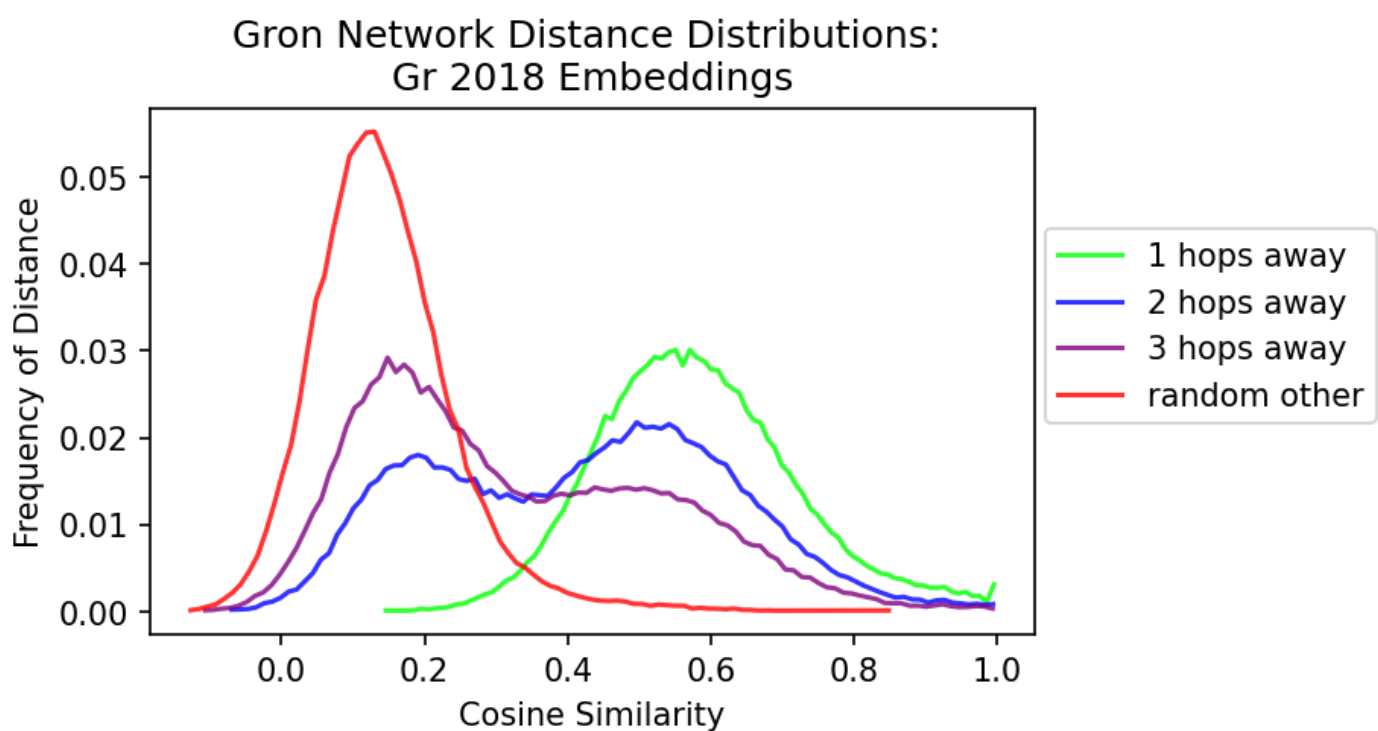
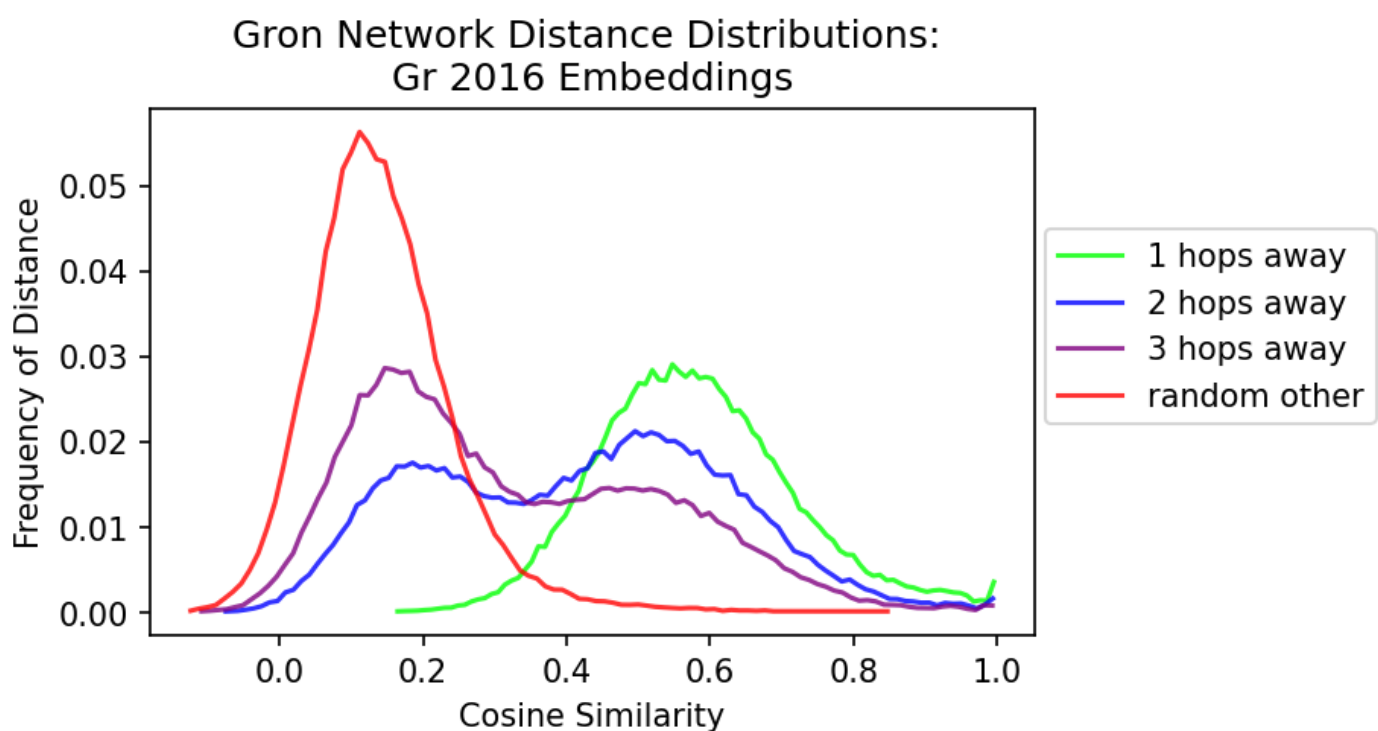


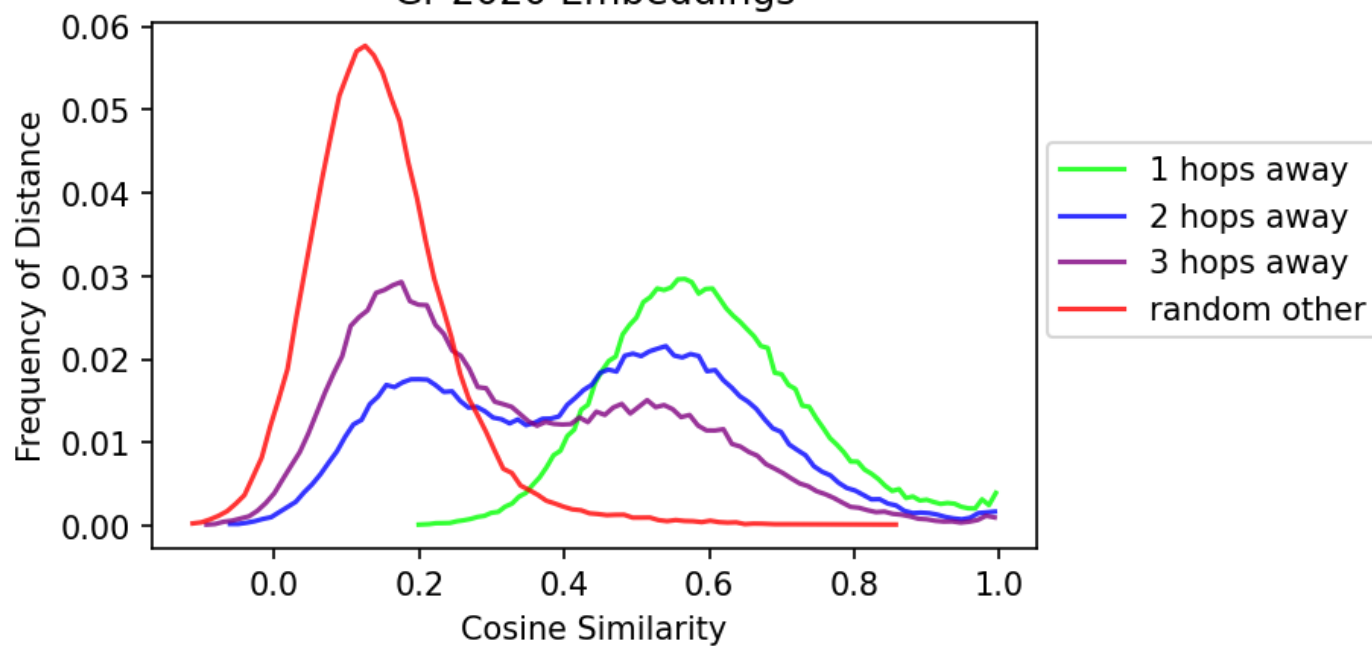
0. Embedding Descriptions/Comparisons

	<i>Gr 2016</i>	<i>Gr 2018</i>	<i>Gr 2020</i>
<i>type</i>	NET	NET	NET
<i>year</i>	2016	2018	2020
<i>n_samples</i>	212501	212596	213905
<i>dimensions</i>	128	128	128

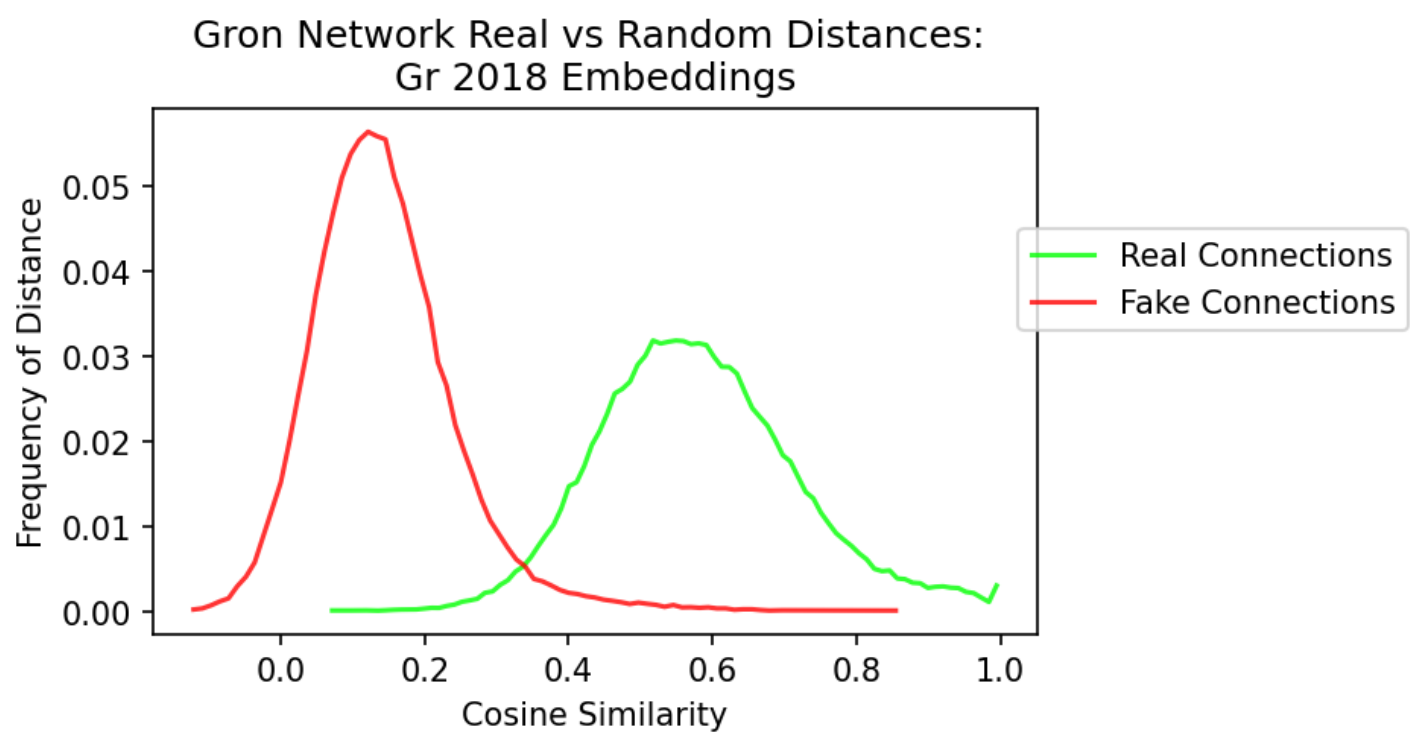
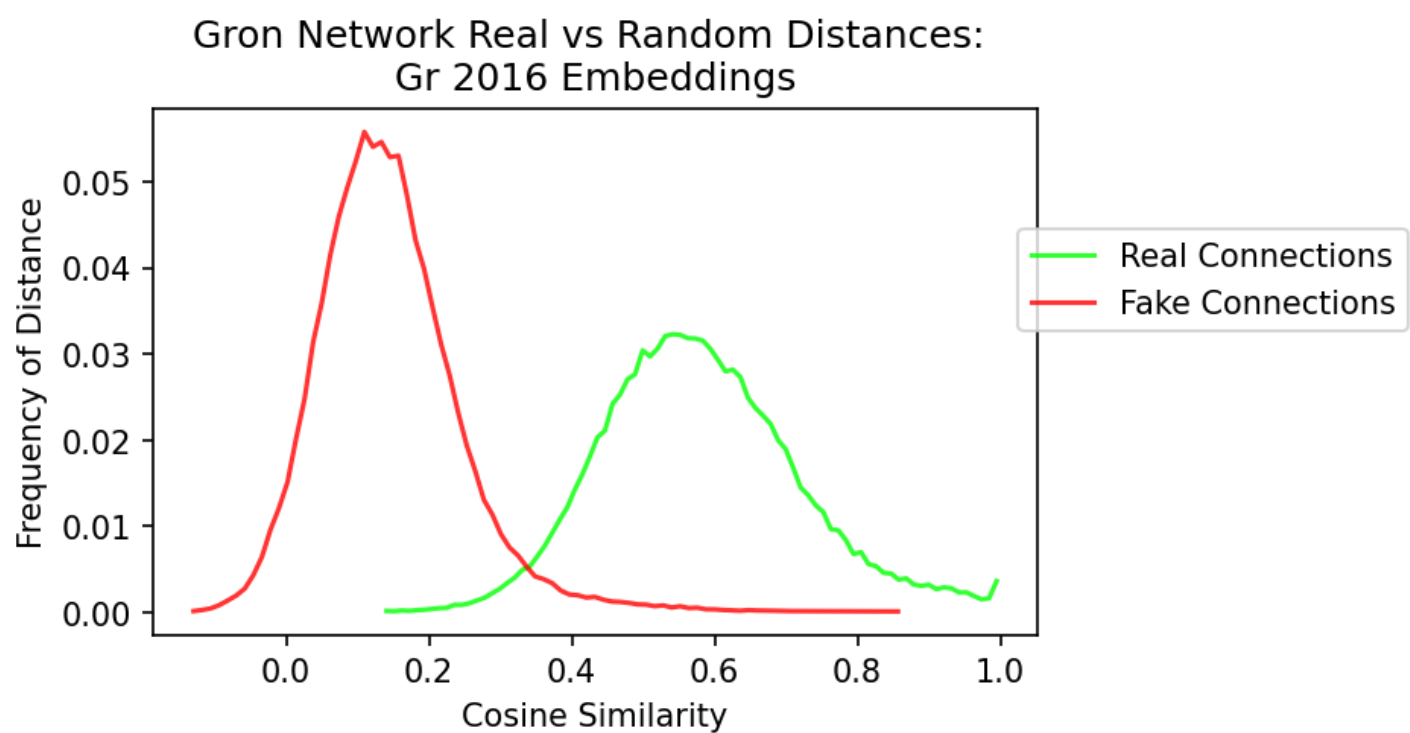
1. Distance Distributions by Hop



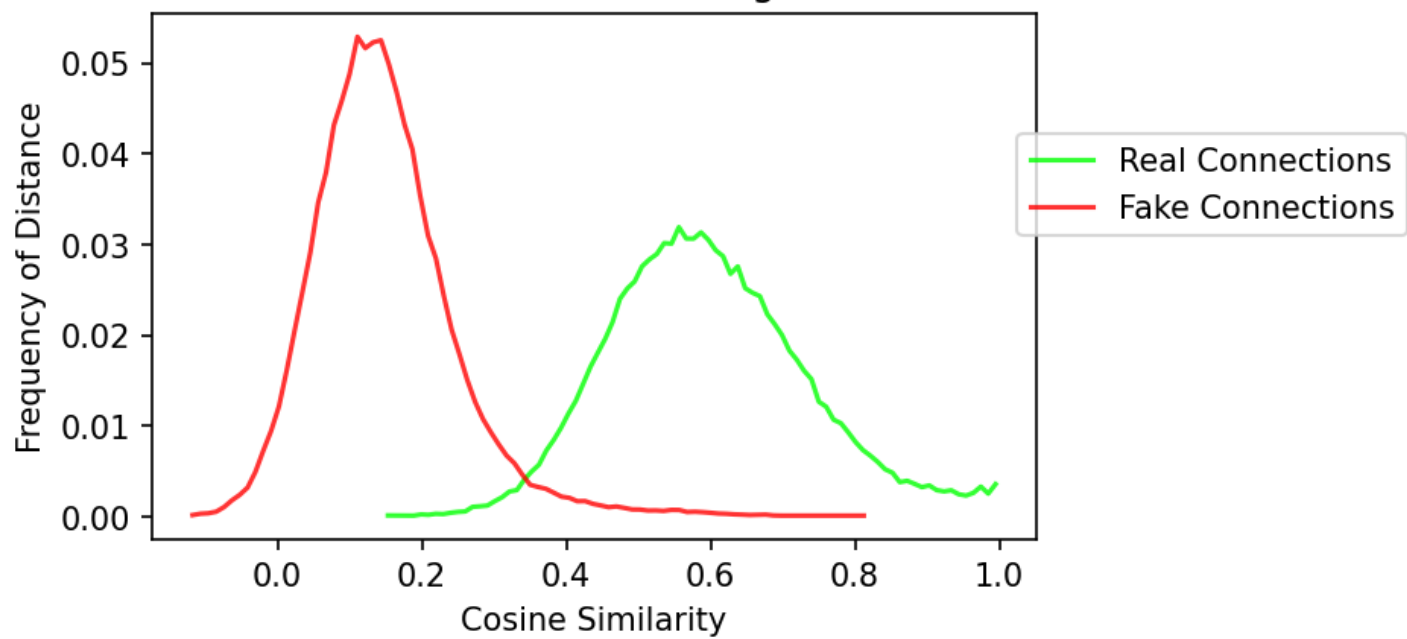
Gron Network Distance Distributions:
Gr 2020 Embeddings



2. Distance Distributions: Real vs Fake Connections



Gron Network Real vs Random Distances:
Gr 2020 Embeddings



3. Prediction - Income at Age 30 (R^2)

	<i>Baseline</i>	<i>Gr 2016</i>	<i>Gr 2016 + Base</i>	<i>Gr 2018</i>	<i>Gr 2018 + Base</i>	<i>Gr 2020</i>	<i>Gr 2020 + Base</i>
<i>2011</i>	-0.034	0.099	0.664	0.1	0.703	0.109	0.701
<i>2012</i>	-0.019	0.098	0.584	0.096	0.507	0.12	0.589
<i>2013</i>	-0.005	0.077	0.452	0.108	0.502	0.075	0.496
<i>2014</i>	-0.01	0.097	0.446	0.111	0.427	0.102	0.394
<i>2015</i>	-0.005	0.121	0.389	0.156	0.403	0.165	0.369
<i>2016</i>	-0.012	0.145	0.273	0.152	0.224	0.129	0.248
<i>2017</i>	-0.005	0.153	0.235	0.169	0.226	0.17	0.217
<i>2018</i>	-0.0	0.152	0.174	0.204	0.205	0.202	0.165
<i>2019</i>	-0.004	0.141	0.151	0.15	0.144	0.18	0.165
<i>2020</i>	-0.001	0.113	0.137	0.159	0.137	0.179	0.172
<i>2021</i>	-0.012	0.045	0.16	0.062	0.153	0.132	0.169
<i>OVERALL</i>	0.14	0.083	0.245	0.115	0.259	0.137	0.264

Test Counts

	<i>Gr 2016</i>	<i>Gr 2016 + Base</i>	<i>Gr 2018</i>	<i>Gr 2018 + Base</i>	<i>Gr 2020</i>	<i>Gr 2020 + Base</i>
<i>2011</i>	499	460	447	411	411	378
<i>2012</i>	528	480	465	424	421	384
<i>2013</i>	563	502	486	439	430	391
<i>2014</i>	626	547	535	472	469	416
<i>2015</i>	690	587	578	503	500	440
<i>2016</i>	779	645	636	545	548	477
<i>2017</i>	835	717	727	617	619	537
<i>2018</i>	858	753	792	652	655	559
<i>2019</i>	935	830	845	709	733	612
<i>2020</i>	1081	984	953	817	887	713
<i>2021</i>	1173	1082	991	875	893	745
<i>OVERALL</i>	8567	7587	7455	6464	6566	5652

5. Prediction - Marriage (Mean Accuracy)

5.1 Binary Prediction (Real vs. Fake Pairs)

	<i>Baseline</i>	<i>Gr 2016</i>	<i>Gr 2016 + Base</i>	<i>Gr 2018</i>	<i>Gr 2018 + Base</i>	<i>Gr 2020</i>	<i>Gr 2020 + Base</i>
2011	-0.012	0.973	-0.009	0.994	-0.034	0.986	-0.041
2012	-0.007	0.985	0.0	0.984	-0.067	0.997	-0.013
2013	-0.012	0.98	-0.027	0.991	0.022	0.99	-0.13
2014	0.0	0.996	0.0	0.997	0.0	0.998	0.0
2015	0.0	0.981	-0.045	0.985	-0.023	0.994	0.0
2016	0.0	0.984	-0.158	0.988	0.0	0.991	0.0
2017	-0.004	0.982	-0.022	0.987	0.0	0.988	-0.029
2018	-0.006	0.966	-0.073	0.984	0.031	0.988	-0.074
2019	0.0	0.972	-0.039	0.992	0.0	0.995	0.0
2020	0.0	0.979	0.015	0.982	-0.081	0.986	0.0
2021	-0.017	0.97	-0.012	0.994	-0.038	0.975	-0.53
OVERALL	-0.005	0.981	-0.267	0.987	-0.418	0.989	-0.629

Test Counts

	<i>Gr 2016</i>	<i>Gr 2016 + Base</i>	<i>Gr 2018</i>	<i>Gr 2018 + Base</i>	<i>Gr 2020</i>	<i>Gr 2020 + Base</i>
2011	119	21	103	17	97	15
2012	137	37	125	30	115	27
2013	121	35	109	28	100	23
2014	134	44	117	32	106	27
2015	136	57	122	42	103	29
2016	137	54	121	39	107	31
2017	133	55	127	48	112	35
2018	140	61	136	49	119	38
2019	130	58	125	48	120	41
2020	94	35	98	30	100	26
2021	100	34	98	33	95	30
OVERALL	1646	552	1531	449	1416	369

5.2 Actual Partner Rank vs. Random Pairings

	<i>Gr 2016</i>	<i>Gr 2018</i>	<i>Gr 2020</i>
<i>2011</i>	2.277	2.479	3.832
<i>2012</i>	2.726	2.365	2.53
<i>2013</i>	2.294	1.955	2.788
<i>2014</i>	2.14	2.991	2.546
<i>2015</i>	1.765	1.843	2.311
<i>2016</i>	3.911	2.145	3.013
<i>2017</i>	5.698	2.015	1.942
<i>2018</i>	6.8	5.802	2.133
<i>2019</i>	9.862	5.605	1.961
<i>2020</i>	14.21	10.405	8.436
<i>2021</i>	16.268	12.715	7.492
<i>OVERALL</i>	6.499	5.113	3.919

Test Counts

	<i>Gr 2016</i>	<i>Gr 2018</i>	<i>Gr 2020</i>
<i>2011</i>	1194	1042	964
<i>2012</i>	1362	1234	1142
<i>2013</i>	1216	1096	1002
<i>2014</i>	1328	1158	1052
<i>2015</i>	1334	1200	1020
<i>2016</i>	1346	1194	1062
<i>2017</i>	1306	1248	1112
<i>2018</i>	1358	1336	1170
<i>2019</i>	1274	1246	1198
<i>2020</i>	926	966	996
<i>2021</i>	992	982	950
<i>OVERALL</i>	16266	15196	14088