

# Assignment 3: GIS

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UEP 235 - Adv GIS  
Sep 24, 2025

## Question 1 SQL Queries in Access

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(A) What is the average household size for low-income households in the MAPC region? Note that HHSIZ is an attribute in the HH table (0.5 point)

```
SELECT AVG(HHSIZ) AS avg_household_size
FROM HH
WHERE INCOME < 4;
```

Output:

avg_household_size
1.69566457501426

(B) What is the average age of women versus men in low-income households in the MAPC region where the person reported their age (exclude records when AGE=99 or 0)? GENDER and AGE are in the PERS table (0.5 point)

(C) What is the average trip duration for low-income women versus low-income men living in the MAPC region who reported their trip duration? TRPDUR is in the trips table PLACE – you can use low-income trips in MAPC that you imported for this. You must use a group by query for this and exclude trips which had a duration of 0. (1 point)

(D) What percentage of trips made by low-income households in MAPC region were by transit Bus, Subway, Walk, Bike, Auto driver and Auto passenger? MODE is an attribute in the trips table trips table PLACE – you should use low-income trips in MAPC that you imported for this query. You must use a group by query. You can use Excel to calculate the percentages after generating counts for each mode. (1 points)

(E) What is the average trip duration of a walk trip made by women over the age of 65 in low-income households in the MAPC region versus the walk trip made by men over the age of 65? You can use low-income trips in MAPC that you imported for this. You should use a group by query for this and exclude people who did not report their age (AGE=99) or trip duration (TRPDUR=0). (1 point)