

# MainStreetIndexer

## D o c u m e n t a t i o n

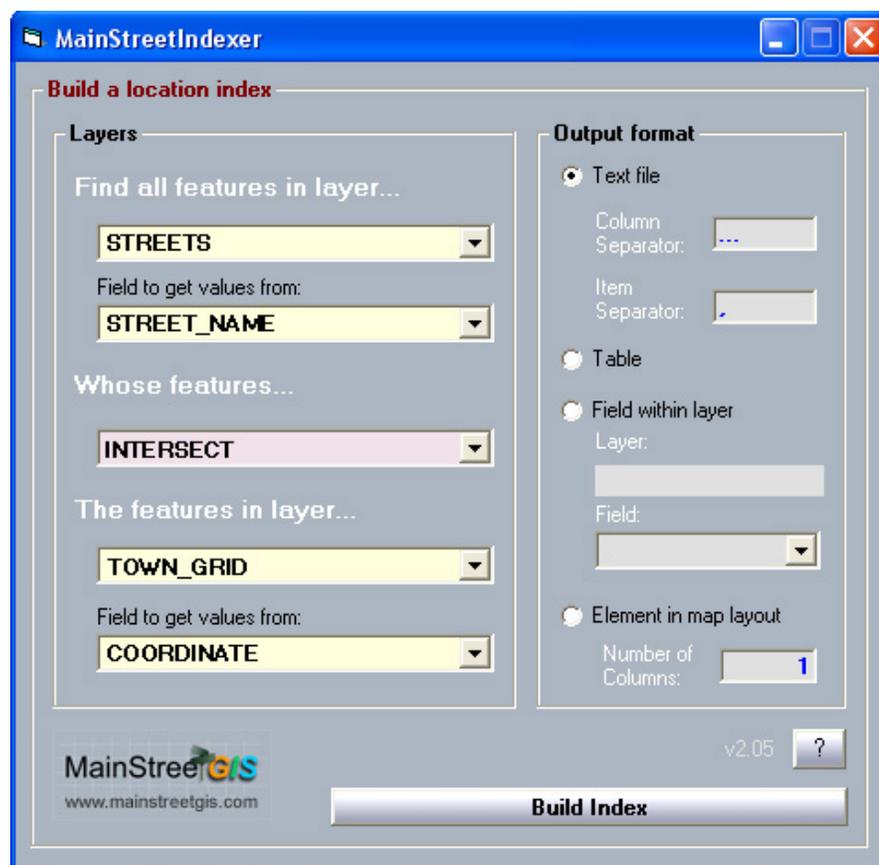
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**Disclaimer:** MainStreetGIS has done its best to make sure that this software functions reliably, however, we cannot guarantee error-free code. By using this tool, you agree not to hold MainStreetGIS liable for any errors resulting from its use. Please employ rigorous quality-control measures.

### I - Overview:

**MainStreetIndexer** is a plug-in for **ArcGIS™** that lists values from features in two layers if the features satisfy a spatial relationship. It's great for building an index of street names and their coordinate location or page number. Output can be sent to a Text File, Delimited Table, a Field in a Layer, or a Text Element in the Page Layout.





## II - Installation:

**Requirements:** Any Windows computer running ArcGIS™ version 9.0 and higher

To add the plug-in to any compatible ArcMap™ project:

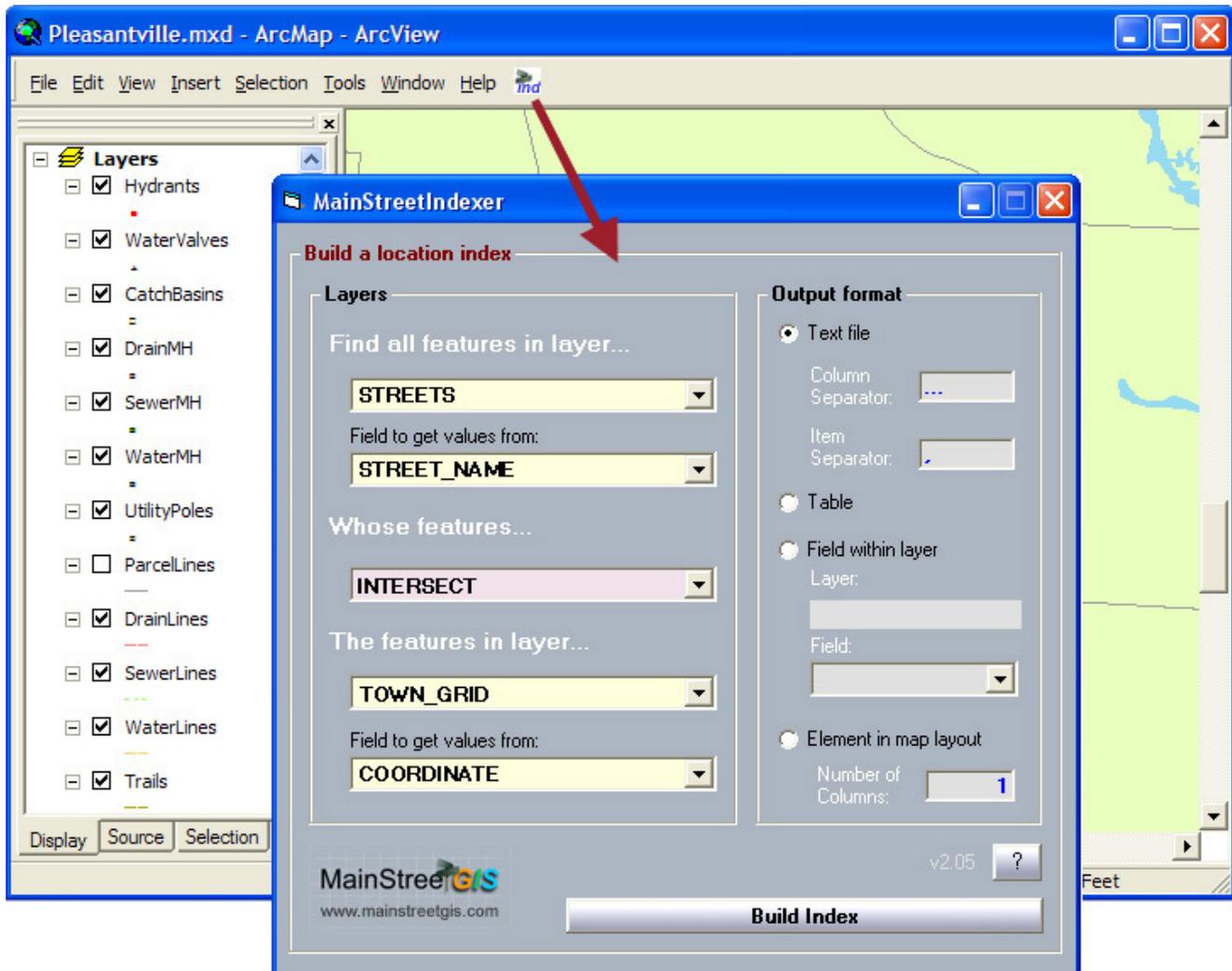
- 1 - Launch ArcMap™
- 2 - From the **Tools** menu, select "**Customize**"
- 3 - Click the **Commands** tab
- 4 - At the bottom of the **Commands** window, next to "**Save in**", you can choose to save the tool to either the current project or to the Normal.mxt file. If you save it to the current project, it will be available the next time the project is loaded. If you save it to the Normal file, it will be available to all projects. Please see ArcMap™ documentation for a description of the Normal file.
- 5 - Click "**Add from file...**" and navigate to the installation folder that contains a **.dll** file.
- 6 - Choose to load the **.dll** file.
- 7 - The tool should now be loaded into the **MainStreetGIS** category, on the left, and the plug-in should be highlighted on the right, in the **Commands** box.
- 8 - Drag and drop the highlighted plug-in text to any toolbar.
- 9 - Click the icon on the toolbar to launch the plug-in.
- 10 - After launching the tool once, the Program Files directory structure for the tool will be created.

### Uninstalling the Plug-in:

To remove from ArcMap, simply close all ArcGIS™ software and delete the MainStreetIndexer.dll file. Copying it first to another location will create an uninstalled copy that you can archive for use at another time.

### III - The Main Tool Window:

Click the tool's icon to launch its main window. Select two layers and then choose a relationship. Also choose fields for each layer. Next, select an **Output Format**. Click **Build Index** to create the index. The result will be a list of values from the two fields you have selected for each feature that satisfies the chosen relationship.

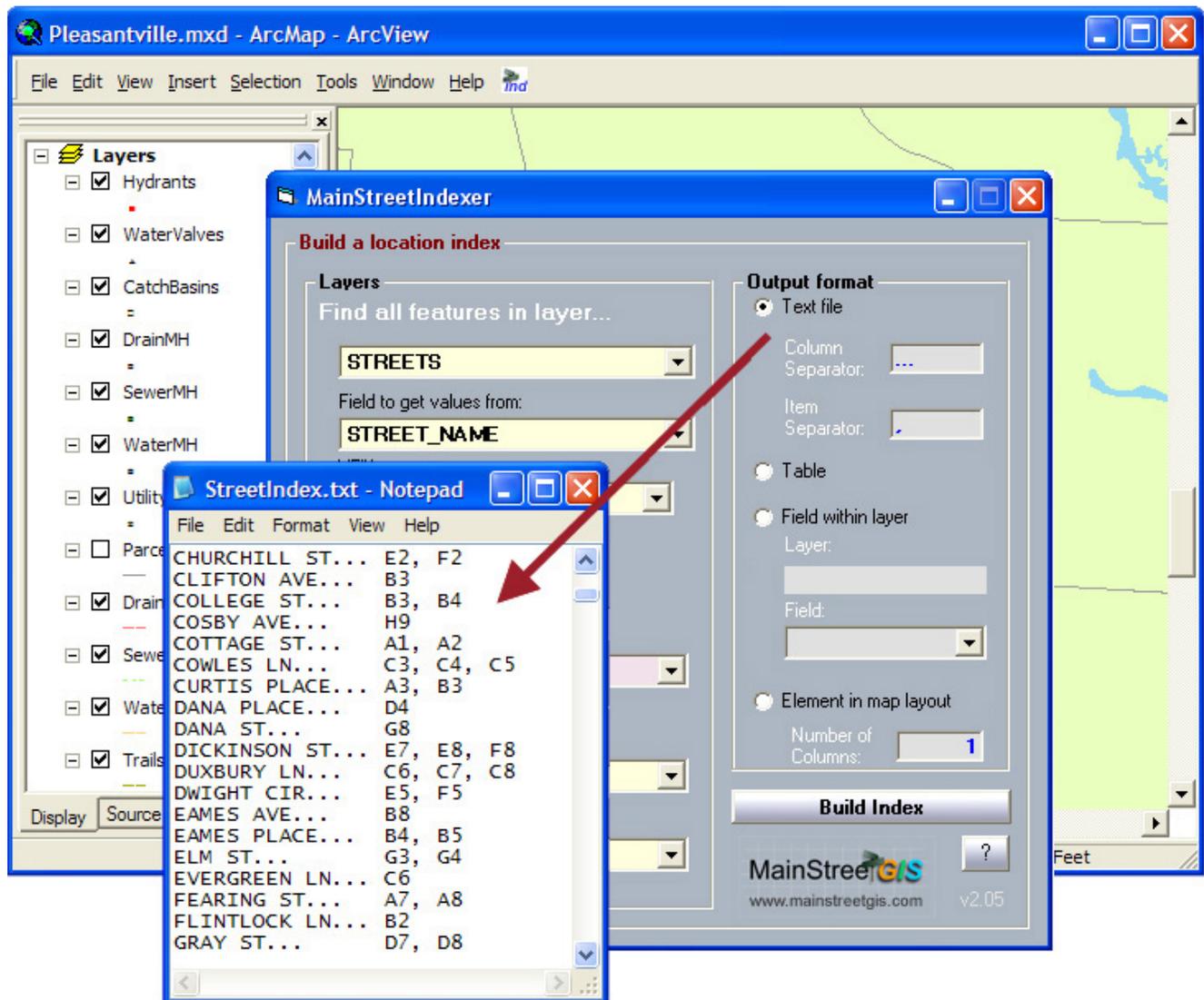


In this example, a Street Index is easily created to provide a cover sheet to a typical mapbook. When the tool is run, all street features that are found to be intersecting a feature in the grid layer are marked with a value from that grid feature. The output is a series of street names and grid coordinates, providing a simple reference to help find a given street in a mapbook or large wall map.

Results can be saved in four different ways:

- Text File
- Delimited Table
- A Field within a Layer
- Map Element on the Page Layout

Export your results to a text file:



Export to a table and import into other applications:

The screenshot shows the ArcMap interface with the MainStreetIndexer dialog box open. The dialog box is titled "MainStreetIndexer" and has a subtitle "Build a location index". It has a "Layers" section with a dropdown menu set to "STREETS". The "Output format" section has three radio buttons: "Text file" (selected), "Table", and "Field within layer". The "Text file" option has fields for "Column Separator" and "Item Separator". The "Field within layer" option has fields for "Layer" and "Field". The "Element in map layout" option has a "Number of Columns" field set to "1". A "Build Index" button is at the bottom of the dialog box. A red arrow points from the "Build Index" button to the Microsoft Excel spreadsheet.

The Microsoft Excel spreadsheet is titled "StreetIndex.csv" and shows a list of street names and their corresponding coordinates. The data is as follows:

	A	B	C	D
1	CHURCHILL ST	E2	F2	
2	CLIFTON AVE	B3		
3	COLLEGE ST	B3	B4	
4	COSBY AVE	H9		
5	COTTAGE ST	A1	A2	
6	COWLES LN	C3	C4	C5
7	CURTIS PLACE	A3	B3	
8	DANA PLACE	D4		
9	DANA ST	G8		
10	DICKINSON ST	E7	E8	F8
11	DUXBURY LN	C6	C7	C8
12	DWIGHT CIR	E5	F5	
13	EAMES AVE	B8		
14	EAMES PLACE	B4	B5	

Populate a field in a layer with the results:

The screenshot shows the ArcMap interface with the 'Attributes of Streets' table open. The table contains the following data:

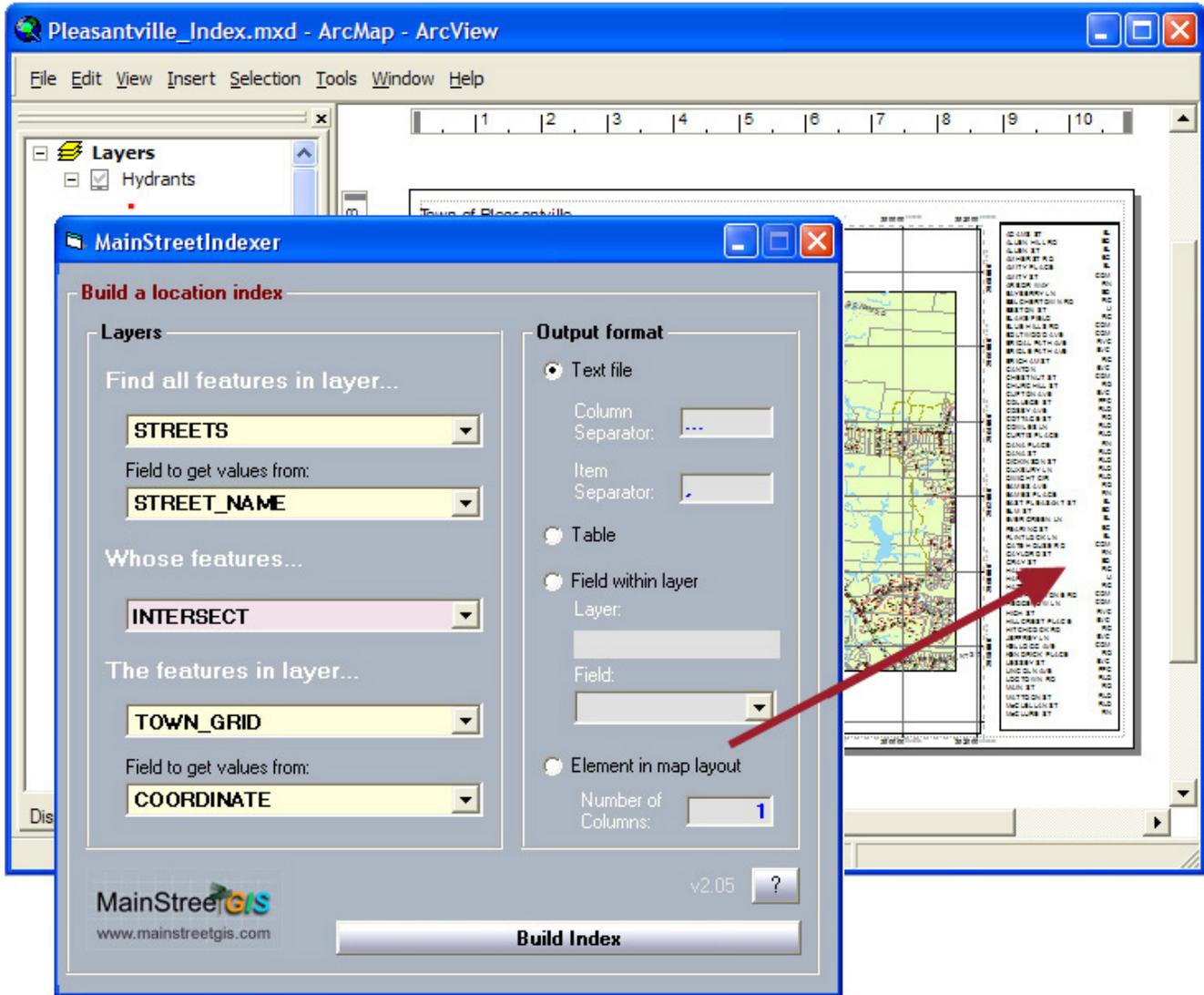
FID	Shape *	TYPE	NAME	DESCRIPTIO	MATERIAL	INDEX
80	Polyline	1	SMITH ST	Paved Road	1	D7
81	Polyline	1	SMITH ST	Paved Road	1	E5
82	Polyline	2	SHUMWAY ST	Unpaved Road	2	A2
83	Polyline	1	SELLEN ST	Paved Road	1	B1
84	Polyline	1	SEELYE ST	Paved Road	1	B3
85	Polyline	1	SEELYE ST	Paved Road	1	F6

The 'Build Index' dialog box is open, showing the following configuration:

- Field to get values from: **STREET\_NAME**
- Whose features...: **INTERSECT**
- The features in layer...: **TOWN\_GRID**
- Field to get values from: **COORDINATE**
- Item Separator: (empty)
- Table:
- Field within layer:  Layer: (empty) Field: (empty)
- Element in map layout:  Number of Columns: **1**

A red arrow points from the 'Table' radio button in the dialog to the 'INDEX' column in the table above.

Or send the results directly to your map:



## IV - Quirks

**Identical Layer Names** – If layers exist in your project that have identical names, the tool may not function properly.

**Layer Groups** – If you experience problems, try removing any Layer Groups in your project, or moving layers from within a Layer Group to the top level in your Table Of Contents.

**Read & Write Access To C:\Program Files\MainStreetGIS\** – This plug-in creates a directory structure within C:\Program Files\MainStreetGIS\ and the user must have read and write access to this directory. On some network systems, the user may not have appropriate permissions to modify the Program Files directory.