New variables created and used in the analysis or can be used in future analysis:

- Type - Type of SHI property whether it is ownership, rental, mixed, etc... (extracted from this document).
- walkscore - Walk Score of a given location. The score is an integer between 0 and 100 inclusive.
- transitscore - Transit Score for a given location. The score is an integer between 0 and 100 inclusive.
- transit_score_description - The description of the Transit Score indicates whether a given location has no transit nearby, some transit, good transit, or excellent transit
- transit_score_summary - A summary of the number of routes used to compute this transit score
- available_land_sqft - available land area that can be used to develop affordable housing or to sell.

Code Used:

- transportation_walk_score_API.R - create API calls to get the walk score and transit score for each parcel owned by Mass DOT and DOH
- housing_walk_score_API.R - create API calls to extract the walk score and transit score for each parcel owned by the municipal housing authorities
- parcellookup_transportation_estimate_extraction.R - create APIs calls to get the most current assessed value for each parcel owned by owned by Mass DOT and DOH
- parcellookup_housing_estimate_extraction.R - create APIs calls to get the most current assessed value for each parcel owned by owned by municipal housing authorities
- housing_summary_analysis.R - create a summary table that summarizes which lands owned by municipal housing authorities that are most attractive for sale in order to raise money to fund affordable housing
- transportation_summary_analysis.R - create a summary table that summarizes which lands owned by Mass DOT and DOH that are most attractive for sale in order to raise money to fund affordable housing
- parcelSeperation.ipynb - Separate parcels into vacant and non-vacant based on the housing codes
- propertiesWithServices.ipynb - Determining which parcels may have existing services
- processData.py - Include some functions to import different files and write data back to files
- process_SHI.py - Reassign shi data to each district
- housing1.py - For land parcels owned by housing authorities, group them by municipalities and districts and calculate available land area, transit score and median income for each area.
- housing2.py - Add a field of percentage of shi units to each municipality and each district.
- houisng_vacant1.py - For vacant land parcels owned by housing authorities, group them by municipalities and districts and calculate available land area, transit score and median income for each area.

- housing_vacant2.py - Add a field of percentage of shi units to each municipality and each district.
- housing_non_vacant1.py - For none-vacant land parcels owned by housing authorities, group them by municipalities and districts and calculate available land area, transit score and median income for each area.
- housing_non_vacant2.py - Add a field of percentage of shi units to each municipality and each district.
- transportation1.py - For land parcels owned by the department of transportation, group them by municipalities and districts and calculate available land area, transit score and median income for each area.
- transportation2.py - Add a field of percentage of shi units to each municipality and each district.
- transportation_vacant1.py - For vacant land parcels owned by the department of transportation, group them by municipalities and districts and calculate available land area, transit score and median income for each area.
- transportation_vacant2.py - Add a field of percentage of shi units to each municipality and each district.
- transportation_non_vacant1.py - For none-vacant land parcels owned by the department of transportation, group them by municipalities and districts and calculate available land area, transit score and median income for each area.
- transportation_non_vacant2.py - Add a field of percentage of shi units to each municipality and each district.