



The new keyword search enhancement on the 211tn.org site embraces a Google-like full-text search capability. This allows for searching for a word or phrase, a prefix of a word or phrase, a word near another word, inflectional words, and a word with higher designated weight within a created searchable index. The index is comprised of the Agency Name, Service Name, and Service Full Description fields.

This implementation uses the MS SQL FREETEXT predicate. This is used to search columns (the 3 fields above) containing character-based data types for values that match the **meaning** of the words in a search condition, NOT the **exact** wording.

When FREETEXT is used, the full-text query engine internally "word-breaks" the search string into a number of search terms and assigns each term a weight and then finds the matches. Any "noise" words such as "and", "the", "or", etc. are eliminated from the search string.

Weights are assigned by determining the relative uniqueness of a word across all the rows in the database, and the weights influence the order of the services in the list. For example, the word "lawn" appears relatively infrequently in the database so it is assigned a higher weight than the word "care". Consequently, in a search for "lawn care" a record with only "lawn" in it would be weighted above a record with only "care" in it.

The implementation favors people who don't know what they're looking for and therefore will return the maximum number of services in the list (like Google), even though a service may not be applicable to what they're ultimately seeking.

"Inflectional" search; i.e. find different versions of the keyword. Example: use 37228, type "driven" in the Keyword text box. The first program in the list is AARP. The word "driven" does not occur in either the Agency Name, Service Name, or in the Full Description. However, the words "driver" and "driving" do occur.

"Prefix" searching (characters at the beginning of words in the 3 search fields match the text string input in the Keyword text box). Example: use 37228, type "anti" in the Keyword text box. The NCCJ College Student Leadership Institute contains the phrase "anti oppression" in the Full Description.

In **multi-word searches** (example: "political activism") instances where either "political" or "activism" exist in the index will appear in the result list, with additional weighting given to proximity of the two words to each other; i.e. if "activism" is next to "political" in the Full Description it would be given higher weight than if, for example, these two words were separated by other words.