# Jefferson Township Tax Incentive Revenue Loss Tracker

This project calculates the revenue lost by Jefferson Township due to Tax Increment Financing (TIFs) and property tax abatements. It uses publicly available datasets to determine how much tax revenue was diverted from the Township’s General, Fire, and Road funds for each municipality, across tax years 2014 through 2024. The results include detailed fund-level breakdowns, yearly summaries, and automatically generated charts saved for visual reporting. This system is designed to be re-run annually without requiring any coding knowledge, as long as the steps below are followed carefully.

## Instructions to Run Annually

### Step 1: Download the Current Year’s Files

Visit the Franklin County Tax Incentives Hub to download the current year’s data. Go to https://franklin-county-tax-incentives-fca.hub.arcgis.com/pages/abatement and scroll to the bottom to download the latest AbatementDetails-TYXXXX.xlsx file. Then visit https://franklin-county-tax-incentives-fca.hub.arcgis.com/pages/tif and download the TifDetails-TYXXXX.xlsx file.

### Step 2: Place Files in the Correct Folder

Move both downloaded files into the 'data-raw' folder located at:  
C:\Users\JosephWhite\Documents\JeffersonTownshipTaxResearch\data-raw

### Step 3: Update the Millage Table

Navigate to C:\Users\JosephWhite\Documents\JeffersonTownshipTaxResearch\data and open the file named Township\_Millage\_Table\_\_2014\_2024\_.csv. Add a new row with the latest year’s data, including the TaxYear, TaxDistrict, PropertyClass, and millage rates for General, Fire, Road, and Total.

### Step 4: Open and Run the Project in RStudio

Open RStudio. Then go to C:\Users\JosephWhite\Documents\JeffersonTownshipTaxResearch\ and open JeffersonTownshipTaxResearch.Rproj. If the script doesn't open automatically, go to the 'scripts' folder and open final\_jefferson\_tax\_pipeline.R. Select all (Ctrl + A), then run (Ctrl + Enter), or click 'Source'.

## Before First Use: Install R Packages

Before running the script for the first time on a new machine, run the following command in the Console to install required packages:

install.packages(c("readxl", "readr", "dplyr", "stringr", "purrr", "tidyr", "ggplot2", "scales", "here"))

## Where to Find Results

After the script completes, outputs are saved to:  
C:\Users\JosephWhite\Documents\JeffersonTownshipTaxResearch\outputs

You will find:

* - accurate\_total\_losses.csv: Final combined summary
* - accurate\_total\_losses\_2024.csv: This year’s summary only
* - outputs/plots/: Visuals of loss breakdowns

## Folder Structure Overview

JeffersonTownshipTaxResearch/  
├── data-raw/ # Input TIF/Abatement files  
├── data/ # Township millage table  
├── outputs/ # Final CSVs and charts  
│ └── plots/  
├── scripts/ # Core R script  
└── JeffersonTownshipTaxResearch.Rproj

## Important Notes and Assumptions

This analysis assumes that tax years range from 2014 to 2024. You will need to update script logic and any file references as new years are added. The script currently supports only known municipalities and tax districts (Jefferson Unincorporated, Gahanna, Reynoldsburg, Columbus). If new ones appear, calculations for them won’t be accurate until added to the script logic. Additionally, abatement losses are assumed to apply to residential/agricultural property (ResAgr). Future CRA projects with other classifications may require changes.

## Final Note

This system was developed by a summer analyst in 2025. If future years’ datasets change format, or additional municipalities are introduced, a programmer may need to revise the script accordingly. Please consult the Township Auditor’s office or a local data analyst if changes are needed.