

TREDIS 6 helps you tell the economic impact story for your transportation projects with infographics, interactive graphs, maps, and updated reports. TREDIS focuses on an ease-of-use mindset to answer important questions and guide fact-based decision making.

In other words, TREDIS can be used for a high-level or very detailed analysis depending on your needs and selection of options. Make sure to read this guide to unlock the power of TREDIS.

SIMPLE NAVIGATION. TREDIS guides you through a sequence of setup questions to customize your analysis, asks for input data, and then provides results. The navigation bar at the top of every screen shows your location in each sequence of the process. You may click on one of the earlier steps to update your inputs at any time.



NOTE: You may not click on a sequence step if the prerequisite steps are not completed.

PROJECT SETUP

PROJECT (NAME/SELECT) Start an analysis session by

- (a) creating a new project from scratch and giving it a name and analysis type, or
- (b) picking a previously existing project to modify, or
- (c) create a new variant of an existing project, by copying it and giving that copy a new name

...*Make your choice, and then **Timing***

TIMING Using the slider controls, enter your construction and operations periods. Using the dropdown menu select your Constant Dollar Year.

The screenshot shows the 'Project Timing' interface. It features two horizontal sliders. The first slider is for 'Design and Construction Spending (2019 - 2020)' with a blue bar indicating the period from 2019 to 2020. The second slider is for 'Changes in Travel or O&M Spending (2019 - 2032)' with a blue bar indicating the period from 2019 to 2032. Below the sliders is a 'Constant Dollar Year' dropdown menu currently set to '2019'. A blue 'Save' button is located at the bottom center of the interface.

...*Fill in the data, click the yellow SAVE button and then press **Regions***

REGION TREDIS creates a Default Region for you. You may change the name by clicking the Rename button and typing the new name in the text box. Clicking outside the text box will save your new name. To create additional regions, click the Add Region button.

To define the content of your region(s) click on the color for your region and then click on counties or states on the map (only counties and states contained in your subscription are selectable.) Alternatively you may use the dropdown menu to select your region definition.

If you clicked on the map by accident, you can click on the Revert Selection button to restore your previously saved regions.

After selecting your region, build the economic model by clicking on the 'Build Economic Model' button.

NOTE: This may take a few minutes to complete.

CAUTION: TREDIS requires Travel inputs for each Region defined.



... When finished building the model, press **Modes**

MODES. To select the mode purposes associated with your project, check the corresponding boxes to identify the types of trips (mode and purpose) that will be affected. Each mode and trip purpose combination has its own default operating cost, fuel use, environmental impact and value of time. You may override the TREDIS defaults as needed. TREDIS uses the selected mode/purpose combinations to simplify the rest of the analysis process by only asking for information about the type of trips that have been selected; tailoring terminology to match the relevant modes. Custom mode purposes can also be added for advanced projects.

NOTE: Press the icon to expand and show variations of the mode selected.

CAUTION: TREDIS requires inputs for each Mode/Purpose combination selected.

SUGGESTION: Use the No Split checkbox if you do not have detail travel data by purpose.

Modes	No Split	Business	Personal	Commute	Freight
<input checked="" type="checkbox"/> Aircraft - All	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- Bik	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- Ped	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bus - Pas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Car - Pas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> Ship - All	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> Train - All	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> Truck - All	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

... Fill in the data, click the yellow SAVE button and then press **Costs**

USER DATA INPUT PROCESS

COSTS Fill in estimates of the total construction cost and the recurring operations & maintenance cost, for each Alternative. TREDIS will allocate those costs over the relevant construction and operation years.

Alternative		Region	Cost Type	Road	Rail
Base	Default Region1	Total Construction Costs	0.00		
Base	Default Region1	Annual Oper & Maint Costs	0.00		
Project	Default Region1	Total Construction Costs	100.00		
Project	Default Region1	Annual Oper & Maint Costs	0.11		

Or select the 'Go To Advanced' button to fill in a detailed schedule of costs on a year-by-year basis (or paste it in from an Excel spreadsheet).

Cancel Changes											
All inputs should be entered as constant 2019 \$M											
Alternative	Region	Facility	Year	Property Acquisition	Engineering And Design	Right Of Way	Transport Structures	Terminal	Vehicles	Ongoing Operations	Maintenance And Rehabilitation
Base	Default Region1	Road	2019	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Base	Default Region1	Road	2020	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Base	Default Region1	Road	2021							0.00	0.00
Base	Default Region1	Road	2022							0.00	0.00
Base	Default Region1	Road	2023							0.00	0.00
Base	Default Region1	Road	2024							0.00	0.00
Base	Default Region1	Road	2025							0.00	0.00
Base	Default Region1	Road	2026							0.00	0.00
Base	Default Region1	Road	2027							0.00	0.00
Base	Default Region1	Road	2028							0.00	0.00
Base	Default Region1	Road	2029							0.00	0.00
Base	Default Region1	Road	2030							0.00	0.00
Base	Default Region1	Road	2031							0.00	0.00
Base	Default Region1	Road	2032							0.00	0.00
Project	Default Region1	Road	2019	10.00	20.00	5.00	15.00	0.00	0.00	0.06	0.03
Project	Default Region1	Road	2020	10.00	20.00	5.00	15.00	0.00	0.00	0.06	0.03
Project	Default Region1	Road	2021							0.06	0.03

...Fill in the data, click the yellow SAVE button and then press **Travel** on either screen.

CAUTION: If you enter data in the Advanced Detail form and then Click on the Basic Mode, you may overwrite any detail data if you save in the Basic Mode.

TRAVEL

Enter the number of trips, adjust the vehicle miles traveled, the hours traveled, and/or other pertinent travel information for each mode purpose. Click through the tabs to see which data inputs you wish to enter:

Diagnostics
Save

Data Year 2020 ✕

Required Inputs
Occupancy
Congestion and Flow
Fuel
Charges, Fees, Tolls
Other

2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 **2040** 2041 2042 2043 2044 2045 2046 2047

Cancel Changes												
Alternative	Region	Segment	Mode	Purpose	Period Veh-Trips	Period VMT	Travel Speed	Transit Passenger Trips	Transit Passenger Miles	Transit Passenger Hours	Out of Vehicle Passenger Time	
Base	Default Region	Annual	Passenger Car	All	2,000,000	50,000,000	50					
Base	Default Region	Annual	All Trucks	Freight	5,000,000	250,000,000	50					
Project	Default Region	Annual	Passenger Car	All	2,000,000	50,000,000	50					
Project	Default Region	Annual	All Trucks	Freight	5,000,000	250,000,000	50					

Data may be pasted into the table from a spreadsheet.

...Fill in the data, click the yellow SAVE button and then press **Access** on either screen.

ACCESS The last input to enter is Market Access. In this spreadsheet, you can enter values for population within a 40-minute drive time (Access to Population) and employment within a 3 hour drive time (Access to Employment) for the base case and each project alternative scenario.

...Fill in the data, click the yellow SAVE button and then press **Results**

RESULTS Selecting the Results tab will bring you to the updated report generation system. First, select the parameters to customize the results or stay with the defaults. (Other analysis parameters may be found in the preference menu) Press the Run Analysis button which will generate all your results.

The screenshot shows the TREDIS 6 interface with a dark blue header containing navigation tabs: Summary, Economic Impact, Benefit - Cost, Financial Impact, Tracing / Validation, Equity, Freight, and VIA. Below the header, there are two columns of settings:

- Interpolation Method:** Compound Annual Growth
- Charge Interpolation:** None
- Depreciation Type:** One-Time Project
- B/C Perspective:** Study Region (radio button), National Perspective (radio button, selected)

 A large blue button labeled "Run Analysis" is centered below these settings. Underneath the button, it says "Analysis completed on 1/8/2022 at 2:58 PM Eastern Time". At the bottom, there are two buttons: "Revert Settings" and "Costs of Emissions by Year".

Once the analysis is complete, the summary infographic appears providing a quick view into your analysis:

The screenshot shows the "RESULTS" section of the TREDIS 6 interface for the "Springfield Highway Expansion" project. The header includes navigation tabs: PROJECT, TIMING, REGIONS, MODES, COSTS, TRAVEL, ACCESS, and RESULTS. Below the header, there are filters for "Results Year" (2042) and "Impact Type" (Total Impact). The infographic is titled "Project analyzes 4 years of construction and 21 years of operations" and is divided into four main sections:

- Travel Impact:** Project investment of \$224M results in travel changes. Includes a bar chart showing Vehicle Trips % Change, VMT % Change, and VWT % Change.
- Societal Benefit:** Resulting changes in the transportation system yield benefits of \$94.18M. Includes a bar chart showing Traveler Benefits, Environmental Social Benefits, and Wider Economic Benefits.
- Economic Impact:** Project increases Gross Regional Product by \$23.37M. Includes a pie chart showing the distribution of benefits across sectors like Manufacturing, Business, Finance, Ed/HC, Wholesale, and Rest.
- Jobs by Year:** Project creates 95 jobs, 39% with above average wages. Includes a line graph showing the number of jobs created from 2022 to 2042.

Use the tabs at the top to view results for economic impact, benefit costs, financial impact, and tracing and validation results. The Freight tab is active only for accounts that include one of the freight options.

SUPPORT

For more help on using TREDIS click on the Help button at the top of each screen to see more information on the current screen. Additional information can be found using the User Resources button also at the top of each screen. Here you can find the User Manual, Default Data Sources document and Case Studies to help you through your analysis project.

Finally, we are always here to help. Please contact us at support@tredis.com or at 617-303-0424.