Redlining Legacies – Answer Key – Total Marks (40)

Q1: Census data is often collected in stratified districts. Demographic and economic data can be grouped by district. Allows for spatial analysis of these variables. Give marks for anything reasonable. **(2)**

Q2: Field in holc_ad_data: objected id, Field in area_descriptions: objected ID **(1)**

Q3: Foreign Key, One to One **(2)**

Q4: (USA_REDLINING.NEIGHBORHO < 4000 AND USA_REDLINING.NEIGHBORHO > 2000) AND (USA_REDLINING.HOLC_GRADE = 'B' OR USA_REDLINING.HOLC_GRADE = 'C')

1211

1 mark for statement on either side of AND and 1 for final answer **(3)**

Q5: (USA_REDLINING.CITY = 'BALTIMORE' OR USA_REDLINING.CITY = 'PORTLAND') AND USA_REDLINING.HOLC_GRADE <> 'A'

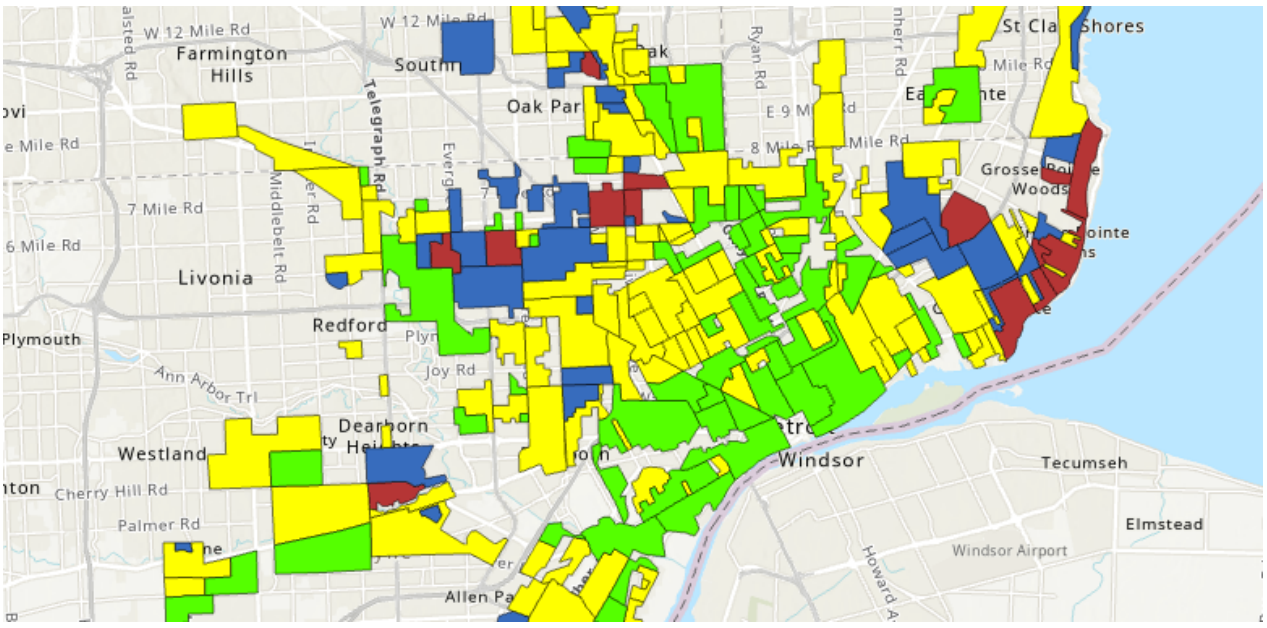
129

1 mark for statement on either side of AND and 1 for final answer **(3)**

Q6: 3 for identifying possible land cover/land use for each polygon and 3 for relating it to redlining classification. **(6)**

Q7: PURPOSE: TO ASSIGN A VALUE TO THE COLUMN SO YOU CAN USE THE " VARY SYMBOLOGY BY ATTRIBUTE" FUNCTION. **(2)**

Q8: Map should look something like following: (5)



-Subtract 1 point for missing elements, scalebar, compass, legend
-Subtract 2 points for missing public service layers (police stations and libraries)

Q9: Clip (1)

Q10: Could use the Split tool with the crime layer as the input features and Detroit redlining districts A/B/C/D as the split features. The split field would be holc_grade (repeat for each class).

Alternatively, you could use the Intersect tool, and intersect the Crime layer with each of the redlining districts. 1 mark for naming an appropriate tool, 2 for describing which layers as inputs **(3)**

Q11: Merge or Dissolve (1)

Q12: (3) 1 point for each

CRIME FOR A: VIOLENT: 857 PROPERTY: 2230

CRIME FOR B: VIOLENT: 2461 PROPERTY: 6158

CRIME FOR D: VIOLENT: 2954 PROPERTY: 9111

Q13: Open ended **(8)**

-5 points for quality of discussion about distribution of public services and crime in redlining districts

-3 points for potential issues/biases (examples below)

Crime polygons do not perfectly align with redlining districts, so some are missing when you split/intersect them

Crime only represents 2016 data

Other data: income, anything related to socioeconomic status