

Assignment 11: Vector Analysis Practice

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1. Intro-fossgis-umass

1.1. Author Attribution

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1.2. Module Licensing Information

Version 1.0.



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1.3. Reviewed by

Quentin Lewis 04/09/07

2. Assignment 11: Vector analysis practice

2.1. Introduction

In this assignment, you will need to find the town of Hadley COMERCIAL areas that fall inside a 100 m buffer of the Hadley roads of CLASS 1, 2 or 3.

2.2. Set Up

Please, refer to the Site Selection 2: vector analysis module: http://linuxlab.sbs.umass.edu/introFossgisUmass/index.php?title=Site_selection_2:_Vector_Analysis if you don't remember how to perform some of the tasks of this assignment. The data layers you will need are the ROADS and ZONING layers used in that module. If you need to download the files again, you can get them here: http://linuxlab.sbs.umass.edu/beginning-fossgis-umass/datasets/lab_siteselection/siteselectiondata.zip [http://linuxlab.sbs.umass.edu/beginning-fossgis-umass/datasets/lab_siteselection/siteselectiondata.zip].

- Open the attribute table for the road layer and note the field "class":

	id	cat	OBJECTID	CLASS	ADMIN_TYPE	STREET_NAME
1	1	1	89507		5	0 STADIUM DRN
2	2	2	89508		5	0 FRENCH STR
3	3	3	89509		4	0 NORTH HADLI
4	4	4	89510		4	0 RAMP-NORTH
5	5	5	89511		4	0 RAMP-RT 116
6	6	6	89512		4	0 RAMP-RT 116
7	7	7	89513		4	0 ROOSEVELT I
8	8	8	89514		3	3 RIVER DRIVE
9	9	9	89515		4	0 ROOSEVELT I
10	10	10	89516		5	0 UNIVERSITY C
11	11	11	89517		5	0 COMINS ROAD
12	12	12	89518		5	0 SHATTUCK RO
13	13	13	89519		5	0 COMINS ROAD
14	14	14	89520		3	3 RIVER DRIVE
15	15	15	89521		5	0 FROST LANE
16	16	16	89522		5	0 SHATTUCK RO
17	17	17	89523		5	0 SHATTUCK RO
18	18	18	89538		5	0 MOODY BRID
19	19	19	89539		5	0 WEST STREE
20	20	20	89540		3	3 RUSSELL STR
21	21	21	89541		5	0 WHALLEY STR

TIP: Note that the assignment specifies ONLY a subset of roads from the road layer, and you will have to select and extract those features before applying the buffer.

Attribute table - roads

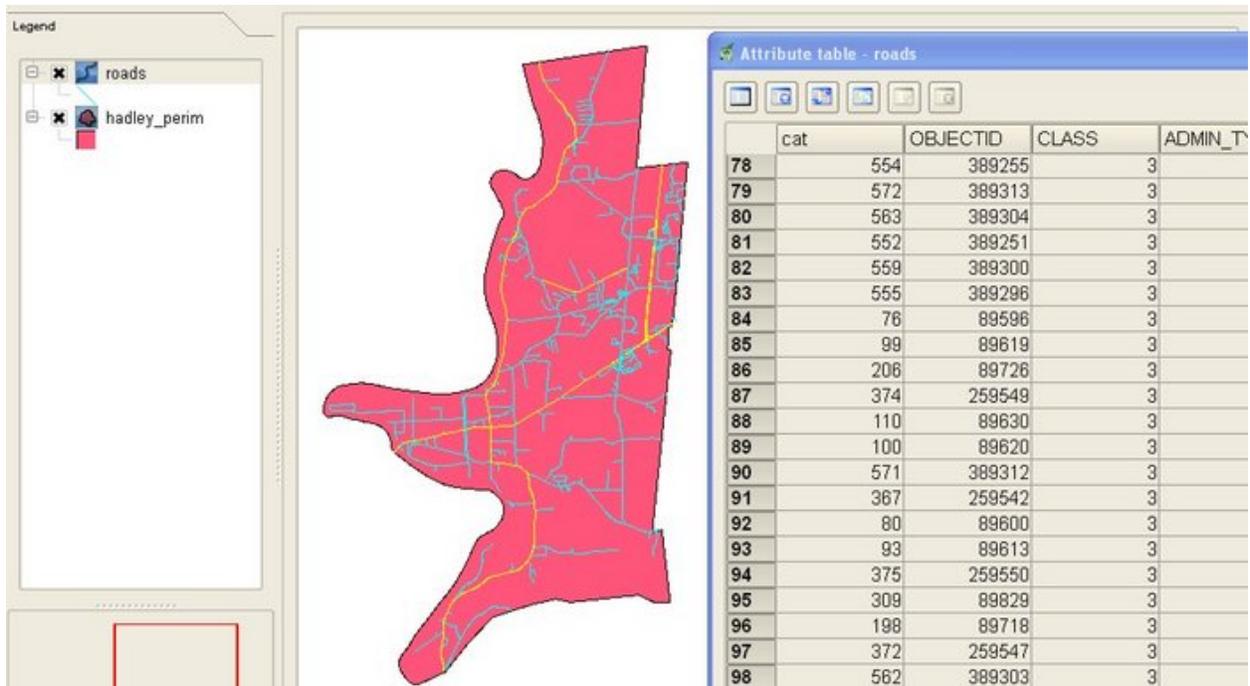
	id	cat	OBJECTID	CLASS	ADMIN_TYPE	STREET_NAME
111	426	426	277215	3	3	RIVER DRIVE
112	394	394	266660	3	3	RIVER DRME
113	466	466	277821	3	3	RUSSELL STF
114	561	561	389302	3	3	RIVER DRIVE
115	560	560	389301	3	3	MIDDLE STRE
116	425	425	277214	3	3	RIVER DRME
117	473	473	278599	3	3	RIVER DRME
118	467	467	278593	3	3	MIDDLE STRE
119	465	465	277820	3	3	RUSSELL STF
120	470	470	278596	3	3	RUSSELL STF
121	464	464	277819	3	3	RUSSELL STF
122	71	71	89591	4	0	MOUNT WARM
123	69	69	89589	4	0	MOUNT WARM
124	227	227	89747	4	0	RAMP-NORTH
125	45	45	89565	4	0	RAMP-RT 116
126	89	89	89609	4	0	RAMP-RT 116
127	72	72	89592	4	0	MOUNT WARM
128	230	230	89750	4	0	NORTH HADLI
129	66	66	89586	4	0	MOUNT WARM
130	70	70	89590	4	0	MOUNT WARM
131	68	68	89588	4	0	MOUNT WARM
132	67	67	89607	4	0	MOUNT WARM

Help Search for: in cat Search select Advanced... Close

2.3. Assignment Deliverables

1. A screenshot of JUST the Hadley roads of class 1, 2 and 3.

TIP: The next image shows all the Hadley roads with the roads of interest selected in yellow,



and the same roads displayed over JUST the COMMERCIAL areas:



2. A screenshot of ONLY the roads of interest over JUST the COMERCIAL areas.
3. A screenshot of the buffered areas displayed with 50% transparency over the commercial areas.
4. A screenshot of the polygons with the solution to the problem stated in the introduction.
5. A compressed file with JUST a shapefile of the solution file.
6. A note about any problems you may have encountered while completing this assignment.

Please email a .pdf of the assignment to your instructor. You can create the .pdf

by pasting the screenshots into an Open Office, Microsoft Word, etc file. If you do not have a .pdf creator, you can download a print to .pdf program, such as PDFCreator [<http://sourceforge.net/projects/pdfcreator/>].