Policy Relevant Visualization and Analysis of LDS Data with Open Source Tools

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Open Source Tools

- **R** (http://cran.r-project.org/)

  – An open source statistics package that is freely available for all platforms.

- **RStudio** (http://www.rstudio.org/)

  – An enhanced front-end for R. An Integrated Development Environment (IDE) for statistical programming.

- **Quantum GIS** (http://www.qgis.org/)

  – A GIS package that provides most of the functionality of ArcGIS but is freely available.

- **GeoDa** (http://geodacenter.asu.edu/)

  – A geo-spatial statistics package for analyzing clustering and spatial correlation of datasets.

- **LaTeX** (http://www.latex-project.org/)

  – A typesetting and document building tool that integrates with R.

Tutorials and Help Getting Started

- R Reference (http://www.statmethods.net/)

- First R Commands to Learn (https://github.com/hadley/devtools/wiki/vocabulary)

- Beginning with LaTeX (http://en.wikibooks.org/wiki/LaTeX)

- Quantum GIS Guide (http://qgis.org/en/documentation/manuals.html)

- R Graph Gallery (http://addictedtor.free.fr/graphiques/)

Collaboration on LDS_TOOLS

- LDS_TOOLS Package for R (https://github.com/jknowles/LDS_TOOLS)

  – A project for R that seeks to make it easier for administrators at state and local education agencies to analyze and visualize their data on student, school, and district performance.

  – The project is open source and available for anyone to contribute to, modify, download, copy, and/or share.

  – Interested folks with programming skills especially at the SEA or district level should visit the homepage and get involved.

  – Currently it comes with simulated achievement data to allow commands to be tested on data that closely resembles administrative records common across state and district data systems.

  – GitHub will be used to coordinate these efforts.