

Majid Taghavi, CORS Secretary
April 17, 2024

**RE: Canadian Operational Research Society
Annual Membership Report 2023–2024**

Dear Majid,

I am pleased to submit a copy of the 2023–2024 Annual Membership Report of the Canadian Operational Research Society for the CORS Council consideration. It documents the membership activities experienced by the Society over the past year. Included are historical statistics for the last 10 years. The report provides the Council with the information it needs to assess the health and well-being of the Society; to monitor the effectiveness of membership processes and practices; and to identify areas where policy initiatives or changes may be required.

Sincerely,

Erla Anderson
Membership Services

OVERALL

As shown in Table 1 and Figure 1, total membership in the Canadian Operational Research Society at the end of the 2023–2024 membership year (March 31) was 439¹. Membership retention and efforts to encourage former members to rejoin should remain a priority for the Society.

Table 1: CORS Membership 2014–2015 to 2023–2024 as of March 31

Membership Year	Total Membership	Change in Membership	Growth Rate
2014–2015	440	–39	–8.1%
2015–2016	424	–16	–3.6%
2016–2017	469	45	10.6%
2017–2018	407	–62	–13.2%
2018–2019	483	76	18.7%
2019–2020	409	–74	–15.3%
2020–2021	415	+6	1.5%
2021–2022	612	+197	47.5%
2022–2023	473	–139	–22.7%
2023–2024	439	–34	–7.2%

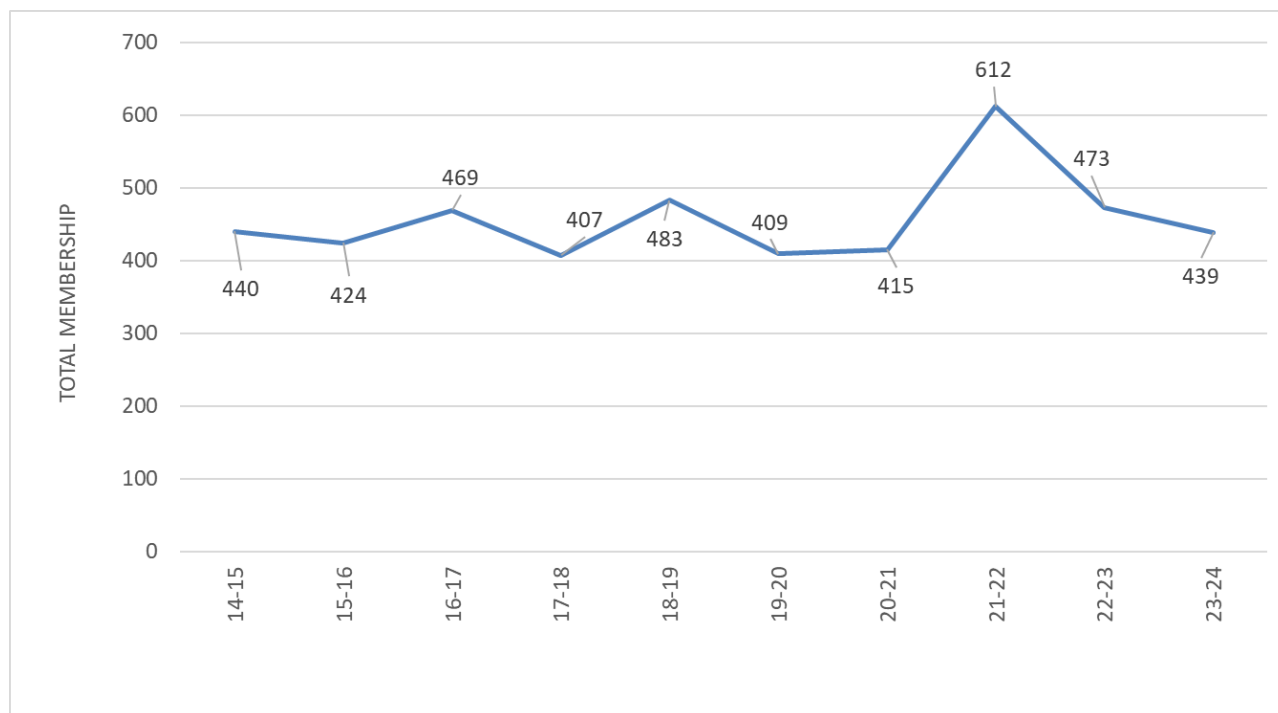


Figure 1

¹ See the “Discontinued Members” section for details.

MEMBERSHIP BY MEMBER TYPE

The distribution of CORS membership by member type is presented by absolute number in Table 2, by percentage of total membership in Table 3 and graphically in Figure 2. In the 2023–2024 membership year, 248 (56%) of the membership were Regular Members, 13 (3%) were Retired Members, 167 (38%) were Student Members, and 11 (3%) were Emeritus Members. Efforts should continue to recruit student members to the Society by 1) CORS members in academia promoting the benefits of membership to their students, 2) coordinators promoting the CORS Diploma at their institutions, 3) practical application articles in the CORS Bulletin, and 4) professional development activities/opportunities by local chapters.

Table 2: CORS Membership by Member Type 2014–2015 to 2023–2024

<i>Member Type</i>	<i>2014–2015</i>	<i>2015–2016</i>	<i>2016–2017</i>	<i>2017–2018</i>	<i>2018–2019</i>	<i>2019–2020</i>	<i>2020–2021</i>	<i>2021–2022</i>	<i>2022–2023</i>	<i>2023–2024</i>
Regular	250	252	290	231	268	244	246	309	260	248
Retired	12	16	13	17	22	15	11	14	16	13
Student	170	149	158	151	184	141	148	278	186	167
Emeritus	8	7	8	8	9	9	10	11	11	11
Total	440	424	469	407	483	409	415	612	473	439

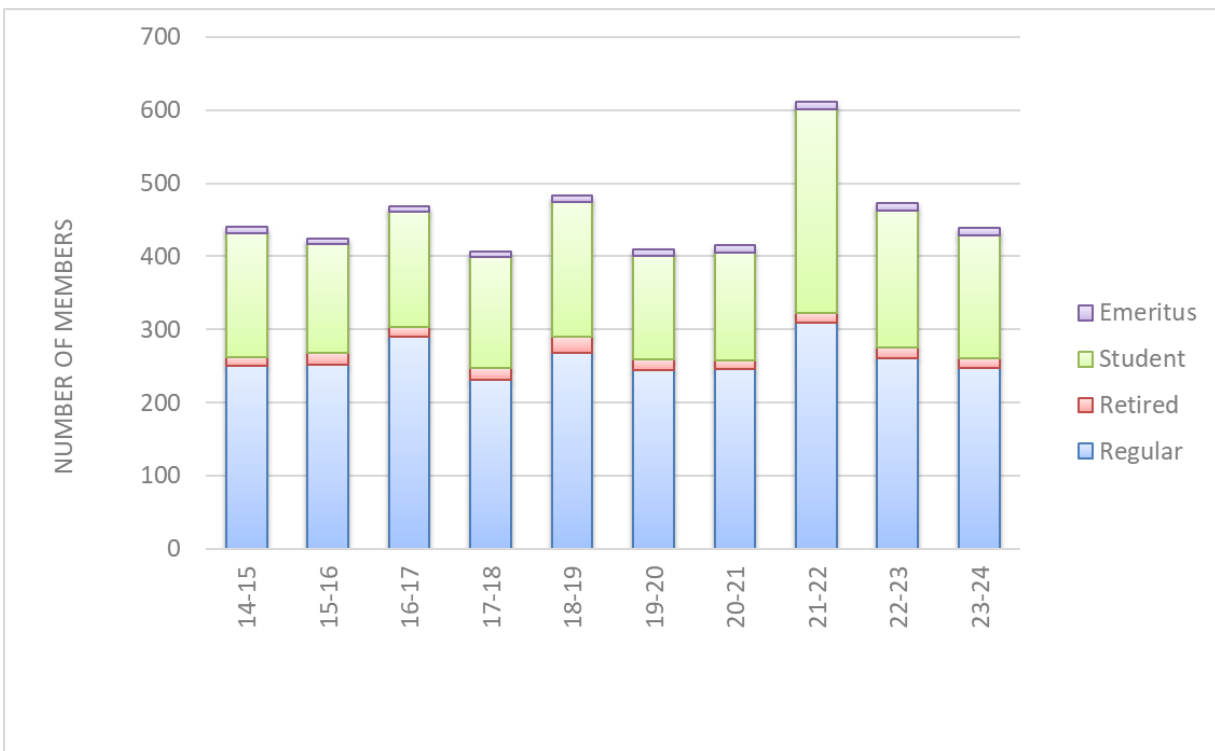


Figure 2

MEMBERSHIP BY SECTION (CHAPTER)

The distribution of the Society’s membership by section and chapter is presented in Table 4. The term “chapter” is used for student groupings. The International Section consists of members living outside of Canada. The SW Ontario Section is the largest with 60 (14% of the total membership). The distribution of the Society’s membership by section and member type as of March 31 is presented in Table 5 and Figure 3. Seven sections and chapters experienced a gain in members over the 2022–2023 membership year. The Waterloo Student Chapter experienced the largest gain (9). There was a loss of members in ten sections and chapters. The Montreal Student Chapter has the largest number of Student Members at 25 (6%) of the student membership, followed by the Toronto Student Chapter with 22 (5%).

Table 4: CORS Membership by Section (Chapter) 2014–2015 to 2023–2024

<i>Section (Chapter)</i>	<i>2014–2015</i>	<i>2015–2016</i>	<i>2016–2017</i>	<i>2017–2018</i>	<i>2018–2019</i>	<i>2019–2020</i>	<i>2020–2021</i>	<i>2021–2022</i>	<i>2022–2023</i>	<i>2023–2024</i>
Vancouver	34	28	37	18	24	25	23	44	47	26
Okanagan Student	-	-	-	-	-	-	-	-	10	6
Edmonton	11	14	16	11	10	11	9	13	20	20
Calgary	24	26	34	23	27	22	19	23	19	21
Saskatoon	12	9	10	12	18	15	15	13	15	13
Winnipeg	4	8	10	4	5	2	1	1	4	2
SW Ontario	53	58	63	40	49	46	48	67	58	60
Waterloo Student	11	7	14	23	24	21	25	28	10	19
Toronto	53	51	62	55	63	57	54	67	52	48
Toronto Student	29	25	25	24	38	29	29	59	32	22
Hamilton Student	-	-	-	-	-	-	-	-	11	13
Ottawa	36	23	16	14	26	19	21	33	28	23
Kingston	13	11	13	12	11	7	6	11	8	8
Montreal	76	80	41	38	45	42	46	58	43	42
Montreal Student	-	-	26	40	39	30	31	59	27	25
Quebec	31	19	17	14	12	15	16	18	16	17
Quebec Student	-	13	11	15	13	8	7	9	3	8
Atlantic	29	26	33	34	43	32	32	41	33	38
International	20	20	37	26	36	28	33	68	37	28
Total	440	424	469	407	483	409	415	612	473	439

Table 5: CORS Membership by Section (Chapter) and Member Type March 31, 2024

<i>Section or Chapter</i>	<i>Regular</i>	<i>Retired</i>	<i>Student</i>	<i>Emeritus</i>	<i>Total</i>
Vancouver	10	-	16	-	26
Okanagan Student	-	-	6	-	6
Edmonton	11	-	9	-	20
Calgary	12	3	5	1	21
Saskatoon	8	-	5	-	13
Winnipeg	-	-	2	-	2
SW Ontario	38	1	19	2	60
Waterloo Student	-	-	19	-	19
Toronto	43	3	-	2	48
Toronto Student	-	-	22	-	22
Hamilton Student	-	-	13	-	13
Ottawa	19	1	3	-	23
Kingston	3	1	3	1	8
Montreal	39	-	-	3	42
Montreal Student	-	-	25	-	25
Quebec	17	-	-	-	17
Quebec Student	-	-	8	-	8
Atlantic	25	2	10	1	38
International	23	2	2	1	28
Total	248	13	167	11	439

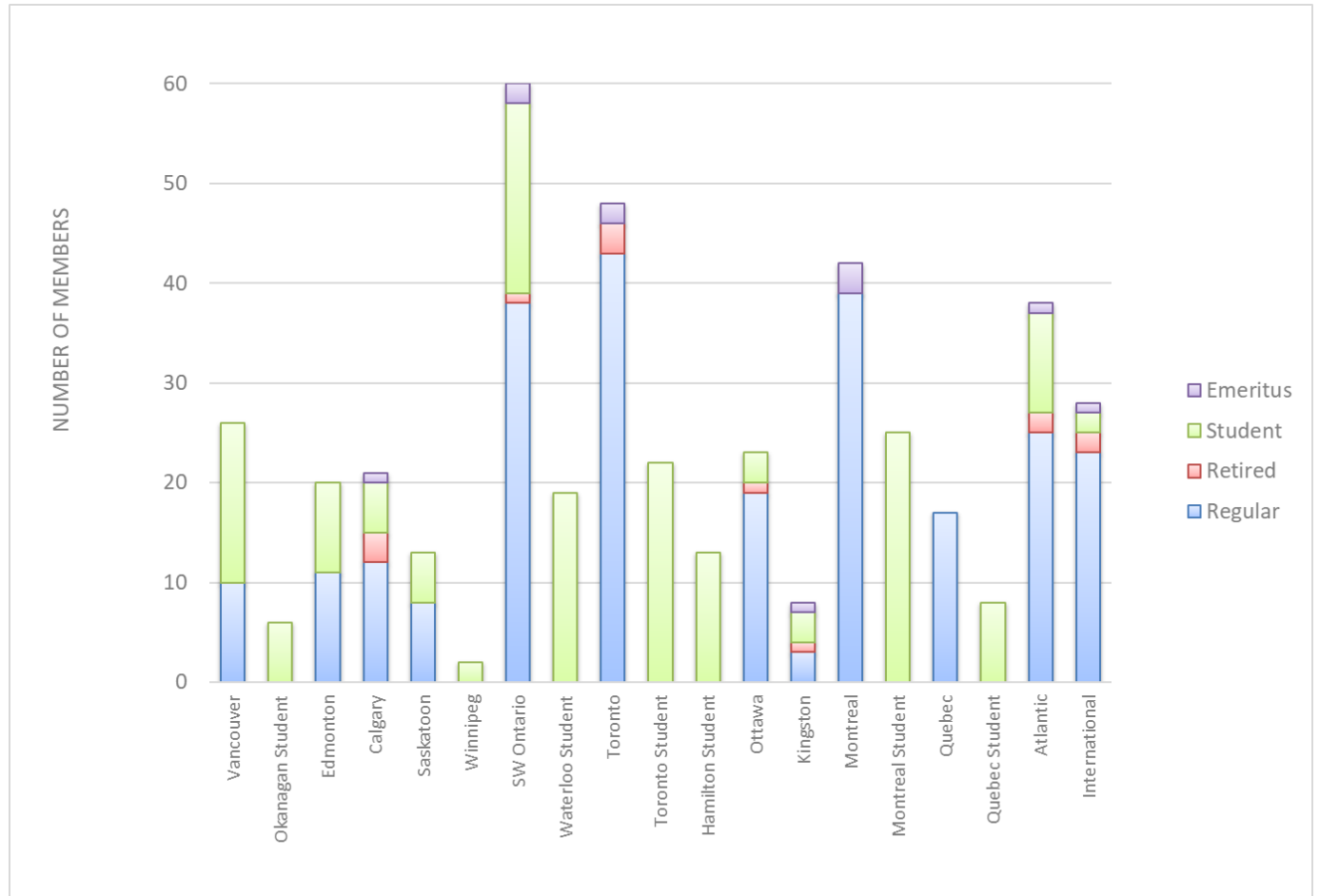


Figure 3

DURATION OF MEMBERSHIP

Table 6 and Figure 4 provide a snapshot of the CORS membership based on how long an individual has retained membership in the Society. In the 2023–2024 membership year 147 (33%) had been in the Society for two years or less. In the 2022–2023 membership year, this category constituted 36% of the membership. The percentage of members in the 2–5-year category was 15% this year and 17% last year.

Table 6: CORS Membership by Duration of Membership in the Society as of March 31, 2024

<i>Duration of Membership</i>	<i>Regular</i>	<i>Retired</i>	<i>Student</i>	<i>Emeritus</i>	<i>Total</i>
2 Years or Less	31	1	115	-	147
2–5 Years	28	-	37	-	65
5–10 Years	53	2	14	-	69
10–15 Years	47	1	1	-	49
15–20 Years	31	-	-	4	35
20–25 Years	28	-	-	-	28
More than 25 Years	30	9		7	46
Total	248	13	167	11	439

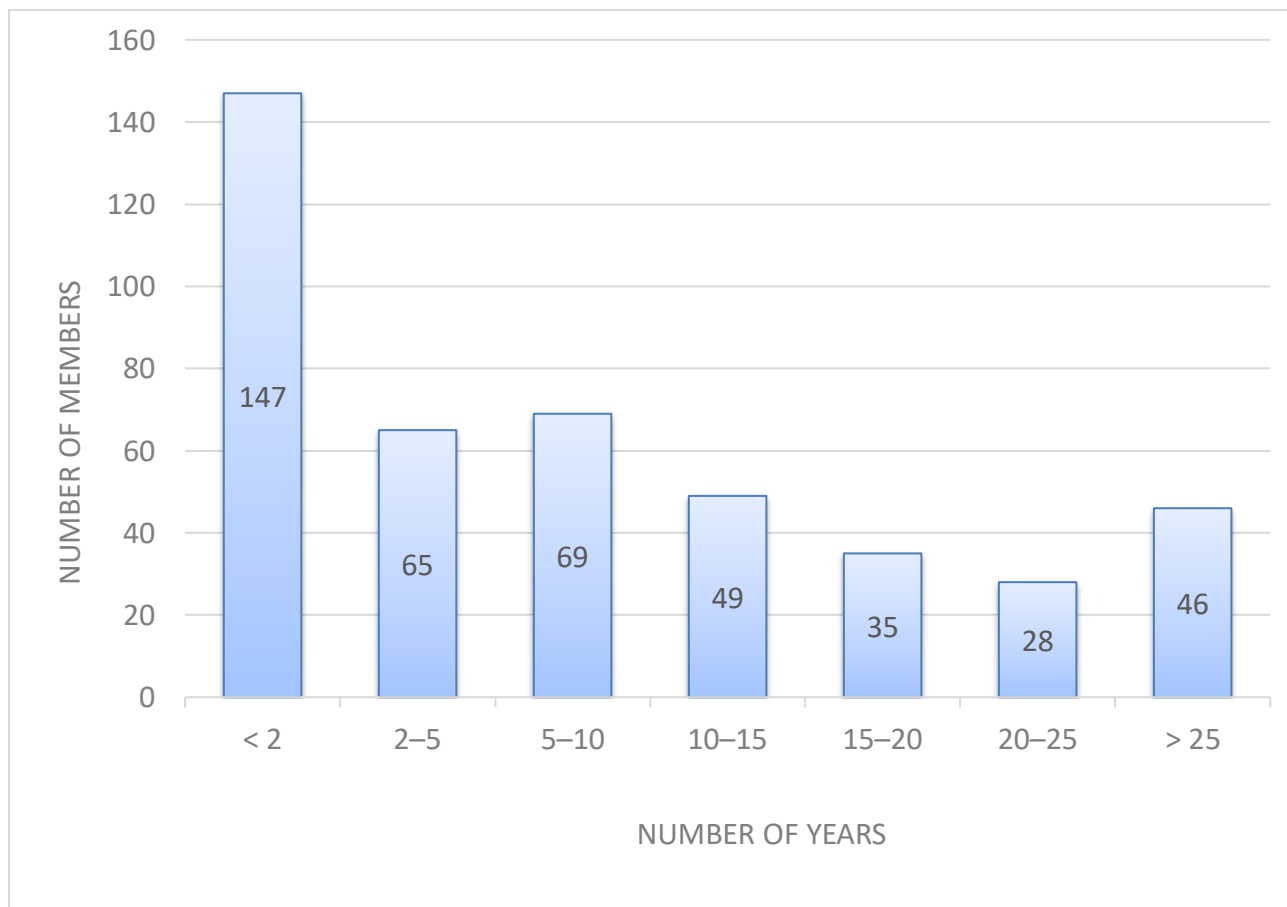


Figure 4

NEW MEMBERSHIPS

As shown in Table 7 and in Figure 5, the number of people who joined the society in the 2023–2024 membership year was 146. Included in the number of new memberships are memberships that were reinstated, i.e., individuals who rejoined the Society after a lapse in their membership. The actual number of “new” members, i.e., individuals with no previous association with CORS is therefore 117. In the tables and figures below, reinstated memberships are included with the new memberships. As shown in Table 8 and in Figure 6, the number of new Regular Members who joined was 38 (8 more than last year). The number of new Student Members was 106 (1 more than last year). There were two new Retired Members.

The CORS Diploma program, requiring membership, has proven over the years to be effective in the recruitment of Student members. Over the past three membership years, the number of CORS Diplomas issued was 25 in 2023–2024, 34 in 2022–2023, and 36 in 2021–2022. Students can request to apply for the CORS Diploma on the CORS membership form: forty-eight requests were received during the 2023–2024 membership year, with applications still in process.

A distribution of the new memberships by section (chapter) over the past ten membership years is presented in Table 9. For the 2023–2024 membership year, this distribution is shown in Table 10 and in Figure 7. The SW Ontario Section had the greatest number of new memberships with 26 (18%) of the new memberships. The Montreal Student Chapter was second largest, with 13 (9%) of new memberships.

Table 7: New CORS Memberships 2014–2015 to 2023–2024

<i>Membership Year</i>	<i>Total New Members</i>
2014–2015	171
2015–2016	132
2016–2017	211
2017–2018	129
2018–2019	192
2019–2020	133
2020–2021	136
2021–2022	308
2022–2023	138
2023–2024	146

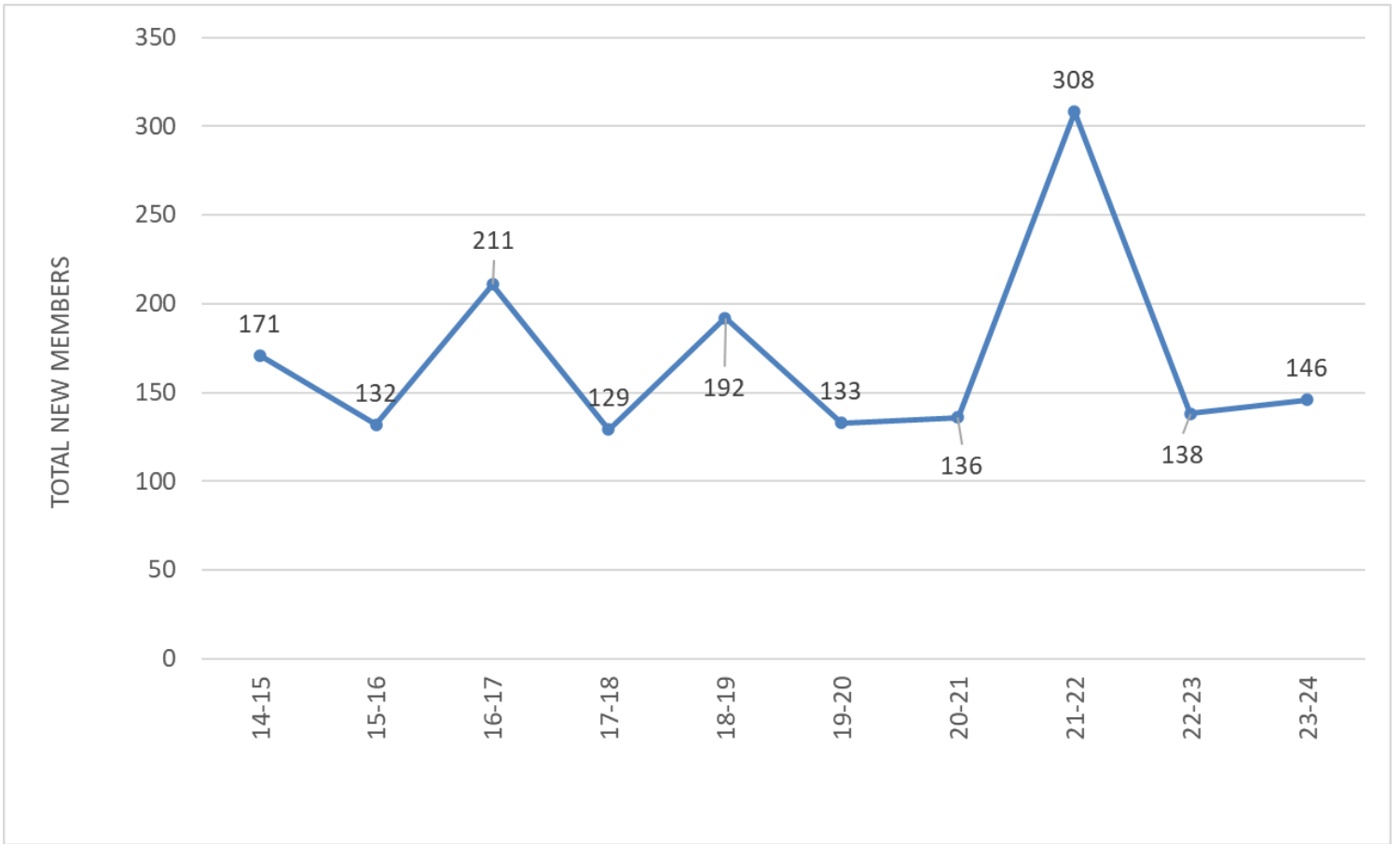


Figure 5

Table 8: New CORS Memberships by Member Type 2014–2015 to 2023–2024

<i>Member Type</i>	<i>2014–2015</i>	<i>2015–2016</i>	<i>2016–2017</i>	<i>2017–2018</i>	<i>2018–2019</i>	<i>2019–2020</i>	<i>2020–2021</i>	<i>2021–2022</i>	<i>2022–2023</i>	<i>2023–2024</i>
Regular	55	45	95	36	76	43	44	97	30	38
Retired	2	2	2	1	3	1	1	3	3	2
Student	114	85	114	92	113	89	91	208	105	106
Total	171	132	111	129	192	133	136	308	138	146

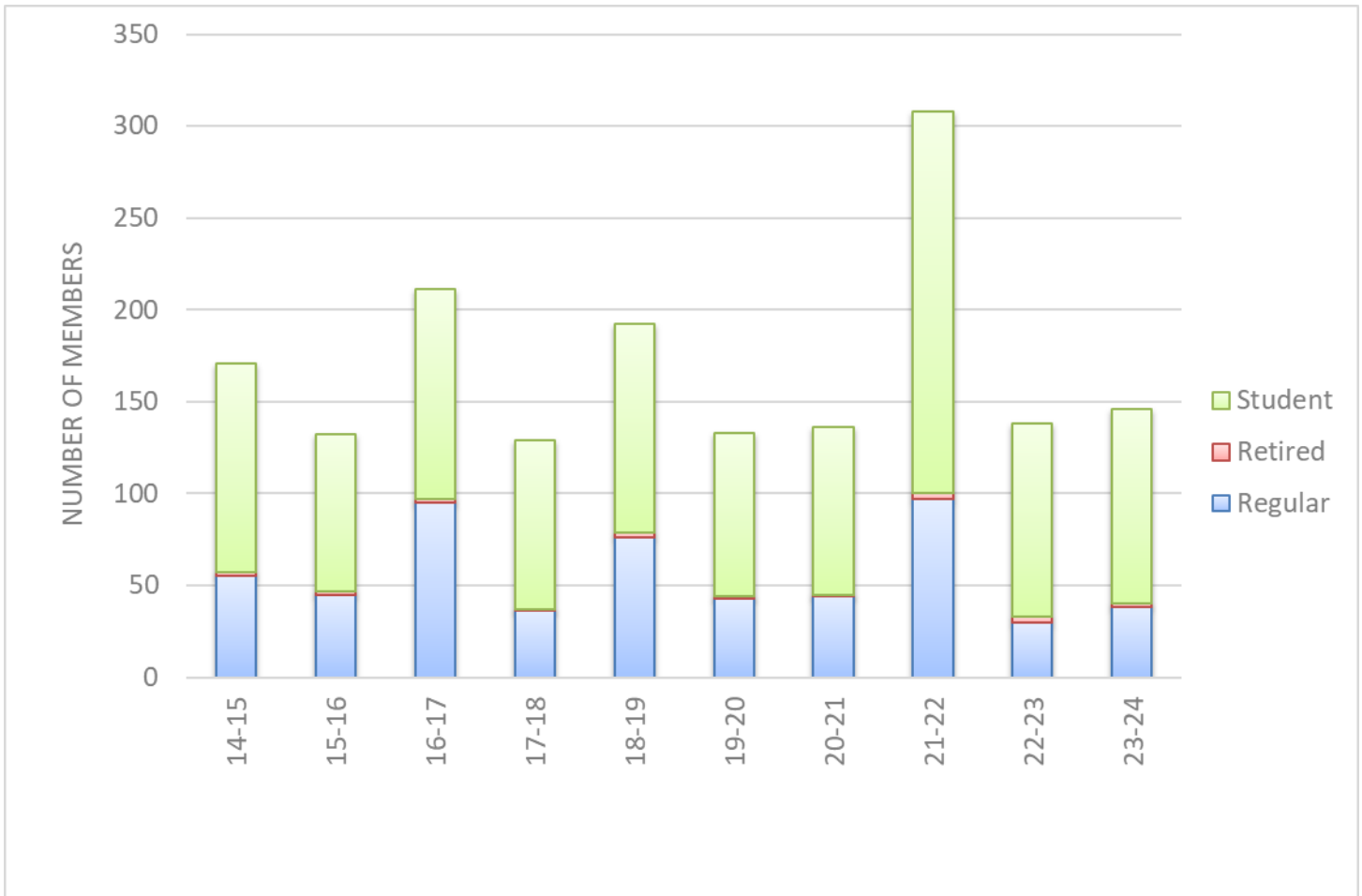


Figure 6

Table 9: New CORS Memberships by Section (Chapter) 2014–2015 to 2023–2024

<i>Section (Chapter)</i>	<i>2014–2015</i>	<i>2015–2016</i>	<i>2016–2017</i>	<i>2017–2018</i>	<i>2018–2019</i>	<i>2019–2020</i>	<i>2020–2021</i>	<i>2021–2022</i>	<i>2022–2023</i>	<i>2023–2024</i>
Vancouver	14	12	23	3	11	13	12	30	29	11
Okanagan Student	-	-	-	-	-	-	-	-	7	5
Edmonton	2	6	8	4	2	4	1	4	10	8
Calgary	8	11	22	6	9	5	5	10	5	5
Saskatoon	2	1	4	4	9	3	2	4	4	4
Winnipeg	-	3	5	1	2	1	-	-	3	2
SW Ontario	17	18	25	8	16	15	14	31	19	26
Waterloo Student	7	3	10	13	14	11	12	18	4	12
Toronto	11	5	16	7	13	6	8	18	1	3
Toronto Student	22	14	20	17	26	22	17	37	11	12
Hamilton Student	-	-	-	-	-	-	-	-	7	8
Ottawa	18	2	3	4	13	5	6	17	9	3
Kingston	8	2	4	3	6	2	2	8	1	4
Montreal	30	32	10	5	11	6	9	18	1	5
Montreal Student	-	-	13	22	19	19	18	46	10	13
Quebec	12	1	1	2	-	1	3	4	1	3
Quebec Student	-	8	6	7	4	4	4	7	1	7
Atlantic	11	2	13	11	16	6	7	14	6	9
International	8	10	26	12	21	10	16	42	8	6
Total	171	132	211	129	192	133	136	308	138	146

Table 10: New CORS Memberships in 2023–2024 by Section (Chapter) and Member Type

<i>Section</i>	<i>Regular</i>	<i>Retired</i>	<i>Student</i>	<i>Total</i>
Vancouver	1	-	10	11
Okanagan Student	-	-	5	5
Edmonton	3	-	5	8
Calgary	2	-	3	5
Saskatoon	1	-	3	4
Winnipeg	-	-	2	2
SW Ontario	9	-	17	26
Waterloo Student	-	-	12	12
Toronto	3	-	-	3
Toronto Student	-	-	12	12
Hamilton Student	-	-	8	8
Ottawa	2	-	1	3
Kingston	2	1	1	4
Montreal	5	-	-	5
Montreal Student	-	-	13	13
Quebec	3	-	-	3
Quebec Student	-	-	7	7
Atlantic	2	1	6	9
International	5	-	1	6
Total	38	2	106	146

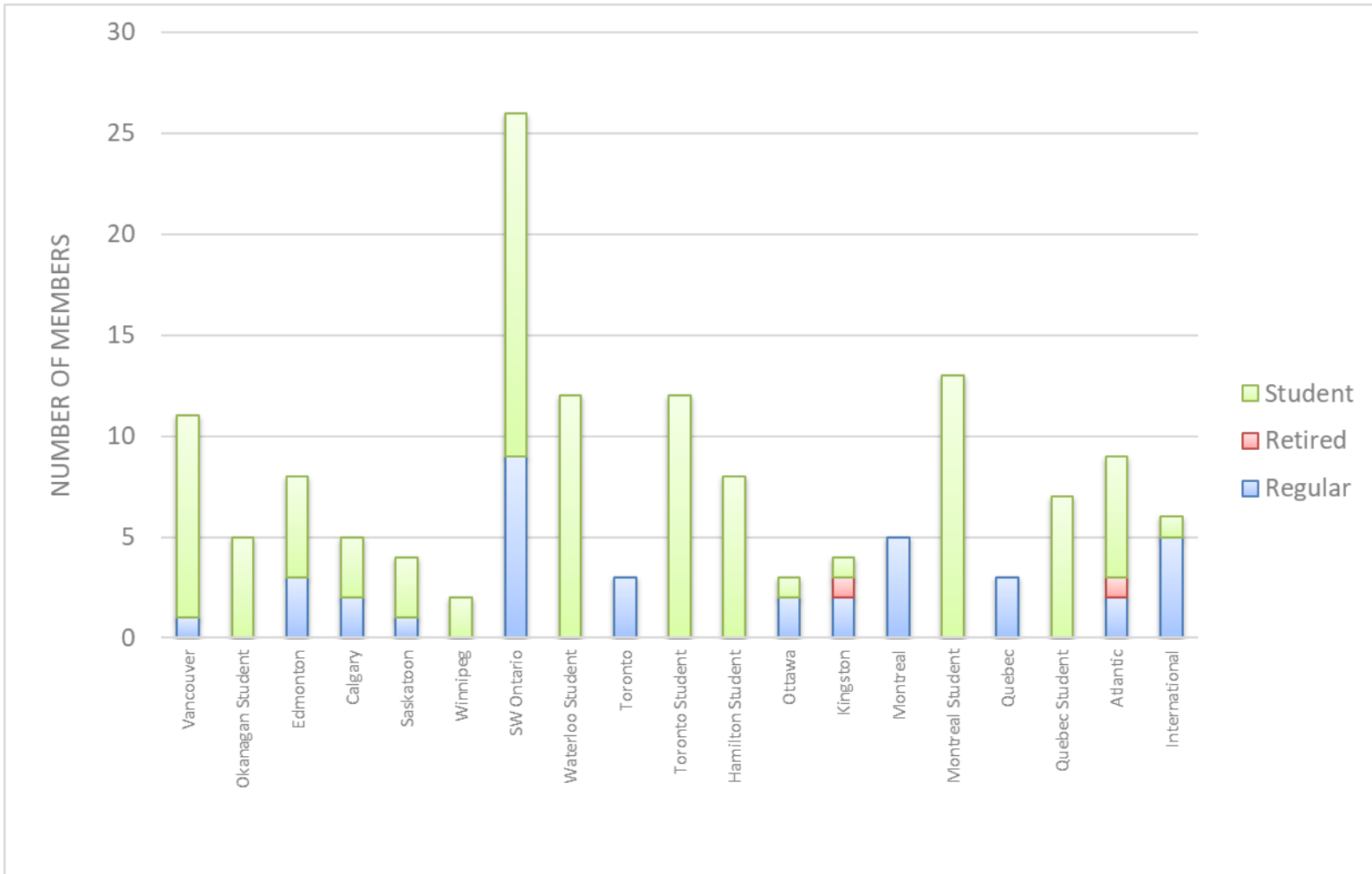


Figure 7

DISCONTINUED MEMBERS

In the 2023–2024 membership year, members were discontinued if they did not pay their dues by October 1, 2023, meaning that payment was six months overdue. Also, members are discontinued at their request, or if there was no way to contact them by post or email due to invalid information. As shown in Table 12 and in Figure 8, of the 146 memberships discontinued in the 2023–2024 membership year 52 (35%) were Regular Members, four were Retired Members, and 90 (62%) were Student Members.

The distribution of discontinued memberships by section and chapter is provided in Table 13. Discontinued memberships by section (chapter) and member type for the 2023–2024 membership year is presented in Table 14 and in Figure 9. The greatest number of discontinued memberships occurred in the Vancouver Section at 26 (18% of the discontinued memberships).

The duration of the memberships that were discontinued in the 2023–2024 membership year by member type is provided in Table 15 and Figure 9. Of the memberships that were discontinued 25 (17%) had been held for two years or less. In the 2022–2023 membership year, this number was 49%, and in the 2021–2022 membership year, this number was 20%. In the 2–5-year category 83 (57%) of the discontinued memberships occurred. Therefore, 108 (74%) of the discontinued memberships had been held for five years or less.

The number of CORS members who registered for the CORS Annual Conference is stated below. In 2018 and 2019, 65–70% of conference attendees became or continued being CORS members for the following membership year (2018–2019 and 2019–2020, respectively). CORS gave free memberships for the 2018 fiscal year to all attendees of the 2017 joint IFORS/CORS conference in Quebec City who also paid for their membership for 2017–2018 before registering for the conference. The 2020 CORS Conference was cancelled. The 2021 CORS Conference was held virtually. The 2022 CORS Conference was held in Vancouver. The 2023 CORS Conference was held in Montreal.

The date indicates the last registration received for that year’s conference.

- 2022 Conference and 2023 Conference numbers not currently available
- 2021 Conference = 397 (out of 682 total registrants) as of June 6, 2021
- 2020 Conference = 36 CORS members (out of 43 total registrants) as of March 30, 2020. These registrations were refunded because the conference was cancelled.
- 2019 Conference = 149 CORS members (out of 231 total registrants) as of May 27, 2019
- 2018 Conference = 188 CORS members (out of 265 total registrants) as of June 5, 2018

Table 11: Discontinued CORS Memberships 2014–2015 to 2023–2024

<i>Discontinued Reason</i>	<i>2014–2015</i>	<i>2015–2016</i>	<i>2016–2017</i>	<i>2017–2018</i>	<i>2018–2019</i>	<i>2019–2020</i>	<i>2020–2021</i>	<i>2021–2022</i>	<i>2022–2023</i>	<i>2023–2024</i>
Lost Contact	-	-	-	-	-	-	-	1	1	1
Withdrew	20	25	10	14	3	10	12	16	10	9
In arrears	124	101	82	134	68	161	89	39	222	136
Total	144	126	92	148	71	171	101	56	233	146

Table 12: Discontinued CORS Memberships by Member Type 2014–2015 to 2023–2024

<i>Member Type</i>	<i>2014–2015</i>	<i>2015–2016</i>	<i>2016–2017</i>	<i>2017–2018</i>	<i>2018–2019</i>	<i>2019–2020</i>	<i>2020–2021</i>	<i>2021–2022</i>	<i>2022–2023</i>	<i>2023–2024</i>
Regular	59	49	41	74	29	73	35	27	78	52
Retired	6	1	2	1	-	7	6	2	1	4
Student	79	76	49	73	42	91	60	27	154	90
Total	144	126	92	148	71	171	101	56	233	146

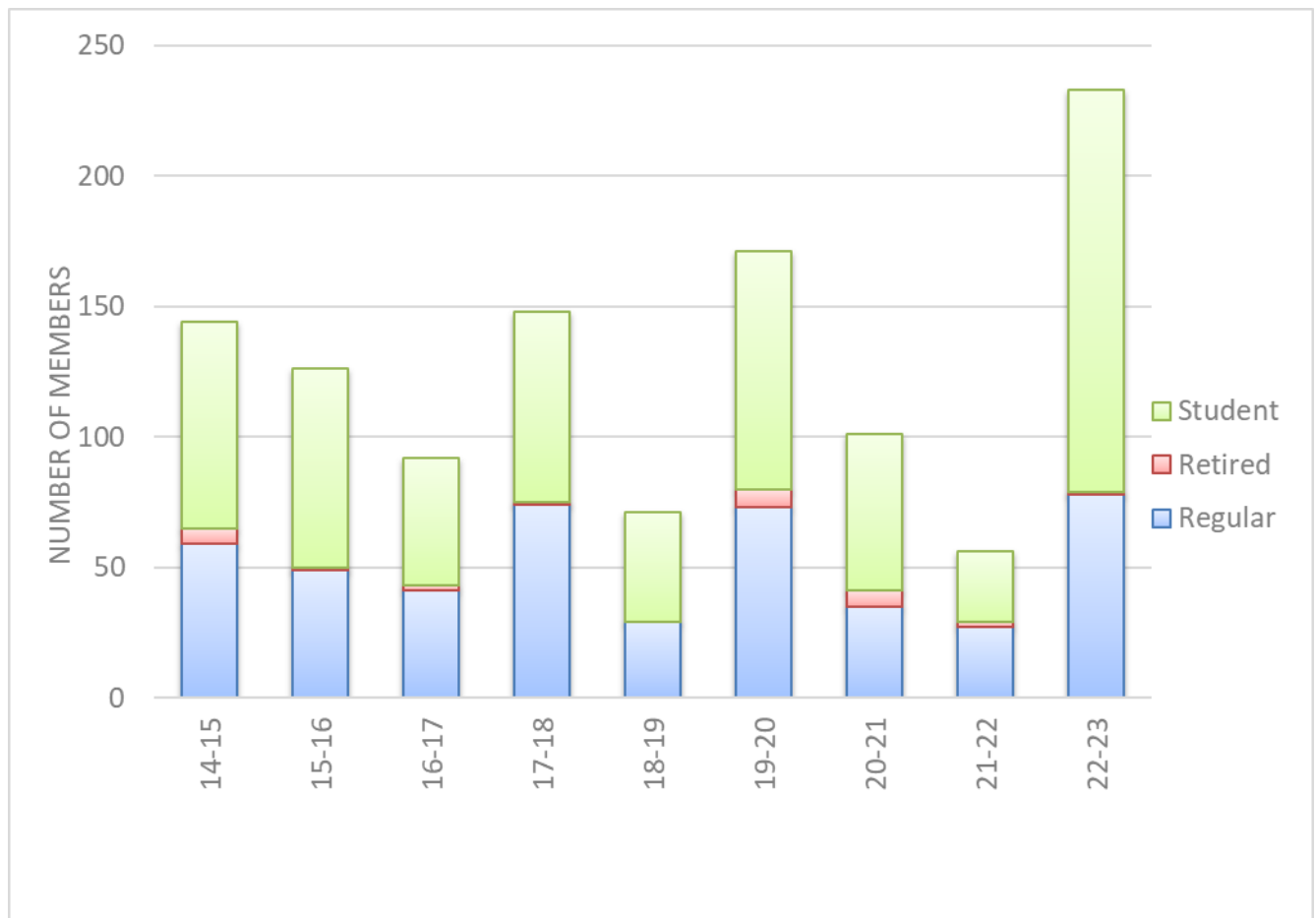


Figure 8

Table 13: Discontinued CORS Memberships by Section (Chapter) 2014–2015 to 2023–2024

<i>Section (Chapter)</i>	<i>14-15</i>	<i>15-16</i>	<i>16-17</i>	<i>17-18</i>	<i>18-19</i>	<i>19-20</i>	<i>20-21</i>	<i>21-22</i>	<i>22-23</i>	<i>23-24</i>
Vancouver	47	16	5	20	5	9	13	4	12	26
Okanagan Student	-	-	-	-	-	-	-	-	-	7
Edmonton	9	3	3	10	4	1	2	-	4	7
Calgary	2	7	7	14	3	6	7	3	7	3
Saskatoon	1	2	2	3	-	5	1	4	1	3
Winnipeg	-	1	1	6	-	2	1	-	-	1
SW Ontario	13	16	9	23	4	13	9	6	22	17
Waterloo Student	-	-	1	5	7	8	5	3	21	1
Toronto	23	20	5	10	5	16	11	6	15	6
Toronto Student	-	-	8	13	11	21	15	4	26	18
Hamilton Student	-	-	-	-	-	-	-	-	-	5
Ottawa	9	15	9	5	1	8	4	3	12	7
Kingston	3	5	-	1	4	3	3	2	3	4
Montreal	17	21	9	4	6	13	4	5	19	8
Montreal Student	-	-	15	6	10	22	9	6	35	12
Quebec	5	7	4	2	2	1	-	1	3	2
Quebec Student	-	-	4	3	3	5	4	2	6	2
Atlantic	2	4	3	5	3	20	5	2	13	2
International	12	9	5	18	3	18	8	5	34	15
Total	144	126	92	148	71	171	101	56	233	146

Table 14: Discontinued CORS Memberships in 2023–2024 by Section (Chapter) and Member Type

<i>Section</i>	<i>Regular</i>	<i>Retired</i>	<i>Student</i>	<i>Total</i>
Vancouver	7	1	18	26
Okanagan Student	-	-	7	7
Edmonton	1	-	6	7
Calgary	2	-	1	3
Saskatoon	1	-	2	3
Winnipeg	1	-	-	1
SW Ontario	9	2	6	17
Waterloo Student	-	-	1	1
Toronto	6	-	-	6
Toronto Student	-	-	18	18
Hamilton Student	-	-	5	5
Ottawa	3	-	4	7
Kingston	4	-	-	4
Montreal	8	-	-	8
Montreal Student	-	-	12	12
Quebec	2	-	-	2
Quebec Student	-	-	2	2
Atlantic	1	1	-	2
International	7	-	8	15
Total	52	4	90	146

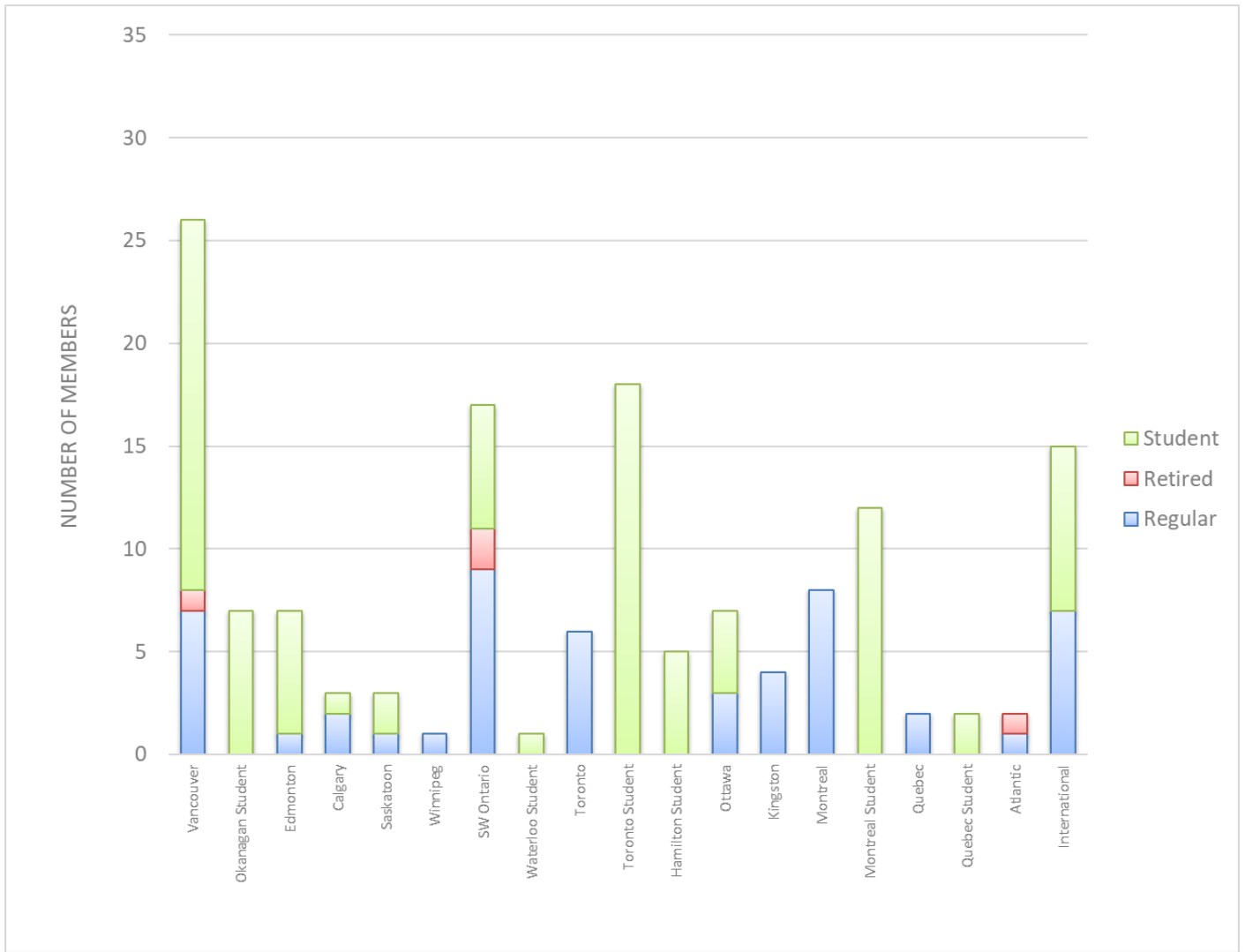


Figure 9

Table 15: Duration of CORS Memberships Discontinued in 2023–2024 Membership Year

<i>Category</i>	<i>Regular</i>	<i>Retired</i>	<i>Student</i>	<i>Total</i>
2 Years or Less	3	-	22	25
2–5 Years	21	1	61	83
5–10 Years	8	-	7	15
10–15 Years	5	-	-	5
15–20 years	4	-	-	4
20–25 Years	7	1	-	8
More than 25 years	4	2	-	6
Total	52	4	90	146

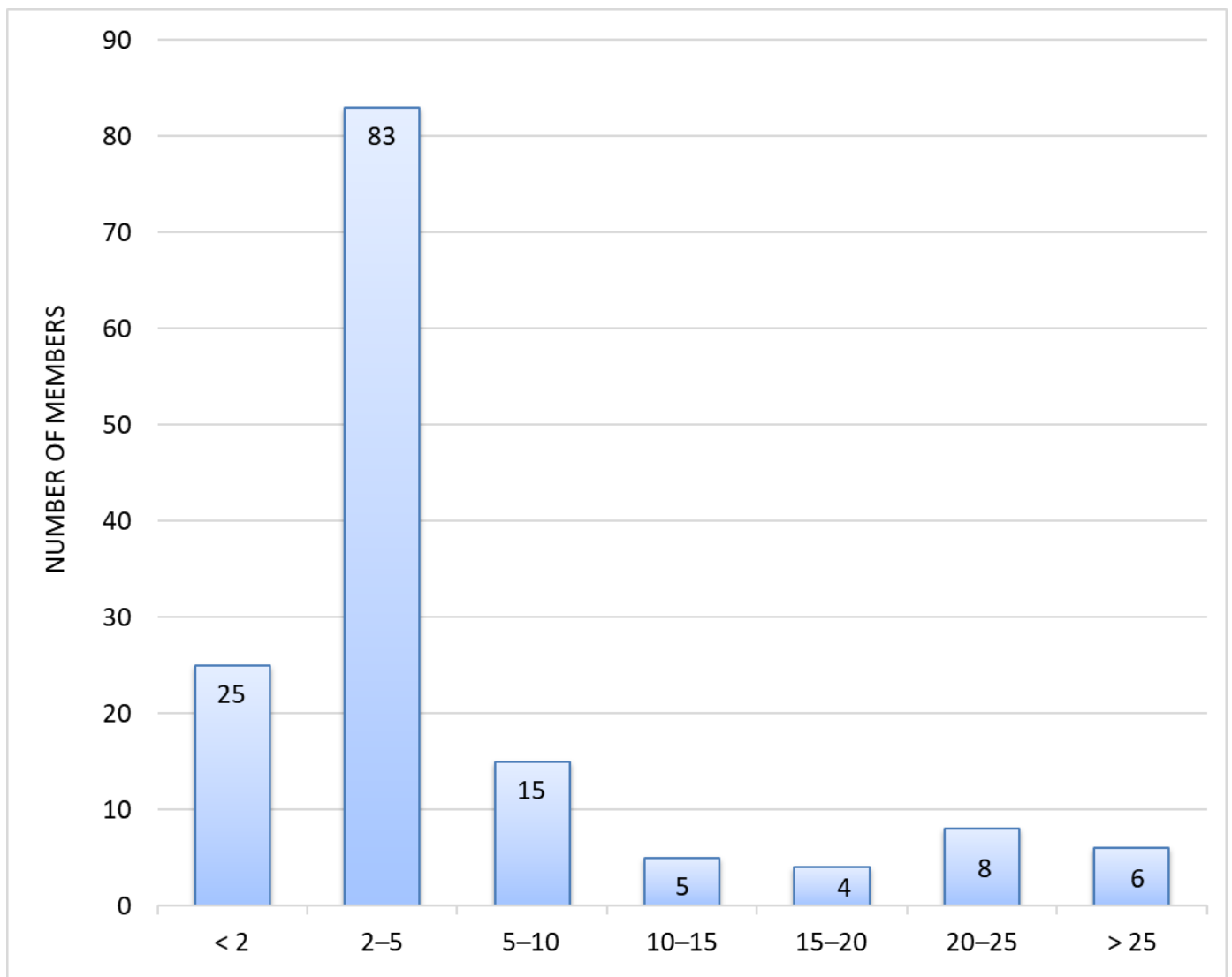


Figure 10

PAYMENT STATUS OF MEMBERSHIP

A snapshot of the membership at the end of the 2023–2024 membership year, in terms of the number of membership renewals processed before the payment due date of April 1, 2023, is provided in Table 16 and in Figure 11. The number of members who paid for the 2023–2024 membership year, as of March 31, 2023, was 189 or 43%. By March 31, 2023, 51% had paid, and by March 31, 2022, 47% had paid. Refer to Table 16 and Figure 11 to identify those sections and chapters where efforts should be made to encourage renewals to improve membership retention. The invoicing process was conducted by email in January. Membership payments were made online, by cheque, by e-transfer, and by wire transfer. Table 17 shows how members paid their fees.

Table 16: Payment Status of CORS Membership by Section (Chapter) March 31, 2024

<i>Section (Chapter)</i>	<i>Dues Paid</i>	<i>Dues unpaid</i>	<i>Total Members</i>
Vancouver	9	17	26
Okanagan Student	3	3	6
Edmonton	11	9	20
Calgary	11	10	21
Saskatoon	8	5	13
Winnipeg	-	2	2
SW Ontario	34	26	60
Waterloo Student	13	6	19
Toronto	29	19	48
Toronto Student	13	9	22
Hamilton Student	8	5	13
Ottawa	10	13	23
Kingston	7	1	8
Montreal	28	14	42
Montreal Student	9	16	25
Quebec	7	10	17
Quebec Student	8	-	8
Atlantic	24	14	38
International	18	10	28
Total	189	250	439

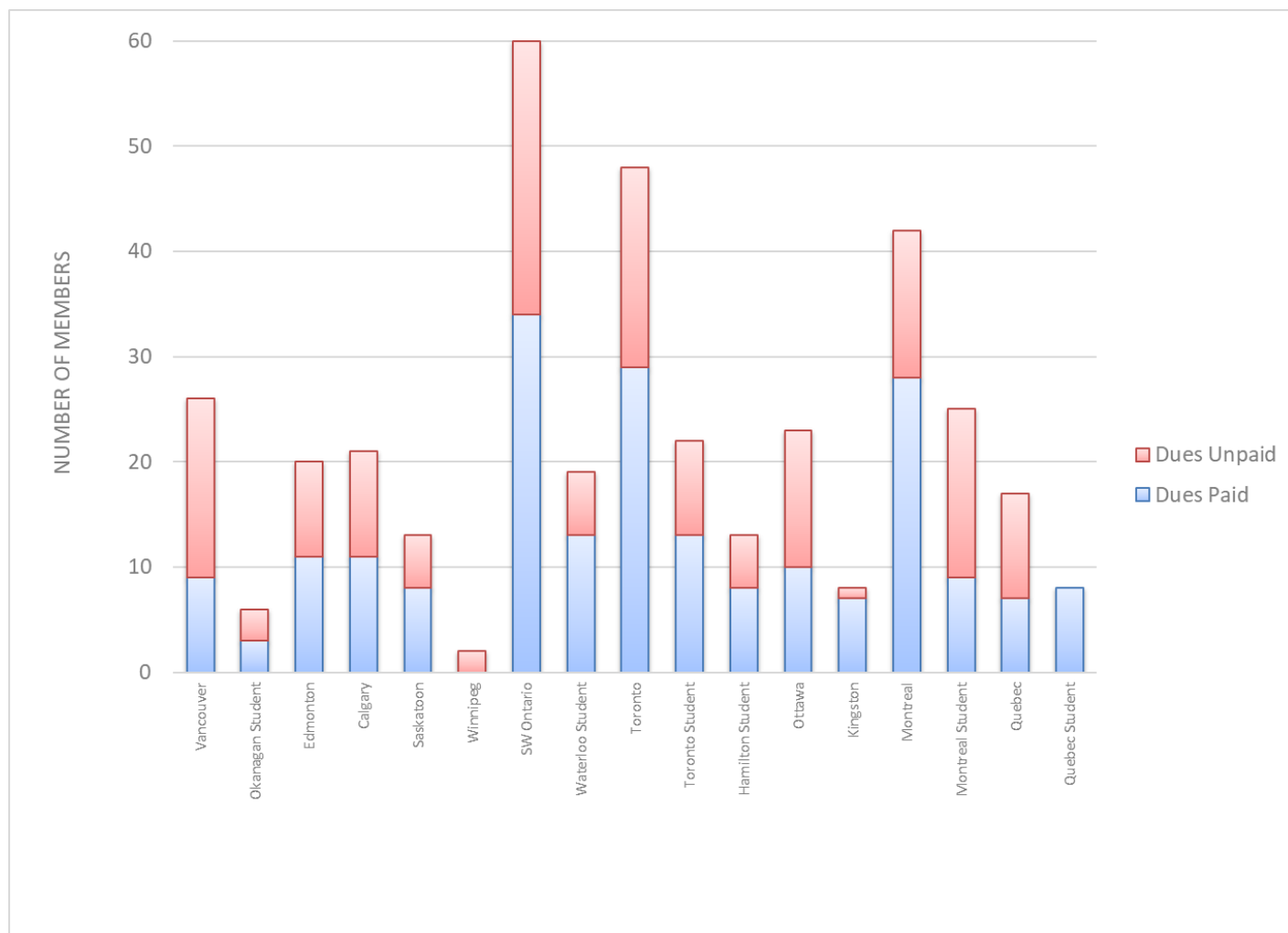


Figure 11

METHOD OF PAYMENT

Table 17: Method of Payment of Transactions Conducted in the 2023–2024 Membership Year

Method of Payment	Number
Online Credit Card	432
Cheque	4
e-Transfer	2
Wire Transfer	1
Total	439