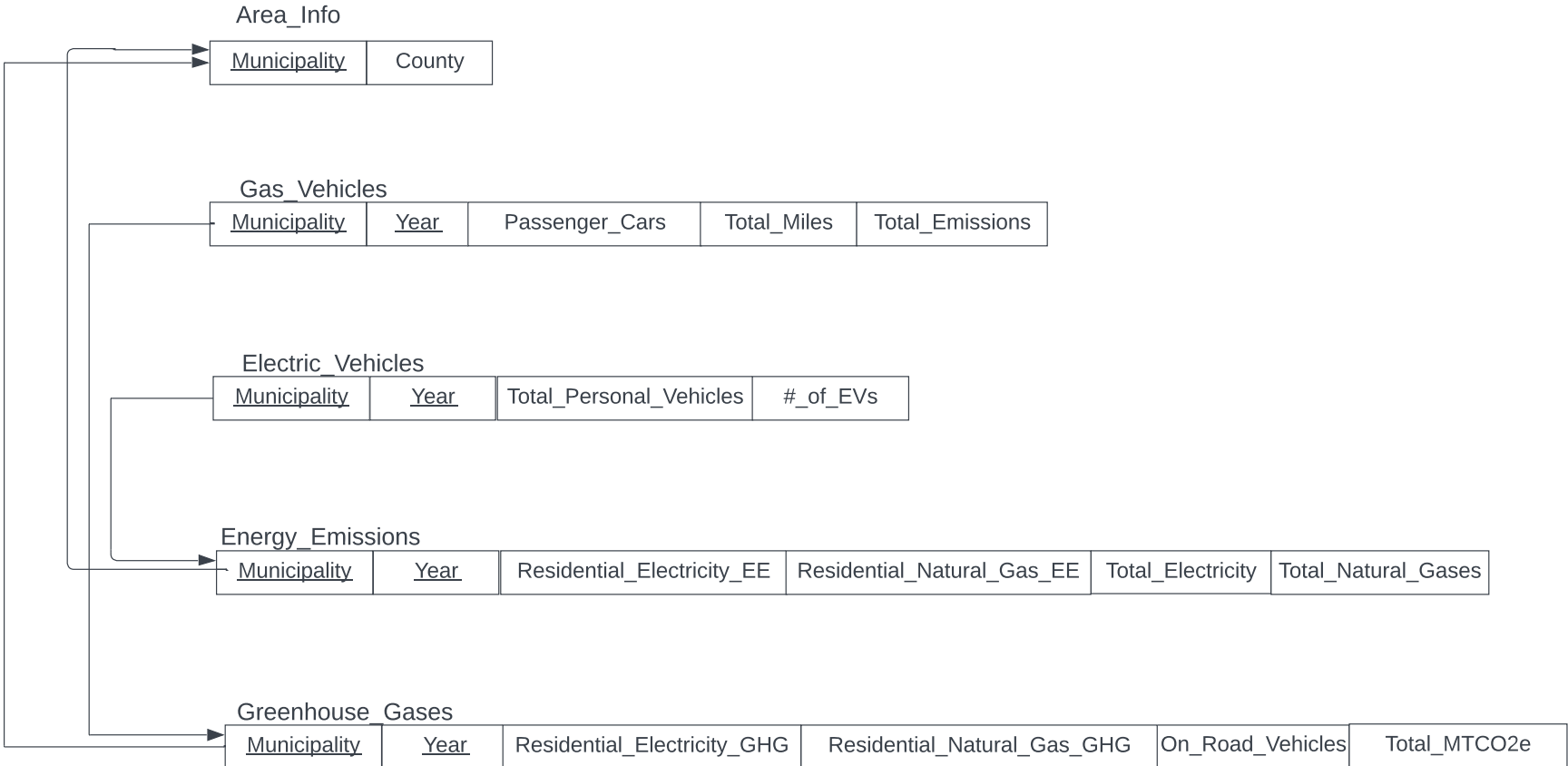
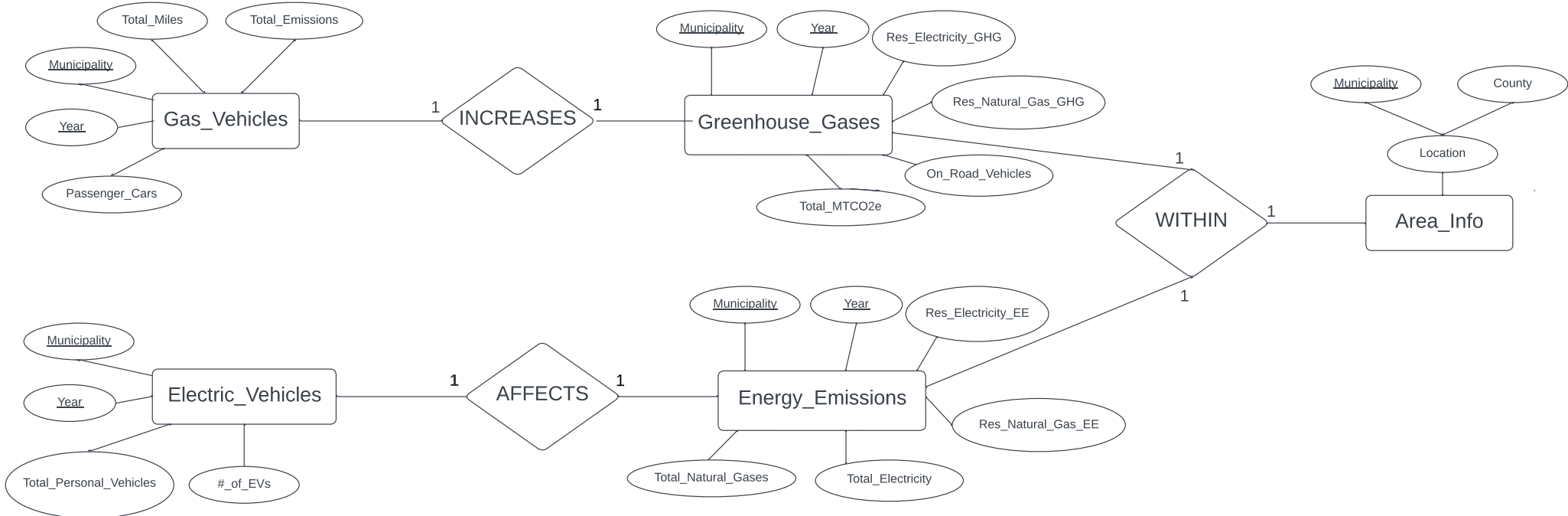


RELATIONAL SCHEMA:

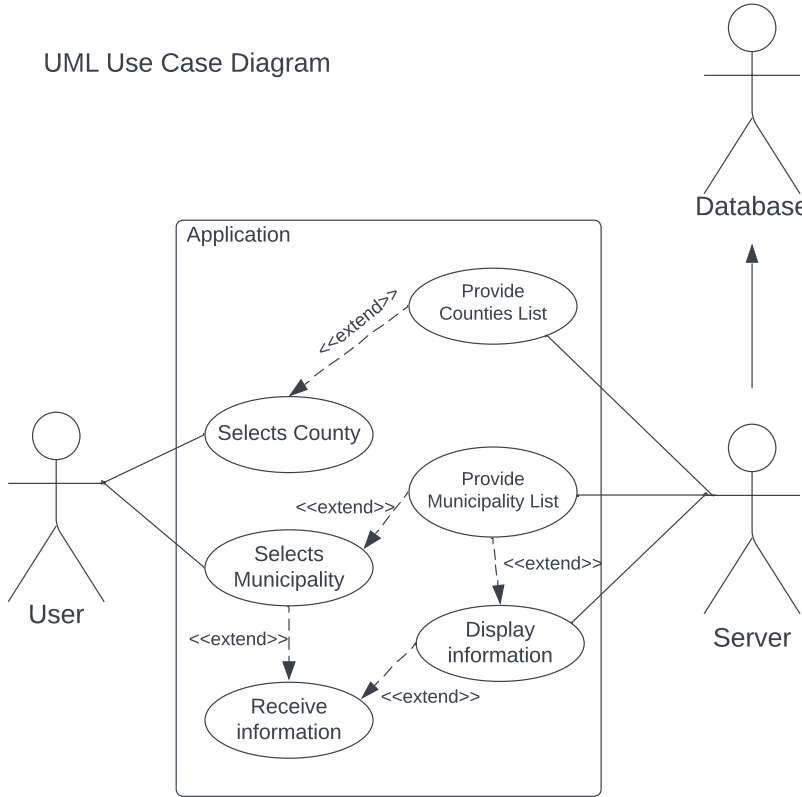


ER DIAGRAM:



UML DIAGRAM:

UML Use Case Diagram



Query Calculations

Area_Info:
Municipality -> 35 chars max
County -> 10 chars max
Number of rows -> 565
Total -> 565 (35 + 10) = 25,425

Greenhouse_Gases:
Municipality -> 35 chars max
Year -> 4 chars max
R_E_GHG -> 6 chars max
R_NG_GHG -> 6 chars max
On_Road Vehicles -> 7 chars max
Total_MTCO2e -> 7 chars max
Number of rows -> 565
Total -> 565(35+10+13+7) = 36,725

Energy_Emissions:
Municipality -> 35 chars max
Year -> 4 chars max
R_E_EE -> 9 chars max
R_NG_EE -> 8 chars max
Total_Electricity -> 10 chars max
Total_NG -> 9 chars max
Number of rows -> 1978
Total -> 1978(35+40) = 148,350

Gas_Vehicles:
Municipality -> 35 chars max
Year -> 4 chars max
Passenger_Cars -> 8 chars max
Total_Miles -> 9 chars max
Total_Emissions -> 9 chars max
Number of Rows -> 565
Total -> 565(35 + 4 + 8 + 18) = 36,725

Electric_Vehicles:
Municipality -> 35 chars max
Year -> 4 chars max
Total_Pers_Vehs -> 5 chars max
#_of_EVs -> 3 chars max
Number of rows -> 565
Total -> 565(35+12) = 6,815

Total:
25,425+36,725+36,725
+6,815+148,350
= 254,040