## Supplementary Materials to PEARC24 paper. Freeman, et al. "Membership and Participation in our RCD Communities: What is it and how are we doing?" DOI: 10.1145/3626203.3670630

## 1 Membership

	2018	2019	2020	2021	2022	2023	2024
Data		89	78	88	103	134	61
Emerging		42	61	72	83	103	56
People	41	129	110	113	132	168	72
Researcher	24	89	110	118	123	154	69
Strategy					97	134	61
Systems	7	85	75	84	86	127	54
Total	72	434	434	475	624	820	373

Table 1: Unique Domain of Membership Additions for CaRCC lists by Year

	Data	Emerging	People	Researcher	Strategy	systems
Total	693	415	1123	957	336	609
Doctoral	611	346	1000	855	287	534
Masters	34	32	54	44	24	37
Bachelors	23	18	32	27	10	14
4Yr Special	13	8	20	17	3	12
Other	12	10	15	12	10	11
MSI	0	1	2	2	2	1

Table 2: Membership Counts by Institution Type/Carnegie Classification

	2018	2019	2020	2021	2022	2023	2024
Far West	12	55	28	24	45	42	10
Great Lakes	10	53	40	52	58	59	17
Mid Atlantic	6	33	51	31	41	47	23
New England	10	44	18	19	34	37	12
Other	0	2	1	0	0	0	0
Plains	5	14	11	8	15	15	4
Rocky Mtns	8	26	5	5	11	16	4
Southeast	7	51	41	44	56	62	16
Southwest	4	34	19	17	18	21	11
Total	62	312	214	200	278	299	97

Table 3: Region Membership Additions for CaRCC lists by Year

Region	4yr Med	4yr Research	Bachelors	Doctoral	Masters	Tribal College
Far West	40	0	7	47	14	0
Great Lakes	20	0	2	37	2	0
Mid Atlantic	10	0	8	49	5	0
New England	100	0	4	80	5	0
Other	0	0	4	0	0	0
Plains	20	100	3	56	2	7
Rocky Mtns	0	0	6	60	8	0
Service	0	0	0	0	0	0
Southeast	11	0	2	67	4	0
Southwest	30	0	7	66	13	0

Table 4: Email Membership by Region (Percent Coverage)

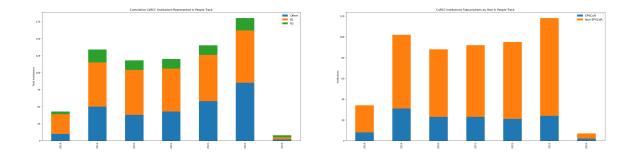


Figure 1: People Network Membership Additions by Year by Carnegie Classification and by EPSCoR Designation

## 2 Participation

Table 11 shows from 2018-11-08 to 2024-01-02 the number of unique domains for persons attending Track Calls. It is interesting to see the fluctuation from year to year across all Tracks. Compared to the beginning year of each track, the number of unique domains attendance for all the tracks increased for at least two times. We also show the "most diverse" Call for a given Track. It would be instructive to look for patterns of high Call attendance and/or diversity based on the topic. The positive signal here is CaRCC calls across all the tracks keep attracting more and more new institutions to join the CaRCC community over time.

The heatmap in Figure 2 shows institutions with at least 15 attendees in CaRCC calls for each track. 63 domains (institutions) have at least 15 attendees in at least 1 track over the time period. Several institutions have more than 15 affiliates attended calls in 4 tracks, which are Harvard, Penn State, Rochester Institute of Technology, Rutgers, University of California-San Diego and University of Massachusetts-Boston. The yellow and green cells on the heatmap show institutions with the highest attendance. Here are the top 10 domains with the highest attendees. Affiliates from Rutgers (147), Harvard (140), Utah (122), UCSD (112), Virginia (99), Northwestern (86) and UCLA (81) are highly engaged in Researcher Facing track calls. Affiliates from Rutgers (75) is highly engaged in the Data Facing track calls.

Track	Capture Rate $(\%)$	2018	2019	2020	2021	2022	2023
Data	67.7	0	248	256	339	109	174
Emerging	80.6	0	41	240	114	115	0
Researcher	88.7	210	560	766	784	616	385
Strategy	86.3	0	0	0	0	80	311
Systems	70.9	0	309	58	357	382	217
Overall	79.8	210	1158	1320	1594	1302	1087

Table 5: Sign-in Capture Rate and Call Participant Counts by Year

Track	2018	2019	2020	2021	2022	2023
Data	0	60	79	107	57	71
Emerging	0	29	87	50	54	0
Researcher	63	112	135	151	140	123
Strategy	0	0	0	0	55	101
Systems	0	85	36	103	97	79

Table 6: Calls by Unique Domains

	Data	Emerging	Joint	Party	Researcher	Strategy	Systems
Doctoral	833	366	206	34	2677	249	983
Masters	66	67	10	2	140	29	71
Bachelors	33	8	8	0	61	5	25
4yr Special	11	5	2	0	24	1	3
MSI	2	1	1	0	5	0	2

Table 7: Call Participation Distribution by Institution Type

Region	2018	2019	2020	2021	2022	2023
Far West	20	195	250	220	176	182
Great Lakes	18	223	239	289	190	161
Mid Atlantic	21	164	259	244	192	198
New England	15	109	133	139	141	149
Other	0	3	3	0	0	0
Plains	14	35	43	52	52	46
Rocky Mtns	19	83	76	93	76	68
Southeast	15	108	176	291	233	179
Southwest	25	60	54	72	88	87
Unknown	65	178	128	194	232	224

 Table 8: Yearly Call Attendees by Region

	2018	2019	2020	2021	2022	2023
non-EPSCoR EPSCoR	$\begin{array}{c} 168 \\ 44 \end{array}$	$946 \\ 212$	$\begin{array}{c} 1076 \\ 285 \end{array}$	$1333 \\ 261$	$\begin{array}{c} 1120 \\ 260 \end{array}$	$\begin{array}{c} 1047 \\ 247 \end{array}$

Table 9: Yearly Calls by EPSCoR Designation

Top Overall	Data	Emerging	Researcher	Strategy	Systems	Top 10 non-R1	Data	Emerging	Researcher	Strategy	Systems
rutgers.edu	70	17	144	12	46	gmu.edu	21	13	68	7	20
harvard.edu	34	12	138	8	45	umb.edu	22	18	29	10	22
utah.edu	10	1	119	1	95	rit.edu	20	17	26	11	15
ucsd.edu	53	16	109	8	16	uvm.edu	6	8	43	6	18
purdue.edu	17	5	45	0	98	ubc.ca	10	1	23	7	39
psu.edu	27	6	71	15	26	mines.edu	10	6	25	3	14
northwestern.edu	39	0	85	8	14	alaska.edu	0	14	18	1	17
wisc.edu	13	3	63	3	54	lafayette.edu	9	3	18	0	13
gmu.edu	21	13	68	7	20	miamioh.edu	2	9	25	6	0
virginia.edu	12	0	98	1	11	okstate.edu	0	0	30	0	12

Table 10: Top Institutional Domains for Call Participation

Track Facing	Date	Topic	Unique Domains	2018	2019	2020	2021	2022	2023	Overall
Researcher	2021-02-11	Supporting Researchers with Containers	89	72	110	133	150	139	132	253
Systems	2022-03-17	Integrating Cloud Storage into Research Workflows	50	-	83	36	103	96	81	179
Data	2021-03-02	PLENARY: Using Data to Benchmark your Research Computing and Data Program: The RCD Capabilities Model and Community Dataset	42	-	68	80	106	56	72	170
Emerging Cntrs Strategy & Policy	2020-12-16 2023-12-06	CC* Program overview Major RCD expansion (Joint with EDUCAUSE RCD CG)	$\begin{array}{c} 42 \\ 49 \end{array}$	-	27 -	86 -	49 -	$\frac{53}{54}$	- 102	$\frac{116}{113}$

Table 11: (Left) The most diverse Calls by attendance. (Right) Annual unique domains by Track.

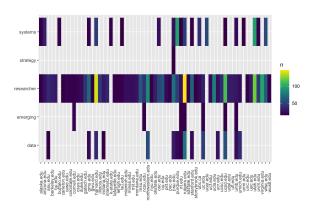


Figure 2: Heatmap of Overall Institutional Engagement