

## Daily Values of Howto Directed Network

| Network | Nodes | Edges_ |             | Den_d  | CC_d  | GD_d | Tpaths |        | TSpaths |         | PL_Tp<br>dN |
|---------|-------|--------|-------------|--------|-------|------|--------|--------|---------|---------|-------------|
|         |       | d      | Reciprocity |        |       |      | _d     | _d     | AvgPL_d | AvgGL_d |             |
| 1       | 9     | 9      | 0           | 0.125  | 0     | 1    | 9      | 9      | 1       | 1       | 2.576       |
| 2       | 5     | 4      | 0           | 0.2    | 0     | 1    | 4      | 4      | 1       | 1       | 3.466       |
| 3       | 18    | 17     | 0           | 0.0556 | 0     | 2    | 23     | 23     | 1.26087 | 1.26087 | 3.633       |
| 4       | 10    | 9      | 0           | 0.1    | 0     | 1    | 9      | 9      | 1       | 1       | 3.325       |
| 5       | 15    | 14     | 0           | 0.0667 | 0     | 1    | 14     | 14     | 1       | 1       | 2.489       |
| 6       | 12    | 11     | 0           | 0.0833 | 0     | 1    | 11     | 11     | 1       | 1       | 3.164       |
| 7       | 15    | 15     | 0           | 0.0714 | 0     | 2    | 17     | 16     | 1.11765 | 1.0625  | 2.864       |
| 8       | 15    | 14     | 0           | 0.0667 | 0     | 1    | 14     | 14     | 1       | 1       | 2.76        |
| 9       | 13    | 12     | 0           | 0.0769 | 0     | 1    | 12     | 12     | 1       | 1       | 2.995       |
| 10      | 12    | 13     | 0           | 0.0985 | 0     | 2    | 16     | 14     | 1.1875  | 1.07143 | 2.517       |
| 11      | 11    | 10     | 0           | 0.0909 | 0     | 1    | 10     | 10     | 1       | 1       | 1.665       |
| 12      | 17    | 16     | 0           | 0.0588 | 0     | 1    | 16     | 16     | 1       | 1       | 3.232       |
| 13      | 17    | 16     | 0           | 0.0588 | 0     | 1    | 16     | 16     | 1       | 1       | 0           |
| 14      | 12    | 11     | 0           | 0.0833 | 0     | 1    | 11     | 11     | 1       | 1       | 0           |
| 15      | 11    | 10     | 0           | 0.0909 | 0     | 2    | 26     | 26     | 1.61538 | 1.61538 | 0           |
| 16      | 9     | 8      | 0           | 0.1111 | 0     | 1    | 8      | 8      | 1       | 1       | 1.798       |
| 17      | 8     | 7      | 0           | 0.125  | 0     | 1    | 7      | 7      | 1       | 1       | 3.183       |
| 18      | 13    | 13     | 0           | 0.0833 | 0     | 1    | 13     | 13     | 1       | 1       | 3.364       |
| 19      | 10    | 9      | 0           | 0.1    | 0     | 1    | 9      | 9      | 1       | 1       | 0           |
| 20      | 53    | 52     | 0           | 0.0189 | 0     | 1    | 52     | 52     | 1       | 1       | 0           |
| 21      | 10    | 9      | 0           | 0.1    | 0     | 1    | 9      | 9      | 1       | 1       | 3.325       |
| 22      | 15    | 14     | 0           | 0.0667 | 0     | 1    | 14     | 14     | 1       | 1       | 3.759       |
| 23      | 14    | 13     | 0           | 0.0714 | 0     | 1    | 13     | 13     | 1       | 1       | 0           |
| 24      | 15    | 14     | 0           | 0.0667 | 0     | 1    | 14     | 14     | 1       | 1       | 2.76        |
| 25      | 19    | 18     | 0           | 0.0526 | 0     | 3    | 31     | 31     | 1.54839 | 1.54839 | 3.583       |
| 26      | 1213  | 1370   | 0.28037383  | 0.0009 | 1E-05 | 5    | 7E+07  | 251628 | 4.44661 | 2.02636 | 1.407       |
| 27      | 77    | 77     | 0           | 0.0132 | 0     | 2    | 479    | 479    | 1.83925 | 1.83925 | 1.678       |
| 28      | 79    | 78     | 0           | 0.0127 | 0     | 1    | 78     | 78     | 1       | 1       | 0           |
| 29      | 133   | 132    | 0           | 0.0075 | 0     | 1    | 132    | 132    | 1       | 1       | 0           |
| 30      | 147   | 146    | 0           | 0.0068 | 0     | 1    | 146    | 146    | 1       | 1       | 0           |
| 31      | 153   | 152    | 0           | 0.0065 | 0     | 1    | 152    | 152    | 1       | 1       | 0           |
| 32      | 13    | 12     | 0           | 0.0769 | 0     | 1    | 12     | 12     | 1       | 1       | 2.995       |
| 33      | 190   | 189    | 0           | 0.0053 | 0     | 1    | 189    | 189    | 1       | 1       | 0           |
| 34      | 16    | 17     | 0           | 0.0708 | 0     | 1    | 17     | 17     | 1       | 1       | 1.721       |
| 35      | 15    | 14     | 0           | 0.0667 | 0     | 1    | 14     | 14     | 1       | 1       | 2.76        |
| 36      | 192   | 191    | 0           | 0.0052 | 0     | 2    | 379    | 379    | 1.49604 | 1.49604 | 2.356       |
| 37      | 181   | 180    | 0           | 0.0055 | 0     | 2    | 358    | 358    | 1.49721 | 1.49721 | 1.245       |
| 38      | 429   | 430    | 0           | 0.0023 | 0     | 2    | 853    | 853    | 1.4959  | 1.4959  | 1.392       |
| 39      | 18    | 17     | 0           | 0.0556 | 0     | 1    | 17     | 17     | 1       | 1       | 2.259       |
| 40      | 12    | 11     | 0           | 0.0833 | 0     | 1    | 11     | 11     | 1       | 1       | 0           |
| 41      | 14    | 13     | 0           | 0.0714 | 0     | 1    | 13     | 13     | 1       | 1       | 0           |
| 42      | 11    | 10     | 0           | 0.0909 | 0     | 1    | 10     | 10     | 1       | 1       | 2.443       |

|    |     |     |            |        |   |   |     |     |         |         |       |
|----|-----|-----|------------|--------|---|---|-----|-----|---------|---------|-------|
| 43 | 55  | 56  | 0.07692308 | 0.0189 | 0 | 2 | 162 | 162 | 1.65432 | 1.65432 | 0     |
| 44 | 8   | 7   | 0          | 0.125  | 0 | 2 | 12  | 12  | 1.41667 | 1.41667 | 1.972 |
| 45 | 21  | 20  | 0          | 0.0476 | 0 | 2 | 21  | 21  | 1.04762 | 1.04762 | 1.869 |
| 46 | 12  | 11  | 0          | 0.0833 | 0 | 1 | 11  | 11  | 1       | 1       | 2.809 |
| 47 | 7   | 6   | 0          | 0.1429 | 0 | 1 | 6   | 6   | 1       | 1       | 2.091 |
| 48 | 22  | 21  | 0          | 0.0455 | 0 | 1 | 21  | 21  | 1       | 1       | 0     |
| 49 | 100 | 109 | 0.01869159 | 0.011  | 0 | 2 | 473 | 463 | 1.76956 | 1.76458 | 1.583 |
| 50 | 16  | 15  | 0          | 0.0625 | 0 | 2 | 29  | 29  | 1.48276 | 1.48276 | 0     |
| 51 | 37  | 36  | 0          | 0.027  | 0 | 2 | 71  | 71  | 1.49296 | 1.49296 | 0     |
| 52 | 12  | 11  | 0          | 0.0833 | 0 | 1 | 11  | 11  | 1       | 1       | 2.33  |
| 53 | 22  | 21  | 0          | 0.0455 | 0 | 1 | 21  | 21  | 1       | 1       | 1.944 |
| 54 | 17  | 16  | 0          | 0.0588 | 0 | 1 | 16  | 16  | 1       | 1       | 2.365 |
| 55 | 19  | 18  | 0          | 0.0526 | 0 | 2 | 35  | 35  | 1.48571 | 1.48571 | 0     |
| 56 | 13  | 12  | 0          | 0.0769 | 0 | 1 | 12  | 12  | 1       | 1       | 2.243 |
| 57 | 7   | 6   | 0          | 0.1429 | 0 | 1 | 6   | 6   | 1       | 1       | 3.885 |
| 58 | 16  | 15  | 0          | 0.0625 | 0 | 1 | 15  | 15  | 1       | 1       | 2.239 |
| 59 | 10  | 9   | 0          | 0.1    | 0 | 1 | 9   | 9   | 1       | 1       | 2.596 |
| 60 | 11  | 10  | 0          | 0.0909 | 0 | 1 | 10  | 10  | 1       | 1       | 2.02  |
| 61 | 13  | 12  | 0          | 0.0769 | 0 | 1 | 12  | 12  | 1       | 1       | 2.995 |
| 62 | 10  | 9   | 0          | 0.1    | 0 | 1 | 9   | 9   | 1       | 1       | 0     |
| 63 | 9   | 8   | 0          | 0.1111 | 0 | 1 | 8   | 8   | 1       | 1       | 2.513 |
| 64 | 12  | 11  | 0          | 0.0833 | 0 | 1 | 11  | 11  | 1       | 1       | 3.36  |
| 65 | 136 | 139 | 0.01459854 | 0.0076 | 0 | 2 | 255 | 251 | 1.4549  | 1.44622 | 1.714 |
| 66 | 13  | 12  | 0          | 0.0769 | 0 | 1 | 12  | 12  | 1       | 1       | 2.674 |
| 67 | 7   | 6   | 0          | 0.1429 | 0 | 1 | 6   | 6   | 1       | 1       | 3.885 |
| 68 | 8   | 7   | 0          | 0.125  | 0 | 1 | 7   | 7   | 1       | 1       | 3.183 |
| 69 | 8   | 7   | 0          | 0.125  | 0 | 1 | 7   | 7   | 1       | 1       | 2.82  |
| 70 | 11  | 10  | 0          | 0.0909 | 0 | 1 | 10  | 10  | 1       | 1       | 0     |
| 71 | 7   | 6   | 0          | 0.1429 | 0 | 1 | 6   | 6   | 1       | 1       | 0     |
| 72 | 23  | 22  | 0          | 0.0435 | 0 | 1 | 22  | 22  | 1       | 1       | 0     |
| 73 | 26  | 25  | 0          | 0.0385 | 0 | 1 | 25  | 25  | 1       | 1       | 0     |
| 74 | 10  | 9   | 0          | 0.1    | 0 | 1 | 9   | 9   | 1       | 1       | 2.596 |
| 75 | 9   | 8   | 0          | 0.1111 | 0 | 1 | 8   | 8   | 1       | 1       | 2.82  |
| 76 | 13  | 12  | 0          | 0.0769 | 0 | 1 | 12  | 12  | 1       | 1       | 2.674 |
| 77 | 20  | 19  | 0          | 0.05   | 0 | 1 | 19  | 19  | 1       | 1       | 0     |
| 78 | 15  | 14  | 0          | 0.0667 | 0 | 3 | 63  | 63  | 1.87302 | 1.87302 | 0     |
| 79 | 11  | 10  | 0          | 0.0909 | 0 | 1 | 10  | 10  | 1       | 1       | 2.443 |
| 80 | 9   | 8   | 0          | 0.1111 | 0 | 1 | 8   | 8   | 1       | 1       | 2.443 |
| 81 | 8   | 7   | 0          | 0.125  | 0 | 1 | 7   | 7   | 1       | 1       | 3.183 |
| 82 | 14  | 16  | 0          | 0.0879 | 0 | 1 | 16  | 16  | 1       | 1       | 1.91  |
| 83 | 46  | 45  | 0          | 0.0217 | 0 | 1 | 45  | 45  | 1       | 1       | 0     |
| 84 | 10  | 9   | 0          | 0.1    | 0 | 1 | 9   | 9   | 1       | 1       | 2.596 |
| 85 | 18  | 17  | 0          | 0.0556 | 0 | 1 | 17  | 17  | 1       | 1       | 2.145 |
| 86 | 14  | 13  | 0          | 0.0714 | 0 | 1 | 13  | 13  | 1       | 1       | 2.571 |
| 87 | 14  | 13  | 0          | 0.0714 | 0 | 1 | 13  | 13  | 1       | 1       | 3.616 |
| 88 | 16  | 15  | 0          | 0.0625 | 0 | 1 | 15  | 15  | 1       | 1       | 1.792 |
| 89 | 16  | 15  | 0          | 0.0625 | 0 | 1 | 15  | 15  | 1       | 1       | 2.422 |

|    |    |    |   |        |   |   |    |    |   |   |       |
|----|----|----|---|--------|---|---|----|----|---|---|-------|
| 90 | 8  | 7  | 0 | 0.125  | 0 | 1 | 7  | 7  | 1 | 1 | 0     |
| 91 | 13 | 12 | 0 | 0.0769 | 0 | 1 | 12 | 12 | 1 | 1 | 1.587 |

| PL_TSpd |       |        |        |        | PL_EVC | EVCd_T | EVCd_TS |
|---------|-------|--------|--------|--------|--------|--------|---------|
| N       | S_d   | R_d    | SMSP_d | ECd    | dN     | pdN    | pdN     |
| 2.5763  | 0.679 | 1      | 0      | 0.6367 | 0      | 0      | 0       |
| 3.4663  | 0.737 | 1      | 0      | 0.6464 | 0      | 0      | 0       |
| 3.63289 | 0.411 | 0.742  | 0      | 0.6052 | 0      | 0      | 0       |
| 3.32486 | 0.488 | 0.964  | 0      | 0.6321 | 0      | 0      | 0       |
| 2.48891 | 0.285 | 0.404  | 0      | 0.6134 | 0      | 0      | 0       |
| 3.16404 | 0.346 | 0.562  | 0      | 0.6508 | 0      | 0.6252 | 0.62517 |
| 2.4427  | 0.442 | 0.833  | 0      | 0.6336 | 0      | 0      | 0.55425 |
| 2.75979 | 0.234 | 0.271  | 0      | 0.6336 | 0      | 0.6556 | 0.65558 |
| 2.99458 | 0.299 | 0.439  | 0      | 0.6201 | 0      | 0      | 0       |
| 2.09136 | 0.381 | 0.653  | 0      | 0.6238 | 1.0313 | 0.7158 | 0.68592 |
| 1.66486 | 0.247 | 0.28   | 0      | 0.6581 | 0      | 0.6553 | 0.65527 |
| 3.23244 | 0.226 | 0.258  | 0      | 0.625  | 0      | 0.6576 | 0.6576  |
| 0       | 0.125 | -0.045 | 0      | 0.625  | 0      | 0.6847 | 0.68465 |
| 0       | 0.18  | 0.093  | 0      | 0.6508 | 0      | 0.6742 | 0.6742  |
| 0       | 0.198 | 0.138  | 0      | 0.5244 | 0      | 0      | 0       |
| 1.79824 | 0.324 | 0.487  | 0      | 0.6768 | 0      | 0      | 0       |
| 3.18271 | 0.534 | 1      | 0      | 0.689  | 0      | 0      | 0       |
| 3.36445 | 0.285 | 0.398  | 0      | 0.6443 | 0      | 0.6342 | 0.63415 |
| 0       | 0.22  | 0.193  | 0      | 0.6667 | 0      | 0.6667 | 0.66667 |
| 0       | 0.038 | -0.247 | 0      | 0.5693 | 0      | 0.7003 | 0.70027 |
| 3.32486 | 0.488 | 0.964  | 0      | 0.6321 | 0      | 0      | 0       |
| 3.75853 | 0.284 | 0.407  | 0      | 0.6134 | 0      | 0      | 0       |
| 0       | 0.153 | 0.025  | 0      | 0.6387 | 0      | 0.6794 | 0.67937 |
| 2.75979 | 0.234 | 0.271  | 0      | 0.6336 | 0      | 0.6556 | 0.65558 |
| 3.58329 | 0.268 | 0.346  | 0      | 0.6179 | 0      | 0      | 0       |
| 2.5287  | 0.002 | -0.315 | 0.0203 | 0.4874 | 1.4037 | 0.8696 | 0.584   |
| 1.67824 | 0.029 | -0.248 | 0      | 0.5466 | 0      | 0.6148 | 0.61478 |
| 0       | 0.026 | -0.276 | 0      | 0.5566 | 0      | 0.7026 | 0.70256 |
| 0       | 0.015 | -0.299 | 0      | 0.5435 | 0      | 0.7044 | 0.70442 |
| 0       | 0.014 | -0.303 | 0      | 0.5414 | 0      | 0.7047 | 0.70468 |
| 0       | 0.013 | -0.304 | 0      | 0.5406 | 0      | 0.7048 | 0.70478 |
| 2.99458 | 0.299 | 0.439  | 0      | 0.6443 | 0      | 0.6384 | 0.63837 |
| 0       | 0.011 | -0.31  | 0      | 0.5364 | 0      | 0.7052 | 0.70523 |
| 1.72135 | 0.251 | 0.317  | 0      | 0.6105 | 0      | 0      | 0       |
| 2.75979 | 0.234 | 0.271  | 0      | 0.6336 | 0      | 0.6556 | 0.65558 |
| 2.35648 | 0.011 | -0.305 | 0      | 0.5003 | 1.3819 | 0.6489 | 0.64887 |
| 1.24457 | 0.011 | -0.306 | 0      | 0.5002 | 0      | 0.6442 | 0.64419 |
| 1.39236 | 0.005 | -0.317 | 0      | 0.5242 | 0      | 0.4988 | 0.49883 |
| 2.25863 | 0.488 | 0.966  | 0      | 0.6213 | 0      | 0      | 0       |
| 0       | 0.18  | 0.093  | 0      | 0.6508 | 0      | 0.6742 | 0.6742  |
| 0       | 0.153 | 0.025  | 0      | 0.6387 | 0      | 0.6794 | 0.67937 |
| 2.4427  | 0.313 | 0.468  | 0      | 0.6581 | 0      | 0.6347 | 0.63474 |

|         |       |        |   |        |        |        |         |
|---------|-------|--------|---|--------|--------|--------|---------|
| 0       | 0.037 | -0.247 | 0 | 0.4632 | 0      | 0.4747 | 0.47472 |
| 1.97176 | 0.383 | 0.65   | 0 | 0.547  | 0      | 0      | 0       |
| 1.86859 | 0.111 | -0.063 | 0 | 0.6118 | 0      | 0.6834 | 0.68337 |
| 2.80916 | 0.442 | 0.829  | 0 | 0.6508 | 0      | 0.5785 | 0.57849 |
| 2.09136 | 0.464 | 0.889  | 0 | 0.7041 | 0      | 0      | 0       |
| 0       | 0.095 | -0.115 | 0 | 0.6091 | 0      | 0.6901 | 0.69007 |
| 1.58838 | 0.027 | -0.227 | 0 | 0.2438 | 1.0279 | 0.9585 | 0.96293 |
| 0       | 0.133 | -0.025 | 0 | 0.6291 | 0      | 0      | 0       |
| 0       | 0.056 | -0.208 | 0 | 0.5833 | 0      | 0.4714 | 0.47143 |
| 2.32972 | 0.273 | 0.362  | 0 | 0.6238 | 0      | 0      | 0       |
| 1.94397 | 0.267 | 0.348  | 0 | 0.6091 | 0      | 0.549  | 0.54904 |
| 2.36536 | 0.226 | 0.255  | 0 | 0.625  | 0      | 0.6518 | 0.65179 |
| 0       | 0.111 | -0.078 | 0 | 0.6179 | 0      | 0      | 0       |
| 2.24267 | 0.242 | 0.28   | 0 | 0.6443 | 0      | 0.6544 | 0.65438 |
| 3.88539 | 0.667 | 1.545  | 0 | 0.6458 | 0      | 0      | 0       |
| 2.23948 | 0.361 | 0.602  | 0 | 0.5551 | 2.0278 | 0.6163 | 0.61632 |
| 2.59647 | 0.366 | 0.611  | 0 | 0.6667 | 0      | 0      | 0       |
| 2.01955 | 0.314 | 0.463  | 0 | 0.6581 | 0      | 0.6207 | 0.62067 |
| 2.99458 | 0.299 | 0.439  | 0 | 0.6443 | 0      | 0.6384 | 0.63837 |
| 0       | 0.667 | 1.551  | 0 | 0.5833 | 2.4427 | 0.7483 | 0.74835 |
| 2.51314 | 0.578 | 1.246  | 0 | 0.6768 | 0      | 0      | 0       |
| 3.36045 | 0.438 | 0.818  | 0 | 0.6508 | 0      | 0      | 0       |
| 1.64987 | 0.02  | -0.22  | 0 | 0.5506 | 1.0513 | 0.5373 | 0.53037 |
| 2.67433 | 0.376 | 0.646  | 0 | 0.6443 | 0      | 0.6036 | 0.60359 |
| 3.88539 | 0.667 | 1.545  | 0 | 0.7041 | 0      | 0      | 0       |
| 3.18271 | 0.534 | 1.106  | 0 | 0.6414 | 0      | 0      | 0       |
| 2.82048 | 0.692 | 1.638  | 0 | 0.6049 | 0      | 0      | 0       |
| 0       | 0.198 | 0.138  | 0 | 0.6581 | 0      | 0.6708 | 0.67082 |
| 0       | 0.324 | 0.475  | 0 | 0.7041 | 0      | 0      | 0       |
| 0       | 0.091 | -0.125 | 0 | 0.6066 | 0      | 0.6908 | 0.69085 |
| 0       | 0.08  | -0.151 | 0 | 0.6    | 0      | 0.6928 | 0.69282 |
| 2.59647 | 0.366 | 0.611  | 0 | 0.6667 | 0      | 0      | 0       |
| 2.82048 | 0.437 | 0.812  | 0 | 0.6768 | 0      | 0      | 0       |
| 2.67433 | 0.376 | 0.646  | 0 | 0.6443 | 0      | 0.6036 | 0.60359 |
| 0       | 0.23  | 0.274  | 0 | 0.6006 | 0      | 0.4731 | 0.47314 |
| 0       | 0.166 | 0.074  | 0 | 0.563  | 0      | 0      | 0       |
| 2.4427  | 0.313 | 0.468  | 0 | 0.6581 | 0      | 0.6347 | 0.63474 |
| 2.4427  | 0.432 | 0.795  | 0 | 0.6768 | 0      | 0      | 0       |
| 3.18271 | 0.534 | 1.106  | 0 | 0.689  | 0      | 0      | 0       |
| 1.91024 | 0.277 | 0.374  | 0 | 0.6387 | 0      | 0.6114 | 0.61141 |
| 0       | 0.044 | -0.233 | 0 | 0.5745 | 0      | 0.6992 | 0.69921 |
| 2.59647 | 0.366 | 0.611  | 0 | 0.6667 | 0      | 0      | 0       |
| 2.14458 | 0.284 | 0.401  | 0 | 0.6213 | 0      | 0.6053 | 0.60534 |
| 2.57106 | 0.325 | 0.509  | 0 | 0.6387 | 0      | 0      | 0       |
| 3.61579 | 0.325 | 0.513  | 0 | 0.6387 | 0      | 0.6319 | 0.63193 |
| 1.79185 | 0.3   | 0.435  | 0 | 0.6291 | 0      | 0.5918 | 0.59184 |
| 2.42166 | 0.253 | 0.321  | 0 | 0.6291 | 0      | 0.6441 | 0.64409 |

|        |       |       |   |        |   |        |         |
|--------|-------|-------|---|--------|---|--------|---------|
| 0      | 0.28  | 0.353 | 0 | 0.689  | 0 | 0      | 0       |
| 1.5866 | 0.199 | 0.156 | 0 | 0.6443 | 0 | 0.6669 | 0.66692 |