

## Help for Beta Version 3.0 of the CARB Pollution Mapping Tool

The beta version 3.0 of the California Air Resources Board Pollution Mapping Tool incorporates a new Mobile Emissions tab that maps the criteria, toxics, and greenhouse gas emissions from on-road vehicles such as cars, trucks and buses. The Mobile Emissions tab allows users to summarize vehicular emissions at the air basin, air district, and county levels by vehicle and fuels types, and allows for the data to be displayed in various map, chart and tabular formats. In addition to these now familiar features, this version adds further capabilities that allow users to view and compare the emission summaries and trends for mobile and stationary sources inside a user-defined area. We are planning to revise and update the Mapping Tool User's Guide in the upcoming months, but for now we would like to offer you some tips on how you may be able to get the most out of the Mobile Emissions tab:

### Accessing the Mobile Emissions tab

- Upon loading, the Mapping Tool display defaults to the Facility Emissions tab. To access the Mobile Emissions, click on the 'Mobile' tab.

### Mobile Emissions Tab Layout

- The user interface consists of three panels: a control panel to the left, a display panel at the center, and an emissions summary panel to the right.
- The control panel allows users to filter emissions by year, geographic region, vehicle type, fuel type, and pollutant.
- The display panel shows the vehicular emissions as a heat map in which the magnitude of the emissions is represented by different color (and different size) dots. The dots representing vehicle emissions are centered on a pre-compiled grid at a spatial resolution of 1 km x 1 km, which become apparent (and more granular) as users increase the zoom level.
- The right side panel displays emissions summary by year, geographic region, vehicle or fuel types chosen in the 'Group by' dropdown list.

### Chart and Data Views

- Users can use the 'Maps', 'Charts' and 'Data' tabs to switch the formats in which the emissions data are displayed.
- In Charts view, the default chart type is a pie-chart representing emissions from the selected geographic region. Users can switch between several chart types that include pie, bar, and column charts.
- In Data view, users can see detailed emission information in tabular format. The data table can be sorted by any column by clicking on a table header to sort in either

ascending or descending order. Users can download the data as a csv file by clicking on the 'Get Data' button above the data table.

### **Viewing Emissions in User-Defined Areas**

- The tool offers an array of spatial calculators to quantify mobile and stationary source emissions in user-defined areas that include circles, rectangles and polygons. The shape-drawing toolbar is located at the upper-right corner of the map.
- Users can select a shape and draw a perimeter around a point of interest on the map, such as their home, school, or community.
- The tool has a limit of 100 miles for the longest distance between any two points on the shape, and users will be prompted by a pop-up window if this limit is exceeded.
- Once a shape has been drawn, please wait until the mobile emissions dots appear inside the perimeter of the shape, which could take up to one minute. The grid scale used for emissions calculation will be displayed in the center of the shape.
- Clicking inside the shape will open an information window that contains geographical and geometry information about the shape, a list of the facilities within the perimeter, and the aggregated mobile and stationary emissions inside the perimeter. This feature allows users to view and compare the emission trends and the relative contributions of the stationary and mobile sources within the selected shape.
- Users can drag and drop the shape anywhere on the map, or change any point on the shape to resize and edit the shape, and the tool will recalculate the above parameters automatically. Again, please wait until the mobile emissions dots appear inside the perimeter of the shape before dragging, resizing, reshaping, or deleting the shape.
- Users can download the emissions data for the aggregated point source and mobile emissions in the shape as a csv file by clicking on the 'Get Data' button on the upper-right corner of tabbed window.

This beta release is intended as an opportunity to get public input as we prepare further refinements for the widespread release of version 3.0 in 2021. Please take some time to try out the test version and make sure the things that are important to you are working. If you find any data quality issues or experience any functionality problems, please report them to us at [mapping\\_tool@arb.ca.gov](mailto:mapping_tool@arb.ca.gov). Also, please send us your questions and suggestions for additional User Guide topics. Thank you for your continued support in the development of this important public information tool.