The updated ZIP Code data, compliant with Standard G-3.A., is received from the vendor and checked and verified for accuracy and appropriateness. The ZIP Code data include a plain text list of all Florida ZIP Codes and GIS layers for the ZIP Code boundaries. These vendor data are used to calculate various datasets for use in the model:

1. Population-weighted centroids of each ZIP Code.
2. Population-weighted roughness for each ZIP code.
3. Distance to coast of each ZIP Code.
4. List of ZIP Codes within the FBC's Wind-Borne Debris Region (WBDR).
5. Classification of coastal/inland for each ZIP Code.

The GIS ZIP Code layers obtained from the vendor, in combination with U.S. Census block data and the effective roughness model gridded data (See Standard G-1, Disclosure 2), are used to compute the population-based centroids and population-weighted effective roughness for each ZIP Code. Once the centroids are calculated, the distance to coast for each centroid, in each of eight possible upstream wind directions, is then computed.

The list of WBDR ZIP Codes is created by overlaying the map defining the WBDR over the ZIP Code boundaries map from the vendor and selecting the intersection. The list of coastal ZIP Codes is similarly derived from the boundaries map by selecting the ZIP Codes that have some portion of their boundary along the coastline.

These new data sets are formatted to be read directly by model code. Items (1) through (4) are formatted as files and transferred to dedicated directories for each version on the model's server platform where software links are used to ensure that the appropriate model components always read the correct version of the files. Items (1) and (5) are each formatted as a database table to use as part of the pre-processing applied to data to be used as input to the model. These tables are part of a dedicated database that is used as a template for the creation of new processing databases in order to ensure that the data pre-processing code uses the correct version of the ZIP Code datasets.