List of Major GIS Datasets and Program Files

The `Florida` folder contains all data, produced results, and program tools:

1. `FL_HSA.gdb`: a GIS geodatabase that contains feature classes and tables used in Chapters 1–6 and Appendix B.
2. `FL_Ntwk.gdb`: a GIS geodatabase that contains a road network dataset and a transit network dataset (as a result) to estimate drive time and transit time in Chapter 2 and define proximal areas in Chapter 5.
3. `FL_MDT_PublicTransit`: a subfolder that contains txt files used for public transit time estimation in Chapter 2.
4. `TransitNetworkTemplate.xml`: a template used to create transit network dataset in Chapter 2.
5. `AddGTFStoND_UsersGuide.html`: a user guide for estimating transit time for ArcMap users in Chapter 2.
6. `ODFlowData`: a subfolder that contains a node file, an edge file, and Gephi software to create a curved-line network flow map in Appendix B.
7. `FLplgnAdjAppend.csv`: an appended spatial adjacency matrix that accounts for physical connections between ZIP code areas in the study area. This file is used to adjust the spatial adjacency matrix generated from the tool in ArcGIS Pro in Chapters 4 and 6.
8. `Reg_fitfunction.R` and `Reg_fitfunction.SAS`: R and SAS programs to implement log-transformed regression analysis of five distance decay functions by spatial interaction model (Sub-section 3.3.1 of Chapter 3).
9. `Reg_ccdf.R`: an R program to implement regression analysis of five distance decay functions by complementary cumulative distribution curve (Sub-section 3.4.1 of Chapter 3).
10. `OD_All_Flows.dbf`: a DBF file that contains 37,180 records with four variables `POPU`, `NUMBEDS`, `AllFlows`, and `Total_Time` for regression analysis programs `Reg_fitfunction.R`, `Reg_fitfunction.SAS`, or `Reg_ccdf.R` as listed above.
11. `requirements.txt`: Python packages to be installed for the toolkit of "`HSA Delineation Pro.tbx`" in Chapters 4, 5, and 6.

12. `Google API Pro.tbx`: an ArcGIS toolkit that contains one tool to implement the drive or transit time estimation by Google Maps API in Chapter 2. The required Python script is saved in subfolder `Scripts`.
13. `Huff Model Pro.tbx`: an ArcGIS toolkit that contains two tools to implement the Huff model in Chapter 5: (1) Huff model based on Euclidean or geodesic distance; (2) Huff model based on an external distance table defined by users. The required Python scripts are saved in subfolder `Scripts`.
14. `HSA Delineation Pro.tbx`: an ArcGIS toolkit that contains five tools in Chapters 4, 5, and 6: (1) build a spatial adjacency matrix from a polygon layer; (2) consolidate flows between areas at a finer level (i.e., ZIP codes, census tracts) to flows between areas at a coarser level (e.g., HSAs); (3) delineate HSAs and HRRs by the refined Dartmouth method; (4) calculate some common indices for assessing regionalization outcomes; (5) delineate HSAs and HRRs by the ScLouvain and ScLeiden methods. The required Python scripts are saved in subfolder `Scripts`.
15. `Scripts`: a subfolder that contains all required Python scripts used for ArcGIS toolkits.
16. `Results`: a subfolder that contains results produced in all Chapters and Appendix B.