Workforce Report – Standard Operating Procedure (SOP)

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# Description

This guide explains how to generate the **Workforce Report** each month. It covers setting up the repository, preparing data, and running the automated report in RStudio with Quarto.

⚠️ **Note:** Only run the pipeline once new monthly data from SARD is available **at the start of the next month**. Running at the **end** of the month (instead of the start of the next month) can cause issues with compliance trend data. You can re-run the report with old data as many times as needed.

# Before You Start

1. Request installation of the following from the Service Now portal:

* **R**
* **RStudio**
* **Git (x64)**

1. Download the repository from GitHub:
   1. Open **RStudio**. (**image 2.1 and 2.2**)
   2. Go to **File → New Project → Version Control**. (**image 2.3**)
   3. Select **Git**.
   4. Enter the following: (**image 2.4**)
      1. **Repository URL:** <https://github.com/OhinUKHSA/WorkForce.git>
      2. **Project directory name:** Workforce (or a name of your choice)
      3. **Location:** Choose where you want the project stored
      4. **Option:** Tick “Open in new directory”
   5. Click **Create Project**.

***✅ This will create a local copy of the repository with all necessary scripts (excluding data files, which must be downloaded separately for information governance reasons).***

***⚠️ Download required data files from the SARD system (explained in Step 4).***

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| * 1. Open R studio | * 1. Example of Rstudio |
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| * 1. After opening RStudio click **file**, **new project** and then select **Version Control** | * 1. Fill in window as shown |

# Install Packages (first time only)

1. In RStudio, open the script **Load\_packages.R** (File → Open File → Load\_packages.R).
   * You should now see a screen similar to that shown in **image 3.1.**
2. Select all code (**Ctrl + A**) and run (**Ctrl + Enter**) (see **image 3.2**)
   * This can take several minutes to complete
   * When complete, you will see the message:  
     ‘*All required packages are installed. You can run report*.’ (see **image 3.2)**

**✅ *Once you have done this step you will not need to do it again***

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| 3.1. Typical screen after opening Load\_package.R file. Highlighted in red is a new window top left including Load\_package.R. |
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| 3.2. Screenshot showing when all packages are installed. Highlighted in red indicates this is complete |

# 4. Prepare the Data

1. Navigate to your project’s **data** folder:

***…/workforce Project/data/***

1. Move last month’s .csv files to the **old\_data** subfolder (**image 4.1.**)
   * **Recommended**: Create a subfolder inside old\_data (e.g., September2025) for version control. (**image 4.2**)

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| * 1. Move or copy the previous month’s four .csv files into old\_data/ before saving the new ones. | * 1. Recommended to save data in separate folder for version control |

1. Download the **three** new files from **SARD**,
   * SAVE THESE as .CSV files
   * Rename them accordingly and save/replace files stored in workforce Project/data/

* *appraisees.csv*
* *appraisers.csv*
* *compliance.csv*

1. Ensure that **Trend\_data.csv** (which updates automatically) is also present in data/. At this point, the data/ folder should contain **four .csv files**:
   * + *appraisees.csv*
     + *appraisers.csv*
     + *compliance.csv*

* Trend\_data.csv

# Create main report

Once you have updated all .csv files you can now run the main report. This will automatically create a new file: **WF\_report\_update.html**.

⚠️ **Note:** If you already have a ***WF\_report\_update.html*** saved in this directory from a previous months analysis then it’s recommended you save thissomewhere (for example **workforce Project/data/old\_data/[month name])** as this will be overwritten when running this script.

1. Open R project (**WorkForce Project.Rproj**) from your directory (**image 5.1** - highlighted in red)

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| * 1. Image highlighting workforce r project (highlighted in red) and script (highlighted in black) which will need to be run within the R project to create new report |

1. When the R project opens, if you **don’t** see **WF\_report\_update** in top left pane (see **image 5.2** -highlighted with red circle), click:
   * File 🡪 Open File 🡪 WF\_report\_update.qmd. (**image 5.1 -** highlighted in black)
     + *You should now see this script open in top left pane*. (**image 5.2**)

⚠️ **NOTE:** *Make sure you are in the WF\_report\_update script as you can have several scripts on at once. Click on the tab if required* (**image 5.2** – highlighted red circle**)**

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| * 1. Image highlighting workforce r project (highlighted in red) and script (highlighted in black) which will need to be run within the R project to create new report |

1. If you are in the correct r script you should see the ‘***Render***’ button (see **image 5.2** - highlighted in yellow).
   * Click ‘**Render**’ button and after a few seconds, if successful a new file will appear (**WF\_report\_update.html**) or replace existing (see **image 5.1**). You may even see this report automatically render.
2. Share the *.html* file with stakeholders (you may rename it if needed)

# Important Notes

* Trend\_data.csv updates automatically each month, but you will need the initial file from the data owner.
* ⚠️If new SARD data is ready and prepared prior to month ending, **Delay running report until start of new month**
* Always save last month’s data in **data/old\_data/** before replacing with new files
* Do not edit column names or file formats in the CSVs, the scripts expect consistent structure

# Quick Monthly Checklist

✅ Download 3 files from SARD

✅ Move old files to data/old\_data/

✅ Save new files in data/ (with correct names)

✅ Open WF\_report\_update.qmd in Rstudio

✅ Click **Render**

✅ Share the newly generated **WF\_report\_update.html** report