| Unit | Image | Distance between chosen node and center node (m) | Cc(node) 1/km | Average distance all nodes to chosen node | Average edges length | Total nodes number | Normalized Centrality 1/km | std | Percentage Deviation CN(v) | Percentage Deviation std | Percentage Deviation edges length |
|------------------|--|--|---------------|---|-------------------------|-----------------------|-------------------------------|------------|----------------------------|--------------------------|-----------------------------------|
| Catchment area 1 | J. FILLY II. | 0 | 0.000999 | 997.837488 | 71.500000 | 1003 | 1.002167 | 445.434300 | 100.000000 | 100.000000 | 100.000000 |
| | | | | | | | | | | | |
| Catchment area 2 | V FIET 19 | 50 | 0.000989 | 1002.344896 | 71.228276 | 1009 | 0.997661 | 448.671811 | 99.550314 | 100.726821 | 99.619966 |
| | | | | | | | | | | | |
| Catchment area 3 | V FUTTER | 100 | 0.000995 | 1000.055721 | 71.402624 | 1005 | 0.999944 | 448.205327 | 99.778189 | 100.622096 | 99.863810 |
| | | | | | | | | | | | |
| Catchment area 4 | Y FAIT IN | 200 | 0.000988 | 1004.625621 | 71.626117 | 1007 | 0.995396 | 451.891057 | 99.324312 | 101.449542 | 100.176387 |
| | | 200 | 0.00000 | 1010 (0050 | 71.215501 | 1005 | 0.000504 | 462.050000 | 00.407071 | 100 775007 | 00.7400.1 |
| Catchment area 5 | TENED THE | 300 | 0.000982 | 1013.680597 | 71.315681 | 1005 | 0.986504 | 462.250903 | 98.437071 | 103.775327 | 99.742211 |
| Catchment area 6 | | 500 | 0.000944 | 1048.883168 | 72.206589 | 1010 | 0.052205 | 494.827587 | 95.133330 | 111.088793 | 100.988236 |
| Catchment area 6 | The state of the s | 500 | 0.000944 | 1048.883168 | /2.206589 | 1010 | 0.953395 | 494.827587 | 95.133330 | 111.088793 | 100.988236 |
| | | | | | | | | | | | |
| Catchment area 7 | Jan | 1000 | 0.000804 | 1200.124517 | 72.627845 | 1036 | 0.833247 | 607.619398 | 83.144497 | 136.410554 | 101.577405 |
| | | | | | | | | | | | |
| Catchment area 8 | A TOTAL TOTAL | 1500 | 0.000714 | 1397.797405 | 74.703961 | 1002 | 0.715411 | 701.524078 | 71.386417 | 157.492155 | 104.481064 |
| | | | | | | | | | | | |

Table 1: Catchment areas 1 Piazza Malpighi with different center nodes and indicator values of (red) node under investigation in the selected catchment areas.

| Unit | Image | Distance between chosen node and center node (m) | Cc(node) 1/km | Average distance all nodes to chosen node | Average edges length | Total nodes number | Normalized Centrality 1/km | std | Percentage Deviation CN(v) | Percentage Deviation std | Percentage Deviation edges length |
|--------|-------|--|---------------|---|----------------------|-----------------------|-------------------------------|------------|----------------------------|--------------------------|-----------------------------------|
| area 1 | | 0 | 0.001003 | 976.285015 | 73.011580 | 1021 | 1.024291 | 494.536764 | 100.000000 | 100.000000 | 100.000000 |
| area 2 | | 50 | 0.001016 | 973.031621 | 73.078929 | 1012 | 1.027716 | 496.538991 | 100.334356 | 100.404869 | 100.092244 |
| area 3 | | 100 | 0.001005 | 980.006897 | 73.777930 | 1015 | 1.020401 | 504.686516 | 99.620219 | 102.052376 | 101.049628 |
| area 4 | | 200 | 0.001021 | 978.080919 | 73.615972 | 1001 | 1.022410 | 509.364455 | 99.816385 | 102.998299 | 100.827803 |
| area 5 | | 300 | 0.000987 | 997.071850 | 74.123448 | 1016 | 1.002937 | 522.010576 | 97.915212 | 105.555464 | 101.522865 |
| area 6 | | 500 | 0.000997 | 1009.347082 | 74.900844 | 994 | 0.990739 | 539.590963 | 96.724410 | 109.110384 | 102.587622 |
| area 7 | | 1000 | 0.000940 | 1162.946448 | 78.097918 | 915 | 0.859885 | 653.068820 | 83.949267 | 132.056677 | 106.966481 |
| area 8 | | 1500 | 0.000759 | 1557.879433 | 85.046769 | 846 | 0.641898 | 716.355924 | 62.667559 | 144.853927 | 116.483944 |

Table 2: Catchment areas 2 Due Torri - Piazza di Porta Ravegnana with different center nodes and indicator values of (blue) node under investigation in the selected catchment areas.

| Unit | Image | Distance between chosen node and center node (m) | Cc(node) 1/km | Average distance all nodes to chosen node | Average edges length | Total nodes number | Normalized Centrality 1/km | std | Percentage Deviation CN(v) | Percentage Deviation std | Percentage Deviation edges length |
|------------------|---------------|--|---------------|---|-------------------------|-----------------------|-------------------------------|------------|----------------------------|--------------------------|-----------------------------------|
| Catchment area 1 | | 0 | 0.001051 | 1221.731707 | 79.414612 | 779 | 0.818510 | 443.240409 | 100.000000 | 100.000000 | 100.000000 |
| | | | | | | | | | | | |
| Catchment area 2 | | 50 | 0.001065 | 1217.329442 | 80.100368 | 771 | 0.821470 | 441.667534 | 100.361633 | 99.645142 | 100.863514 |
| | | | | | | | | | | | |
| Catchment area 3 | | 100 | 0.001052 | 1224.673969 | 80.318894 | 776 | 0.816544 | 446.604123 | 99.759751 | 100.758892 | 101.138685 |
| | | | | | | | | | | | |
| Catchment area 4 | | 200 | 0.001036 | 1240.622108 | 82.156481 | 778 | 0.806047 | 460.356932 | 98.477345 | 103.861679 | 103.452601 |
| | | | | | | | | | | | |
| Catchment area 5 | | 300 | 0.001045 | 1247.907432 | 83.048780 | 767 | 0.801341 | 469.587542 | 97.902431 | 105.944208 | 104.576196 |
| | | | | | | | | | | | |
| Catchment area 6 | | 500 | 0.000997 | 1314.180865 | 85.664129 | 763 | 0.760930 | 538.340576 | 92.965264 | 121.455663 | 107.869481 |
| | | | | | | | | | | | |
| Catchment area 7 | | 1000 | 0.000884 | 1496.730159 | 86.293189 | 756 | 0.668123 | 609.804827 | 81.626718 | 137.578798 | 108.661601 |
| | | | | | | | | | | | |
| Catchment area 8 | Will the same | 1500 | 0.000736 | 1717.620733 | 85.152445 | 791 | 0.582201 | 654.629462 | 71.129306 | 147.691738 | 107.225160 |
| | | | | | | | | | | | |

Table 3: Catchment areas 3 Porta Santo Stefano with different center nodes and indicator values of (green) node under investigation in the selected catchment areas.

| Unit | Image | Distance between chosen node and center node (m) | Cc(node) 1/km | Average distance all nodes to chosen node | Average edges length | Total nodes number | Normalized Centrality 1/km | std | Percentage Deviation CN(v) | Percentage Deviation std | Percentage Deviation edges length |
|------------------|--------------|--|---------------|---|-------------------------|-----------------------|-------------------------------|------------|----------------------------|--------------------------|-----------------------------------|
| Catchment area 1 | 52.40. 11 HZ | 0 | 0.001305 | 1532.396000 | 97.324873 | 500 | 0.652573 | 527.801325 | 100.000000 | 100.000000 | 100.000000 |
| Catchment area 2 | | 50 | 0.001269 | 1541.671233 | 97.379139 | 511 | 0.649647 | 527.931307 | 99.398365 | 100.024627 | 100.055758 |
| Catchment area 2 | | 30 | 0.001269 | 1341.0/1233 | 91.3/9139 | 311 | 0.048047 | 327.931307 | 99.396303 | 100.024027 | 100.055/58 |
| Catchment area 3 | | 100 | 0.001265 | 1526.451737 | 98.031046 | 518 | 0.655114 | 509.827865 | 100.389417 | 96.594654 | 100.725583 |
| Catchment area 4 | | 200 | 0.001251 | 1528.592734 | 97.599354 | 523 | 0.654196 | 511.674950 | 100.248808 | 96.944613 | 100.282025 |
| Catchment area 5 | | 300 | 0.001224 | 1529.756554 | 92.696682 | 534 | 0.653699 | 506.532370 | 100.172540 | 95.970272 | 95.244596 |
| Catchment area 6 | | 500 | 0.001252 | 1530.350575 | 95.724026 | 522 | 0.653445 | 512.077473 | 100.133657 | 97.0 <u>2</u> 0877 | 98.355151 |
| Catchment area 7 | | 1000 | 0.001240 | 1593.557312 | 94.192496 | 506 | 0.627527 | 512.398323 | 96.161963 | 97.081667 | 96.781525 |
| Catchment area 8 | | 1500 | 0.000966 | 2175.235294 | 99.737391 | 476 | 0.459720 | 706.486435 | 70.447367 | 133.854616 | 102.478830 |

Table 4: Catchment areas 4 West suburb Borgo Panigale with different center nodes and indicator values of (green) node under investigation in the selected catchment areas.

| Unit | Image | Distance between chosen node and center node (m) | Cc(node) 1/km | Average distance all nodes to chosen node | Average edges length | Total nodes number | Normalized Centrality 1/km | std | Percentage Deviation CN(v) | Percentage Deviation std | Percentage Deviation edges length |
|------------------|-------|--|---------------|---|-------------------------|-----------------------|-------------------------------|------------|----------------------------|--------------------------|--------------------------------------|
| Catchment area 1 | | 0 | 0.001293 | 1303.937605 | 87.607643 | 593 | 0.766908 | 509.639334 | 100.000000 | 100.000000 | 100.000000 |
| | | | | | | | | | | | |
| Catchment area 2 | | 50 | 0.001250 | 1320.531353 | 87.160891 | 606 | 0.757271 | 516.187603 | 98.743404 | 101.284883 | 99.490053 |
| Catchment area 3 | | 100 | 0.001215 | 1335.597403 | 87.331311 | 616 | 0.748729 | 524.563331 | 97.629540 | 102.928345 | 99.684579 |
| Catchment area 4 | | 200 | 0.001124 | 1381.655280 | 86.929234 | 644 | 0.723770 | 552.525719 | 94.375032 | 108.415046 | 99.225628 |
| Catchment area 5 | | 300 | 0.001098 | 1403.770416 | 86.777019 | 649 | 0.712367 | 570.344884 | 92.888238 | 111.911473 | 99.051882 |
| Catchment area 6 | | 500 | 0.001008 | 1466.872781 | 87.389130 | 676 | 0.681722 | 612.791610 | 88.892344 | 120.240250 | 99.750578 |
| Catchment area 7 | | 1000 | 0.000848 | 1666.334746 | 88.579167 | 708 | 0.600120 | 737.251153 | 78.251840 | 144.661352 | 101.108948 |
| Catchment area 8 | | 1500 | 0.000579 | 2201.450955 | 85.674352 | 785 | 0.454246 | 950.939254 | 59.230827 | 186.590632 | 97.793239 |

Table 5: Catchment areas 5 South suburb Savena with different center nodes and indicator values of (green) node under investigation in the selected catchment areas.