### Digitization: day 2.

#### 1. Download

- 1. Download just a few more shapefiles from this link
- 2. Assemble into 9 groups.
- 3. Download one of the maps for the day:
  - Groups 1-5 download West campus
  - Groups 6-9 download East Campus

## 2. Setup

- Reload your QGIS setup.
- With "on-the-fly" reprojection enabled, **change your default CRS for the projection to "Google Mercator"**. (You can do this by typing "Google" into the search box;
- Add the two new layers you downloaded in section 1 ("streets" and "buildings").

#### 3. Georectification

Georectify the map

- 1. Enter georectification mode (under QGIS 2.14 "Essen", raster menu -> georeferencer).
- 2. Click the add raster button.
- 3. Set points at street intersections by clicking the add points button.
- 4. Choose a transformation type (use "polynomial 1").
- 5. Choose a name for your output file.
- 6. Make sure the desired output is also in the Google Mercator projection.

### Comparing to tabular data

Each group choose a page from this site. View as list. Group 1 should take file 1; etc.

Everybody in your group should trace the outline of a different house on your map.

- 1. Menu "layer" -> "New Layer". This will be a polygon layer.
- 2. Right-click or control click on the layer for "toggle editing."
- 3. Click the green object with the "add star.".
- 4. Draw around a polygon.
- 5. We could add metadata around this point. We won't, now, but something like this could form the kernel of someone's final project...

# **Note on Sources**

You may at some point want to work with a larger set of buildings, maps, or streets. Here are links to the original sources.

- One is a set of building outlines from ArcGIS.com and the City of Boston.
- Another is a set of road outlines in the city of Boston from the Commonwealth of Massachusetts.
- Finally, we're using a set of digitized atlases from the Commonwealth of Massachusetts..)
- The census images are from family search.org. The proper blocks are found using tools on stevemorse.org.