Student Postal Code Mapping, 2013-2024



December 17, 2024
Prepared for UASU Executive Committee by
Department of Research and Advocacy

Overview

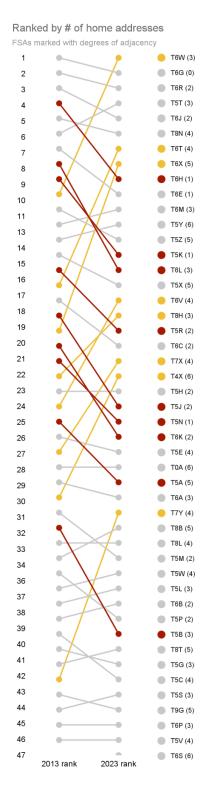
In Fall 2024, VPX Abdul Abbasi asked the Office of the Registrar for anonymized time series data on the first three postal code digits (Forward Sortation Areas, or FSAs) of undergraduate students' Edmonton-area home addresses. We thank the RO's Enrolment Research, Analytics, and Insights unit (ERAI) for providing the FSA counts with notes on interpretation (Appendix A). For example:

- Not all students have their valid home address postal code recorded in the RO database. The completeness of data is ~95%.
- Not all the students update their Edmonton residential address, so only about 70% of students have Edmonton addresses.

With ERAI's caveats in mind, we found that between 2013-23 (ten years) and particularly over 2019-23 (four years), undergraduate students' home addresses pushed outward from North Campus and the south end of the Edmonton LRT.

- In terms of *number* of home addresses, since 2019, many peripheral FSAs saw increases of around 40-55% and some central areas saw decreases of around 20-30%.
- In terms of *share* of home addresses, the chart to the right marks changes in rank order (-4 or worse in red, +4 or better in gold) from 2013 to 2023. The 'degrees of adjacency' label is laid out later in this report; low numbers are closer to North Campus and high numbers are farther. Average degree of adjacency has steadily increased.

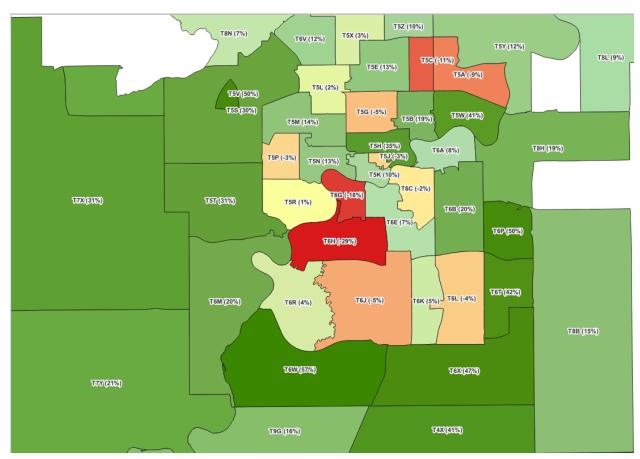
To understand some of the implications, we added a self-reported FSA field to the 2024 Annual Survey (n=2,930). It appears that living close to North Campus or very far away are associated with higher food insecurity and poverty indicators. We suggest that affordability has been a primary driver. However, as several peripheral and less-affordable areas saw strong growth, affordability is clearly not the only factor at work.



Change Between 2019 and 2023

While the full decade interval has certainly seen significant change, the most drastic change took place since 2019.

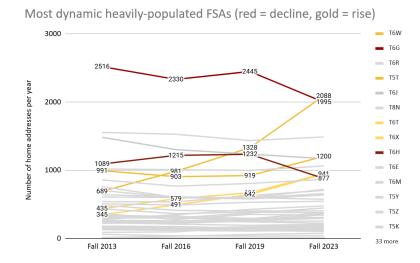
- Between 2019 and 2023, the number of undergraduate students' home addresses in T6G fell by 18% and T6H (adjacent to T6G; Parkallen, Pleasantview, South Campus, Empire Park, Brookside, etc.) fell by 29%.
- The number of home addresses in T6W (past the south end of the LRT, and encompassing Riverpointe, Windermere, Heritage Valley, etc.) rose by 57% over this four-year period.
 - Several other areas rose by 40-50%, such as T5V (newer developments in Starling and Trumpeter), T5W (Highlands, Newton, Beacon Heights, Beverly Heights, Rundle Heights), T6P (Maple Ridge), T6T (Larkspur, Wild Rose, Silver Berry, Laurel), T6X (Ellerslie, Summerside, Walker, Charlesworth) and T4X (Beaumont).
- These trends underscore the importance of affordable housing within a
 reasonable commuting distance, and also the importance of stable, affordable,
 high-quality public transportation. Several of these areas are served by regional
 transit providers who are partners in the U-Pass. It would not be an exaggeration
 to note that these trends have been made possible by the existence of the
 U-Pass.



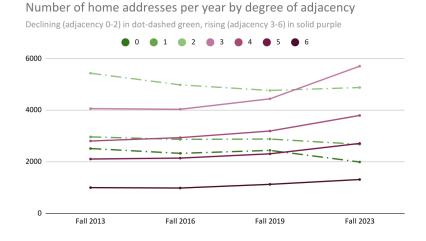
Undergraduate home address change, Fall 2019 to Fall 2023.

Adjacency Analysis — How far away from North Campus do students live? To assess average trends across 47 FSAs, we rated them according to their degree of adjacency to T6G, where adjacency was a direct road or bridge connection between residential areas, not just a shared map border. Each FSA was given its lowest/most direct degree of adjacency, as multiple paths to T6G were possible.

- T6G and FSAs adjacent to it (T6G's first-degree connections) have, on average, seen declining numbers of student home addresses, most strongly between 2019 and 2023. Second-degree connections have also seen significant declines since 2013.
- Conversely, Edmonton FSAs three, four, five, or six degrees away from T6G have seen consistently increasing numbers of student home addresses.
 - For example, T6W (a third-degree connection) has recently eclipsed T6G as the FSA with the most undergraduate home addresses.



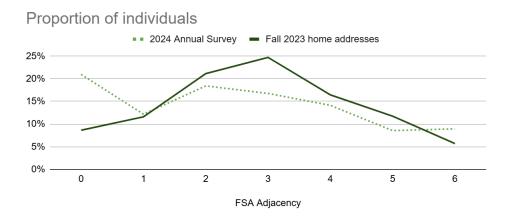
• The combination of declining student home addresses near campus and increasing home addresses farther from campus produced a clear pattern:



• The average student's degree of adjacency rose steadily (2.58 in 2013, 2.63 in 2016, 2.69 in 2019, and 2.87 in 2023) as students moved out farther and farther.

2024 Annual Survey Data

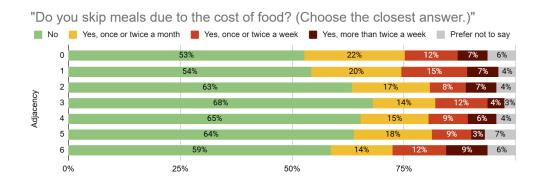
The 2024 UASU Annual Survey (n=2,930) included an optional FSA field for current residence. 2,290 respondents (around 6% of the undergraduate student body) provided an FSA, around 200-400 respondents per degree of adjacency, allowing cross-tabulation with other survey questions. This sample was reasonably consistent with the home address data from one year earlier, with the exception of T6G (where many students in University-owned residence would not list that as their home address in University records).



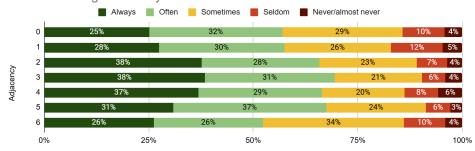
Considering the survey data reasonably representative, we found the following:

- The lowest adjacency ratings and a rating of 6 (i.e. living in either the central areas that have seen the largest decline, or the most peripheral areas) were associated with three food insecurity indicators:
 - Frequently skipping meals due to the cost of food (the UASU's longstanding measure in the years when we do not run the Health Canada HFSSM).
 - Reduced access to a variety of food (a question recommended by the ED of the Campus Food Bank).
 - o Self-reported food bank usage.

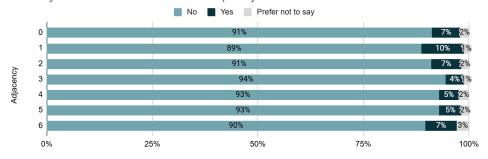
For a sense of scale, each adjacency level had around 200-400 respondents.



"I can afford a good variety of food."



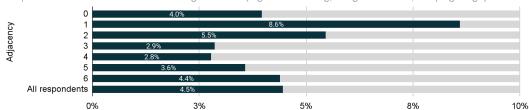
"Have you visited a food bank in the past year?"



 Adjacency ratings of 1, 2, and 6 were also associated with recent (past-two-years) experience of precarious housing situations, including homelessness:

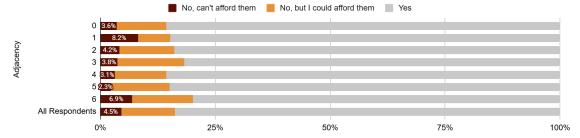
"Have you found yourself in any of these circumstances in the past two years? Choose all that apply." (Note adjusted X axis.)

Proportion who selected 'Unstable housing situations (e.g. couch-surfing, living in a vehicle, sleeping rough)'



 Adjacency ratings of 1 and 6 were also associated with being unable to afford appropriate footwear, a question adopted from Geranda Notten's work with Food Banks Canada on <u>material deprivation</u> poverty measures:

"Do you have at least one pair of properly fitting shoes and at least one pair of winter boots?"



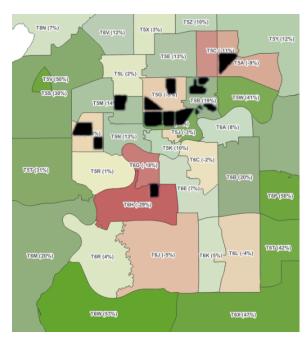
Why Are Students Living Farther Away?

A degree of caution is important. There is no one student story. In any given case, a home address farther from North Campus could mean a student settling for a long commute so they can find somewhere affordable, or it could mean a residence in a comfortable new development.

The Annual Survey data indicates that students living in many areas close to North Campus and the south end of the LRT face significant and persistent financial pressure. We suggest that affordability has played a major role in the strong outward push between 2013 and 2023, and particularly since 2019.

This would be broadly consistent with the municipal <u>Affordable Housing in Edmonton dashboard</u>, which shows the following results for Edmonton's median individual income. Note how few neighbourhoods near North Campus or the south end of the LRT are marked as affordable at that income level.





Median-income-affordable neighbourhoods overlaid on 2019-23 undergraduate home address change

A straightforward overlay shows that, while median-income-affordable neighbourhoods and changing student home addresses do not line up exactly, 'south of the river' inner-city affordability is a clear challenge. To the north, students seem to have flocked to affordable neighbourhoods in T5H (e.g. Queen Mary Park, Central McDougall, McCauley) and T5B (e.g. Virginia Park, Cromdale, Eastwood, Elmwood Park).

Meanwhile, many peripheral areas are not listed as affordable for Edmonton's median individual income, but have seen very strong growth. Even though affordability is a dominant factor for many students, there must be other factors at work. Again, there is no one student story.

Concluding Thoughts

We are grateful to the Enrolment Research, Analytics and Insights (ERAI) unit in the Office of the Registrar for providing the aggregated FSA data (Appendix A). We believe it shows nothing short of an accelerating mass exodus outward from the areas surrounding North and South Campus.

Food insecurity data and other poverty metrics show that students in those areas face heavy financial pressure, so we believe affordability is a major factor in that exodus. However, it clearly cannot be the only factor.

Overall, while this project is only a surface-level analysis, we believe it emphasizes:

- The urgency of the affordable housing situation in Edmonton, particularly around the University of Alberta.
- The urgency of understanding the extent and impact of many students' vulnerability to financial pressures, including the rising cost of living and cost of education.
- The importance of affordable, reliable, safe, and well-connected public transit.
- The need for further and better-resourced research.

APPENDIX A: ERAI Data and Usage Notes

Number of students having home address in each FSA in Edmonton (Undergraduate only)

- Note 1: The definition of Edmonton's FSA follows <u>the City of Edmonton's</u> definition.
- Note 2: Not all the students have their valid home address postal code recorded in our database. The completeness of data is ~95%.
- Note 3: Not all the students update their Edmonton residential address. Only about 70% of students have Edmonton addresses.

FSA	Fall 2013	Fall 2016	Fall 2019	Fall 2023
T0A	242	232	248	253
T4X	222	220	255	360
T5A	265	258	242	220
T5B	173	151	118	140
T5C	147	138	114	101
T5E	263	241	260	294
T5G	147	122	121	115
T5H	294	328	256	346
T5J	363	275	351	339
T5K	701	597	577	634
T5L	149	142	144	147
T5M	178	172	148	169
T5N	321	295	272	306
T5P	161	161	149	144
T5R	483	410	400	403
T5S	12	31	56	73
T5T	991	903	919	1200
T5V	1	1	2	3
T5W	155	146	112	158
T5X	506	488	528	543
T5Y	538	534	626	702
T5Z	641	607	594	656
T6A	231	208	190	206
T6B	148	134	123	147
T6C	433	362	383	375
T6E	856	765	804	863
T6G	2516	2330	2445	1995

Т6Н	1089	1215	1232	877
T6J	1481	1300	1234	1167
T6K	341	317	292	305
T6L	757	597	596	573
T6M	606	599	596	717
T6P	7	5	4	6
T6R	1553	1525	1432	1486
T6S				1
T6T	435	579	668	948
T6V	277	346	424	475
T6W	689	981	1328	2088
T6X	345	491	642	941
T7X	255	249	286	375
T7Y	87	94	167	202
T8B	170	149	169	195
T8H	301	299	371	443
T8L	173	139	167	182
T8N	1016	1006	995	1061
T8T	125	116	105	122
T9G	58	37	32	37