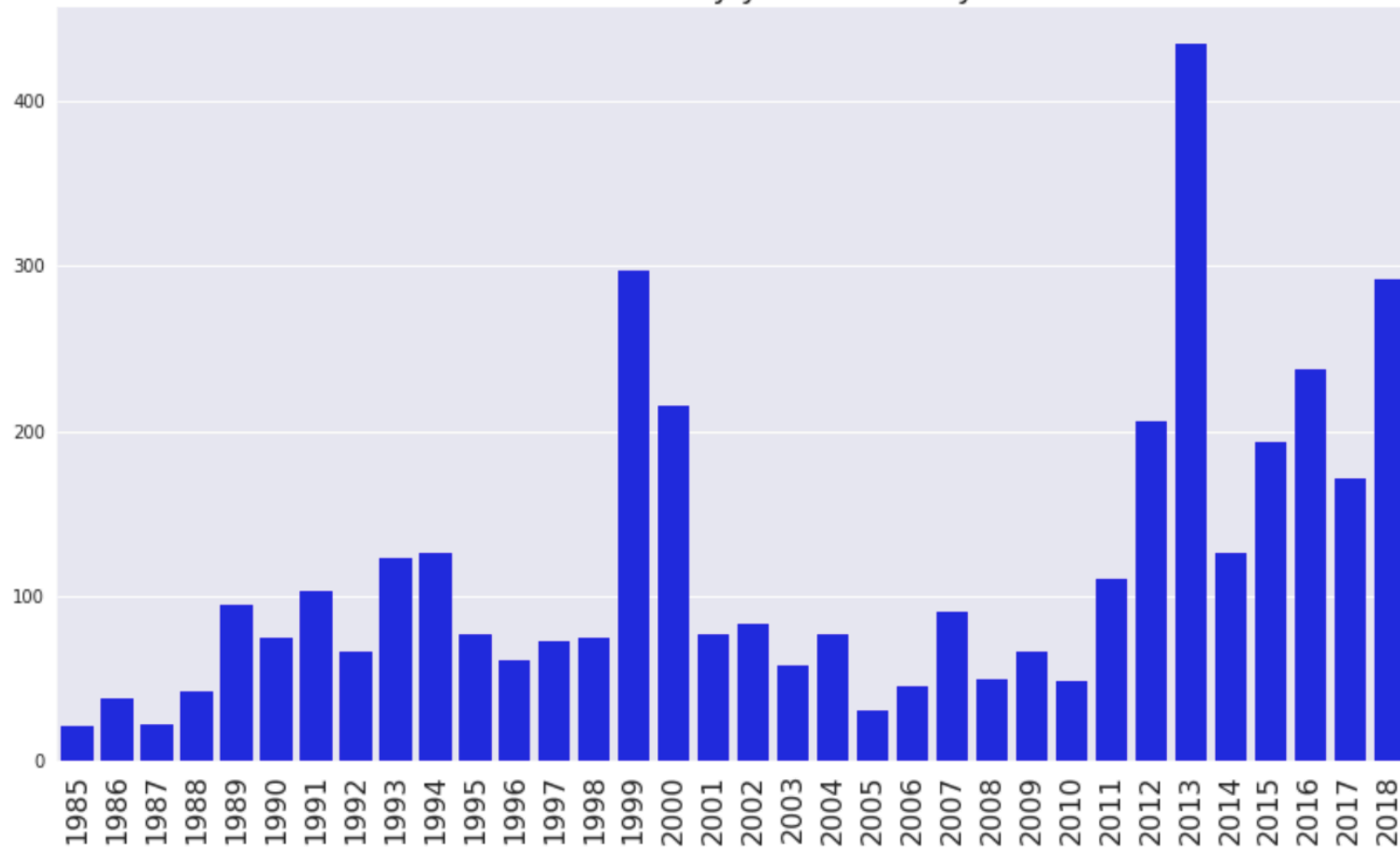**Trends in Topics in Gun Control – NY Times**
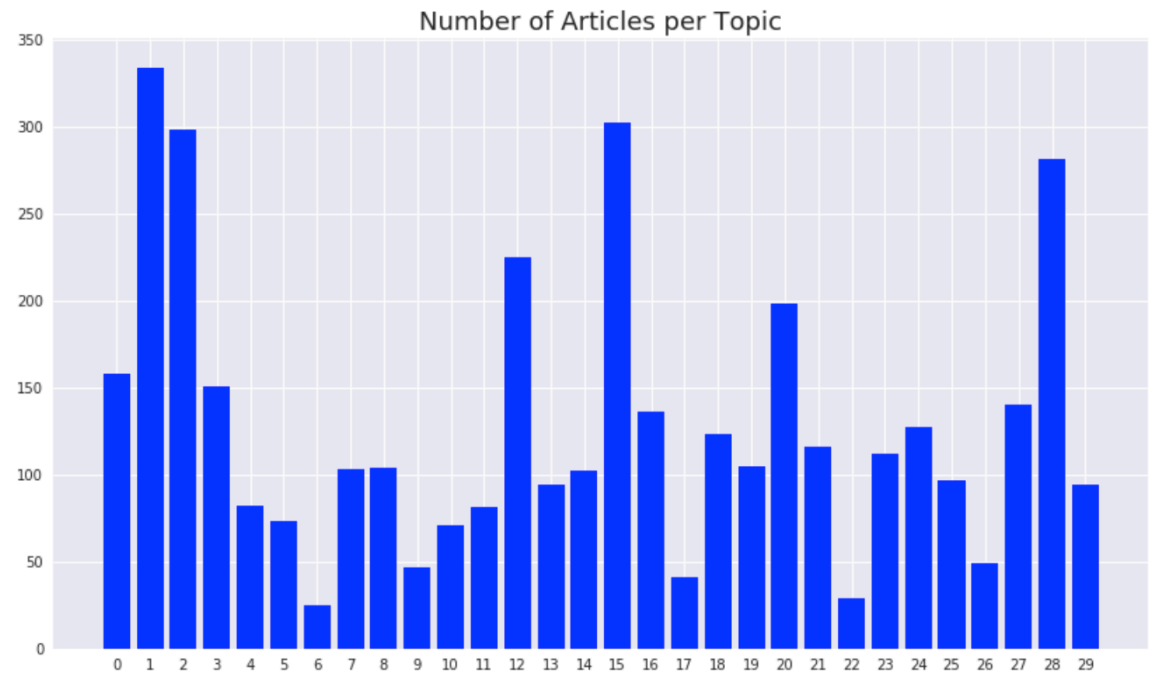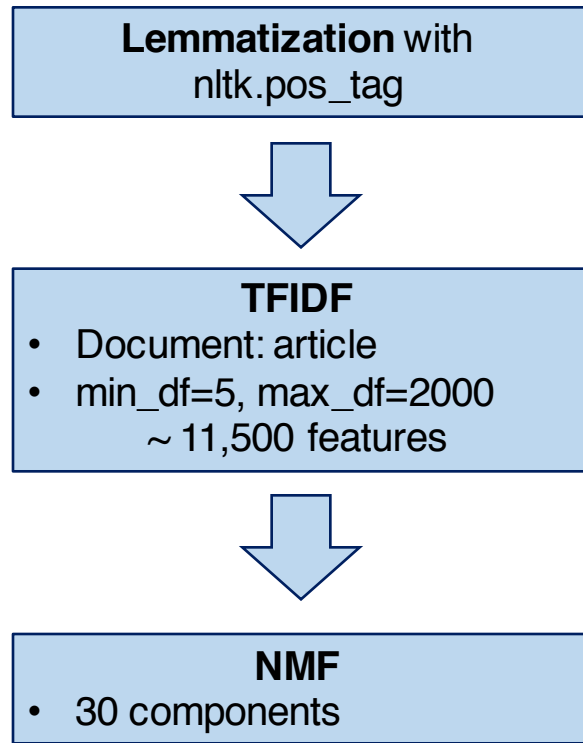*Elena Bohenick*

Data

- 3,900 NY Times articles (1985 – 2018)
  - Relevance score > 0.015 for "gun control" query
  - News, Editorial, Op-Ed and Letter

- Sources:
  - Meta data: NY Times API
  - Article Body Text: www.nytimes.com

Number of artices by year 1985-May 2018
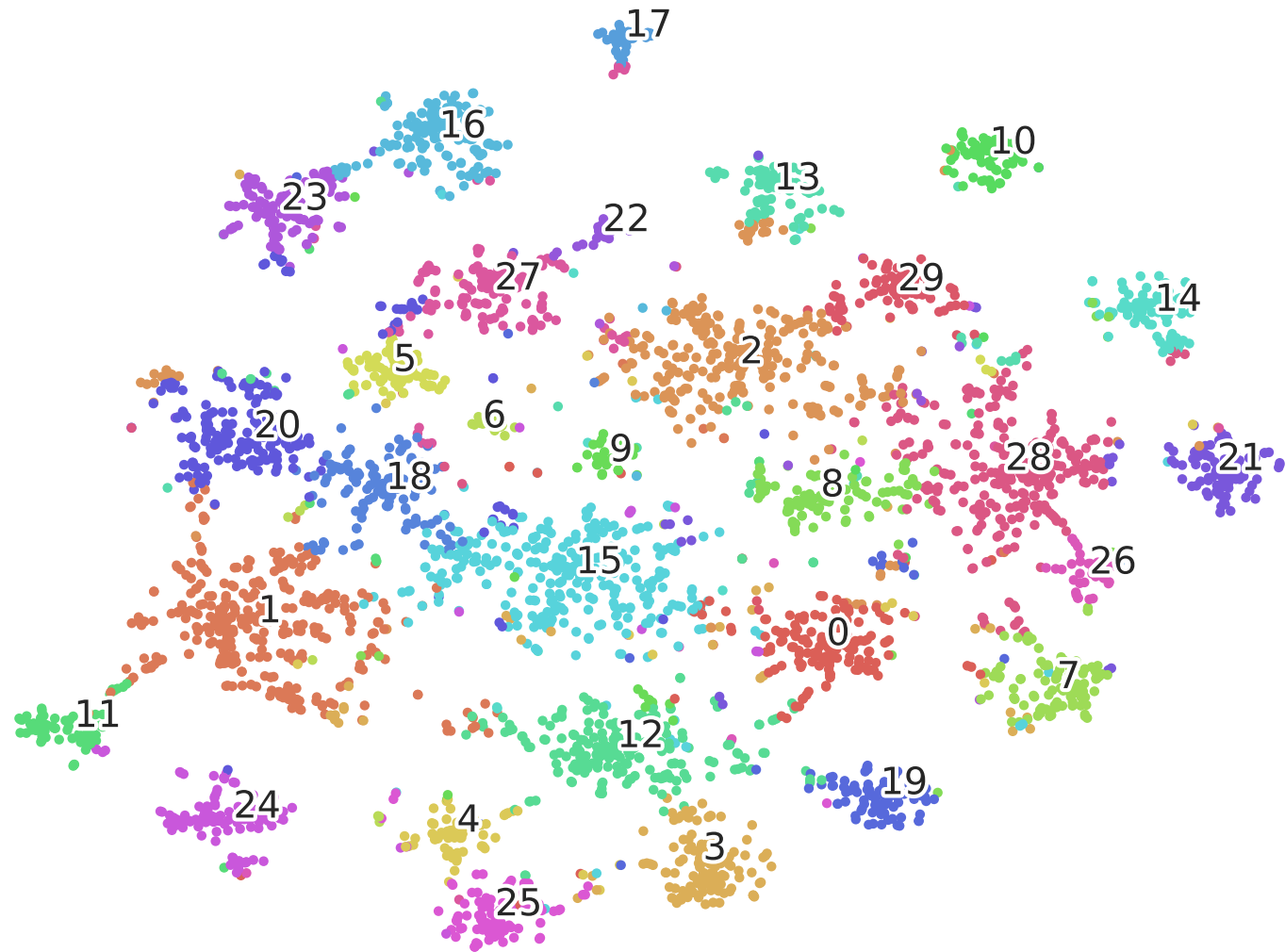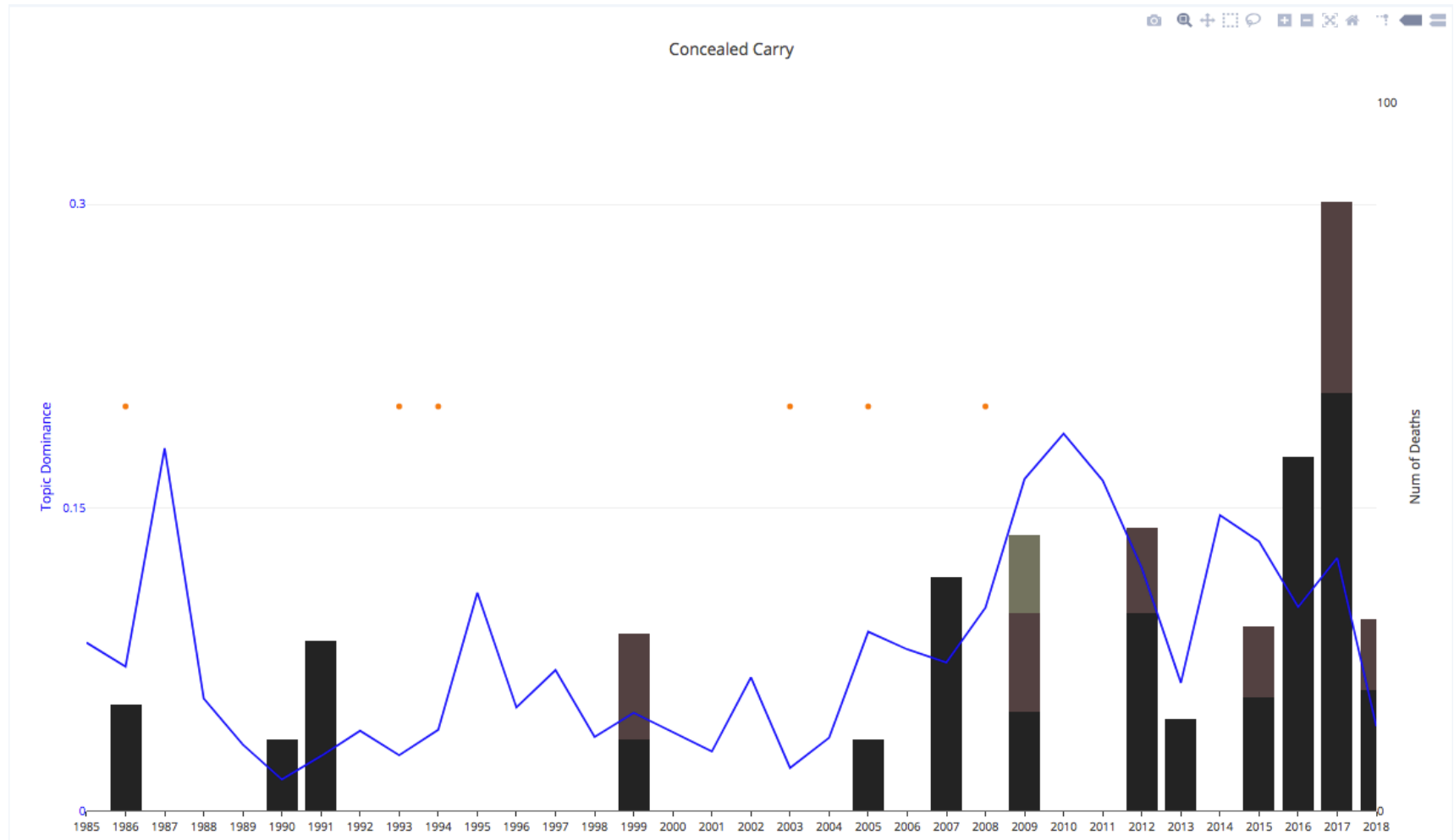
Model

Lemmatization with nltk.pos_tag

⬇

TFIDF
• Document: article
• min_df=5, max_df=2000
~ 11,500 features

⬇

NMF
• 30 components

Number of Articles per Topic

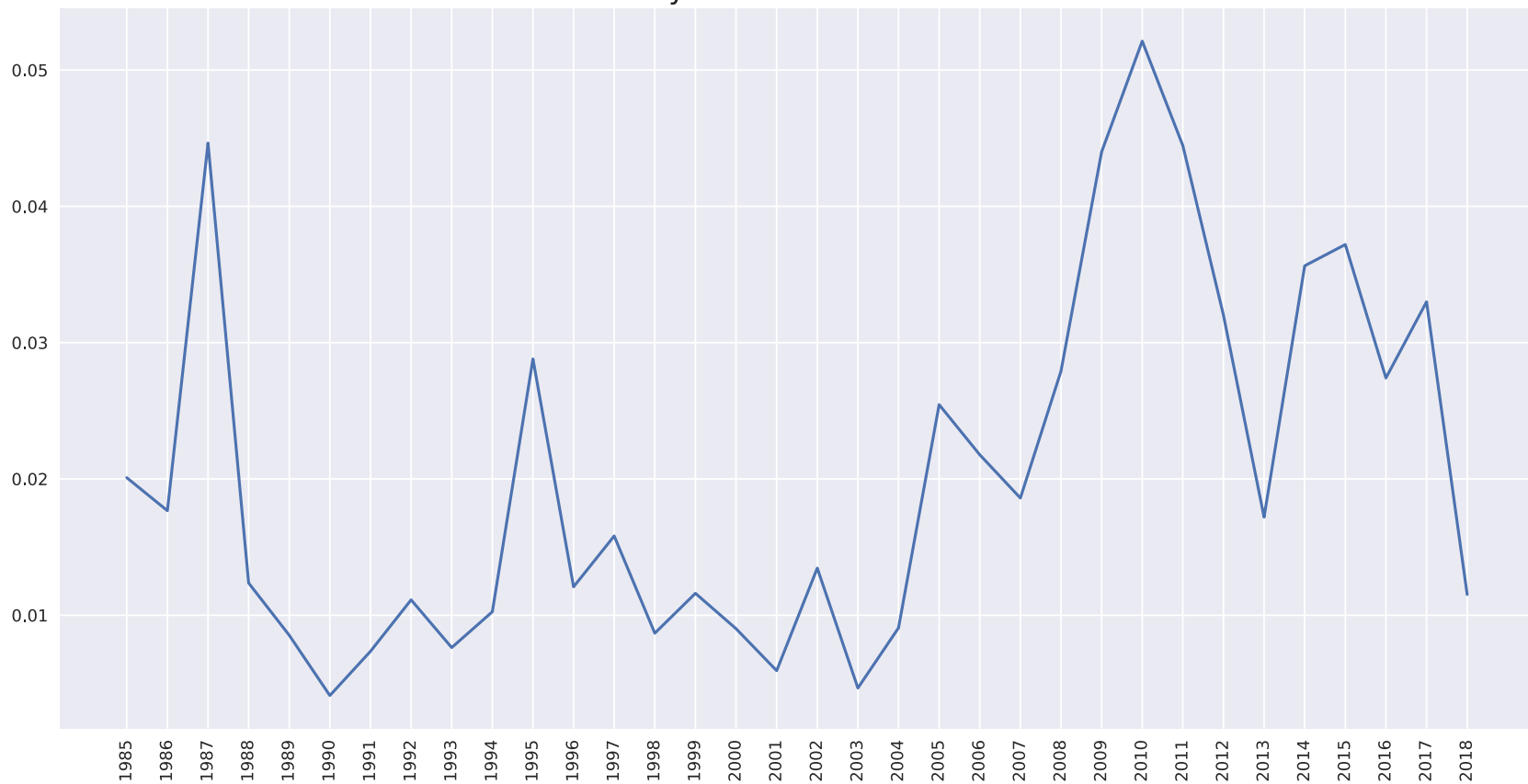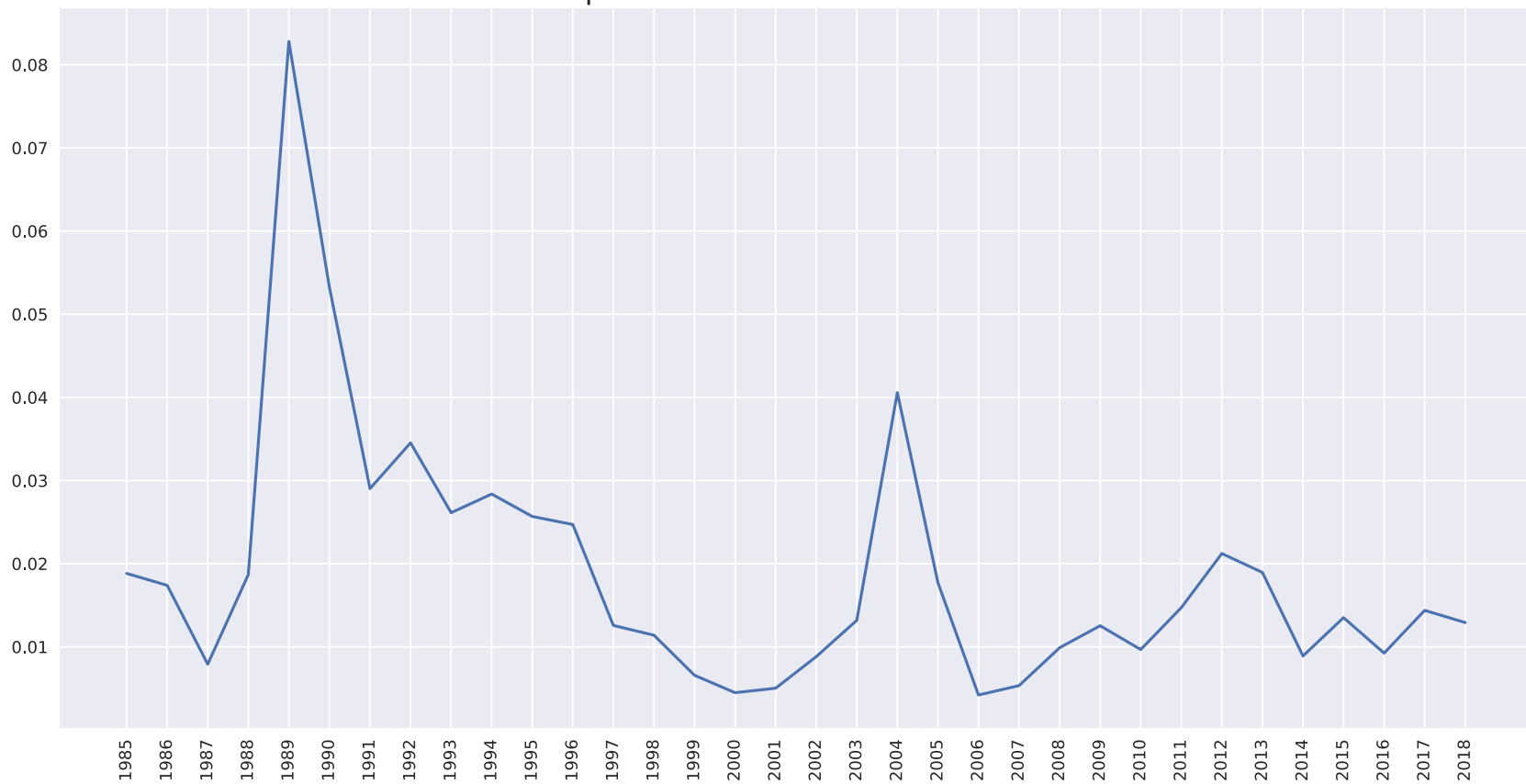| Topic #	Topic
0	Obama
1	concealed carry
2	assault weapons ban
3	parkland shooting
4	research on gun control
5	Bloomberg
6	prisons/convicts
7	Las Vegas & parkland
8	background checks
9	gun safety
10	Cuomo
11	Columbia v. Heller case
12	Noise
13	jersey gov. gun control
14	Brady handgun violence prevention act
15	killings and shootings
16	pension funds investment in gun manufacturers
17	Mexican border operations
18	police
19	mental health
20	politician stance on gun control
21	Clintons
22	Shummer
23	lawsuits against manufacturers
24	2nd amendment
25	gun related death
26	terrorism
27	gun purchase requirements
28	dem/rep gun control debate
29	bush vs gore run

Concealed Carry

plot.ly

Appendix

0	1	2	3	4	5	6	7	8	9
0	obama, 3.05%	president, 1.30%	newtown, 0.80%	white, 0.68%	congress, 0.64%	action, 0.50%	american, 0.46%	violence, 0.45%	biden, 0.43%
1	carry, 3.58%	concealed, 2.42%	permit, 1.99%	campus, 1.18%	allow, 0.99%	texas, 0.84%	conceal, 0.82%	right, 0.62%	university, 0.60%
2	ban, 3.53%	assault, 3.18%	semiautomatic, 1.70%	magazine, 1.15%	military, 1.01%	round, 0.85%	import, 0.73%	ar, 0.71%	automatic, 0.70%
3	school, 4.18%	student, 3.13%	teacher, 1.35%	high, 1.06%	shooting, 0.96%	parkland, 0.96%	campus, 0.83%	stoneman, 0.75%	douglas, 0.70%
4	research, 1.50%	violence, 1.36%	dr, 1.28%	study, 1.23%	percent, 1.16%	center, 0.86%	injury, 0.83%	health, 0.76%	report, 0.64%
5	bloomberg, 4.11%	mayor, 3.78%	michael, 0.86%	illegal, 0.72%	campaign, 0.63%	group, 0.62%	ad, 0.56%	support, 0.50%	candidate, 0.49%
6	crime, 5.06%	criminal, 1.42%	sentence, 1.28%	violent, 1.17%	drug, 1.05%	prison, 1.03%	penalty, 1.02%	commit, 0.85%	mandatory, 0.65%
7	trump, 4.08%	republican, 0.67%	president, 0.64%	florida, 0.45%	white, 0.44%	donald, 0.43%	bump, 0.43%	parkland, 0.43%	mass, 0.41%
8	check, 4.89%	background, 4.41%	buyer, 1.13%	record, 0.98%	sale, 0.91%	require, 0.90%	buy, 0.83%	colorado, 0.76%	measure, 0.73%
9	lock, 2.71%	child, 2.21%	smart, 2.17%	technology, 1.80%	trigger, 1.41%	handgun, 1.32%	safety, 1.15%	owner, 0.87%	require, 0.79%
10	cuomo, 3.77%	governor, 1.72%	york, 1.16%	assembly, 0.89%	penalty, 0.85%	albany, 0.80%	pataki, 0.71%	republican, 0.71%	legislature, 0.68%
11	court, 4.27%	supreme, 1.94%	justice, 1.78%	decision, 1.55%	case, 1.49%	appeal, 1.35%	judge, 1.30%	district, 1.17%	ruling, 1.07%
12	editor, 3.42%	editorial, 1.18%	march, 1.05%	jan, 1.00%	page, 0.92%	article, 0.89%	oct, 0.87%	writer, 0.86%	dec, 0.70%
13	florio, 3.03%	jersey, 1.84%	governor, 1.50%	repeal, 1.23%	veto, 1.18%	override, 1.16%	legislature, 1.03%	vote, 0.98%	republican, 0.88%
14	brady, 4.59%	period, 2.36%	handgun, 1.86%	reagan, 1.64%	wait, 1.50%	waiting, 1.37%	purchase, 0.82%	day, 0.81%	james, 0.78%
15	ms, 0.62%	shoot, 0.51%	old, 0.43%	child, 0.38%	kill, 0.38%	know, 0.35%	just, 0.34%	family, 0.33%	son, 0.33%
16	company, 2.54%	wesson, 0.83%	colt, 0.80%	smith, 0.78%	investor, 0.60%	sale, 0.58%	sell, 0.57%	fund, 0.55%	ruger, 0.54%
17	furious, 1.49%	mexico, 1.44%	operation, 1.40%	fast, 1.28%	border, 1.18%	agent, 1.16%	holder, 1.12%	cartel, 0.92%	department, 0.91%
18	police, 4.31%	officer, 2.92%	department, 0.86%	chief, 0.85%	arrest, 0.73%	enforcement, 0.66%	charge, 0.45%	force, 0.40%	detective, 0.39%
19	mental, 4.52%	health, 2.47%	illness, 2.15%	treatment, 1.11%	mentally, 0.97%	ill, 0.82%	database, 0.71%	psychiatric, 0.70%	patient, 0.67%
20	city, 5.81%	york, 1.91%	council, 1.35%	chicago, 1.25%	mayor, 1.13%	ordinance, 1.11%	street, 0.83%	giuliani, 0.70%	illegal, 0.65%
21	clinton, 4.65%	mrs, 2.01%	dole, 1.47%	president, 0.99%	campaign, 0.70%	house, 0.62%	today, 0.61%	congress, 0.52%	sander, 0.49%
22	schumer, 5.55%	amato, 5.46%	vote, 1.69%	senator, 1.16%	campaign, 1.10%	charles, 0.80%	york, 0.66%	alfonse, 0.60%	al, 0.56%
23	industry, 2.94%	suit, 2.15%	maker, 1.77%	lawsuit, 1.76%	manufacturer, 1.75%	lawyer, 1.37%	file, 0.81%	company, 0.79%	product, 0.78%
24	amendment, 2.88%	right, 2.72%	second, 1.91%	militia, 1.81%	arm, 1.76%	bear, 1.50%	constitution, 0.91%	individual, 0.88%	constitutional, 0.74%
25	suicide, 5.14%	rate, 2.62%	death, 1.57%	homicide, 1.43%	percent, 1.01%	united, 0.92%	american, 0.77%	high, 0.73%	die, 0.65%
26	list, 2.77%	terrorist, 2.37%	watch, 1.52%	terrorism, 1.37%	terror, 0.96%	buy, 0.95%	orlando, 0.93%	attack, 0.72%	fly, 0.66%
27	dealer, 3.65%	firearm, 1.60%	sell, 1.47%	license, 1.41%	sale, 1.26%	bureau, 1.21%	federal, 1.11%	buy, 0.80%	trace, 0.79%
28	republican, 2.76%	democrat, 2.30%	vote, 2.09%	senate, 2.05%	house, 1.78%	measure, 1.42%	senator, 1.42%	committee, 0.85%	legislation, 0.78%
29	bush, 4.46%	gore, 2.18%	president, 1.08%	kerry, 0.92%	support, 0.72%	campaign, 0.69%	lapierre, 0.63%	texas, 0.62%	candidate, 0.58%

<Concealed Carry> articles distribution 1985-2018

<Assault Weapons Ban> articles distribution 1985-2018
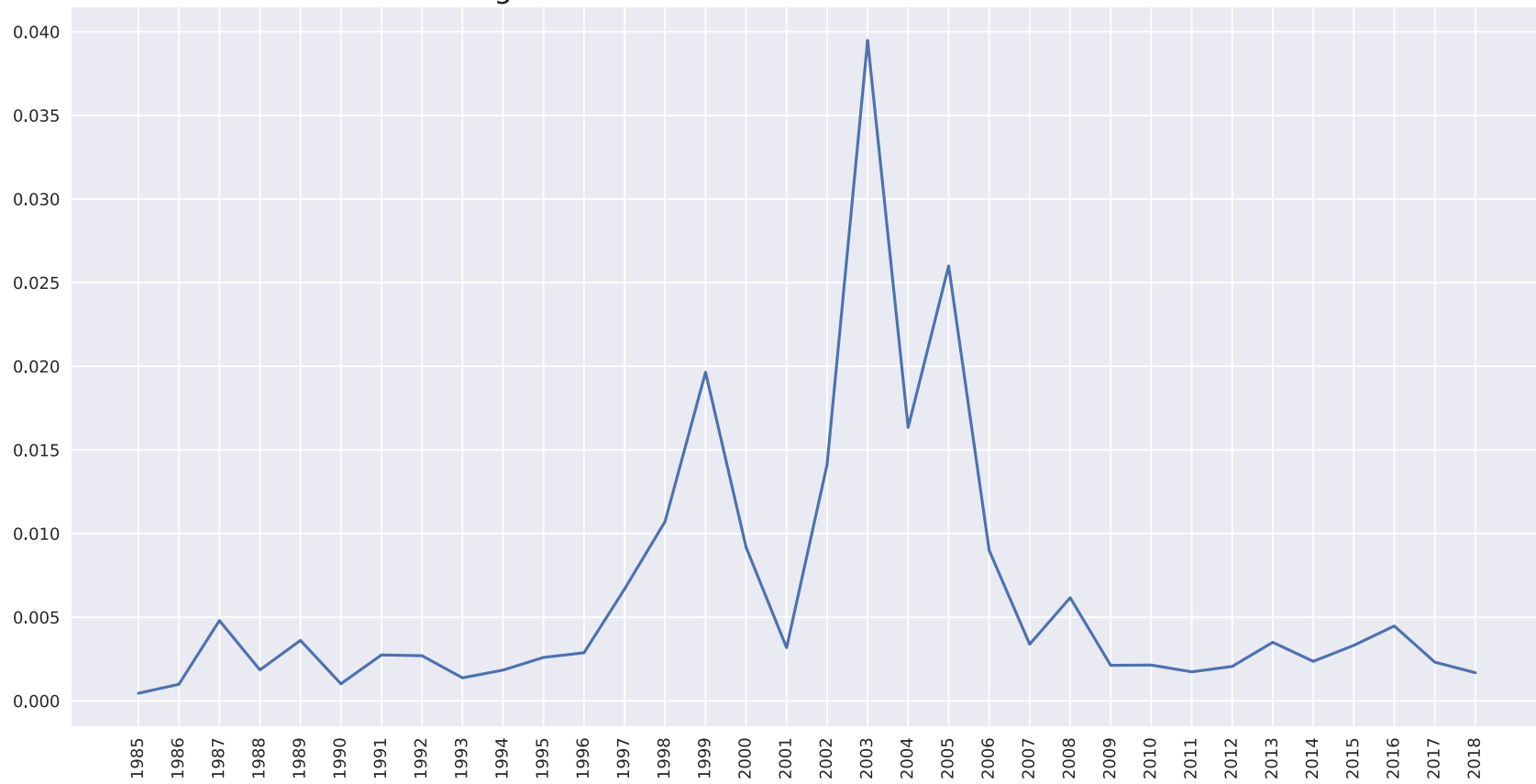
<Lawsuits against Manufacturers> articles distribution 1985-2018

<Mental Health> articles distribution 1985-2018