

Autobound EDGE - Compactness Report

Plan Name: State Senate:052124_SD_EW3

[For more information on compactness calculations Click Here](#)



Compactness measure: Polsby-Popper

| District | District Area (SQM) | Perimeter (Miles) | Area of Circle with Same Perimeter | Perimeter of Circle with Same Area | Compactness Value |
|----------|---------------------|-------------------|------------------------------------|------------------------------------|-------------------|
| 1 | 66 | 59 | 281 | 29 | 0.23 |
| 2 | 53 | 43 | 145 | 26 | 0.37 |
| 3 | 57 | 47 | 178 | 27 | 0.32 |
| 4 | 221 | 96 | 736 | 53 | 0.30 |
| 5 | 113 | 60 | 285 | 38 | 0.40 |
| 6 | 83 | 44 | 157 | 32 | 0.53 |
| 7 | 46 | 41 | 133 | 24 | 0.35 |
| 8 | 117 | 57 | 255 | 38 | 0.46 |
| 9 | 95 | 50 | 196 | 35 | 0.49 |
| 10 | 60 | 41 | 136 | 28 | 0.45 |
| 11 | 80 | 48 | 180 | 32 | 0.45 |
| 12 | 306 | 89 | 629 | 62 | 0.49 |
| 13 | 132 | 65 | 333 | 41 | 0.39 |
| 14 | 966 | 165 | 2,158 | 110 | 0.45 |
| 15 | 406 | 122 | 1,186 | 71 | 0.34 |
| 16 | 1,797 | 223 | 3,954 | 150 | 0.45 |
| 17 | 3,507 | 419 | 13,972 | 210 | 0.25 |
| 18 | 1,589 | 244 | 4,740 | 141 | 0.34 |
| 19 | 543 | 108 | 924 | 83 | 0.59 |
| 20 | 1,890 | 318 | 8,068 | 154 | 0.23 |
| 21 | 887 | 134 | 1,426 | 106 | 0.62 |
| 22 | 874 | 133 | 1,416 | 105 | 0.62 |
| 23 | 309 | 92 | 677 | 62 | 0.46 |
| 24 | 547 | 124 | 1,223 | 83 | 0.45 |
| 25 | 5,020 | 353 | 9,894 | 251 | 0.51 |
| 26 | 1,701 | 269 | 5,763 | 146 | 0.30 |
| 27 | 288 | 84 | 555 | 60 | 0.52 |
| 28 | 1,119 | 169 | 2,266 | 119 | 0.49 |
| 29 | 77 | 41 | 133 | 31 | 0.58 |
| 30 | 360 | 112 | 994 | 67 | 0.36 |
| 31 | 2,499 | 227 | 4,100 | 177 | 0.61 |
| 32 | 5,788 | 347 | 9,573 | 270 | 0.60 |
| 33 | 2,924 | 333 | 8,827 | 192 | 0.33 |
| 34 | 4,334 | 354 | 9,974 | 233 | 0.43 |
| 35 | 767 | 137 | 1,502 | 98 | 0.51 |
| 36 | 14,061 | 615 | 30,128 | 420 | 0.47 |
| 37 | 9,836 | 613 | 29,891 | 352 | 0.33 |
| 38 | 33,196 | 943 | 70,771 | 646 | 0.47 |

Most Compact: 0.62 For District: 22

Least Compact: 0.23 For District: 1

Compactness measure: Schwartzberg

Autobound EDGE - Compactness Report



Plan Name: State Senate:052124_SD_EW3

[For more information on compactness calculations Click Here](#)

| District | District Area (SQM) | Perimeter (Miles) | Area of Circle with Same Perimeter | Perimeter of Circle with Same Area | Compactness Value |
|----------|---------------------|-------------------|------------------------------------|------------------------------------|-------------------|
| 1 | 66 | 59 | 281 | 29 | 0.48 |
| 2 | 53 | 43 | 145 | 26 | 0.61 |
| 3 | 57 | 47 | 178 | 27 | 0.56 |
| 4 | 221 | 96 | 736 | 53 | 0.55 |
| 5 | 113 | 60 | 285 | 38 | 0.63 |
| 6 | 83 | 44 | 157 | 32 | 0.73 |
| 7 | 46 | 41 | 133 | 24 | 0.59 |
| 8 | 117 | 57 | 255 | 38 | 0.68 |
| 9 | 95 | 50 | 196 | 35 | 0.70 |
| 10 | 60 | 41 | 136 | 28 | 0.67 |
| 11 | 80 | 48 | 180 | 32 | 0.67 |
| 12 | 306 | 89 | 629 | 62 | 0.70 |
| 13 | 132 | 65 | 333 | 41 | 0.63 |
| 14 | 966 | 165 | 2,158 | 110 | 0.67 |
| 15 | 406 | 122 | 1,186 | 71 | 0.59 |
| 16 | 1,797 | 223 | 3,954 | 150 | 0.67 |
| 17 | 3,507 | 419 | 13,972 | 210 | 0.50 |
| 18 | 1,589 | 244 | 4,740 | 141 | 0.58 |
| 19 | 543 | 108 | 924 | 83 | 0.77 |
| 20 | 1,890 | 318 | 8,068 | 154 | 0.48 |
| 21 | 887 | 134 | 1,426 | 106 | 0.79 |
| 22 | 874 | 133 | 1,416 | 105 | 0.79 |
| 23 | 309 | 92 | 677 | 62 | 0.68 |
| 24 | 547 | 124 | 1,223 | 83 | 0.67 |
| 25 | 5,020 | 353 | 9,894 | 251 | 0.71 |
| 26 | 1,701 | 269 | 5,763 | 146 | 0.54 |
| 27 | 288 | 84 | 555 | 60 | 0.72 |
| 28 | 1,119 | 169 | 2,266 | 119 | 0.70 |
| 29 | 77 | 41 | 133 | 31 | 0.76 |
| 30 | 360 | 112 | 994 | 67 | 0.60 |
| 31 | 2,499 | 227 | 4,100 | 177 | 0.78 |
| 32 | 5,788 | 347 | 9,573 | 270 | 0.78 |
| 33 | 2,924 | 333 | 8,827 | 192 | 0.58 |
| 34 | 4,334 | 354 | 9,974 | 233 | 0.66 |
| 35 | 767 | 137 | 1,502 | 98 | 0.71 |
| 36 | 14,061 | 615 | 30,128 | 420 | 0.68 |
| 37 | 9,836 | 613 | 29,891 | 352 | 0.57 |
| 38 | 33,196 | 943 | 70,771 | 646 | 0.68 |

Most Compact: 0.79 For District: 22

Least Compact: 0.48 For District: 1

Compactness measure: Reock Score

| District | District Area (SQM) | Perimeter (Miles) | Area of Circle with Same Perimeter | Perimeter of Circle with Same Area | Compactness Value |
|----------|---------------------|-------------------|------------------------------------|------------------------------------|-------------------|
|----------|---------------------|-------------------|------------------------------------|------------------------------------|-------------------|

Autobound EDGE - Compactness Report

Plan Name: State Senate:052124_SD_EW3

[For more information on compactness calculations Click Here](#)



| | | | | | |
|----|--------|-----|--------|-----|------|
| 1 | 66 | 59 | 281 | 29 | 0.29 |
| 2 | 53 | 43 | 145 | 26 | 0.63 |
| 3 | 57 | 47 | 178 | 27 | 0.45 |
| 4 | 221 | 96 | 736 | 53 | 0.41 |
| 5 | 113 | 60 | 285 | 38 | 0.40 |
| 6 | 83 | 44 | 157 | 32 | 0.52 |
| 7 | 46 | 41 | 133 | 24 | 0.42 |
| 8 | 117 | 57 | 255 | 38 | 0.37 |
| 9 | 95 | 50 | 196 | 35 | 0.52 |
| 10 | 60 | 41 | 136 | 28 | 0.37 |
| 11 | 80 | 48 | 180 | 32 | 0.44 |
| 12 | 306 | 89 | 629 | 62 | 0.42 |
| 13 | 132 | 65 | 333 | 41 | 0.34 |
| 14 | 966 | 165 | 2,158 | 110 | 0.35 |
| 15 | 406 | 122 | 1,186 | 71 | 0.41 |
| 16 | 1,797 | 223 | 3,954 | 150 | 0.32 |
| 17 | 3,507 | 419 | 13,972 | 210 | 0.22 |
| 18 | 1,589 | 244 | 4,740 | 141 | 0.41 |
| 19 | 543 | 108 | 924 | 83 | 0.57 |
| 20 | 1,890 | 318 | 8,068 | 154 | 0.30 |
| 21 | 887 | 134 | 1,426 | 106 | 0.49 |
| 22 | 874 | 133 | 1,416 | 105 | 0.51 |
| 23 | 309 | 92 | 677 | 62 | 0.46 |
| 24 | 547 | 124 | 1,223 | 83 | 0.44 |
| 25 | 5,020 | 353 | 9,894 | 251 | 0.53 |
| 26 | 1,701 | 269 | 5,763 | 146 | 0.39 |
| 27 | 288 | 84 | 555 | 60 | 0.56 |
| 28 | 1,119 | 169 | 2,266 | 119 | 0.52 |
| 29 | 77 | 41 | 133 | 31 | 0.57 |
| 30 | 360 | 112 | 994 | 67 | 0.37 |
| 31 | 2,499 | 227 | 4,100 | 177 | 0.60 |
| 32 | 5,788 | 347 | 9,573 | 270 | 0.43 |
| 33 | 2,924 | 333 | 8,827 | 192 | 0.29 |
| 34 | 4,334 | 354 | 9,974 | 233 | 0.50 |
| 35 | 767 | 137 | 1,502 | 98 | 0.58 |
| 36 | 14,061 | 615 | 30,128 | 420 | 0.49 |
| 37 | 9,836 | 613 | 29,891 | 352 | 0.38 |
| 38 | 33,196 | 943 | 70,771 | 646 | 0.51 |

Most Compact: 0.63 For District: 2

Least Compact: 0.22 For District: 17

Compactness measure: Length-Width

| District | District Area (SQM) | Perimeter (Miles) | Area of Circle with Same Perimeter | Perimeter of Circle with Same Area | Compactness Value |
|----------|---------------------|-------------------|------------------------------------|------------------------------------|-------------------|
| 1 | 66 | 59 | 281 | 29 | 1.53 |
| 2 | 53 | 43 | 145 | 26 | 1.27 |

Autobound EDGE - Compactness Report

Plan Name: State Senate:052124_SD_EW3

[For more information on compactness calculations Click Here](#)



| | | | | | |
|----|--------|-----|--------|-----|------|
| 3 | 57 | 47 | 178 | 27 | 1.80 |
| 4 | 221 | 96 | 736 | 53 | 1.56 |
| 5 | 113 | 60 | 285 | 38 | 1.84 |
| 6 | 83 | 44 | 157 | 32 | 0.91 |
| 7 | 46 | 41 | 133 | 24 | 1.53 |
| 8 | 117 | 57 | 255 | 38 | 0.73 |
| 9 | 95 | 50 | 196 | 35 | 1.18 |
| 10 | 60 | 41 | 136 | 28 | 3.09 |
| 11 | 80 | 48 | 180 | 32 | 0.86 |
| 12 | 306 | 89 | 629 | 62 | 1.19 |
| 13 | 132 | 65 | 333 | 41 | 0.85 |
| 14 | 966 | 165 | 2,158 | 110 | 2.90 |
| 15 | 406 | 122 | 1,186 | 71 | 1.65 |
| 16 | 1,797 | 223 | 3,954 | 150 | 4.04 |
| 17 | 3,507 | 419 | 13,972 | 210 | 3.60 |
| 18 | 1,589 | 244 | 4,740 | 141 | 1.00 |
| 19 | 543 | 108 | 924 | 83 | 1.65 |
| 20 | 1,890 | 318 | 8,068 | 154 | 1.74 |
| 21 | 887 | 134 | 1,426 | 106 | 2.34 |
| 22 | 874 | 133 | 1,416 | 105 | 1.55 |
| 23 | 309 | 92 | 677 | 62 | 0.99 |
| 24 | 547 | 124 | 1,223 | 83 | 1.99 |
| 25 | 5,020 | 353 | 9,894 | 251 | 1.05 |
| 26 | 1,701 | 269 | 5,763 | 146 | 1.69 |
| 27 | 288 | 84 | 555 | 60 | 1.35 |
| 28 | 1,119 | 169 | 2,266 | 119 | 1.71 |
| 29 | 77 | 41 | 133 | 31 | 2.01 |
| 30 | 360 | 112 | 994 | 67 | 2.05 |
| 31 | 2,499 | 227 | 4,100 | 177 | 1.88 |
| 32 | 5,788 | 347 | 9,573 | 270 | 0.80 |
| 33 | 2,924 | 333 | 8,827 | 192 | 0.87 |
| 34 | 4,334 | 354 | 9,974 | 233 | 1.55 |
| 35 | 767 | 137 | 1,502 | 98 | 1.27 |
| 36 | 14,061 | 615 | 30,128 | 420 | 1.87 |
| 37 | 9,836 | 613 | 29,891 | 352 | 1.63 |
| 38 | 33,196 | 943 | 70,771 | 646 | 1.87 |

Most Compact: 4.04 For District: 16

Least Compact: 0.73 For District: 8

Compactness measure: Convex Hull

| District | District Area (SQM) | Perimeter (Miles) | Area of Circle with Same Perimeter | Perimeter of Circle with Same Area | Compactness Value |
|----------|---------------------|-------------------|------------------------------------|------------------------------------|-------------------|
| 1 | 66 | 59 | 281 | 29 | 0.61 |
| 2 | 53 | 43 | 145 | 26 | 0.81 |
| 3 | 57 | 47 | 178 | 27 | 0.73 |
| 4 | 221 | 96 | 736 | 53 | 0.66 |

Autobound EDGE - Compactness Report

Plan Name: State Senate:052124_SD_EW3

[For more information on compactness calculations Click Here](#)



| | | | | | |
|----|--------|-----|--------|-----|------|
| 5 | 113 | 60 | 285 | 38 | 0.77 |
| 6 | 83 | 44 | 157 | 32 | 0.89 |
| 7 | 46 | 41 | 133 | 24 | 0.66 |
| 8 | 117 | 57 | 255 | 38 | 0.82 |
| 9 | 95 | 50 | 196 | 35 | 0.82 |
| 10 | 60 | 41 | 136 | 28 | 0.85 |
| 11 | 80 | 48 | 180 | 32 | 0.82 |
| 12 | 306 | 89 | 629 | 62 | 0.86 |
| 13 | 132 | 65 | 333 | 41 | 0.75 |
| 14 | 966 | 165 | 2,158 | 110 | 0.91 |
| 15 | 406 | 122 | 1,186 | 71 | 0.77 |
| 16 | 1,797 | 223 | 3,954 | 150 | 0.94 |
| 17 | 3,507 | 419 | 13,972 | 210 | 0.64 |
| 18 | 1,589 | 244 | 4,740 | 141 | 0.71 |
| 19 | 543 | 108 | 924 | 83 | 0.86 |
| 20 | 1,890 | 318 | 8,068 | 154 | 0.62 |
| 21 | 887 | 134 | 1,426 | 106 | 0.96 |
| 22 | 874 | 133 | 1,416 | 105 | 0.89 |
| 23 | 309 | 92 | 677 | 62 | 0.86 |
| 24 | 547 | 124 | 1,223 | 83 | 0.81 |
| 25 | 5,020 | 353 | 9,894 | 251 | 0.87 |
| 26 | 1,701 | 269 | 5,763 | 146 | 0.70 |
| 27 | 288 | 84 | 555 | 60 | 0.95 |
| 28 | 1,119 | 169 | 2,266 | 119 | 0.83 |
| 29 | 77 | 41 | 133 | 31 | 0.93 |
| 30 | 360 | 112 | 994 | 67 | 0.74 |
| 31 | 2,499 | 227 | 4,100 | 177 | 0.90 |
| 32 | 5,788 | 347 | 9,573 | 270 | 0.91 |
| 33 | 2,924 | 333 | 8,827 | 192 | 0.70 |
| 34 | 4,334 | 354 | 9,974 | 233 | 0.78 |
| 35 | 767 | 137 | 1,502 | 98 | 0.80 |
| 36 | 14,061 | 615 | 30,128 | 420 | 0.79 |
| 37 | 9,836 | 613 | 29,891 | 352 | 0.76 |
| 38 | 33,196 | 943 | 70,771 | 646 | 0.87 |

Most Compact: 0.96 For District: 21

Least Compact: 0.61 For District: 1