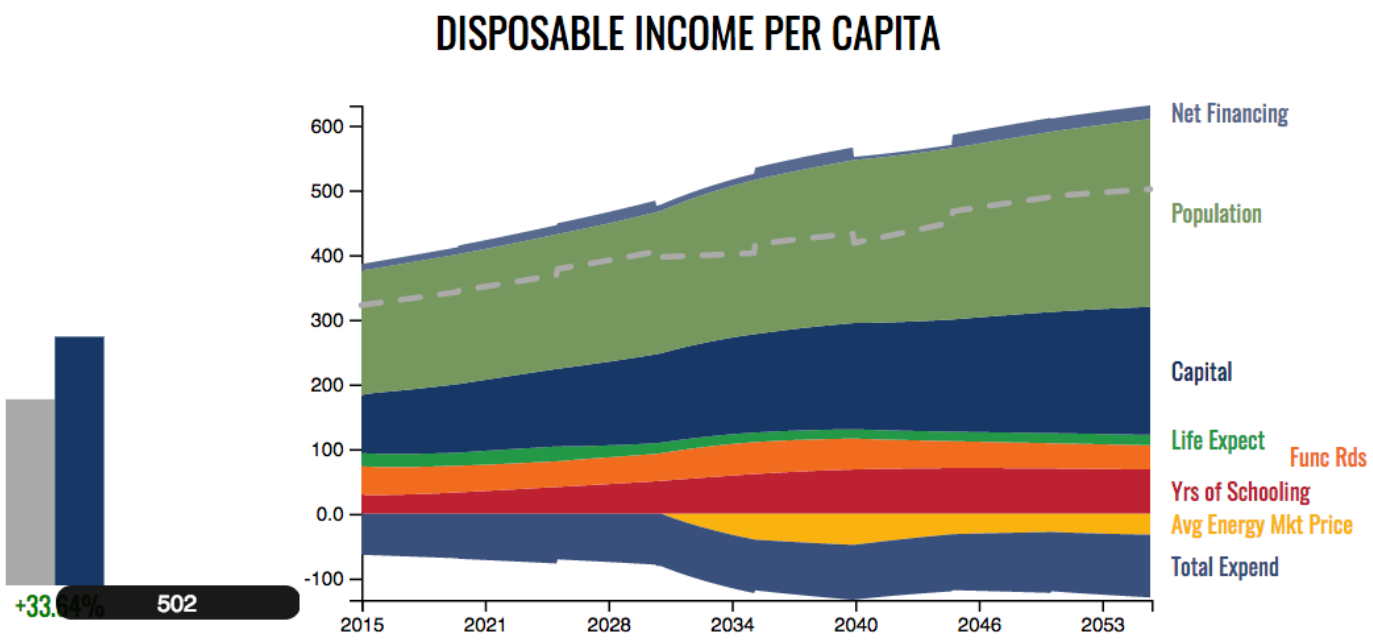
BEHAVIOR



After simulation, the top of the "behavior" page displays the five icons which represent five major resources in this model, Life Expectancy, for Health; the total Years of Schooling a person receives in their lifetime, for Education, The Capacity of Energy Supply, for Energy, The total Functioning Roads of a nation, for Roads/Infrastructure, and lastly Capital for the Country's finance sector.

These icons sit above the two bar graphs which represent the achievements at the end of the simulation period (which is 2055), for the BAU scenario (in grey) and your current simulation (in the color of that goal), this percentage is out of 100%, the optimal scenario.

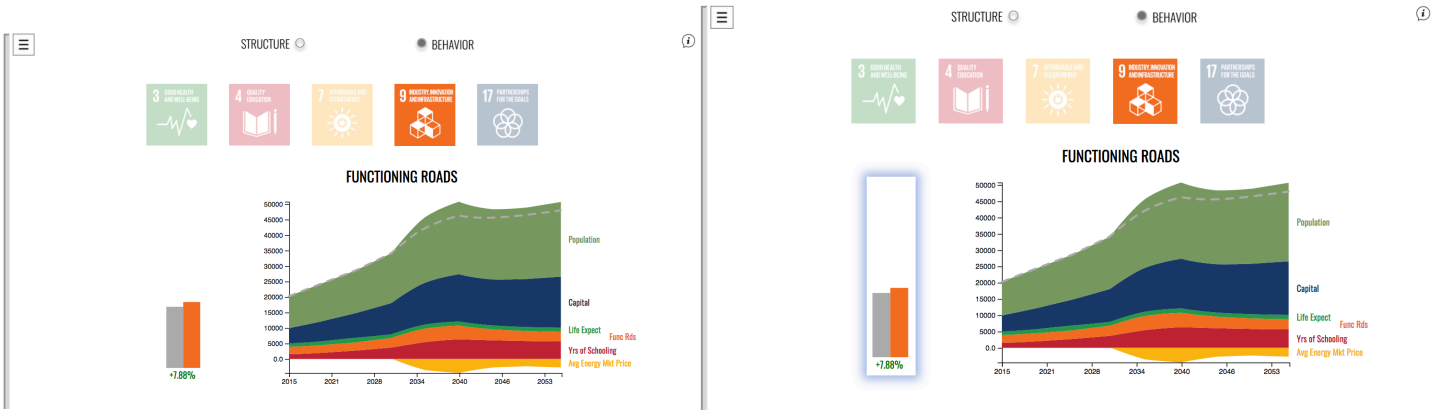
Results for Per Capita Disposable Income appear below the icons in two forms



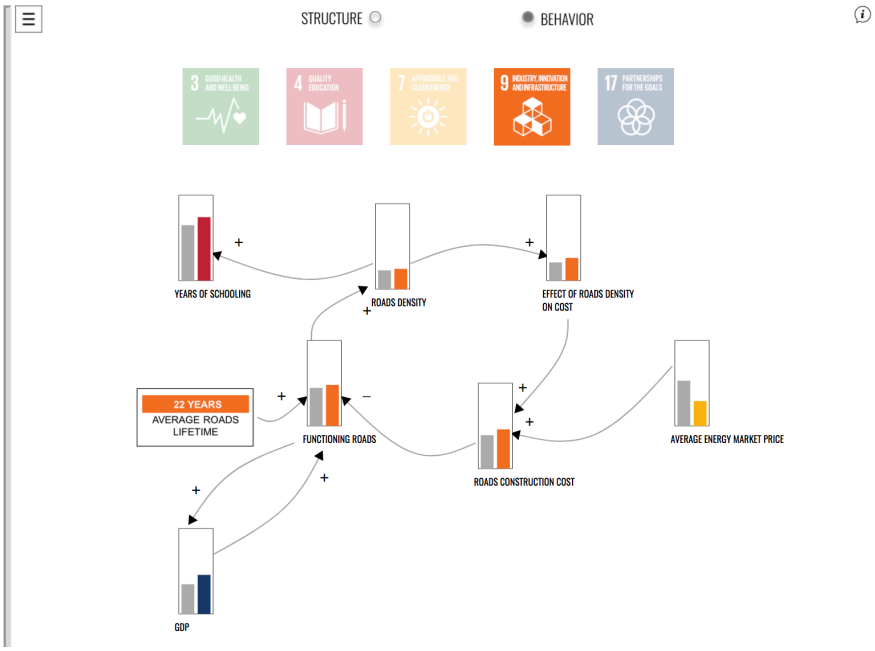
(1) a **Bar Graph** measuring progress in your simulation values in 2055 compared to the BAU Scenario.
   - **Mousing** over the difference in percentages will provide you the numeric value associated with the variable.

(2) a **Contributions Graph** which will shows you 2 things
   - first, If you look at the **dotted grey line**, it shows how a resource develops over time from 2015 to 2055.
   - Second, it will show you the **relative contributions of other goals** to the development of the variable in question. Look at the y-axis to see that there are positive and negative contributions to PCDI.
   - This contributions graph will allow you to monitor the development of the variable in question, and how much other goals are contributing to that development at different points in time.

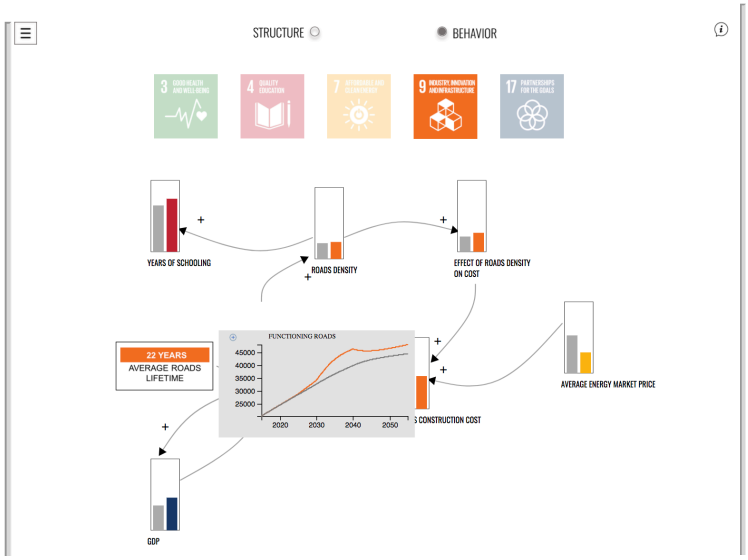
You will see these two displays for each of the five goals.

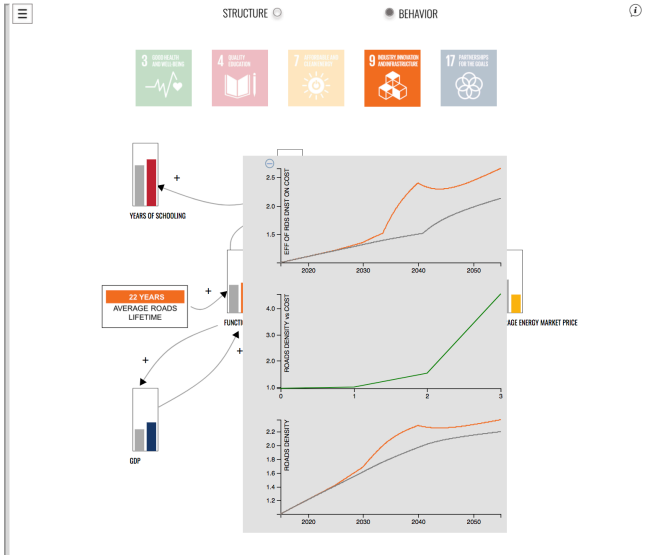


- This second tier of data allows you to access data in two different forms. The “bar graph" click will bring you to an animated CLD for this sector, similar to what you viewed in the Structure portion of the interface.



The plus and minus signs represent how the two variables relate to each other. When you see a plus, you can think that a change in one variable causes a similar change in the one attached. If the first variable grows, the next will too. With a negative sign, a change in one variable causes an opposite response in the one attached. When the first variable grows, the next will slow in growth.

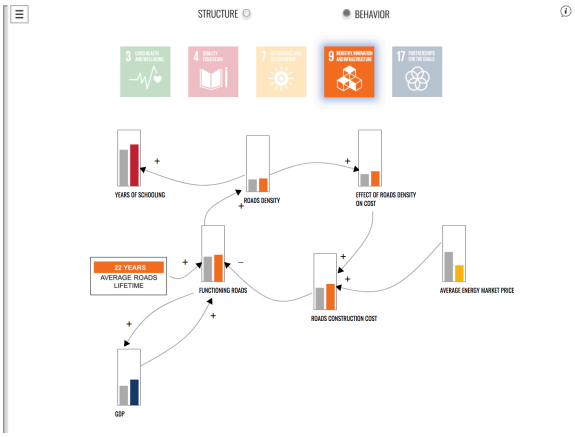


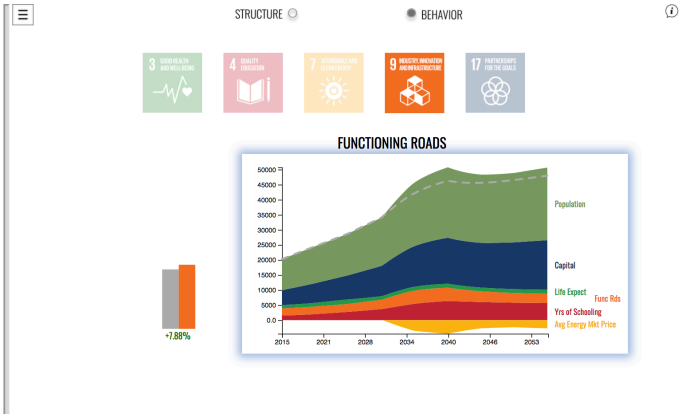


Each bar graph variable can be clicked to display a time graph, and a click on the "plus" button will enlarge the display. **Mousing over** the graph will provide you with numeric values. Clicking the minus will minimize it, and finally clicking within the left-hand domain of the graph will return it to a bar graph.

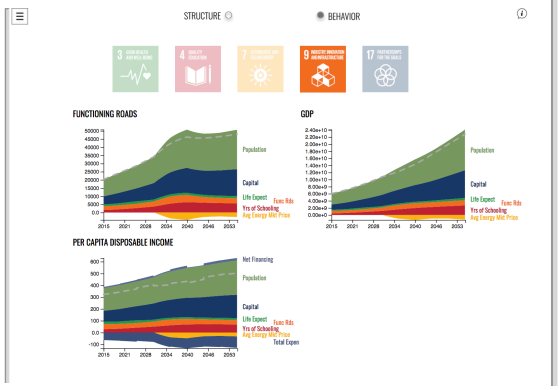
Where you found an image with a special structure in the structure diagram, you will find 3 graphs **only** upon enlarging in this third tier of data.

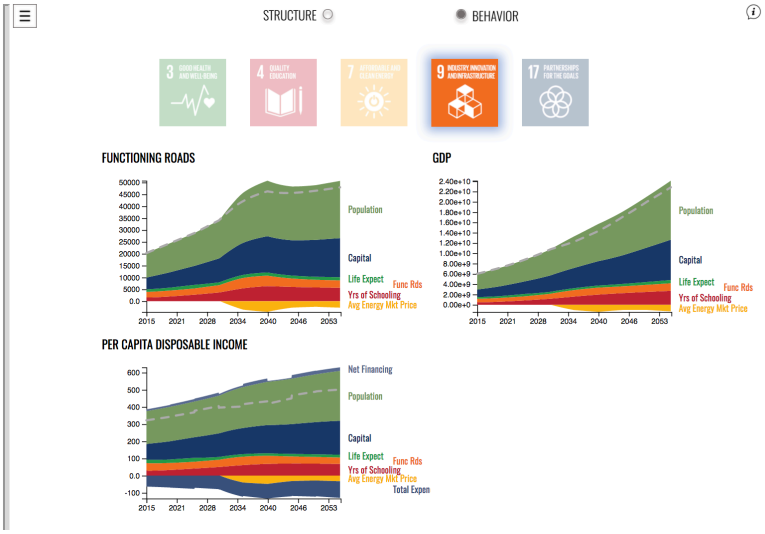
- For example, we see **Roads Density** (current Functioning Roads / Initial Functioning Roads) in the bottom graph
- In the middle Graph the **Roads Density (x-axis)** is plotted here against the **effect on cost (y-axis)**, (as the amount of roads doubles and triples, we see a growing effect on cost)
- Top graph **the effect of roads density on cost**.





- When you're done looking at this data display, you can click the icon of origin to move up a tier back to the bar and contributions graph.
- Lastly when you click on the Contributions graph, you will find third tier stream graph data for the main goal variable, in this case Functioning Roads, PC Disposable Income, and GDP.





- To get back to the first tier and have access to the other goal results, just click on the icon of origin.