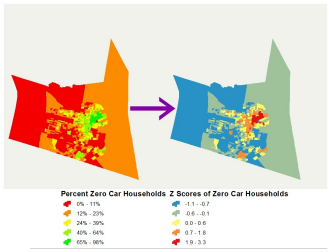
ZStandarizeFields

Title ZStandarizeFields

Description

This scripting tool is designed to take selected fields and create an added field with a Z score for each one. The selected fields will be standarized Z scores by extending a numpy array to the feature class.

Illustration



Usage

The goal of this script is to add new fields with standarized Z Scores for every field selected. The Z Scores are based on the values of each column, so they will change depending on the extent of the current data set.

Syntax

ZStandarizeFields (Input_Feature_Class, Fields_to_Standarize, {Ignore_Nulls})

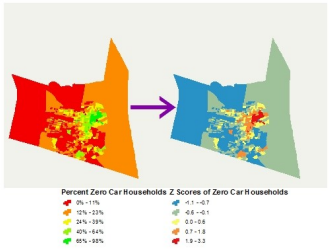
Parameter	Explanation	Data Type
Input_Feature_Class	Dialog Reference This is the selected input feature class that will have new fields with Z scores calculated joined to it. If the fields already exist, they will be updated by the tool. Python Reference The feature class uses the ExtendTable function used from the DA module of arcpy to join a modifed structured numpy array with column-wse calculated Z scores joined to it.	Feature Layer
Fields_to_Standarize	Dialog Reference These are the fields that will have their Z scores calculated within a Pandas data frames, converted to a structured numpy array, and then joined to the input feature class based on the object ID. The fields added will be in the form of "Zscore_"+% FieldName%. If a field of that form already exists in the table, it will be updated.	Multiple Value

	Python Reference Generally the fields are selected from the feature class to be converted into a numpy array, then into a pandas data frame, then back to structured numpy array to be joined based on the object ID. This tool assumes there is an object ID to use to join to.	
Ignore_Nulls (Optional)	Dialog Reference Skips Rows with any Null Values in Selected Fields. If you want to process multiple fields preprocess the data ahead of time to deal with them appropropriately. There is no python reference for this parameter.	Boolean

Code Samples

There are no code samples for this tool.

Side-panel Help Illustration



Tags

Z Score Calculation, Standardize Field, 10.4, ArcGIS

Credits

David Wasserman

Use limitations

This scripting tool only works in ArcGIS 10.4 and onwards because it uses the Pandas data manipulation library. It should work in ArcGIS Pro.

You are currently using the Item Description metadata style. Change your metadata style in the Options dialog box to see additional metadata content.