



## Frequently Asked Questions: Transit and Intercity Rail Capital Program Quantification Methodology

December 23, 2019

CARB staff updated the [TIRCP Calculator Tool](#) to enable TIRCP applicants to quantify the benefits associated with separable and scalable elements of their project proposals by including subcomponent columns within each “Quantifiable Component” tab. These subcomponent columns are intended to capture separable elements of a project that provide either an independent utility (e.g., procurement of rail cars and buses) or supplemental benefits as a result of the project (e.g., increase in ridership across multiple modes). Additionally, the calculator tool update allows for the selection of separable elements and project phases such that recipients and Caltrans can report incremental benefits as project elements receive allocation or Letter of No Prejudice from CTC. Please refer to the [TIRCP Guidelines](#) for program requirements.

If a project component does not have separable or scalable elements, applicants should populate just one subcomponent column in a “Quantifiable Component” tab.

Further questions about the TIRCP Quantification Methodology should be sent to: [GGRFProgram@arb.ca.gov](mailto:GGRFProgram@arb.ca.gov).

Questions about the TIRCP should be sent to: [TIRCPcomments@dot.ca.gov](mailto:TIRCPcomments@dot.ca.gov).

### **1. How should applicants split costs across multiple subcomponents that may have a single cost associated with it?**

For a project component that has a single cost but has separable elements, applicants should:

- First, attempt to quantify the project within a single subcomponent column. The tool allows multiple project types to be quantified within the same subcomponent column.
- Second, if the project cannot be quantified in a single subcomponent column, applicants can use one of the following two options:
  - If the additional subcomponents provide supplemental benefits that have no cost associated with them, the applicant may enter the funding amount in one subcomponent column and enter zeroes for the supplemental subcomponents’ funding amounts; or

- If there is a cost associated with each of the subcomponents but the cost cannot be parsed for each subcomponent, funding and co-funding amounts may be divided evenly among the subcomponents.

**2. What should applicants do if there are not enough subcomponent columns or component tabs to quantify the project?**

If more subcomponent columns are needed, the applicant may instead use a separate component tab to quantify the additional subcomponents. If more subcomponent tabs are needed, the applicant may use another calculator tool, and then manually sum the results of each tool and submit the results as part of the project proposal.

**3. The tool does not allow applicants to enter negative ridership. How should applicants quantify projects that may have reduced ridership in Year 1 for one subcomponent (e.g., shifting ridership from one transit line to another)?**

For quantification purposes, negative ridership would indicate that riders are shifting from transit to personal passenger vehicles. If the project is expecting to see a transfer of ridership from various transit or public transportation lines as a result of a system-wide improvement or other project elements, it is recommended to aggregate the data into a single subcomponent to reflect the change in net ridership.

**Note:** Year 1 is when the project or project element becomes operational, and does not account for prior downtimes (e.g., during construction).

**4. Can applicants include "future anticipated" Low Carbon Transit Operations Program (LCTOP) funds and funds from other sources?**

Any past, present, or anticipated future funding that's specific to the quantified project and that will be sourced from the Greenhouse Gas Reduction Fund (GGRF) should be inputted into the appropriate data entry fields in the various Quantifiable Component tabs. This is done to pro-rate the benefits of the project so that the other GGRF funding sources do not double-count the benefits.

For a list of California Climate Investment programs that are funded by the GGRF, visit: <http://www.caclimateinvestments.ca.gov>

**5. What are the units of the Project-Specific GHG Emission Factor?**

The Project-Specific GHG Emission Factor is in units of grams of carbon dioxide equivalent per megajoule (CO<sub>2</sub>e/MJ). Values must be sourced from carbon intensity values calculated through the [Low Carbon Fuel Standard](#) that pertain to the project’s fuel pathway.

**6. Should applicants include future potential project changes in the quantification?**

For quantification purposes, applicants should only include project elements that are reasonably assured to occur as a result of the project. Reasonable assurance may mean that these project elements would appear in master agreement/project supplement agreement. Any potential future project elements that are not reasonably assured to occur as a result of the proposed project should not be included in the tool or the calculated results. This allows applicants to request funding in future TIRCP cycles and from other California Climate Investments programs for project elements that demonstrate independent utility and achieve additional GHG reductions. However, applicants may use additional tools to model alternative potential scenarios in order to enhance the application narrative.

For example, if a project proposal is requesting funding for the procurement of Tier 4 locomotives to replace older Tier 2 locomotives, the GHG reductions reflected in the tool and evaluated for scoring purposes will reflect this replacement. If the applicant plans to eventually transition the new Tier 4 locomotives with zero-emission locomotives, the applicant may provide a supplemental tool to demonstrate potential future GHG reductions from this future replacement and write about this in the application narrative, but those future, unassured benefits will not be considered in the GHG reduction scoring.

**7. How should applicants input fuels that have a Project-Specific GHG Emission Factor of zero or less?**

Currently, the [TIRCP Benefits Calculator Tool](#) does not allow users to input Project-Specific GHG Emission Factors less than or equal to zero.

- As a proxy for zero, CARB staff suggests inputting a value of 0.00000001.
- As a proxy for less than zero, CARB staff suggests the same approach as noted above *and* the applicant should use the corresponding Documentation cell next to the input cell to make a note about the actual, less-than-zero emission factor that should be used (in addition to including documentation for the less-than-zero emission factor in the application).

Future iterations of the tool will allow users to input zero and negative Project-Specific GHG Emission Factors.

**8. If the input for Project-Specific GHG Emission Factor is left blank, what default value is used?**

Default carbon intensity values can be found on the “Fuel-Specific GHG” tab of the [CCI Quantification Methodology Emission Factor Database](#).

**9. What are the assumed fuel consumption rates and emission factors used in the calculator tool?**

Vehicle-specific fuel consumption rates and emission factors can be found in the [CCI Quantification Methodology Emission Factor Database](#).

**10. How detailed do the Documentation inputs need to be?**

The Documentation inputs in the tool can be fairly general and high-level. Supporting documentation for inputs should be explained and justified further in the application narrative.