**Boston Regional STOPS Model**

**README: STOPS Summary HTML Report *(Boston\_Regional\_STOPS\_Summary\_Report.RMD)***

**June 2025**

**Tested with R version 4.4.1**

**Purpose**

This RMarkdown (RMD) script processes the \*Results.prn output file from a STOPS model run, along with supporting files – including the station shapefile, district shapefile, and control file – to generate a comprehensive HTML report that summarizes the key model settings and inputs, calibration results, No-Build and Build results, and the ridership-related Capital Investment Grant (CIG) metrics in a series of tables, charts, and/or maps.

The script is intended to be run from a single directory containing both the RMD script and all the required input files.

**Required Inputs**

Place the following files in the same directory as the RMD script:

1. **Output File:** Copy the \*Results.prn file from the STOPS model run’s “Reports” folder.
2. **Station Shape File:** Copy the STOPSStations shape file from the “Inputs” folder.
3. **Districts Shape File:** Copy the districts shape file from the model run’s “Districts” folder.
4. **Control File:** Copy the STOPS control file (e.g., Boston\_2024.ctl) used in the model run.
5. **1-parameters.csv File:** Update the Value column appropriately. The Notes column provides context for each row. Note that rows corresponding to observed data can be set to zero without causing errors.
6. **2-keyroutes.csv File:** List the route IDs of interest in the ID column. Use the Description column for internal reference (not used by the script).
7. **3-keystations.csv File:** List the stop IDs of interest in the ID column. The Name and Description columns are for user reference only.
8. **Additional Files:** There are two other files read by the script which do not need to be updated by the user:
   * **Boston\_MPO\_Logo.png:** Appears in the bottom-left of the HTML report. To use a different logo, replace the image file but retain the same name and extension.
   * **custom.css**: Defines the report’s HTML styling (e.g., fonts, colors). Users may edit this file in Notepad to customize the visual style of the report.

**Running the Script**

Once all required files are in place and the CSV inputs are updated:

* Open Boston\_Regional\_STOPS\_Summary\_Report.RMD in **RStudio**
* Run the script using **Ctrl + Shift + K**

**Runtime:** 4-5 minutes

**Note:** If you encounter issues installing the rgdal package (required by the script), copy the pre-installed rgdal folder provided in this directory to your R library directory (E.g.: C:/Program Files/R/R-4.4.1/library/rgdal).

**Outputs**

The script will generate an **HTML report** in the same directory. The top portion of the report includes the title, logo, and summary sections as shown in the image below:

