

Data Storytelling

with Ann K. Emery

A decorative background graphic consisting of a line graph with two data series. The first series, in teal, starts at the bottom left and trends upwards with minor fluctuations. The second series, in purple, starts slightly higher than the teal one and trends more steeply upwards, ending at the top right. Both series are marked with small circular data points.

**depict
data
studio**

1

Audience



2

Charts



3

Declutter



4

Color



5

Text

1

Audience



2

Charts



3

Declutter



4

Color

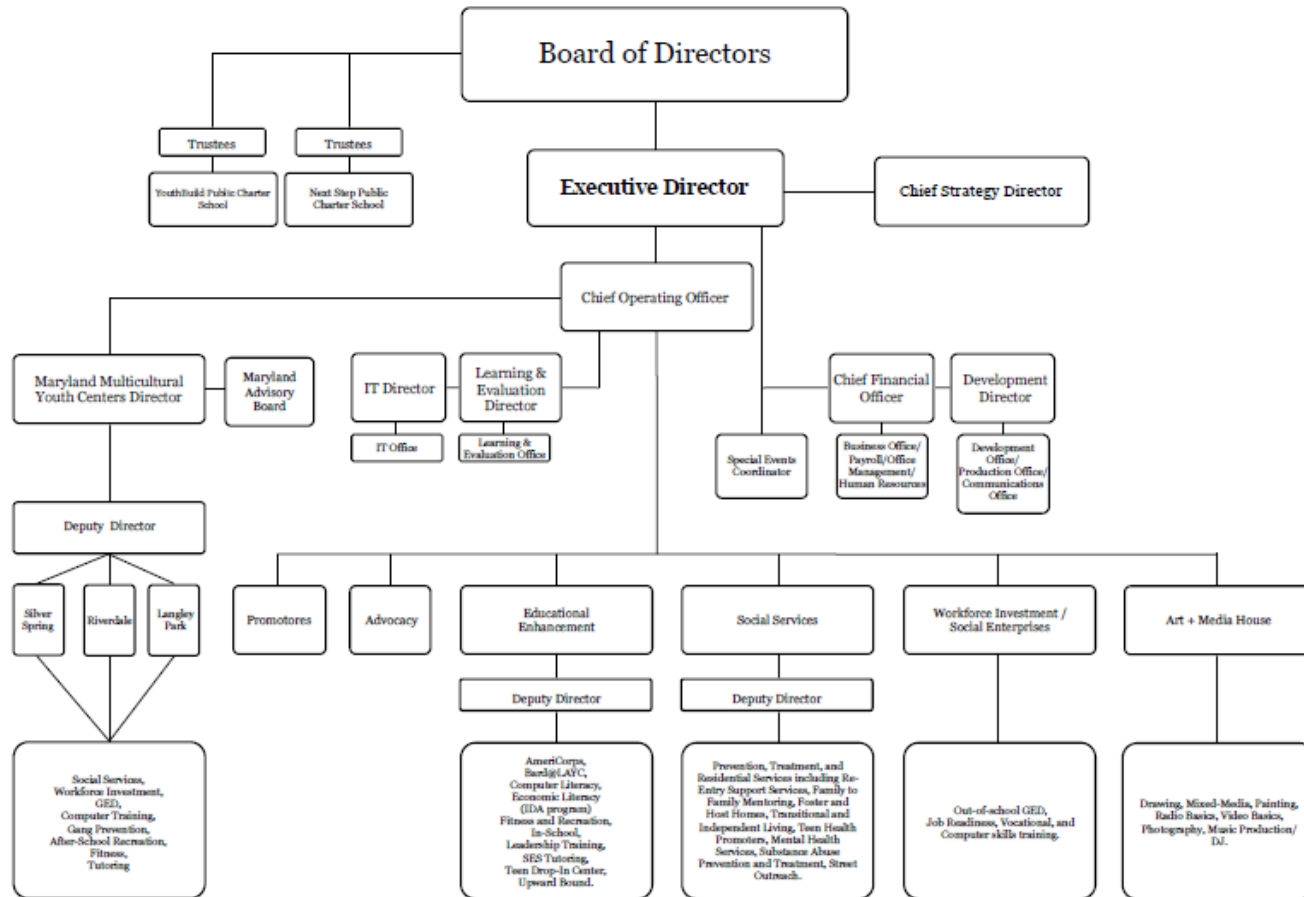


5

Text



Who's Our Audience?



- 1 Board of Directors
- 2 Executive Director
- 3 Mid-level managers
- 4 Frontline staff
- 5 Program participants
- 6 Current donors
- 7 Prospective donors
- 8 Local policymakers
- 9 Grant writers
- 10 My direct supervisor



Internal or External?

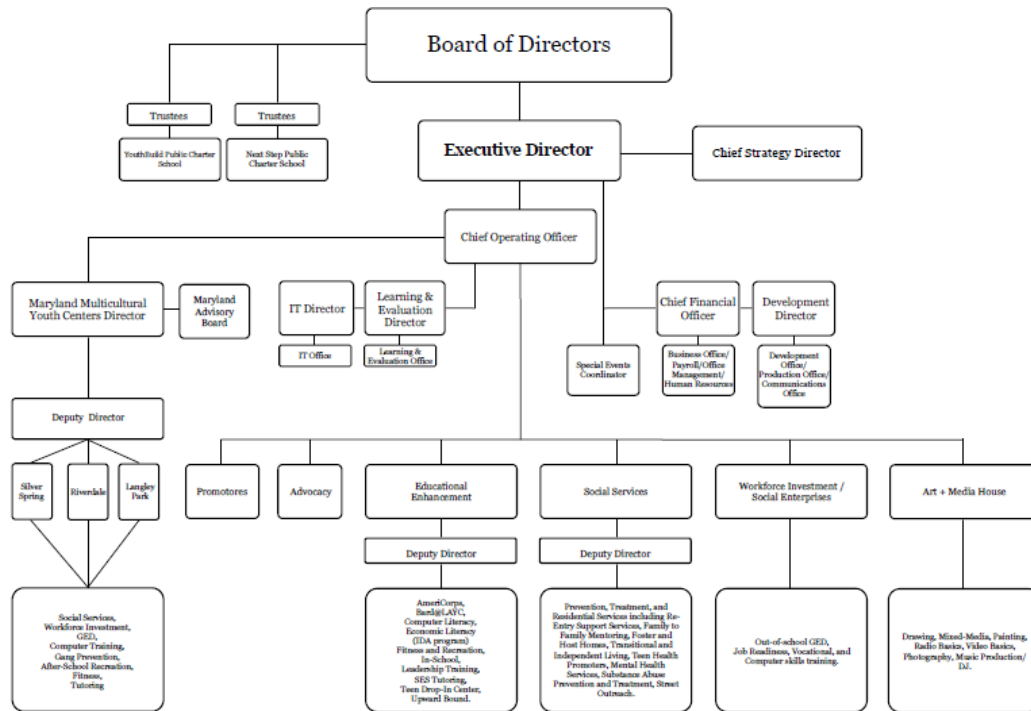
Internal

Within the agency / project

External

Outside the agency / project

Everyone else

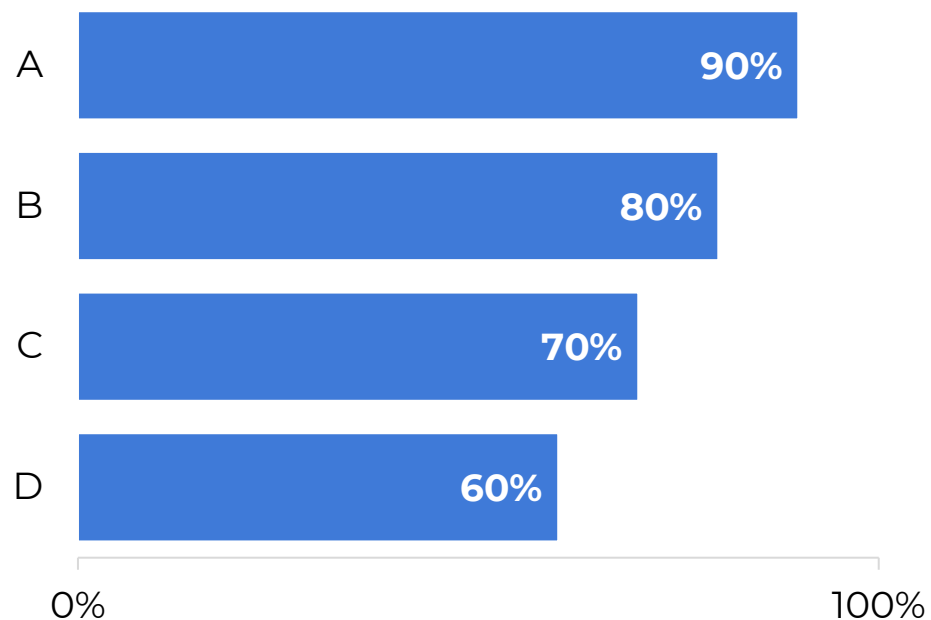




Internal or External?

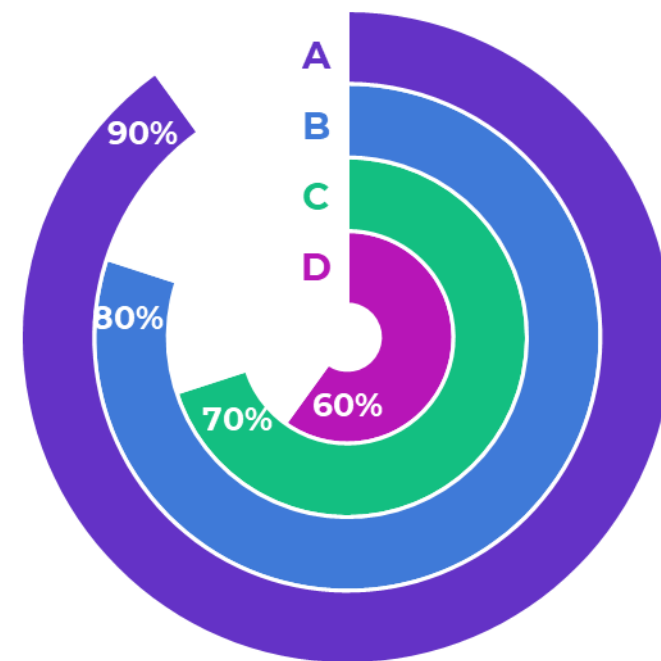
Internal

Everyday graphs



External

Xenographs

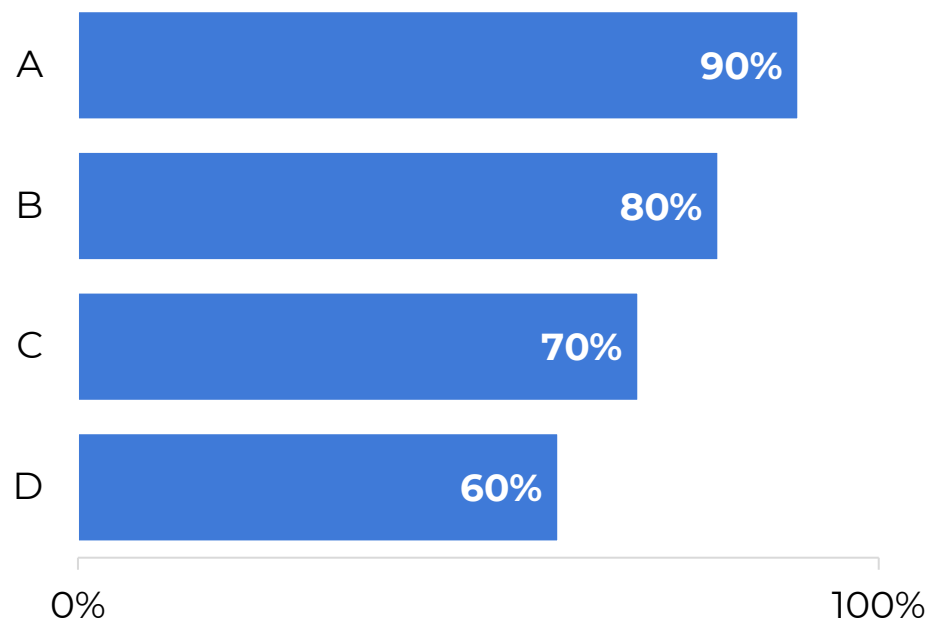




Internal or External?

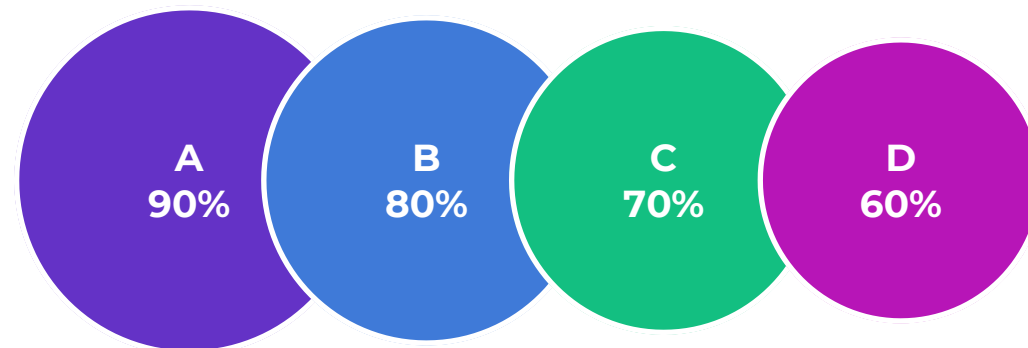
Internal

Everyday graphs



External

Xenographs

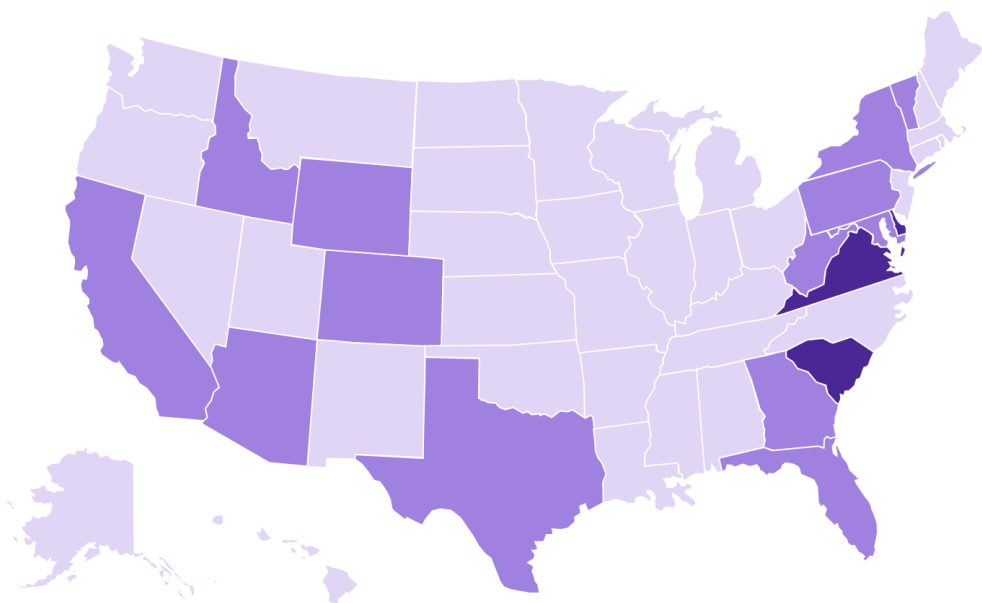




Internal or External?

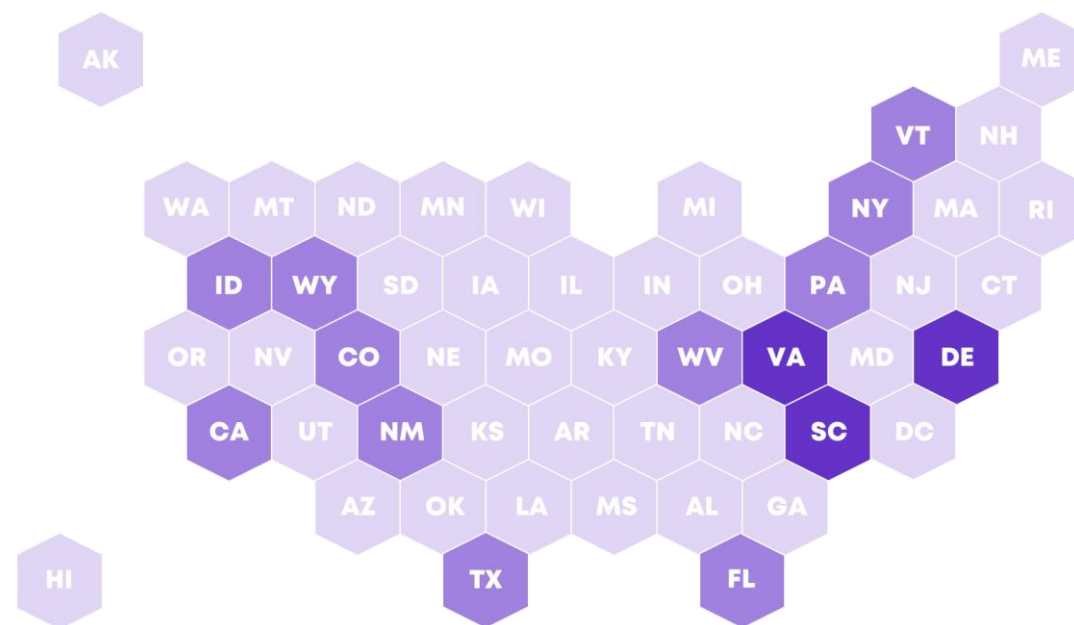
Internal

Everyday graphs



External

Xenographs



Technical or Non-Technical?

Technical

Looooooooove data



Star Eyes



Party Face



Nerd



Heart Eyes

Non-Technical

Would rather be doing something else



Weary



Neutral



Sleeping



Puke



Technical or Non-Technical?

Technical

Have fun exploring raw data

Non-Technical

Prefer the finished product

[0.953284] 0.376217 0.076617 0.645929 0.414435 0.547572 0.523631 0.99893 0.65167 0.390406 0.030641 0.510484 0.95574 0.82773 0.832066 0.836509 0.153303 0.634901 0.914137 0.258775 0.328629 0.440171
0.188075 0.251357 0.288381 0.613373 0.306846 0.753598 0.818623 0.128497 0.307381 0.246659 0.015457 0.632159 0.714594 0.404071 0.288767 0.851804 0.907902 0.525938 0.783869 0.909977 0.986716 0.589297
0.895446 0.839704 0.27427 0.219755 0.54079 0.561259 0.003853 0.803916 0.711041 0.851121 0.393367 0.467919 0.237197 0.484184 0.571817 0.607922 0.755666 0.686688 0.626091 0.126619 0.472653 0.063199
0.027059 0.682383 0.610662 0.124393 0.320093 0.744889 0.423824 0.689795 0.189599 0.331535 0.370245 0.236981 0.779391 0.272415 0.960406 0.801751 0.272751 0.340892 0.825666 0.998923 0.625799 0.615473
0.127378 0.180885 0.483953 0.561083 0.967897 0.992337 0.917772 0.814417 0.969717 0.106426 0.055771 0.628511 0.243922 0.180767 0.365476 0.118247 0.564126 0.204261 0.69078 0.284908 0.140117 0.291334
0.790644 0.92958 0.783277 0.13187 0.222777 0.405745 0.014355 0.371369 0.142582 0.822682 0.590209 0.494012 0.849521 0.626976 0.168601 0.697032 0.720928 0.476631 0.670201 0.852592 0.90096 0.869511
0.725675 0.600104 0.701473 0.985484 0.174777 0.718067 0.268866 0.292506 0.17214 0.31243 0.295553 0.451181 0.169234 0.951011 0.504258 0.278798 0.990196 0.712788 0.481765 0.965574 0.863184 0.343556
0.514338 0.572572 0.210544 0.522367 0.973239 0.594898 0.299532 0.972448 0.812027 0.745263 0.902455 0.370216 0.570173 0.032805 0.159422 0.903175 0.321975 0.743789 0.334827 0.760373 0.121309 0.252582
0.953911 0.040871 0.156563 0.507927 0.716653 0.621231 0.251525 0.245581 0.654325 0.200117 0.087613 0.530066 0.975422 0.891814 0.907483 0.968634 0.775341 0.641389 0.356007 0.29552 0.01261 0.831068
0.144115 0.944388 0.234216 0.39697 0.675611 0.393858 0.744053 0.251706 0.88816 0.902928 0.918225 0.66638 0.248694 0.107438 0.591023 0.669395 0.03383 0.056195 0.826724 0.749887 0.739266 0.311969
0.316599 0.440917 0.576138 0.419979 0.270483 0.083545 0.348141 0.223611 0.747343 0.836179 0.881434 0.921394 0.025731 0.33174 0.561311 0.048473 0.850843 0.874333 0.150455 0.824078 0.397084 0.98788
0.570074 0.374875 0.34471 0.709548 0.914905 0.706518 0.298957 0.959796 0.160448 0.485023 0.161661 0.537482 0.725829 0.551313 0.284427 0.367552 0.808926 0.603313 0.978162 0.3974 0.887609 0.458864
0.935678 0.557077 0.729672 0.757167 0.056943 0.293951 0.43209 0.042027 0.876946 0.410333 0.714653 0.774493 0.618552 0.617936 0.368338 0.855338 0.570767 0.795454 0.841355 0.993876 0.32174 0.486824
0.454584 0.660179 0.402844 0.871378 0.538609 0.667719 0.737323 0.886805 0.318316 0.899203 0.027996 0.181681 0.749578 0.590074 0.540195 0.856017 0.162641 0.50161 0.218523 0.507379 0.484434 0.312078
0.886169 0.925527 0.068829 0.776848 0.072548 0.354735 0.548673 0.732215 0.072942 0.714961 0.751548 0.002428 0.836994 0.379765 0.790196 0.544027 0.830238 0.807825 0.954849 0.264066 0.967692 0.480454
0.792126 0.971457 0.693299 0.77543 0.557637 0.139169 0.63661 0.057681 0.830503 0.599017 0.164988 0.792581 0.087921 0.408318 0.270424 0.288548 0.243037 0.774954 0.513758 0.417952 0.96393 0.088706
0.362329 0.354017 0.046851 0.215632 0.373116 0.042802 0.730739 0.900977 0.127064 0.687615 0.679536 0.926082 0.161057 0.457443 0.603192 0.675273 0.192554 0.759375 0.245584 0.793898 0.796399 0.904292
0.469356 0.473938 0.06038 0.109724 0.855546 0.973517 0.425367 0.45542 0.697701 0.369029 0.844078 0.806612 0.066143 0.363862 0.999825 0.995956 0.884313 0.115129 0.353846 0.091941 0.654451 0.275526
0.275597 0.155553 0.172814 0.681237 0.471065 0.438367 0.050731 0.833271 0.214297 0.61851 0.644491 0.339565 0.16485 0.872295 0.989478 0.907447 0.233827 0.371804 0.545235 0.799821 0.009885 0.28697
0.039816 0.003855 0.468681 0.502677 0.420111 0.105273 0.264604 0.296932 0.804567 0.599457 0.636731 0.977342 0.639694 0.05593 0.986828 0.708097 0.51442 0.536924 0.622932 0.760815 0.248761 0.235112
0.984173 0.21636 0.526671 0.469471 0.343318 0.109894 0.93354 0.152019 0.116806 0.360829 0.408452 0.695524 0.716235 0.355851 0.413677 0.796569 0.391904 0.33607 0.87428 0.84009 0.462772 0.161538
0.144951 0.217788 0.141943 0.801072 0.967109 0.939734 0.542092 0.782577 0.712777 0.576391 0.892805 0.122406 0.788908 0.932028 0.012208 0.485958 0.162982 0.879969 0.407934 0.108848 0.318285 0.730128
0.654896 0.567751 0.7282 0.706369 0.890539 0.214753 0.638322 0.443577 0.933842 0.384668 0.186344 0.923091 0.165509 0.447125 0.389008 0.599709 0.751911 0.580602 0.772741 0.230598
0.562267 0.267976 0.334961 0.400983 0.085865 0.58442 0.50691 0.659205 0.367395 0.620543 0.146107 0.365249 0.262334 0.716873 0.881709 0.059786 0.944591 0.868722 0.242919 0.287858 0.731217 0.769903
0.975244 0.549867 0.630762 0.166044 0.555523 0.403959 0.977174 0.301901 0.342351 0.52442 0.993696 0.159834 0.728692 0.194121 0.486379 0.256112 0.757465 0.105147 0.577687 0.634093 0.58861 0.567187
0.615863 0.232863 0.477096 0.589778 0.096807 0.249523 0.248437 0.123125 0.63626 0.866644 0.691006 0.868617 0.366851 0.817286 0.936623 0.310534 0.146296 0.878627 0.782547 0.160651 0.3033 0.911233
0.253044 0.149209 0.365452 0.633263 0.06886 0.897761 0.631538 0.747273 0.351472 0.541135 0.19805 0.750516 0.587842 0.007764 0.581409 0.468932 0.01058 0.905083 0.705749 0.202206 0.802256 0.337511
0.818954 0.045804 0.847235 0.650855 0.140769 0.889501 0.26107 0.136813 0.492463 0.214805 0.003773 0.04528 0.287969 0.814847 0.714521 0.710301 0.860773 0.145967 0.416075 0.733481 0.365716 0.729934
0.973791 0.735828 0.953568 0.432877 0.642072 0.632749 0.802982 0.524187 0.70884 0.783495 0.369039 0.729051 0.354927 0.696431 0.210124 0.529065 0.630124 0.599295 0.605254 0.199329 0.339094 0.343485
0.193009 0.531726 0.195479 0.372552 0.379062 0.903341 0.852618 0.879118 0.538832 0.597738 0.544583 0.523788 0.591419 0.850974 0.309445 0.624141 0.184467 0.47997 0.757825 0.733972 0.736913 0.115806
0.625275 0.108493 0.374433 0.456473 0.154249 0.290983 0.781118 0.749729 0.193413 0.091716 0.7613 0.987651 0.408817 0.819758 0.786286 0.125599 0.198136 0.669442 0.698733 0.333772 0.44894 0.219155
0.336904 0.229028 0.601401 0.809084 0.367575 0.834782 0.253843 0.411163 0.939455 0.730338 0.03143 0.682417 0.678628 0.704923 0.637239 0.790873 0.909801 0.516822 0.469174 0.040208 0.351153 0.675603
0.425893 0.809463 0.706686 0.717973 0.426988 0.601262 0.32529 0.892763 0.672374 0.501822 0.816747 0.097207 0.297895 0.498039 0.039131 0.570983 0.683729 0.03156 0.044848 0.48824 0.601994 0.442018
0.088704 0.966578 0.325465 0.237623 0.067547 0.207877 0.787524 0.450563 0.467728 0.951353 0.258463 0.771684 0.577409 0.601971 0.477478 0.315905 0.348421 0.975497 0.669465 0.53026 0.762135 0.982272
0.345587 0.747794 0.331331 0.724199 0.134682 0.121188 0.20252 0.913991 0.534685 0.478449 0.489554 0.031996 0.1214 0.396121 0.922364 0.780581 0.851269 0.009116 0.429744 0.489811 0.55731 0.050255
0.912127 0.885528 0.993676 0.730865 0.313584 0.449158 0.651794 0.909939 0.071816 0.37147 0.815117 0.408131 0.563174 0.151923 0.463919 0.519928 0.700362 0.320561 0.634285 0.094387 0.814003 0.009897
0.536442 0.294096 0.630024 0.009034 0.355123 0.797593 0.330725 0.473091 0.727899 0.643264 0.424463 0.739379 0.337249 0.154818 0.56567 0.628228 0.82334 0.737593 0.641804 0.79879 0.650613 0.154712
0.447517 0.132389 0.041988 0.551949 0.908285 0.543774 0.171336 0.669062 0.254328 0.106838 0.312451 0.603317 0.458775 0.46707 0.30753 0.268499 0.657423 0.375593 0.339059 0.343677 0.866306 0.844939
0.365403 0.100141 0.643554 0.915551 0.942152 0.870046 0.467219 0.386991 0.086255 0.15331 0.495267 0.315952 0.14942 0.884536 0.12717 0.871866 0.638467 0.777782 0.868051 0.130413 0.086029
0.479152 0.06977 0.647932 0.883956 0.172109 0.29222 0.440996 0.166354 0.821838 0.851051 0.181467 0.959484 0.636288 0.717058 0.556948 0.935045 0.497407 0.697386 0.67272 0.053173 0.422733 0.124617
0.361663 0.176552 0.264594 0.285229 0.263266 0.656397 0.561363 0.10886 0.596965 0.617746 0.316833 0.527708 0.444365 0.625376 0.295058 0.890521 0.375899 0.132866 0.870261 0.373993 0.312138
0.489561 0.029151 0.41707 0.942814 0.647795 0.128164 0.575414 0.694338 0.575669 0.575669 0.615431 0.506528 0.667495 0.898365 0.304765 0.869762 0.045438 0.101371 0.48632 0.847615 0.047658 0.527293 0.007078
0.730691 0.354338 0.923318 0.258597 0.290921 0.585745 0.297631 0.404569 0.62831 0.720897 0.814754 0.938501 0.182837 0.445696 0.622473 0.961073 0.115359 0.260057 0.959513 0.062533 0.476432 0.40349
0.55617 0.822419 0.377041 0.88694 0.618027 0.779654 0.008721 0.457656 0.161403 0.684068 0.142561 0.604573 0.978701 0.278431 0.688073 0.419399 0.293759 0.529636 0.306824 0.38016 0.811092 0.455283
0.459376 0.923274 0.519606 0.250614 0.450723 0.516542 0.171304 0.93565 0.427305 0.465867 0.837078 0.886724 0.006987 0.463538 0.373097 0.828545 0.080206 0.710085 0.983608 0.87093 0.114725 0.309155
0.888084 0.241902 0.493229 0.716446 0.443999 0.271184 0.253688 0.670862 0.869189 0.071265 0.84101 0.259038 0.15944 0.973895 0.904226 0.581492 0.676684 0.826005 0.110746 0.186145 0.73452 0.546746
0.189875 0.772128 0.817735 0.763336 0.910647 0.345905 0.496592 0.835567 0.050255 0.443839 0.470837 0.578534 0.34956 0.248797 0.64785 0.477796 0.734236 0.09905 0.685331 0.354526 0.156558 0.131724

A

90%

B

80%

C

70%

D

60%

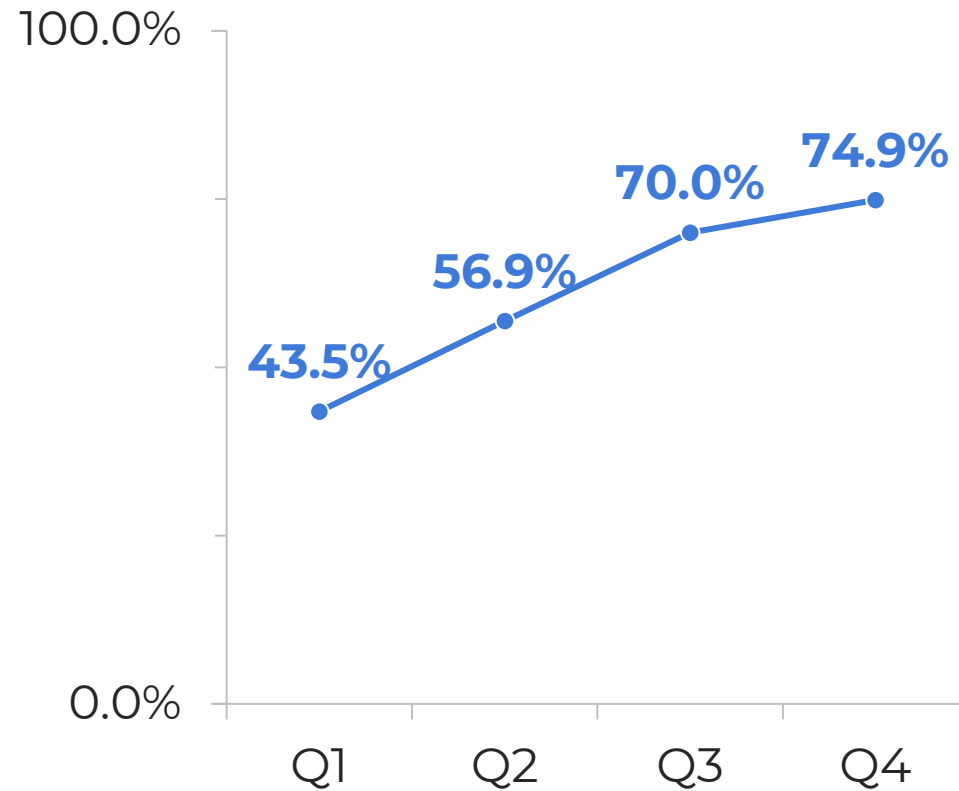
0%

100%

Technical or Non-Technical?

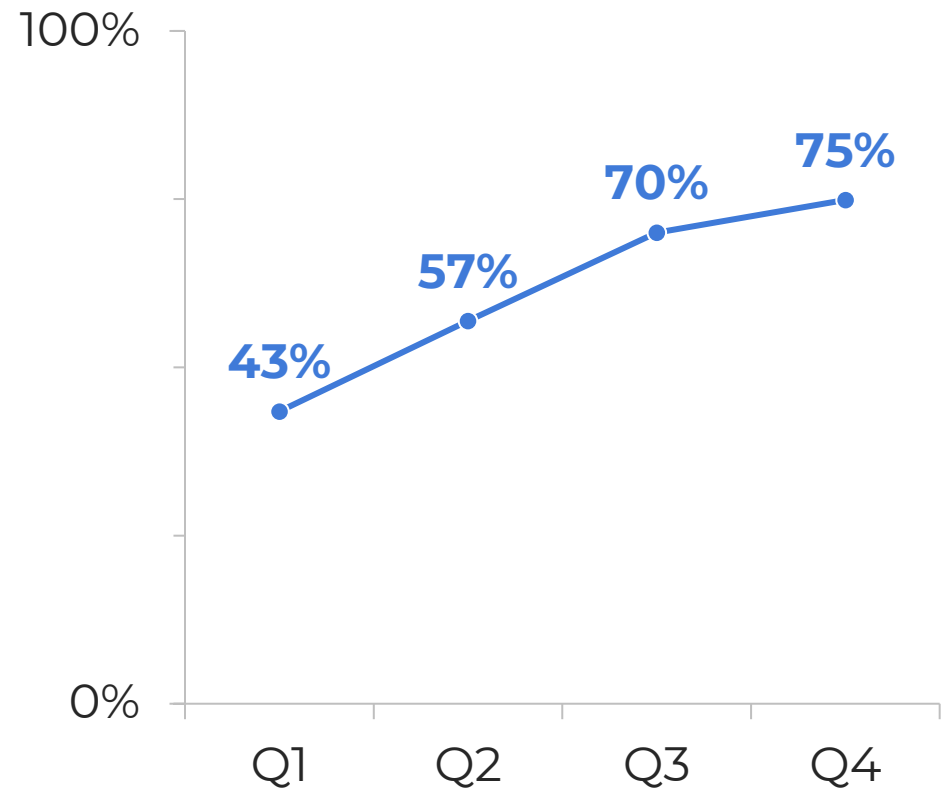
Technical

Don't mind decimal places



Non-Technical

Get lost in decimal places





Technical or Non-Technical?

Technical

Don't mind regular tables

5. How influential were these individuals and resources on your decision to major in xyz?

Please indicate whether you agree or disagree with the following statements.	Strongly Agree	Agree	Disagree	Strongly Disagree	No Opinion	Total
This was the wording for the survey question.	32%	33%	12%	16%	7%	100%
This was the wording for the survey question.	22%	37%	17%	18%	6%	100%
This was the wording for the survey question.	22%	34%	15%	17%	12%	100%
This was the wording for the survey question.	17%	25%	16%	25%	17%	100%
This was the wording for the survey question.	11%	32%	16%	29%	12%	100%
This was the wording for the survey question.	11%	23%	18%	36%	12%	100%
This was the wording for the survey question.	7%	19%	17%	42%	15%	100%
This was the wording for the survey question.	5%	24%	21%	32%	17%	99%
This was the wording for the survey question.	2%	9%	18%	55%	16%	100%

Please indicate whether you agree or disagree with the following statements.	Strongly Agree	Agree	Disagree	Strongly Disagree	No Opinion	Total
This was the wording for the survey question.	44%	38%	10%	5%	3%	100%
This was the wording for the survey question.	40%	26%	17%	3%	14%	100%
This was the wording for the survey question.	33%	39%	15%	10%	3%	100%
This was the wording for the survey question.	22%	26%	20%	21%	11%	100%
This was the wording for the survey question.	17%	30%	23%	17%	13%	100%
This was the wording for the survey question.	17%	30%	23%	17%	13%	100%
This was the wording for the survey question.	17%	30%	23%	17%	13%	100%
This was the wording for the survey question.	17%	29%	21%	20%	13%	100%
This was the wording for the survey question.	7%	23%	22%	30%	18%	100%

Page 2 of 3

Non-Technical

Prefer heat tables

5. How influential were these individuals and resources on your decision to major in xyz?

Please indicate whether you agree or disagree with the following statements.	Strongly Agree	Agree	Disagree	Strongly Disagree	No Opinion	Total
This was the wording for the survey question.	32%	33%	12%	16%	7%	100%
This was the wording for the survey question.	22%	37%	17%	18%	6%	100%
This was the wording for the survey question.	22%	34%	15%	17%	12%	100%
This was the wording for the survey question.	17%	25%	16%	25%	17%	100%
This was the wording for the survey question.	11%	32%	16%	29%	12%	100%
This was the wording for the survey question.	11%	23%	18%	36%	12%	100%
This was the wording for the survey question.	7%	19%	17%	42%	15%	100%
This was the wording for the survey question.	5%	24%	21%	32%	17%	99%
This was the wording for the survey question.	2%	9%	18%	55%	16%	100%

Please indicate whether you agree or disagree with the following statements.	Strongly Agree	Agree	Disagree	Strongly Disagree	No Opinion	Total
This was the wording for the survey question.	44%	38%	10%	5%	3%	100%
This was the wording for the survey question.	40%	26%	17%	3%	14%	100%
This was the wording for the survey question.	33%	39%	15%	10%	3%	100%
This was the wording for the survey question.	22%	26%	20%	21%	11%	100%
This was the wording for the survey question.	17%	30%	23%	17%	13%	100%
This was the wording for the survey question.	17%	30%	23%	17%	13%	100%
This was the wording for the survey question.	17%	30%	23%	17%	13%	100%
This was the wording for the survey question.	17%	29%	21%	20%	13%	100%
This was the wording for the survey question.	7%	23%	22%	30%	18%	100%

Page 2 of 4

Are Viewers Expecting a Story?



Are Viewers Expecting a Story?

Default



Traditional

or

Storytelling



Are Viewers Expecting a Story?

Default

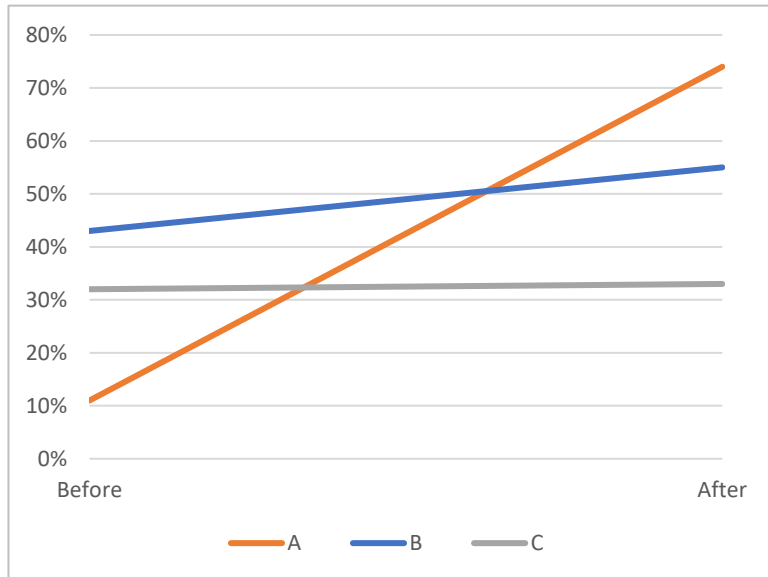


Traditional

or

Storytelling

Figure 1. Project Results Before and After the Four-Year Grant Funding





Are Viewers Expecting a Story?

Default

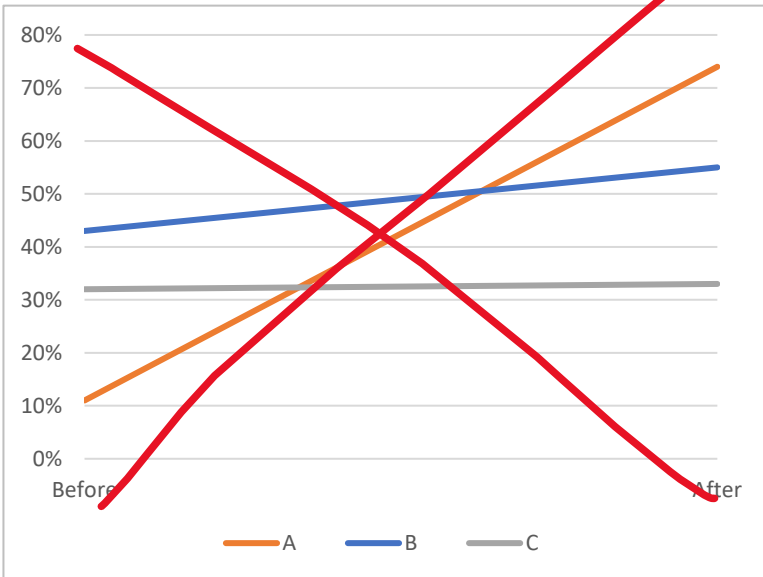


Traditional

or

Storytelling

Figure 1. Project Results Before and After the Four-Year Grant Funding





Are Viewers Expecting a Story?

Default



Traditional

or

Storytelling

Figure 1. Project Results Before and After the Four-Year Grant Funding

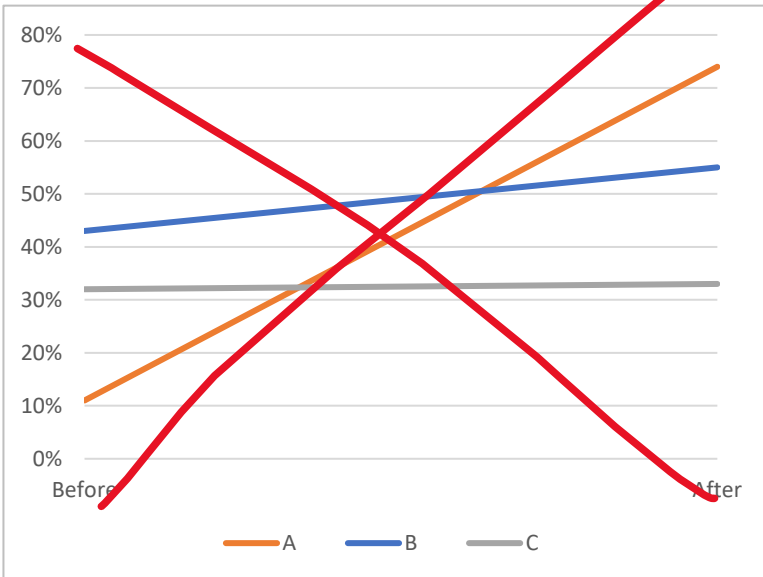
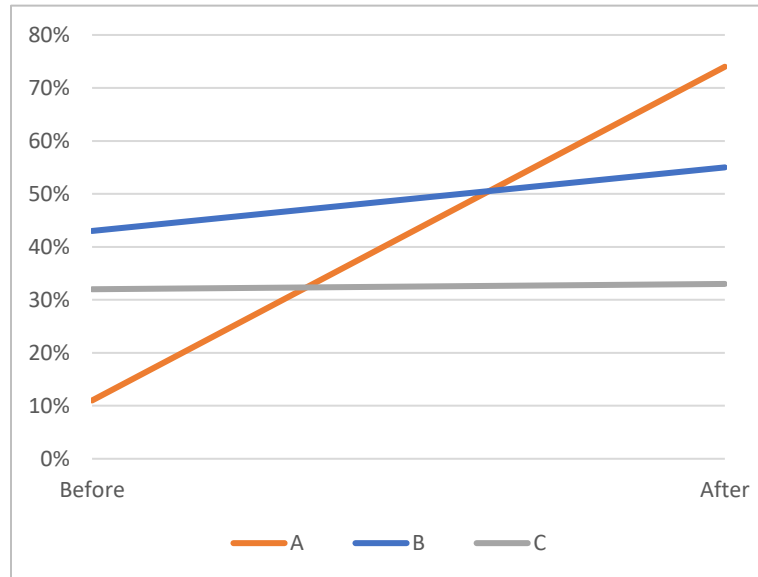


Figure 1. Project Results Before and After the Four-Year Grant Funding





Are Viewers Expecting a Story?

Default



Traditional

or

Storytelling

Figure 1. Project Results Before and After the Four-Year Grant Funding

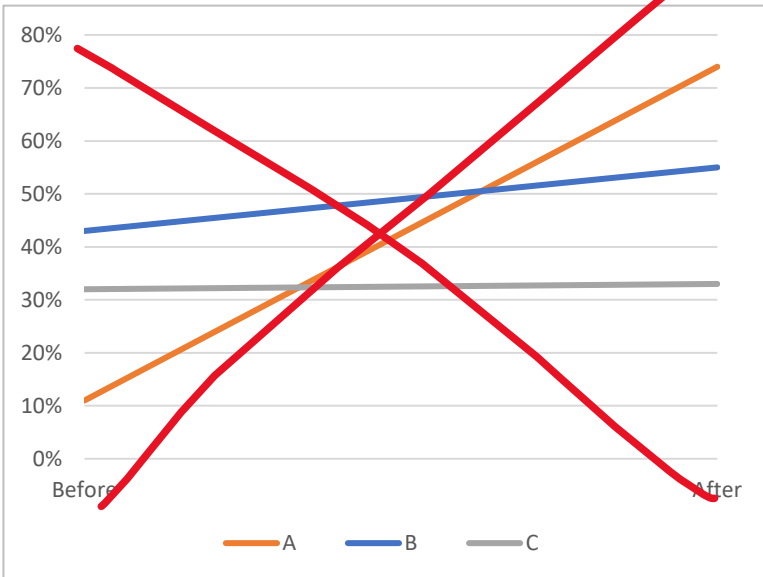
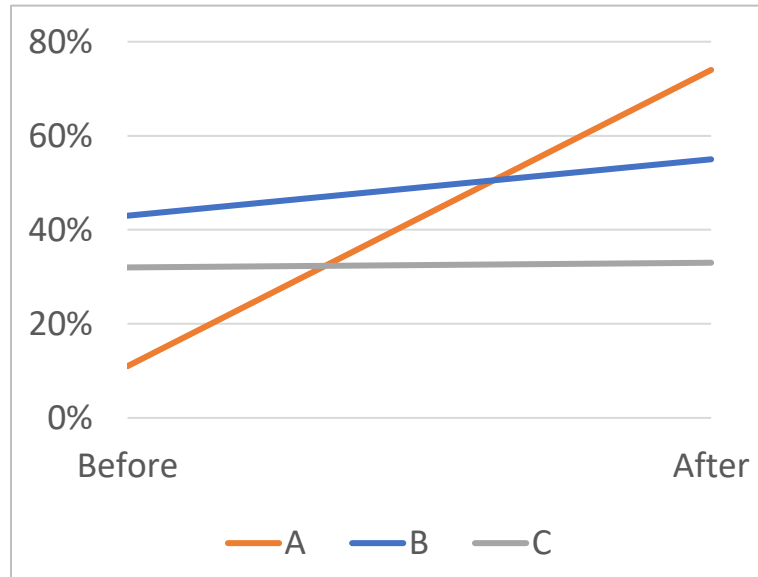


Figure 1. Project Results Before and After the Four-Year Grant Funding





Are Viewers Expecting a Story?

Default



Traditional

or

Storytelling

Figure 1. Project Results Before and After the Four-Year Grant Funding

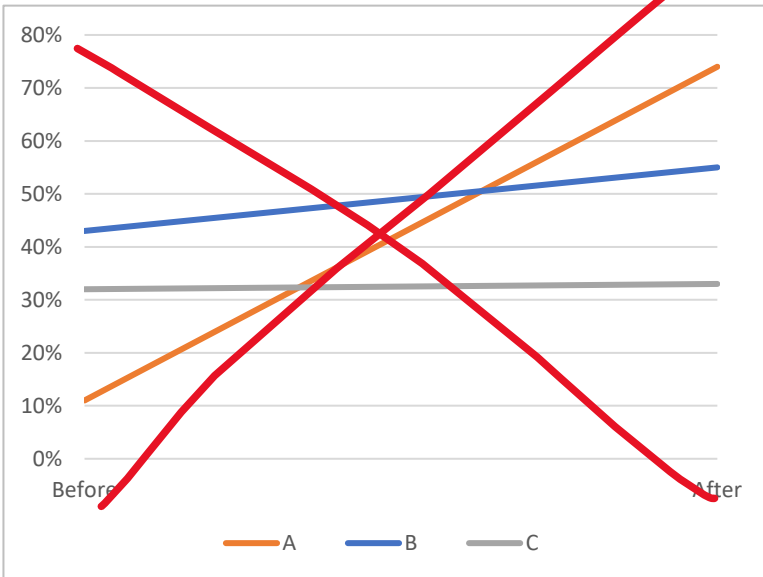
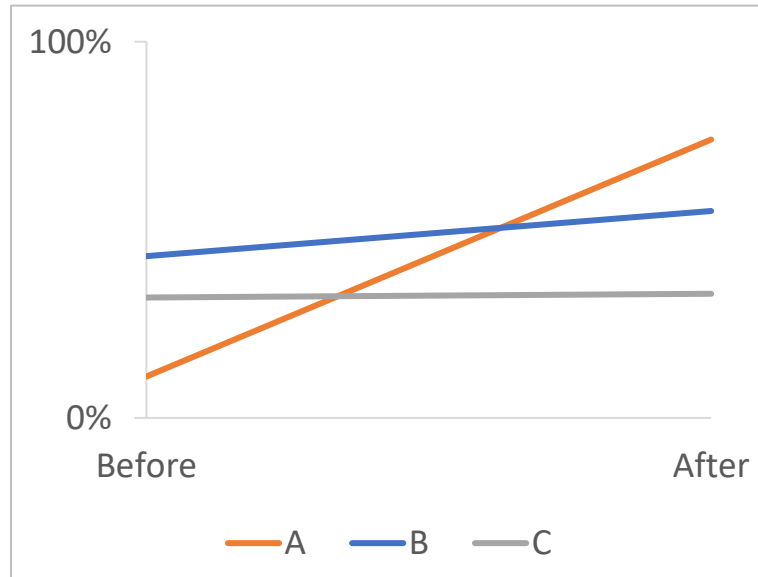


Figure 1. Project Results Before and After the Four-Year Grant Funding





Are Viewers Expecting a Story?

Default



Traditional

or

Storytelling

Figure 1. Project Results Before and After the Four-Year Grant Funding

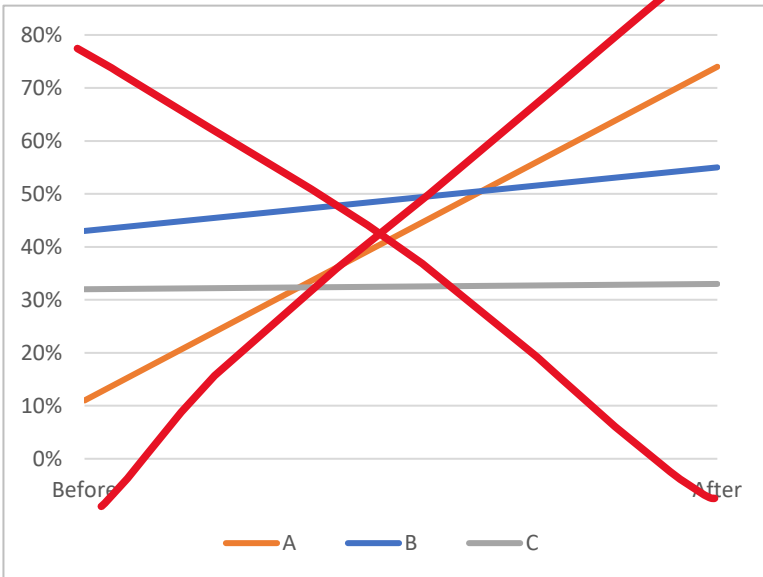
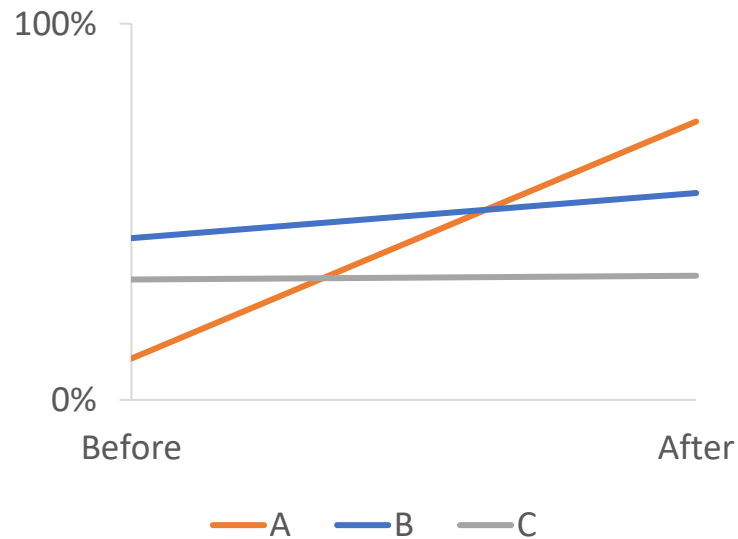


Figure 1. Project Results Before and After the Four-Year Grant Funding





Are Viewers Expecting a Story?

Default



Traditional

or

Storytelling

Figure 1. Project Results Before and After the Four-Year Grant Funding

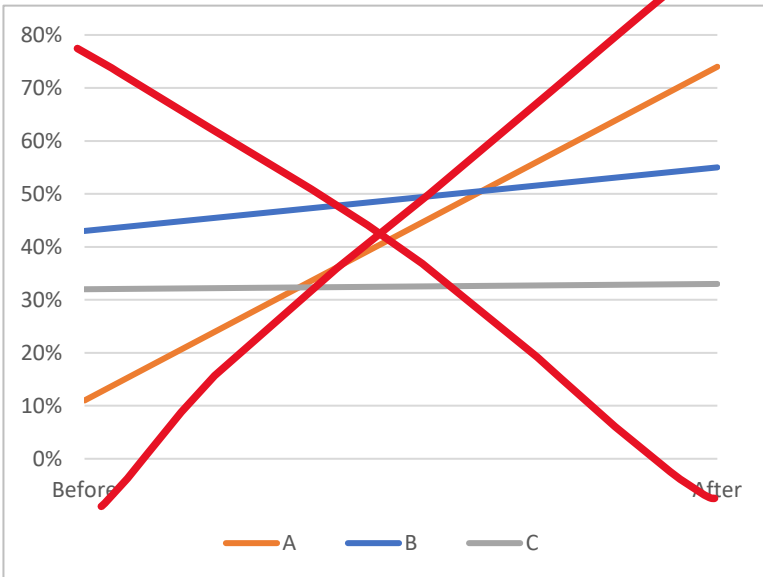
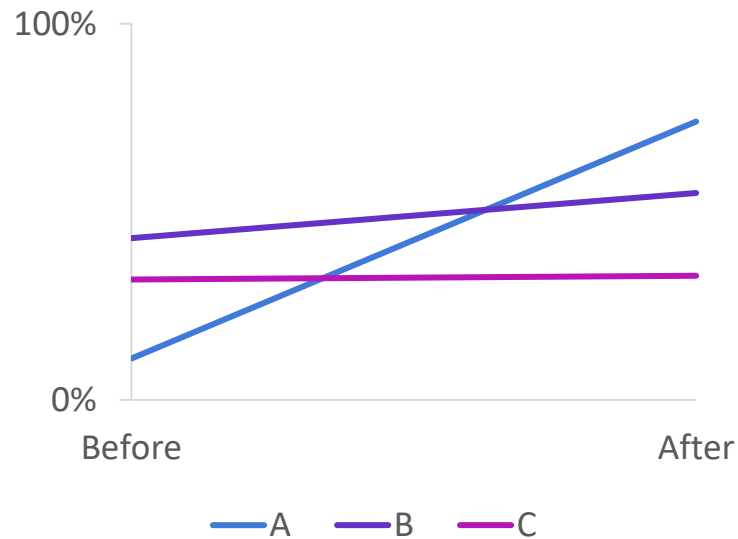


Figure 1. Project Results Before and After the Four-Year Grant Funding





Are Viewers Expecting a Story?

Default



Traditional

or

Storytelling

Figure 1. Project Results Before and After the Four-Year Grant Funding

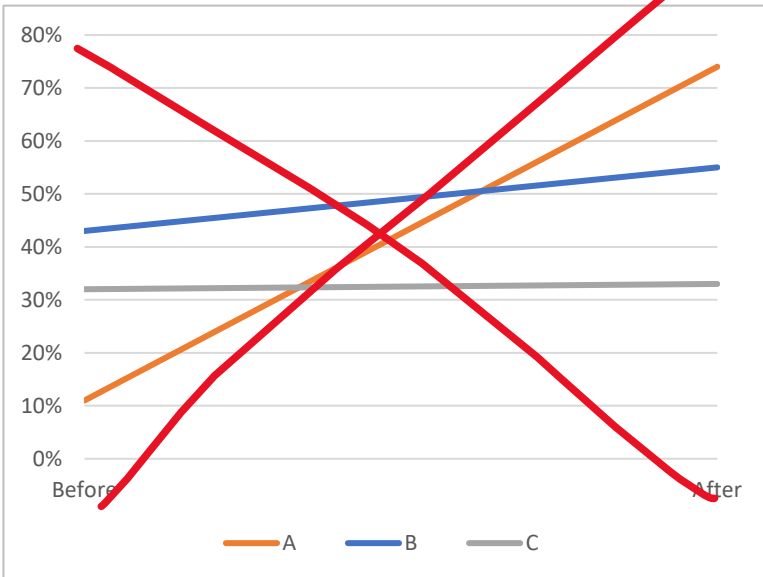
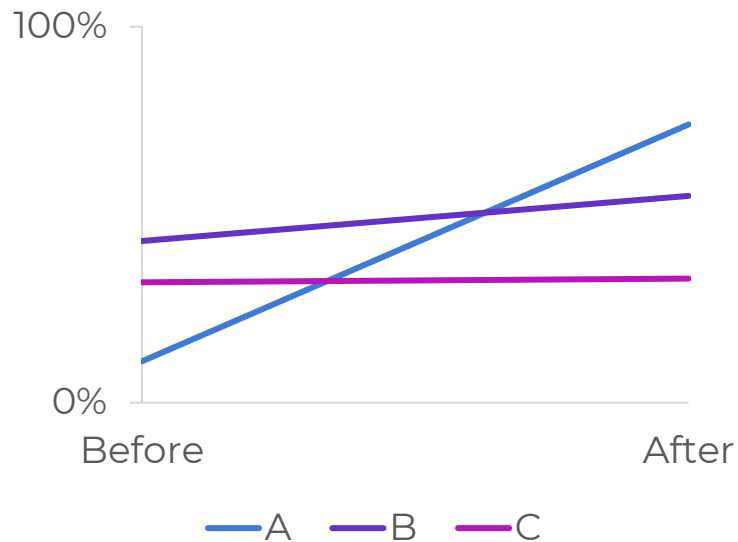


Figure 1. Project Results Before and After the Four-Year Grant Funding





Are Viewers Expecting a Story?

Default



Traditional

or

Storytelling

Figure 1. Project Results Before and After the Four-Year Grant Funding

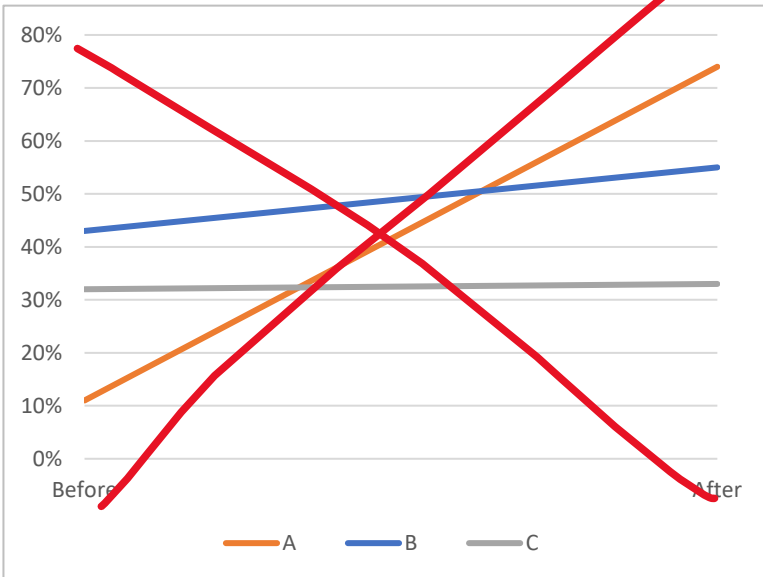
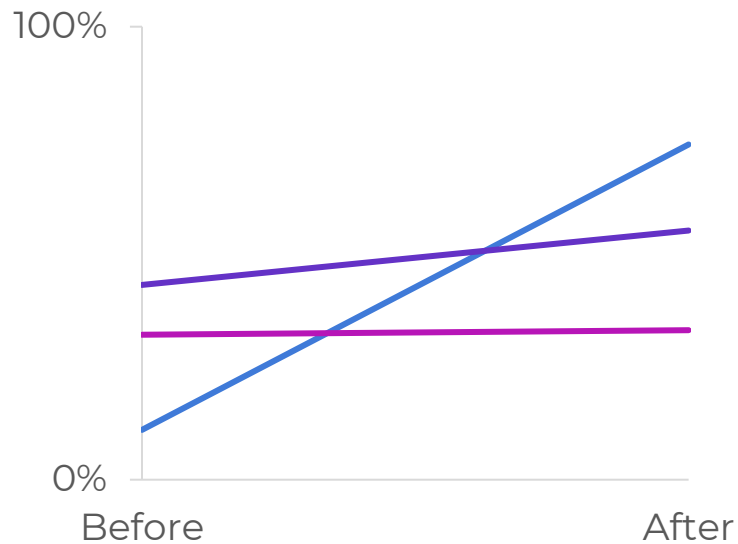


Figure 1. Project Results Before and After the Four-Year Grant Funding





Are Viewers Expecting a Story?

Default



Traditional

or

Storytelling

Figure 1. Project Results Before and After the Four-Year Grant Funding

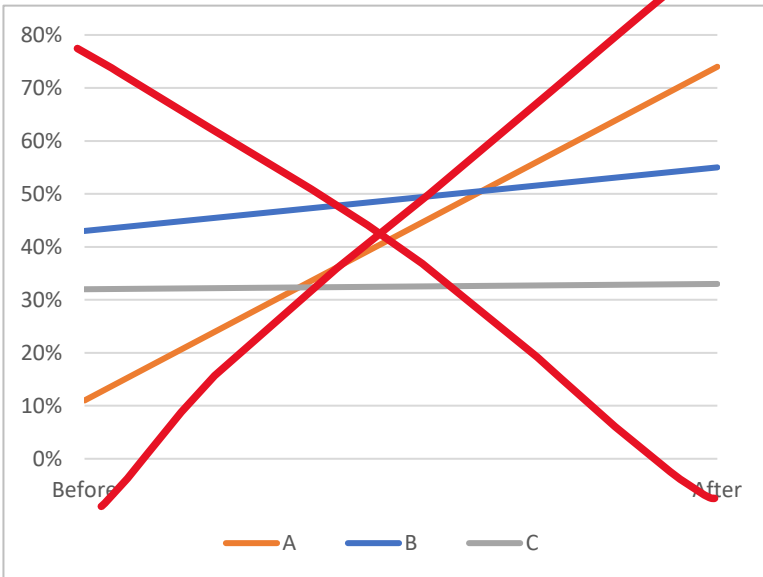
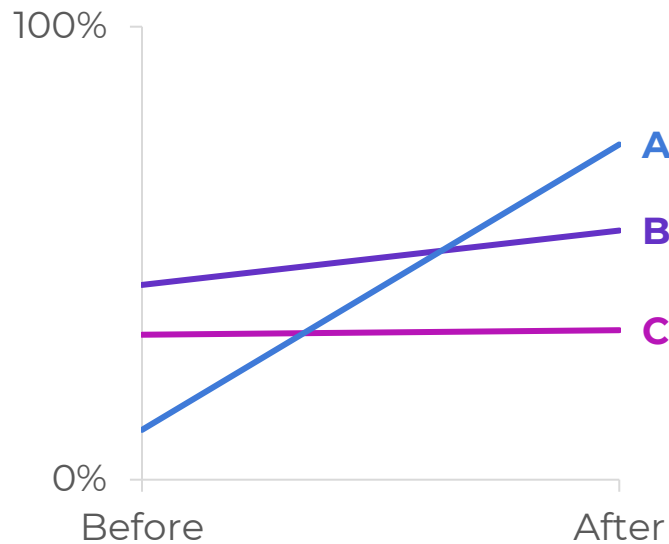


Figure 1. Project Results Before and After the Four-Year Grant Funding





Are Viewers Expecting a Story?

Default



Traditional

or

Storytelling

Figure 1. Project Results Before and After the Four-Year Grant Funding

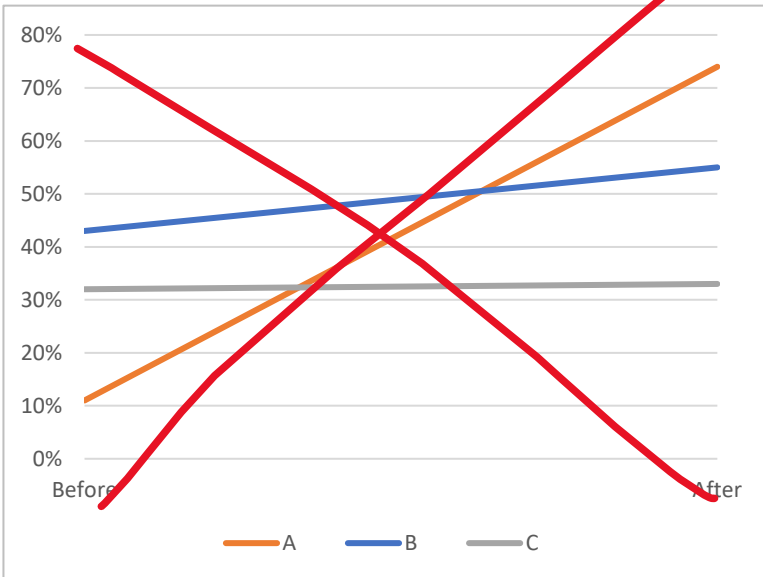
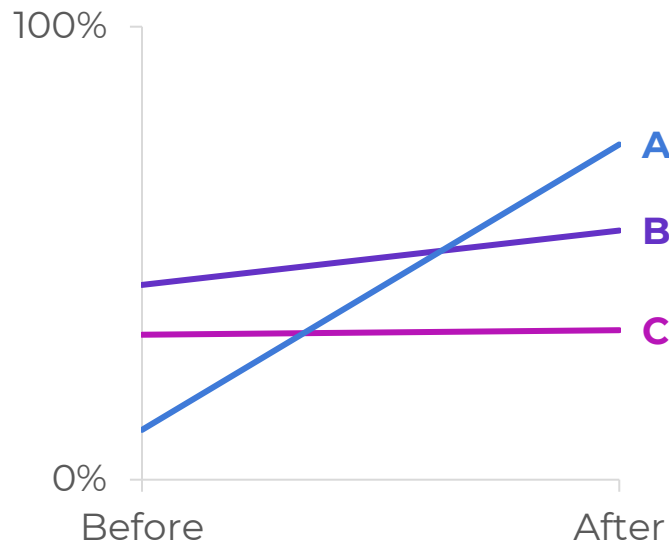


Figure 1. Project Results Before and After the Four-Year Grant Funding





Are Viewers Expecting a Story?

Default



Traditional

or

Storytelling

Figure 1. Project Results Before and After the Four-Year Grant Funding

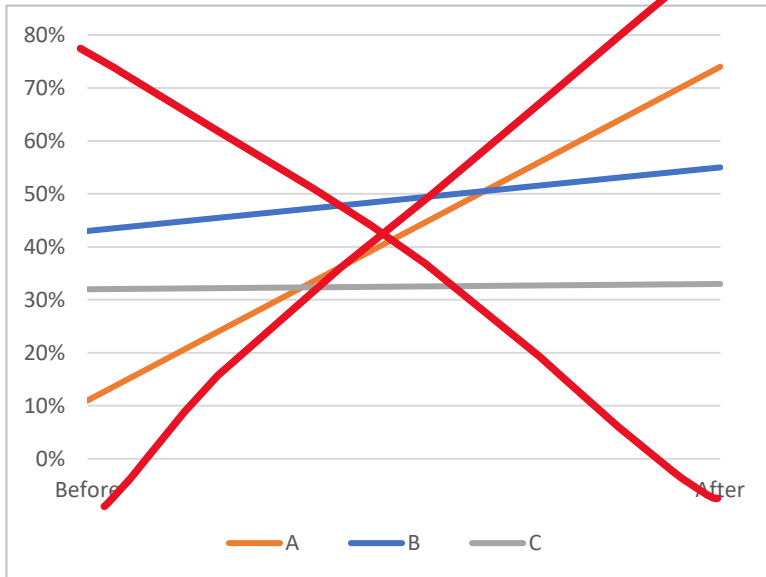


Figure 1. Project Results Before and After the Four-Year Grant Funding

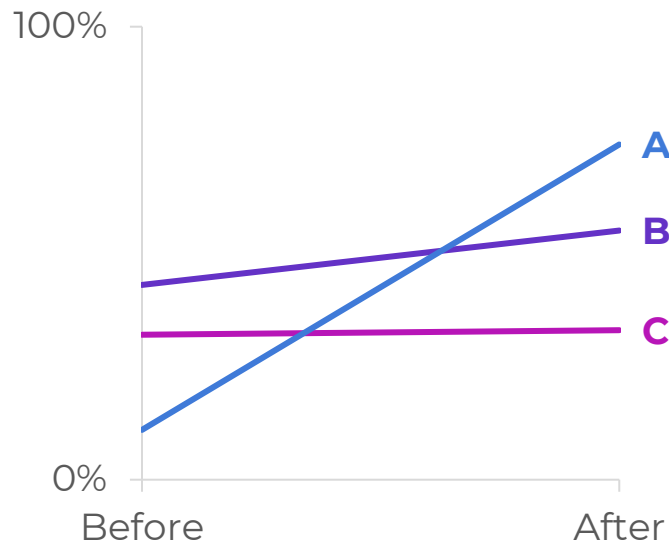
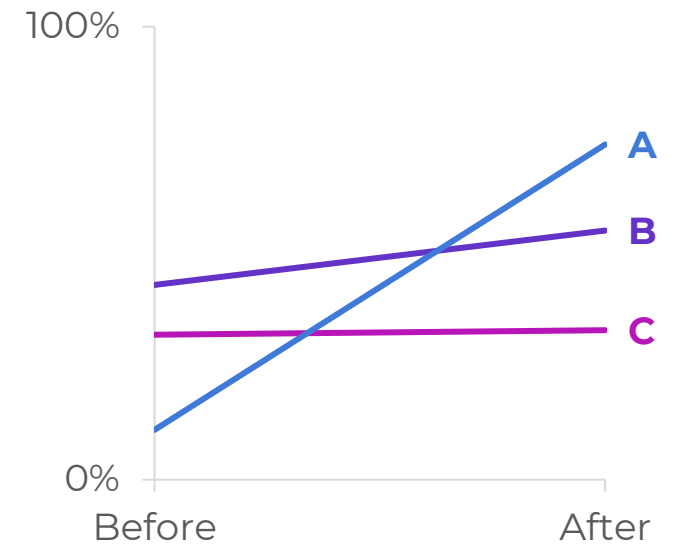


Figure 1. Project Results Before and After the Four-Year Grant Funding





Are Viewers Expecting a Story?

Default



Traditional

or

Storytelling

Figure 1. Project Results Before and After the Four-Year Grant Funding

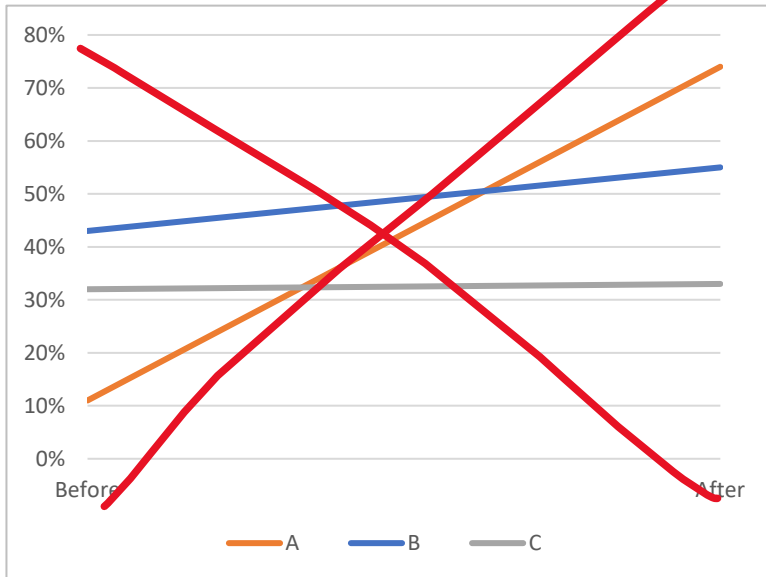


Figure 1. Project Results Before and After the Four-Year Grant Funding

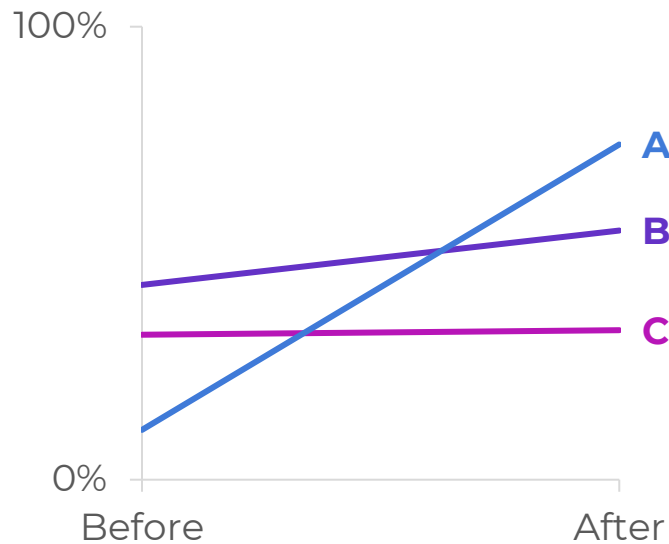
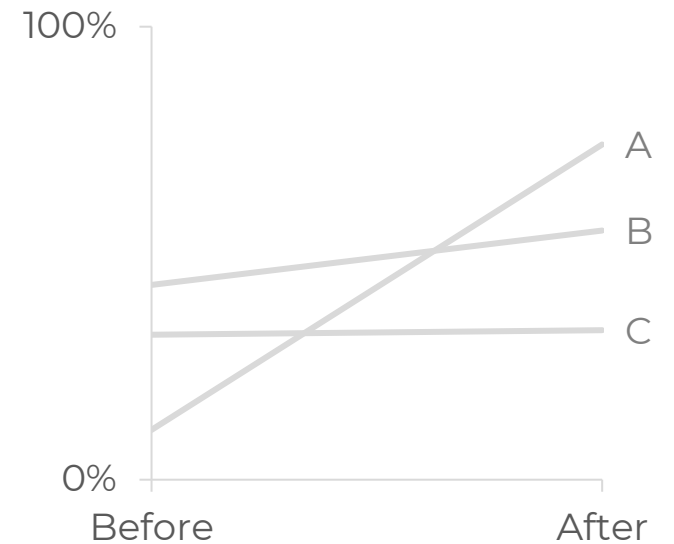


Figure 1. Project Results Before and After the Four-Year Grant Funding





Are Viewers Expecting a Story?

Default



Traditional

or

Storytelling

Figure 1. Project Results Before and After the Four-Year Grant Funding

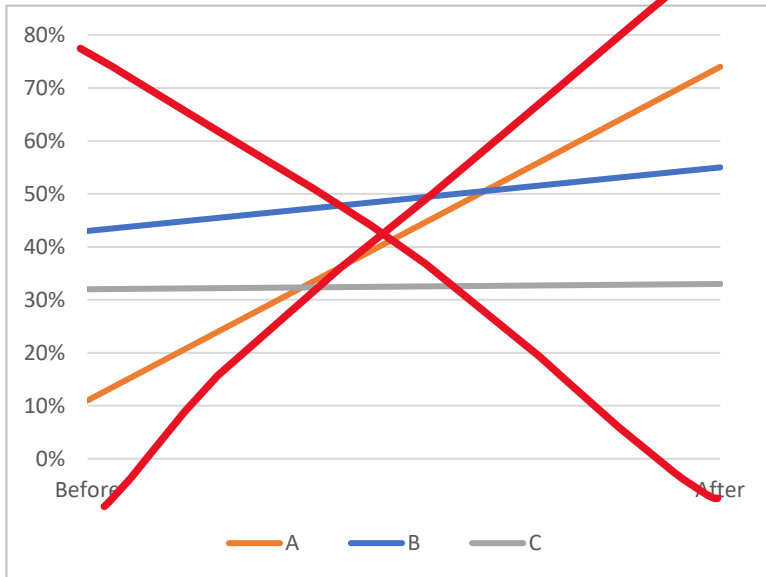


Figure 1. Project Results Before and After the Four-Year Grant Funding

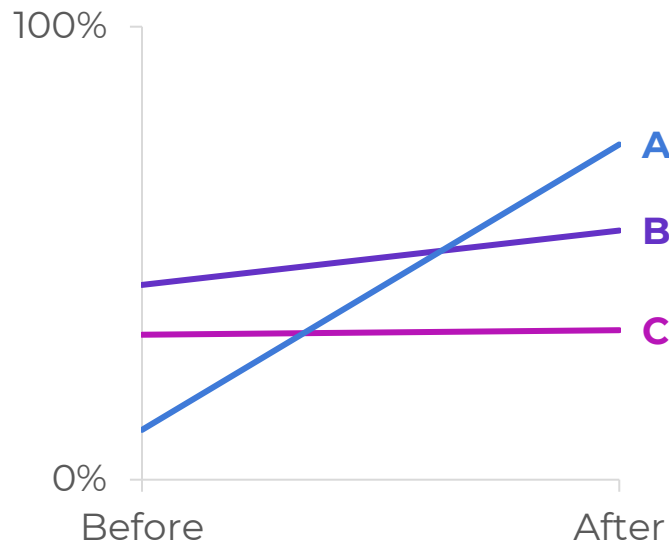
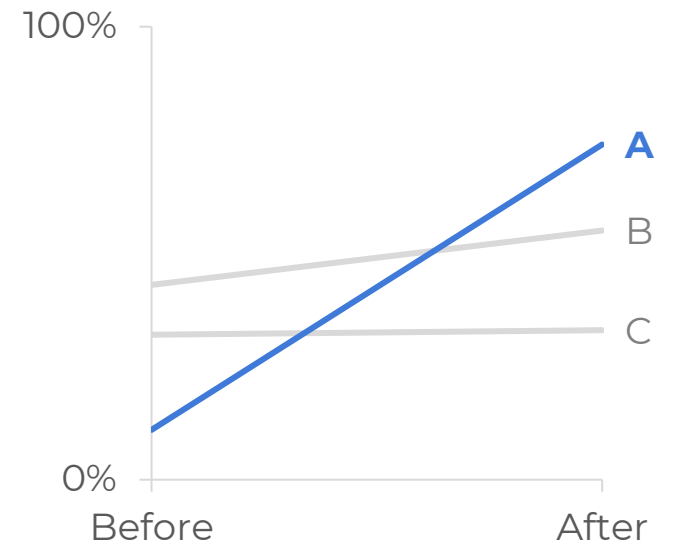


Figure 1. Project Results Before and After the Four-Year Grant Funding





Are Viewers Expecting a Story?

Default



Traditional

or

Storytelling

Figure 1. Project Results Before and After the Four-Year Grant Funding

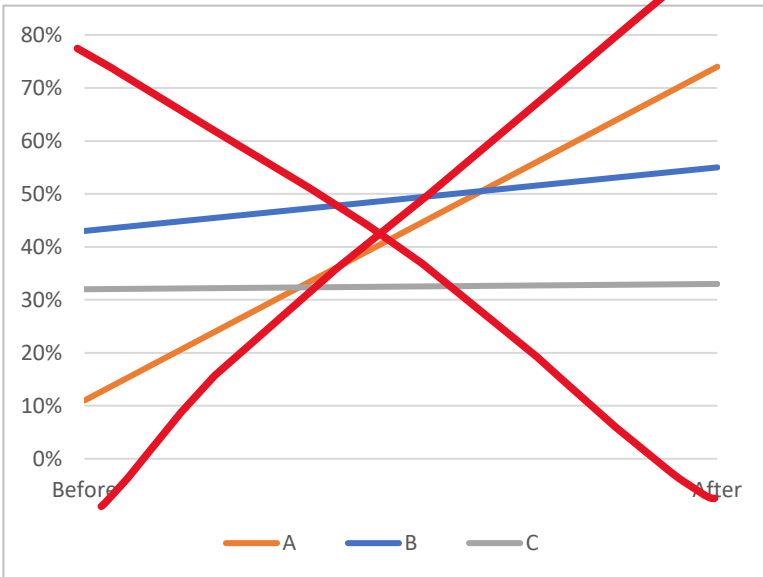
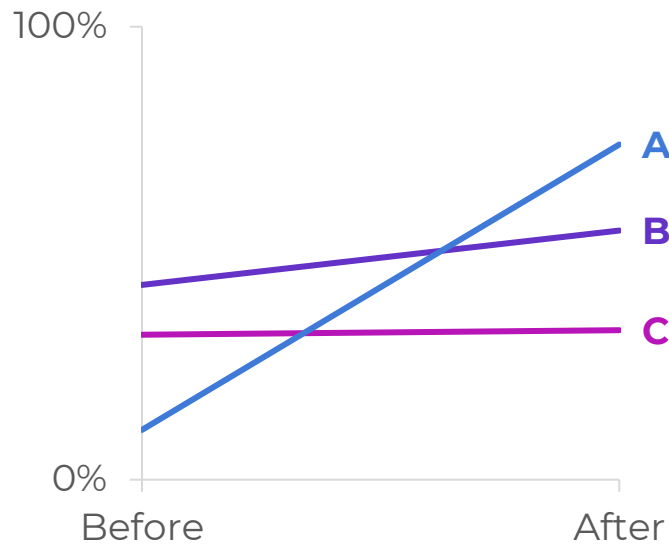
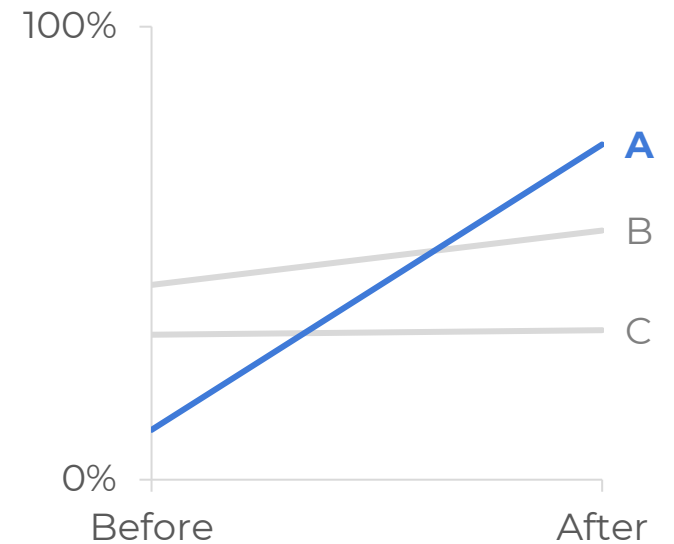


Figure 1. Project Results Before and After the Four-Year Grant Funding



Project A Improved the Most After the Four-Year Grant Funding





Are Viewers Expecting a Story?

Default



Traditional

or

Storytelling

Figure 1. Project Results Before and After the Four-Year Grant Funding

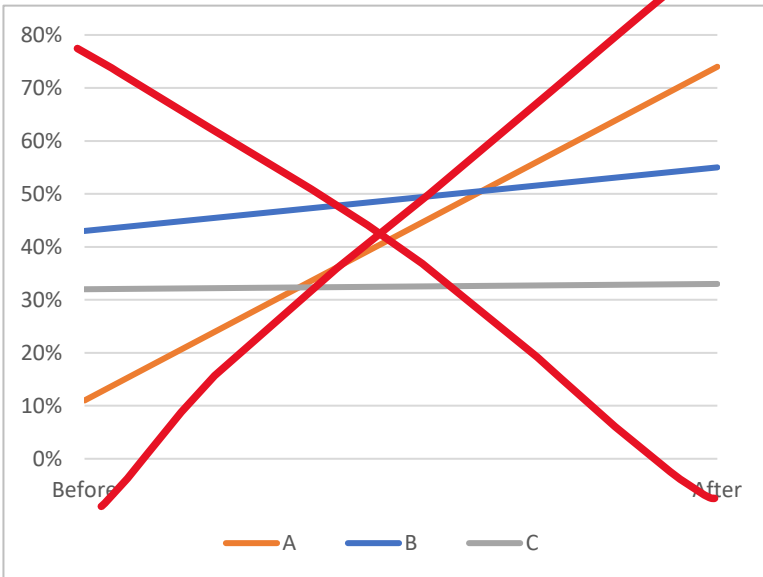
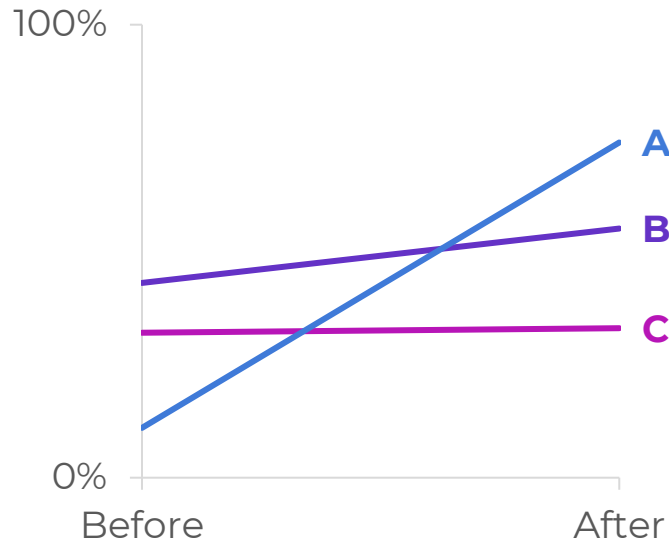
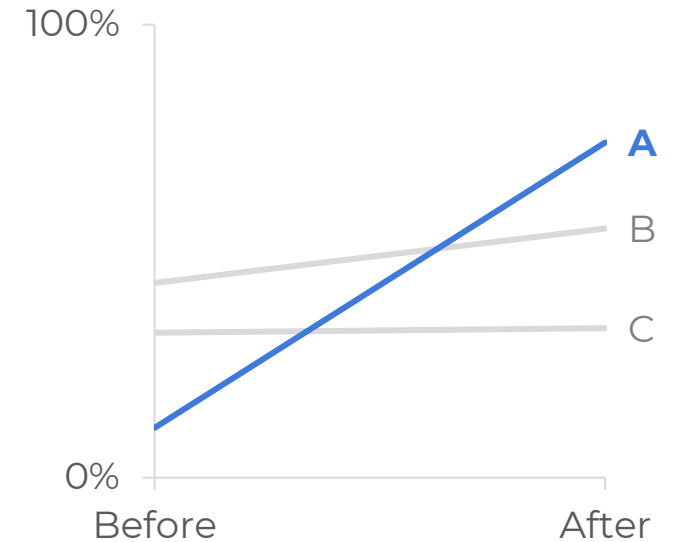


Figure 1. Project Results Before and After the Four-Year Grant Funding



Project A Improved the Most
After the Four-Year Grant Funding





Are Viewers Expecting a Story?

Default



Traditional

or

Storytelling

Figure 1. Project Results Before and After the Four-Year Grant Funding

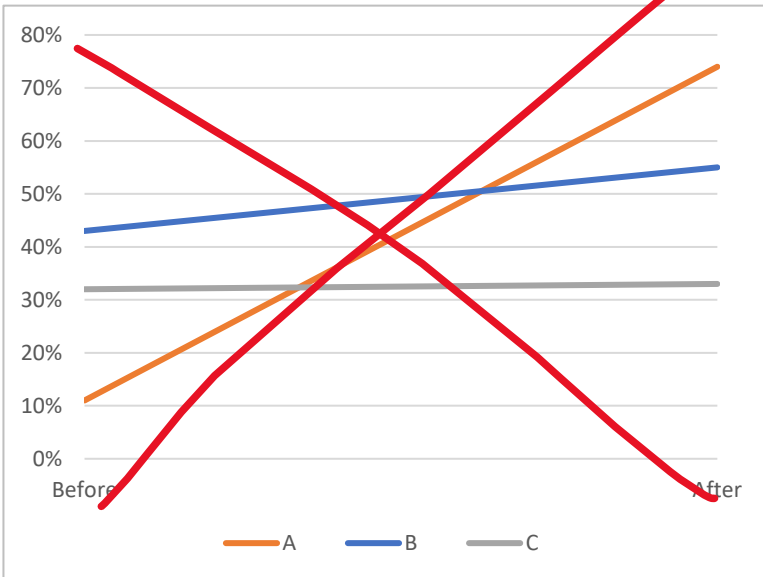
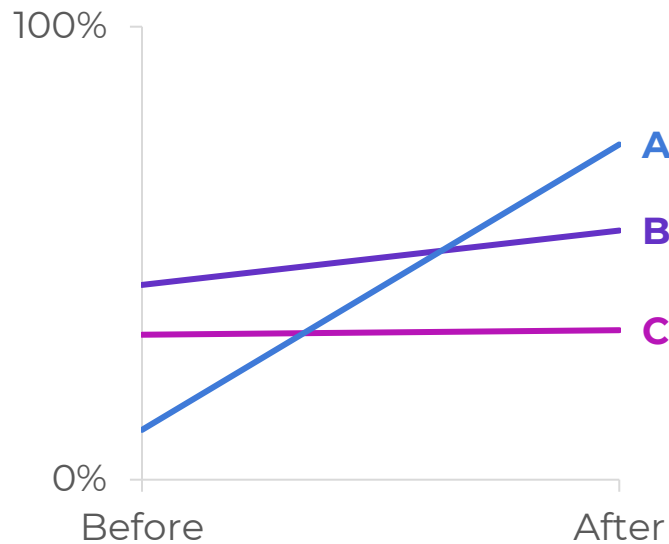
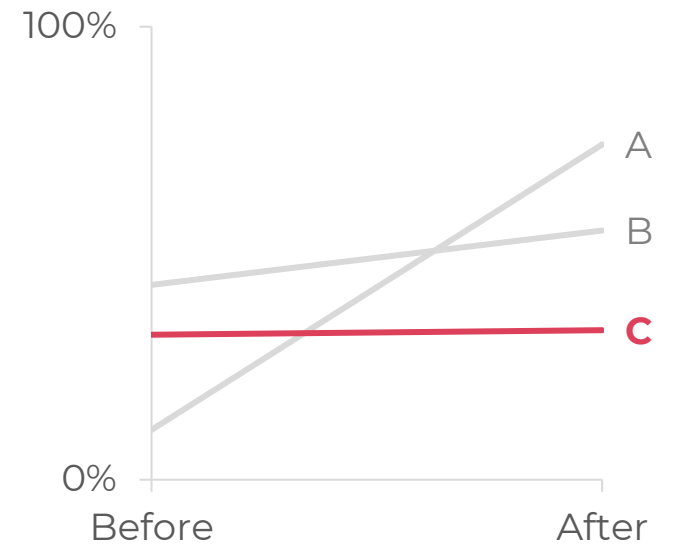


Figure 1. Project Results Before and After the Four-Year Grant Funding



Project C Stayed the Same
After the Four-Year Grant Funding





Are Viewers Expecting a Story?

Default



Traditional

or

Storytelling

Figure 1. Project Results Before and After the Four-Year Grant Funding

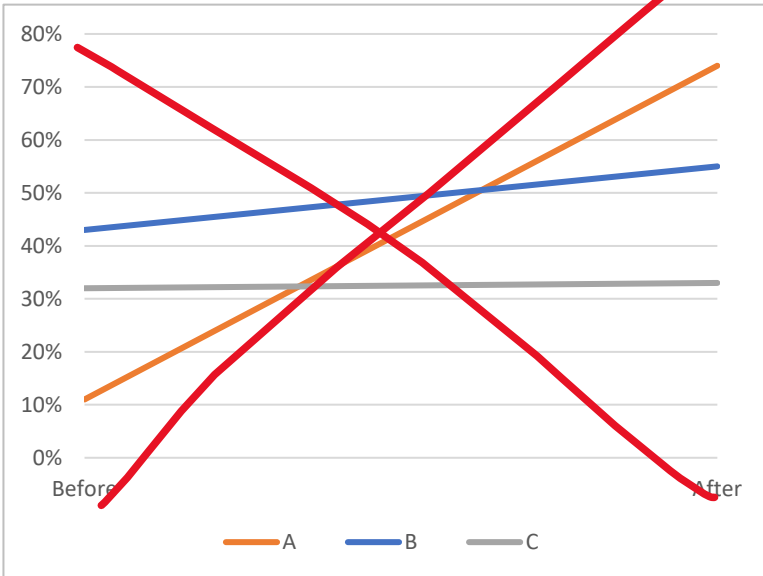
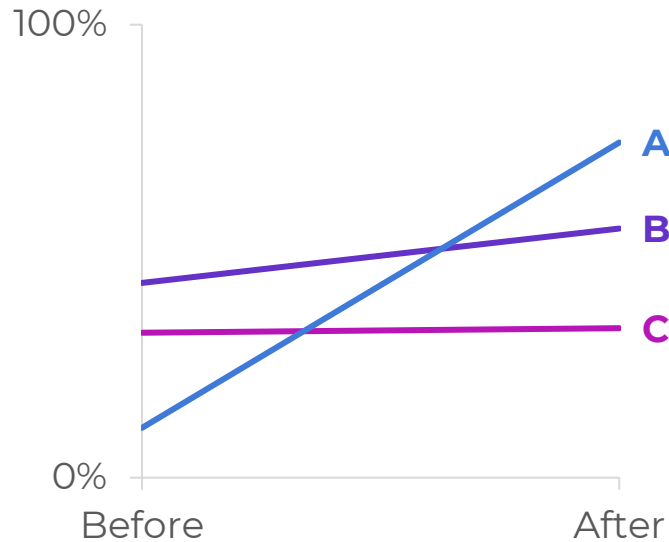
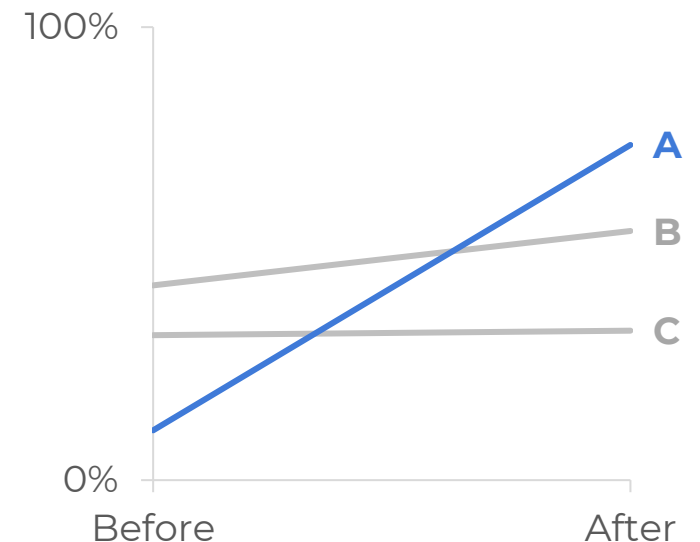


Figure 1. Project Results Before and After the Four-Year Grant Funding



.scientific, technical
Internal presentations

Project A Improved the Most
After the Four-Year Grant Funding



Partner presentations
Everything else
External
Educators, policymakers
Higher-ups in CDC, some internal presentations
Anyone who doesn't live in this world
Public-facing websites

1

Audience



2

Charts



3

Declutter



4

Color



5

Text

Our Scenario:

	A	B	C	D	E	F	
1	#	Group A	Group B	Group C			
2	1	37	83	46			
3	2	50	71	77			
4	3	10	88	11			
5	4	45	72	13			
6	5	8	62	55			
7	6	50	61	37			
8	7	15	91	61			
9	8	43	72	93			
10	9	45	80	45			
11	10	41	62	12			

Show the Averages...?

34

Group A

74

Group B

45

Group C

Add Charts!!!

34

Group A

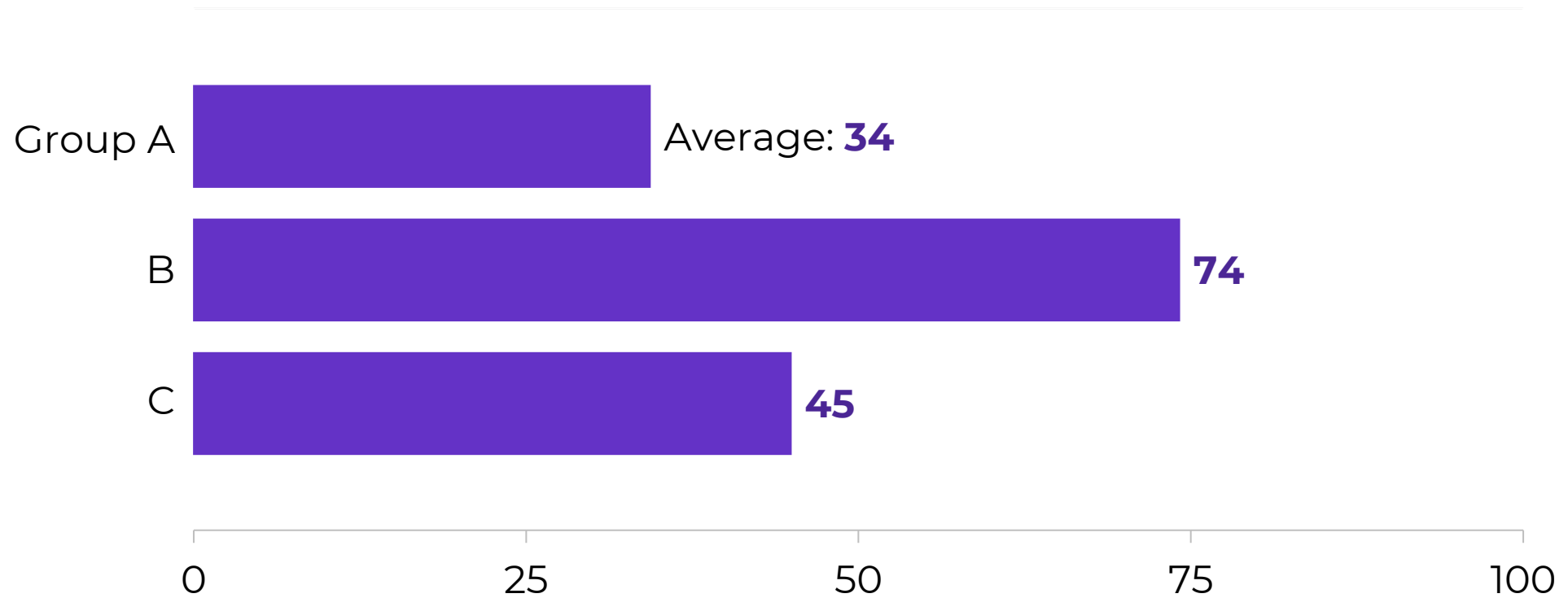
74

Group B

45

Group C

Add Charts!!!



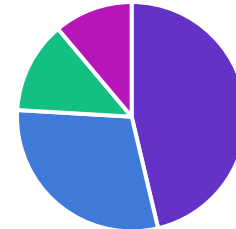
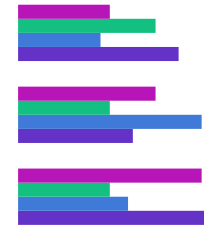
(because Visual Superiority Effect)

Words

Lorem ipsum dolor sit amet,
consectetur adipiscing elit.
Maecenas porttitor congue massa.
Fusce posuere, magna sed
pulvinar ultricies, purus lectus
malesuada libero, sit amet
commodo magna eros quis urna.

vs.

Pictures



(because Visual Superiority Effect)

Words

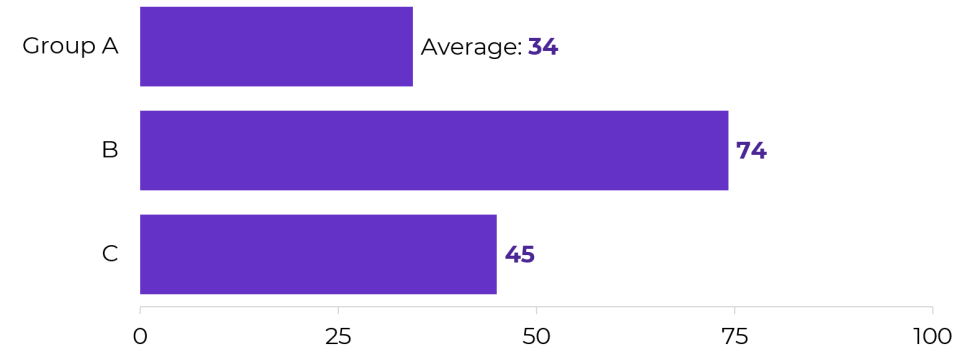
vs.

Pictures

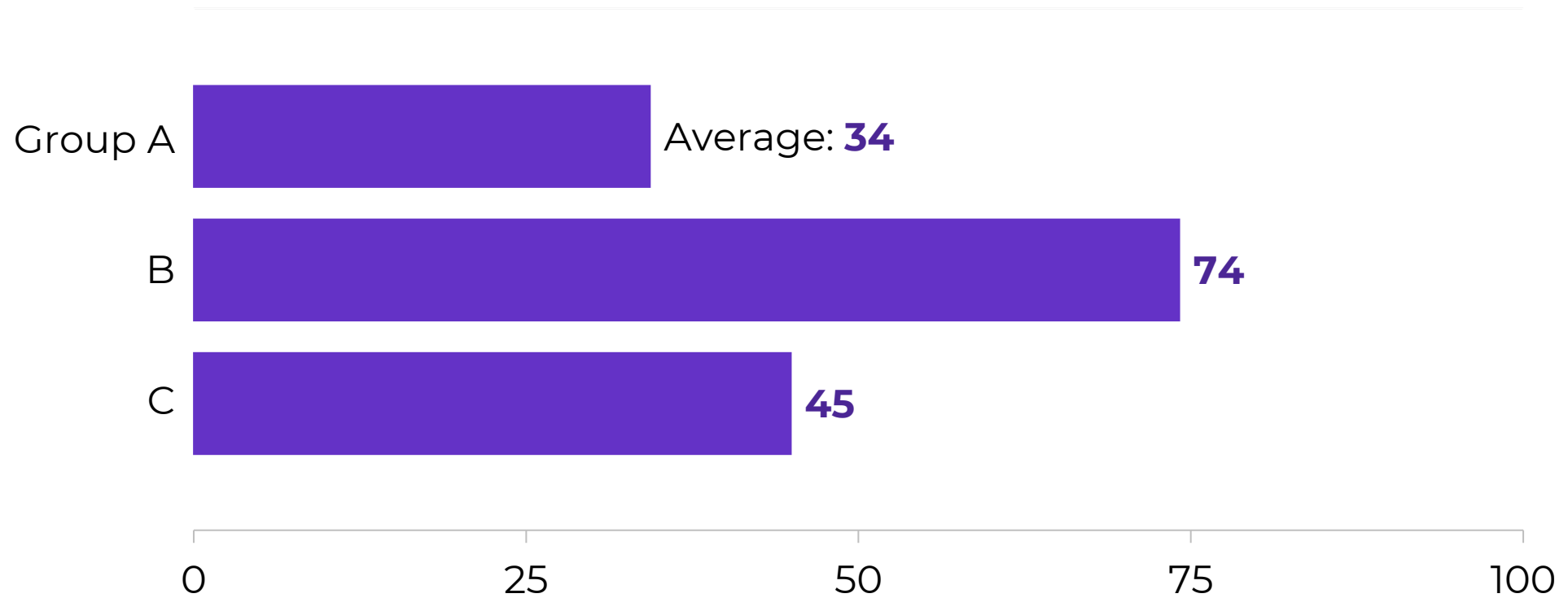
34
Group A

74
Group B

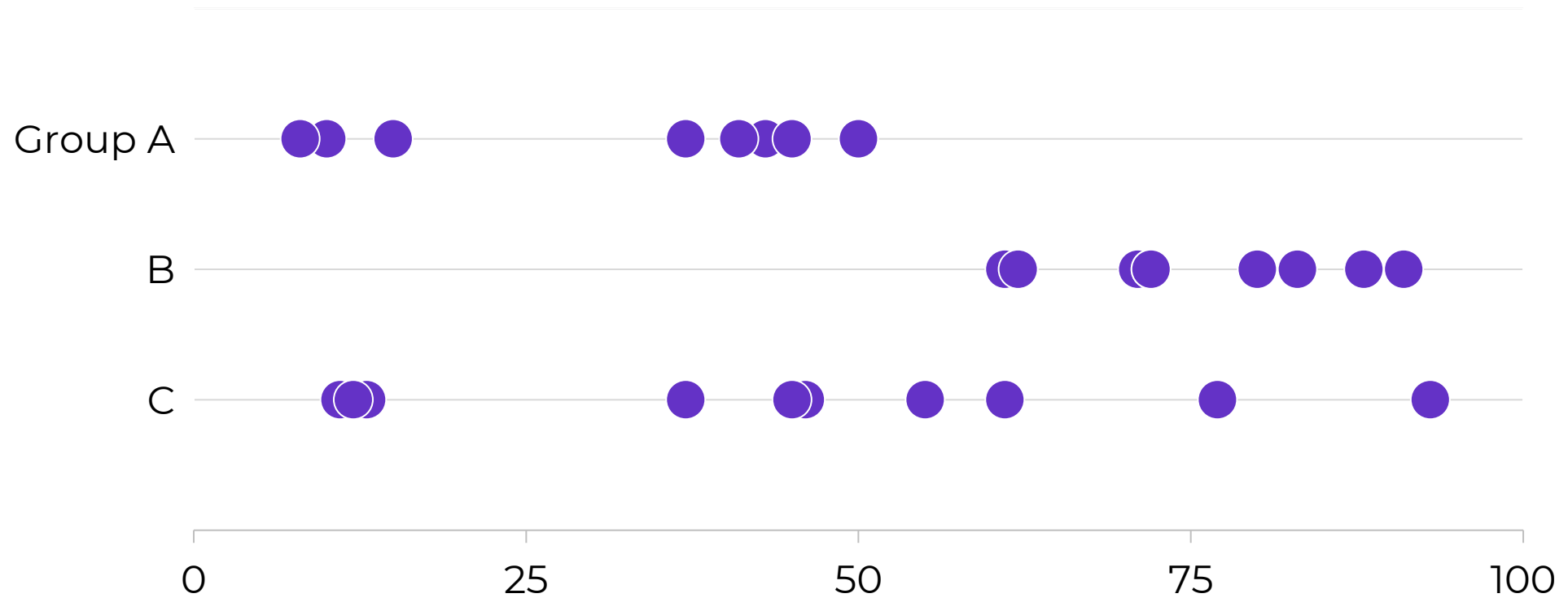
45
Group C



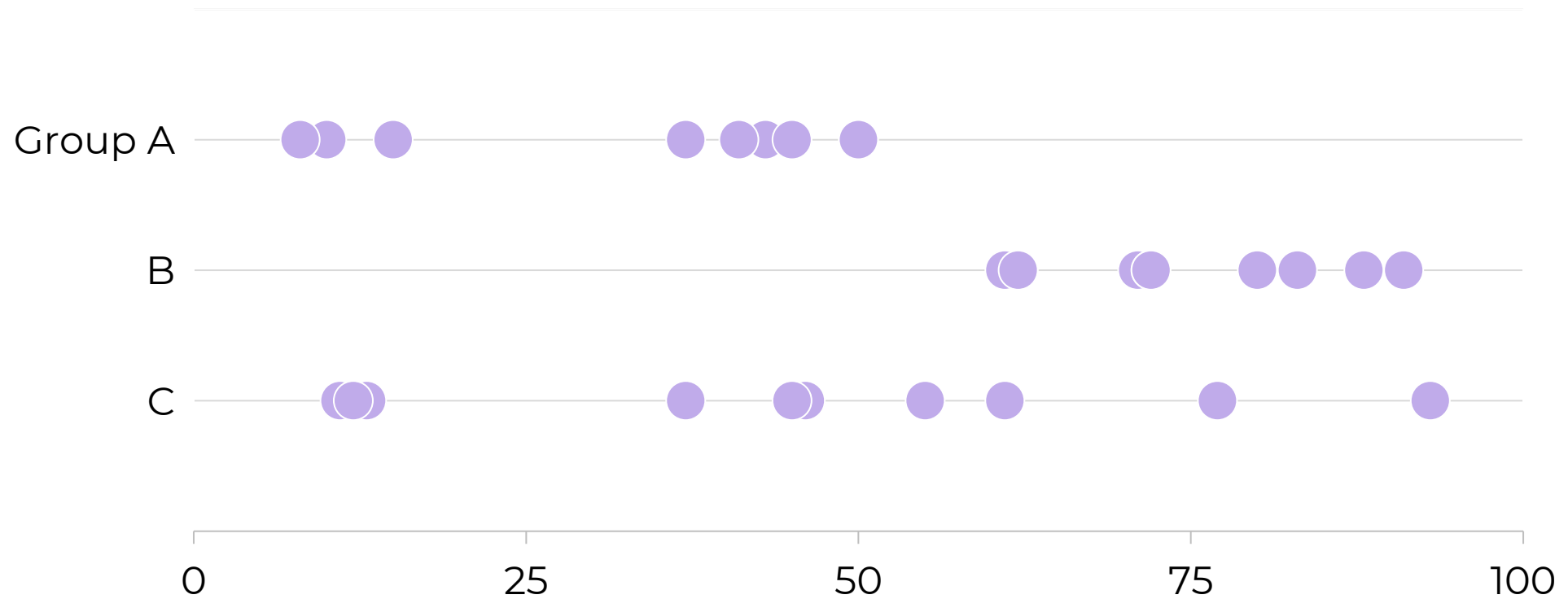
Bars into Dots



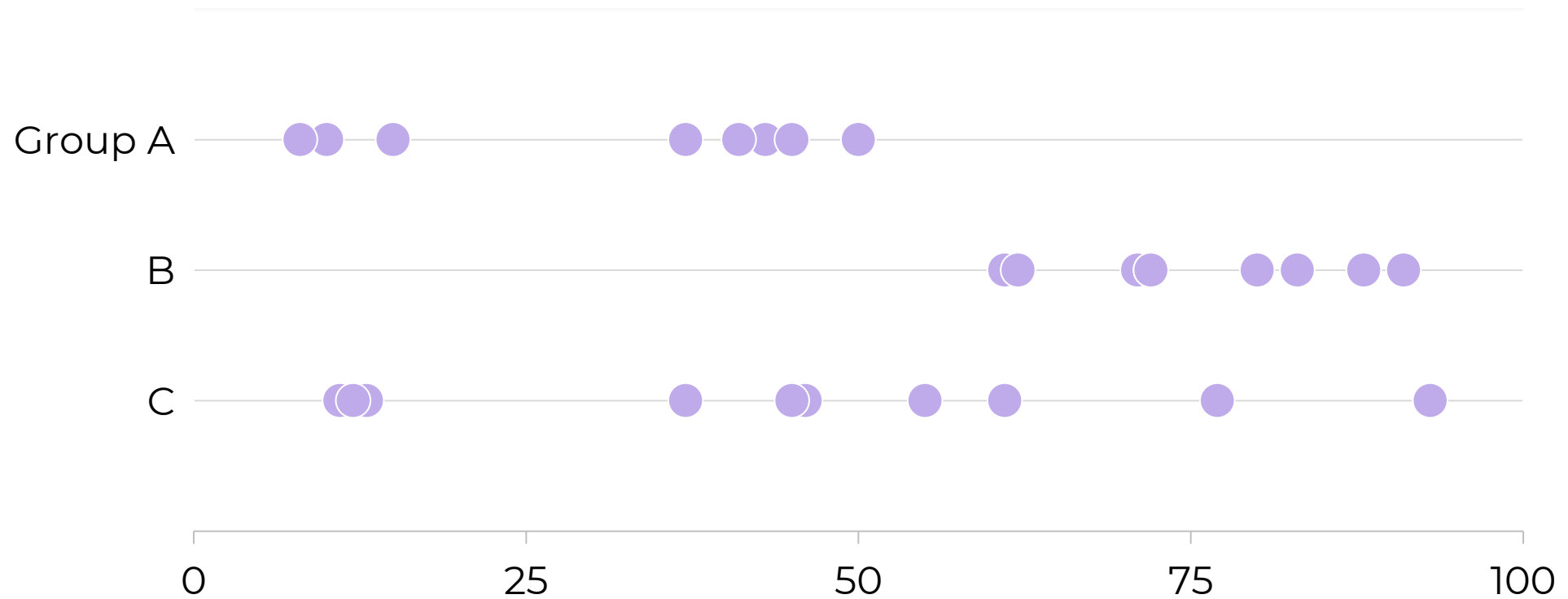
Bars into Dots



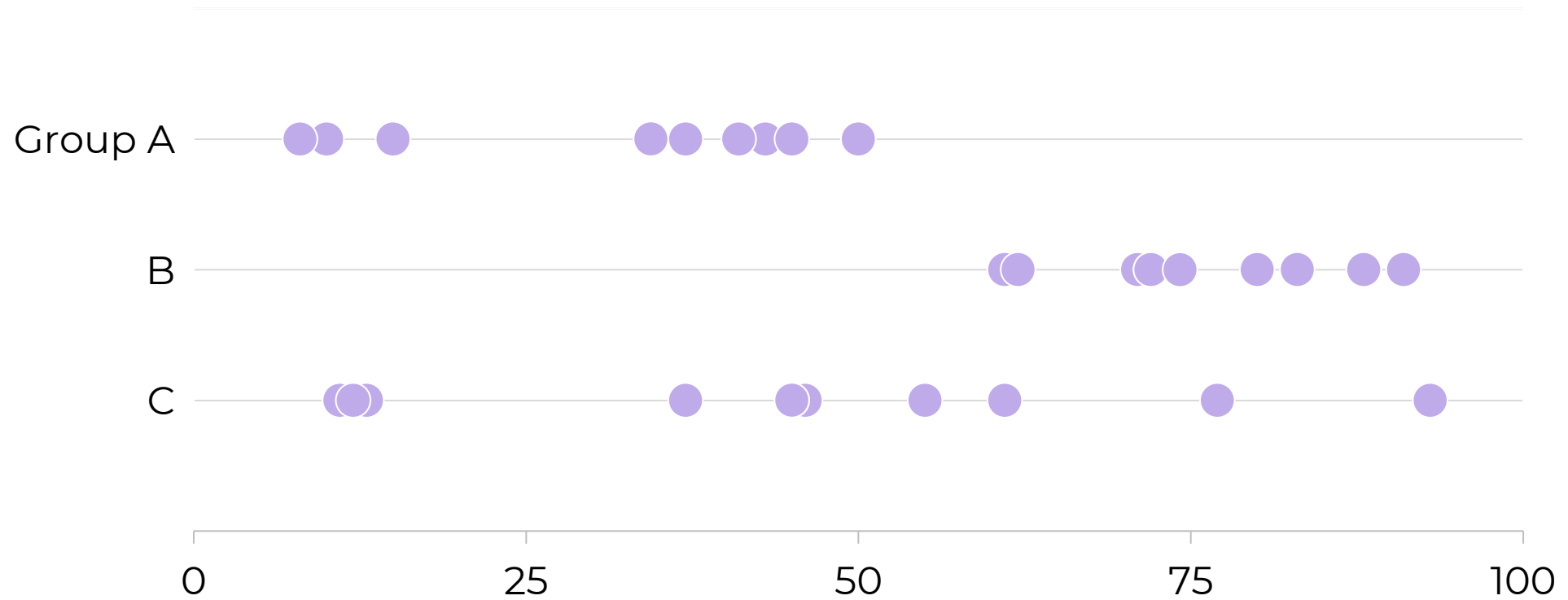
Bars into Dots



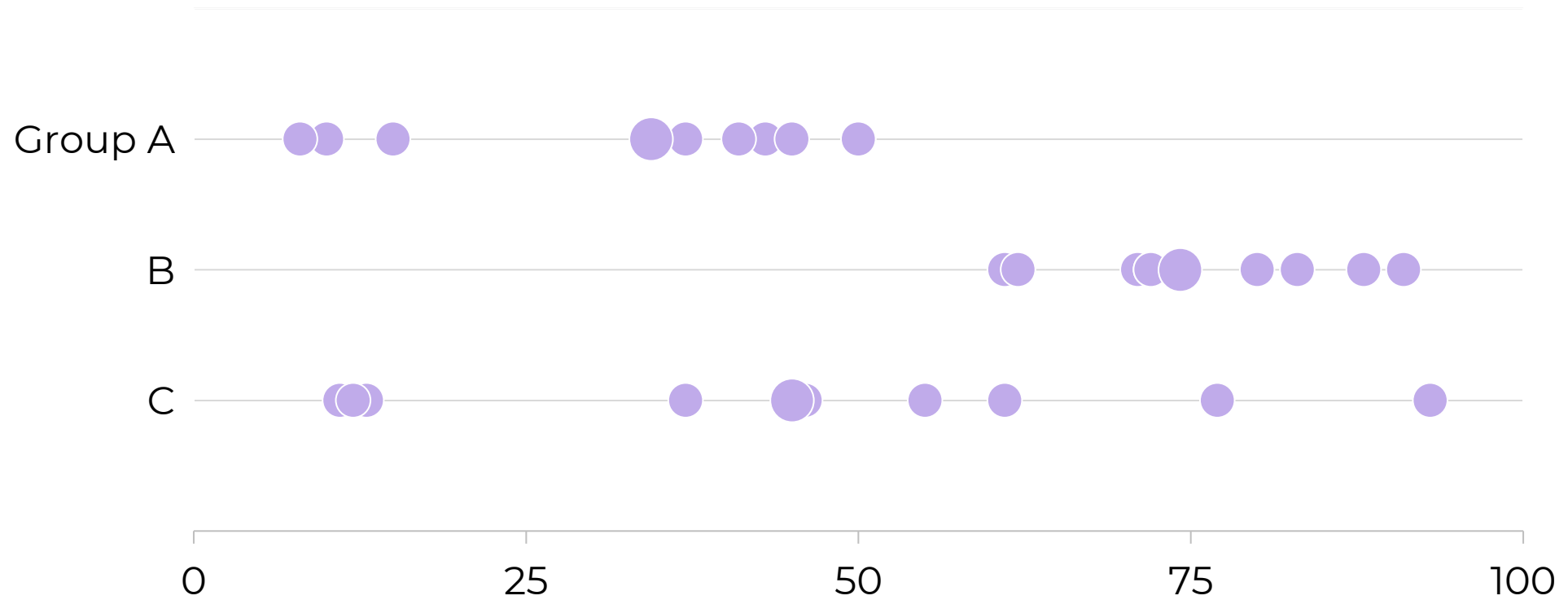
Bars into Dots



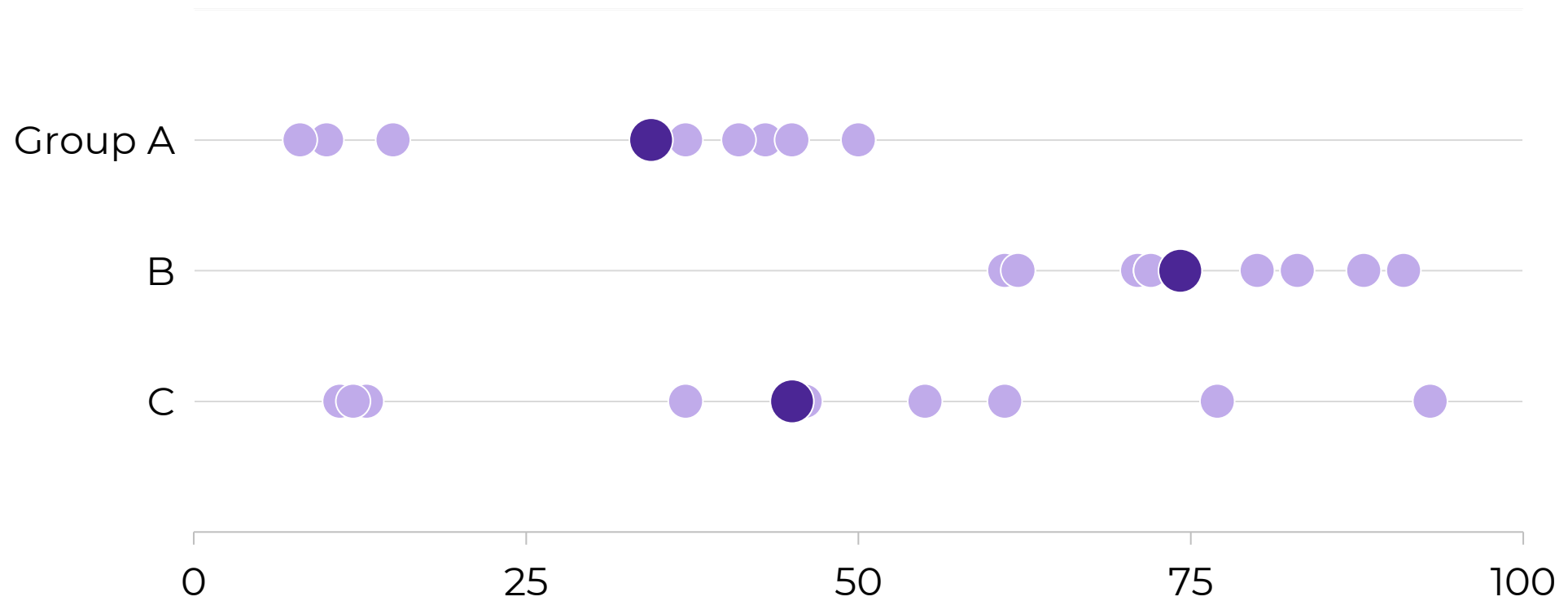
Bars into Dots



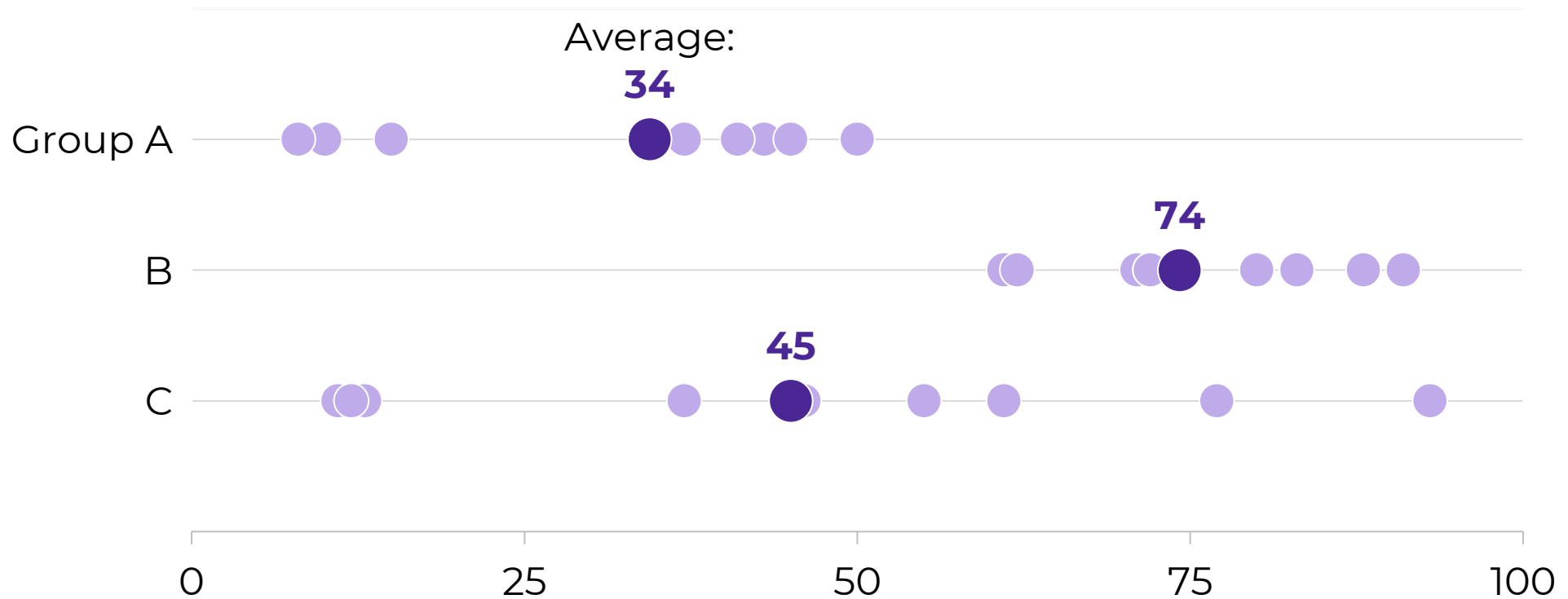
Bars into Dots



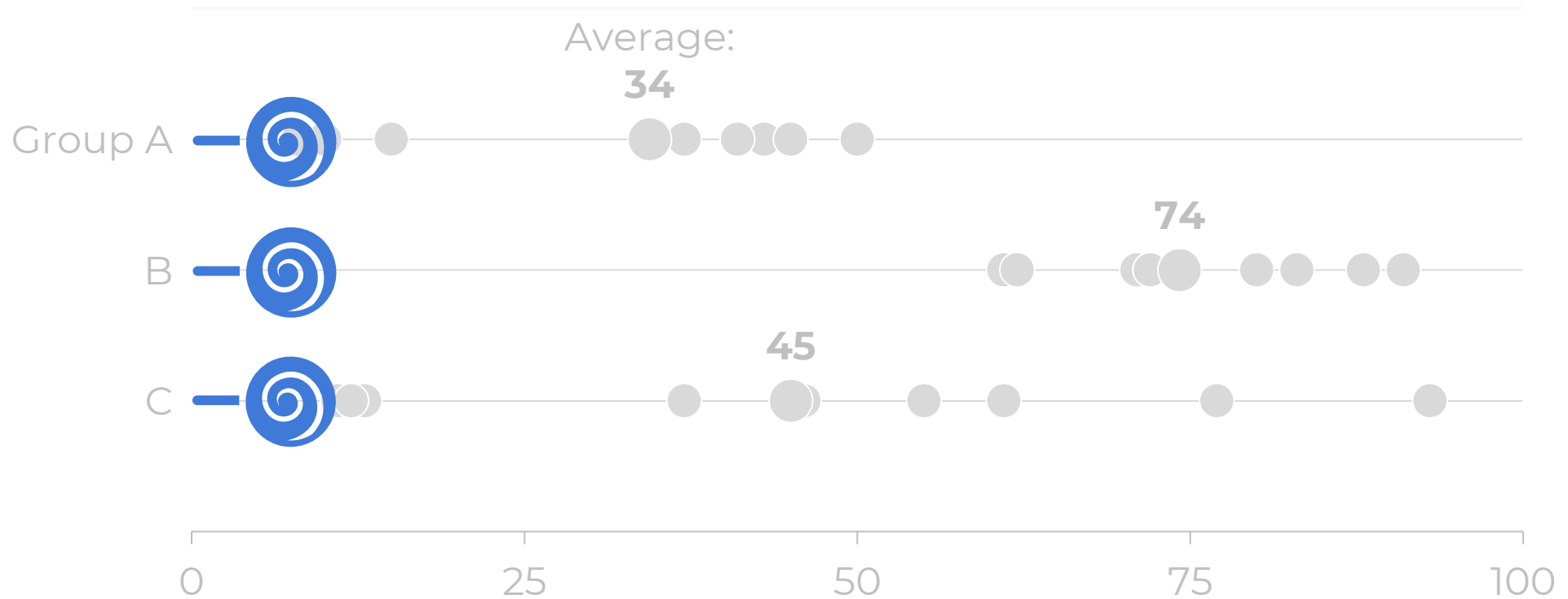
Bars into Dots



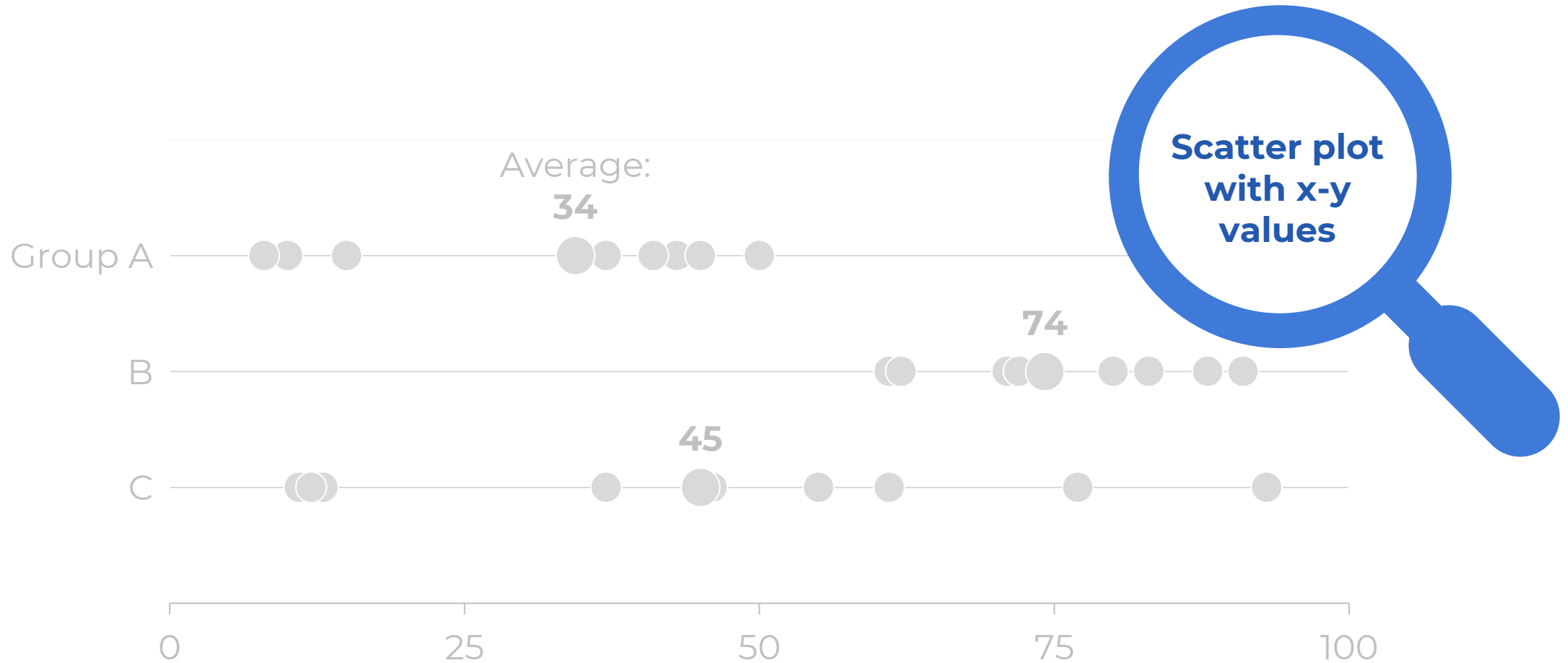
Bars into Dots



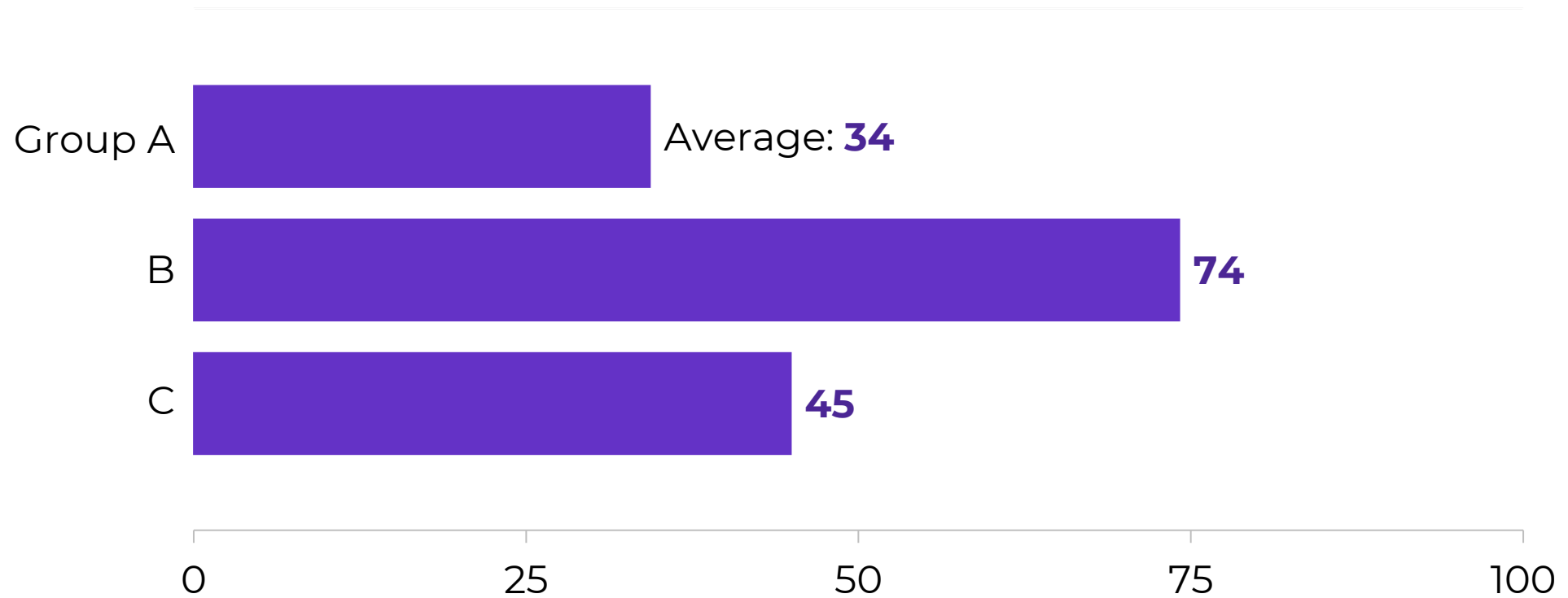
Bars into Dots (aka lollipops)



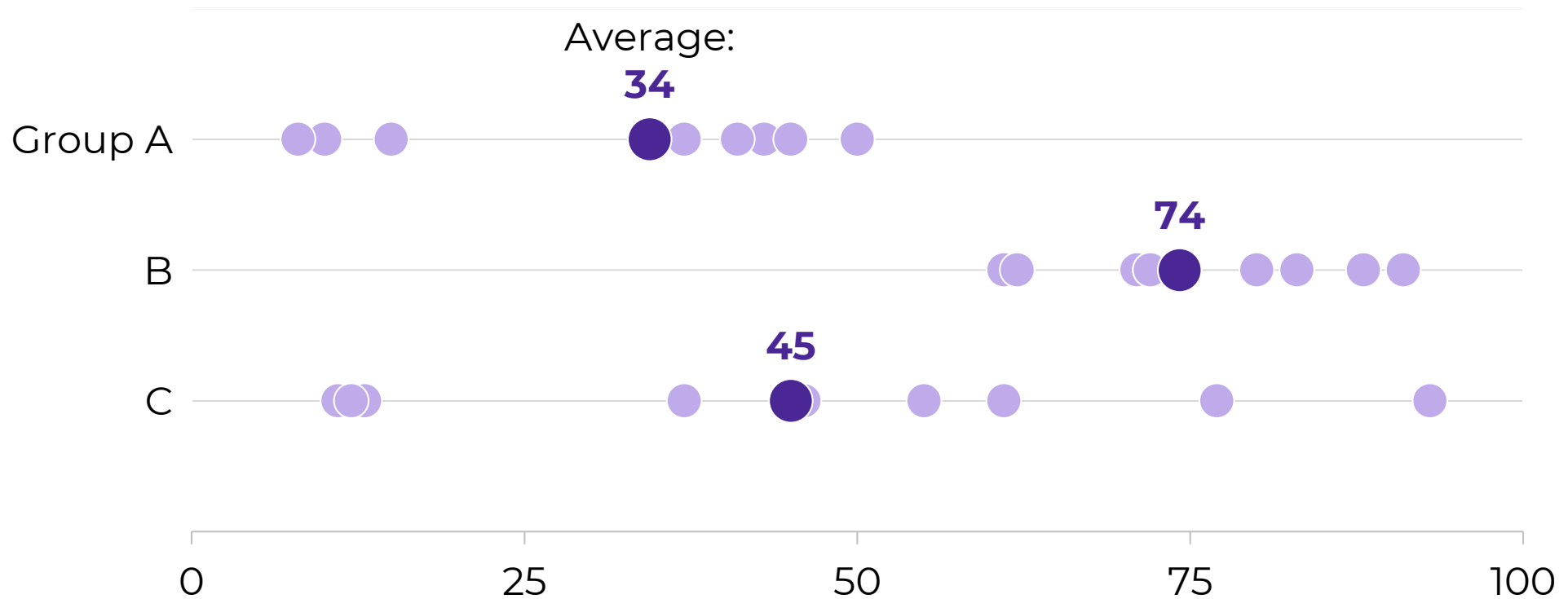
Bars into Dots (aka lollipops)



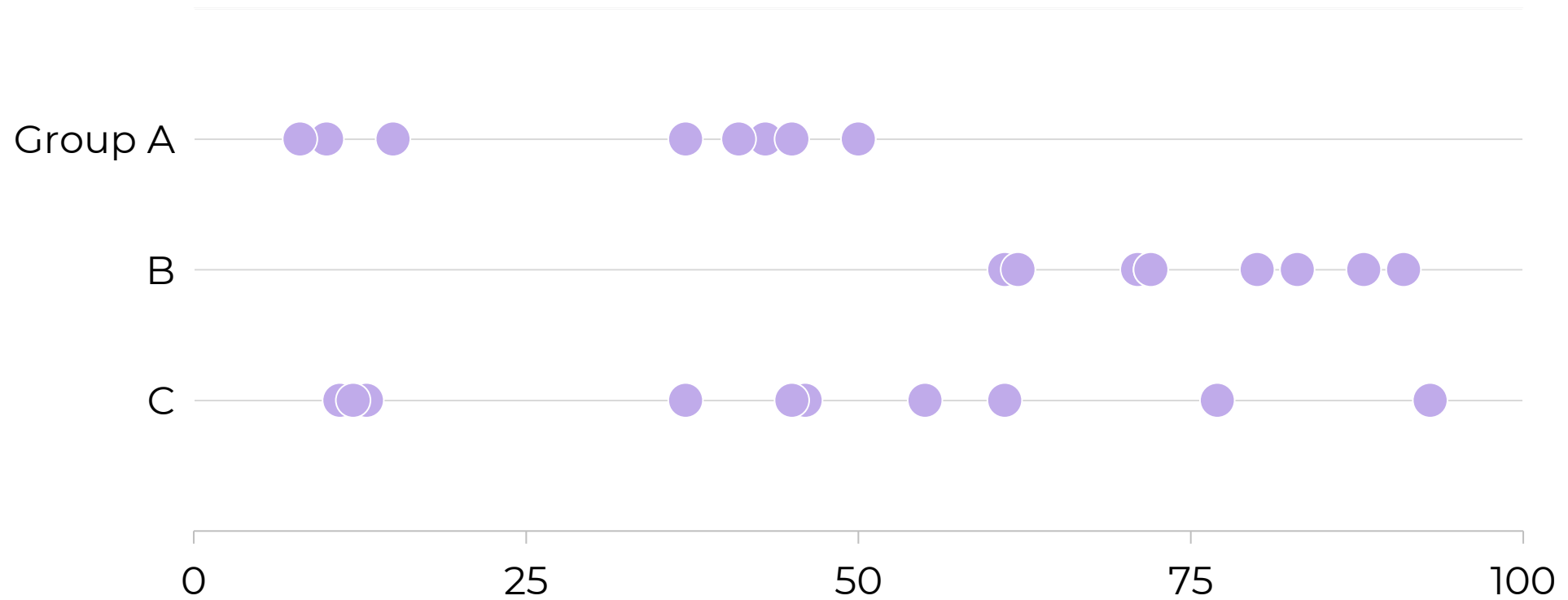
Bars into Dots (aka lollipops)



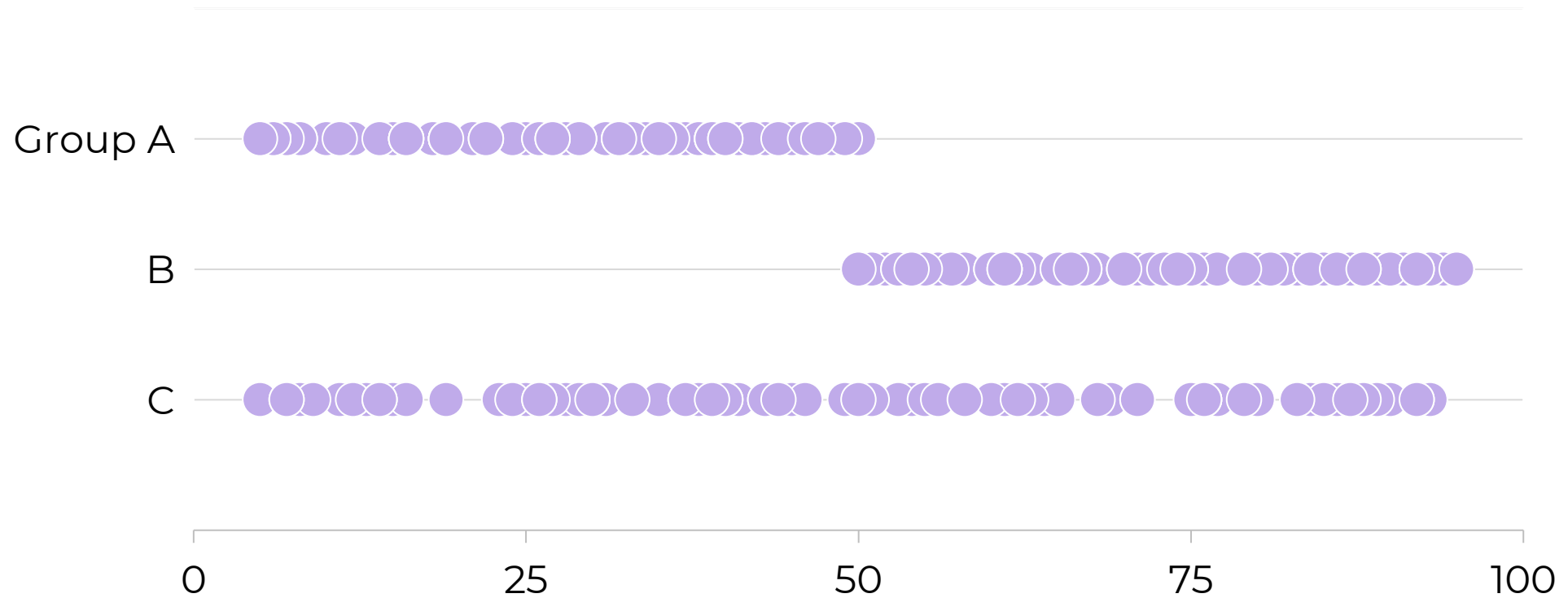
Bars into Dots (aka lollipops)



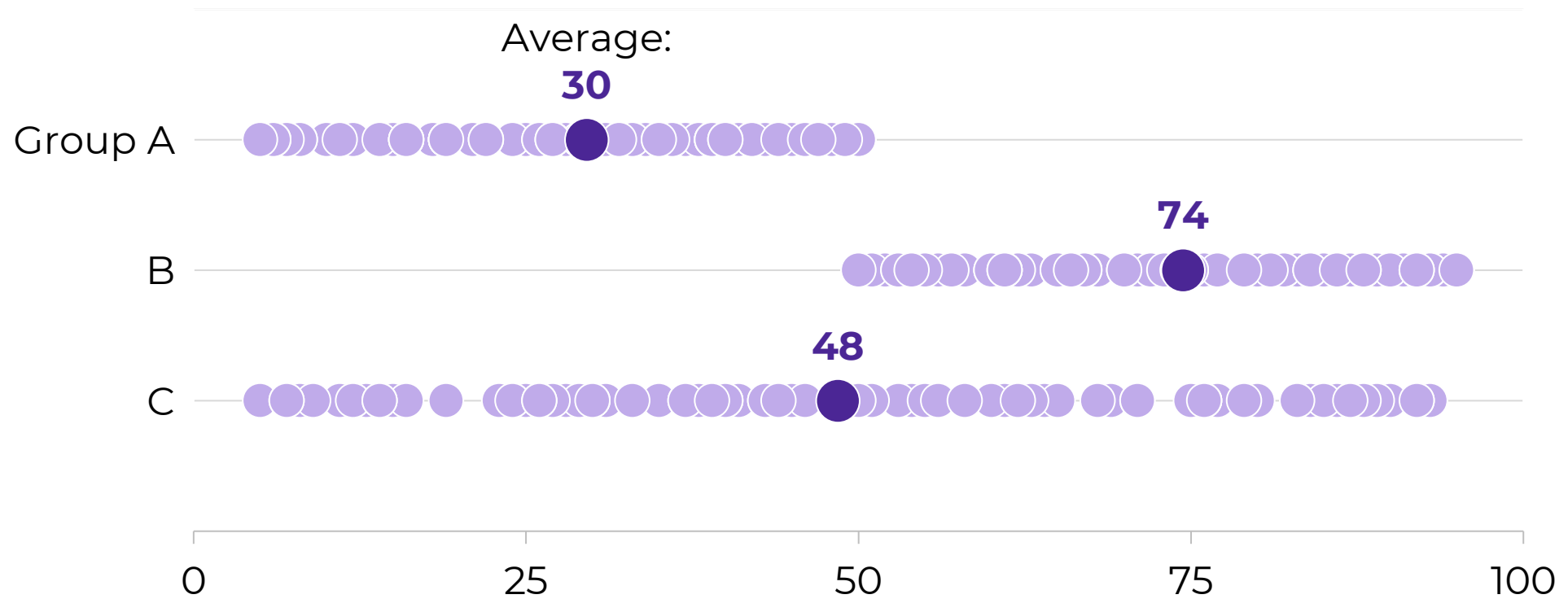
Dots into Swarms



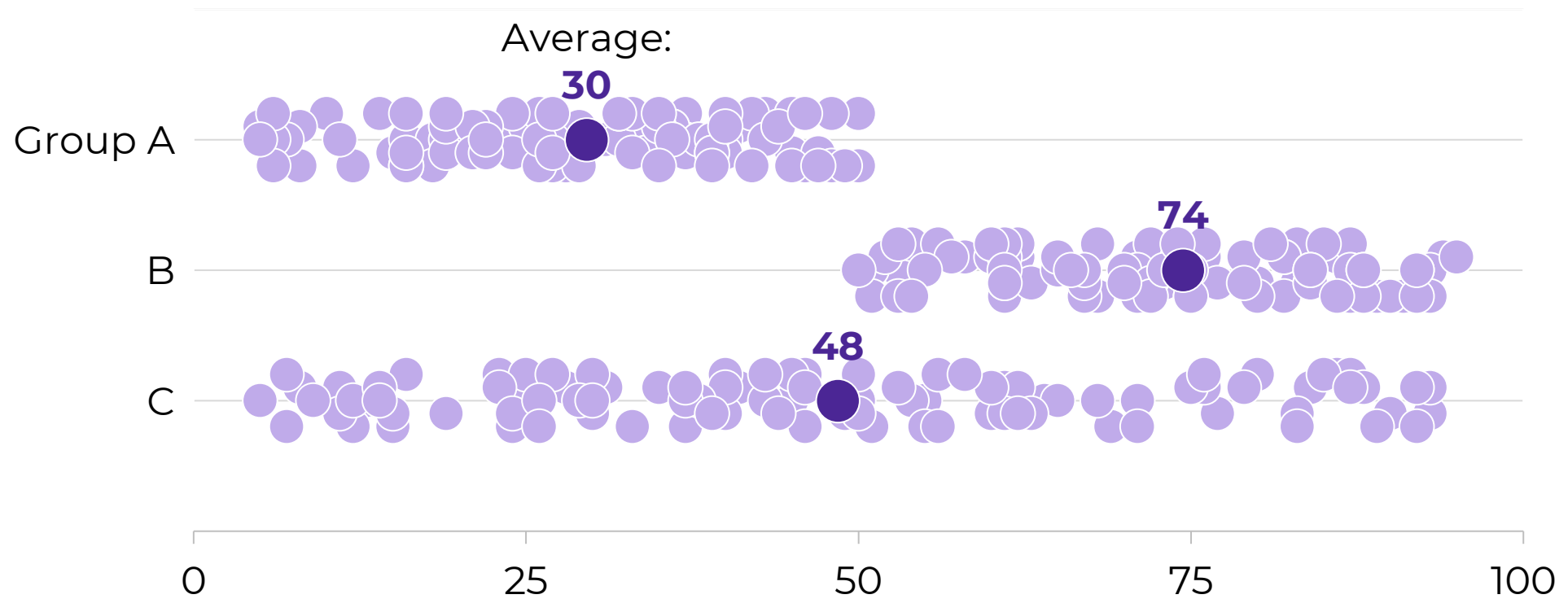
Dots into Swarms



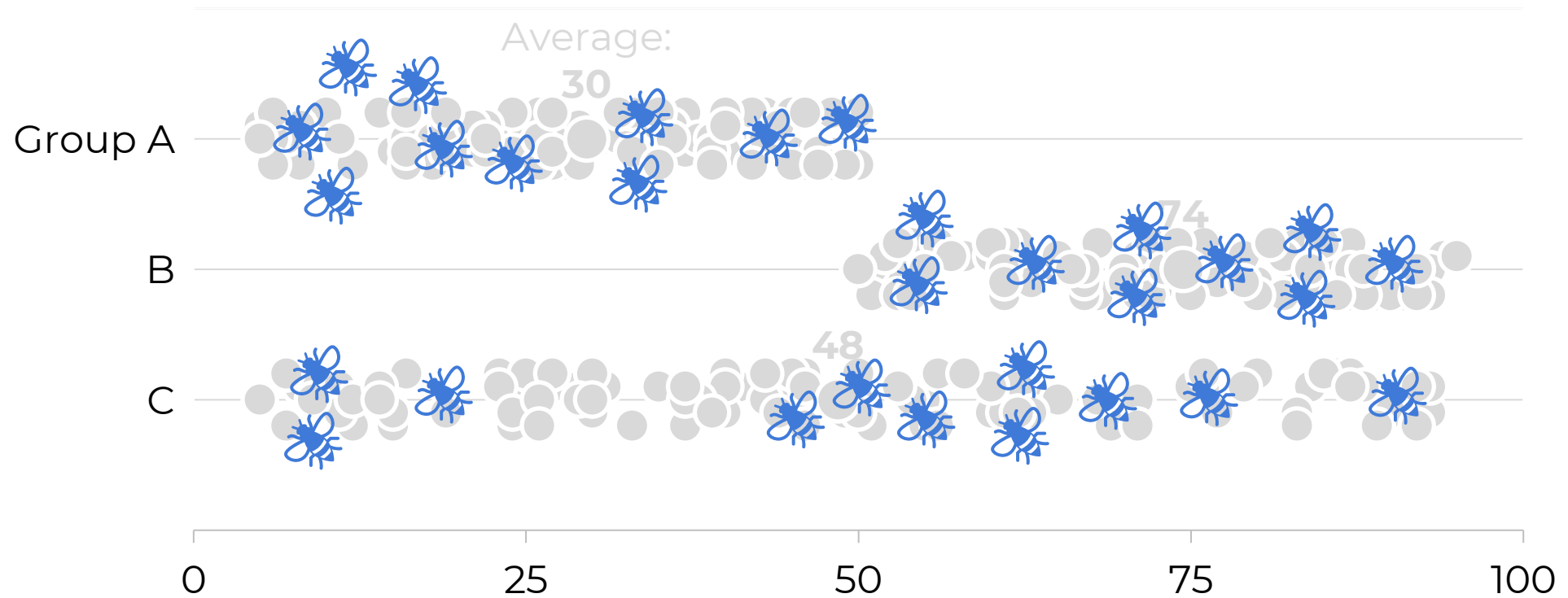
Dots into Swarms



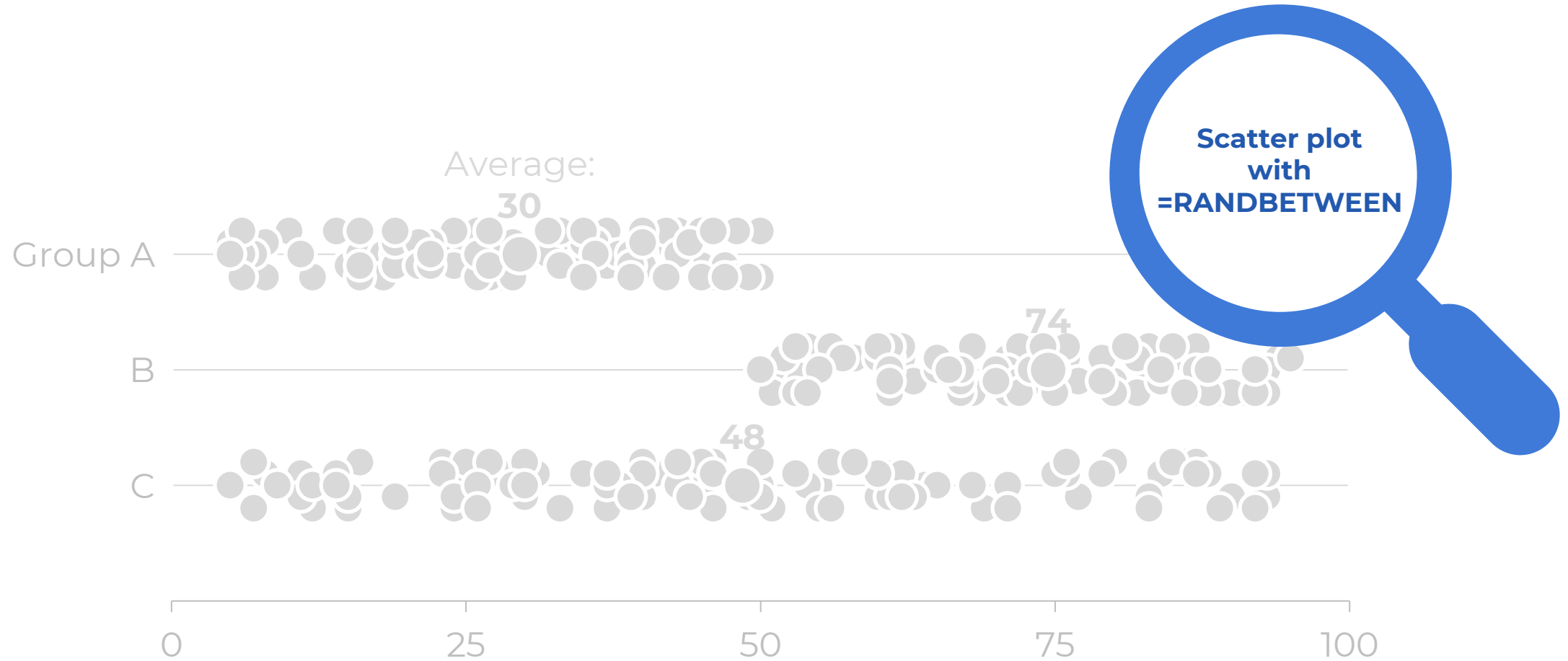
Dots into Swarms



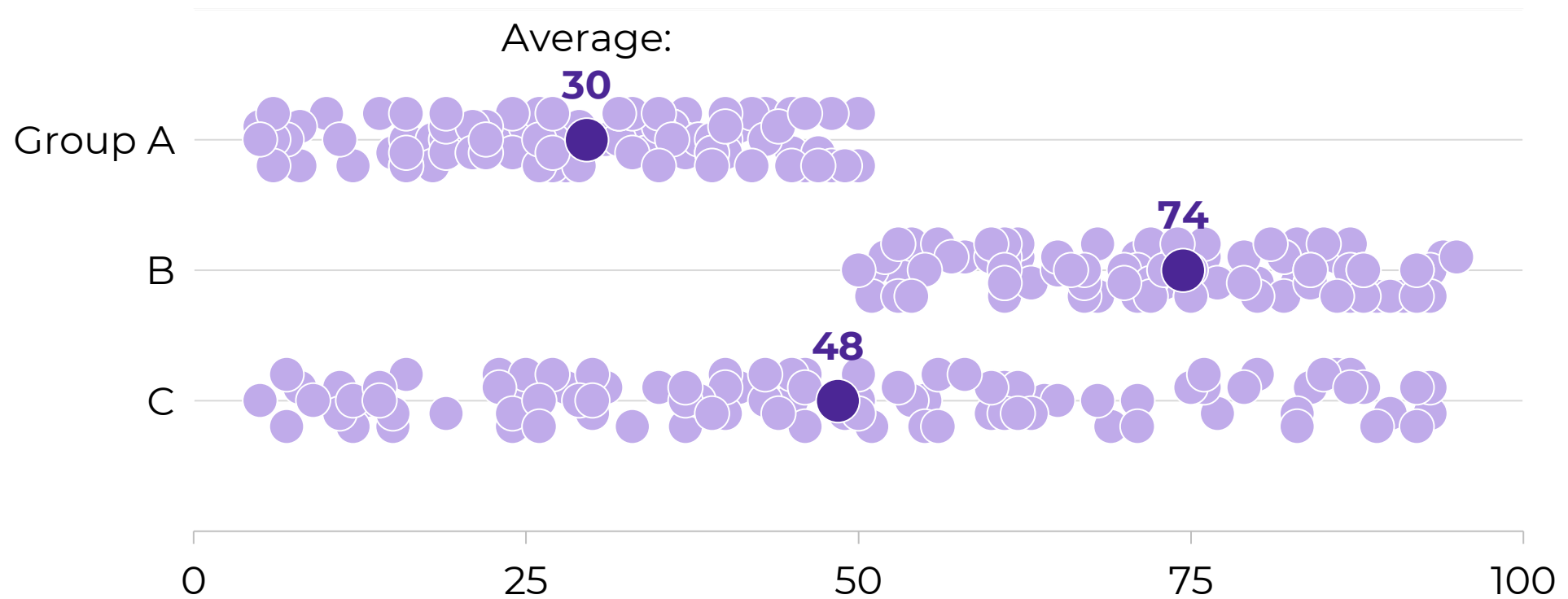
Dots into Swarms



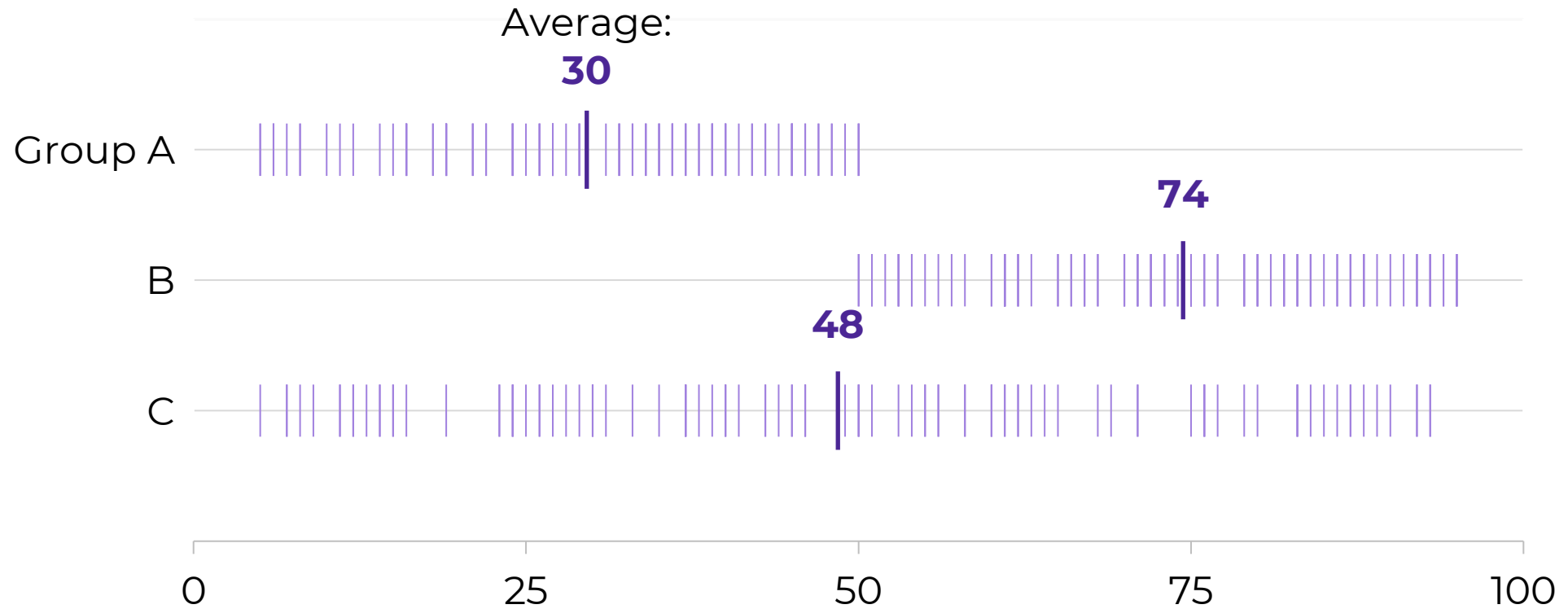
Dots into Swarms



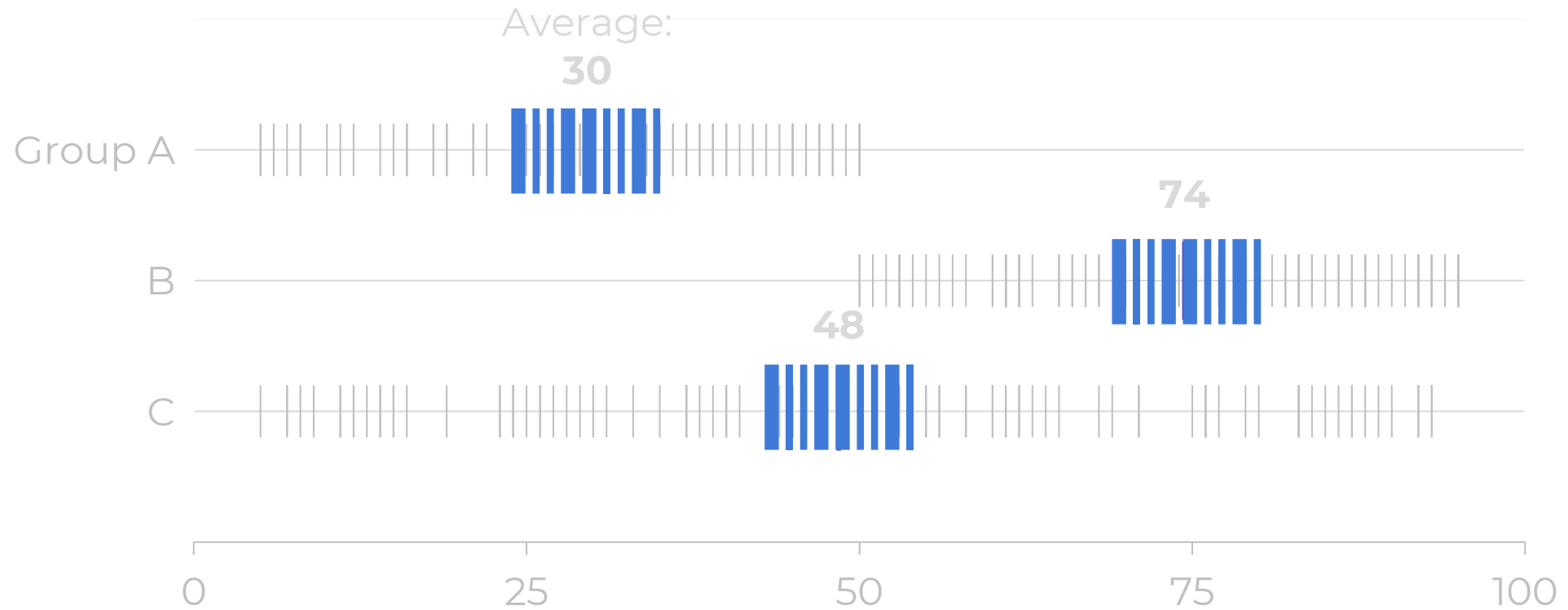
Swarms into Strips



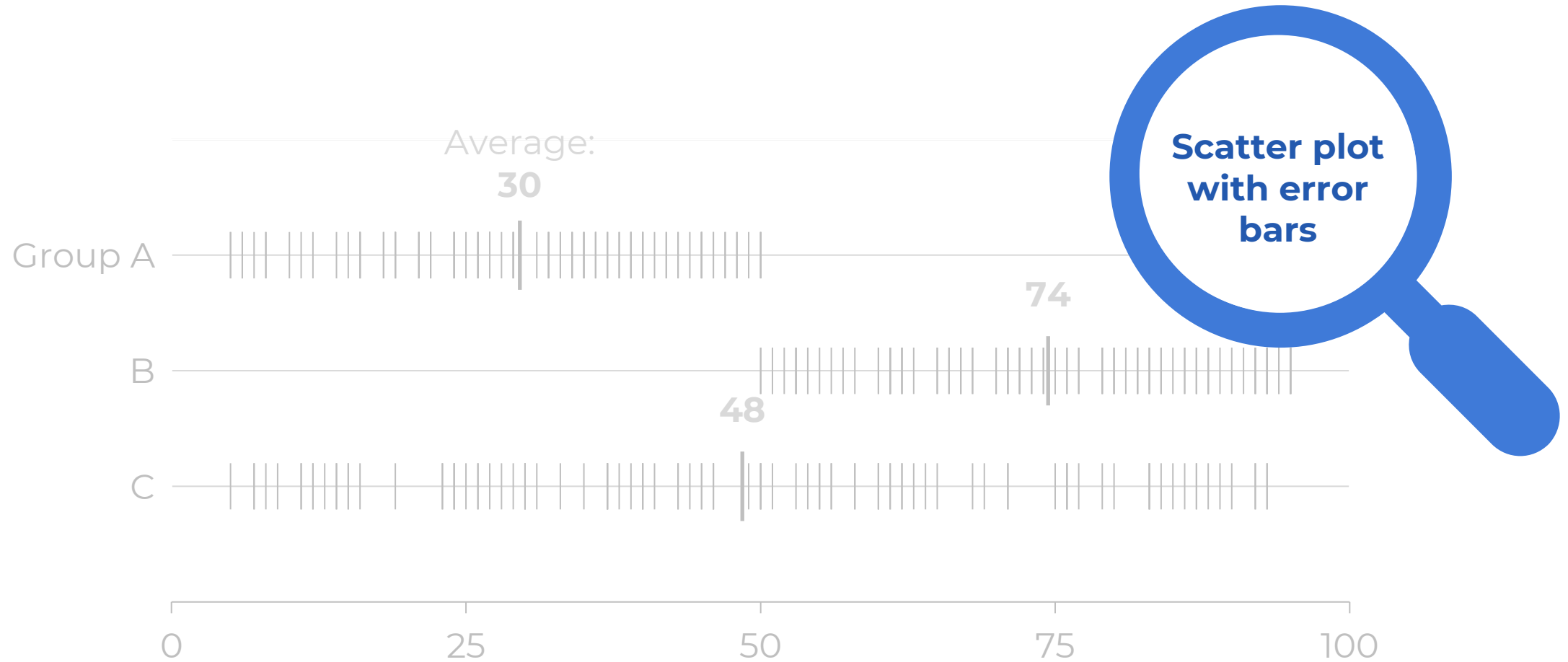
Swarms into Strips

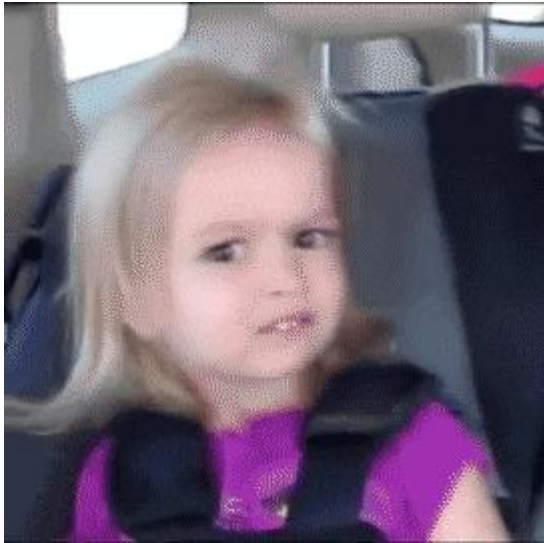


Swarms into Strips (aka Bar Codes)

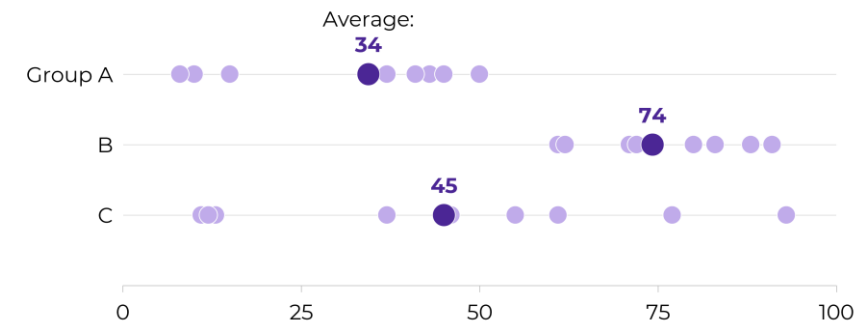


Swarms into Strips (aka Bar Codes)

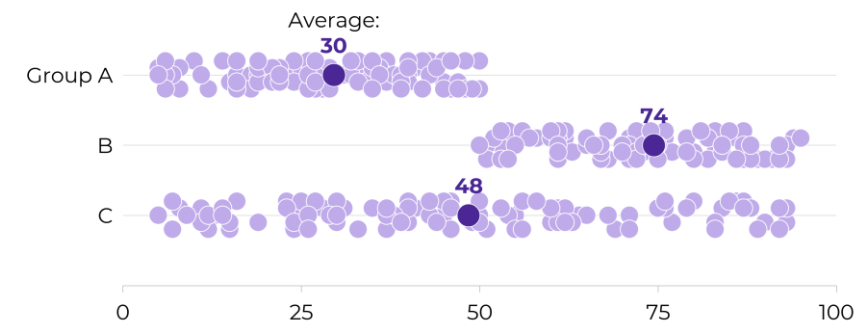




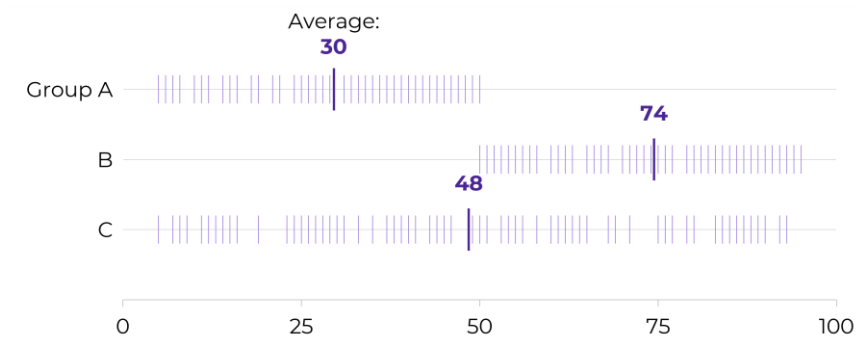
Dots



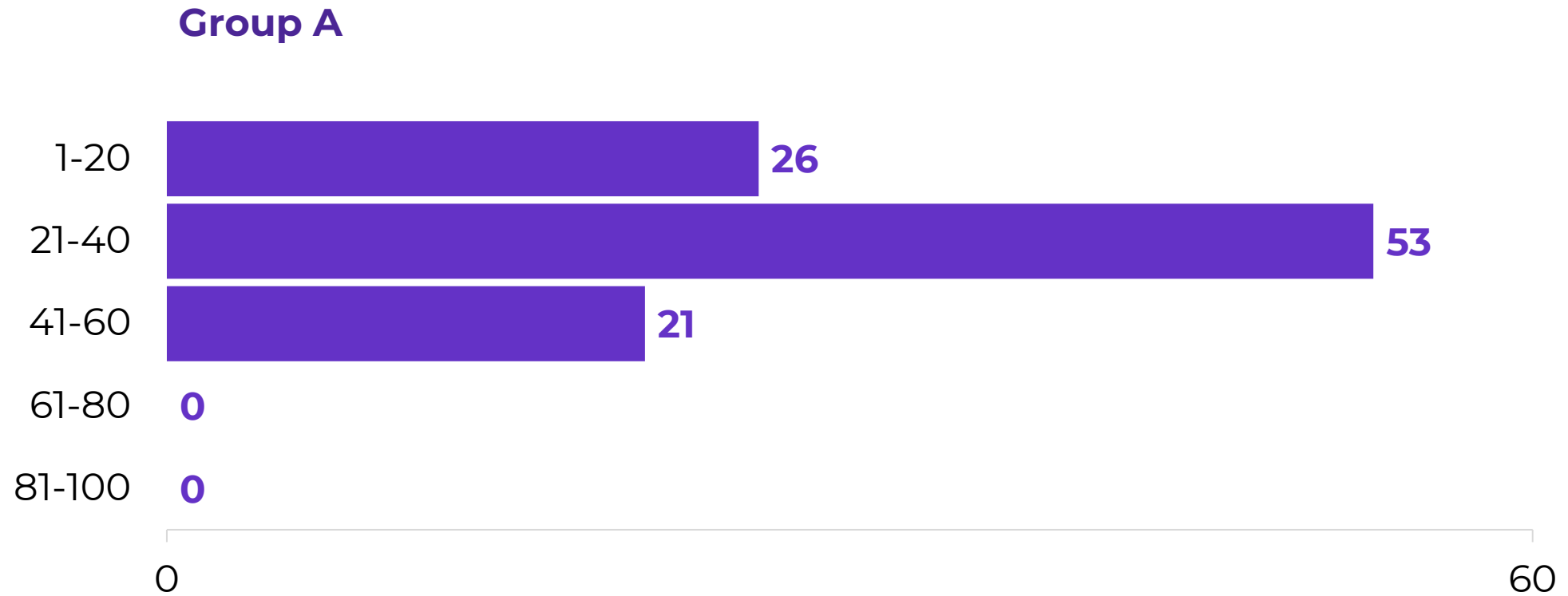
Swarms



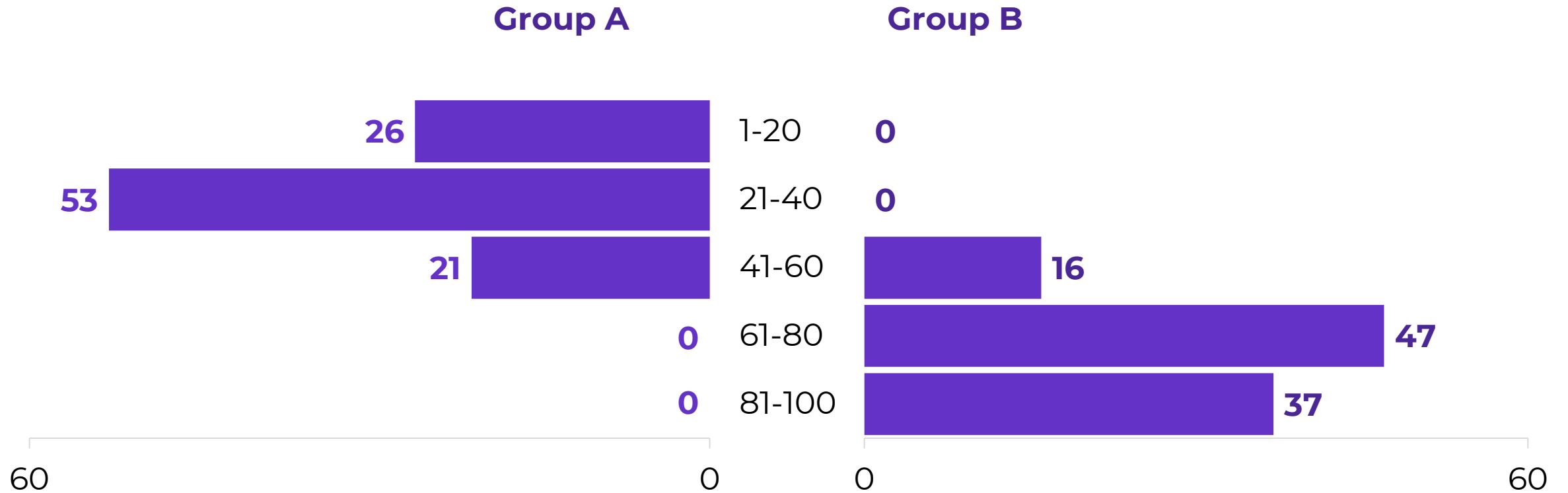
Strips



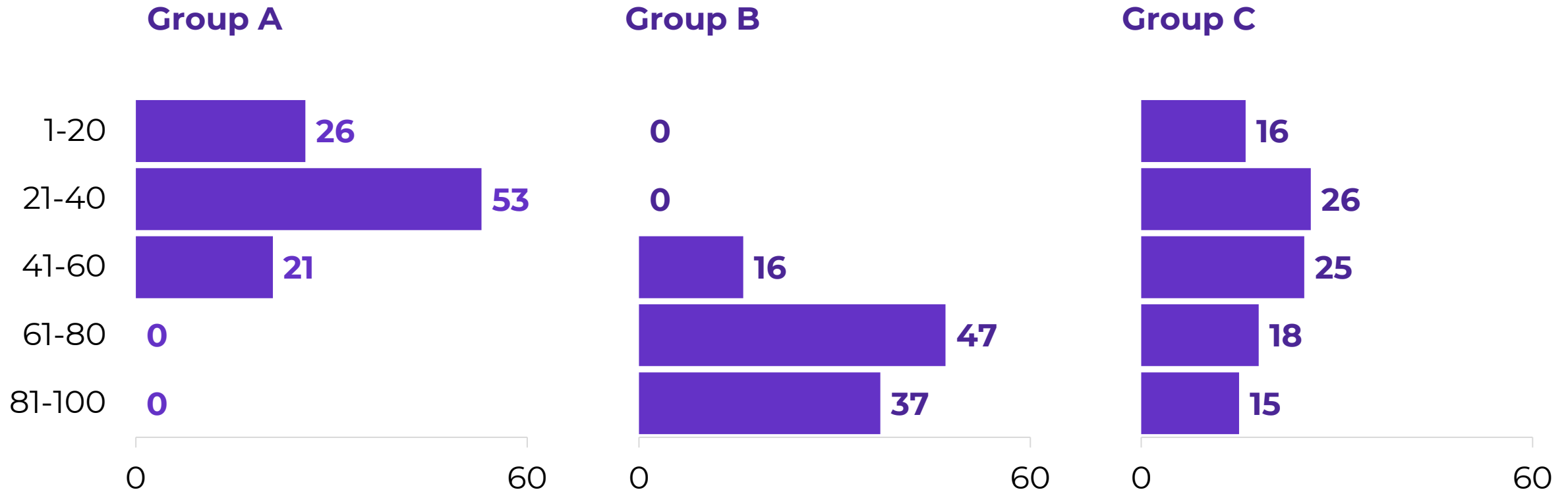
Histograms



Pyramids



Small Multiples

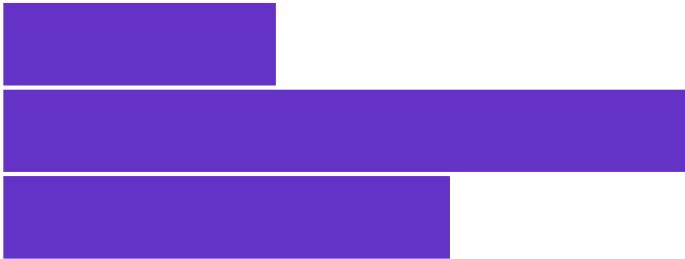


Bar

Group A: 30

B: 74

C: 48

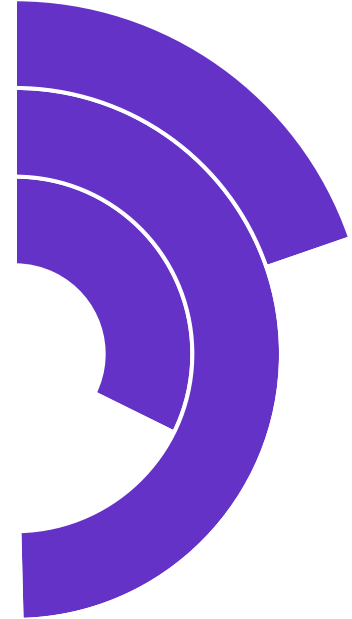


B'arc

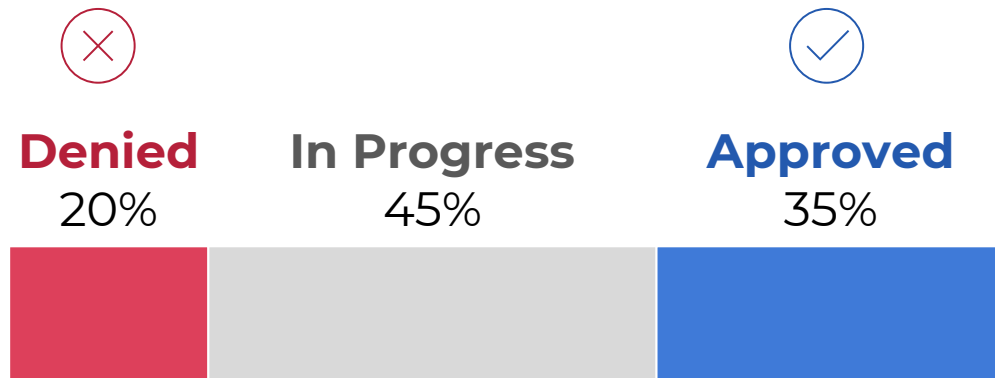
Group A: 30

B: 74

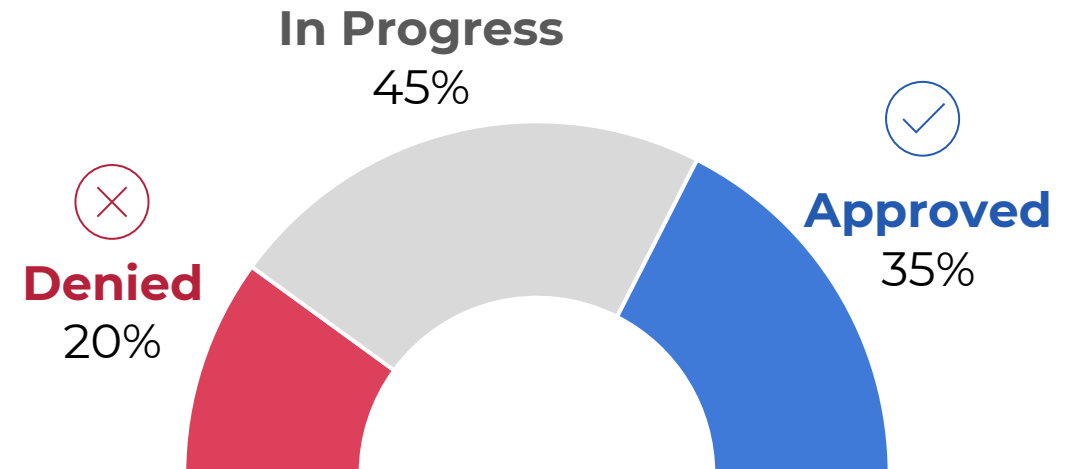
C: 48



Stacked Bar



Stacked B'arc



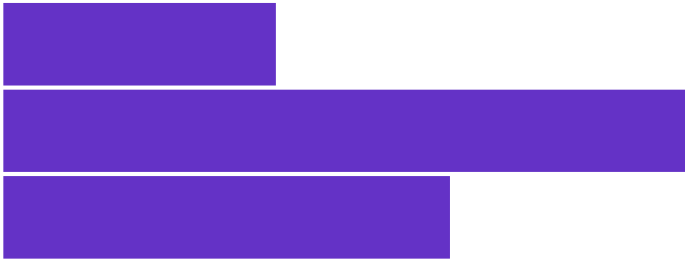
Bubbles

Bar

Group A: 30

B: 74

C: 48



Bubbles

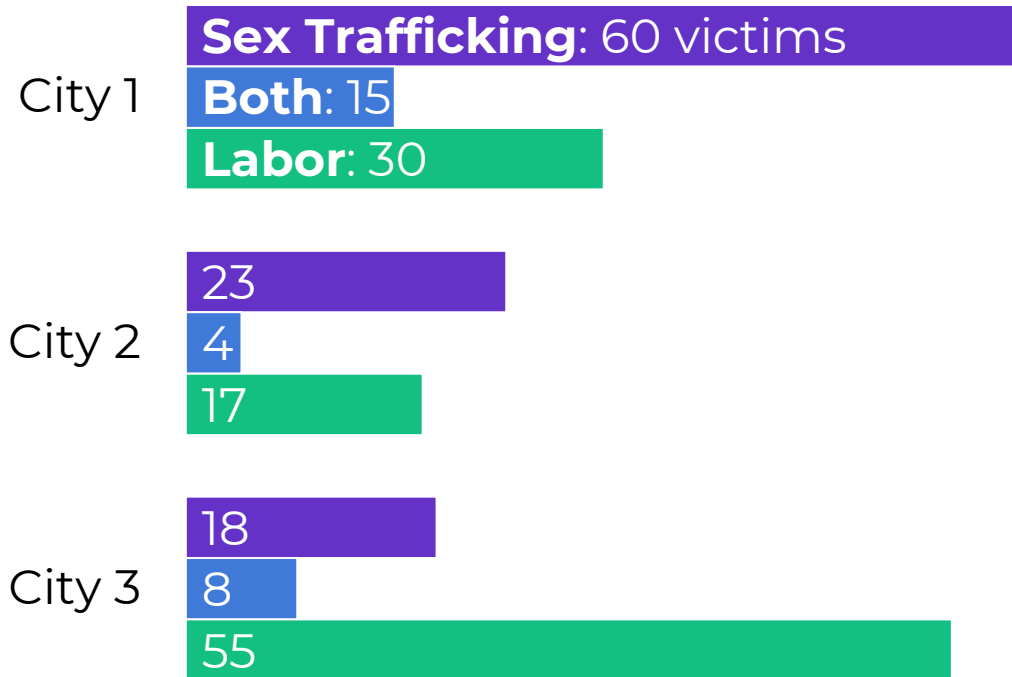
Group A
30



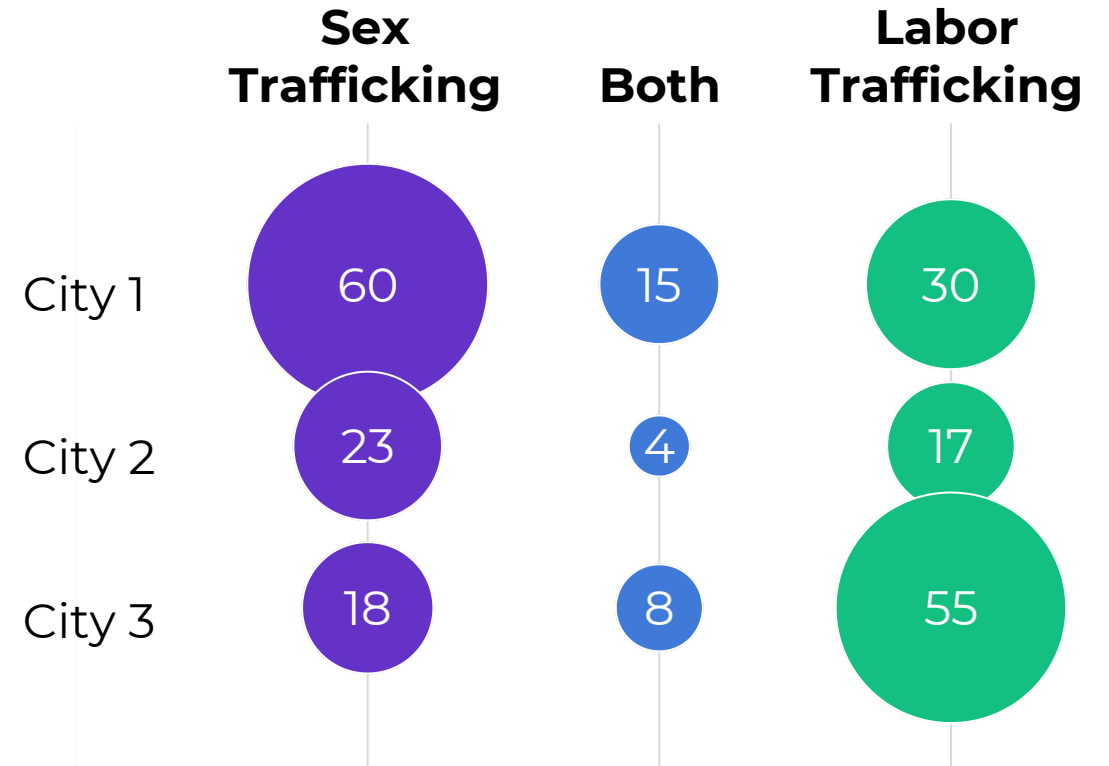
Group C
48

Bubbles

Bar



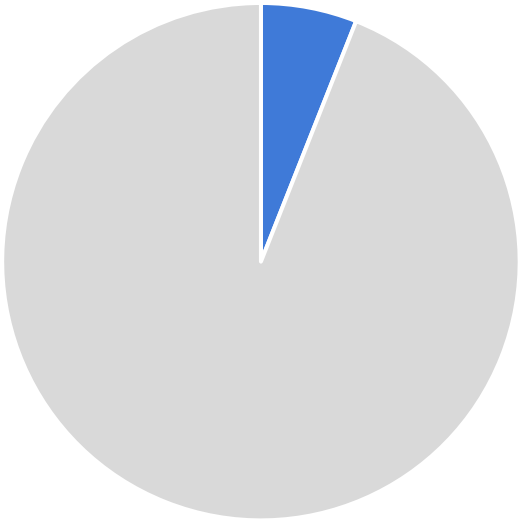
Bubbles



Pies into Donuts

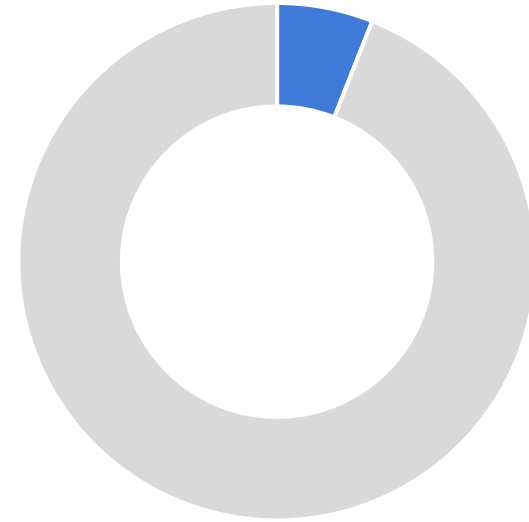
Pie

6%



Donut

6%



Pies into Donuts

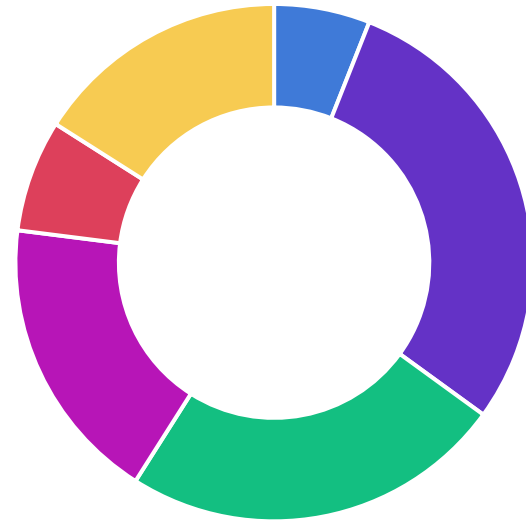
Pie

6%



Donut

6%

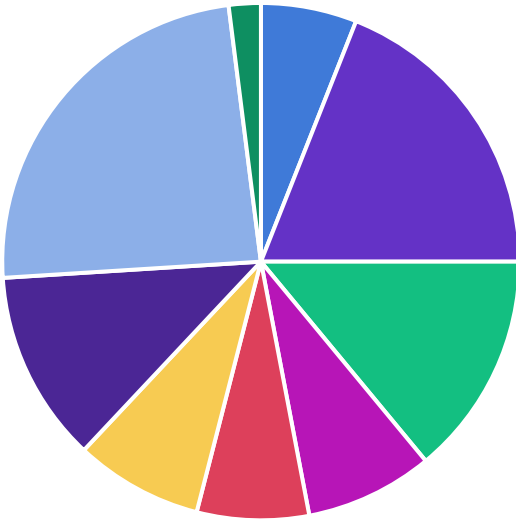


Pies into Donuts



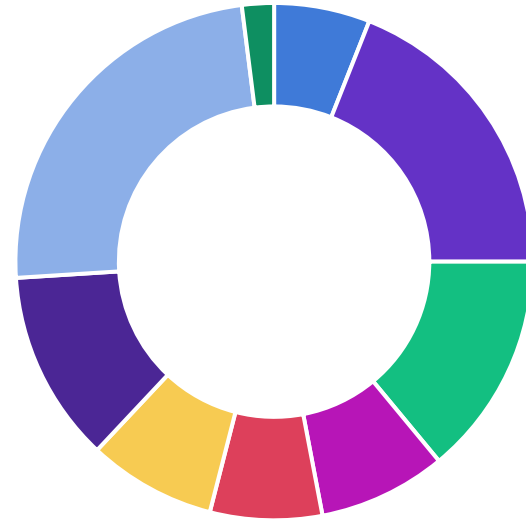
Pie

6%



Donut

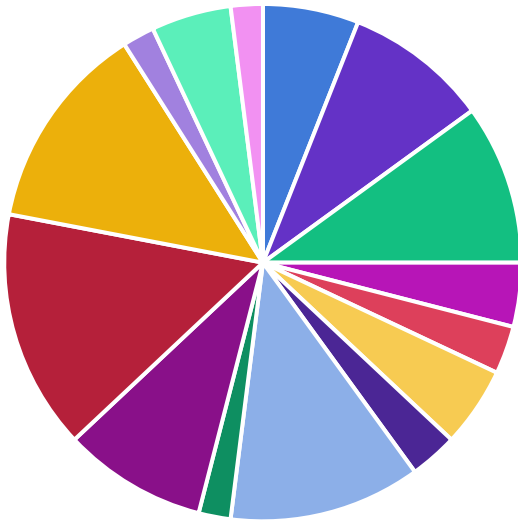
6%



Pies into Donuts

Pie

6%



Donut

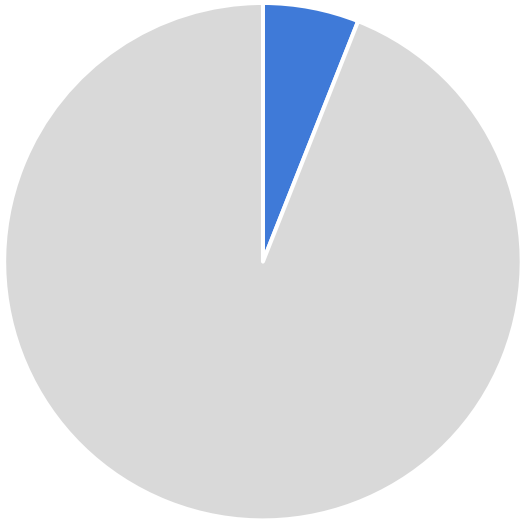
6%



Pies into Donuts

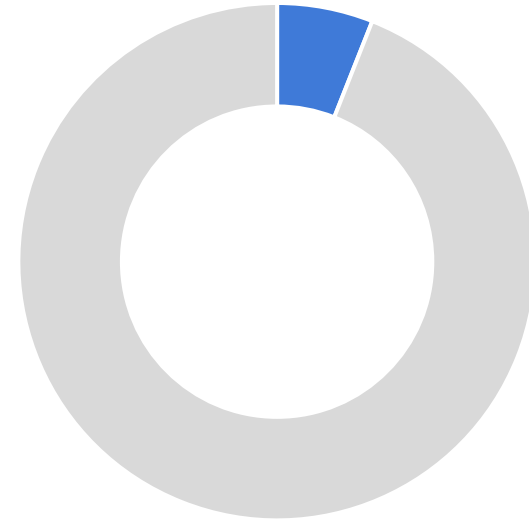
Pie

6%



Donut

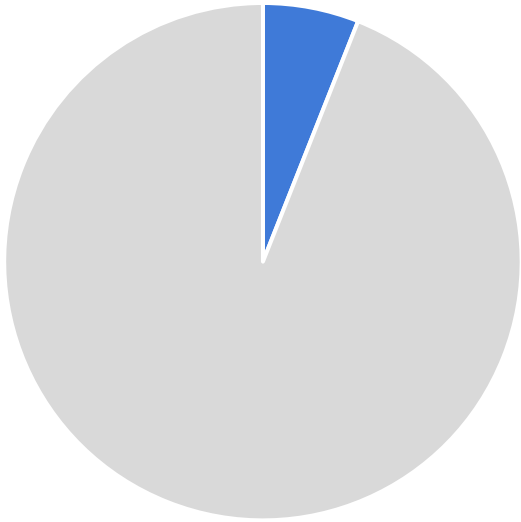
6%



Pies into Square Pies (a.k.a. Waffles)

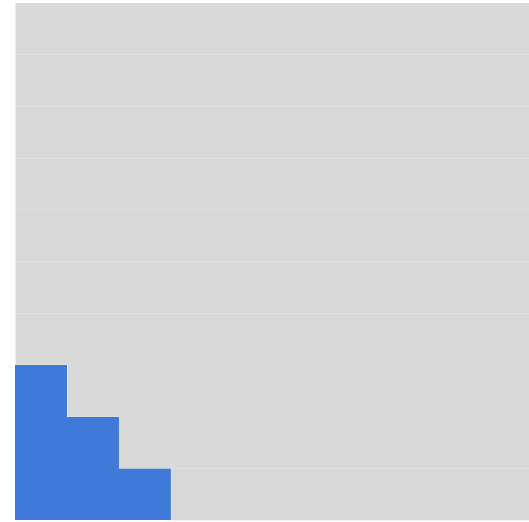
Pie

6%



Square Pie

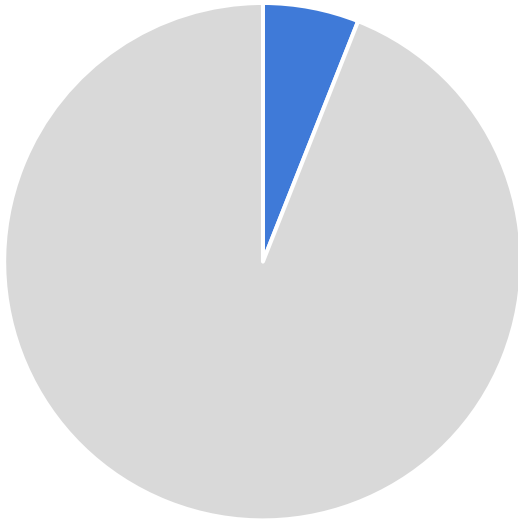
6%



Pies into Square Pies (a.k.a. Waffles)

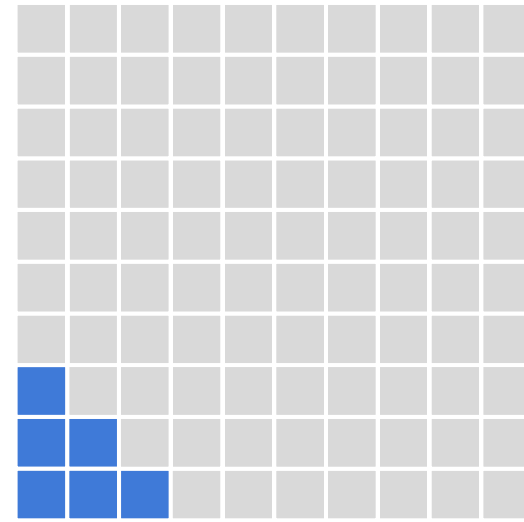
Pie

6%



Waffle

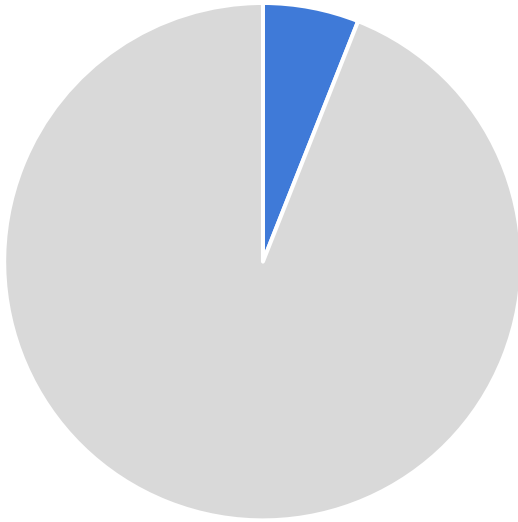
6%



Pies into Icon Arrays

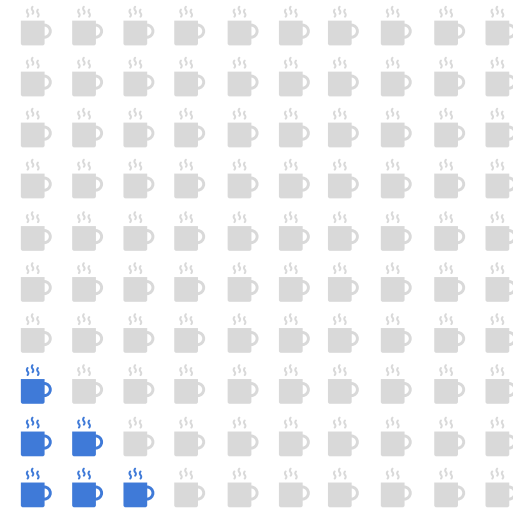
Pie

6%



Icon Array

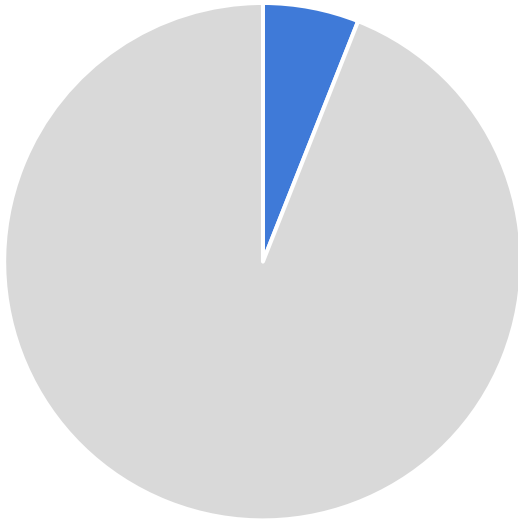
6%



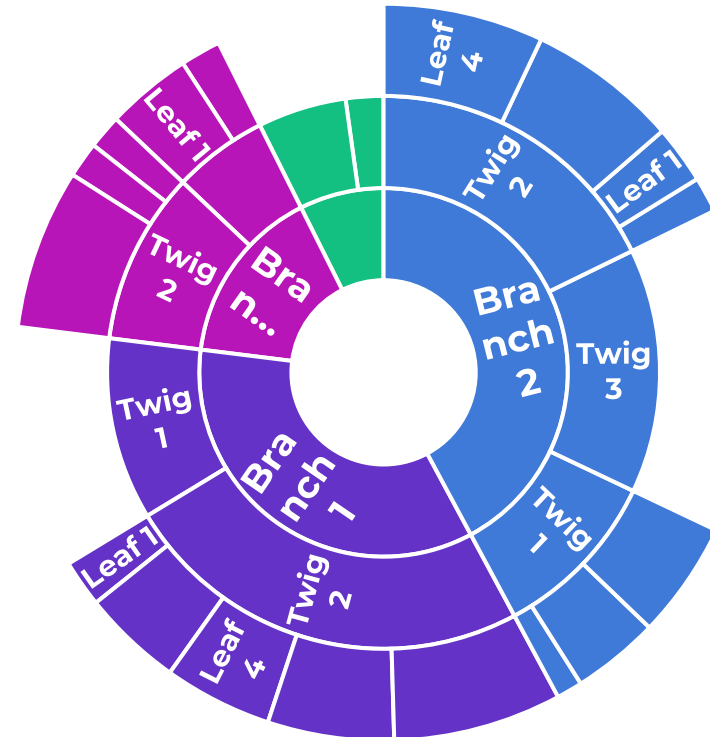
Pies into Sunbursts

Pie

6%



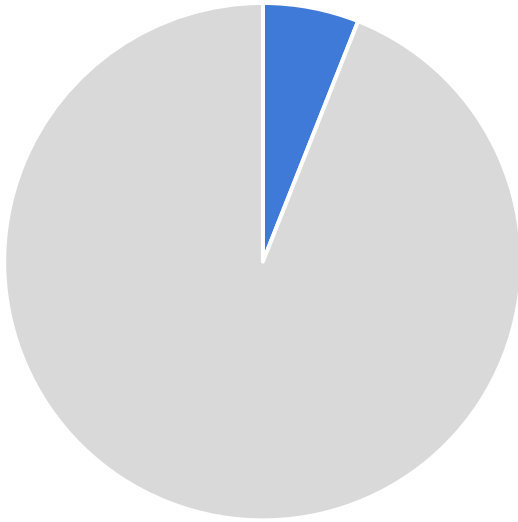
Sunburst



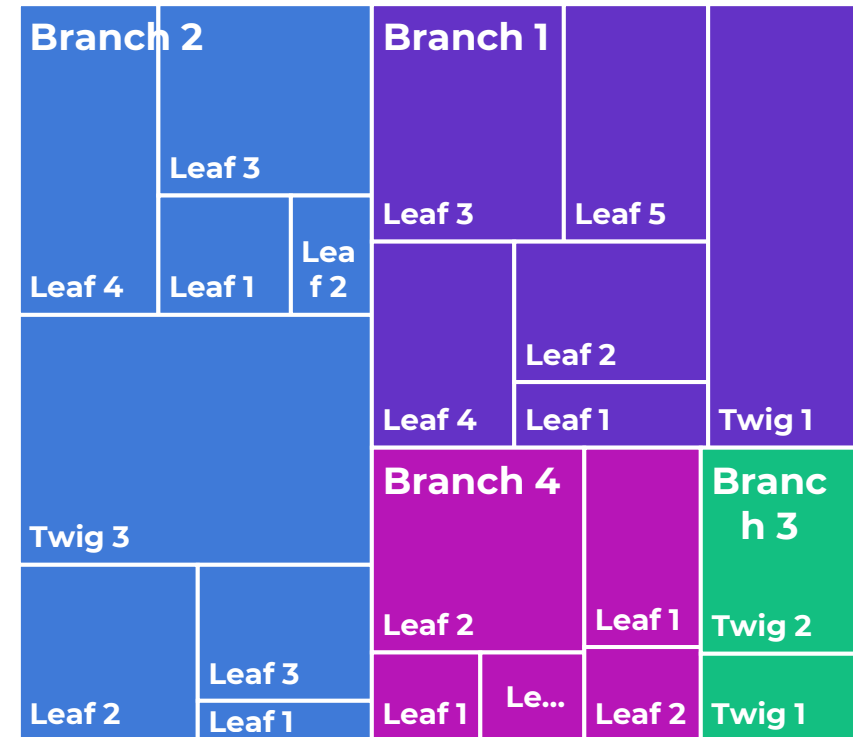
Pies into Trees

Pie

6%



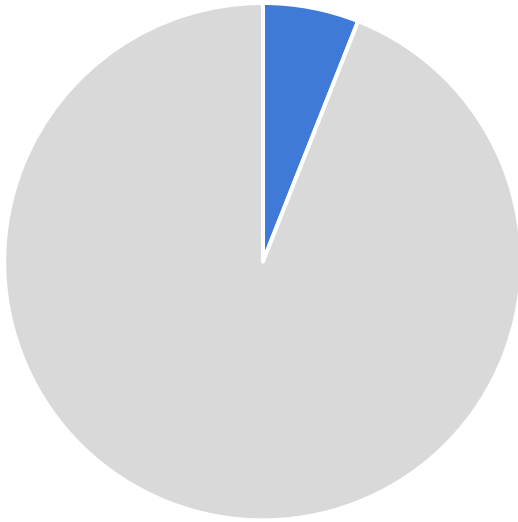
Tree



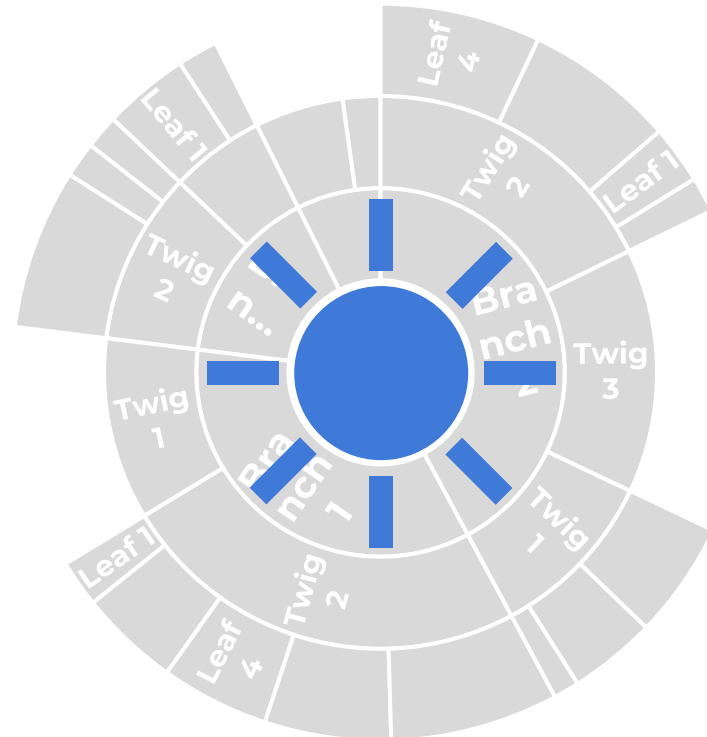
Pies into Sunbursts

Pie

6%



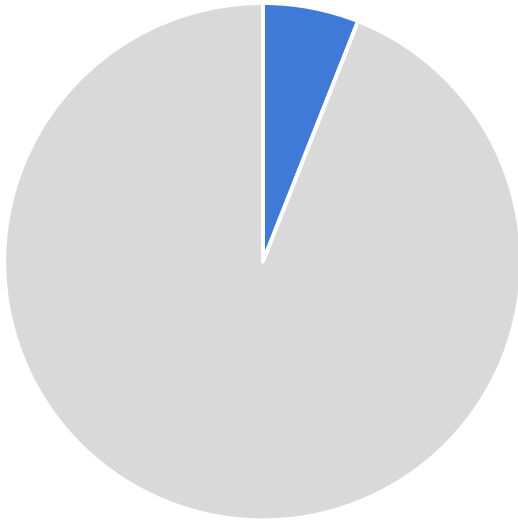
Sunburst



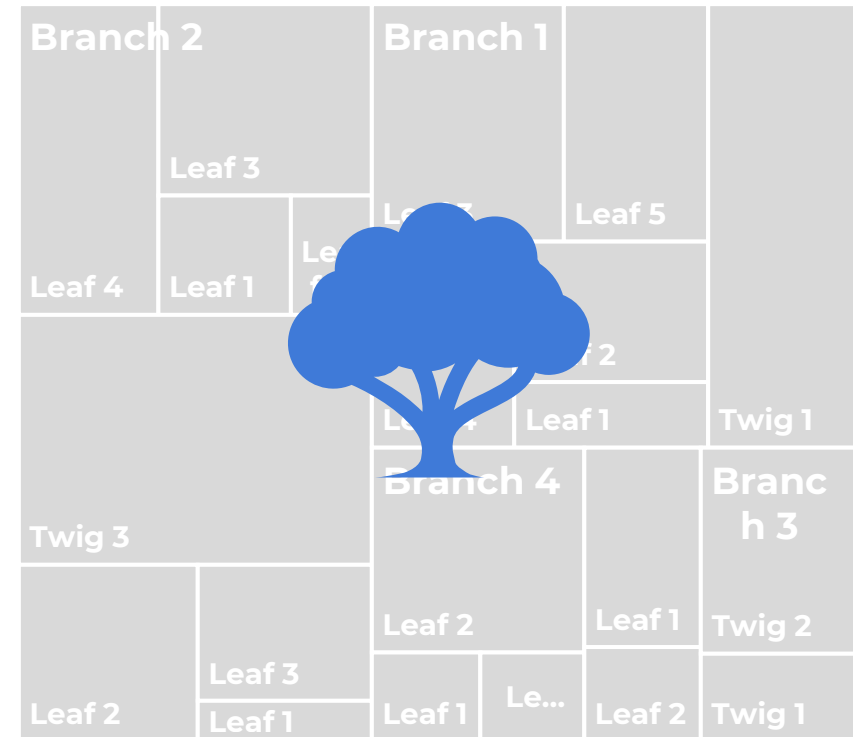
Pies into Trees

Pie

6%



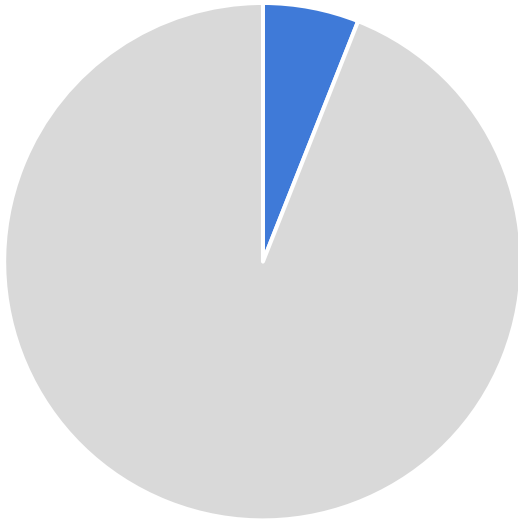
Tree



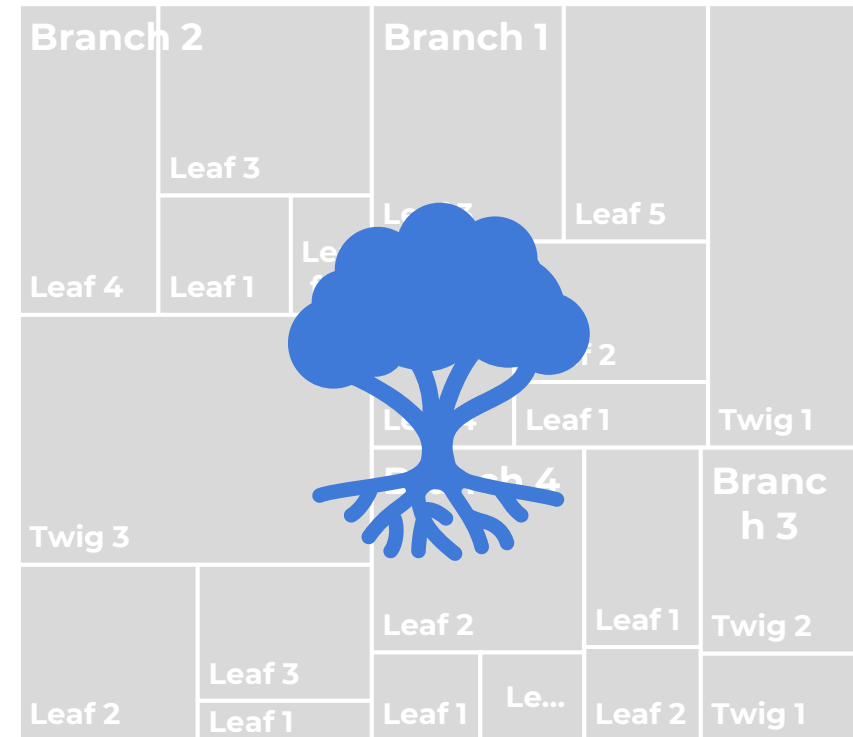
Pies into Trees

Pie

6%

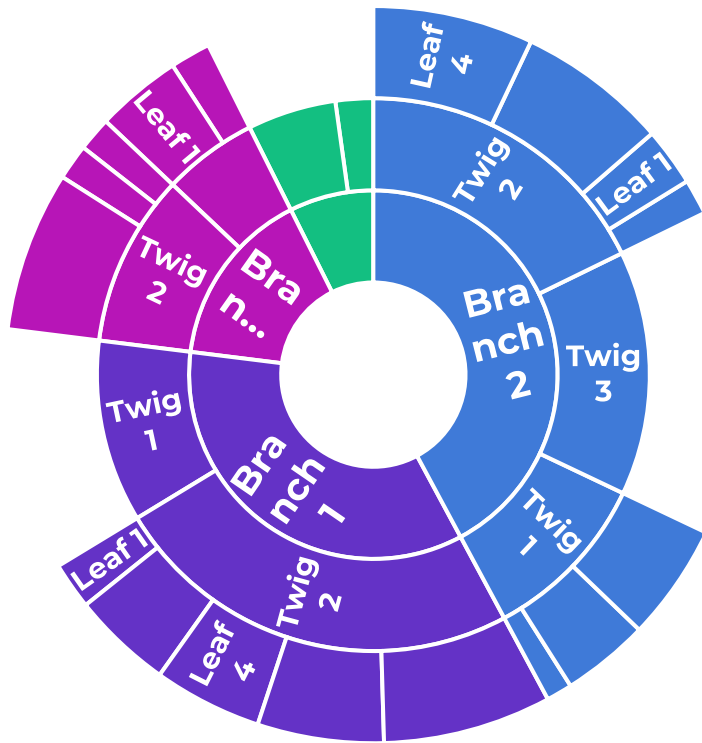


Tree

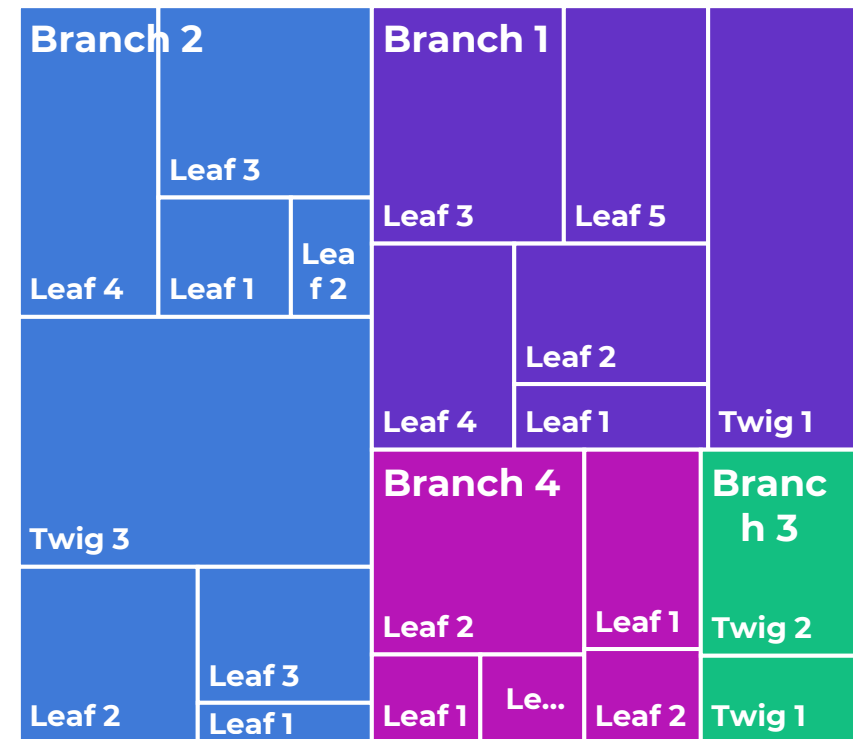


Pies into Sunbursts or Tree Maps

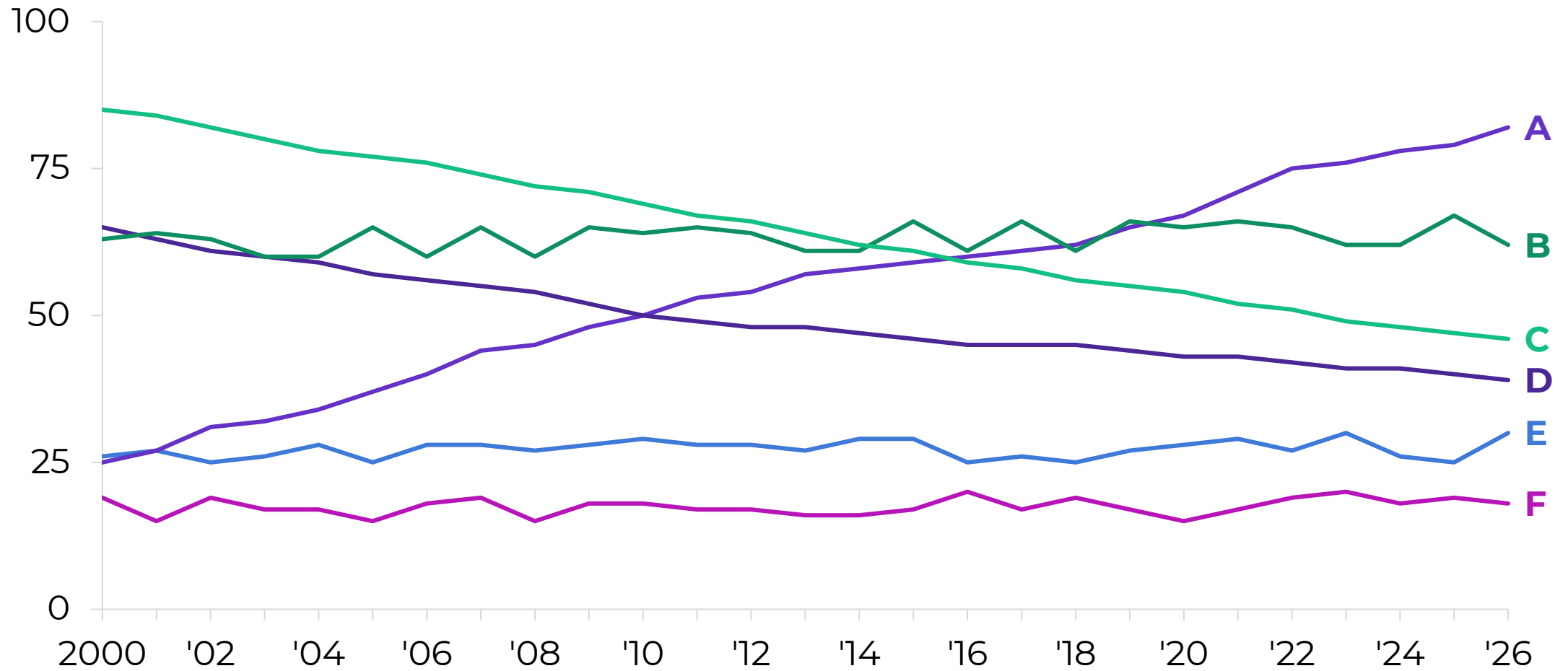
Sunburst



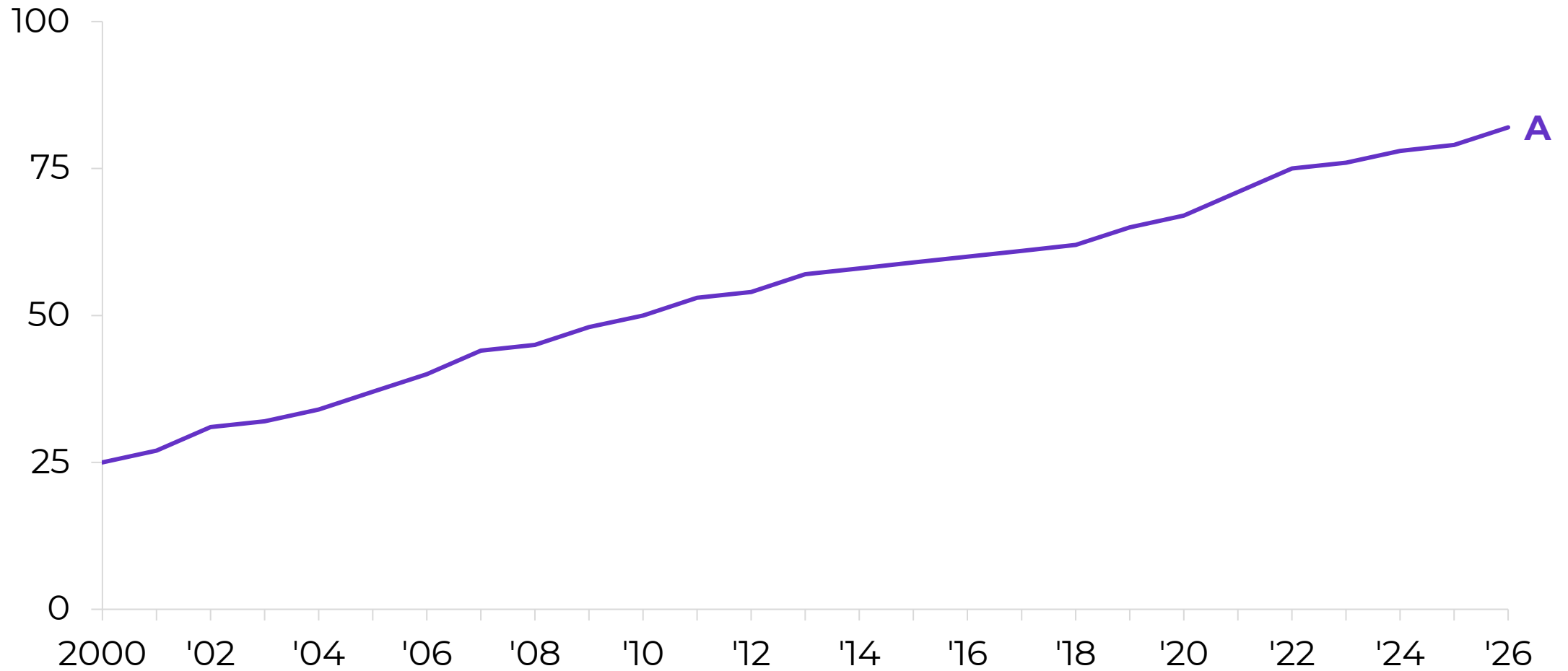
Tree



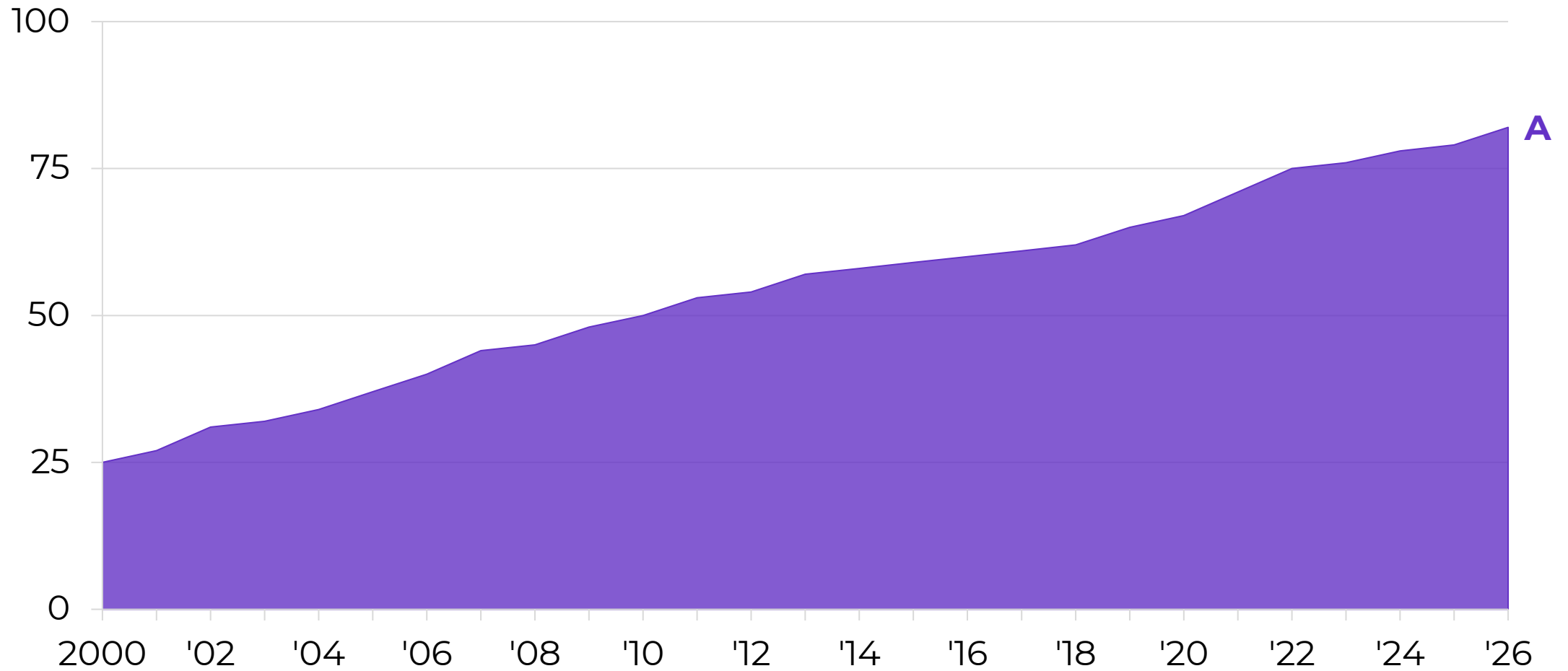
Fixing Spaghetti Lines...



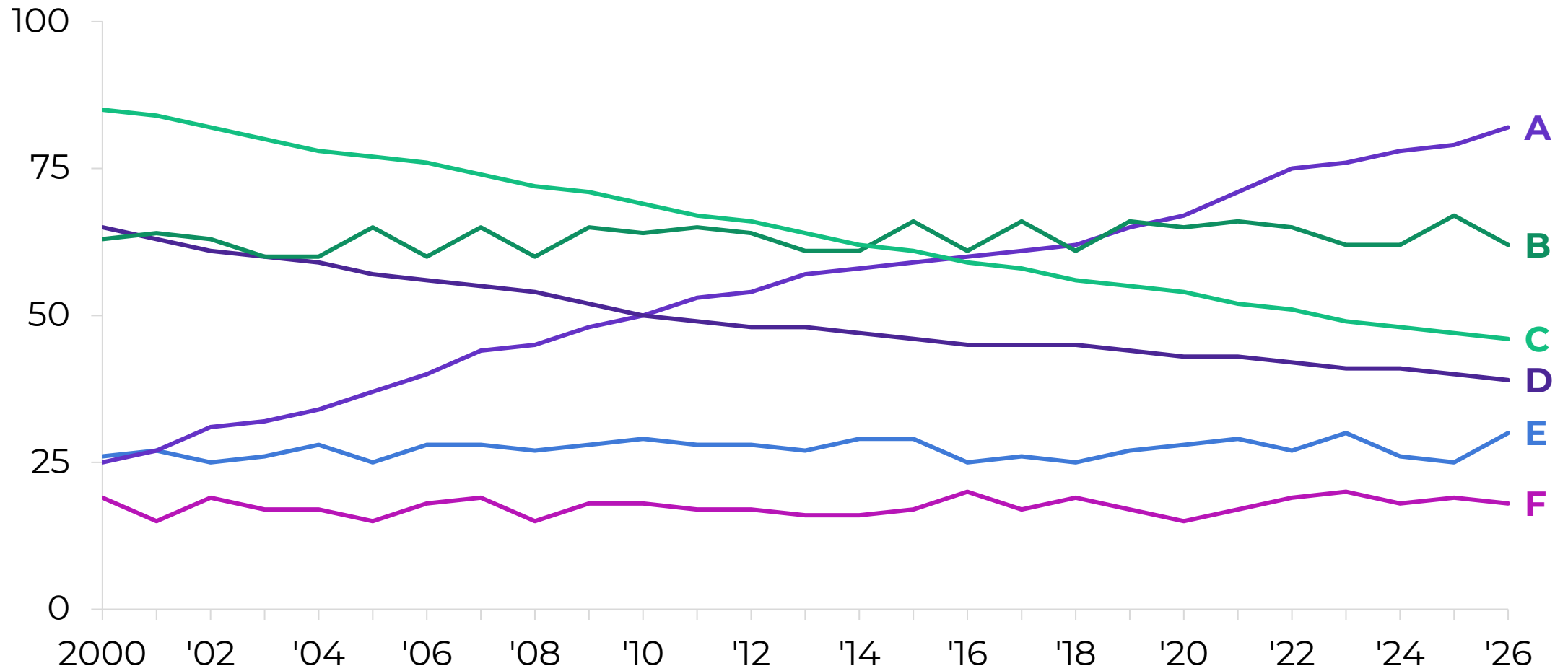
Single Lines into Area Charts



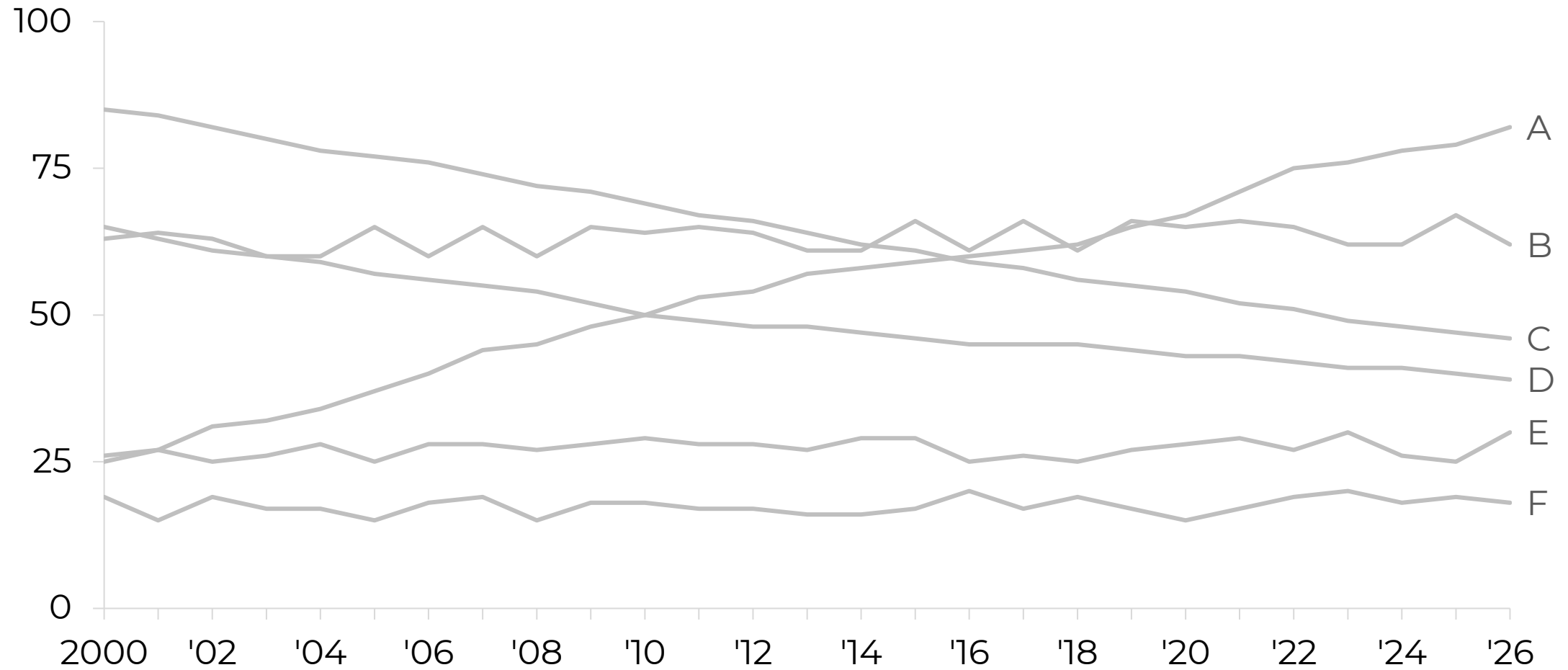
Single Lines into Area Charts



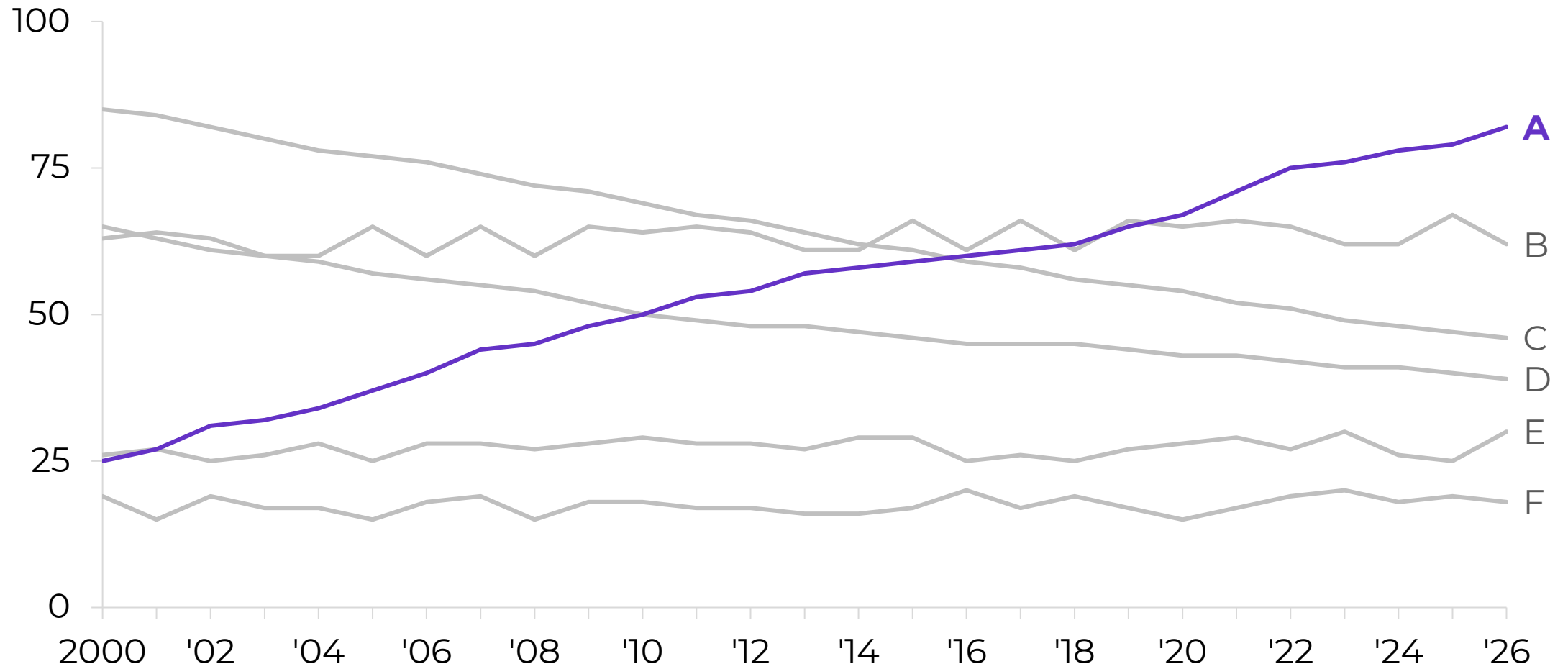
Spaghetti with Highlighting



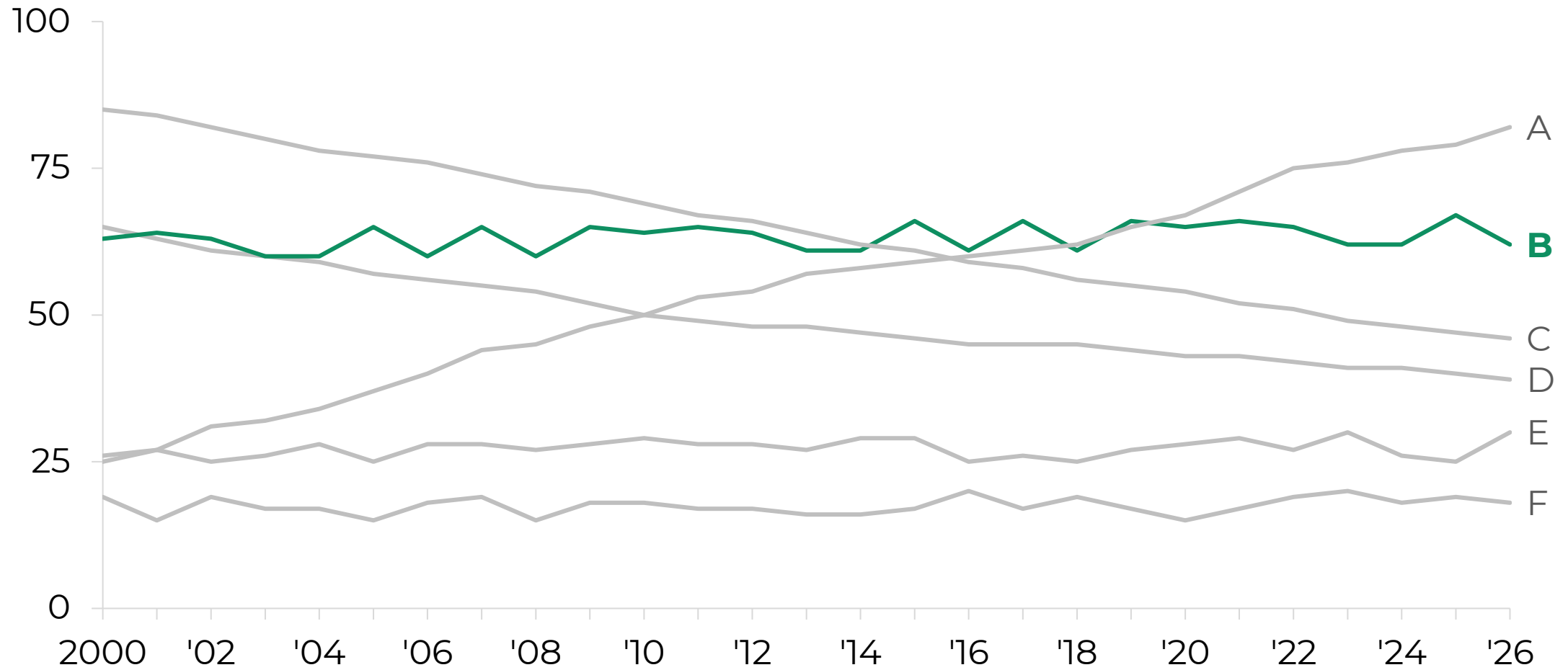
Spaghetti with Highlighting



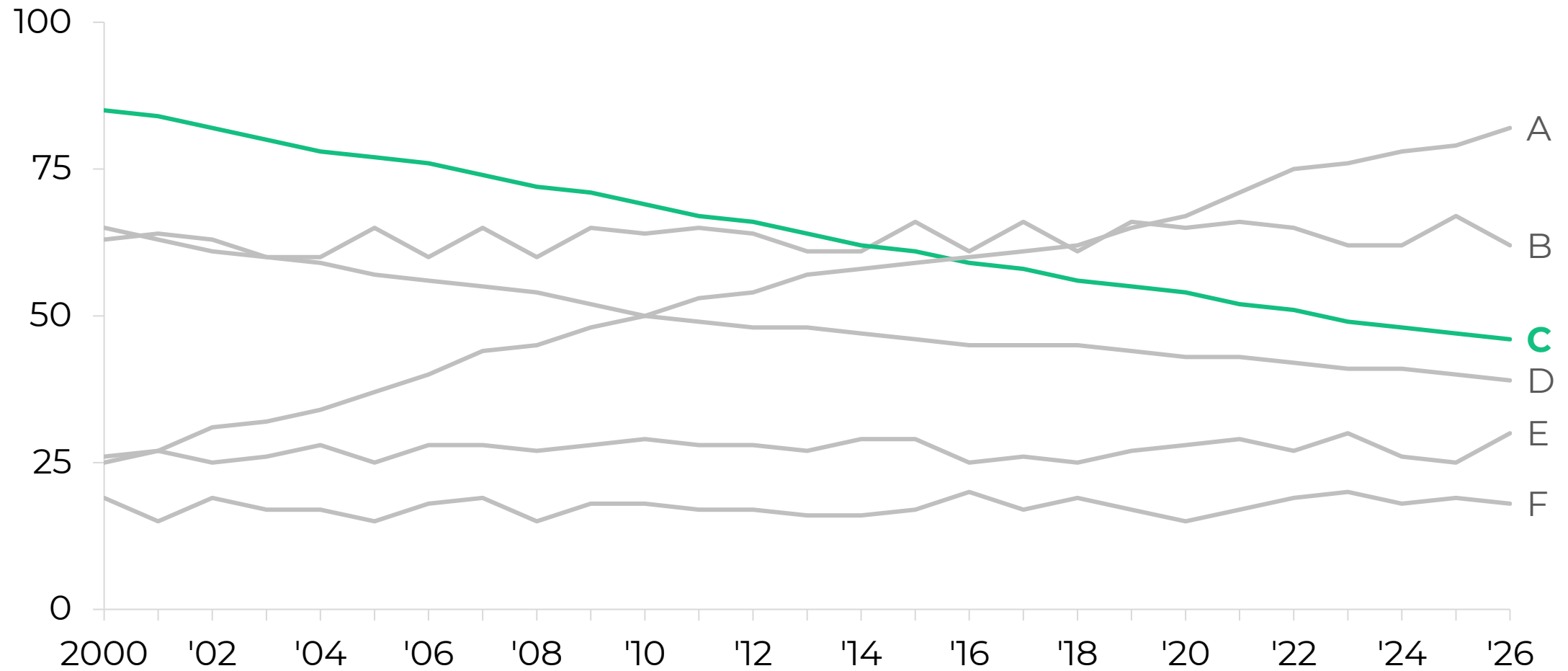
Spaghetti with Highlighting



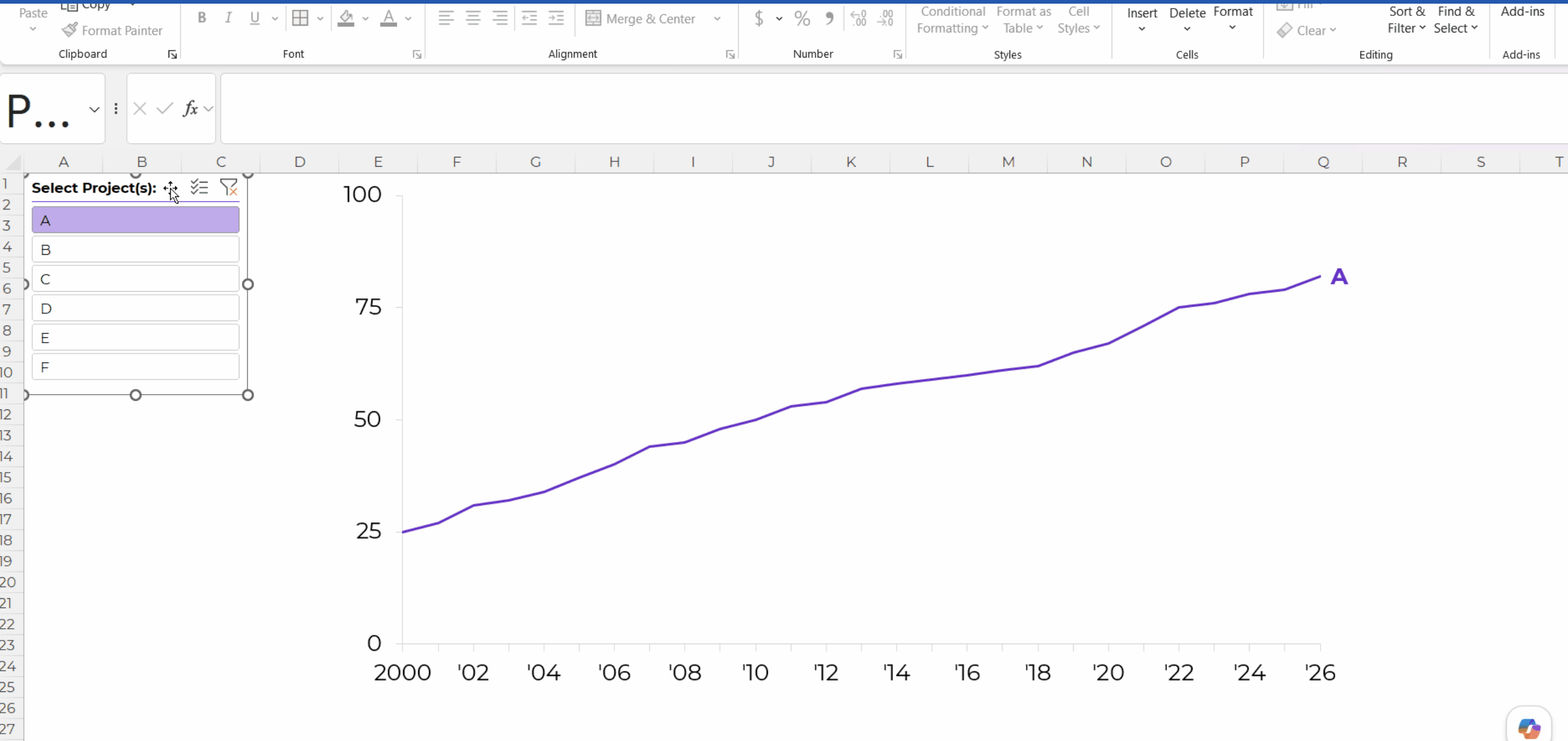
Spaghetti with Highlighting



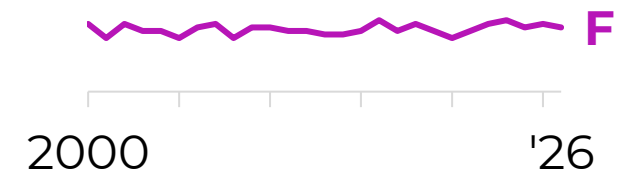
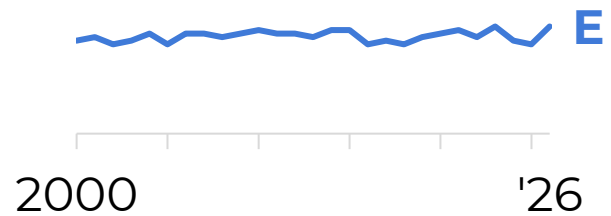
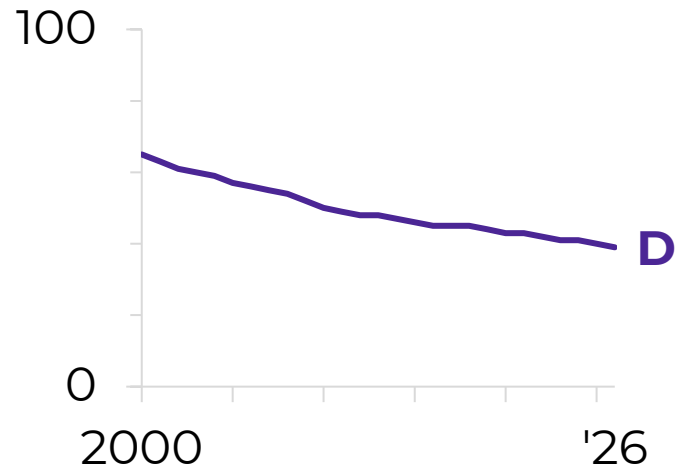
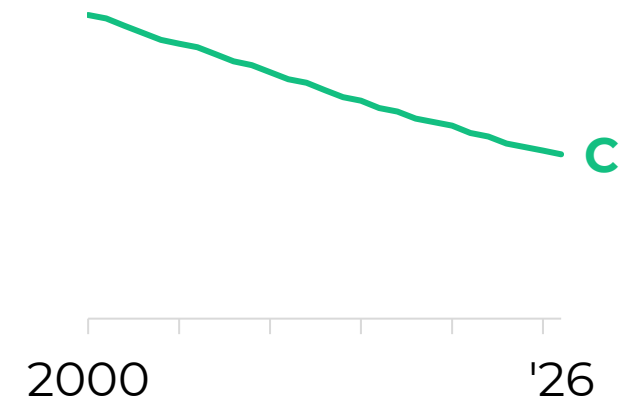
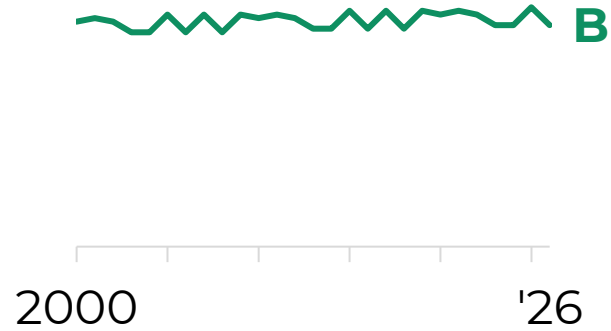
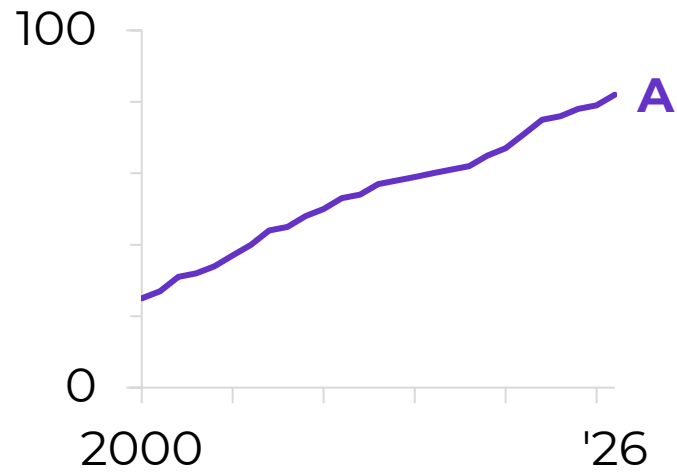
Spaghetti with Highlighting



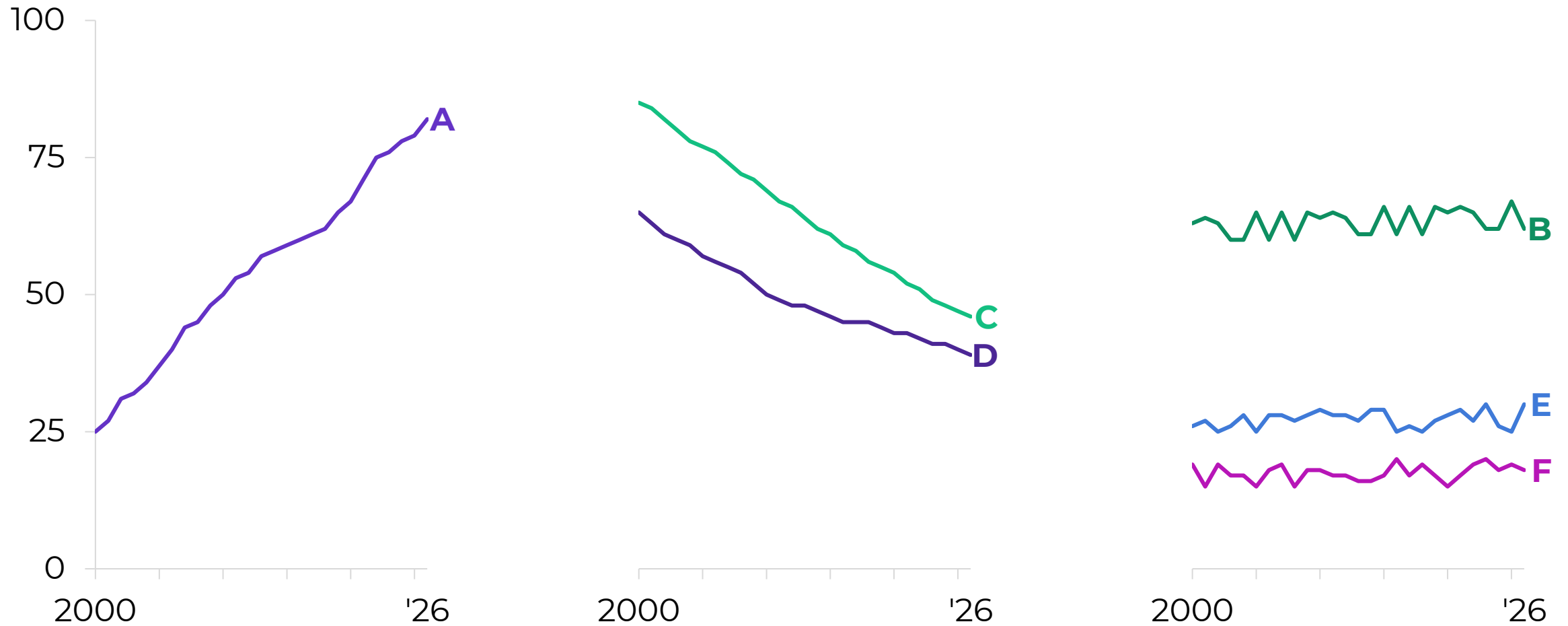
Spaghetti with Slicers



Spaghetti into Small Multiples

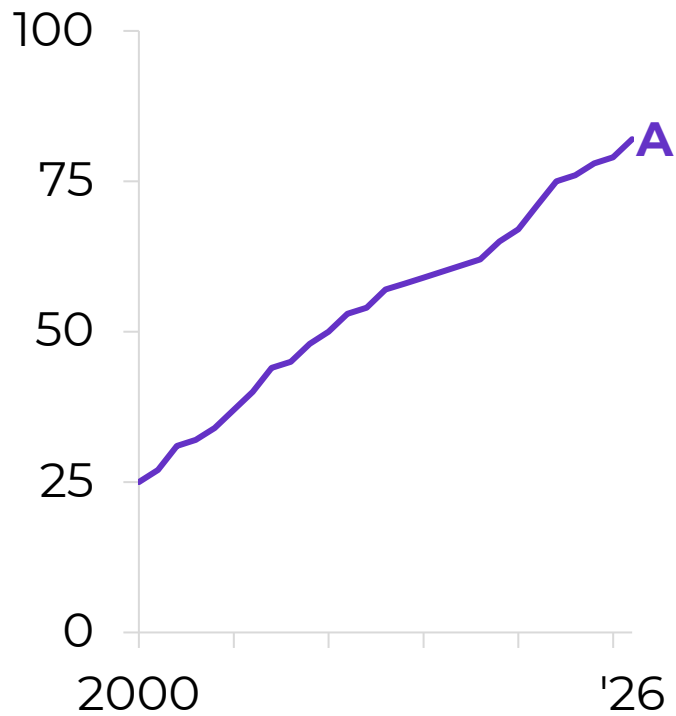


Spaghetti into Small Multiples

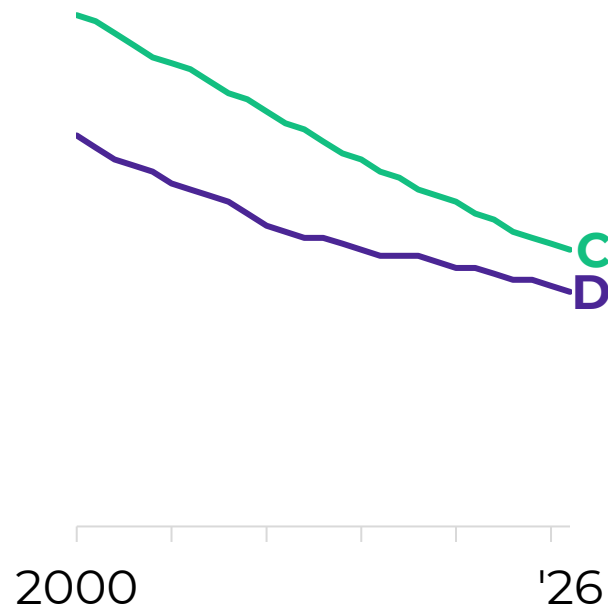


Spaghetti into Small Multiples

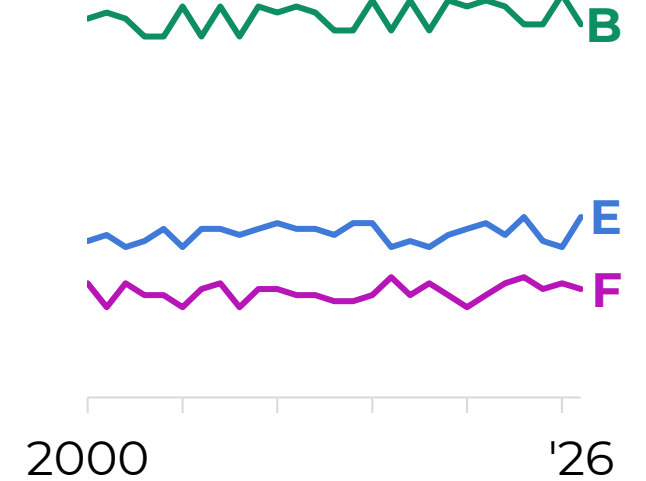
Increased



Decreased

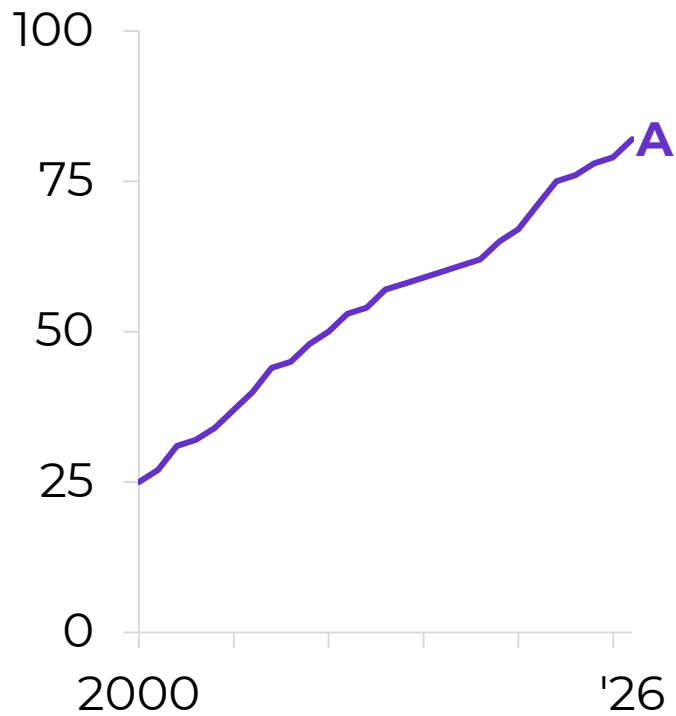


Steady

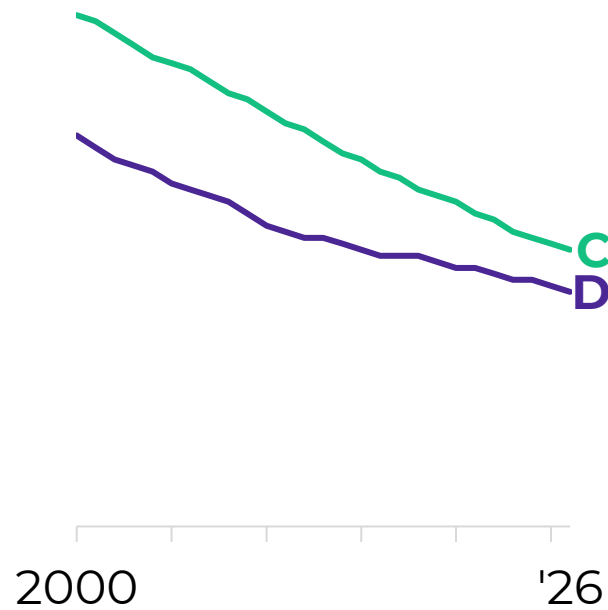


Spaghetti into Small Multiples

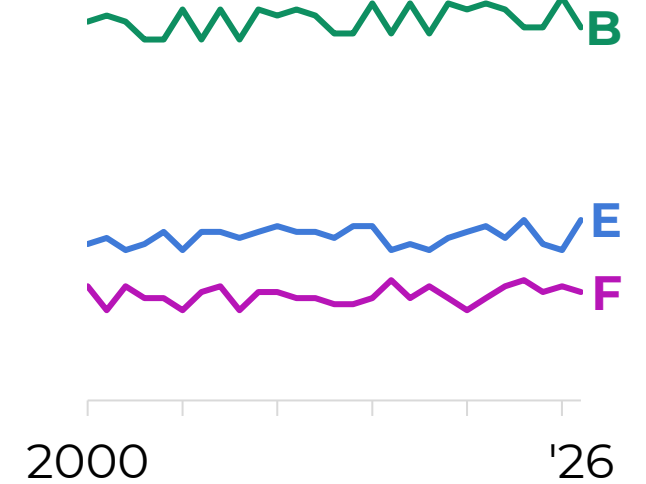
Increased
1 project



Decreased
2 projects



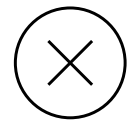
Steady
3 projects



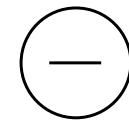
Spaghetti into Small Multiples



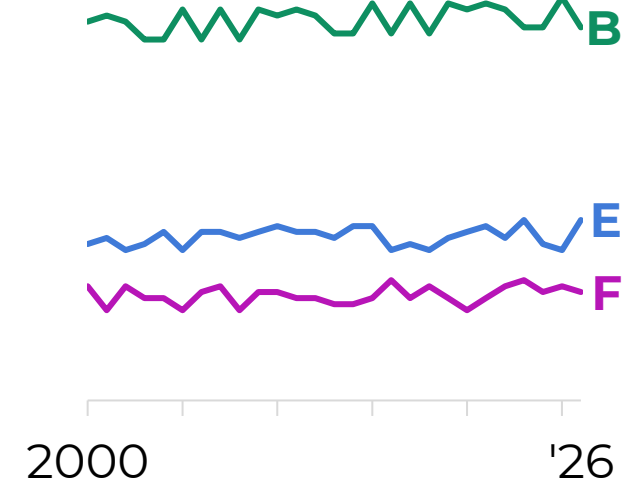
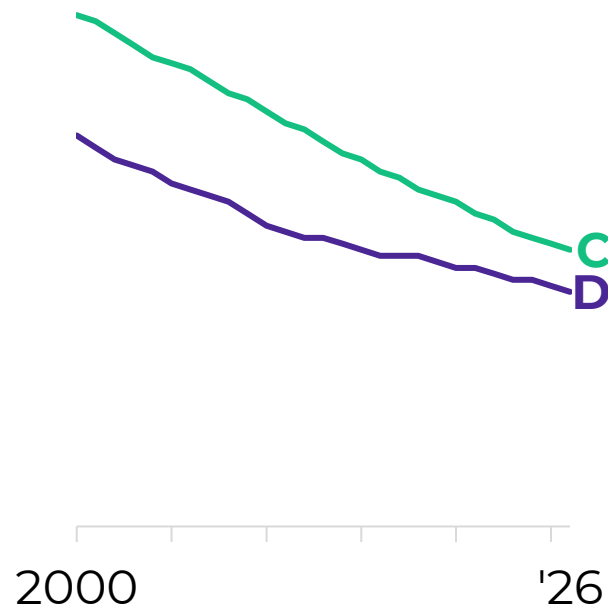
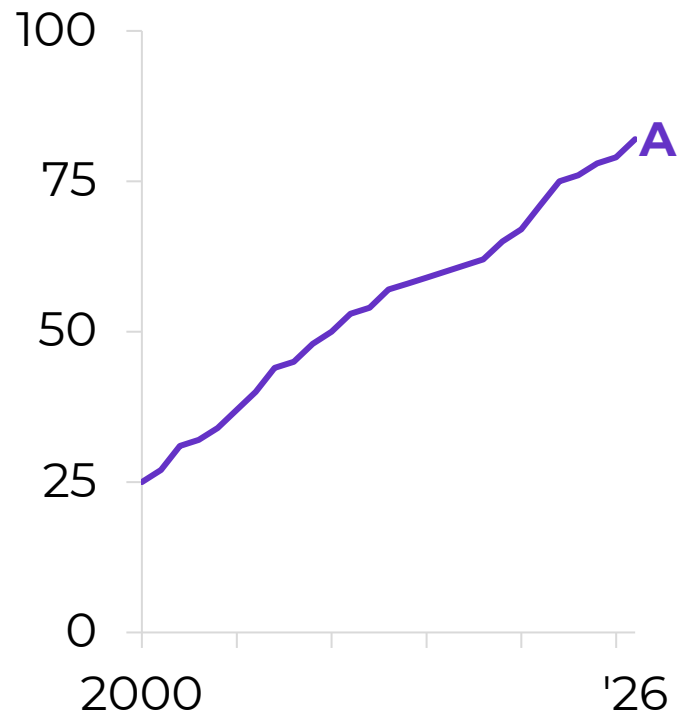
Increased
1 project



Decreased
2 projects



Steady
3 projects

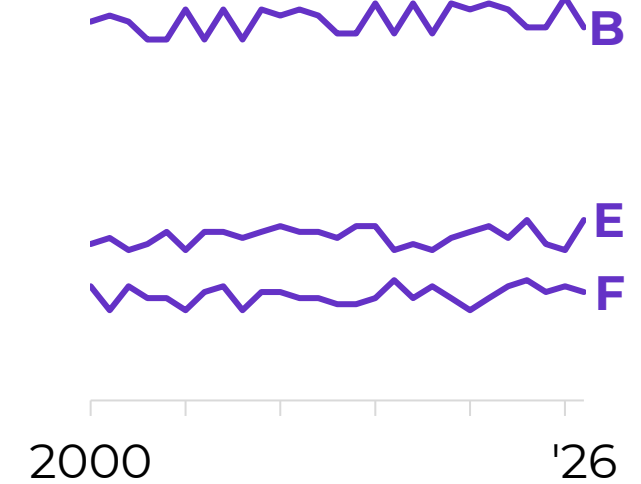
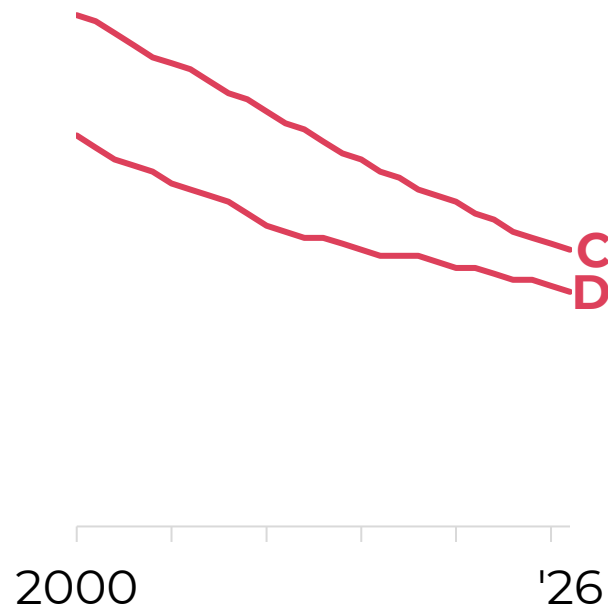
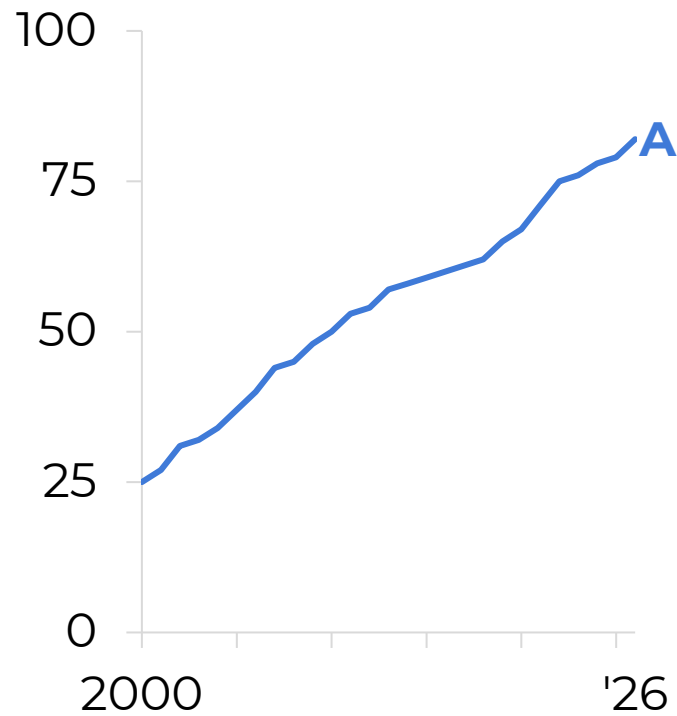


Spaghetti into Small Multiples

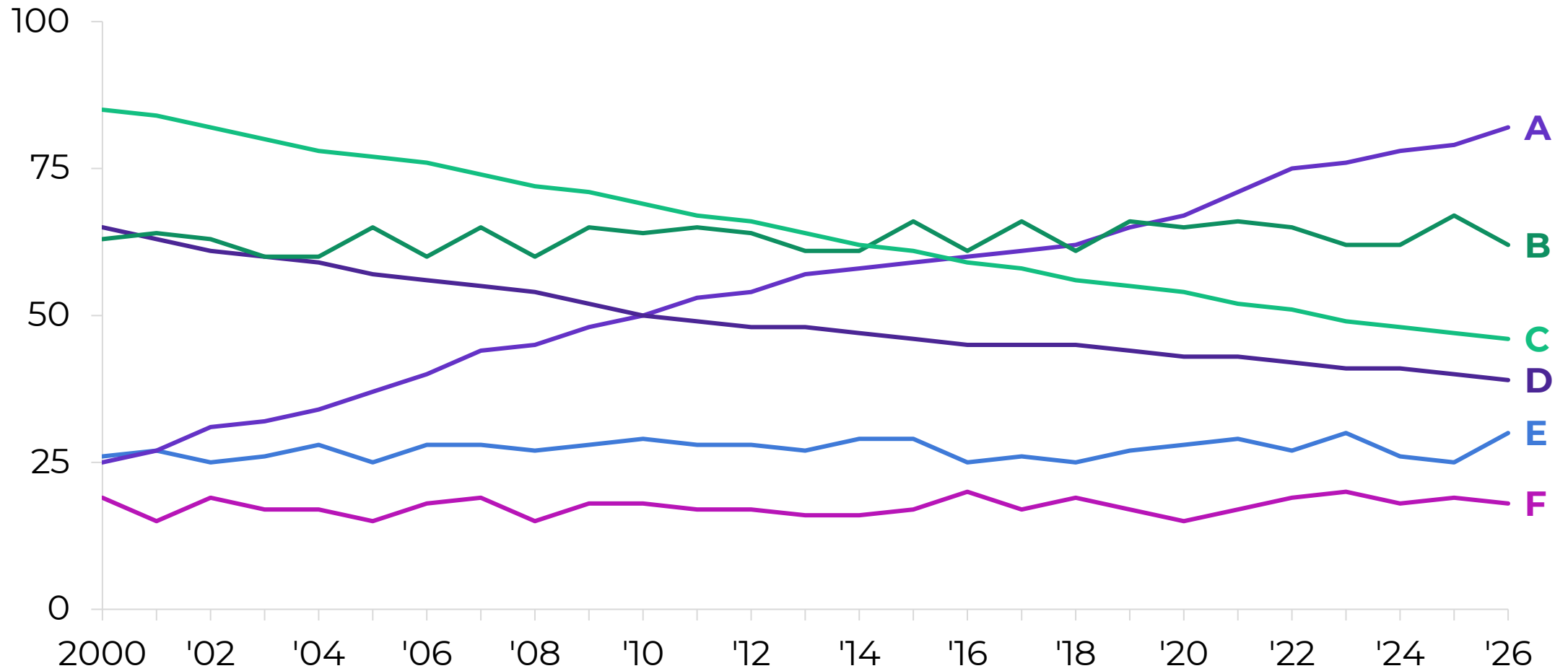
✓ **Increased**
1 project

✗ **Decreased**
2 projects

— **Steady**
3 projects



Fixing Spaghetti Lines



1

Audience



2

Charts



3

Declutter



4

Color

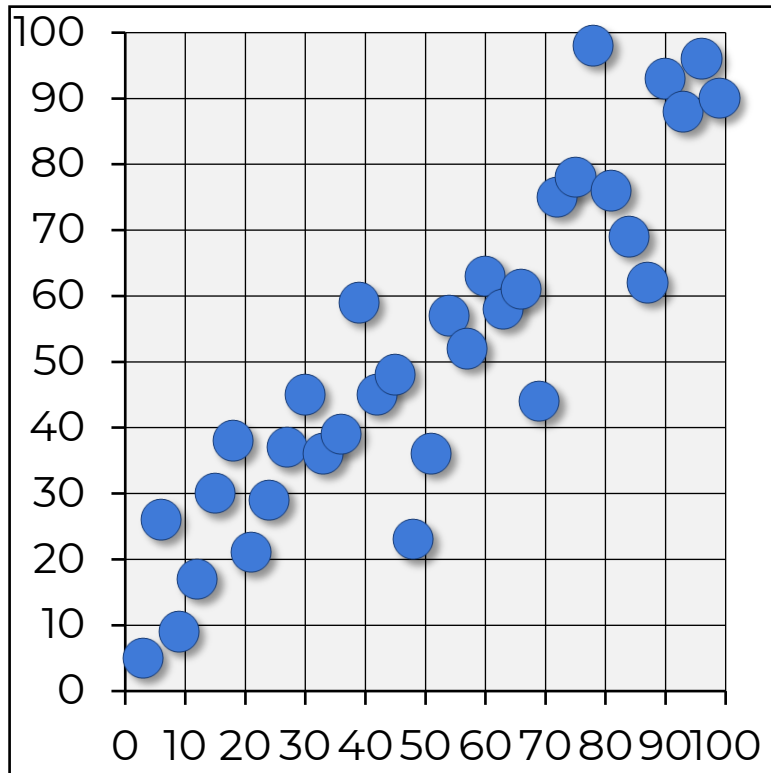


5

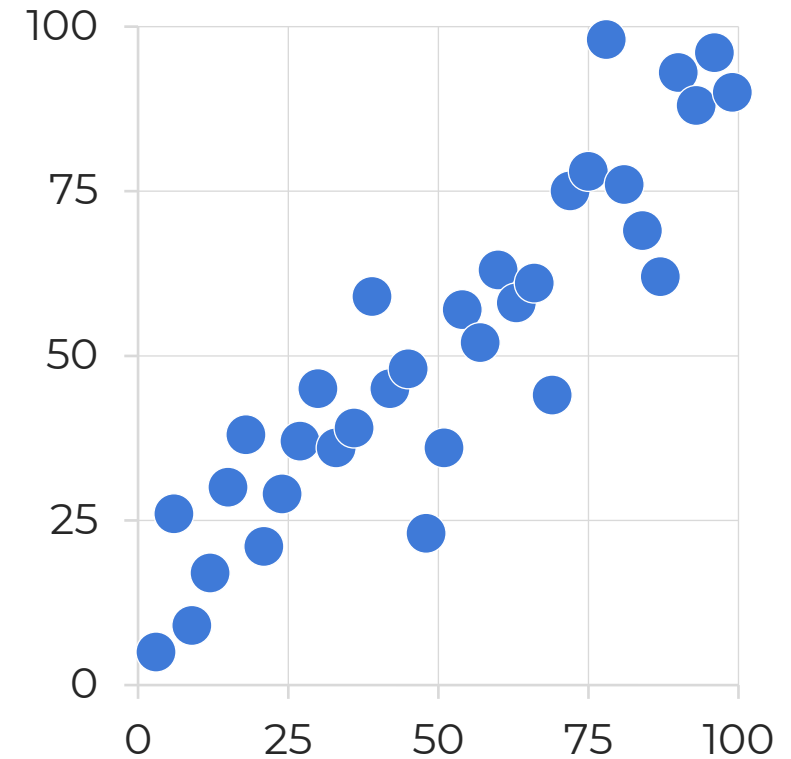
Text

Decluttering

Fancy

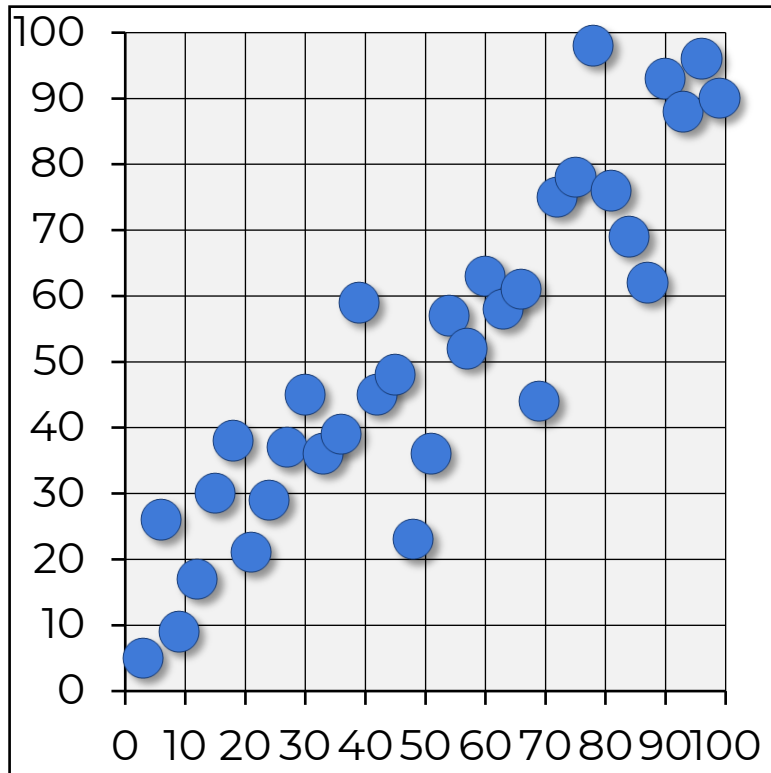


Focused on the "So What?"

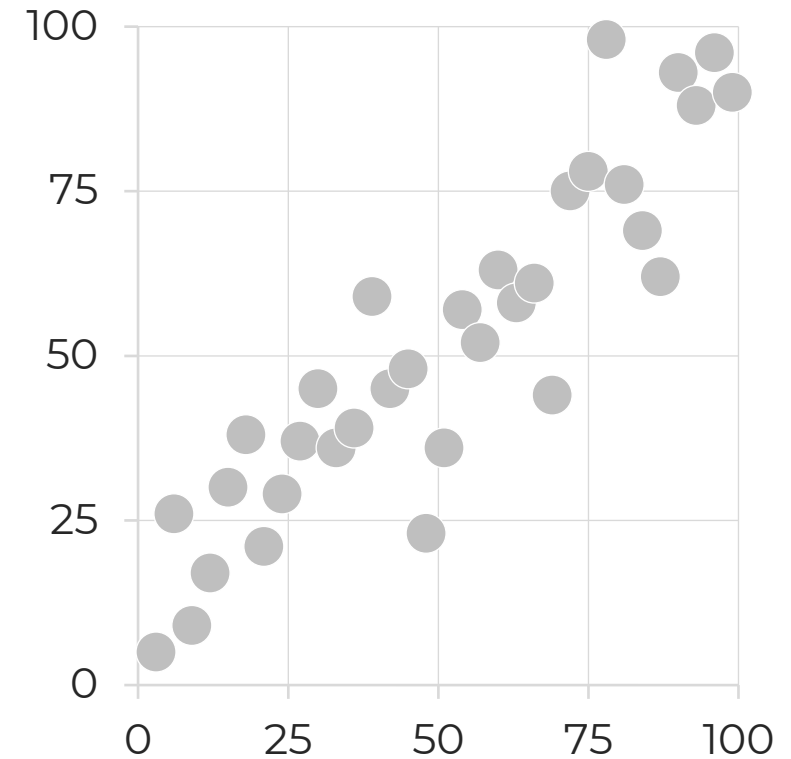


Decluttering

Fancy

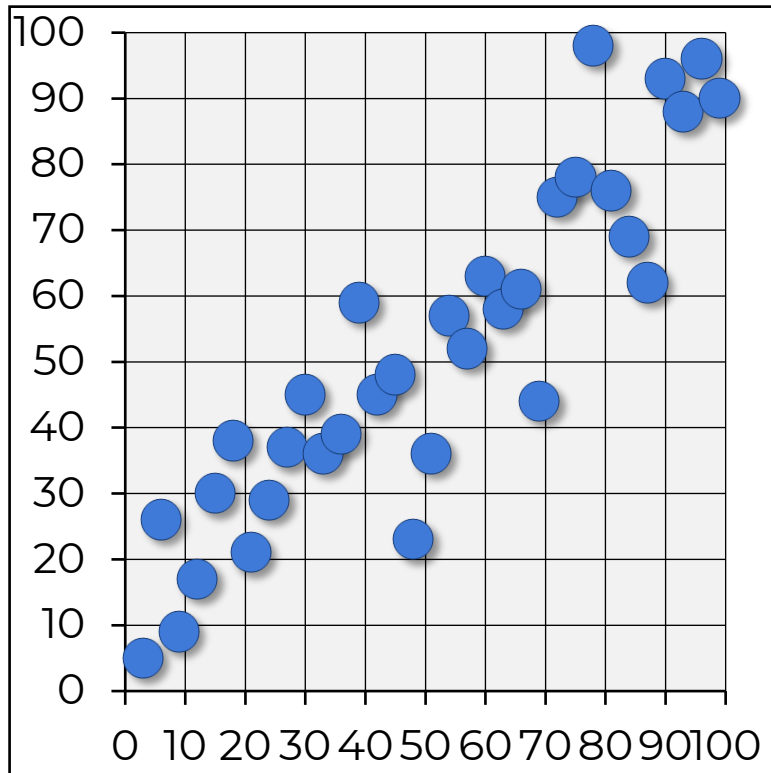


Focused on the “So What?”

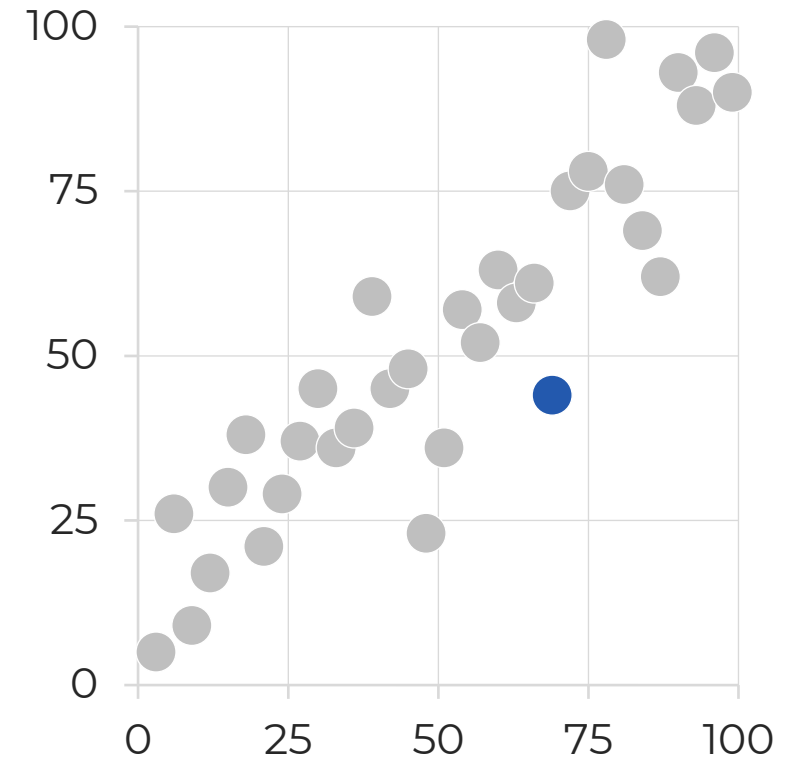


Decluttering

Fancy

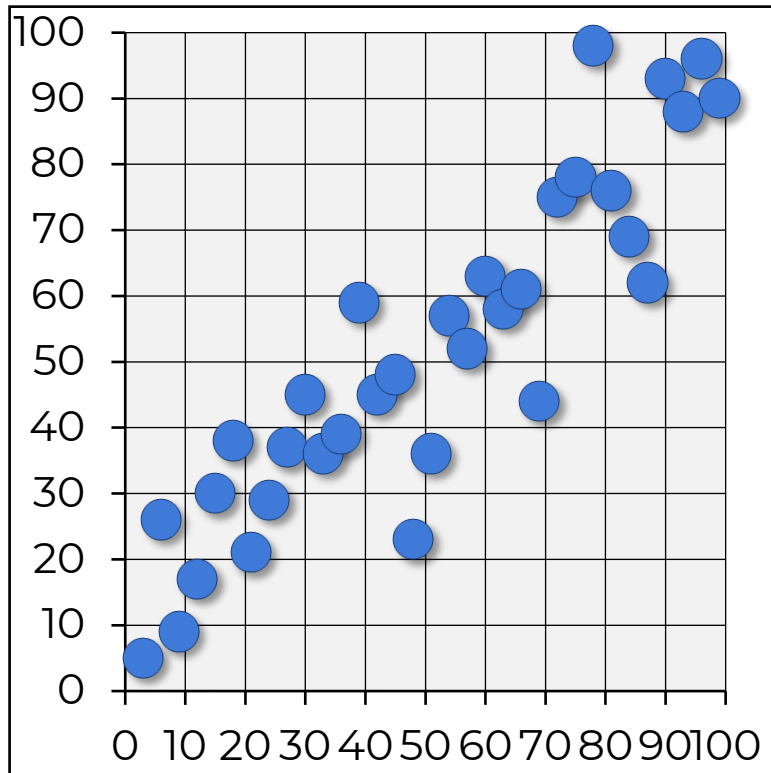


Focused on the "So What?"

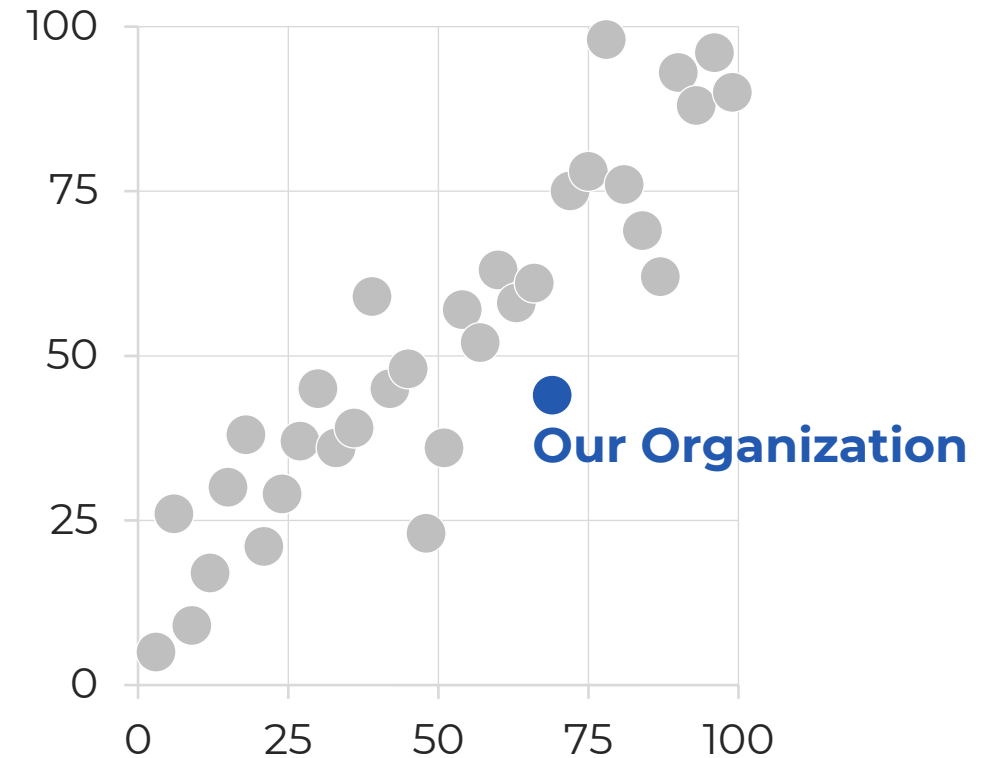


Decluttering

Fancy

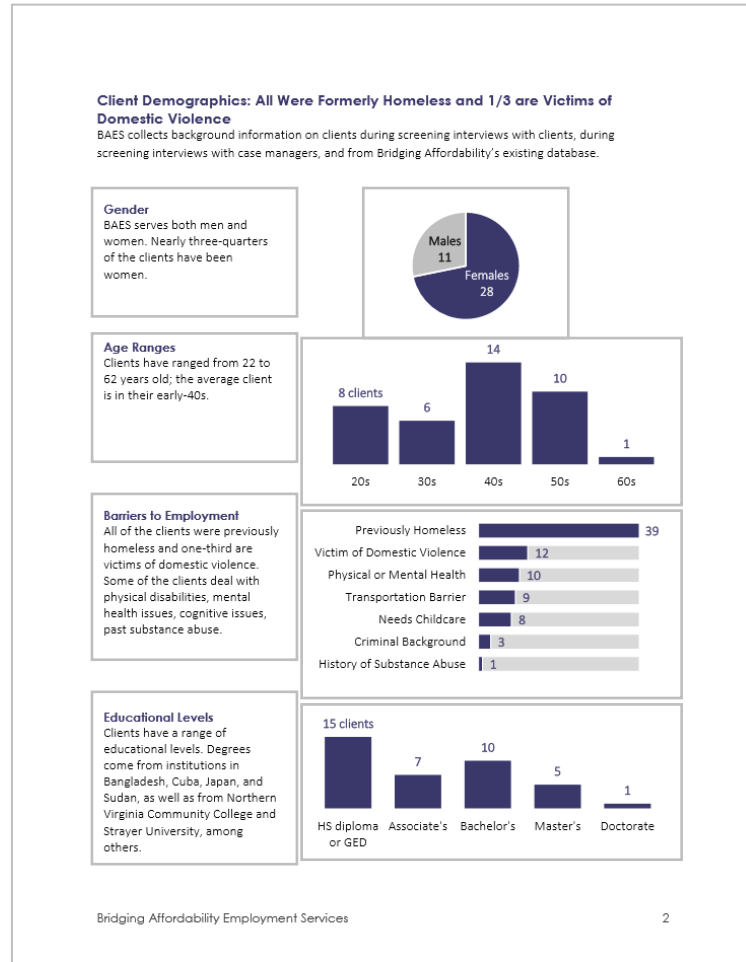


Focused on the “So What?”

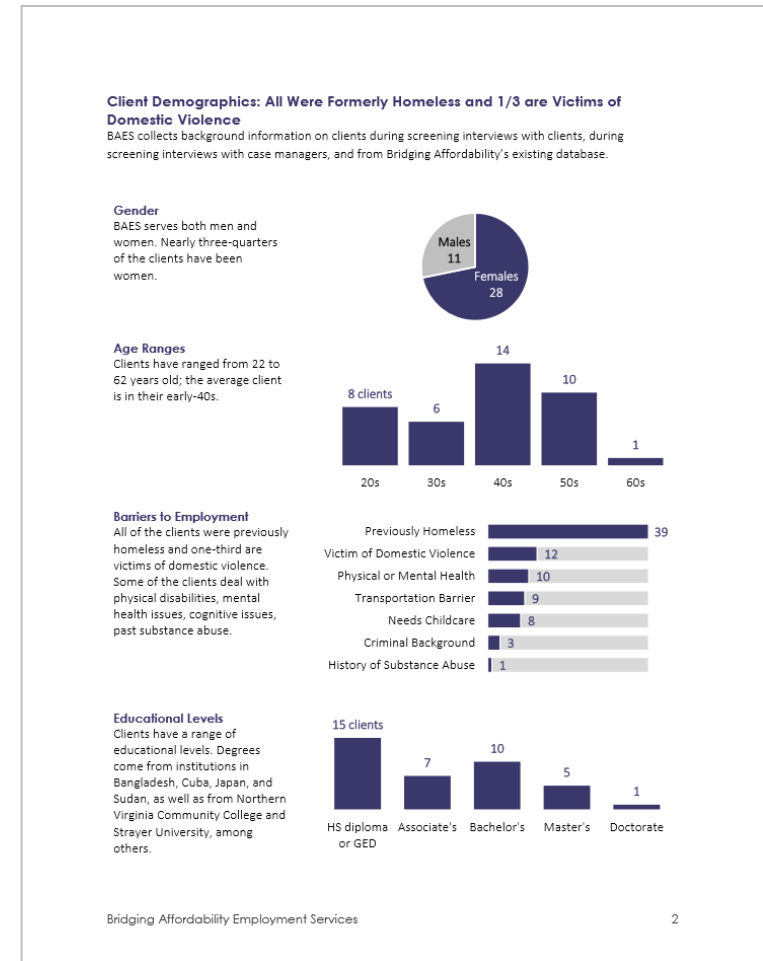


Remove Borders

Text Box Outlines

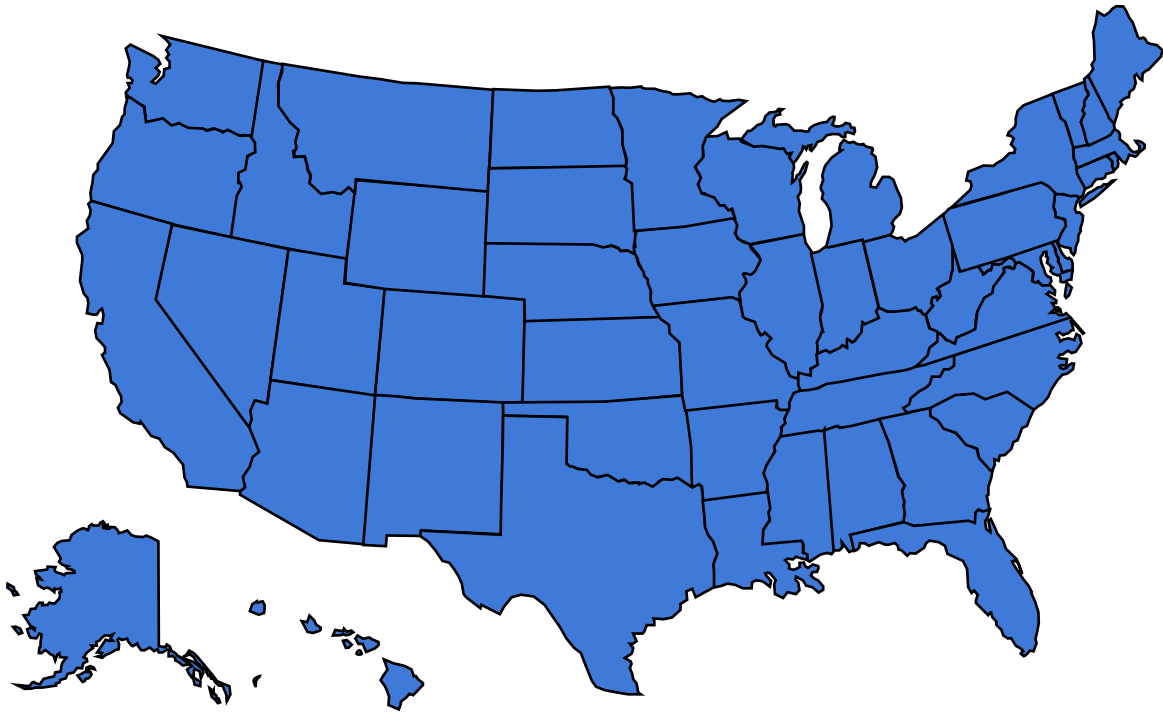


Focused on the “So What?”

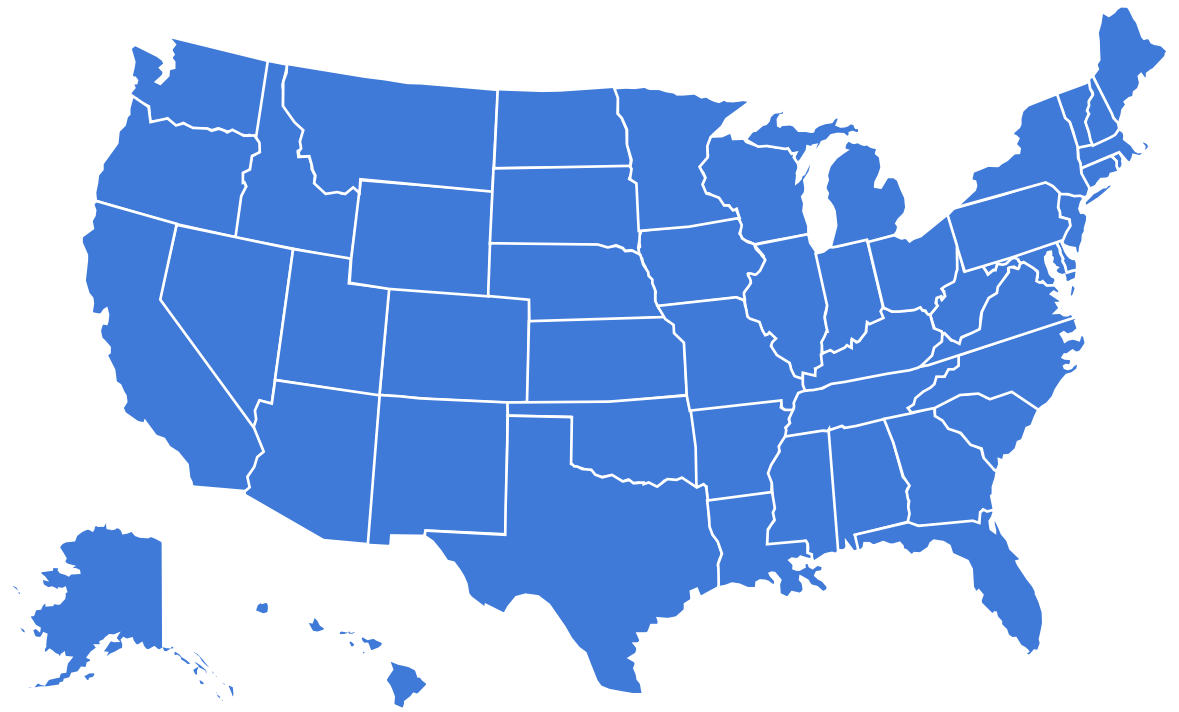


Remove Borders

Colored Outlines

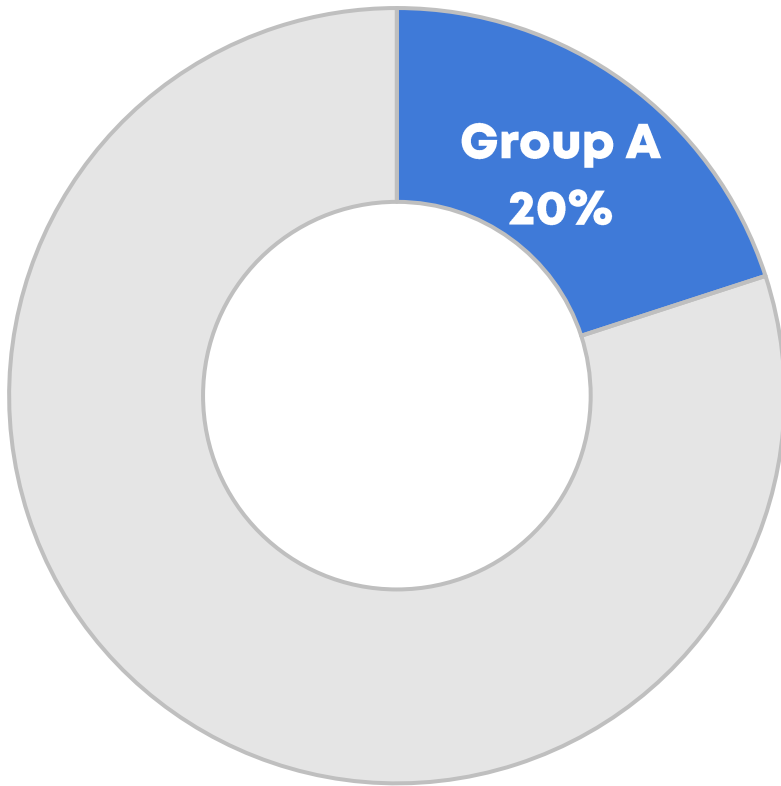


White Outlines

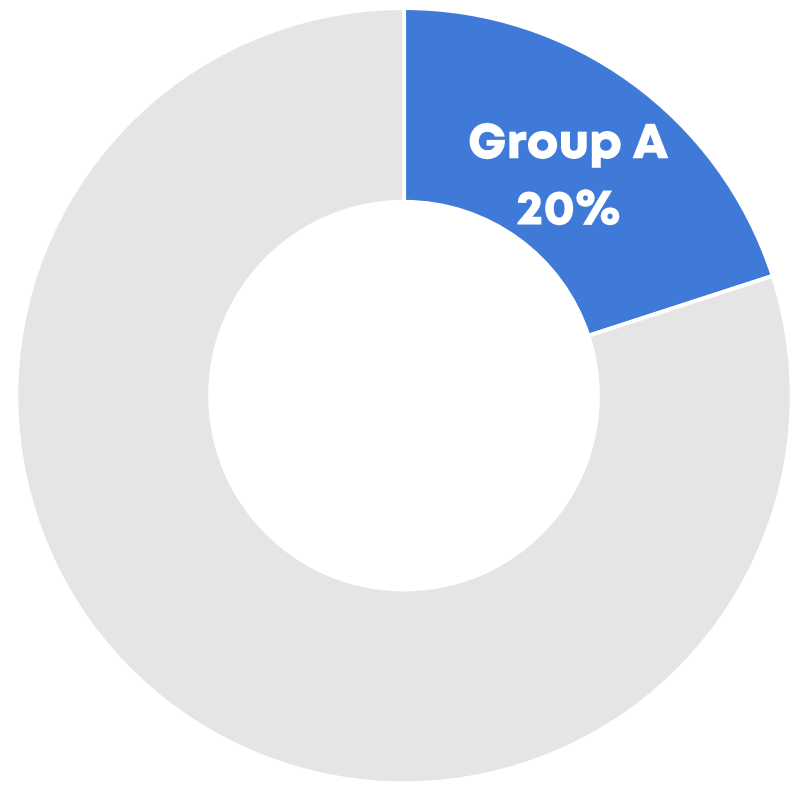


Remove Borders

Colored Outlines

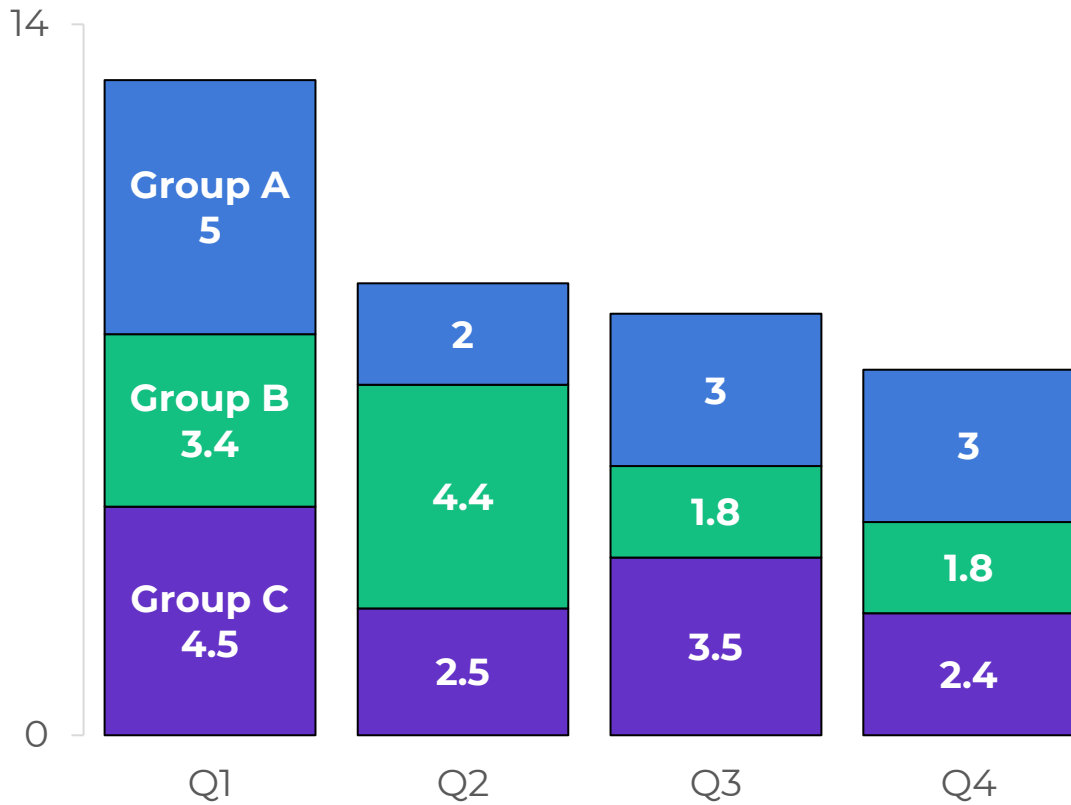


White Outlines

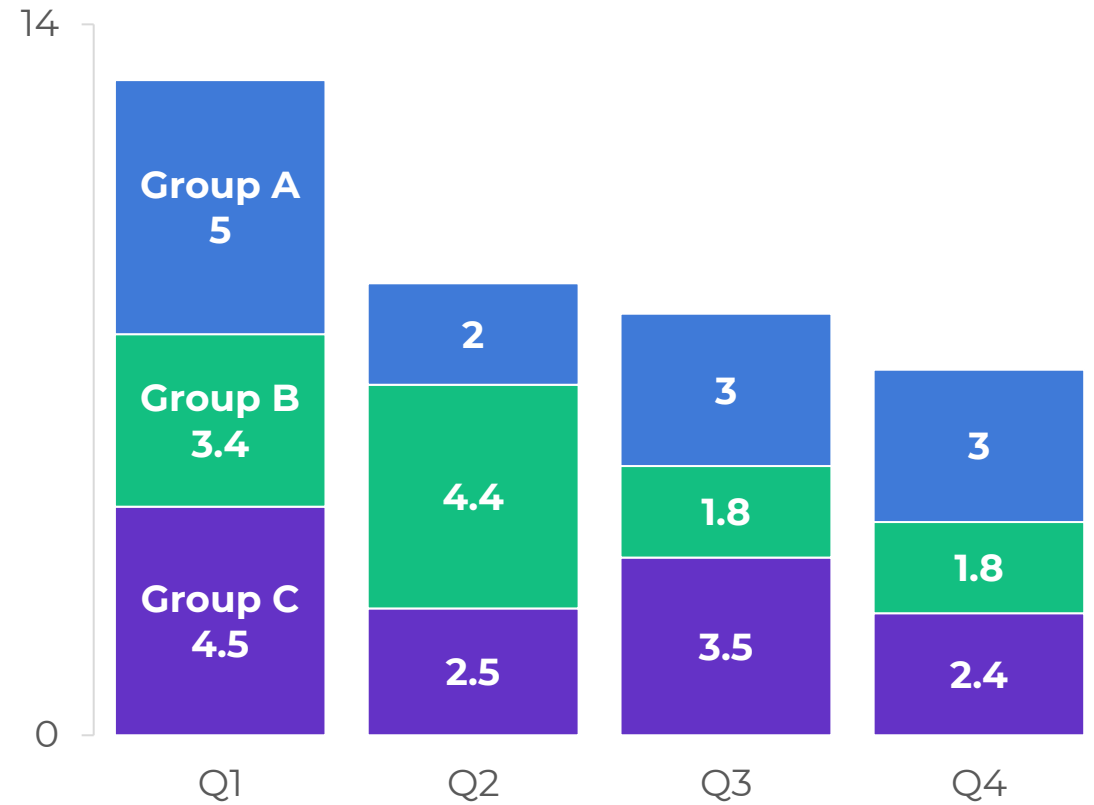


Remove Borders

Colored Outlines

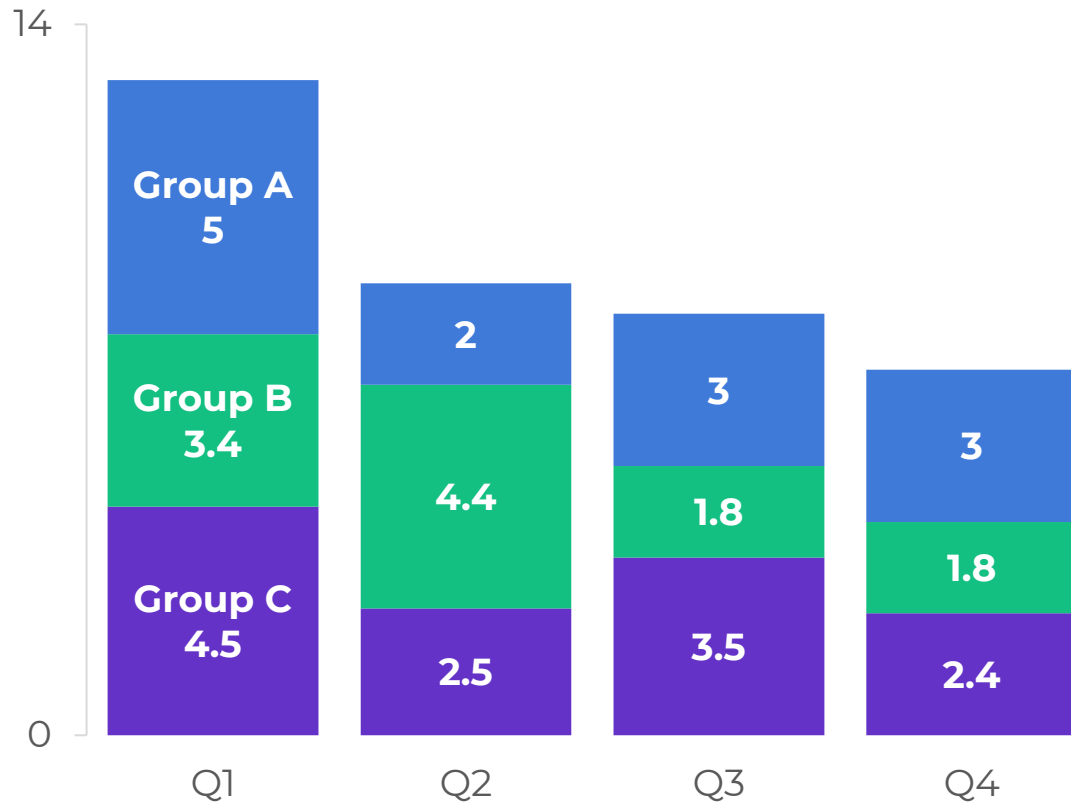


White Outlines

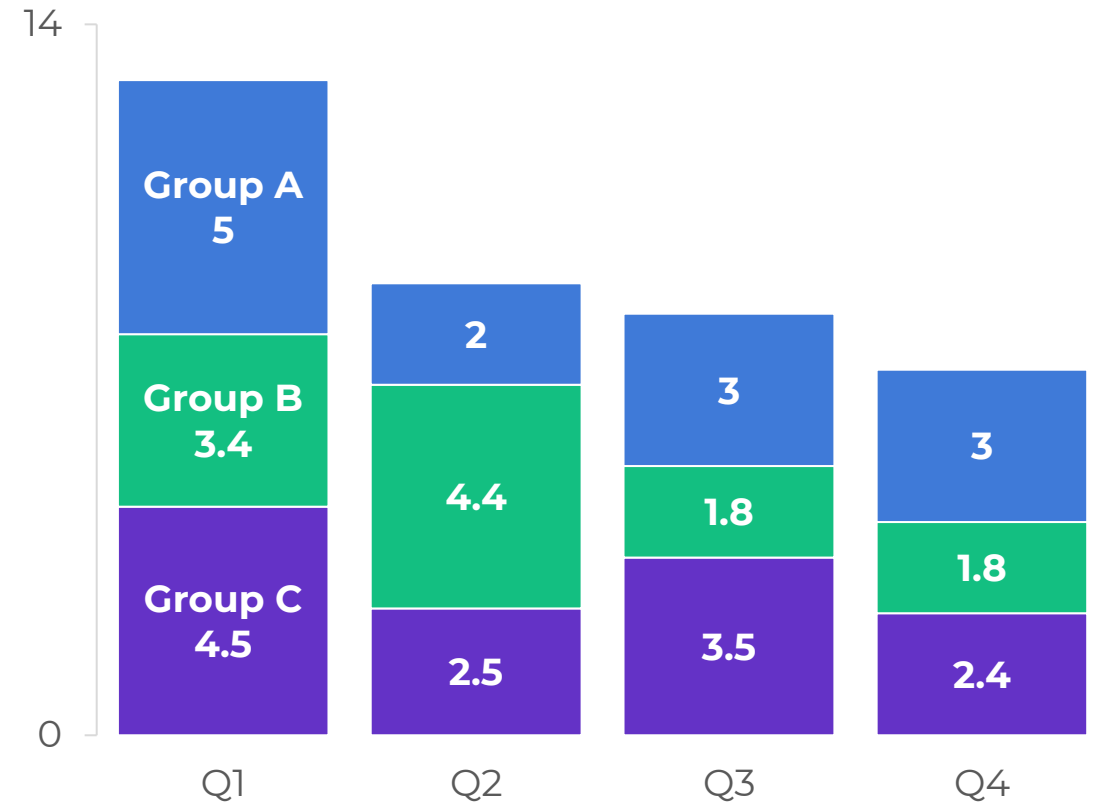


Remove Borders

No Outlines



White Outlines

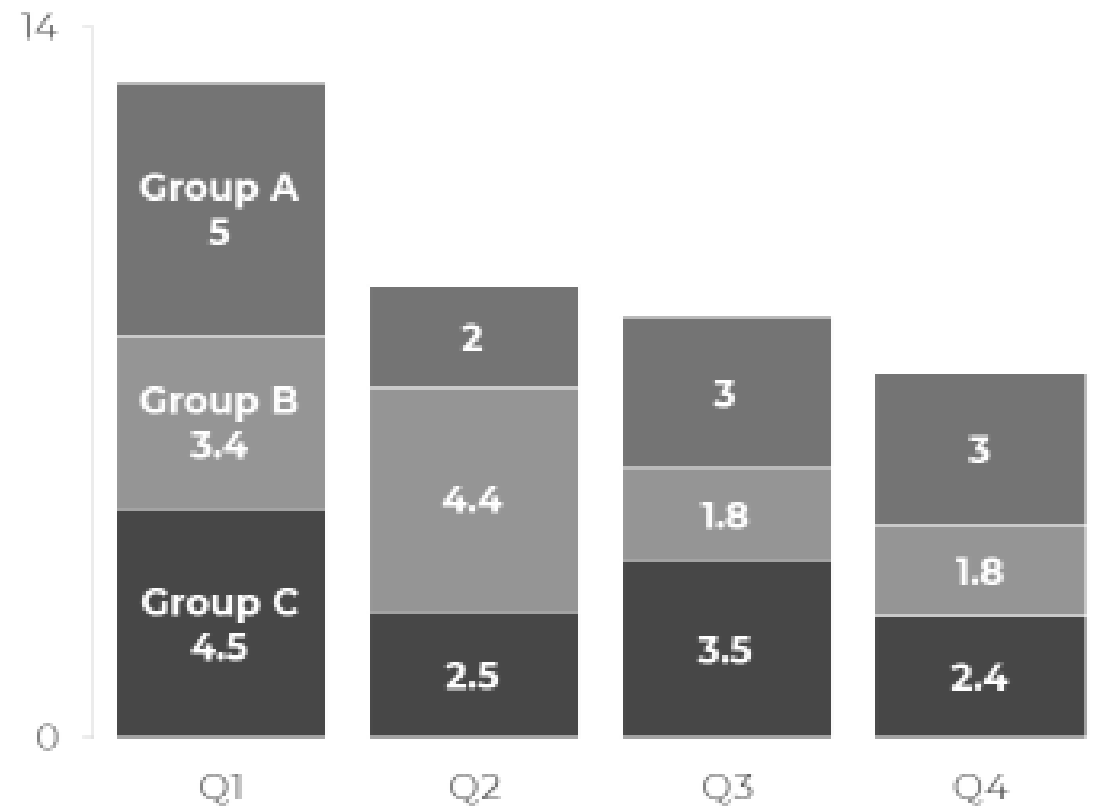
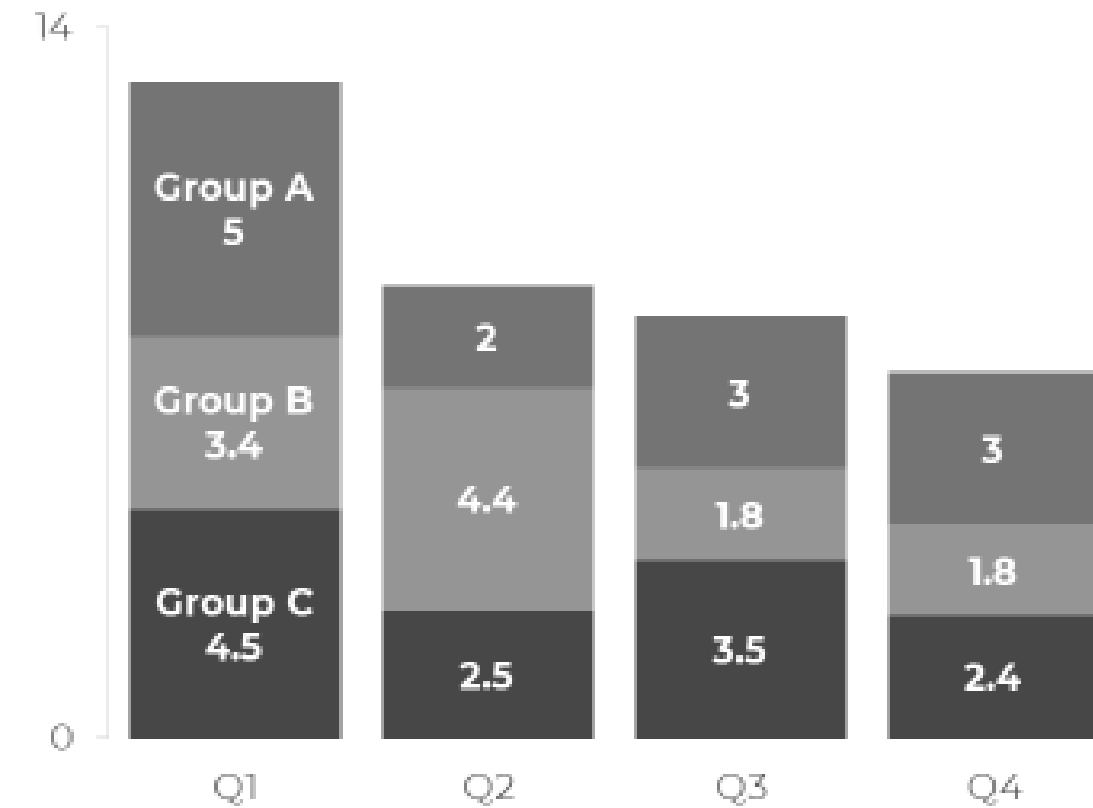


Remove Borders

No Outlines



White Outlines



Remove Background Distractions (e.g., Fills)

Banded Rows

Filled Background
Helps Us Read Across

ID	A	B	C	D
101	16	18	28	3
102	3	11	16	20
103	12	27	17	19
104	92	87	98	84
105	19	33	6	31
106	15	3	14	14
107	75	87	83	88
108	23	18	11	20



Heat Table

Gray Lines
Helps Us Read Across

ID	A	B	C	D
101	16	18	28	3
102	3	11	16	20
103	12	27	17	19
104	92	87	98	84
105	19	33	6	31
106	15	3	14	14
107	75	87	83	88
108	23	18	11	20

Remove Background Distractions (e.g., Fills)

Banded Rows

Filled Background
Helps Us Read Across

ID	A	B	C	D
101	16	18	28	3
102	3	11	16	20
103	12	27	17	19
104	92	87	98	84
105	19	33	6	31
106	15	3	14	14
107	75	87	83	88
108	23	18	11	20



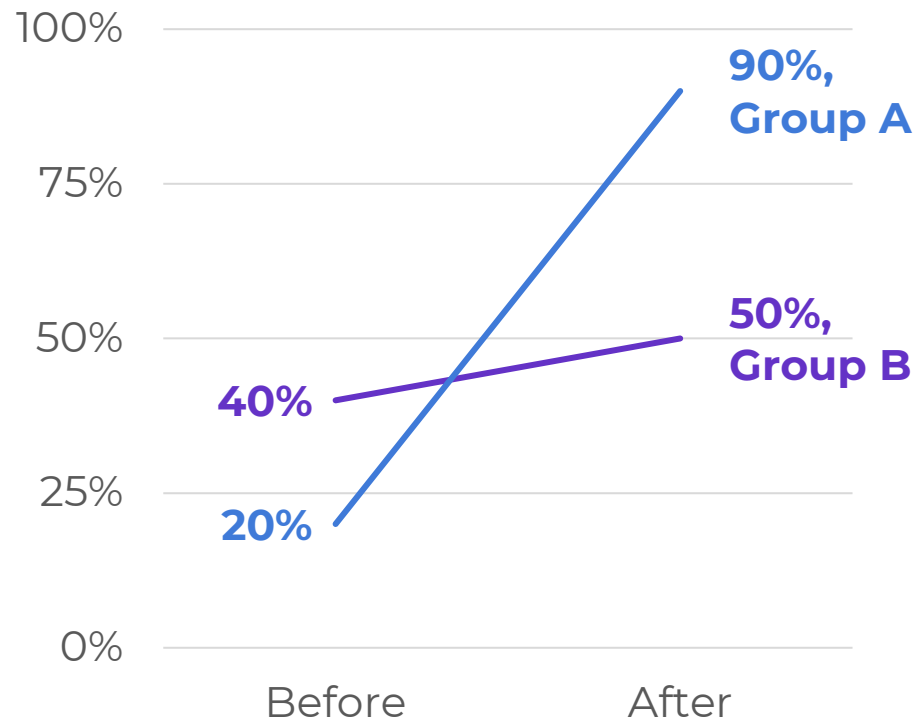
Heat Table

Filled Background
Helps Us Find Patterns

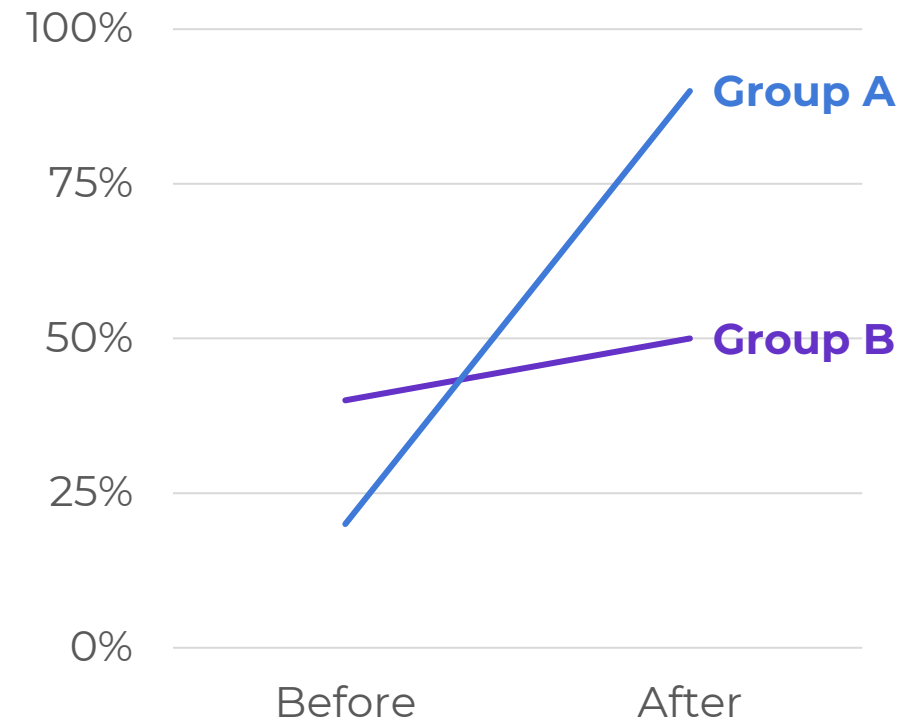
ID	A	B	C	D
101	16	18	28	3
102	3	11	16	20
103	12	27	17	19
104	92	87	98	84
105	19	33	6	31
106	15	3	14	14
107	75	87	83	88
108	23	18	11	20

Remove Redundant Labels

Redundant
Scale AND Data Points

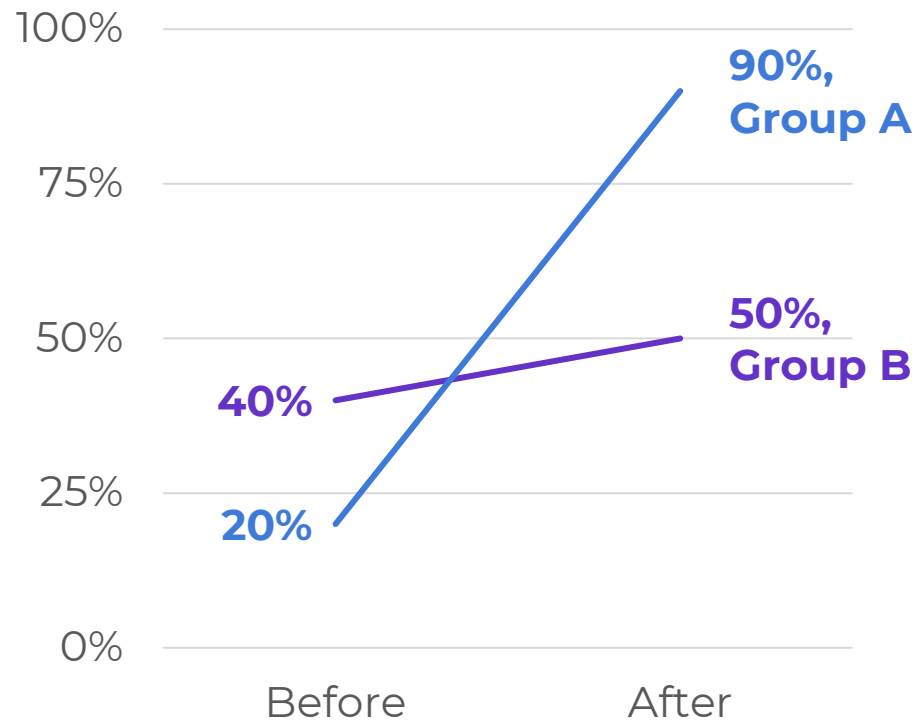


Birds-Eye-View
Scale

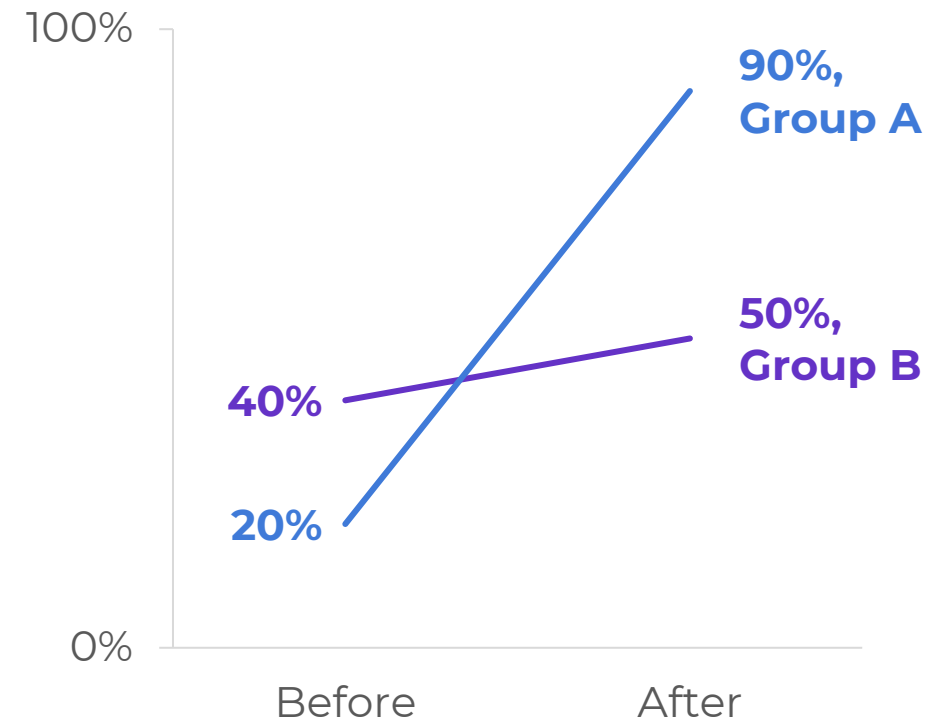


Remove Redundant Labels

Redundant
Scale AND Data Points



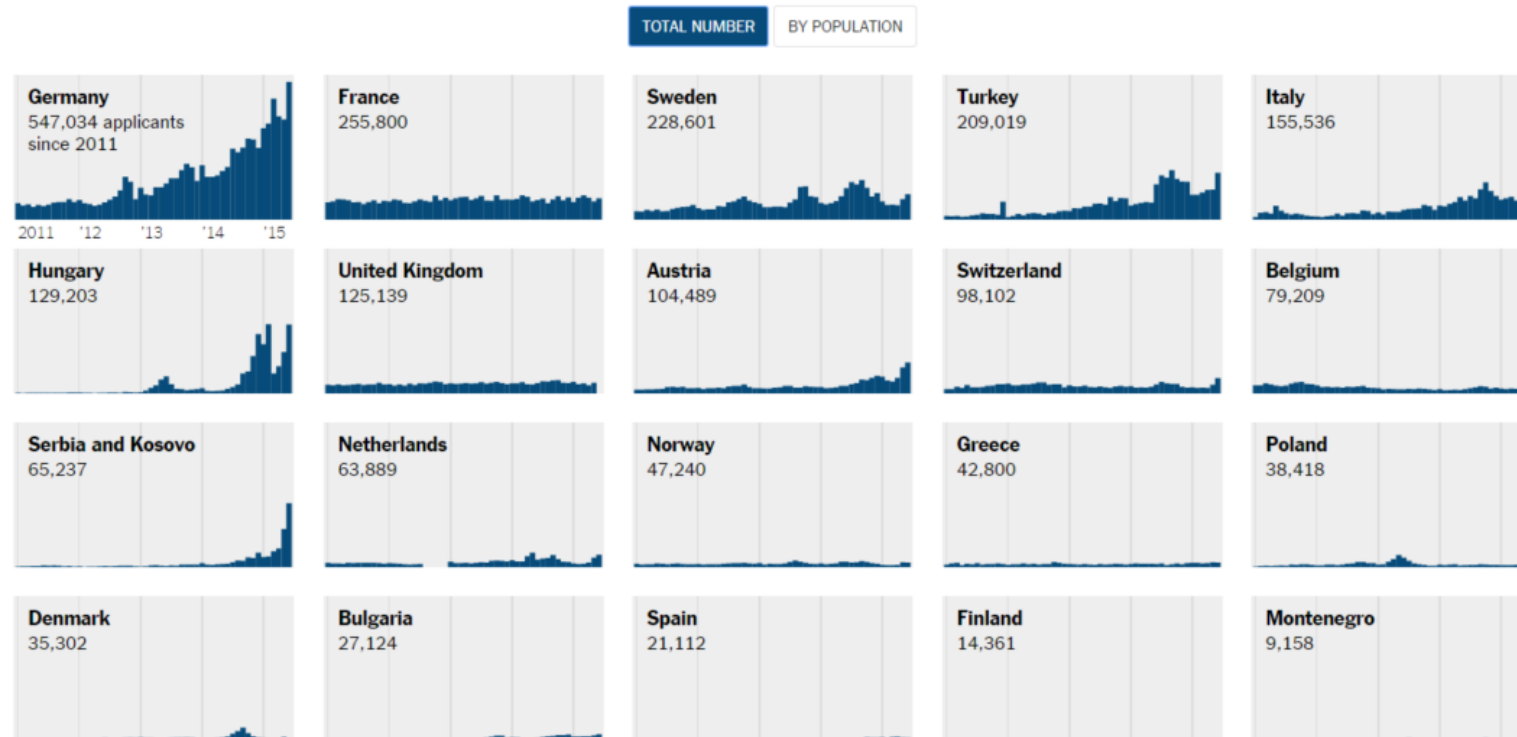
Detailed
Data Points



Remove Redundant Text

A Surge in Asylum Applications

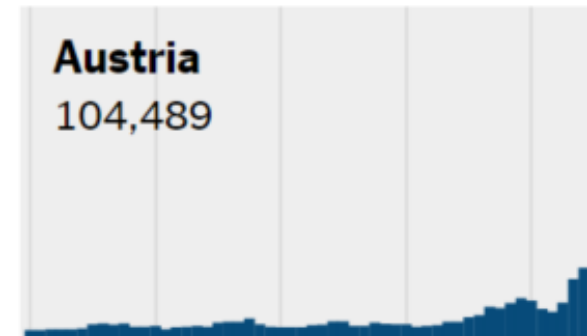
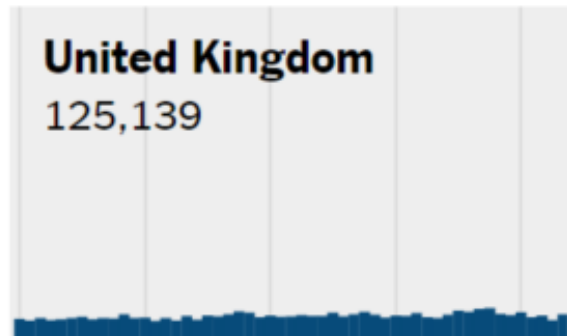
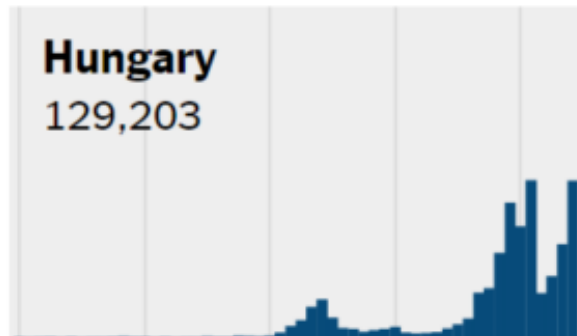
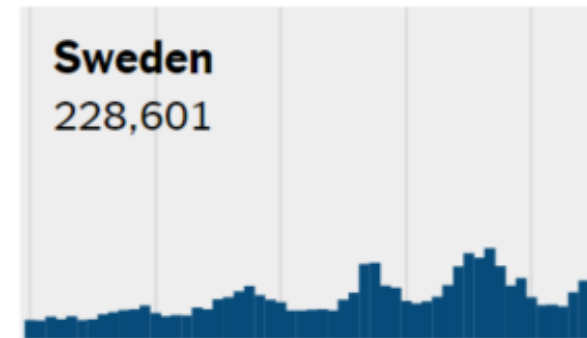
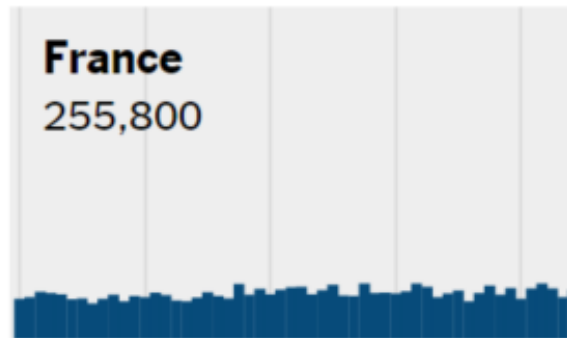
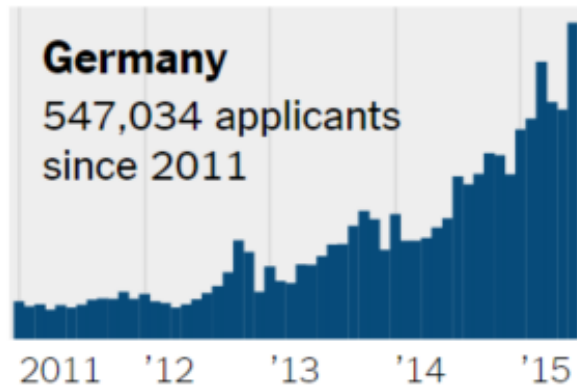
Germany has received more applicants than any other European Union nation, with more than 154,000 migrants seeking asylum from January to June, up from 68,000 in the same period last year. When adjusted for population, Hungary and Sweden are among the top recipients.



Sources: United Nations High Commissioner for Refugees, World Bank

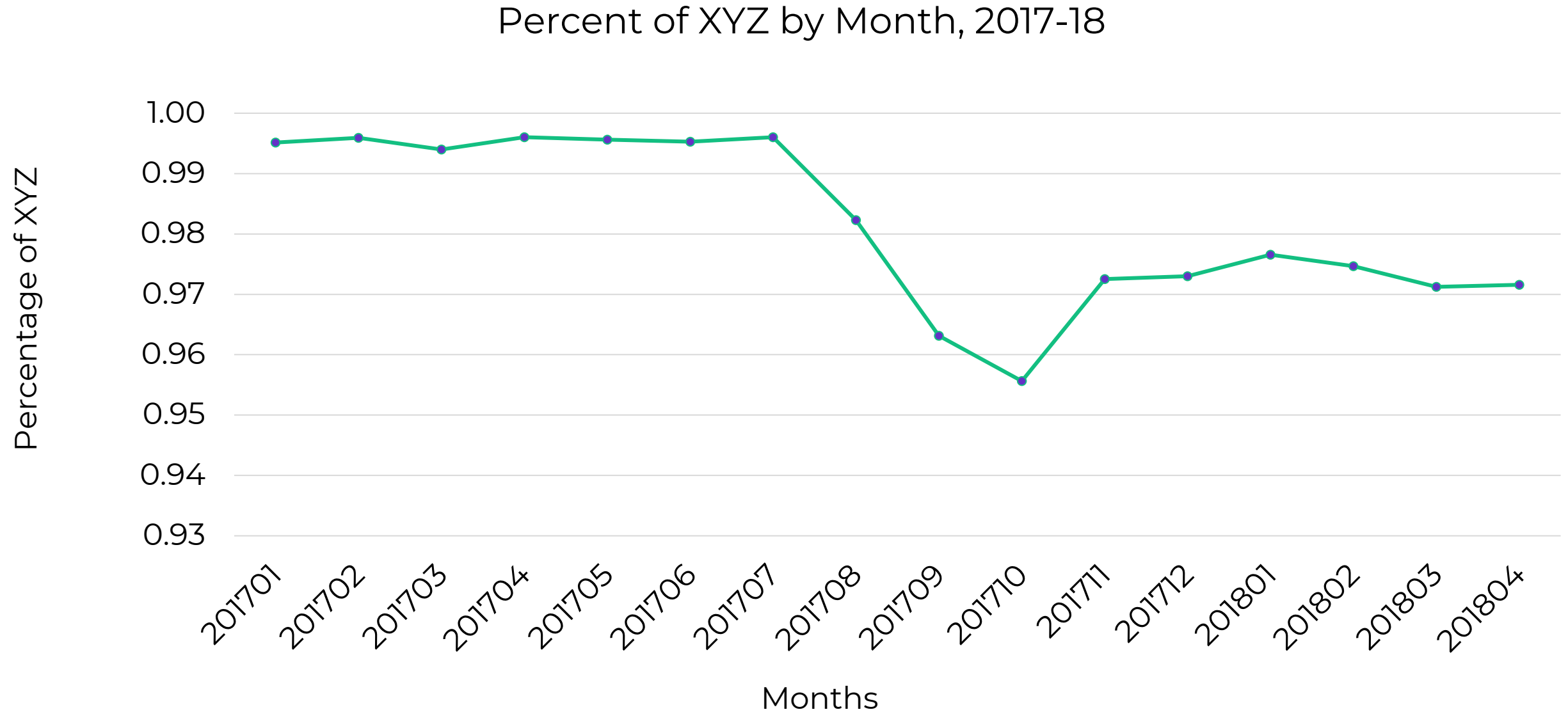
New York Times, <http://www.nytimes.com/interactive/2015/08/28/world/europe/countries-under-strain-from-european-migration-crisis.html>

Remove Redundant Text

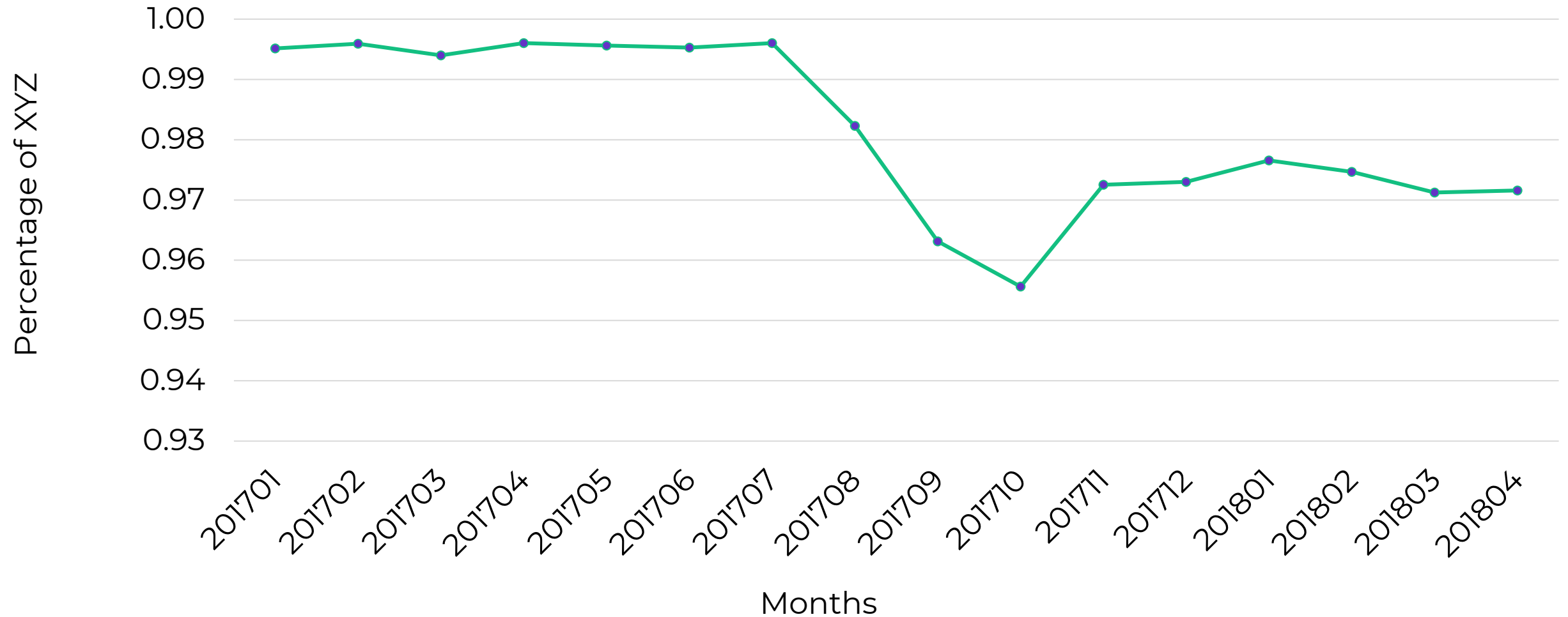


New York Times, <http://www.nytimes.com/interactive/2015/08/28/world/europe/countries-under-strain-from-european-migration-crisis.html>

Percentage of XYZ by Month, 2017-18



Percentage of XYZ by Month, 2017-18



Percentage of XYZ by Month, 2017-18



Percentage of XYZ by Month, 2017-18



Percentage of XYZ by Month, 2017-18



Percentage of XYZ by Month, 2017-18



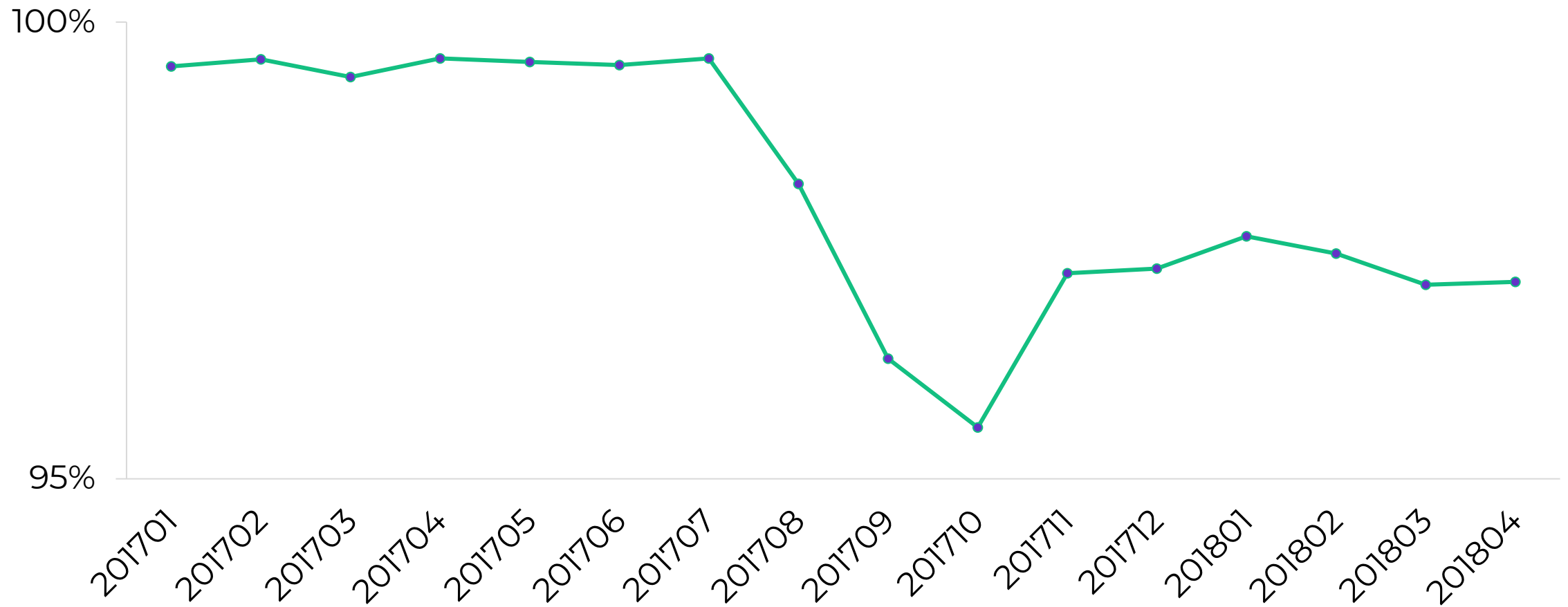
Percentage of XYZ by Month, 2017-18



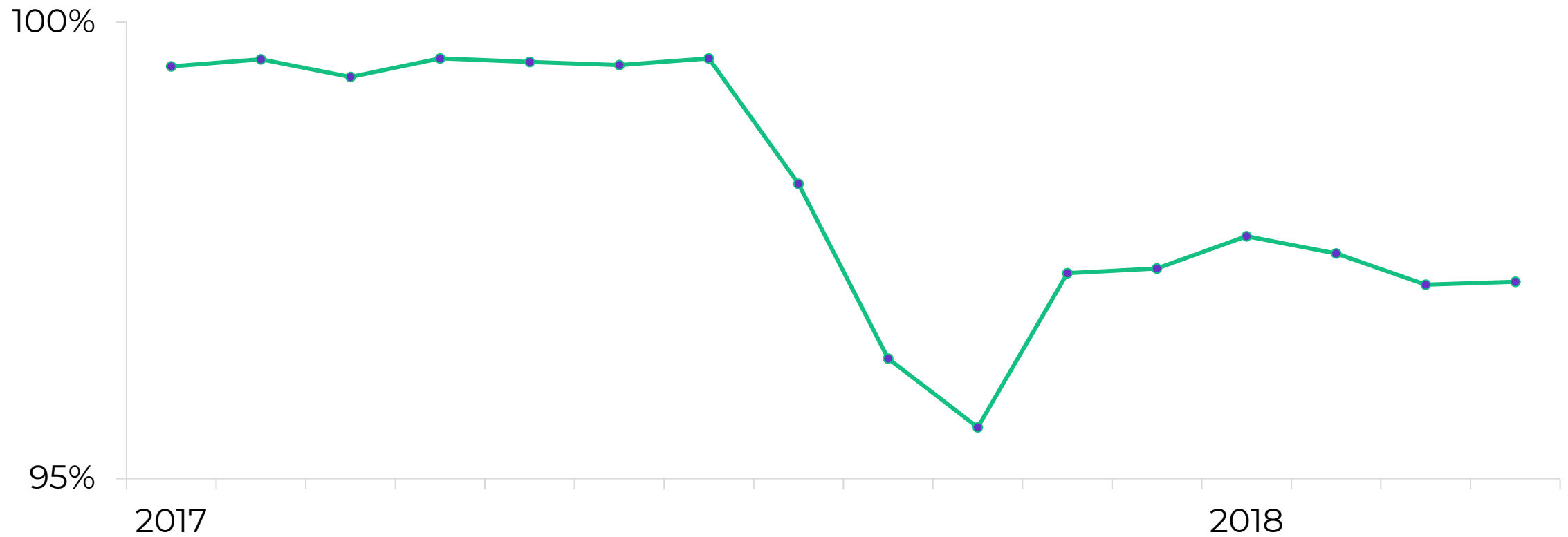
Percentage of XYZ by Month, 2017-18



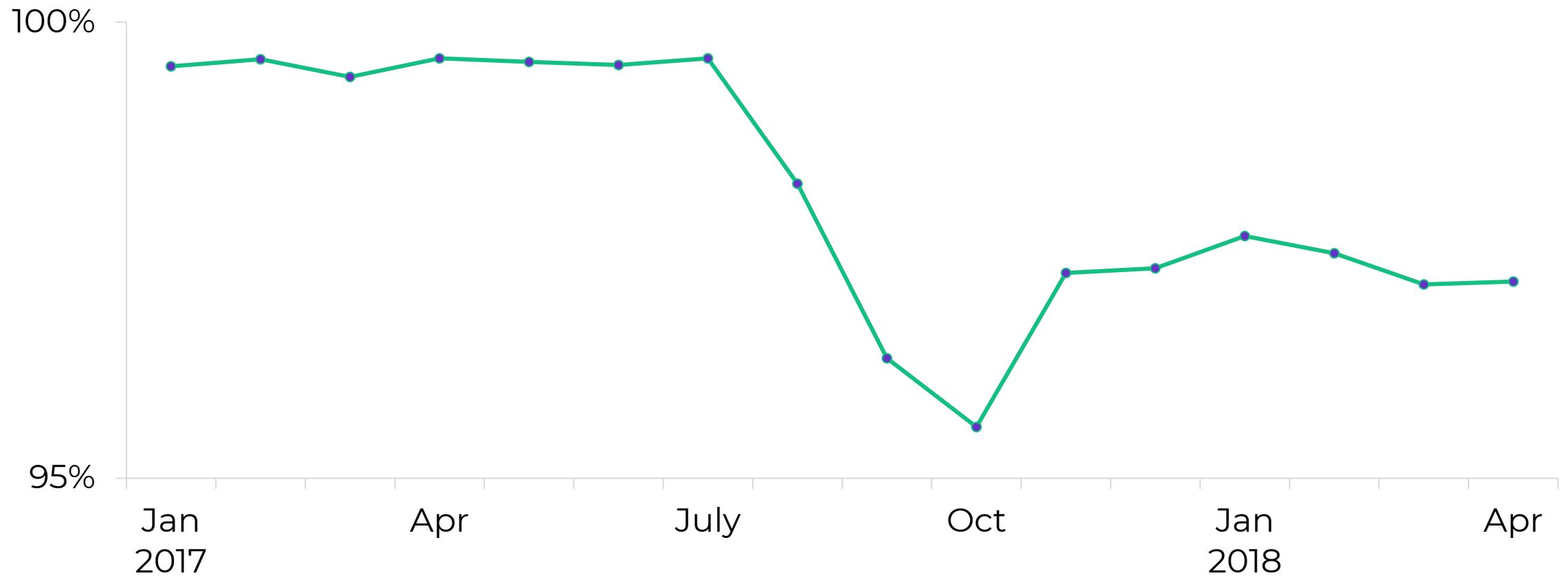
Percentage of XYZ by Month, 2017-18



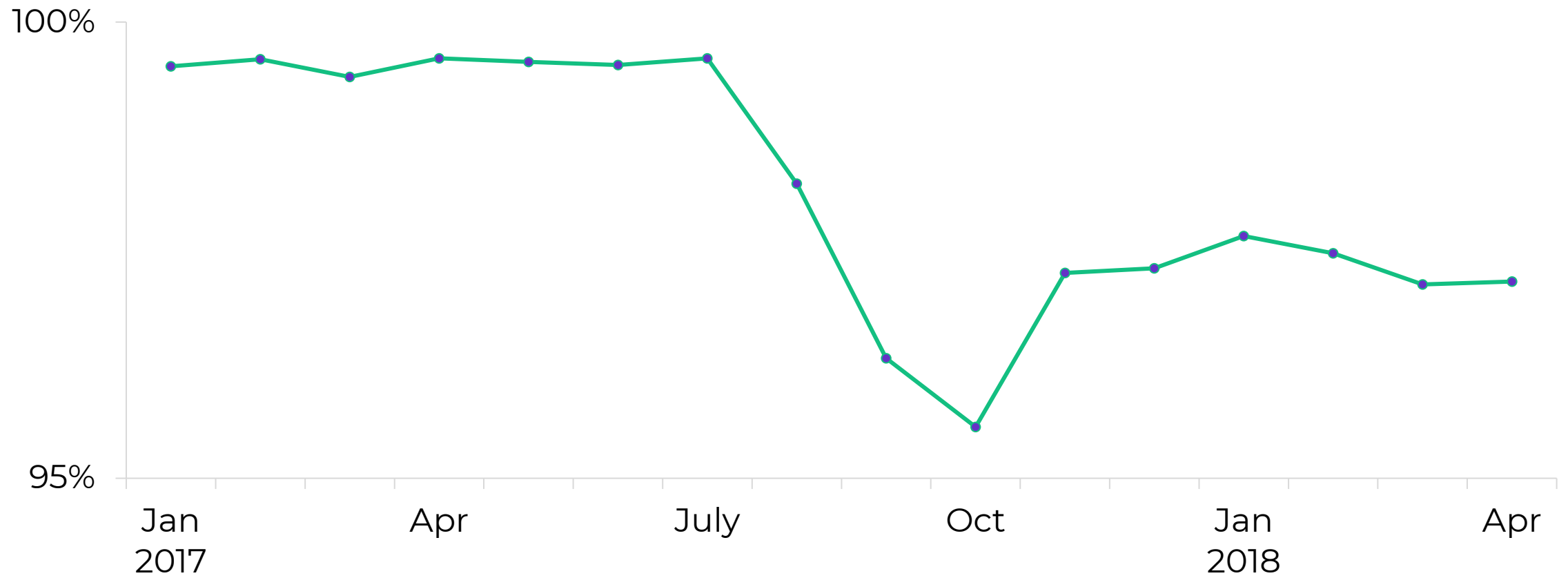
Percentage of XYZ by Month, 2017-18



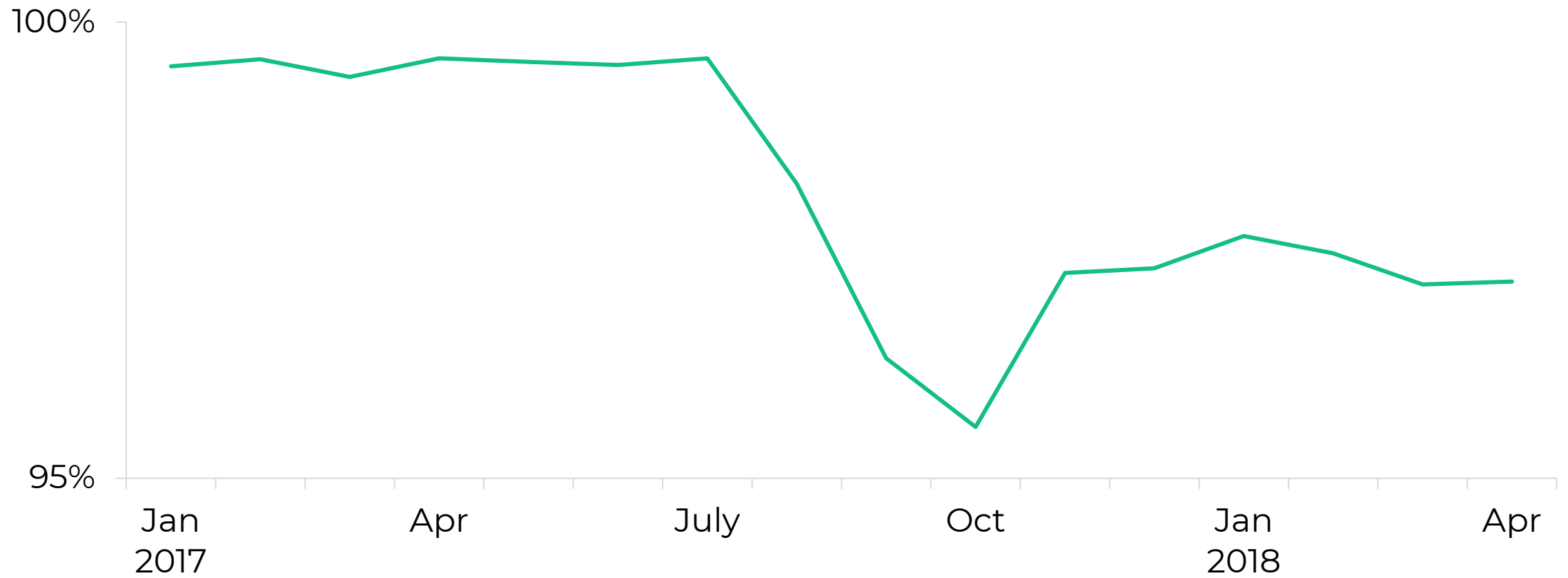
Percentage of XYZ by Month, 2017-18



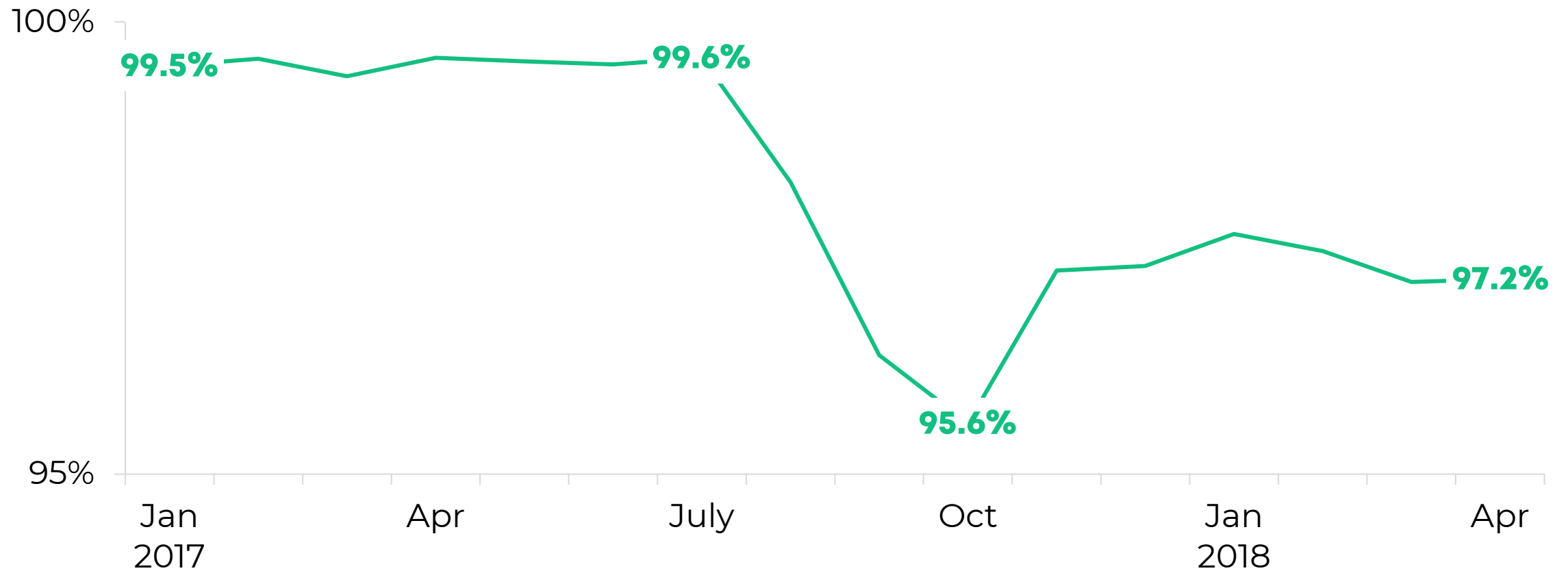
Percentage of XYZ



Percentage of XYZ



Percentage of XYZ

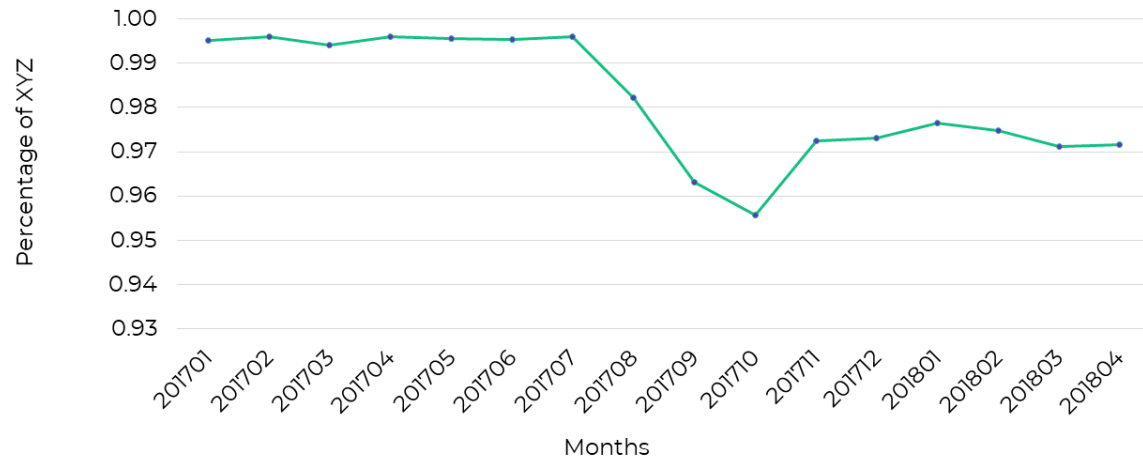


Declutter



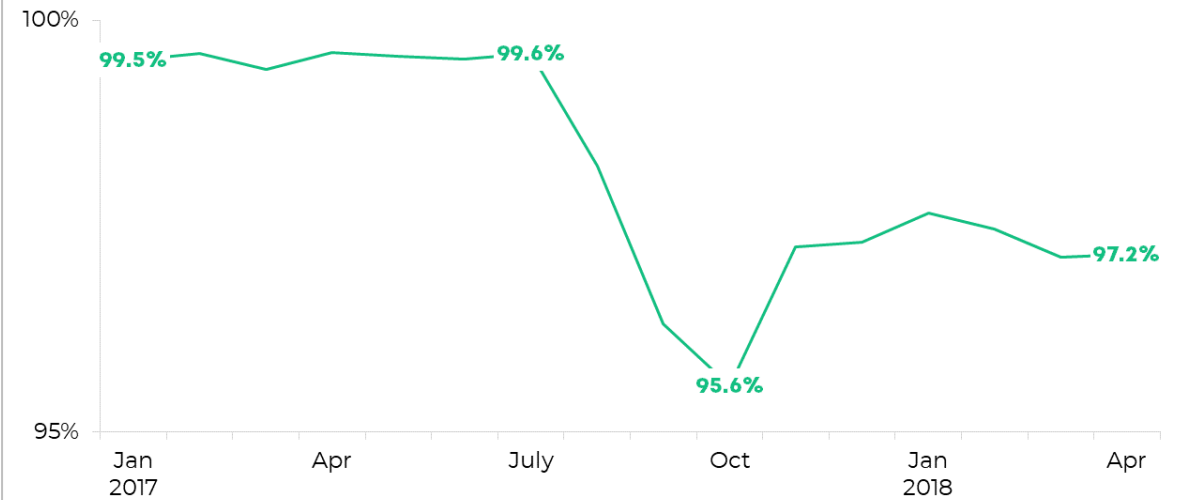
Percentage of XYZ by Month, 2017-18

Percent of XYZ by Month, 2017-18



depict data studio

Percentage of XYZ



depict data studio

1

Audience



2

Charts



3

Declutter



4

Color



5

Text

Use Your Brand Colors

Find Color Codes in Your Style Guide



Use Those Colors in Your Visuals



PMS 426 C
RGB 38, 38, 38
CMYK 71, 65, 64, 69
HEX # 262626



PMS 266 C
RGB 100, 50, 198
CMYK 74, 83, 0, 0
HEX # 6432C6



PMS 660 C
RGB 63, 122, 216
CMYK 75, 51, 0, 0
HEX # 3F7AD8



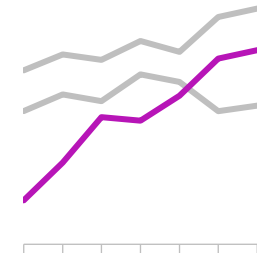
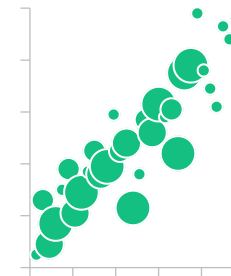
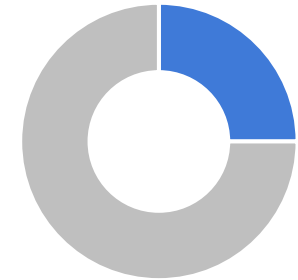
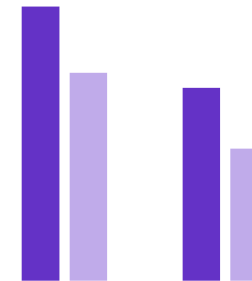
PMS 253 C
RGB 183, 21, 183
CMYK 40, 91, 0, 0
HEX # B715B7



PMS 3395 C
RGB 19, 191, 129
CMYK 73, 0, 68, 0
HEX # 13BF81



PMS 141 C
RGB 247, 203, 82
CMYK 3, 19, 79, 0
HEX # F7CB52



Set Up Theme Colors

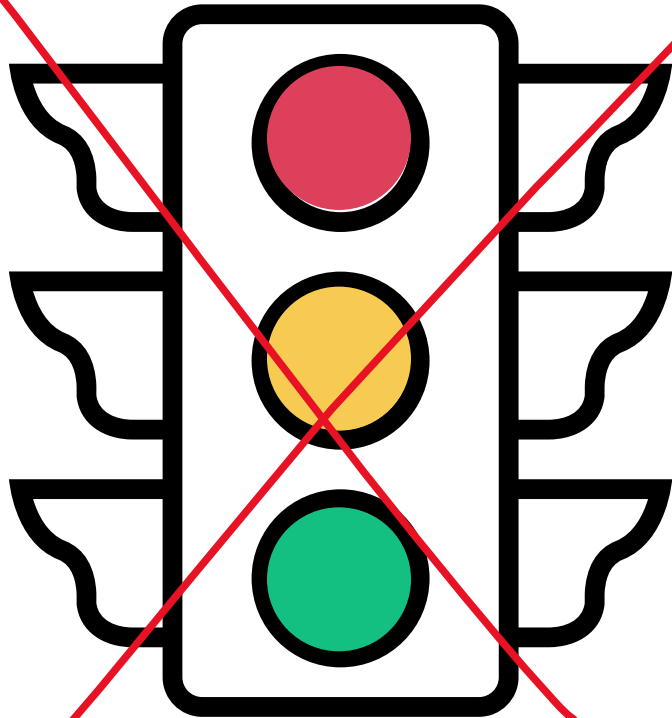
The screenshot displays the Microsoft Excel interface with the 'Page Layout' ribbon selected. The 'Colors' button in the 'Page Layout' ribbon is highlighted with a yellow circle. The 'Custom' theme color palette is open, showing a list of themes with their corresponding color swatches. The themes listed are:

- Alliance Theatre
- Atlanta Symphony Orchestra
- CDC One Branding (2024 and onw...
- Chinese Center for Disease Con...
- Clarinda Regional Center
- Depict
- Emory University
- Goizueta Foundation
- Grand Settlement
- GTSS - Global Tobacco Surveill...
- HGBF
- Kamehameha Schools
- March of Dimes
- MHRC
- NACDD
- NEA Creative Forces
- Northeastern
- OPE MSPB
- PEAK Grantmaking
- REACH Healthcare Foundation
- Sample

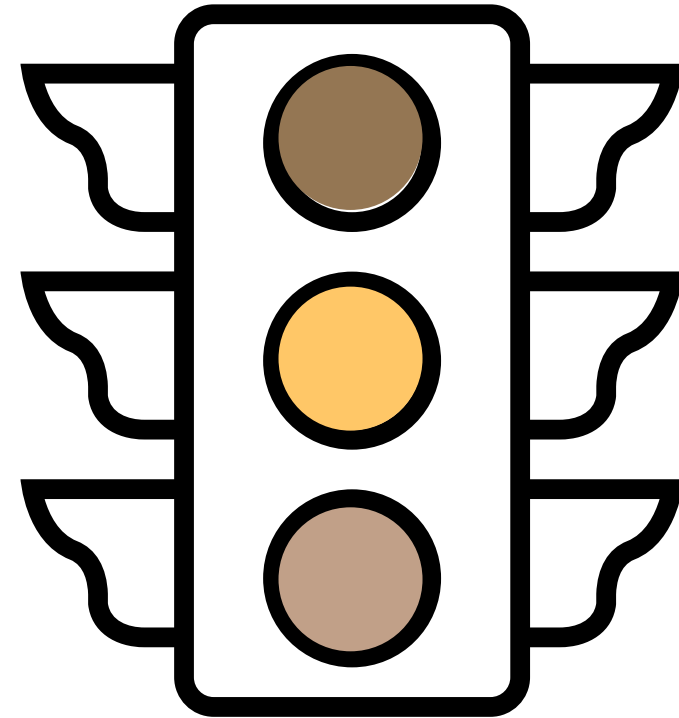
At the bottom of the palette, there is a link to 'Customize Colors...'. The background of the spreadsheet shows columns G through U and rows 1 through 26.

Avoid Red-Green

Normal Color Vision



Colorblind



Avoid Red-Green



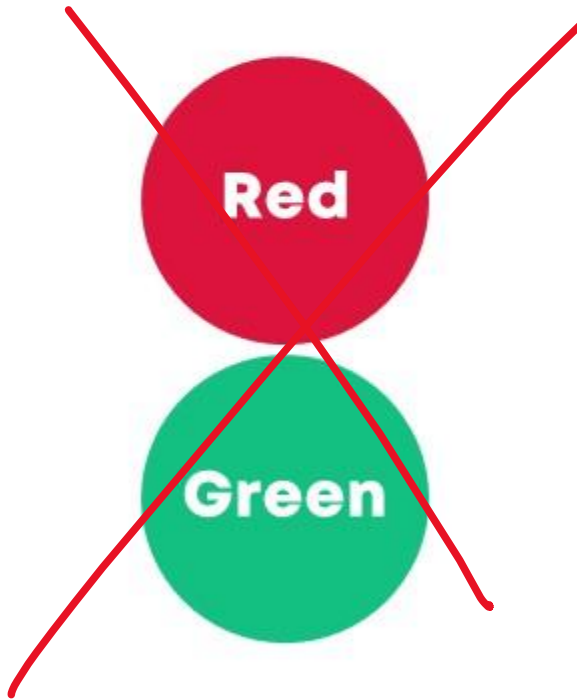
<https://twitter.com/ProfessorTD/status/1106201729287286784>

<https://www.color-blindness.com/coblis-color-blindness-simulator/>

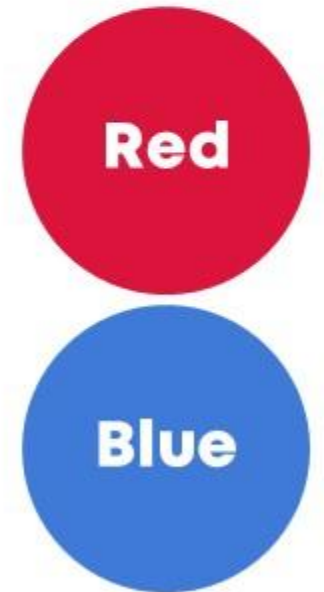
Avoid Red-Green

No Way!

Bad
↑
↓
Good

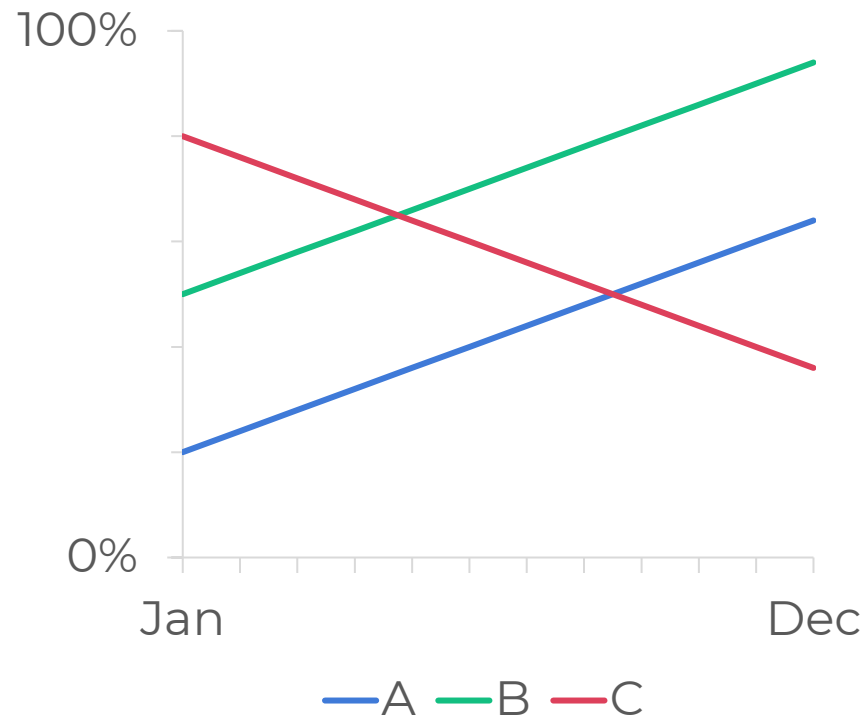


Safer Bets

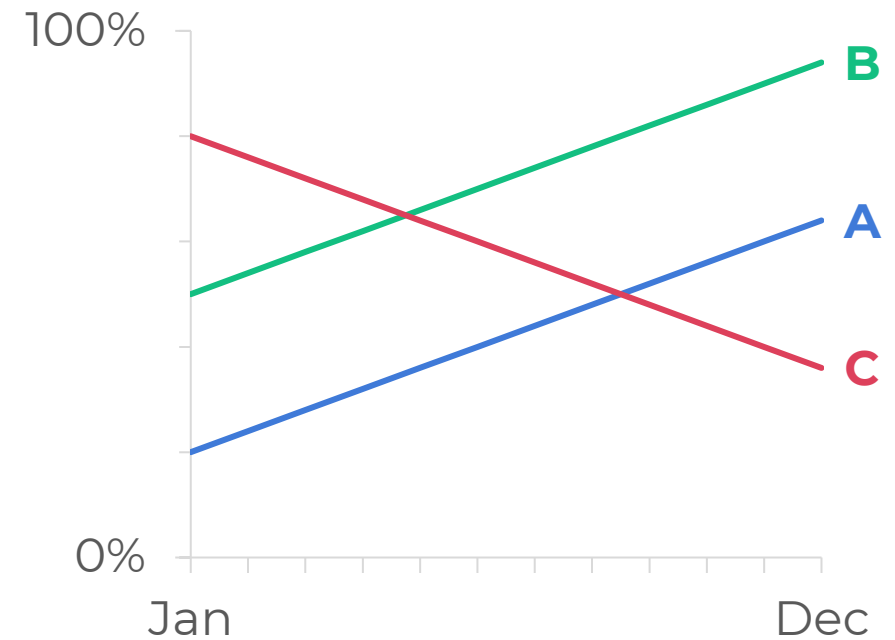


Don't Rely on Color Alone: Direct Labels

Legend

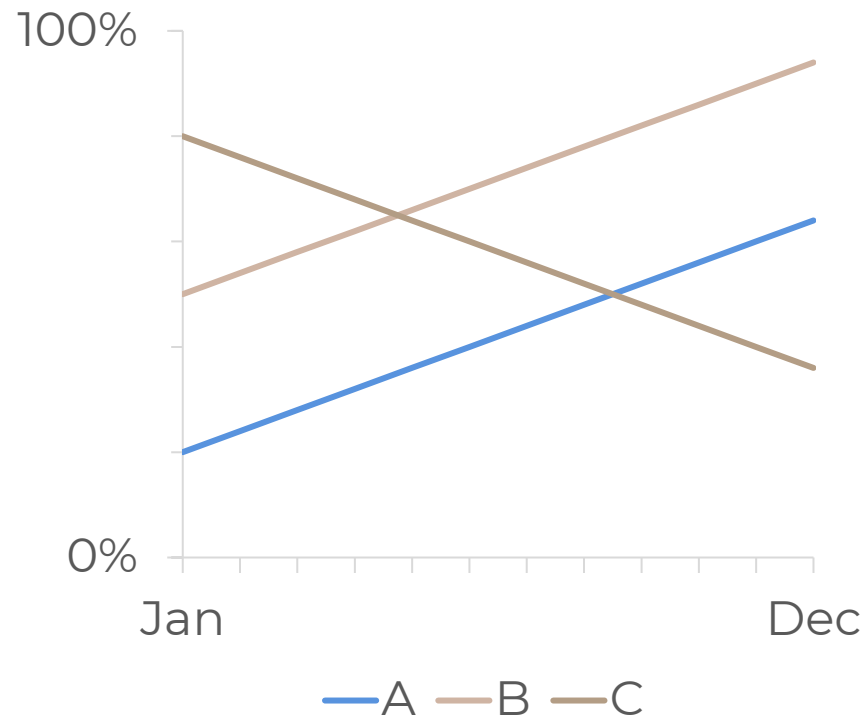


Direct Labels

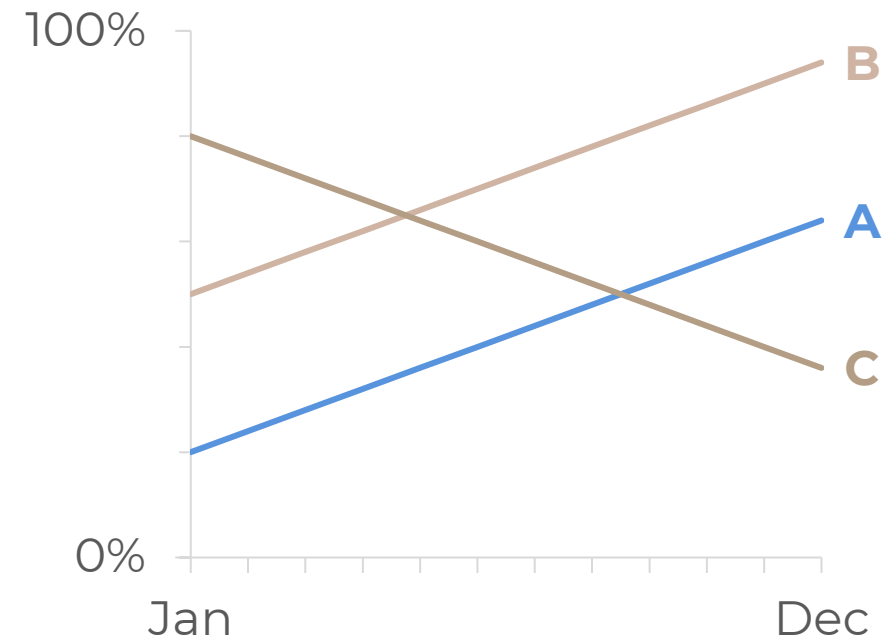


Don't Rely on Color Alone: Direct Labels

Legend

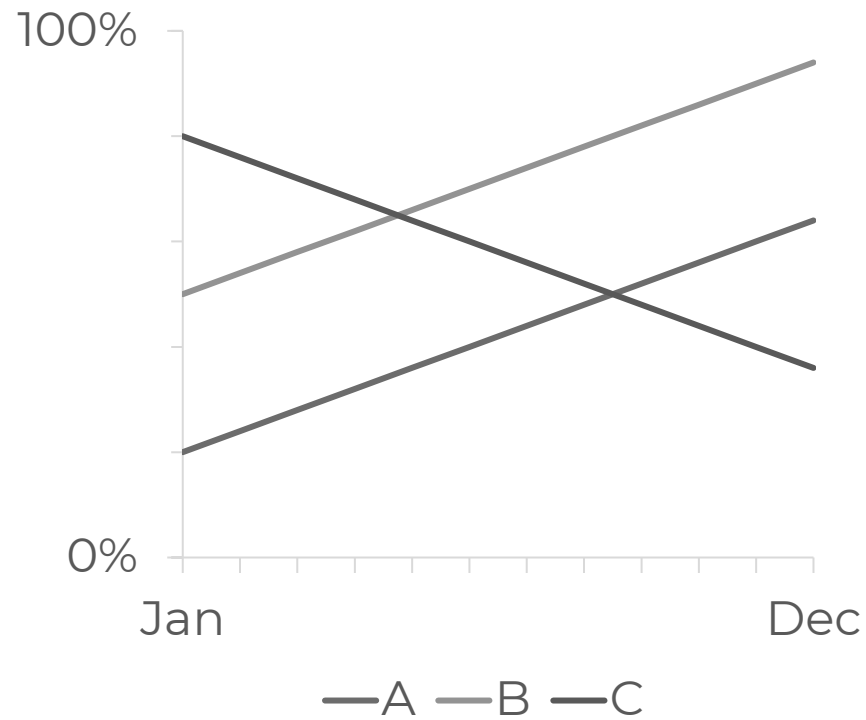


Direct Labels

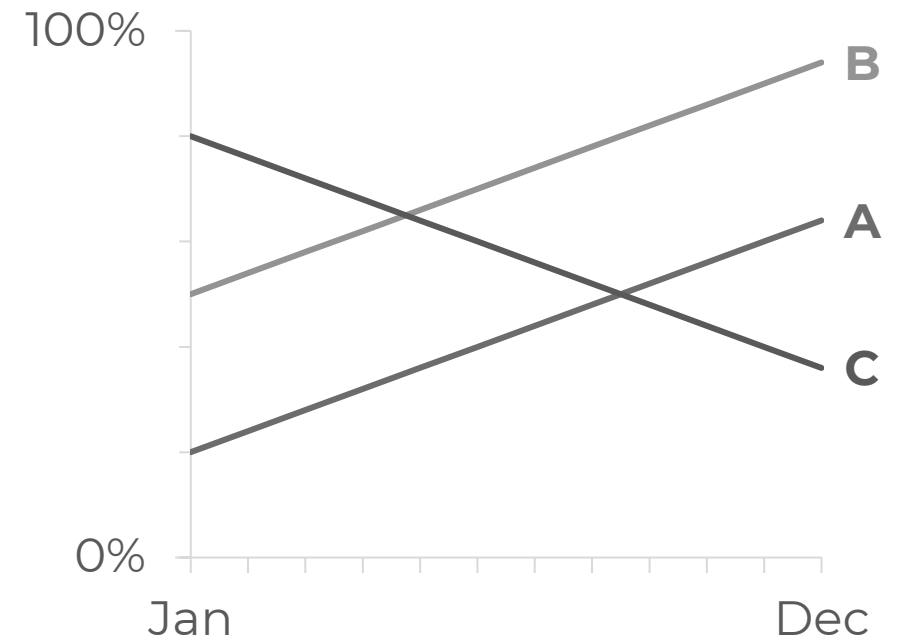


Don't Rely on Color Alone: Direct Labels

Legend



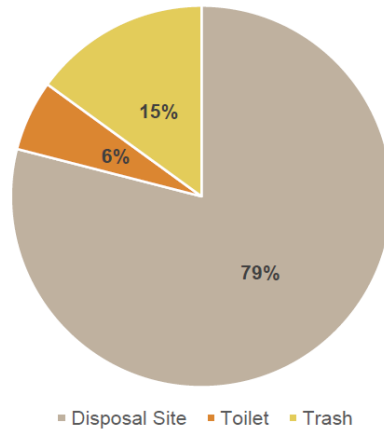
Direct Labels



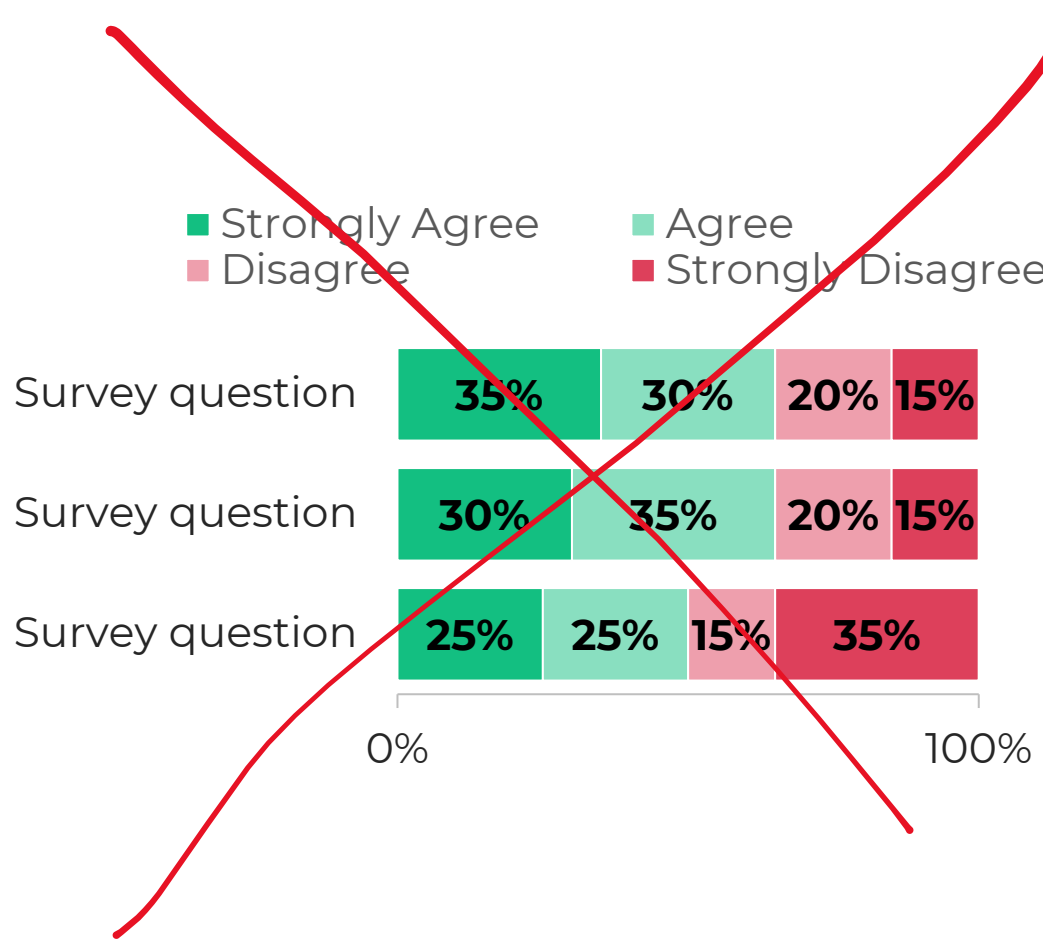
Your Turn



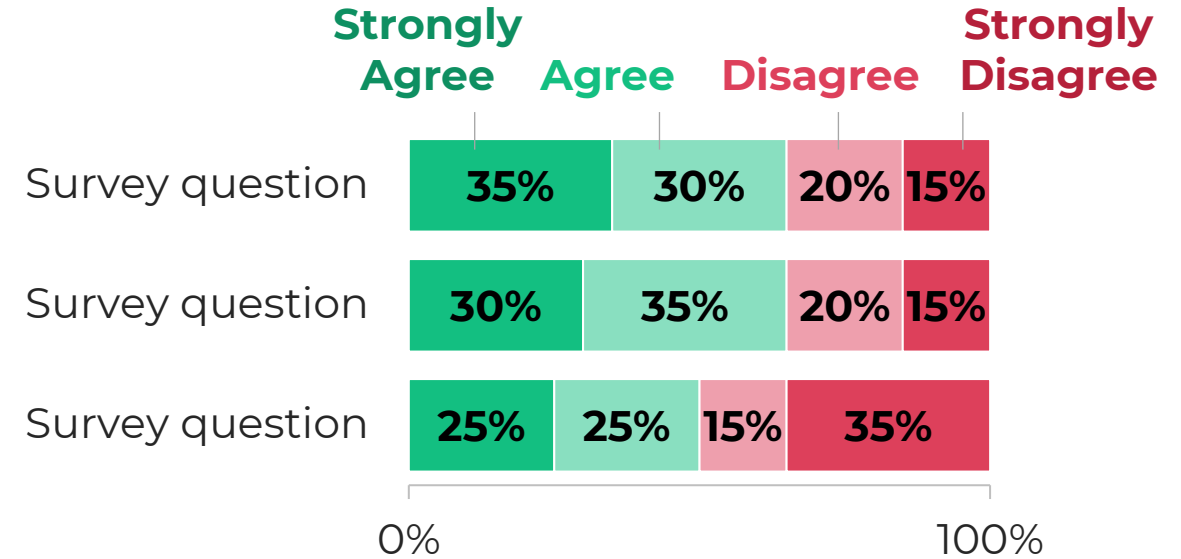
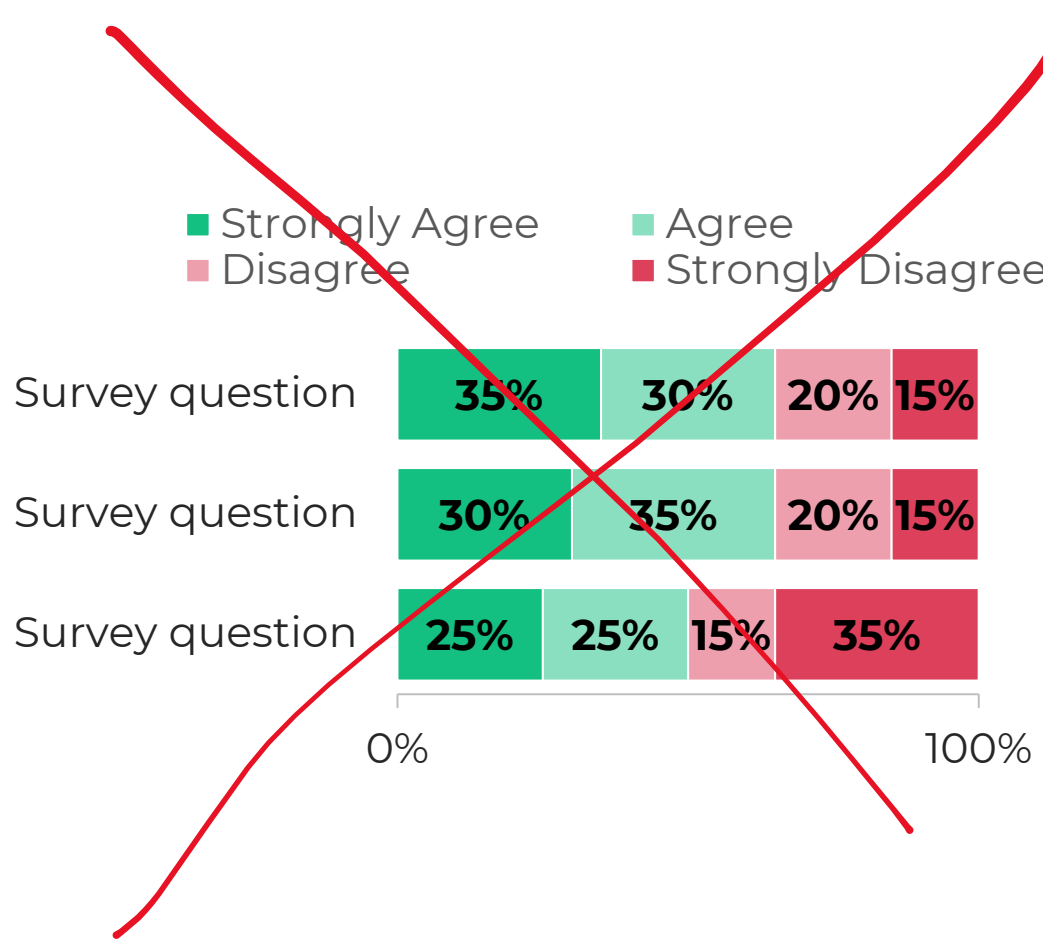
Disposal of Unwanted/Unused Medications



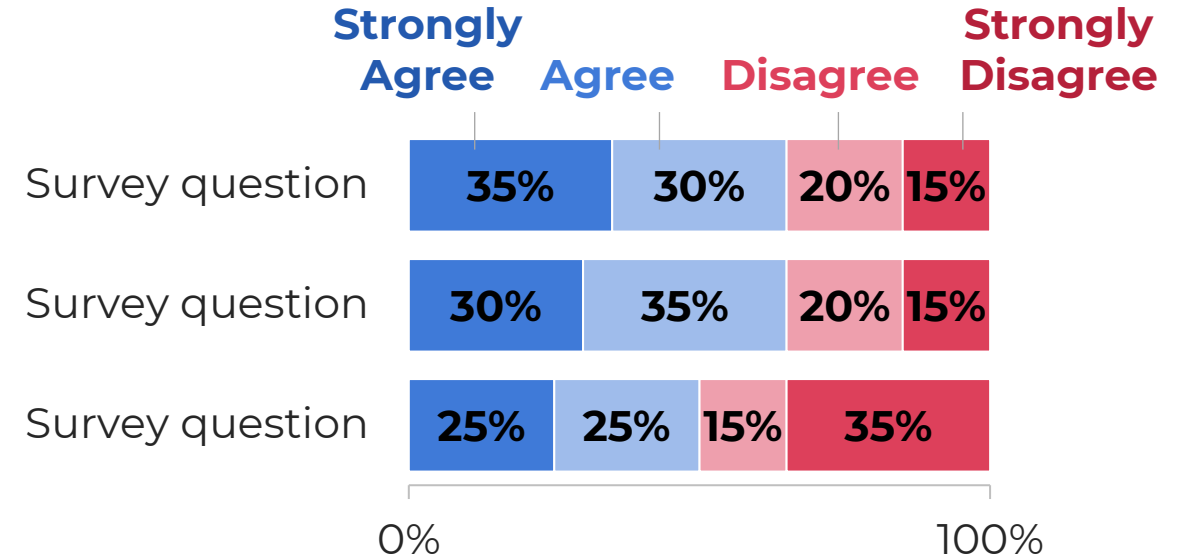
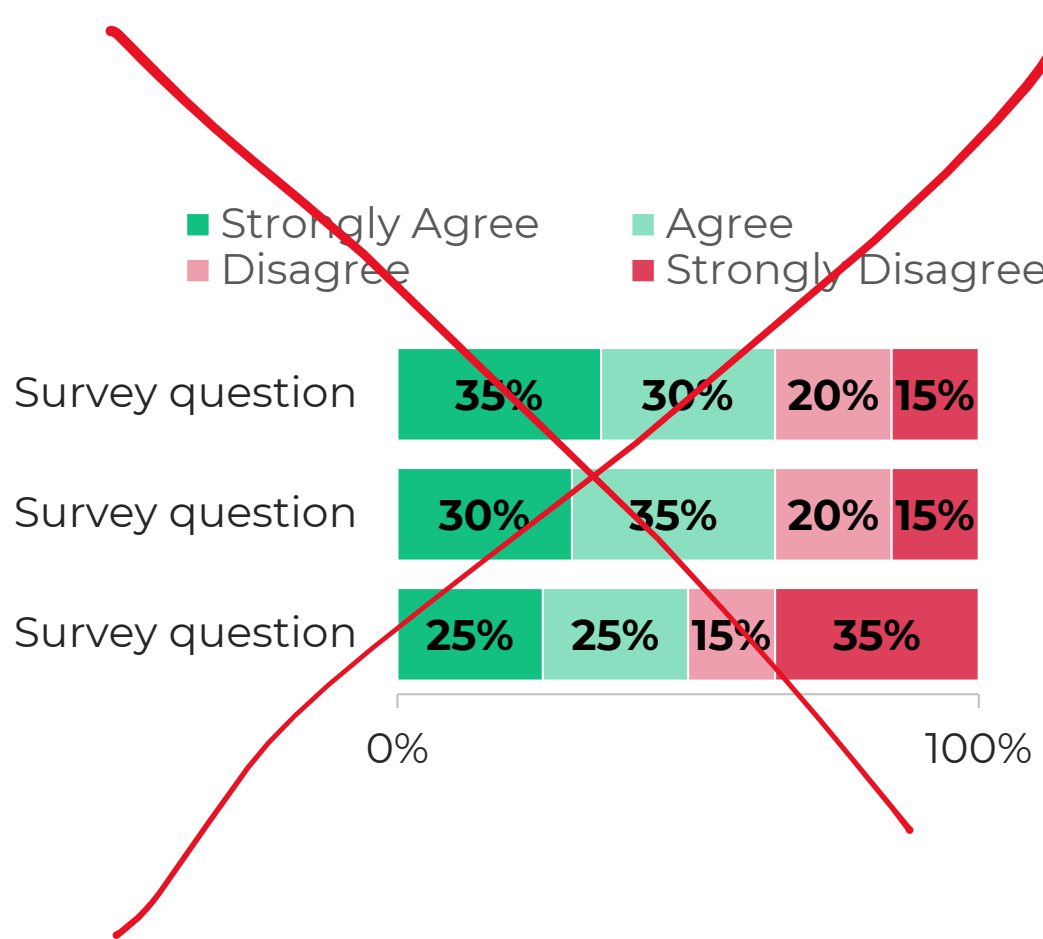
Your Turn



Your Turn



Your Turn

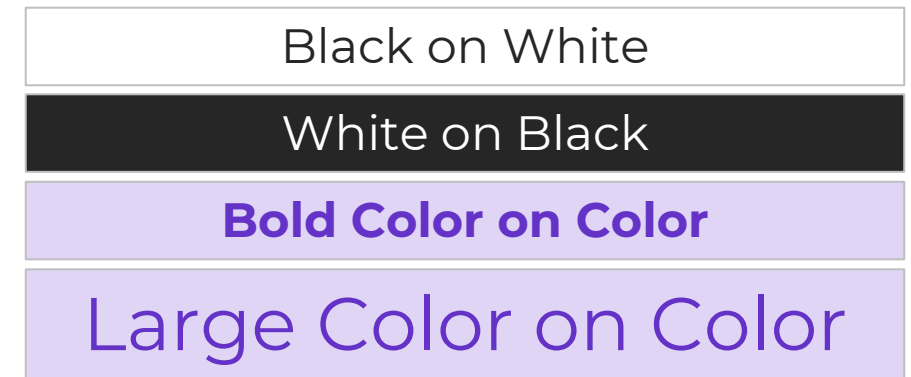


Increase the Color Contrast

Low Contrast

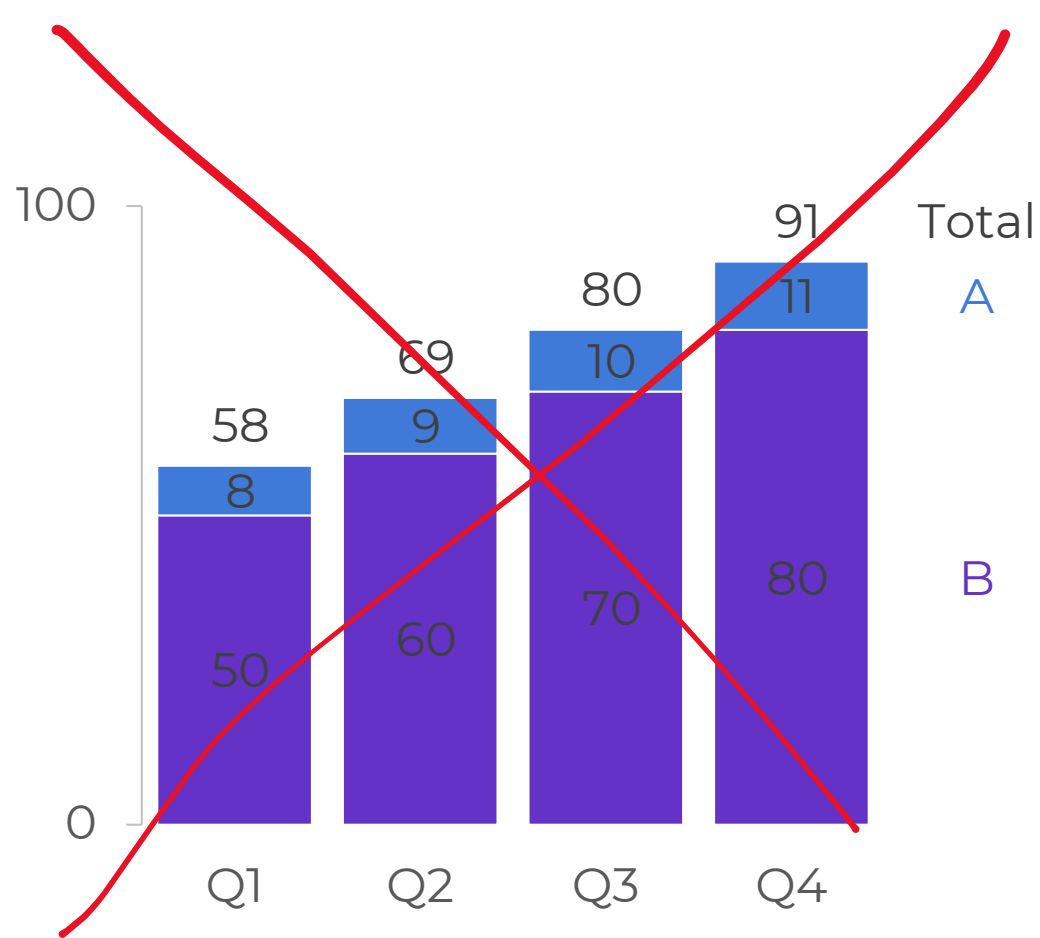


High Contrast



Increase the Color Contrast

Low Contrast

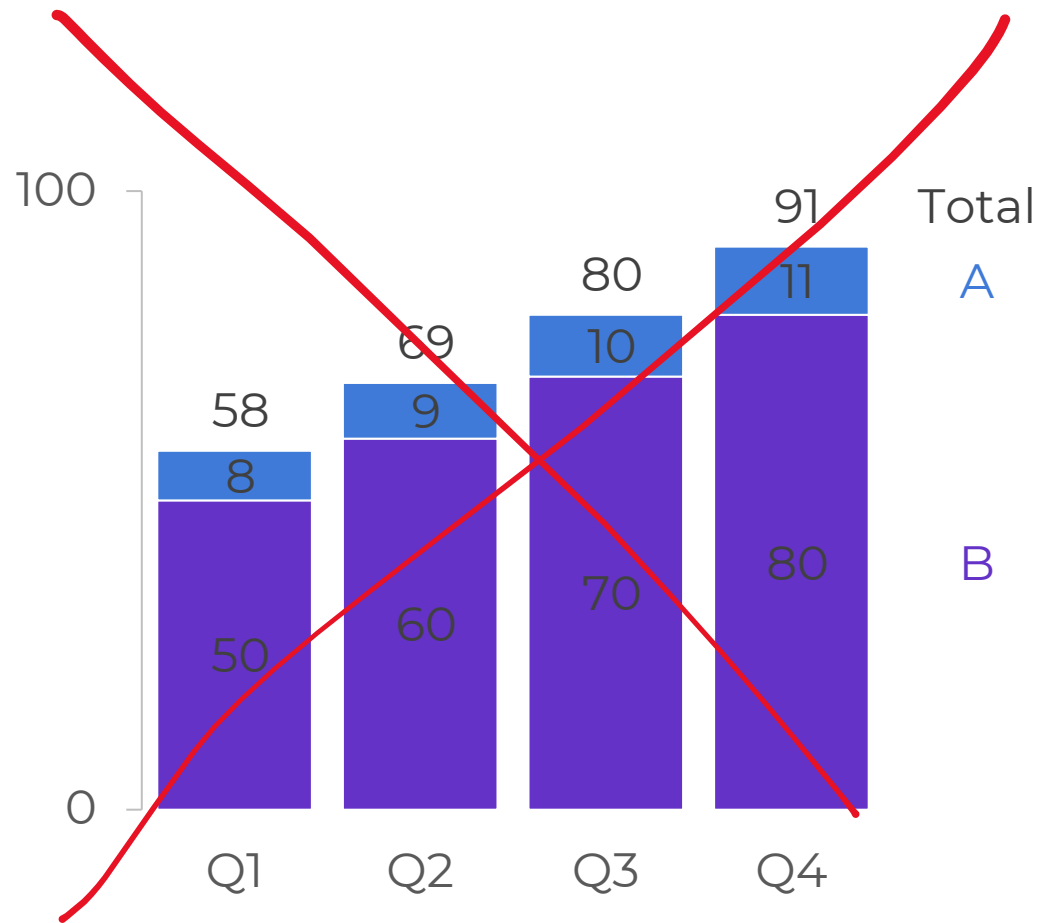


High Contrast

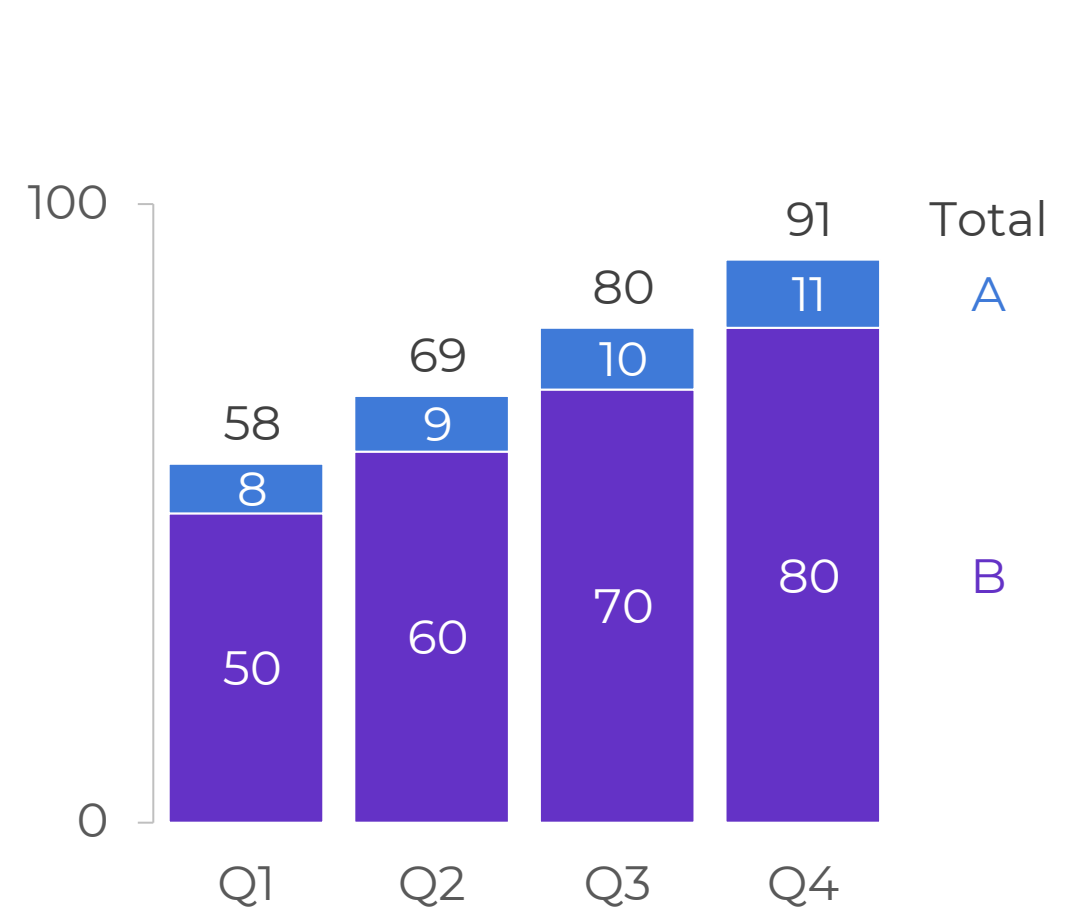


Increase the Color Contrast

Low Contrast

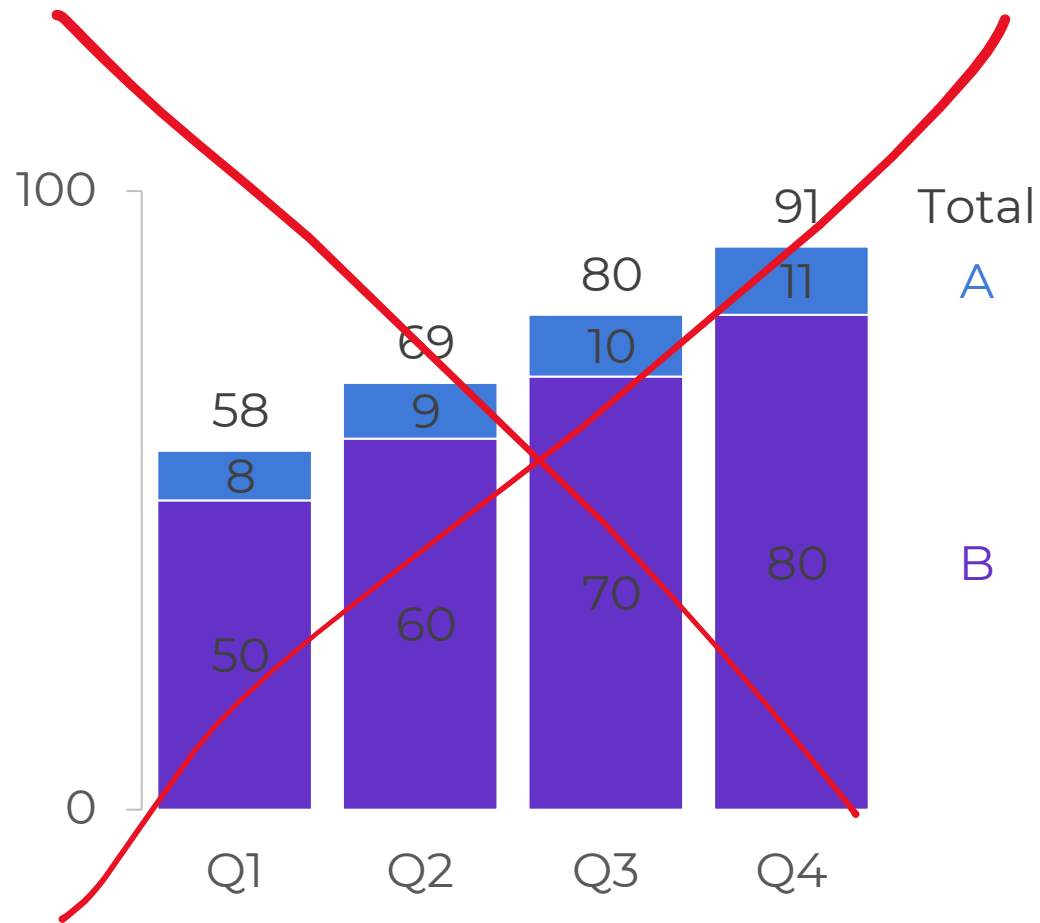


High Contrast

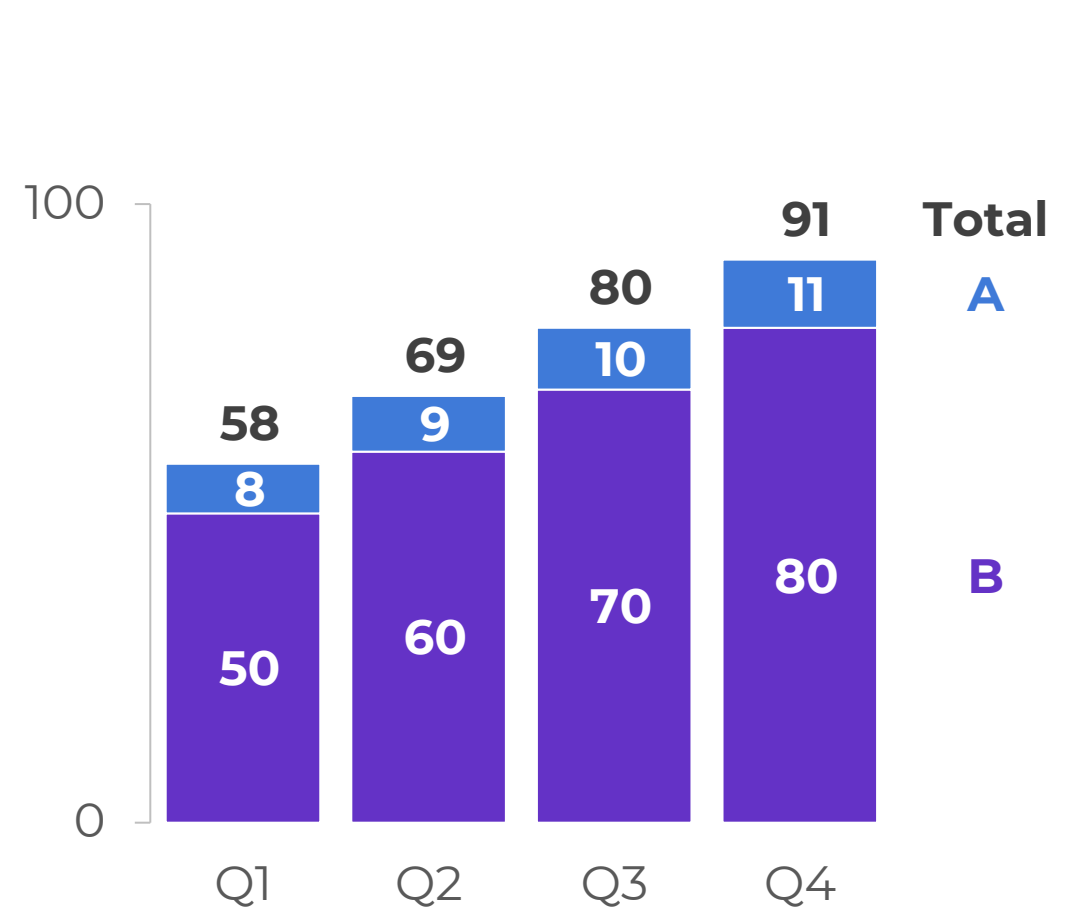


Increase the Color Contrast

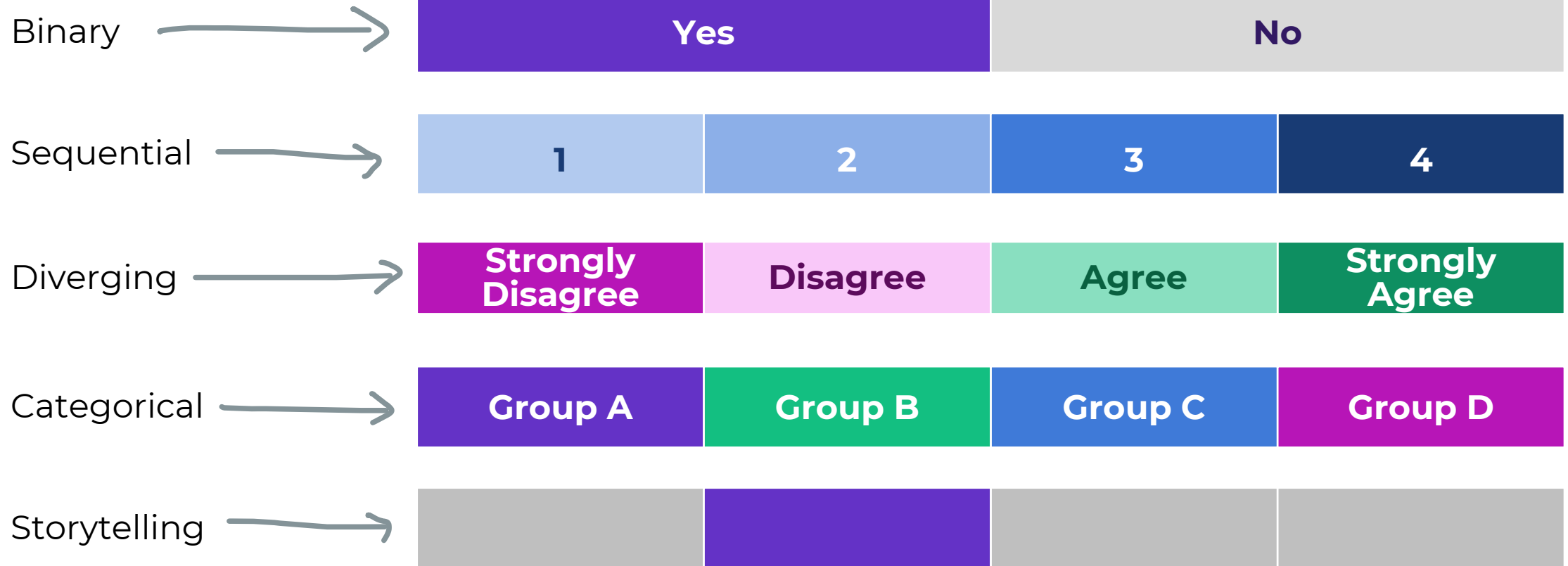
Low Contrast



High Contrast



Apply Colors to Make Data Feel Intuitive



Apply Colors to Make Data Feel Intuitive

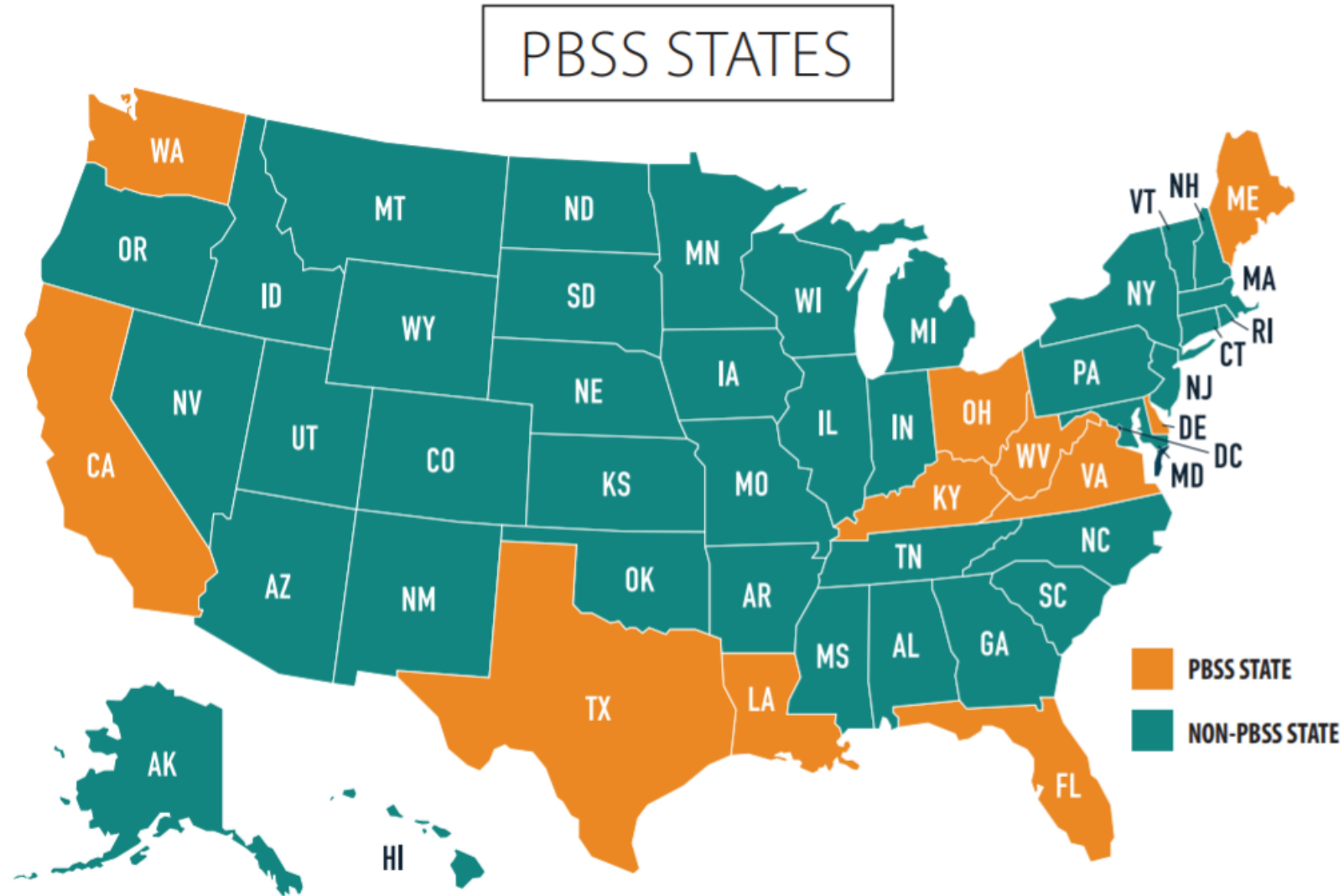
Binary	Yes		No	
Sequential	1	2	3	4
Diverging	Strongly Disagree	Disagree	Agree	Strongly Agree
Categorical	Group A	Group B	Group C	Group D
Storytelling				

NO!

NO!

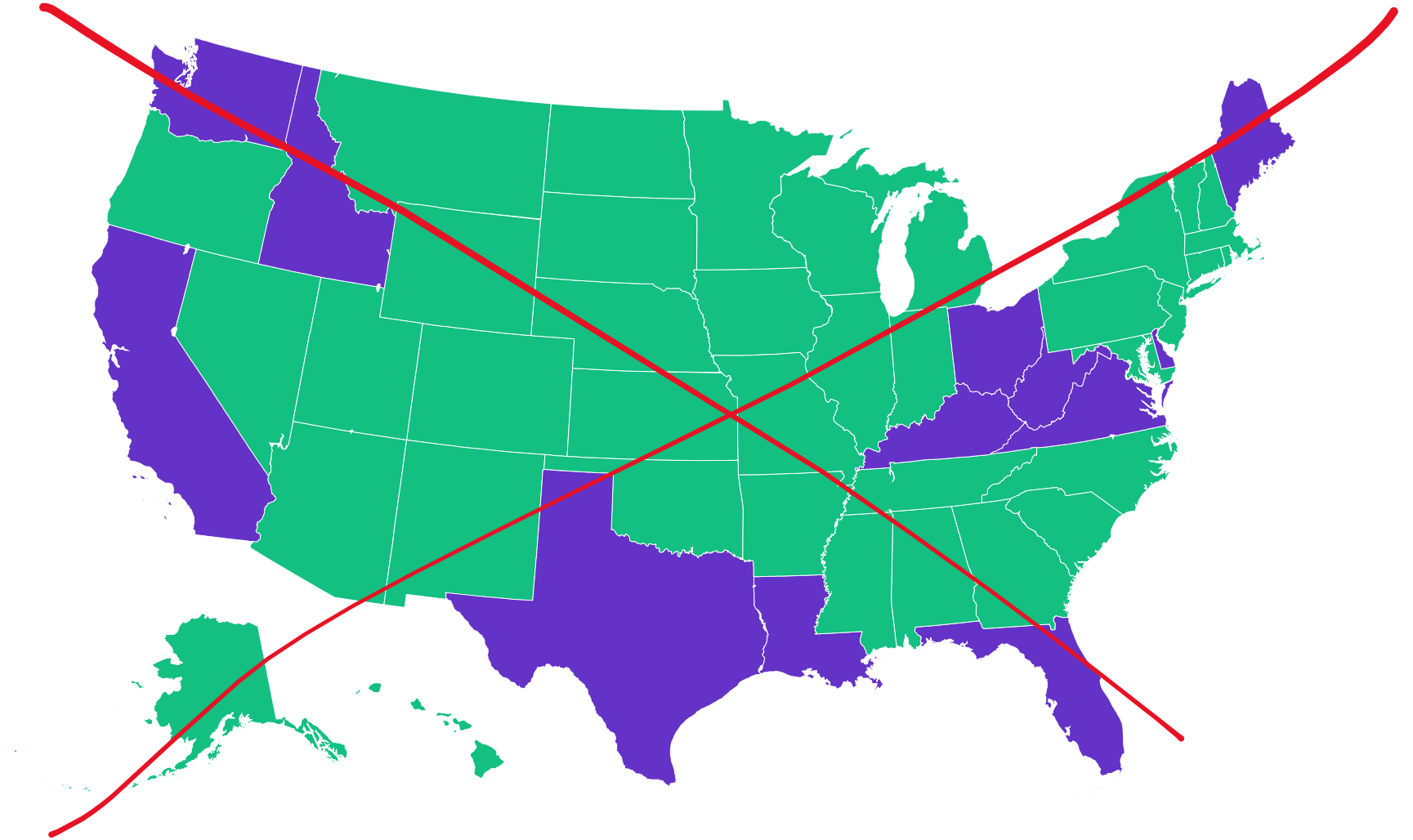


Your Turn



<https://www.cdc.gov/drugoverdose/pdf/pbss/PBSS-Report-072017.pdf>

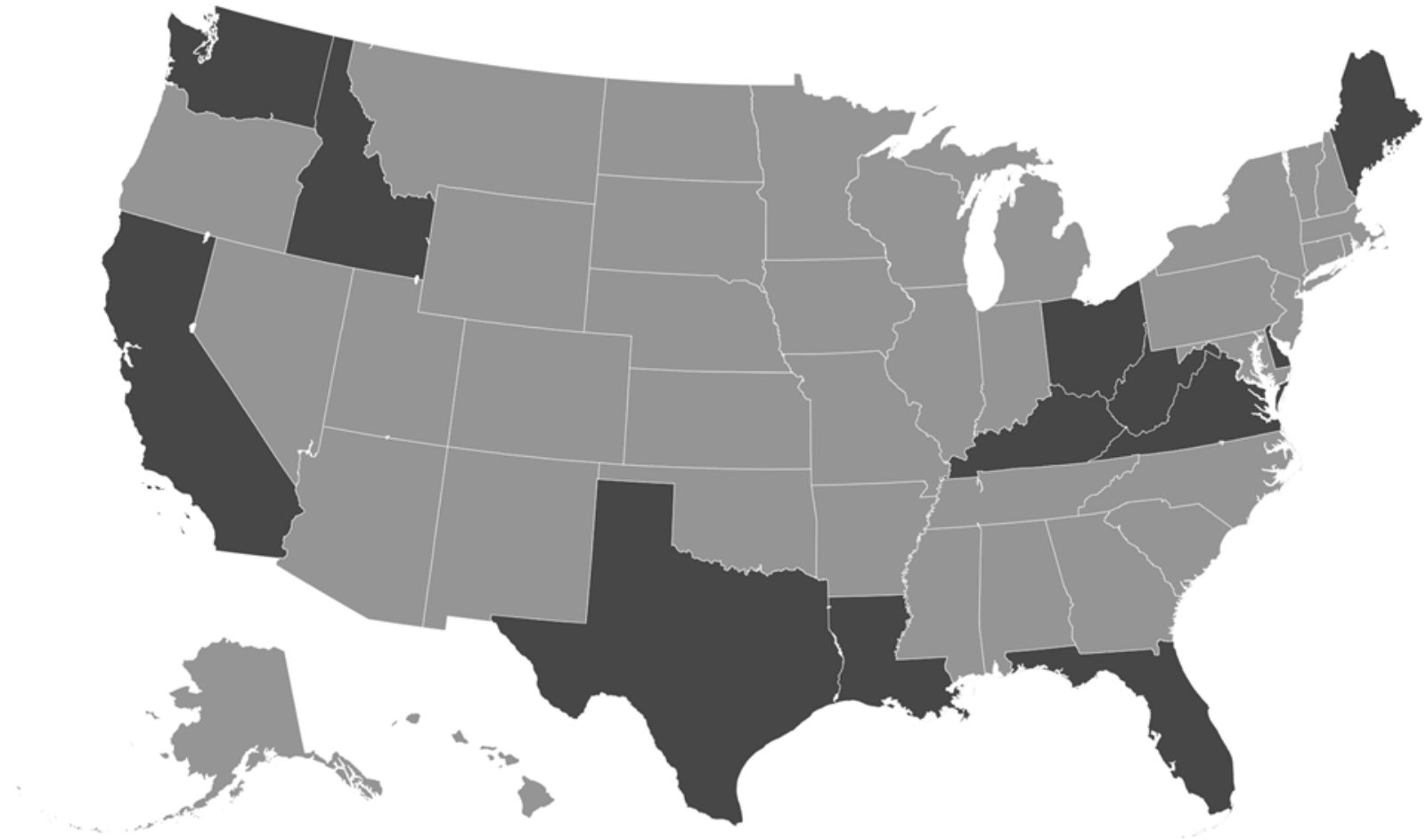
PBSS States



<https://www.cdc.gov/drugoverdose/pdf/pbss/PBSS-Report-072017.pdf>

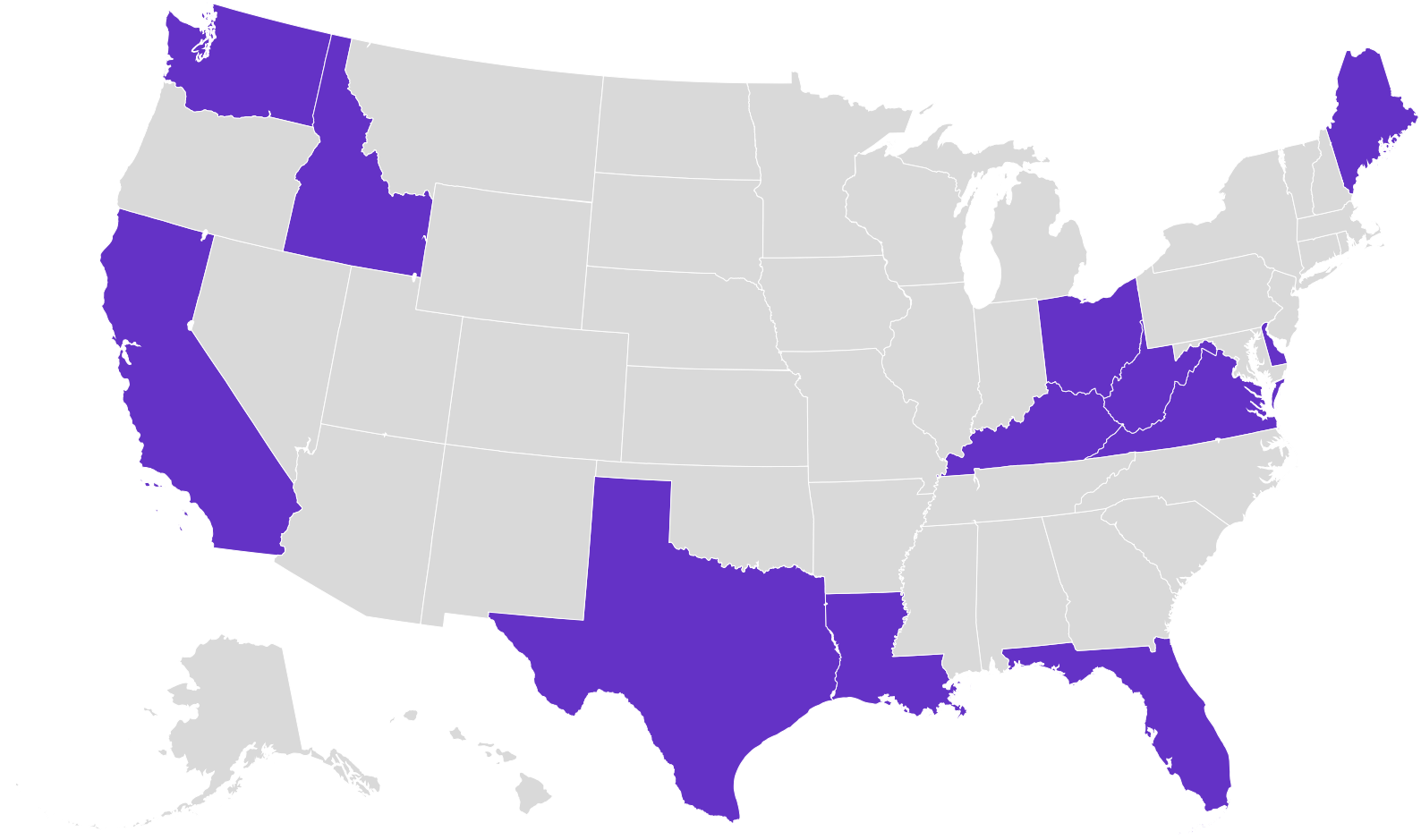
PBSS States

Non-PBSS States



Ann K. Emery | Ann@DepictDataStudio.com

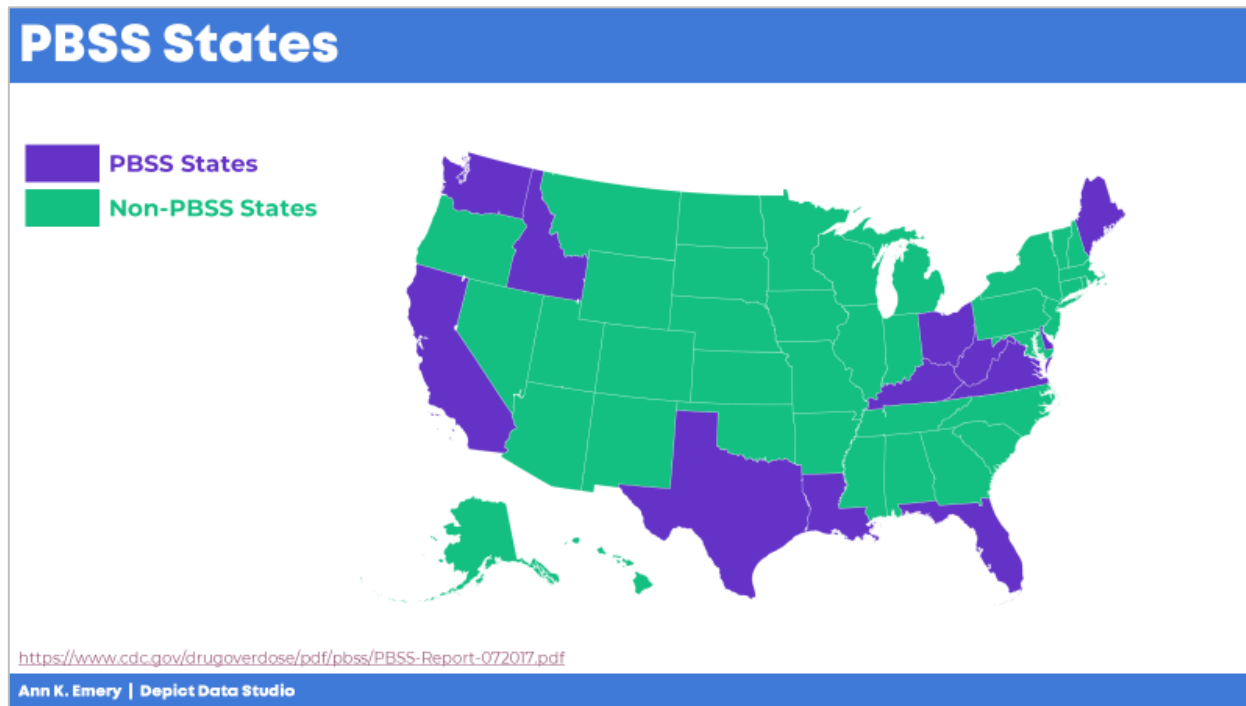
PBSS States



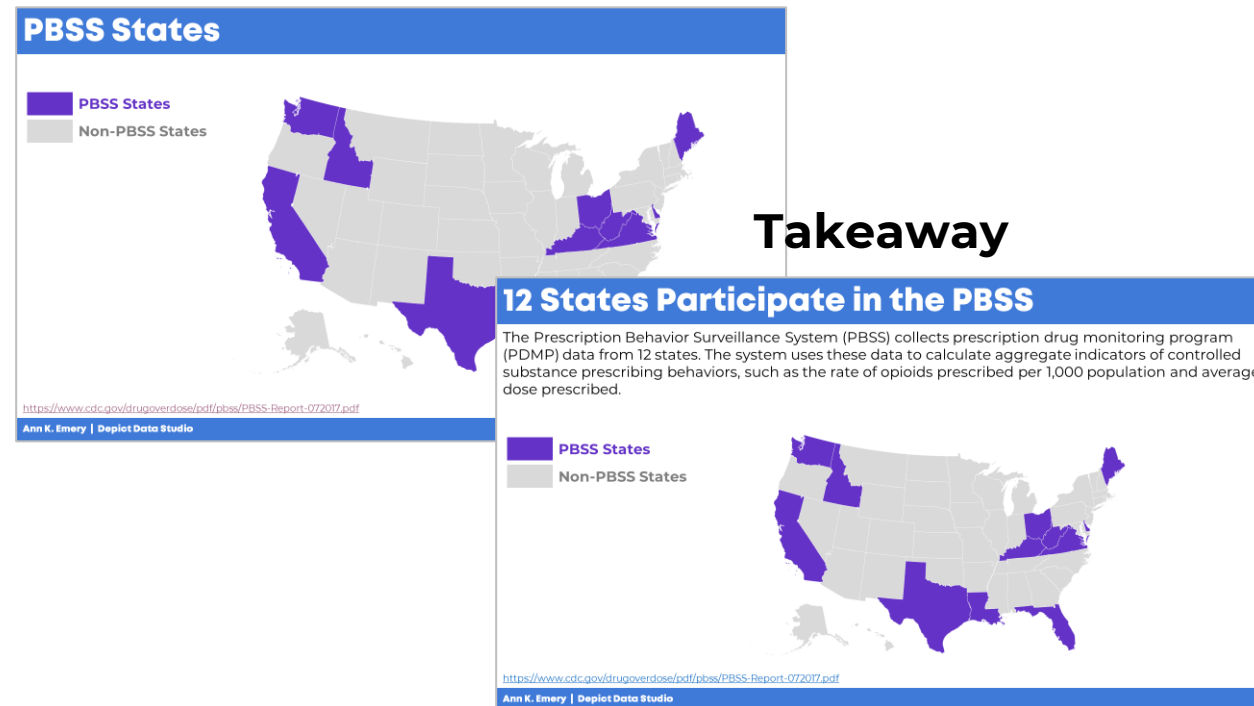
<https://www.cdc.gov/drugoverdose/pdf/pbss/PBSS-Report-072017.pdf>

Your Turn

Original

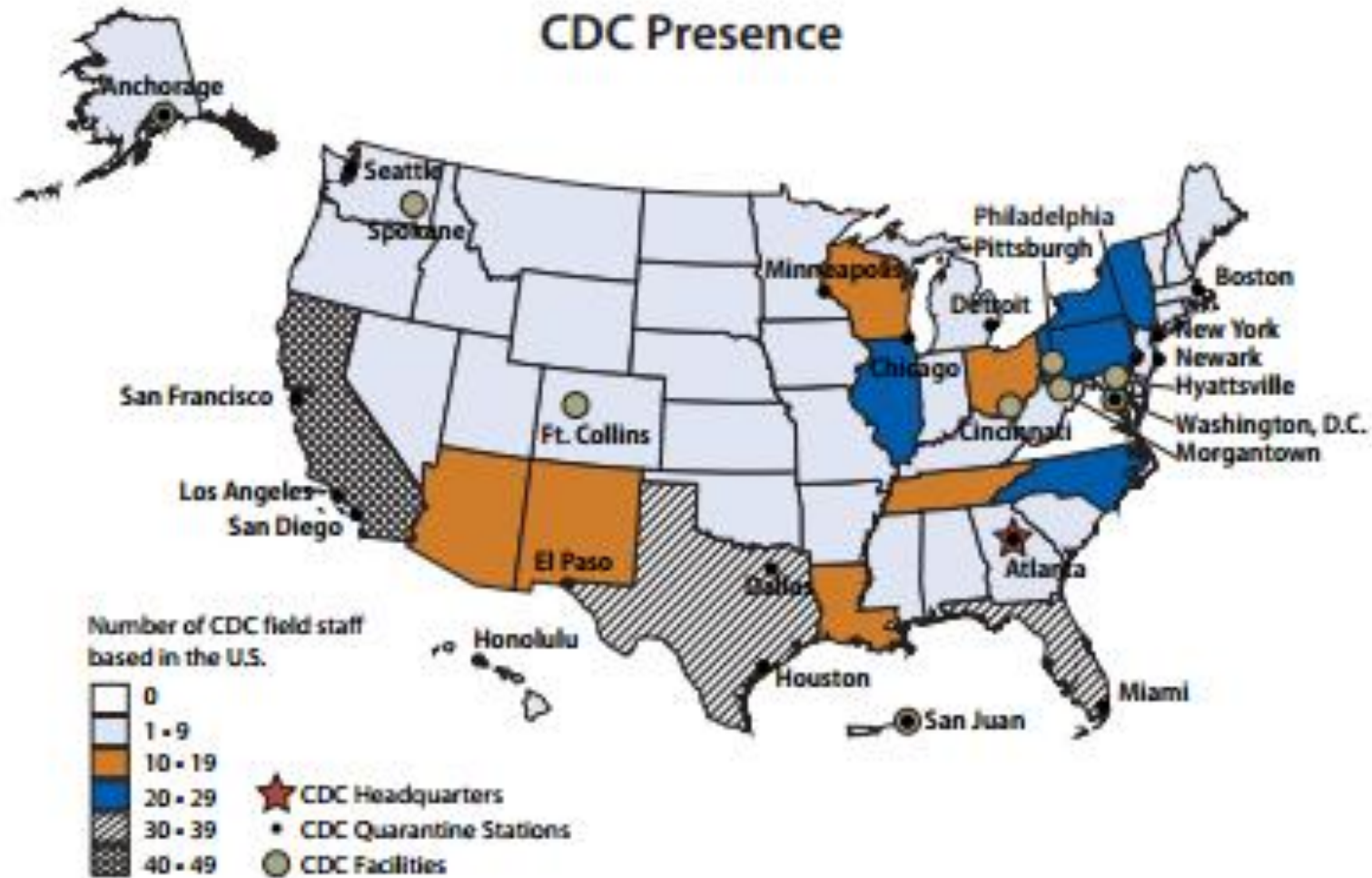


Topical

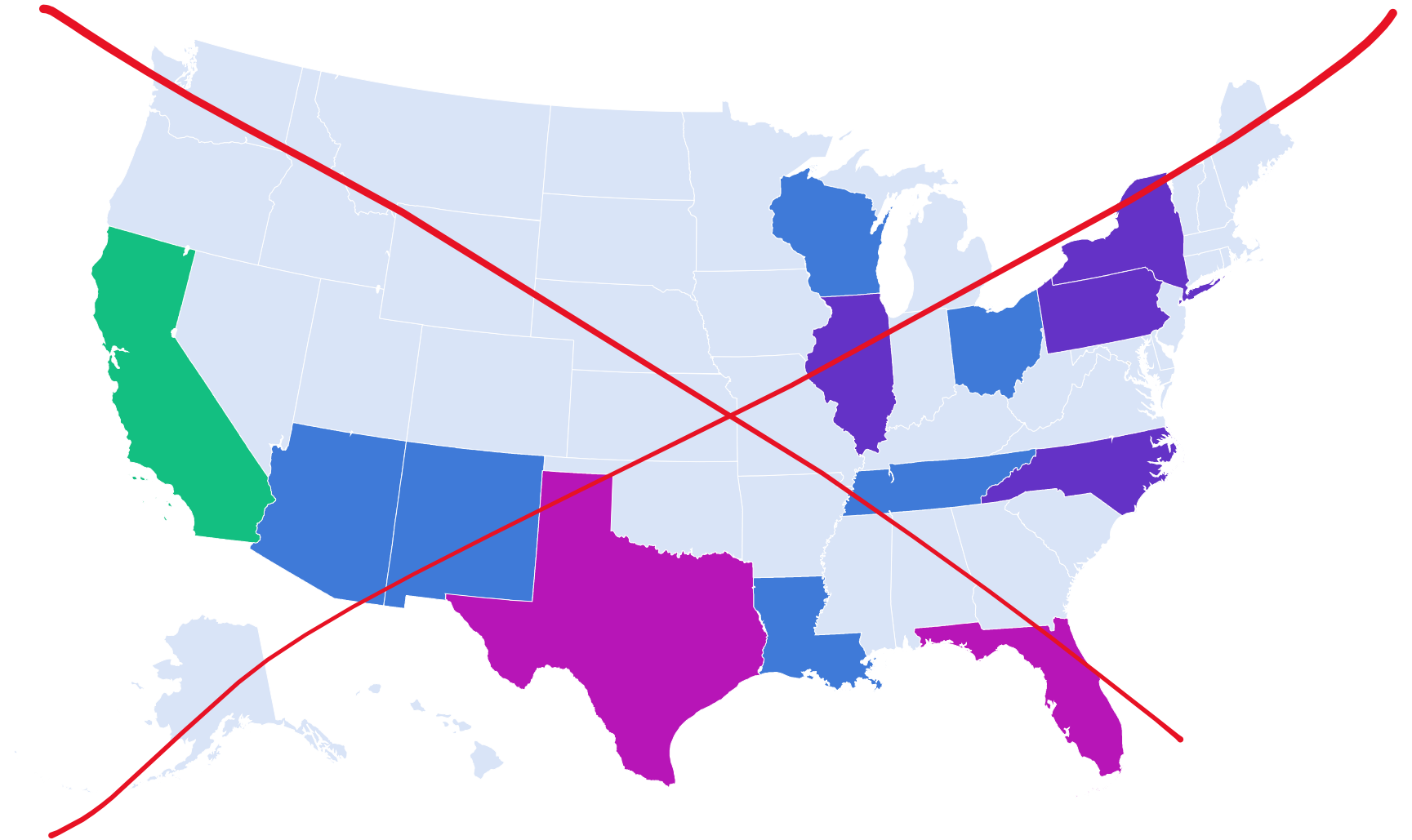
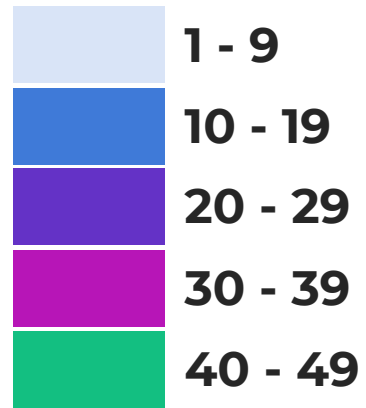


Takeaway

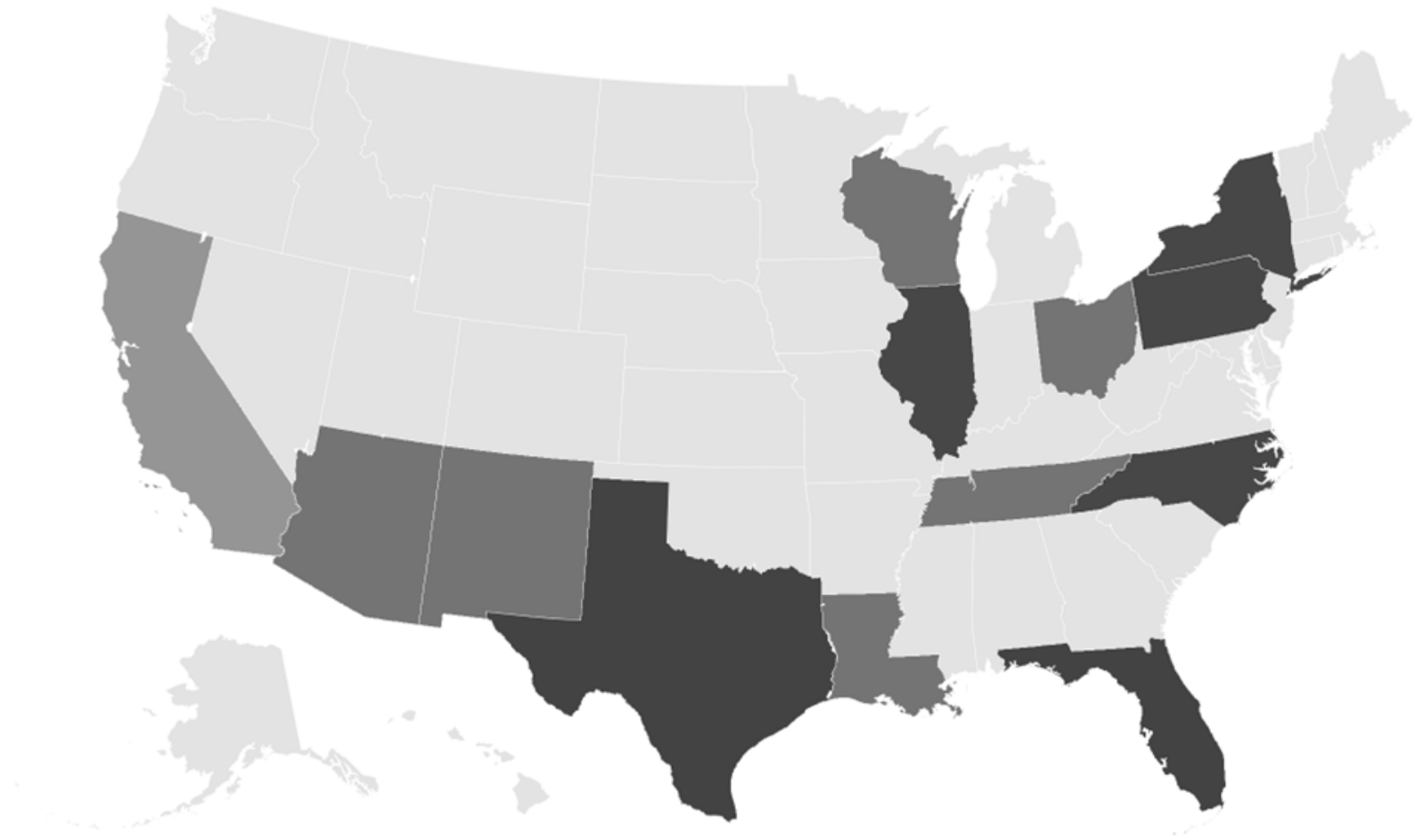
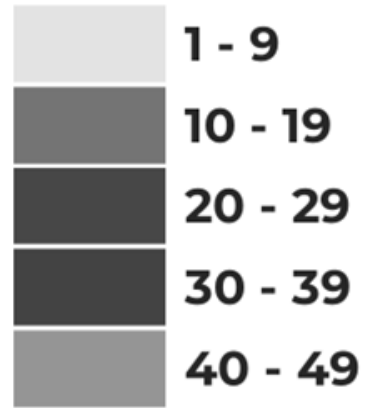
Your Turn



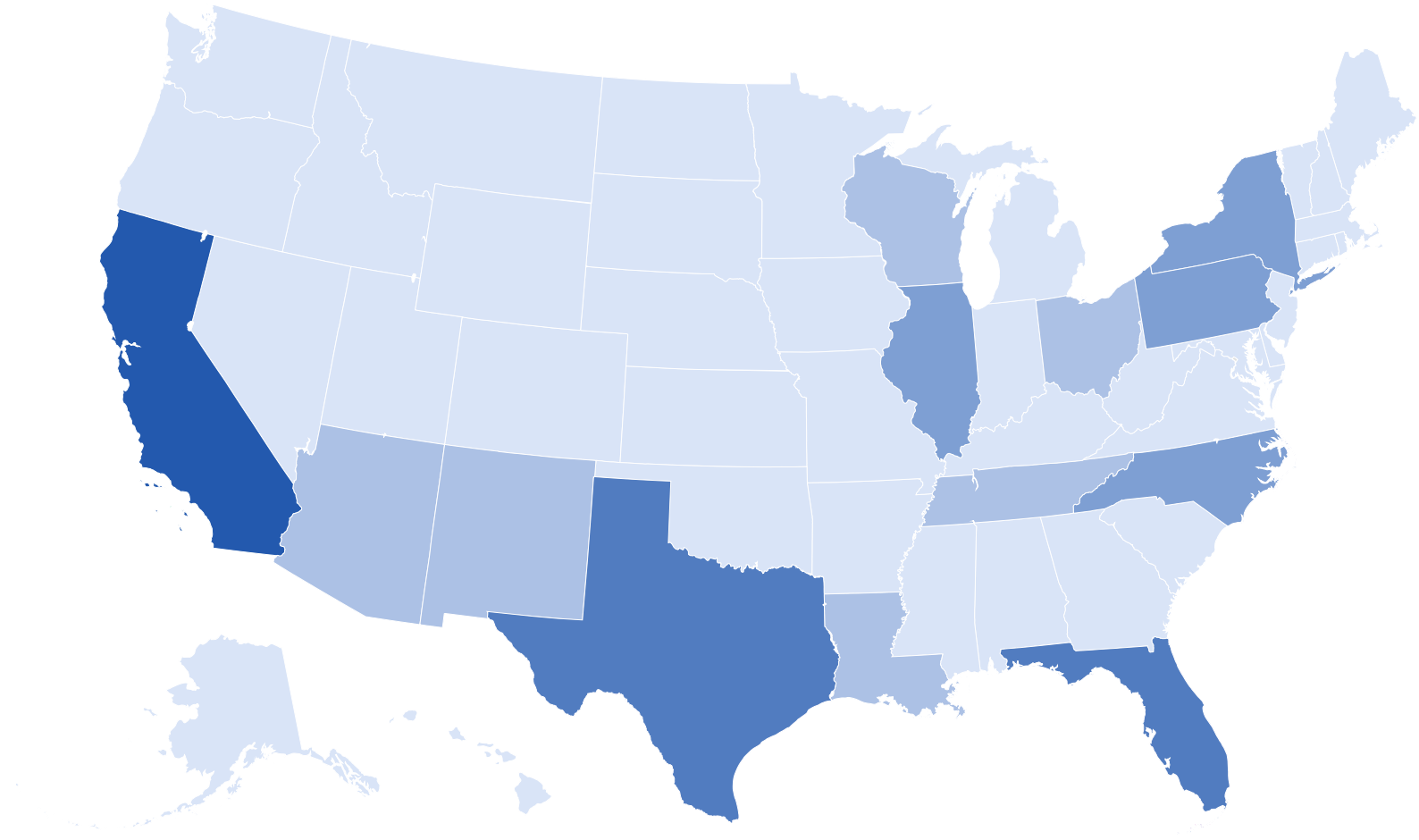
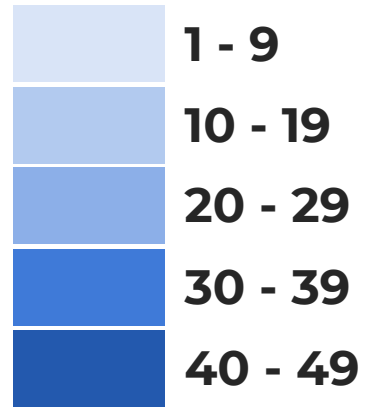
Number of Field Staff



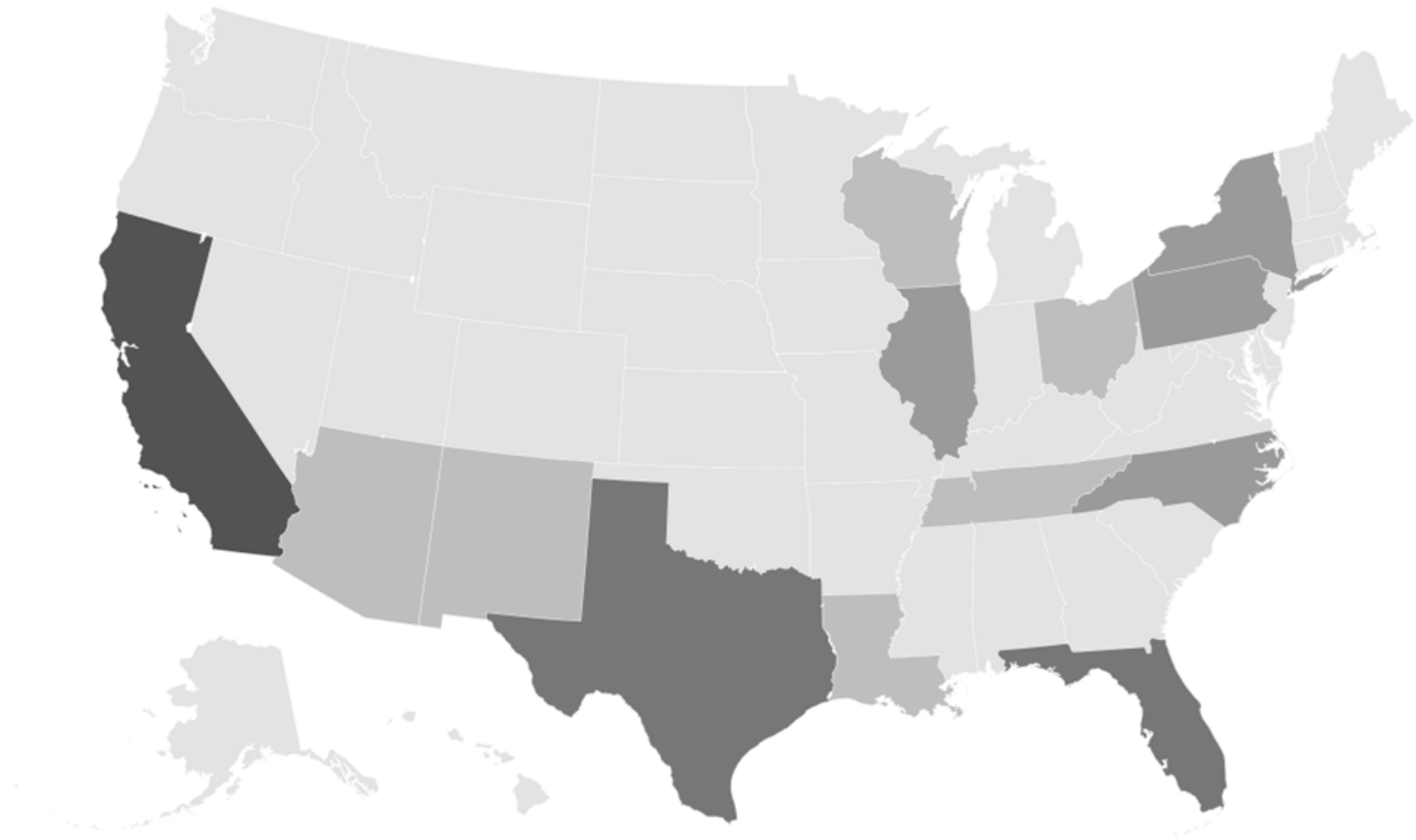
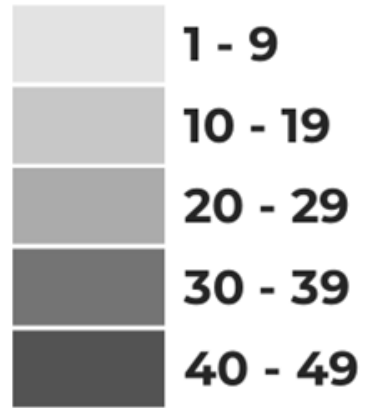
Number of Field Staff



Number of Field Staff

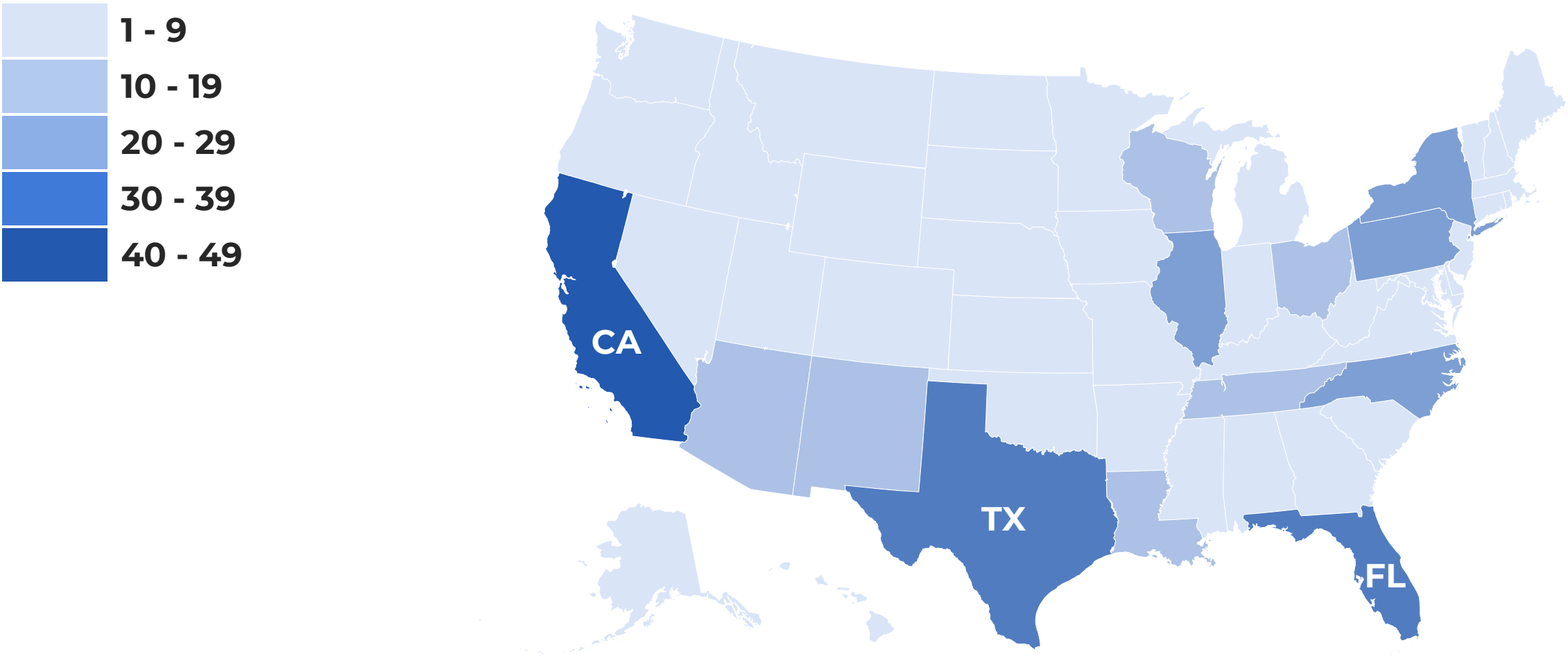


Number of Field Staff



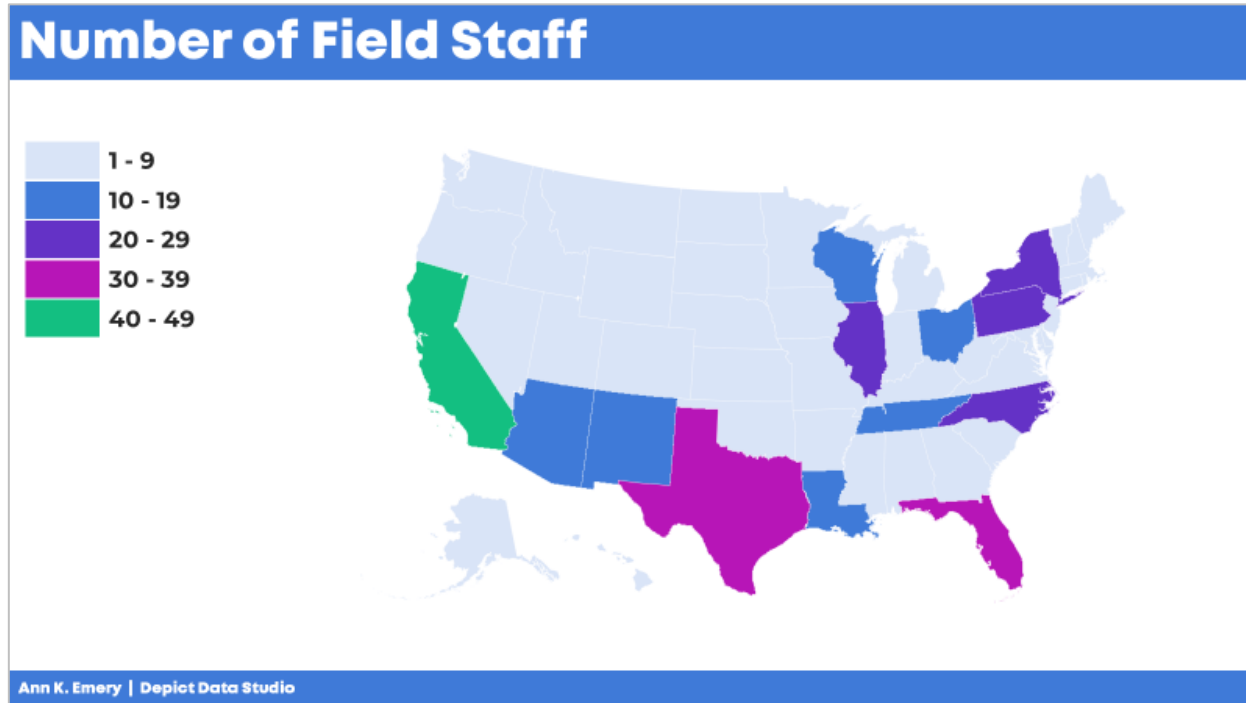
CA, TX, & FL have the Most Field Staff

Number of field staff from the ABC Agency based throughout the U.S.

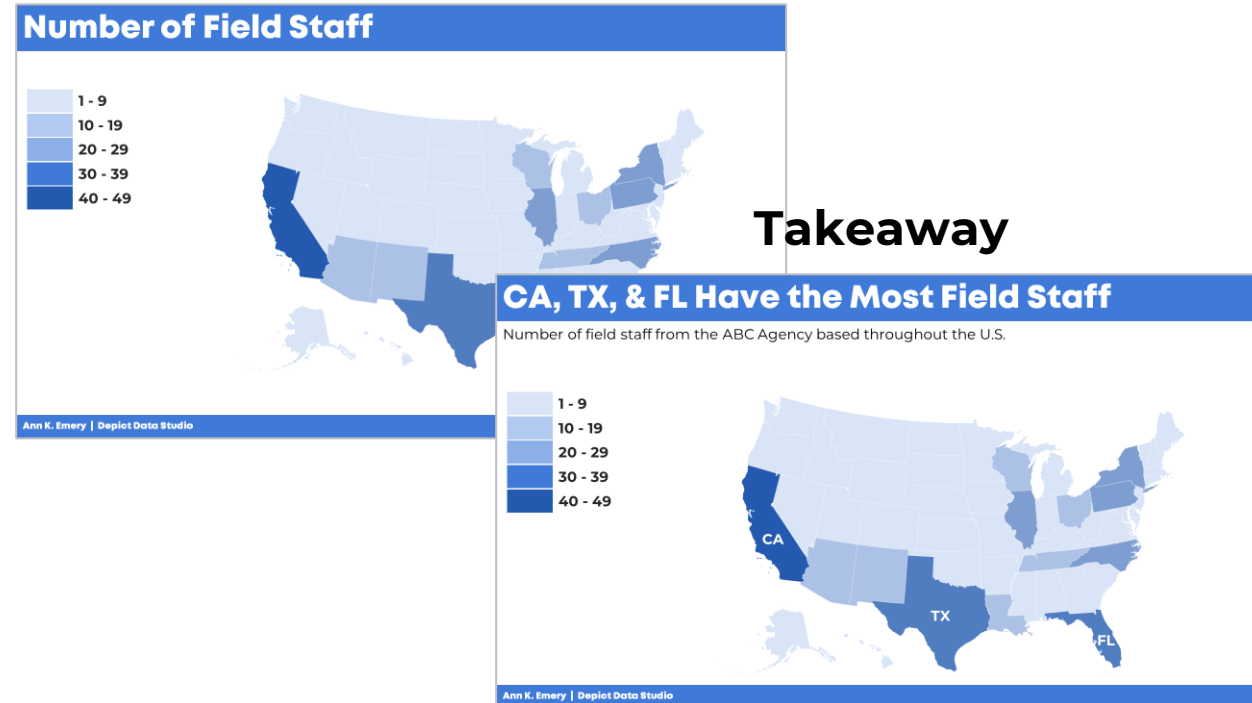


Your Turn

Original



Topical



1

Audience



2

Charts



3

Declutter



4

Color



5

Text

Add Takeaway Text

Default



Topical

or

Takeaway

Figure 1. Project Results Before and After the Four-Year Grant Funding

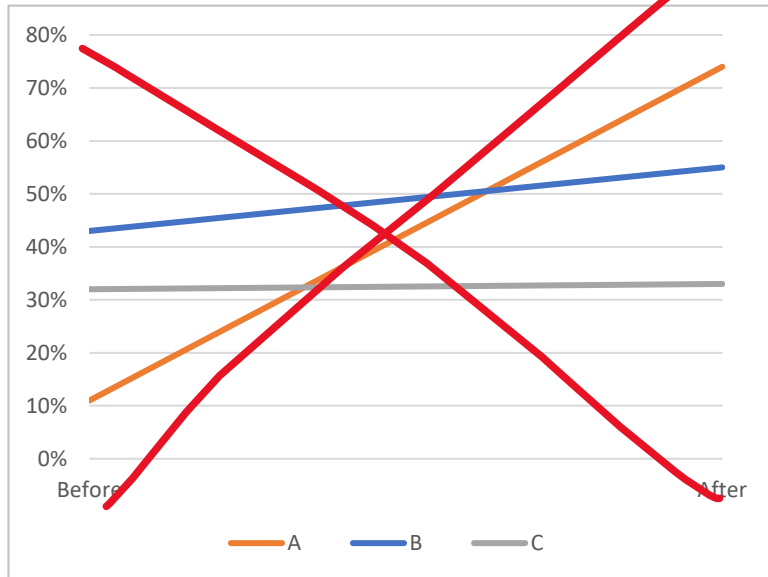
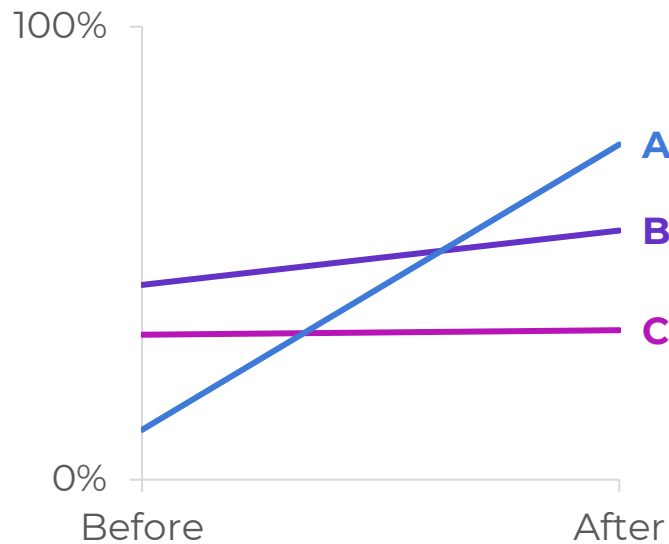
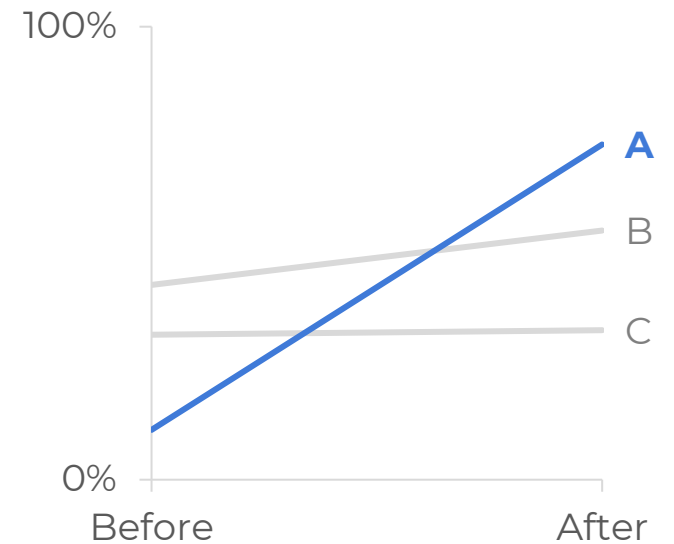


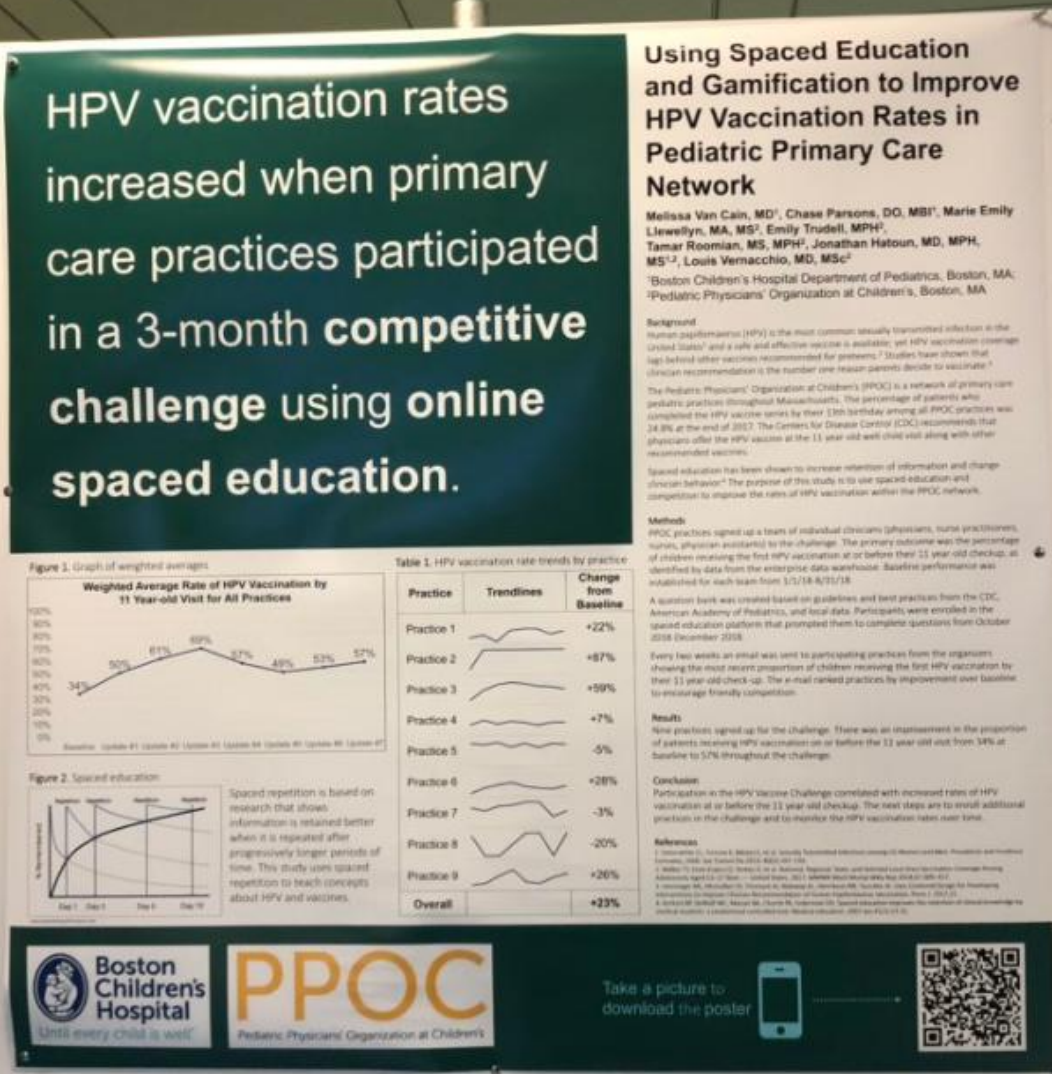
Figure 1. Project Results Before and After the Four-Year Grant Funding



Project A Improved the Most
After the Four-Year Grant Funding



Add Takeaway Text: Posters



Using Spaced Education and Gamification to Improve HPV Vaccination Rates in Pediatric Primary Care Network

Melissa Van Cain, MD¹, Chase Parsons, DO, MBS¹, Marie Emily Llewellyn, MA, MS², Emily Trudell, MPH³, Tamar Roomian, MS, MPH⁴, Jonathan Hstoun, MD, MPH, MS^{1,2}, Louis Vernacchio, MD, MS⁵

¹Boston Children's Hospital Department of Pediatrics, Boston, MA;
²Pediatric Physicians' Organization at Children's, Boston, MA

Background

Human papillomavirus (HPV) is the most common sexually transmitted infection in the United States¹ and a safe and effective vaccine is available, yet HPV vaccination coverage lags behind other vaccines recommended for preteens.² Studies have shown that clinician recommendation is the number one reason parents decide to vaccinate.³

The Pediatric Physicians' Organization at Children's (PPOC) is a network of primary care pediatric practices throughout Massachusetts. The percentage of patients who completed the HPV vaccine series by their 11th birthday among all PPOC practices was 34.8% at the end of 2017. The Centers for Disease Control (CDC) recommends that physicians offer the HPV vaccine at the 11 year old well child visit along with other recommended vaccines.

Spaced education has been shown to increase retention of information and change clinician behavior.⁴ The purpose of this study is to use spaced education and gamification to improve the rates of HPV vaccination within the PPOC network.

Methods

PPOC practices signed up a team of individual clinicians (physicians, nurse practitioners, physician assistants) to the challenge. The primary outcome was the percentage of children receiving the first HPV vaccination at or before their 11 year old check-up, as identified by data from the enterprise data warehouse. Baseline performance was established for each team from 1/1/18-4/31/18.

A question bank was created based on guidelines and best practices from the CDC, American Academy of Pediatrics, and local data. Participants were enrolled in the spaced education platform that prompted them to complete questions from October 2018 (December 2018).

Every two weeks an email was sent to participating practices from the organizers showing the most recent proportion of children receiving the first HPV vaccination by their 11 year old check-up. The email ranked practices by improvement over baseline to encourage friendly competition.

Results

Nine practices signed up for the challenge. There was an improvement in the proportion of patients receiving HPV vaccination at or before the 11 year old visit from 34% at baseline to 52% throughout the challenge.

Conclusion

Participation in the HPV vaccine Challenge correlated with increased rates of HPV vaccination at or before the 11 year old check-up. The next steps are to mount additional practices in the challenge and to monitor the HPV vaccination rates over time.

References

1. CDC. HPV. <https://www.cdc.gov/hpv/index.html>. Accessed 10/1/18.
2. CDC. HPV. <https://www.cdc.gov/hpv/index.html>. Accessed 10/1/18.
3. CDC. HPV. <https://www.cdc.gov/hpv/index.html>. Accessed 10/1/18.
4. CDC. HPV. <https://www.cdc.gov/hpv/index.html>. Accessed 10/1/18.



Differences in emergency department length of stay and throughput times between males and females: Preliminary results of the Sex Equity in Emergency Departments (SEED) study group

C.G. Knier¹, Molly M. Jeffery, Ph.D.^{1,2}, Venkatesh R. Bellamkonda, M.D.¹

¹Mayo Clinic Graduate School of Biomedical Sciences, Mayo Clinic Alix School of Medicine, and Mayo Clinic Medical Scientist Training Program, ²Department of Emergency Medicine, ³Department of Health Sciences Research, Mayo Clinic, Rochester, MN

Introduction

• Sex and gender disparities exist in healthcare and are outlined by the Centers for Medicare and Medicaid services

• However, current knowledge of gender disparities in emergency departments is limited to analysis of individual chief complaints or diagnoses

Purpose

• To determine whether there are sex based differences in length of stay (LOS) and throughput for all comers to the Emergency Department

Methods

• Retrospective study of all adults presenting to the ED (n=65,533) between 7/1/2015-7/1/2016

• Data presented as n(%) or median (interquartile range), with all measures of time in minutes

• Mann-Whitney test used to compare medians

Results

• LOS was longer for females than males (236 vs. 222 min, p<0.0001)

• Men experienced shorter time to room, time to provider, time to disposition plan, and treatment time than women (for all comparisons p<0.0001)

Conclusion

• Females have longer throughput times and length of stay in than males within the same emergency department. This serves to spotlight an area of potential disparity where further investigation can be done to understand reasons why.

Female patients have longer ED lengths of stay than males



Take a picture to download the full paper

Program 16

Table 1. Length of stay and throughput by sex

Variable	Male	Female
n	31,428 (48%)	34,105 (52%)
Length of stay	222 (147, 317)	236 (150, 322)
Time to room	8 (2, 50)	11 (2, 69)
Time to provider	24 (11, 63)	27 (12, 74)
Time to disposition plan	141 (86, 216)	152 (95, 209)
Treatment time	187 (120, 273)	195 (127, 283)

Figure 1. Definitions

Arrive at registration	Enter treatment room	Seen by provider	Disposition plan	Discharge
Length of stay				
Time to room				
Time to provider				
Time to disposition plan				
Treatment time				

Future directions

- Sex-specific differential diagnoses, testing, and treatments may account for some of the differences observed
- Future analysis should take into account the influence of sex-specific tests on differences in time
- The differences in time to room and time to provider are more difficult to explain
- Multivariate analysis adjusting for age, race, chief complaint, BMI, and insurance status should be explored for the potential role in disparities observed

Support

This research is made possible by Mayo Clinic Department of Emergency Medicine Rochester, MN the Mayo Foundation

Catherine was supported in part by the National Office of General Medical Sciences (T32 GM 65841) and Clinical and Translational Science (UL1TR002377) thanks the Mayo Clinic MSTP for fostering an outstanding environment for physician-scientist training



@cgknier



@mollyjeffery



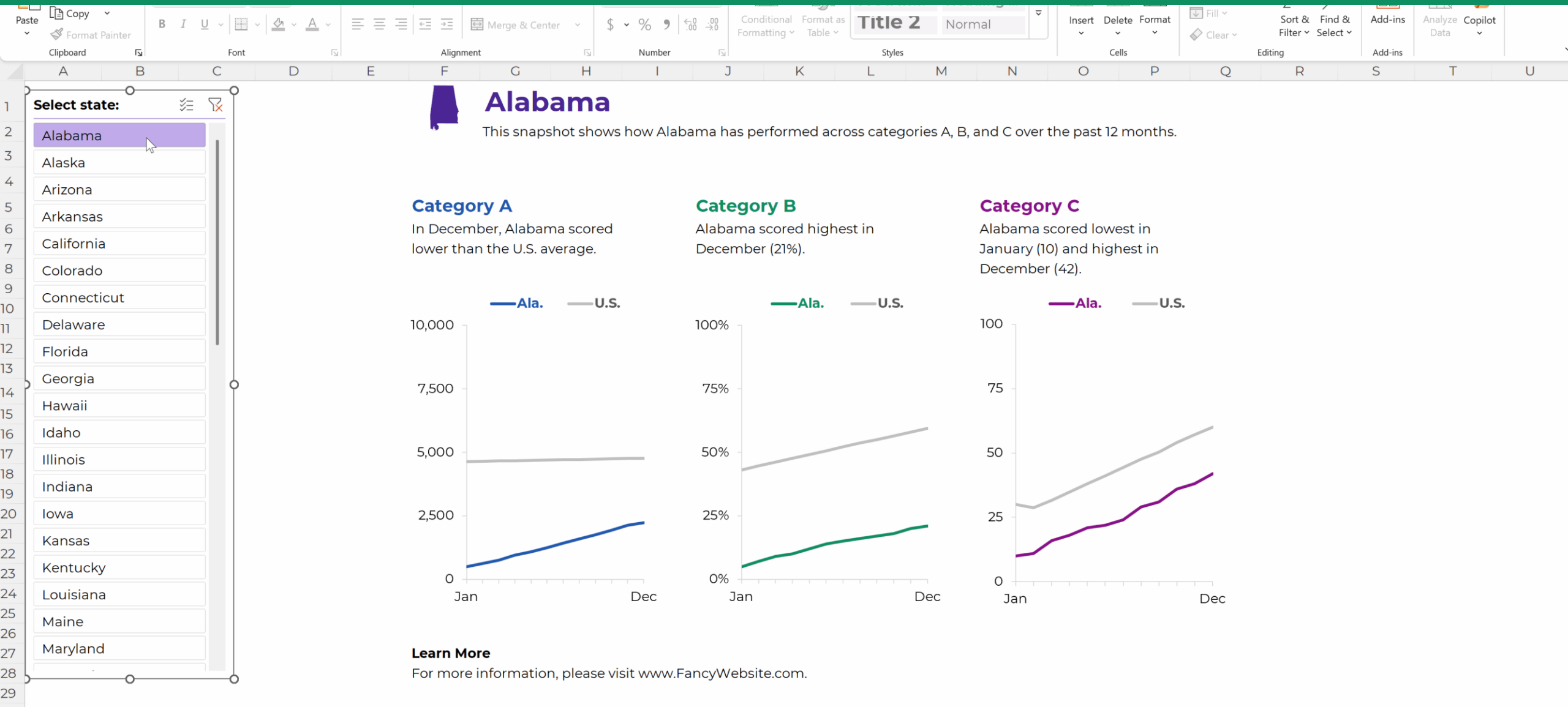
@venkbellamkonda

© 2018 Mayo Foundation for Medical Education and Research

<https://twitter.com/MelissaVanCain/status/1120781090329853953>

<https://twitter.com/elliottthaut/status/1114558290191691777>

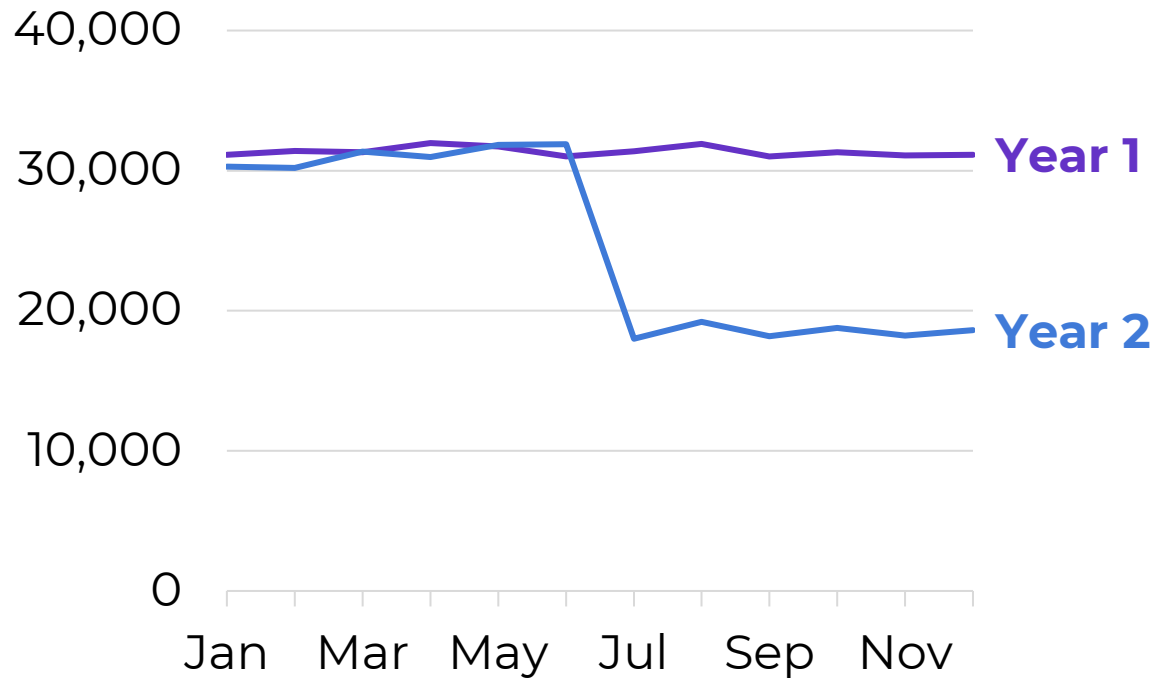
Add Takeaway Text: Dashboards



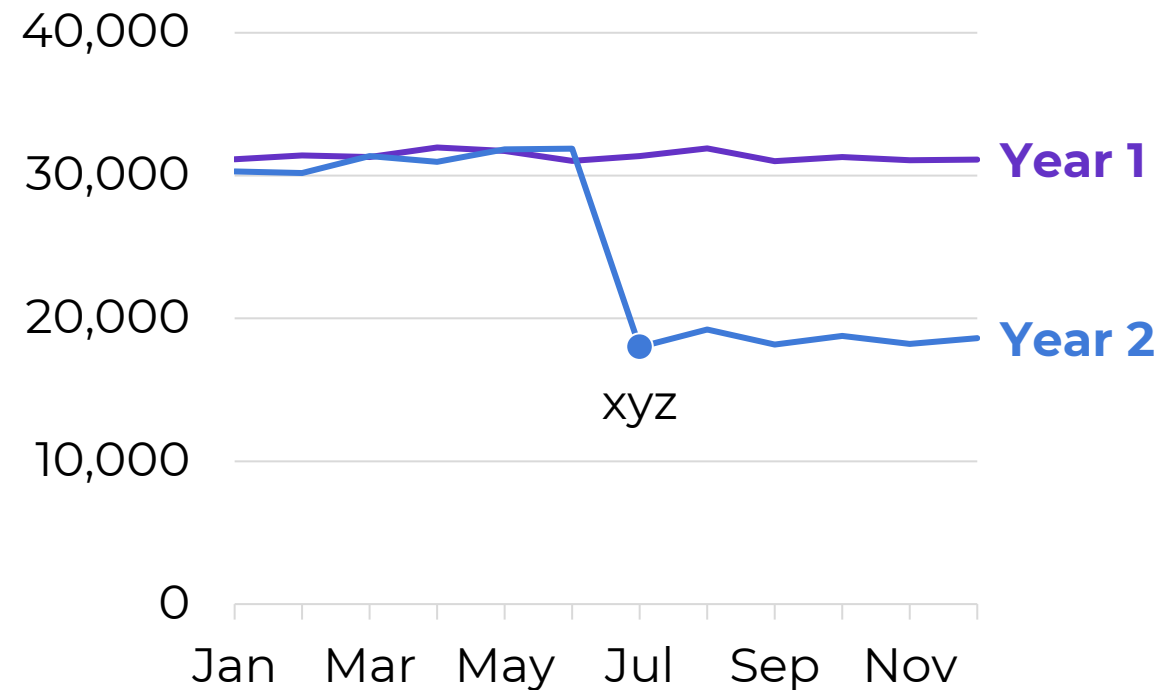
<https://www.youtube.com/watch?v=IGbjlUI0gNM>

Provide Context with Annotations

Context Elsewhere

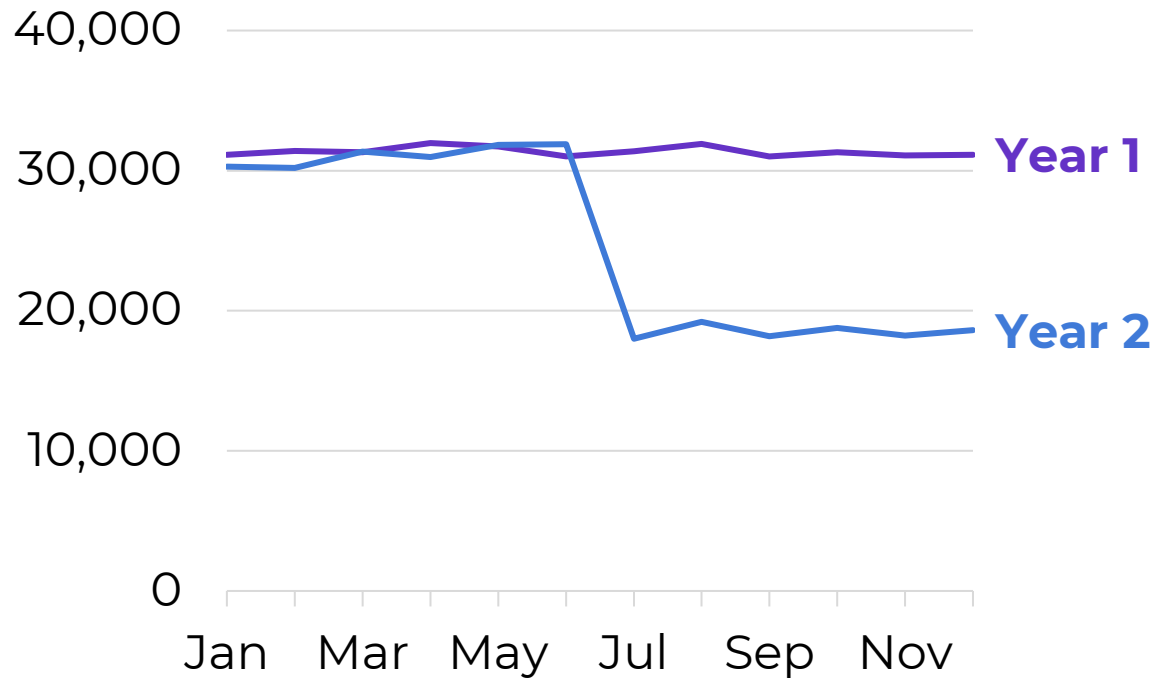


Context on Graph

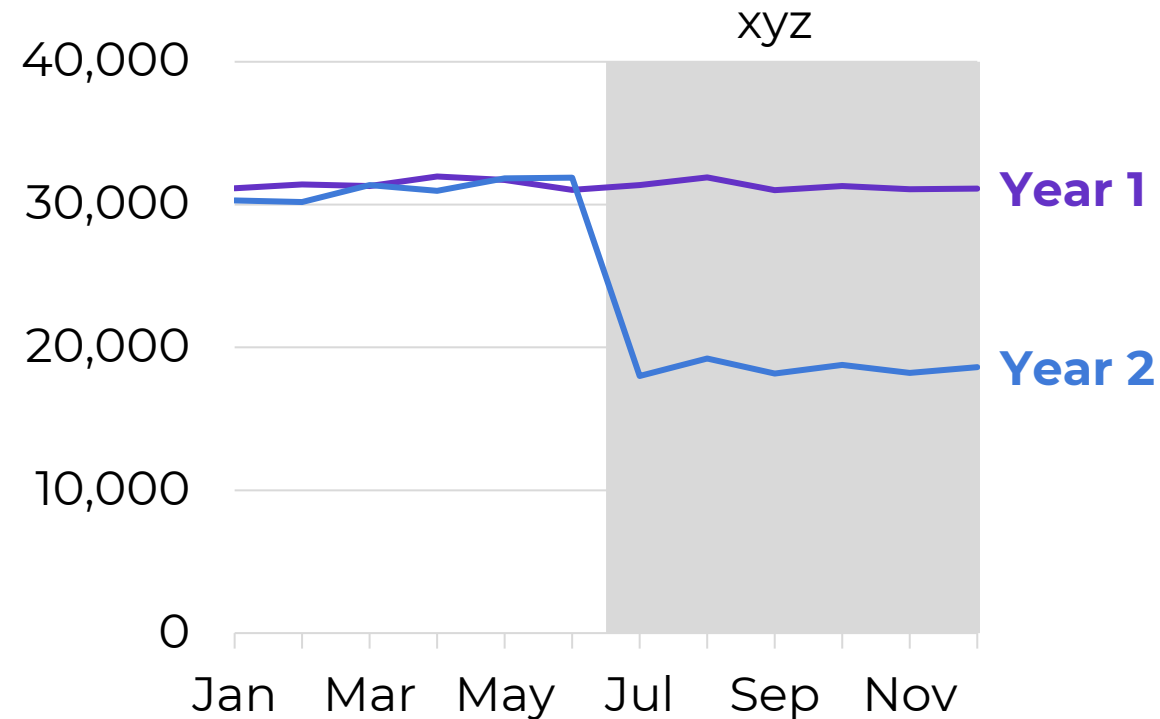


Provide Context with Annotations

Context Elsewhere



Context on Graph



Establish a Text Hierarchy

And you will read this last

**You will read
this first**

And then you will read this

Then this one

Establish a Text Hierarchy

Typewriter

Text Hierarchy

Mix 'n' Match



Title

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Maecenas porttitor congue massa. Fusce posuere, magna sed pulvinar ultricies, purus lectus malesuada libero, sit amet commodo magna eros quis.

Headings

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Maecenas porttitor congue massa. Fusce posuere, magna sed pulvinar ultricies, purus lectus malesuada libero, sit amet commodo magna eros quis.

Subheadings

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Maecenas porttitor congue massa. Fusce posuere, magna sed pulvinar ultricies, purus lectus malesuada libero, sit amet commodo magna eros quis.

Establish a Text Hierarchy

Typewriter

Text Hierarchy

Mix 'n' Match

Title

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Maecenas porttitor congue massa. Fusce posuere, magna sed pulvinar ultricies, purus lectus malesuada libero, sit amet commodo magna eros quis.

HEADINGS

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Maecenas porttitor congue massa. Fusce posuere, magna sed pulvinar ultricies, purus lectus malesuada libero, sit amet commodo magna eros quis.

SUBHEADINGS

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Maecenas porttitor congue massa. Fusce posuere, magna sed pulvinar ultricies, purus lectus malesuada libero, sit amet commodo magna eros quis.

Establish a Text Hierarchy

Typewriter

Text Hierarchy

Mix 'n' Match



Titles

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Maecenas porttitor congue massa. Fusce posuere, magna sed pulvinar ultricies, purus lectus malesuada libero, sit amet commodo magna eros quis.

Headings

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Maecenas porttitor congue massa. Fusce posuere, magna sed pulvinar ultricies, purus lectus malesuada libero, sit amet commodo magna eros quis.

Subheadings

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Maecenas porttitor congue massa. Fusce posuere, magna sed pulvinar ultricies, purus lectus malesuada libero, sit amet commodo magna eros quis.

Establish a Text Hierarchy

Typewriter

Text Hierarchy

Mix 'n' Match

Medical Providers

Medical providers reported that the top three challenges they face are access to mental health inpatient programs, inpatient drug/alcohol programs, and availability of a psychiatrist for referrals or consults

Figure 42: Behavioral Health Challenges-Medical Providers

What are the biggest behavioral health challenges you face as a medical provider (check all that apply)?	
Lack of access to mental health inpatient program	66.18%
Lack of access to drug/alcohol inpatient program	52.94%
Availability of psychiatrist for consults or referrals	51.47%
Finding quality counseling or therapy for my patients	48.53%
Prescribing behavioral health medications	23.53%
Conducting screenings for mental health or substance abuse conditions	23.53%
Patients can't afford behavioral health medications	22.06%
Getting tests and diagnosis for my patients	19.12%
Other (please specify)	11.76%

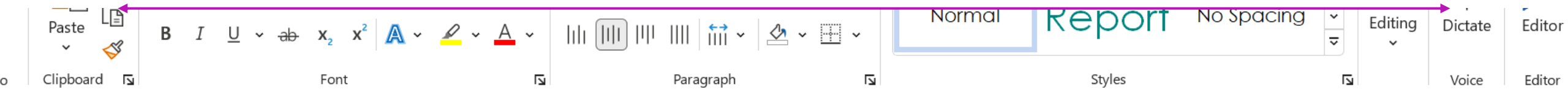
23

Establish a Text Hierarchy

Typewriter

Text Hierarchy

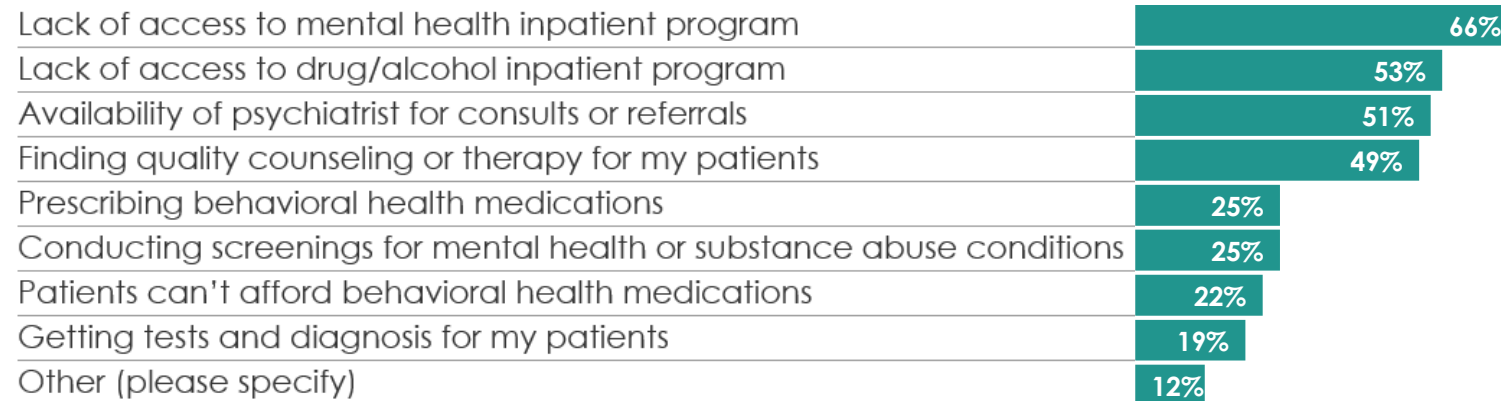
Mix 'n' Match



Top Behavioral Health Challenges Facing Medical Providers

Medical providers reported that the top three challenges they face are access to mental health inpatient programs, inpatient drug/alcohol programs, and availability of a psychiatrist for referrals or consults.

*What are the biggest behavioral health challenges you face as a medical provider?
Check all that apply.*



Left-Align Text & Right-Align Numbers

Left

→ Lorem ipsum dolor
→ sit amet, consectetur
adipiscing elit, sed
do eiusmod tempor
incididunt ut labore
et dolore magna
aliqua.

4
6
26
688
42

Centered

→ Lorem ipsum dolor
→ sit amet, consectetur
adipiscing elit, sed
do eiusmod tempor
incididunt ut labore
et dolore magna
aliqua.

4
6
26
688
42

Right

→ Lorem ipsum dolor
→ sit amet, consectetur
adipiscing elit, sed
do eiusmod tempor
incididunt ut labore
et dolore magna
aliqua.

4
6
26
688
42

Justified

→ Lorem ipsum dolor
→ sit amet, consectetur
adipiscing elit, sed
do eiusmod tempor
incididunt ut labore
et dolore magna
aliqua.

4
6
26
688
42

Left-Align Text & Right-Align Numbers: Tables

School	Type	Students	Student to Teacher Ratio	Free or Reduced Meals
Academy for Autism	Private	48	12.0	-
Acceleration Academy	Public	232	13.6	99%
Access Charter	Public	113	7.1	0%
Aloma High Charter	Public	500	35.7	1%
Amikids Orlando	Public	45	11.2	7%
Apopka Christian	Private	82	8.0	-

Left-Align Text & Right-Align Numbers: Tables

School	Type	Students	Student to Teacher Ratio	Free or Reduced Meals
Academy for Autism	Private	48	12.0	-
Acceleration Academy	Public	232	13.6	99%
Access Charter	Public	113	7.1	0%
Aloma High Charter	Public	500	35.7	1%
Amikids Orlando	Public	45	11.2	7%
Apopka Christian	Private	82	8.0	-

Left-Align Text & Right-Align Numbers: Tables

School	Type	Students	Student to Teacher Ratio	Free or Reduced Meals
Academy for Autism	Private	48	12.0	-
Acceleration Academy	Public	232	13.6	99%
Access Charter	Public	113	7.1	0%
Aloma High Charter	Public	500	35.7	1%
Amikids Orlando	Public	45	11.2	7%
Apopka Christian	Private	82	8.0	-

Left-Align Text & Right-Align Numbers: Tables

School	Type	Students	Student to Teacher Ratio	Free or Reduced Meals
Academy for Autism	Private	48	12.0	-
Acceleration Academy	Public	232	13.6	99%
Access Charter	Public	113	7.1	0%
Aloma High Charter	Public	500	35.7	1%
Amikids Orlando	Public	45	11.2	7%
Apopka Christian	Private	82	8.0	-

Left-Align Text & Right-Align Numbers: Tables

School	Type	Students	Student to Teacher Ratio	Free or Reduced Meals
Academy for Autism	Private	48	12.0	-
Acceleration Academy	Public	232	13.6	99%
Access Charter	Public	113	7.1	0%
Aloma High Charter	Public	500	35.7	1%
Amikids Orlando	Public	45	11.2	7%
Apopka Christian	Private	82	8.0	-

Left-Align Text & Right-Align Numbers: Tables

Centered



Left-Aligned Text & Right-Aligned Numbers

School	Type	Students	Student to Teacher Ratio	Free or Reduced Meals
Academy for Autism	Private	48	12.0	-
Acceleration Academy	Public	232	13.6	99%
Access Charter	Public	113	7.1	0%
Aloma High Charter	Public	500	35.7	1%
Amikids Orlando	Public	45	11.2	7%
Apopka Christian	Private	82	8.0	-

School	Type	Students	Student to Teacher Ratio	Free or Reduced Meals
Academy for Autism	Private	48	12.0	-
Acceleration Academy	Public	232	13.6	99%
Access Charter	Public	113	7.1	0%
Aloma High Charter	Public	500	35.7	1%
Amikids Orlando	Public	45	11.2	7%
Apopka Christian	Private	82	8.0	-

Make Sure Text is Horizontal

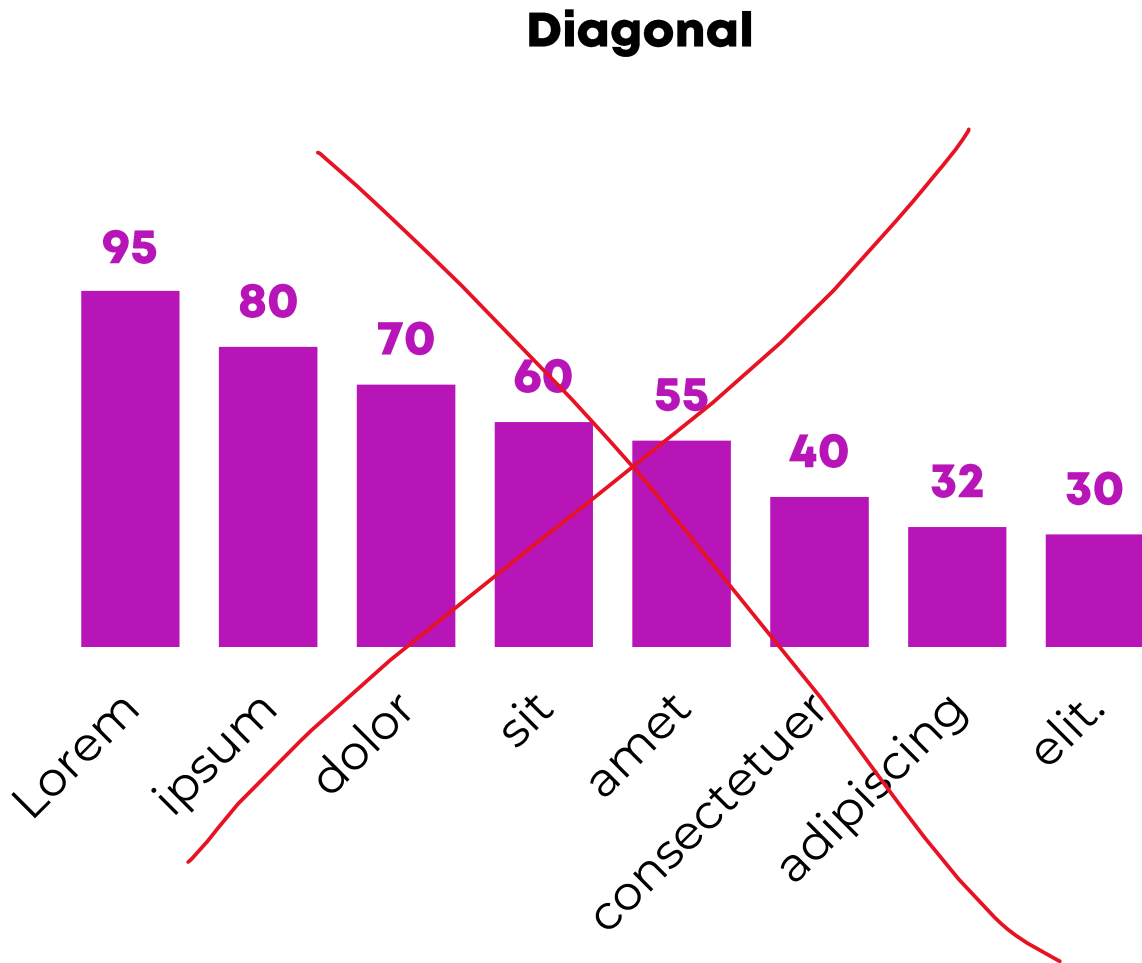
~~Diagonal~~

~~Vertical~~

~~S
t
a
c
k
e
d~~

Horizontal

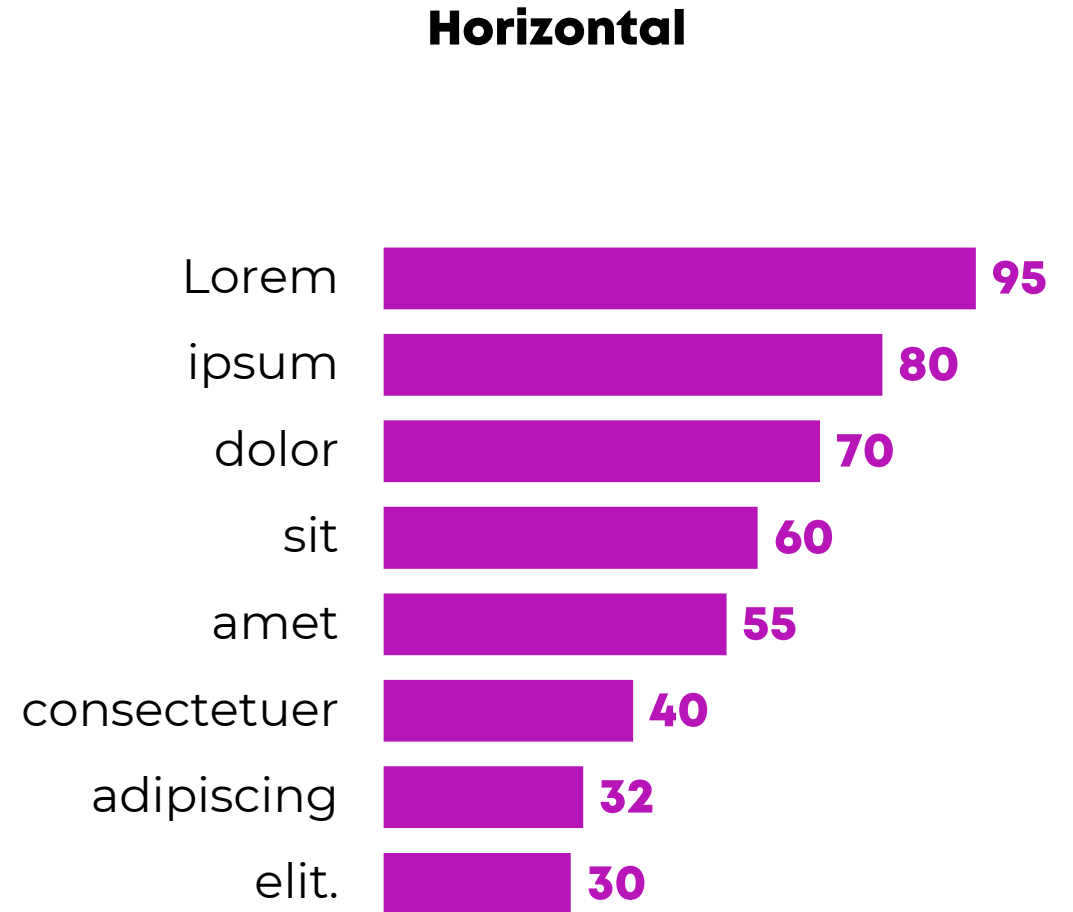
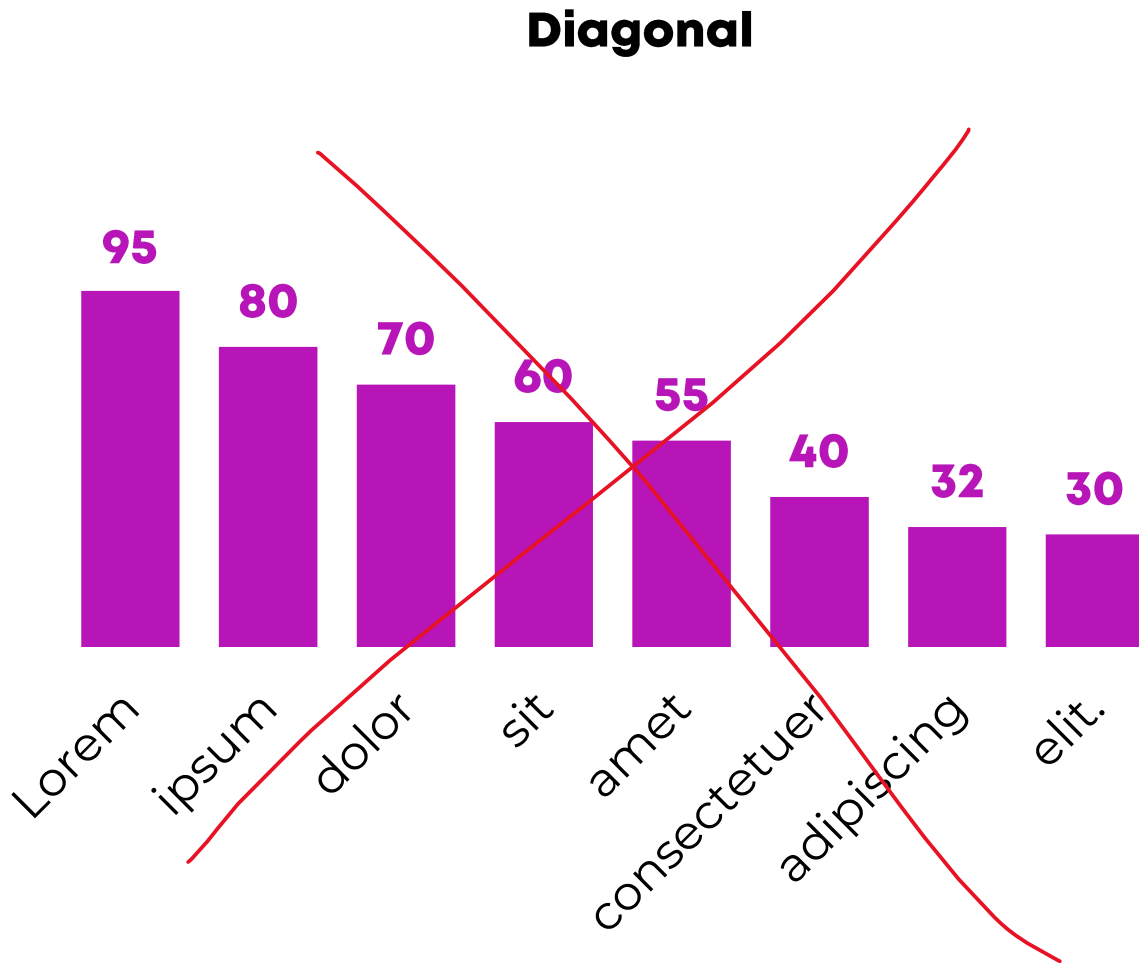
Make Sure Text is Horizontal



Horizontal

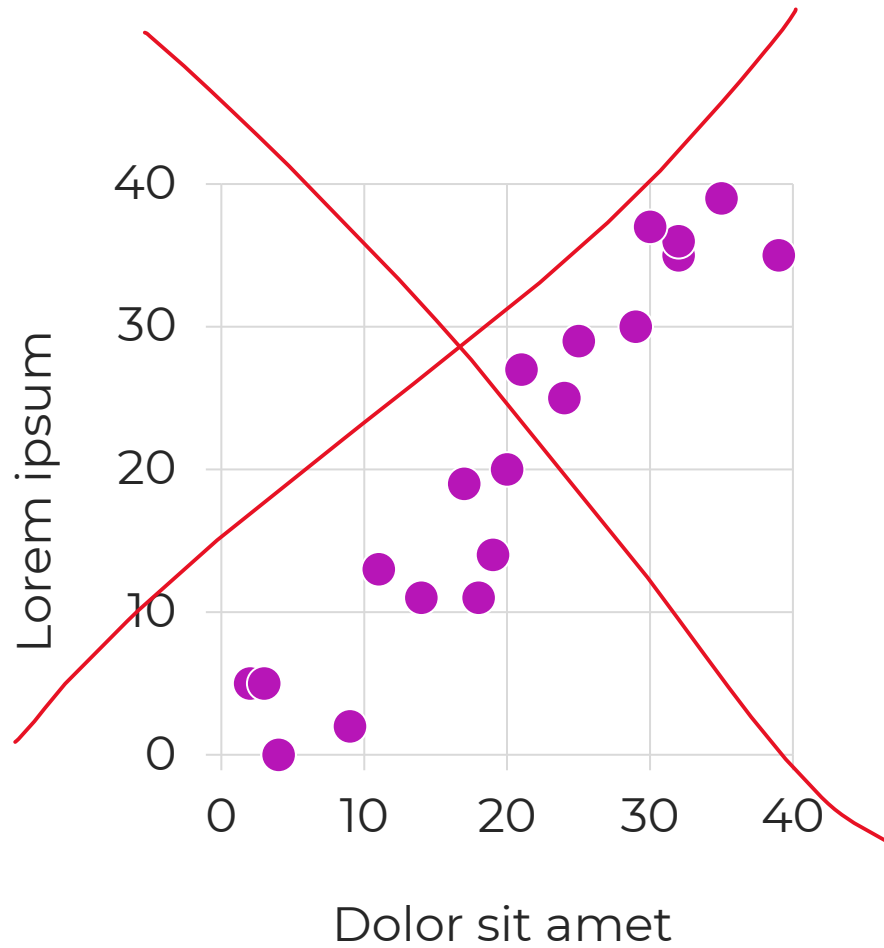


Make Sure Text is Horizontal



Make Sure Text is Horizontal

Vertical

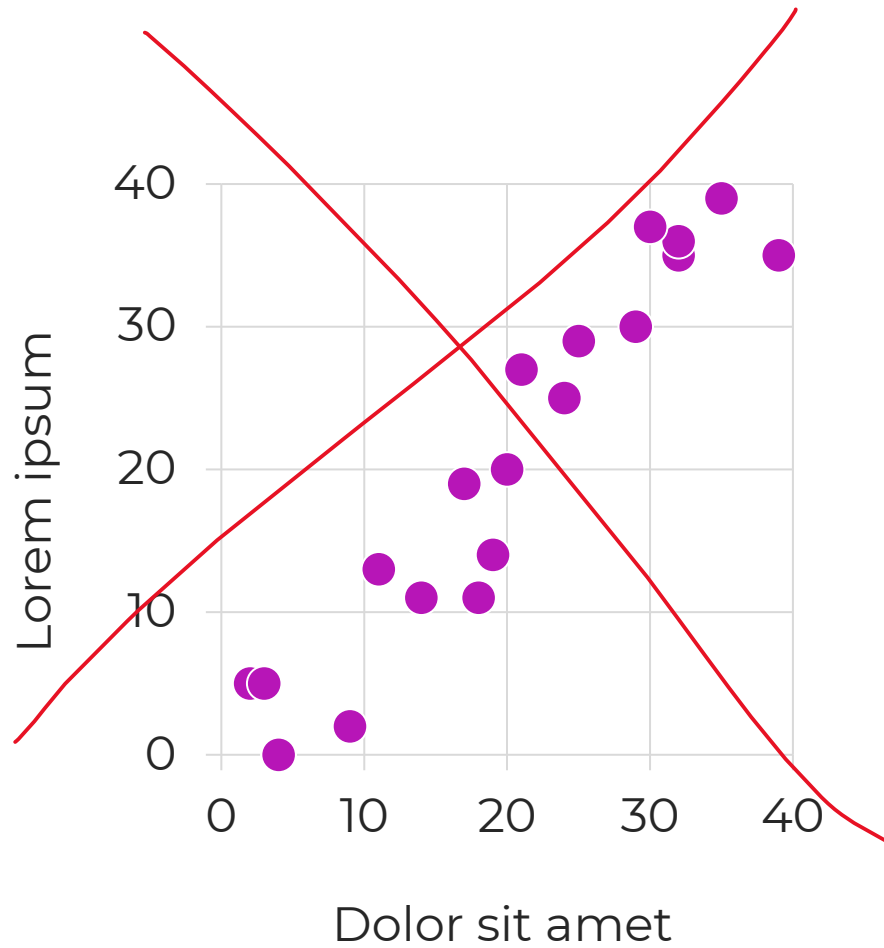


Horizontal



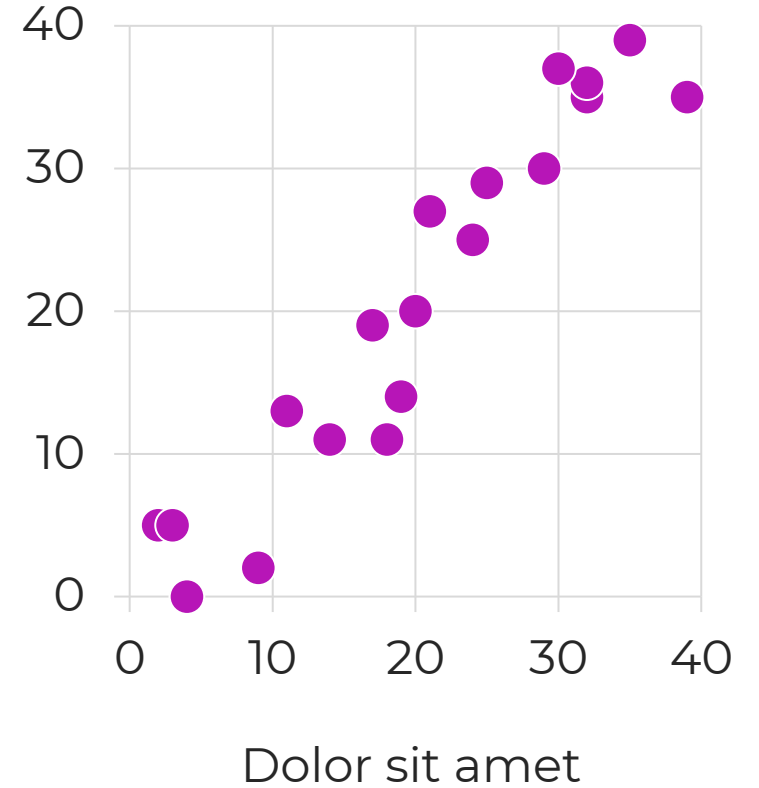
Make Sure Text is Horizontal

Vertical

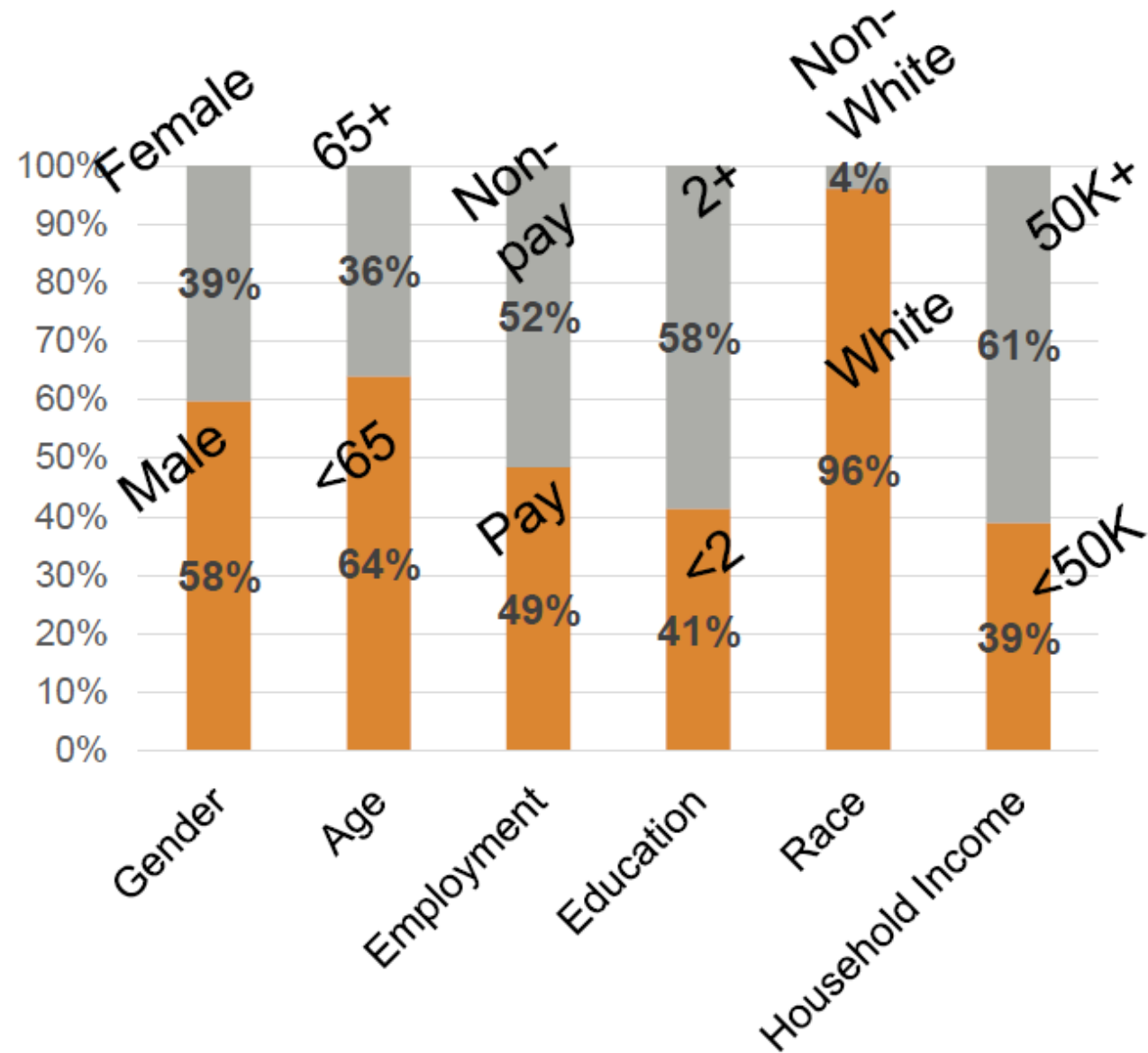


Horizontal

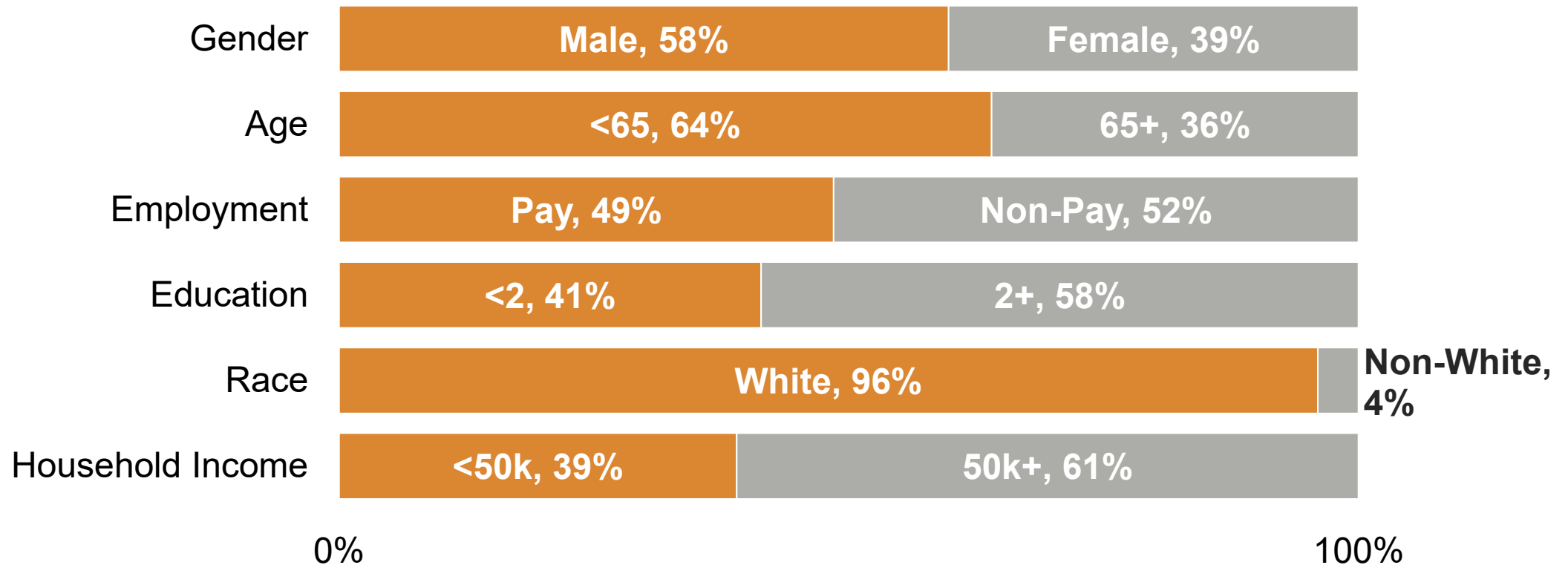
Lorem ipsum



Your Turn

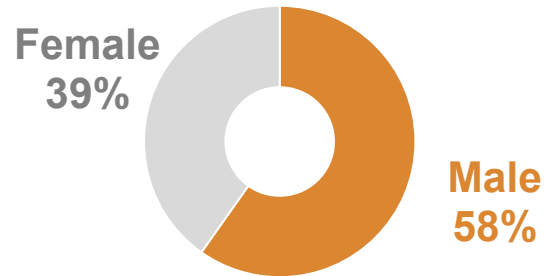


Your Turn

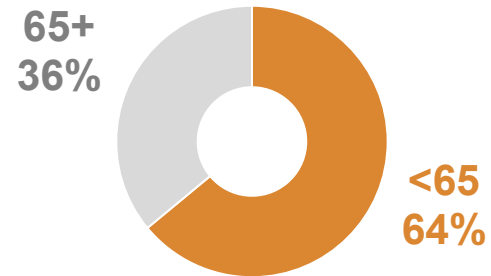


Your Turn

Gender



Age



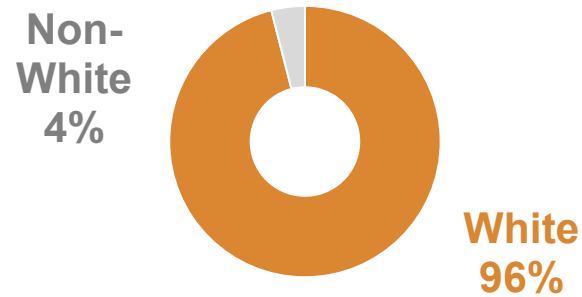
Employment



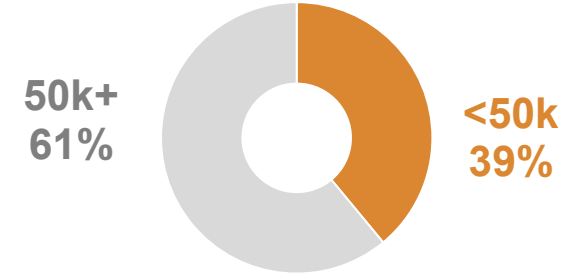
Education



Race



Household Income



AVOID ALL CAPS (and all lowercase)

~~ALL
CAPS~~

~~all
lowercase~~



Sentence
case

Title
Case

AVOID ALL CAPS (and all lowercase)



~~ann@depictdatastudio.com~~

Ann@DepictDataStudio.com

AVOID ALL CAPS (and all lowercase)



~~depictdatastudio.com~~

DepictDataStudio.com

AVOID ALL CAPS (and all lowercase)



~~#datavisualization~~

#DataVisualization

Only Underline the Hyperlinks



~~Underlined Headings
Just Because~~

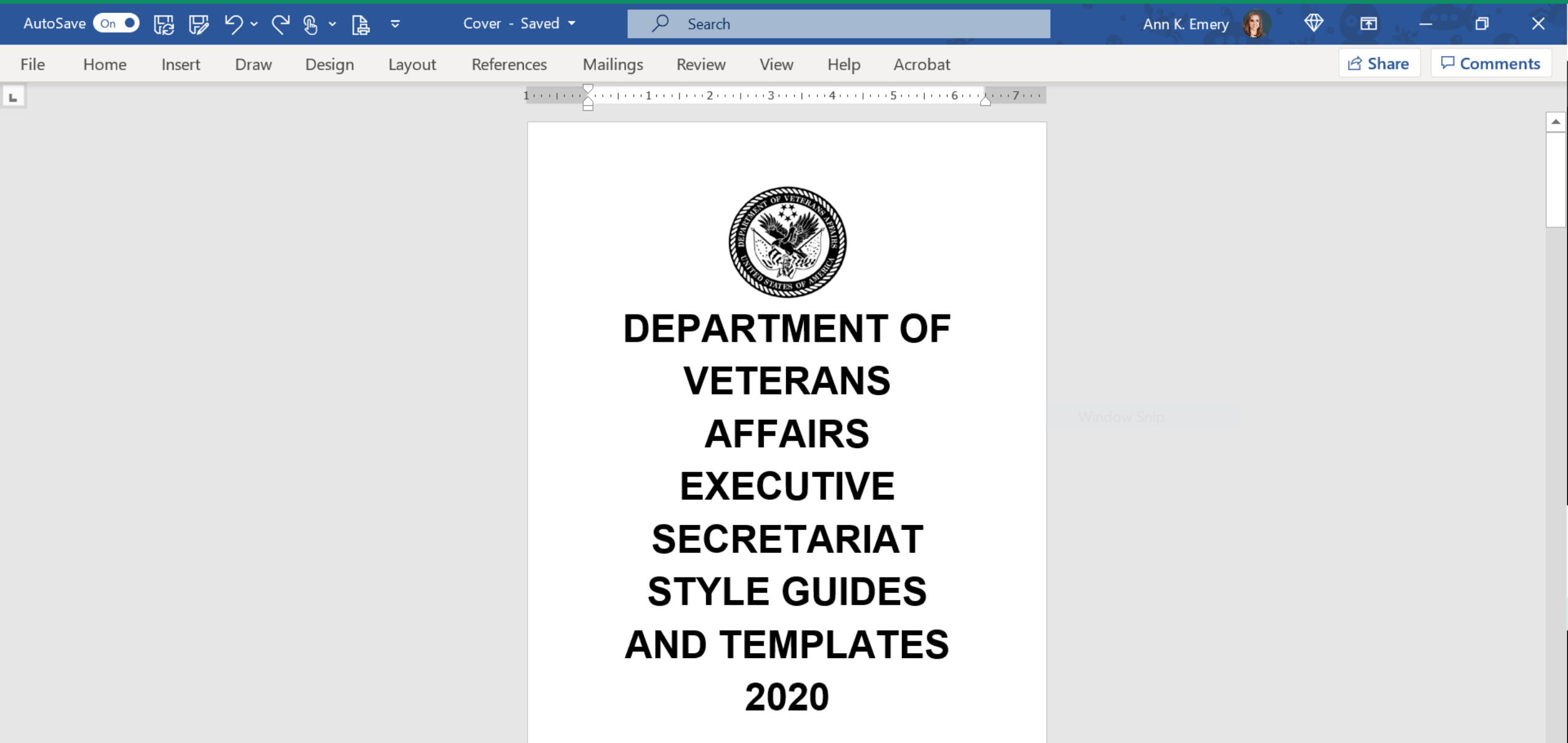
Source:
FancyWebsite.com

Use Bold **Sparingly**



**If Everything is Bold,
Nothing Stands Out**

Only Use Bold for the
Most Important Words



Your Turn

AutoSave On        Cover - Saved  Search

File Home Insert Draw Design Layout References Mailings Review View Help Acrobat  Share  Comments

1 1 2 3 4 5 6 7



**Department of
Veterans
Affairs
Executive
Secretariat
Style Guides
and Templates
2020**

Your Turn

AutoSave ☒ On        Cover - Saved Ann K. Emery      

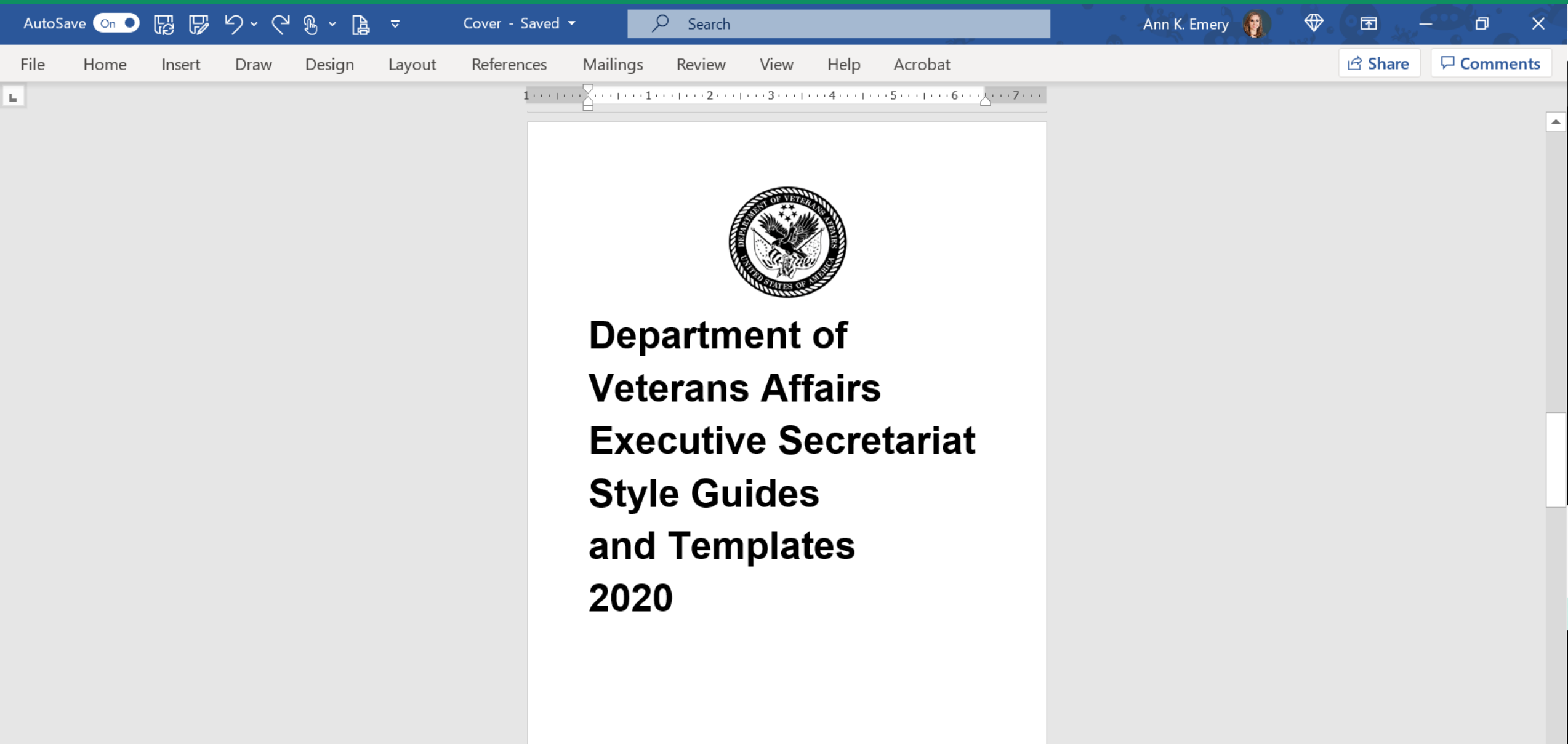
File Home Insert Draw Design Layout References Mailings Review View Help Acrobat [Share](#) [Comments](#)

1 2 3 4 5 6 7



**Department of
Veterans
Affairs
Executive
Secretariat
Style Guides
and Templates
2020**

Your Turn



Your Turn

AutoSave On        Cover - Saved  Search

File Home Insert Draw Design Layout References Mailings Review View Help Acrobat [Share](#) [Comments](#)

1 1 2 3 4 5 6 7

2020 Style Guides and Templates



**Department of
Veterans Affairs
Executive Secretariat**

Your Turn

AutoSave On        Cover - Saved  Search

File Home Insert Draw Design Layout References Mailings Review View Help Acrobat  Share  Comments

1 1 2 3 4 5 6 7

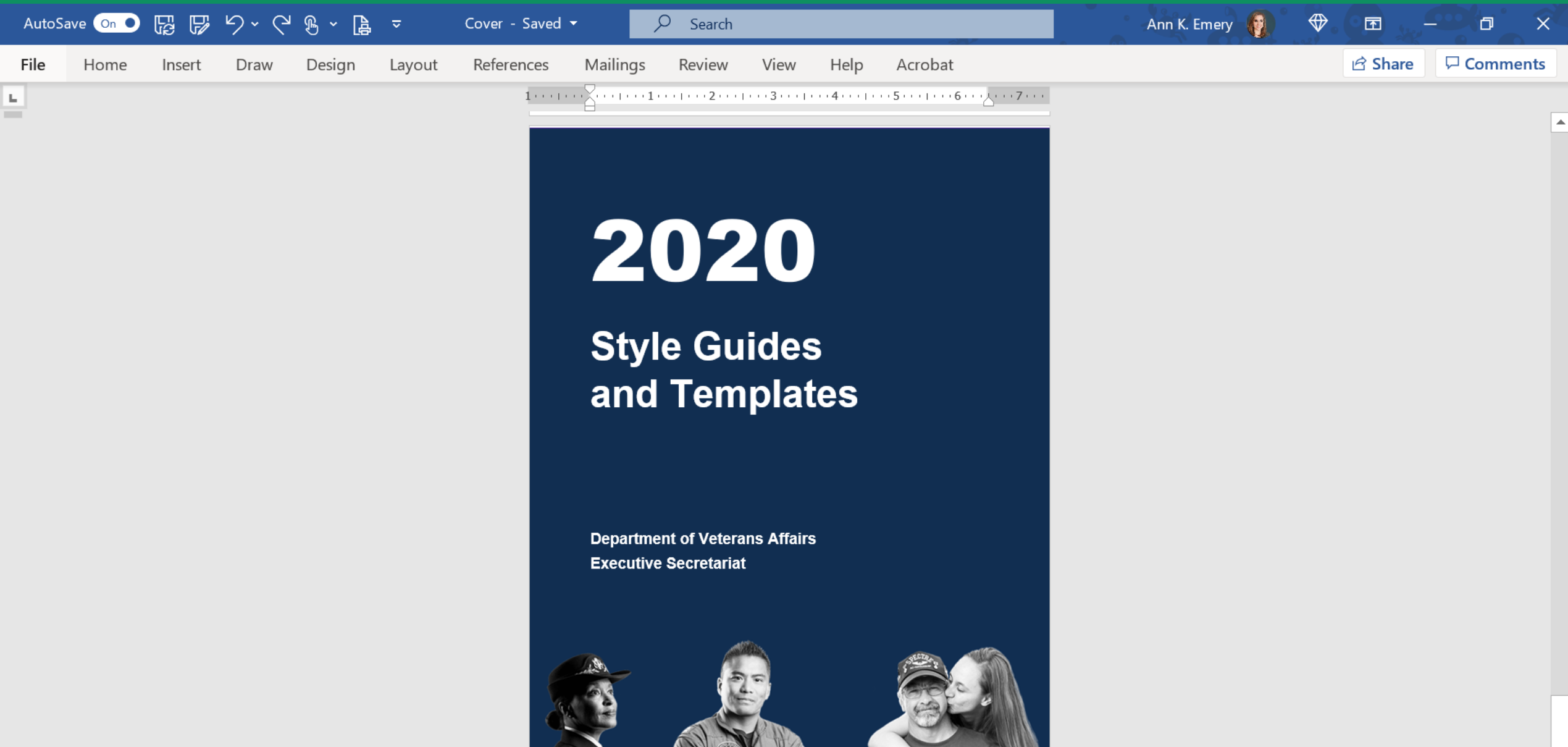
2020

Style Guides and Templates



Department of Veterans Affairs
Executive Secretariat

Your Turn



Your Turn

Before



**DEPARTMENT OF
VETERANS
AFFAIRS
EXECUTIVE
SECRETARIAT
STYLE GUIDES
AND TEMPLATES
2020**

2020

**Style Guides
and Templates**

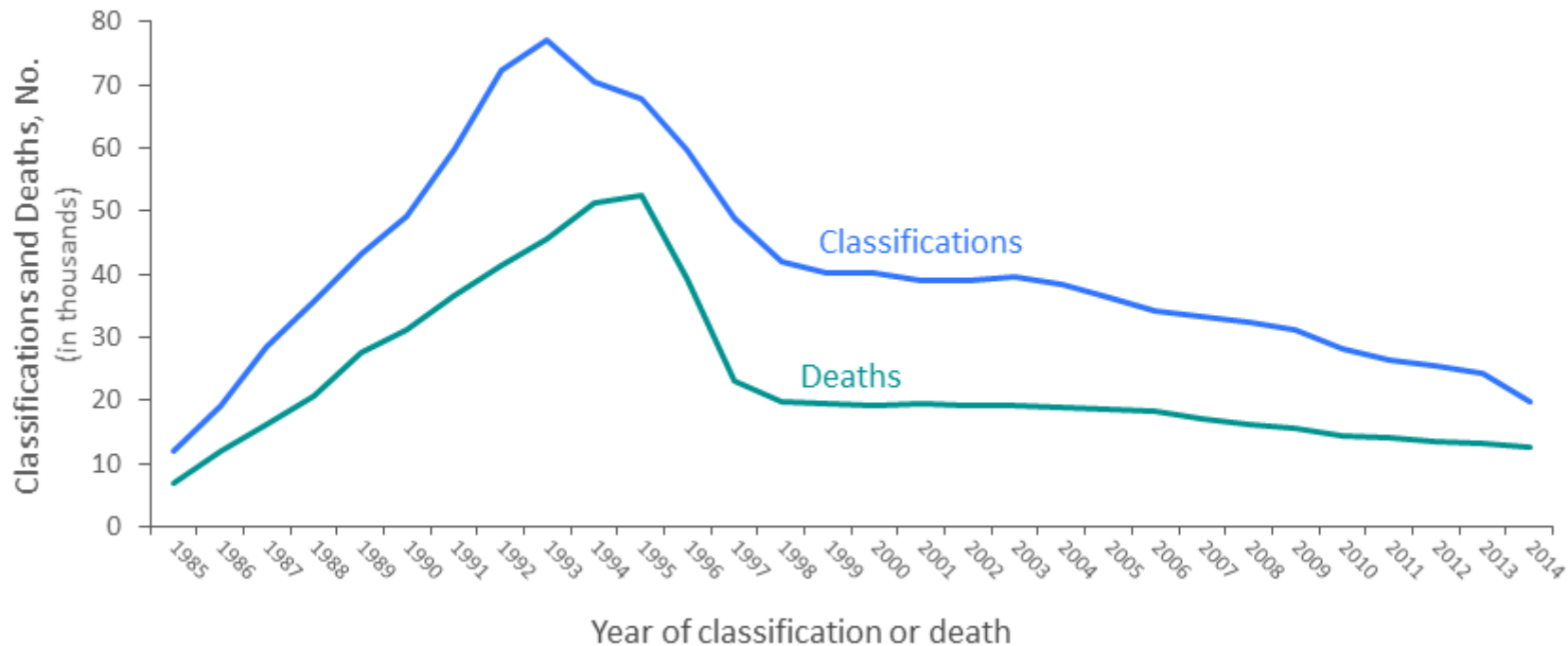
Department of Veterans Affairs
Executive Secretariat



After

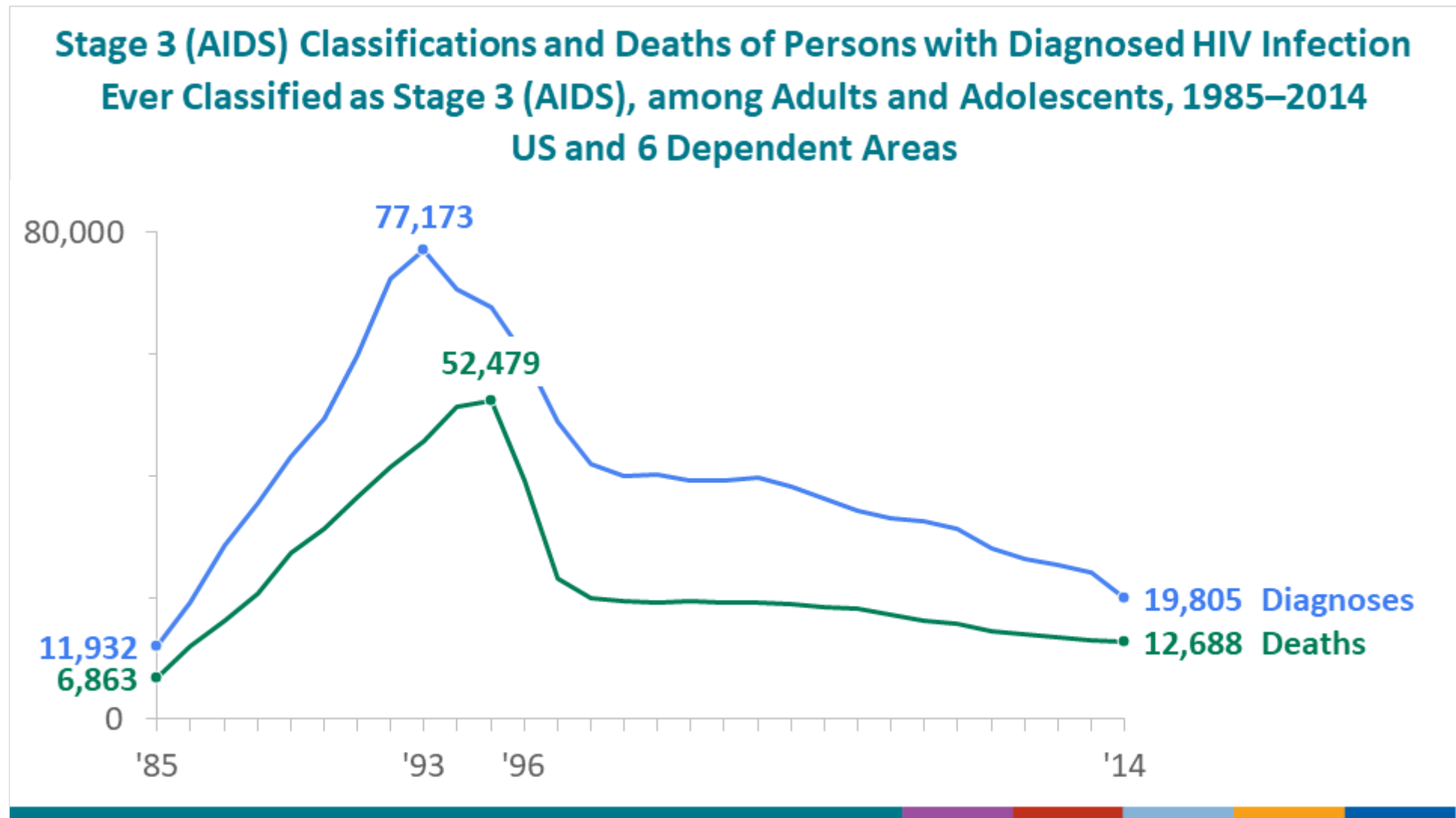
Lower the Reading Level

Stage 3 (AIDS) Classifications and Deaths of Persons with Diagnosed HIV Infection Ever Classified as Stage 3 (AIDS), among Adults and Adolescents, 1985–2014
US and 6 Dependent Areas



Note. Deaths of persons with HIV infection, stage 3 (AIDS) may be due to any cause.

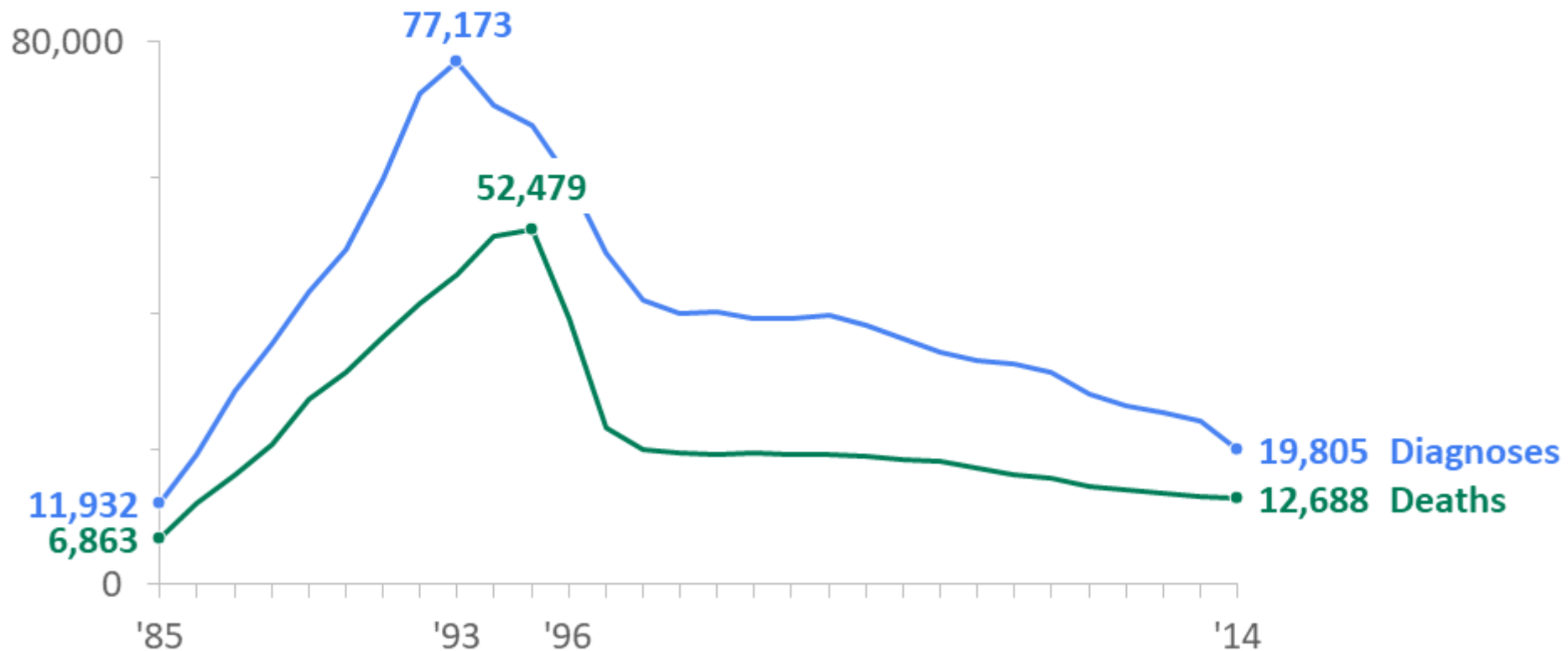
Lower the Reading Level



Lower the Reading Level

AIDS Diagnoses and Deaths—Decreasing Since 1990s

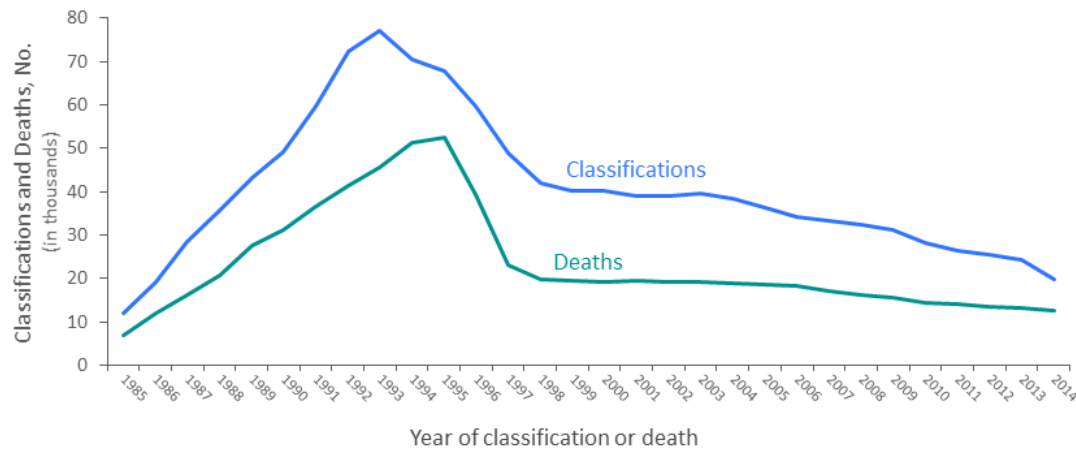
Stage 3 (AIDS) Classifications and Deaths of Persons with Diagnosed HIV Infection Ever Classified as Stage 3 (AIDS), among Adults and Adolescents, US and 6 Dependent Areas



Lower the Reading Level



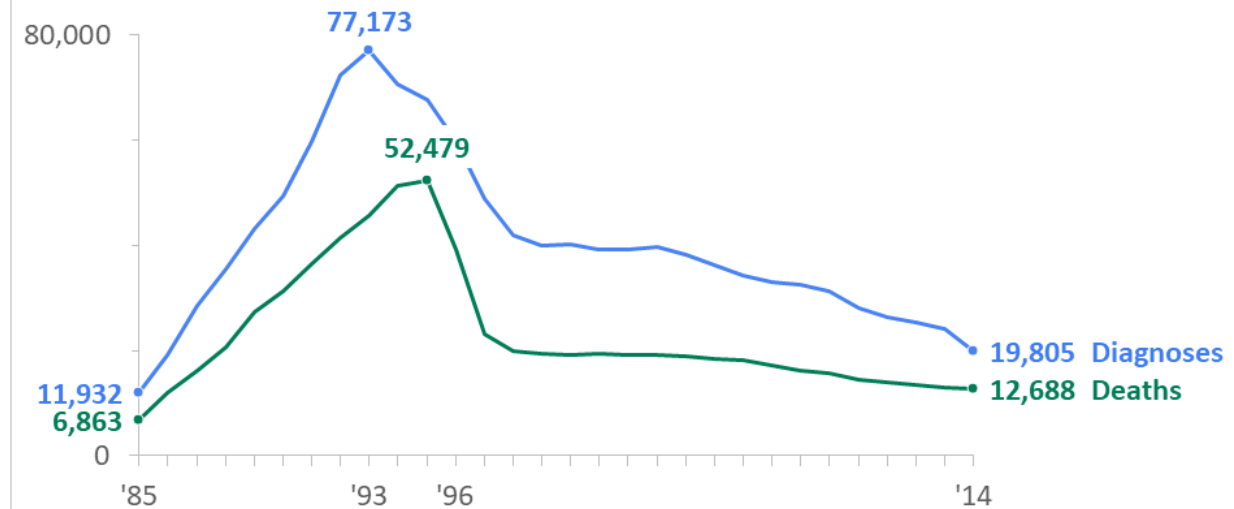
Stage 3 (AIDS) Classifications and Deaths of Persons with Diagnosed HIV Infection Ever Classified as Stage 3 (AIDS), among Adults and Adolescents, 1985–2014
US and 6 Dependent Areas



Note. Deaths of persons with HIV infection, stage 3 (AIDS) may be due to any cause.

AIDS Diagnoses and Deaths—Decreasing Since 1990s

Stage 3 (AIDS) Classifications and Deaths of Persons with Diagnosed HIV Infection Ever Classified as Stage 3 (AIDS), among Adults and Adolescents, US and 6 Dependent Areas



Lower the Reading Level



Text To Score

Text

Save

Load

History

Help

Measure Readability

Stage 3 (AIDS) Classifications and Deaths of Persons with Diagnosed HIV Infection Ever Classified as Stage 3 (AIDS), among Adults and Adolescents, 1985–2014 US and 6 Dependent Area

Readability Rating

RATING: D

You are using too many long words. Try replacing some of them with shorter alternatives.

Readability Grade Levels

Readability Formula	Grade
Flesch–Kincaid Grade Level	12.5
Gunning Fog Index	9.6
Coleman–Liau Index	16
SMOG Index	15.9
Automated Readability Index	17.1
Average Grade Level	14.2

Readability Scores

Readability Formula	Score
Flesch Reading Ease	48.5
Spache Score	7.4
New Dale–Chall Score	7.8

Text Quality

Text To Score

Text

Save

Load

History

Help

Measure Readability

AIDS Diagnoses and Deaths

Readability Rating

RATING: A

You are using too many long words. Try replacing some of them with shorter alternatives.

Readability Grade Levels

Readability Formula	Grade
Flesch–Kincaid Grade Level	6.6
Gunning Fog Index	1.6
Coleman–Liau Index	9.1
SMOG Index	8.8
Automated Readability Index	6.5
Average Grade Level	6.5

Readability Scores

Readability Formula	Score
Flesch Reading Ease	54.7
Spache Score	7.3
New Dale–Chall Score	4.1

Text Quality

Lower the Reading Level

Average reading level?

Lower the Reading Level

Education level:

Doctoral degree

Master's degree

Bachelor's degree

High school diploma

Middle school

Elementary school

Write 1-2 levels below



Lower the Reading Level

- ✓ **Active** voice (instead of passive voice)
- ✓ **Shorter** words, sentences, and paragraphs
- ✓ **Replace jargon** with synonyms

Lower the Reading Level

A survey instrument
was designed by the
ABC Research
Organization.



The ABC Research
Organization designed
a survey.

Lower the Reading Level

A total of 14 people participated in the survey.



Lower the Reading Level

A total of 14 people participated in the survey.



Fourteen people participated in the survey.

Lower the Reading Level

A total of 14 people participated in the survey.

A total of 144 people participated in the survey.



Fourteen people participated in the survey.

Lower the Reading Level

A total of 14 people participated in the survey.

A total of 144 people participated in the survey.



Fourteen people participated in the survey.

We collected surveys from 144 people.

Lower the Reading Level

Undergraduate students comprise 65% of total responses.



Lower the Reading Level

Undergraduate students comprise 65% of total responses.



Nearly 7 out of 10 were college students.

Lower the Reading Level

Measure the Readability

Secure | https://app.readable.io/text/

R

readable.io

★ Go Pro From \$4/mo

Home

Projects

Tools

Score Text

Score a URL

Score an Email

Score a File

Readability Alerts

Free Text Tools

Integrations

API

Home / Tools / Measure Text Readability

Editing

Save

Load

Export

A survey instrument was designed by the ABC Research Company working under the supervision of the DEF Foundation staff, and key department heads of GHI Agencies.

A series of survey instruments were developed to administer among students in the ABC programs.

A total of 14 programs participated in the survey.

A total of 144 programs participated in the survey.

Initial surveys were launched on March 7, 2018 with fieldwork continuing to accommodate the schedules of participating institutions.

Data collection was cut off on April 25 to begin data processing. A total of 789 surveys were attempted, with a total of 654 surveys completed sufficiently to include in the final tabulated results. A total of 123 individuals entered their contact information for a drawing.

We are providing detailed data tables with this report that shows the responses by institution.

Overall, undergraduate students comprise 65% of total responses and graduate students comprise the remaining 35%.

One way the important resources and individuals specifically helped at least two-thirds of students were giving them a good sense for the kinds of careers they could pursue with a degree.

The largest mean share of the total cost are paid for by the student or their family, who account for 50% of the total cost. Student loans are used to cover a mean of 20% of the total cost, and scholarships or other financial aid pay for 30%.

Readability | Quality | Statistics | More

Readability Rating



You are using too many long words. Try replacing some of them with shorter alternatives.

Download Results:

PDF

CSV

Readability Grade Levels

READABILITY FORMULA	GRADE
Flesch-Kincaid Grade Level	11.2
Gunning Fog Index	13.0
Coleman-Liau Index	12.4
SMOG Index	13.0
Automated Readability Index	11.1
Average Grade Level	12.1

Readability Scores

READABILITY FORMULA	SCORE
---------------------	-------

Feedback

Ann K. Emery | Ann@DepictDataStudio.com

Lower the Reading Level

Measure the Readability

Securehttps://app.readable.io/text/

Home / Tools / Measure Text Readability

Editing

Save

Load

Export

Home

Projects

Tools

Score Text

Score a URL

Score an Email

Score a File

Readability Alerts

Free Text Tools

Integrations

API

The ABC Research Company, DEF Foundation, and GHI Agency teamed up to collect data.

We designed surveys to collect information from students in the ABC programs.

Fourteen programs participated in the survey.

We collected surveys from 144 programs.

We collected surveys in Spring 2018. We tried to collect data from 789 people, and 654 people participated, for a response rate of 83 percent—one of the highest response rates we've ever had on a survey.

Want to view responses by institution? View the appendix on page 31.

Two out of three responses (65%) were from undergraduate students. The rest were from graduate students.

We asked students which resources were most useful. Two out of three students said that others had given them a sense of career options that they could pursue with their degree.

For the typical student, 50% of their costs are covered by the student and their family, 30% are covered by scholarships or financial aid, and 20% are covered by student loans.

Readability Rating

A

You are using too many long words. Try replacing some of them with shorter alternatives.

Download Results:

PDF

CSV

Readability Grade Levels

READABILITY FORMULA	GRADE
Flesch-Kincaid Grade Level	7.7
Gunning Fog Index	9.7
Coleman-Liau Index	10.7
SMOG Index	10.6
Automated Readability Index	7.7
Average Grade Level	9.3

Readability Scores

READABILITY FORMULA	SCORE
---------------------	-------

Ann K. Emery | Ann@DepictDataStudio.com