

City Semester
Problem Set One ¹

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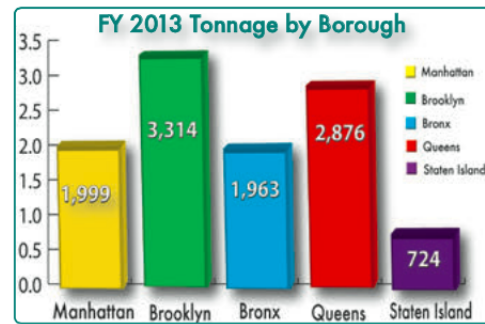
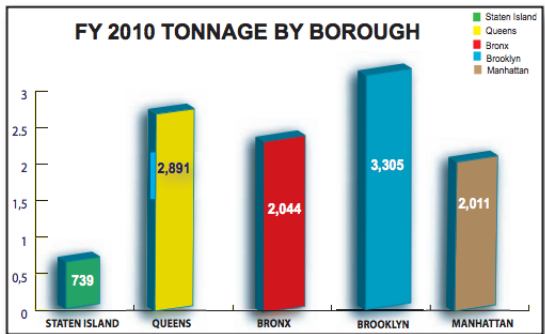
Name: _____

- Visit NYC Independent Budget Office's site: New York By The Numbers—<http://ibo.nyc.ny.us/cgi-park2/>
Find one graph/dataset that interests you, prepare a short presentation (1-2 minutes) for the group on why you chose the dataset, what you find interesting about it, and what others may find surprising about it. (Please use the archive links on the right as well so that we can all have different graphs/datasets.)

	Dec 13	Jan 14	Feb 14	Mar 14	Apr 14	May 14	Jun 14	Jul 14	Aug 14	Sep 14	Oct 14	Nov 14	% Change From Previous Month	Current Month 2013	Current Month 2014	% Change From Month in Previous Year	YTD 2013	YTD 2014	% Change YTD
Felony Arrests within NYC																			
VFO	2,058	2,221	1,936	2,250	2,180	2,412	2,513	2,526	2,445	2,199	2,383	2,079	-12.8%	2,078	2,079	0.0%	25,159	25,144	-0.1%
Drug	1,157	1,526	1,312	1,547	1,481	1,738	1,339	1,632	1,551	1,356	1,615	1,384	-14.3%	1,618	1,384	-14.5%	18,344	16,481	-10.2%
VTL	143	204	185	206	171	191	139	138	148	140	172	160	-7.0%	171	160	-6.4%	1,723	1,854	7.6%
Other	3,131	3,804	3,348	3,757	3,752	3,967	3,777	4,097	3,835	3,783	4,190	3,522	-15.9%	3,448	3,522	2.1%	39,413	41,832	6.1%
Total Felony	6,489	7,755	6,781	7,760	7,584	8,308	7,768	8,393	7,979	7,478	8,360	7,145	-14.5%	7,315	7,145	-2.3%	84,639	85,311	0.8%
Misdemeanor Arrests within NYC																			
VTL	759	759	811	919	787	874	657	742	757	630	780	765	-1.9%	830	765	-7.8%	8,508	8,481	-0.3%
Drug	3,964	4,850	4,646	5,466	5,340	5,540	4,957	5,324	5,467	4,917	5,549	3,373	-39.2%	4,719	3,373	-28.5%	55,062	55,429	0.7%
Other	11,716	13,111	12,562	14,696	13,963	14,308	13,089	13,632	13,310	12,704	13,691	12,032	-12.1%	12,549	12,032	-4.1%	147,367	147,098	-0.2%
Total Misdemeanor	16,439	18,720	18,019	21,081	20,090	20,722	18,703	19,698	19,534	18,251	20,020	16,170	-19.2%	18,098	16,170	-10.7%	210,937	211,008	0.0%
Total Arrest	22,928	26,475	24,800	28,841	27,674	29,030	26,471	28,091	27,513	25,729	28,380	23,315	-17.8%	25,413	23,315	-8.3%	295,576	296,319	0.3%

- How many total arrests were made in NYC from 12/2013 to 11/2014? $296,319$
- What percentage of total crimes were felonies? $\frac{95,311}{296,319} = 28.29\%$
- What percentage of July misdemeanor arrests were drug related? $\frac{5,324}{19,698} = 27.078\%$
- Explain what the numbers 0.0% and -0.1% in the VFO row mean in the context of the chart and explain how the numbers were calculated.
- Do you see any patterns in arrests over the course of the year? Describe.
- Compare 2014 with 2013. Write a short summary supported by figures from the table that you could imagine being presented as a summation of crime in NYC in 2014.

¹questions thanks to Lauren Nelson



8. Approximately how many tons of waste were disposed of in all of 2010? What about 2013?
 $10,990 \text{ tons/day}$ $4,011 \times 10^6$ $108,76 \text{ tons/day}$ 3.97×10^6
9. What was the percent change from 2010 to 2013 in tons of daily waste per year for each borough?
 $\text{Staten Is. } -2.029\%$ $\text{Queens } -0.52\%$ $\text{Bronx } -3.96\%$ $\text{Brooklyn } 0.2\%$ $\text{Manhattan } -0.597\%$
10. Look up the population of each borough in 2010 (census year). For each borough how much trash was disposed per resident?
11. Look up the geographical area of each borough. How much trash was generated per square foot in 2013? Keep careful track of units.
12. Where does it all go?