Assignment 7: Computing Land Use Change with SQL

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1. Intro-fossgis-umass

1.1. Author Attribution

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1.2. Module Licensing Information

Version 1.0.

1.3. Reviewed by

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Assignment 7: Computing Land Use Change with SQL

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2. Assignment: Computing land use change with SQL (select query)

2.1. Assignment

Let's assume that you work as a consultant for the planning department for the Town of Hadley, MA. Your colleagues asked you to prepare some numbers for the coming public meeting. One of major concerns of the public is a rapid residential development in the area. To provide additional insight into the residential development dynamics please compute the following:

1. Number of areas/parcels classified as "FOREST" in 1971 and in 1999
2. Total acreage (area) of parcels classified as "pasture" in 1999
3. Estimate number of parcels (and their acreage) which were converted from forest, pasture and cropland into residential landuse in the period 1971-1999.

2.2. How To

1. Use pgAdmin to query TestGIS database, which has table "ma_lu_hadley" with landuse data for the Town of Hadley.
2. Use table **ma_lu_hadley** to query from.
3. Check [metadata [http://www.mass.gov/mgis/lus.htm]] page for information on table structure and attributes.
4. For question #1 and #2 use COUNT() and SUM() aggregate functions.

2.3. Data sources

a) MassGIS > Metadata on land use layer: http://www.mass.gov/mgis/lus.htm

2.4. Assignment Deliverables

Please submit the following with your assignment:
1. A short description how you tackle the problem.
2. SQL queries which you performed to answer the questions and the results of the queries.
3. A note about any problems you may have encountered while completing this assignment.