

R Installation and App Setup Guide

Step 1: Download and Install R

For Windows:

1. Go to <https://cran.r-project.org/>
2. Click "Download R for Windows"
3. Click "base"
4. Click "Download R-4.x.x for Windows" (latest version)
5. Run the downloaded `.exe` file
6. Follow the installation wizard with default settings
7. R is now installed!

For Mac:

1. Go to <https://cran.r-project.org/>
2. Click "Download R for macOS"
3. Download the `.pkg` file for your Mac (Intel or Apple Silicon)
4. Double-click the downloaded file and follow the installation prompts
5. R is now installed!

Step 2: Download and Install RStudio (Recommended)

RStudio makes R much easier to use with a user-friendly interface.

1. Go to <https://posit.co/download/rstudio-desktop/>
2. Click "Download RStudio Desktop for [Your Operating System]"
3. Install the downloaded file
4. Launch RStudio

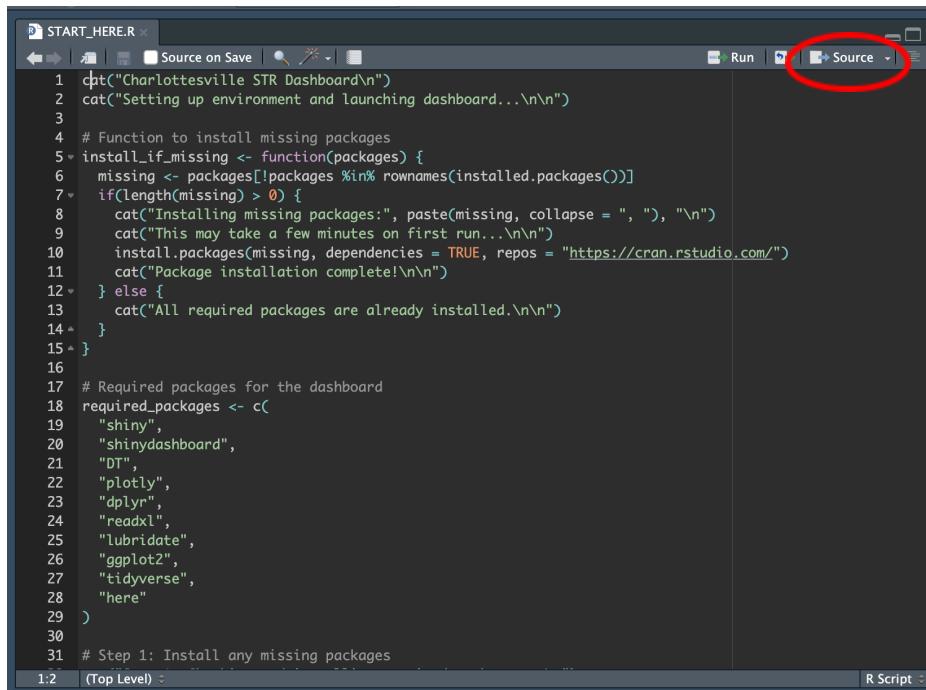
Step 3: Open the Project in RStudio

1. Simply double-click the "START_HERE.R" file from your file explorer in the AlbemarleSTRProject folder

Step 4: Run the Application

Run the app:

- Look for a "Source" button at the top of the Source pane
- Click "Source" (Look at image below)



```
1 cat("Charlottesville STR Dashboard\n")
2 cat("Setting up environment and launching dashboard...\n\n")
3
4 # Function to install missing packages
5 install_if_missing <- function(packages) {
6   missing <- packages[!packages %in% rownames(installed.packages())]
7   if(length(missing) > 0) {
8     cat("Installing missing packages:", paste(missing, collapse = ", "), "\n")
9     cat("This may take a few minutes on first run...\n\n")
10    install.packages(missing, dependencies = TRUE, repos = "https://cran.rstudio.com/")
11    cat("Package installation complete!\n\n")
12  } else {
13    cat("All required packages are already installed.\n\n")
14  }
15 }
16
17 # Required packages for the dashboard
18 required_packages <- c(
19   "shiny",
20   "shinydashboard",
21   "DT",
22   "plotly",
23   "dplyr",
24   "readxl",
25   "lubridate",
26   "ggplot2",
27   "tidyverse",
28   "here"
29 )
30
31 # Step 1: Install any missing packages
```

Step 5: Using the Application

- The app should open in a new window or in Browser
- Follow any on-screen instructions in the app