Ottawa Crime data tutorial, part two

We left off with an Excel worksheet that combined the tables containing the offences in what the Ottawa police call the five "key crime trends" – Crimes Against The Person, Crimes Against Property, Other Criminal Code of Canada Offences, Criminal Code Traffic Offences, and Drug Offences. We also created a new field for Wards.

So let's continue

2)

1) Keep the top row that contains the dates – 2012 and 2013 – and filter for and then delete the other rows that contain those dates so that you have a worksheet with no breaks.

	Α	В	С	D	E	F	G	Н		J
1			2012			2013				
2	Offence	Actual	Rate (1) So	lvency%	Actual	Rate (1) So	lvency%	3-Year Avera	%Change (2)	Ward
3	Homicide (Incidents)	0	0.0	0.0%	0	0.0	0.0%	0	0.0%	Orleans
4	Attempted Murder	0	0.0	0.0%	0	0.0	0.0%	0	0.0%	Orleans
5	Robbery	28	56.9	32.1%	13	26.3	23.1%	23	-53.6%	Orleans
6	Assault (Incl. Sexual Assaults)	111	225.6	77.5%	112	226.2	61.6%	102	0.9%	Orleans
7	Other Sexual Offences	3	6.1	33.3%	8	16.2	37.5%	5	167.0%	Orleans
8	Abduction	2	4.1	100.0%	3	6.1	0.0%	2	50.0%	Orleans
9	Uttering Threats or Intimidation	15	30.5	73.3%	16	32.3	43.8%	15	6.7%	Orleans
10	Other Offences	25	50.8	52.0%	38	76.7	50.0%	33	52.0%	Orleans
11	Break and Enter	57	115.8	21.1%	46	92.9	23.9%	61	-19.3%	Orleans
12	Theft - Motor Vehicle	42	85.4	16.7%	24	48.5	37.5%	40	-42.9%	Orleans
13	Theft Over \$5000	12	24.4	16.7%	7	14.1	0.0%	10	-41.7%	Orleans
14	Theft \$5000 and Under	441	896.2	20.4%	289	583.7	17.0%	434	-34.5%	Orleans
15	Possession of Stolen Goods	10	20.3	90.0%	5	10.1	120.0%	10	-50.0%	Orleans
16	Fraud	115	233.7	19.1%	84	169.7	16.7%	98	-27.0%	Orleans
17	Mischief	229	465.4	10.0%	136	274.7	13.2%	198	-40.6%	Orleans
18	Arson	7	14.2	28.6%	7	14.1	0.0%	7	0.0%	Orleans
19	Offensive Weapons	4	8.1	75.0%	3	6.1	66.7%	5	-25.0%	Orleans
20	Bail Violations	16	32.5	100.0%	29	58.6	82.8%	22	81.3%	Orleans
21	Counterfeiting Currency	2	4.1	0.0%	3	6.1	0.0%	2	50.0%	Orleans
22	Breach Probation	2	4.1	50.0%	3	6.1	66.7%	3	50.0%	Orleans
23	Threats via the Internet	4	8.1	25.0%	1	2.0	0.0%	4	-75.0%	Orleans
24	Prostitution	0	0.0	0.0%	0	0.0	0.0%	0	0.0%	Orleans
25	Other Criminal Code Offences	18	36.6	61.1%	20	40.4	80.0%	17	11.1%	Orleans
26	Dangerous Operation of Motor Vehicle	6	12.2	83.3%	0	0.0	0.0%	2	-100.0%	Orleans
27	Impaired Operation of Vehicle	44	89.4	102.0%	30	60.6	100.0%	34	-31.8%	Orleans
28	Failure to Stop or Remain	65	132.1	9.2%	71	143.4	1.4%	70	9.2%	Orleans
29	Driving Motor Vehicle While Prohibited	4	8.1	100.0%	1	2.0	100.0%	3	-75.0%	Orleans
30	Other Criminal Code Offences	0	0.0	0.0%	0	0.0	0.0%	0	0.0%	Orleans
31	Cannabis	33	67.1	93.9%	37	74.7	103.0%	39	12.1%	Orleans
32	Ecstasy (Methylenedioxyamphetamine	0	0.0	0.0%	1	2.0	100.0%	1	0.0%	Orleans
33	Crystal Meth (Methamphetamine)	0	0.0	0.0%	0	0.0	0.0%	0	0.0%	Orleans
34	Heroin	0	0.0	0.0%	1	2.0	100.0%	0	0.0%	Orleans
35	Cocaine	1	2.0	100.0%	0	0.0	0.0%	0	-100.0%	Orleans

3) Double check that your Offences column contains the offences in the five key crime trend categories and nothing extra. You can do this by applying the filter, which gives you a drop-down menu,

- listing all the offences in alphabetical order, and then checking them against the offences in the original Ottawa Crime PDF that lists the offences.
- 4) Your cleaned-up table should like look like <u>this</u> version which you can download as a reference.
- 5) So your new table has three columns for each year Actual, Rate(1) and Solvency. In this phase of the clean-up exercise, we won't worry about the columns "3-year average" and "%Change(2)". We want to keep the "Ward" field.
- 6) So we'll move it over and place it between columns D (Solvency%) AND E (Actual). To do so, select the Ward column, cut it (which then surrounds the column with broken lines).
- 7) Highlight column E (remember, Excel pastes items to the left),

	С	D	Е	F	G	Н	1	J
	2012			2013				
	Rate (1)	Solvency%	Actual	Rate (1)	Solvency%	3-Year Avera	%Change (2)	Ward
ı	0.0	0.0%	0	0.0	0.0%	0	0.0%	Orleans
١	0.0	0.0%	0	0.0	0.0%	0	0.0%	Orleans
ŧ	56.9	32.1%	13	26.3	23.1%	23	-53.6%	Orleans
	225.6	77.5%	112	226.2	61.6%	102	0.9%	Orleans
:	6.1	33.3%	8	16.2	37.5%	5	167.0%	Orleans
!	4.1	100.0%	3	6.1	0.0%	2	50.0%	Orleans
i	30.5	73.3%	16	32.3	43.8%	15	6.7%	Orleans
i	50.8	52.0%	38	76.7	50.0%	33	52.0%	Orleans
,	115.8	21.1%	46	92.9	23.9%	61	-19.3%	Orleans

9)and use the "Insert Cut Cells" option from the menu.

	А	В	С	D	Е	F	G	Н	1	J
1			2012			Ī	2013			
2	Offence	Actual	Rate (1)	Solvency%	Ward	Actual	Rate (1)	Solvency%	3-Year Avera	%Change (2)
3	Homicide (Incidents)	0	0.0	0.0%	Orleans	0	0.0	0.0%	0	0.0%
4	Attempted Murder	0	0.0	0.0%	Orleans	0	0.0	0.0%	0	0.0%
5	Robbery	28	56.9	32.1%	Orleans	13	26.3	23.1%	23	-53.6%
6	Assault (Incl. Sexual Assaults)	111	225.6	77.5%	Orleans	112	226.2	61.6%	102	0.9%
7	Other Sexual Offences	3	6.1	33.3%	Orleans	8	16.2	37.5%	5	167.0%
8	Abduction	2	4.1	100.0%	Orleans	3	6.1	0.0%	2	50.0%
9	Uttering Threats or Intimidation	15	30.5	73.3%	Orleans	16	32.3	43.8%	15	6.7%
10	Other Offences	25	50.8	52.0%	Orleans	38	76.7	50.0%	33	52.0%
11	Break and Enter	57	115.8	21.1%	Orleans	46	92.9	23.9%	61	-19.3%
12	Theft - Motor Vehicle	42	85.4	16.7%	Orleans	24	48.5	37.5%	40	-42.9%
13	Theft Over \$5000	12	24.4	16.7%	Orleans	7	14.1	0.0%	10	-41.7%
14	Theft \$5000 and Under	441	896.2	20.4%	Orleans	289	583.7	17.0%	434	-34.5%
15	Possession of Stolen Goods	10	20.3	90.0%	Orleans	5	10.1	120.0%	10	-50.0%
16	Fraud	115	233.7	19.1%	Orleans	84	169.7	16.7%	98	-27.0%
17	Mischief	229	465.4	10.0%	Orleans	136	274.7	13.2%	198	-40.6%

11) Delete the last two columns I and J

4	А	В	С	D	Е	F	G	Н
1			2012				2013	
2	Offence	Actual	Rate (1)	Solvency%	Ward	Actual	Rate (1)	Solvency%
3	Homicide (Incidents)	0	0.0	0.0%	Orleans	0	0.0	0.0%
4	Attempted Murder	0	0.0	0.0%	Orleans	0	0.0	0.0%
5	Robbery	28	56.9	32.1%	Orleans	13	26.3	23.1%
6	Assault (Incl. Sexual Assaults)	111	225.6	77.5%	Orleans	112	226.2	61.6%
7	Other Sexual Offences	3	6.1	33.3%	Orleans	8	16.2	37.5%
8	Abduction	2	4.1	100.0%	Orleans	3	6.1	0.0%
9	Uttering Threats or Intimidation	15	30.5	73.3%	Orleans	16	32.3	43.8%
10	Other Offences	25	50.8	52.0%	Orleans	38	76.7	50.0%
11	Break and Enter	57	115.8	21.1%	Orleans	46	92.9	23.9%
12	Theft - Motor Vehicle	42	85.4	16.7%	Orleans	24	48.5	37.5%
13	Theft Over \$5000	12	24.4	16.7%	Orleans	7	14.1	0.0%
14	Theft \$5000 and Under	441	896.2	20.4%	Orleans	289	583.7	17.0%
15	Possession of Stolen Goods	10	20.3	90.0%	Orleans	5	10.1	120.0%
16	Fraud	115	233.7	19.1%	Orleans	84	169.7	16.7%
17	Mischief	229	465.4	10.0%	Orleans	136	274.7	13.2%
18	Arson	7	14.2	28.6%	Orleans	7	14.1	0.0%
19	Offencive Weanone	4	Ω 1	75 በ%	Orleans	2	6.1	66 7%

- 12)
- 13) In order to prepare a table for a pivot table, each row must contain the same information which can be grouped together. So far, what we're missing is a "Year" field.
- 14) Insert a column between E and D, and call it "Year".

	A	В	С	D	Е	F	G	Н	1
1			2012			Ì		2013	
2	Offence	Actual	Rate (1)	Solvency%	Year	Ward	Actual	Rate (1)	Solvency%
3	Homicide (Incidents)	0	0.0	0.0%		Orleans	0	0.0	0.0%
4	Attempted Murder	0	0.0	0.0%		Orleans	0	0.0	0.0%
5	Robbery	28	56.9	32.1%		Orleans	13	26.3	23.1%
6	Assault (Incl. Sexual Assaults)	111	225.6	77.5%		Orleans	112	226.2	61.6%
7	Other Sexual Offences	3	6.1	33.3%		Orleans	8	16.2	37.5%
8	Abduction	2	4.1	100.0%		Orleans	3	6.1	0.0%
9	Uttering Threats or Intimidation	15	30.5	73.3%		Orleans	16	32.3	43.8%
10	Other Offences	25	50.8	52.0%		Orleans	38	76.7	50.0%
11	Break and Enter	57	115.8	21.1%		Orleans	46	92.9	23.9%
12	Theft - Motor Vehicle	42	85.4	16.7%		Orleans	24	48.5	37.5%
13	Theft Over \$5000	12	24.4	16.7%		Orleans	7	14.1	0.0%
14	Theft \$5000 and Under	441	896.2	20.4%		Orleans	289	583.7	17.0%
15	Possession of Stolen Goods	10	20.3	90.0%		Orleans	5	10.1	120.0%
16	Fraud	115	233.7	19.1%		Orleans	84	169.7	16.7%
17	Mischief	229	465.4	10.0%		Orleans	136	274.7	13.2%
18	Arson	7	14.2	28.6%		Orleans	7	14.1	0.0%
19	Offensive Weapons	4	8.1	75.0%		Orleans	3	6.1	66.7%
20	Bail Violations	16	32.5	100.0%		Orleans	29	58.6	82.8%
21	Counterfeiting Currency	2	4.1	0.0%		Orleans	3	6.1	0.0%
22	Breach Probation	2	4.1	50.0%		Orleans	3	6.1	66.7%
23	Threats via the Internet	4	8.1	25.0%		Orleans	1	2.0	0.0%

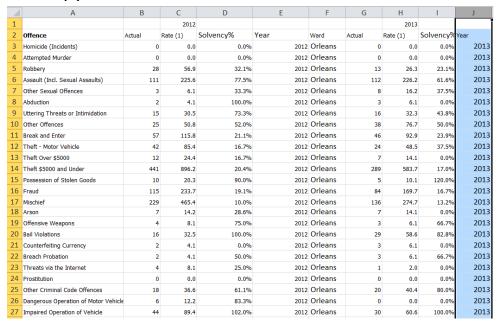
- 15)
- 16) Format the column as "general" type 2012 and copy the result the bottom.

	А	В	С	D	Е	F	G	Н	1
1			2012					2013	
2	Offence	Actual	Rate (1)	Solvency%	Year	Ward	Actual	Rate (1)	Solvency%
3	Homicide (Incidents)	0	0.0	0.0%	2012	Orleans	0	0.0	0.0%
4	Attempted Murder	0	0.0	0.0%	2012	Orleans	0	0.0	0.0%
5	Robbery	28	56.9	32.1%	2012	Orleans	13	26.3	23.1%
6	Assault (Incl. Sexual Assaults)	111	225.6	77.5%	2012	Orleans	112	226.2	61.6%
7	Other Sexual Offences	3	6.1	33.3%	2012	Orleans	8	16.2	37.5%
8	Abduction	2	4.1	100.0%	2012	Orleans	3	6.1	0.0%
9	Uttering Threats or Intimidation	15	30.5	73.3%	2012	Orleans	16	32.3	43.8%
10	Other Offences	25	50.8	52.0%	2012	Orleans	38	76.7	50.0%
11	Break and Enter	57	115.8	21.1%	2012	Orleans	46	92.9	23.9%
12	Theft - Motor Vehicle	42	85.4	16.7%	2012	Orleans	24	48.5	37.5%
13	Theft Over \$5000	12	24.4	16.7%	2012	Orleans	7	14.1	0.0%
14	Theft \$5000 and Under	441	896.2	20.4%	2012	Orleans	289	583.7	17.0%
15	Possession of Stolen Goods	10	20.3	90.0%	2012	Orleans	5	10.1	120.0%
16	Fraud	115	233.7	19.1%	2012	Orleans	84	169.7	16.7%
17	Mischief	229	465.4	10.0%	2012	Orleans	136	274.7	13.2%
18	Arson	7	14.2	28.6%	2012	Orleans	7	14.1	0.0%
19	Offensive Weapons	4	8.1	75.0%	2012	Orleans	3	6.1	66.7%
20	Bail Violations	16	32.5	100.0%	2012	Orleans	29	58.6	82.8%
21	Counterfeiting Currency	2	4.1	0.0%	2012	Orleans	3	6.1	0.0%
22	Breach Probation	2	4.1	50.0%	2012	Orleans	3	6.1	66.7%
23	Threats via the Internet	4	8.1	25.0%	2012	Orleans	1	2.0	0.0%
24	Prostitution	0	0.0	0.0%	2012	Orleans	0	0.0	0.0%
25	Other Criminal Code Offences	18	36.6	61.1%	2012	Orleans	20	40.4	80.0%

18) Label column J Year, type 2013 in the first cell under the label and copy it to the bottom.

17)

19)



20) Finally, copy the Ward field, and paste it in column K.

1	Α	В	С	D	Е	F	G	Н	1	J	K
1			2012					2013			
2	Offence	Actual	Rate (1)	Solvency%	Year	Ward	Actual	Rate (1)	Solvency%Y	ear	Ward
3	Homicide (Incidents)	0	0.0	0.0%	2012	Orleans	0	0.0	0.0%	2013	Orleans
4	Attempted Murder	0	0.0	0.0%	2012	Orleans	0	0.0	0.0%	2013	Orleans
5	Robbery	28	56.9	32.1%	2012	Orleans	13	26.3	23.1%	2013	Orleans
6	Assault (Incl. Sexual Assaults)	111	225.6	77.5%	2012	Orleans	112	226.2	61.6%	2013	Orleans
7	Other Sexual Offences	3	6.1	33.3%	2012	Orleans	8	16.2	37.5%	2013	Orleans
8	Abduction	2	4.1	100.0%	2012	Orleans	3	6.1	0.0%	2013	Orleans
9	Uttering Threats or Intimidation	15	30.5	73.3%	2012	Orleans	16	32.3	43.8%	2013	Orleans
10	Other Offences	25	50.8	52.0%	2012	Orleans	38	76.7	50.0%	2013	Orleans
11	Break and Enter	57	115.8	21.1%	2012	Orleans	46	92.9	23.9%	2013	Orleans
12	Theft - Motor Vehicle	42	85.4	16.7%	2012	Orleans	24	48.5	37.5%	2013	Orleans
13	Theft Over \$5000	12	24.4	16.7%	2012	Orleans	7	14.1	0.0%	2013	Orleans
14	Theft \$5000 and Under	441	896.2	20.4%	2012	Orleans	289	583.7	17.0%	2013	Orleans
15	Possession of Stolen Goods	10	20.3	90.0%	2012	Orleans	5	10.1	120.0%	2013	Orleans
16	Fraud	115	233.7	19.1%	2012	Orleans	84	169.7	16.7%	2013	Orleans
17	Mischief	229	465.4	10.0%	2012	Orleans	136	274.7	13.2%	2013	Orleans
18	Arson	7	14.2	28.6%	2012	Orleans	7	14.1	0.0%	2013	Orleans
19	Offensive Weapons	4	8.1	75.0%	2012	Orleans	3	6.1	66.7%	2013	Orleans
20	Bail Violations	16	32.5	100.0%	2012	Orleans	29	58.6	82.8%	2013	Orleans
21	Counterfeiting Currency	2	4.1	0.0%	2012	Orleans	3	6.1	0.0%	2013	Orleans
22	la tate	_		E0 001	2012	0-1	_		cc 701	2012	0-1

22) Now we don't need the first row, so delete it.



23) Select the offences in column A



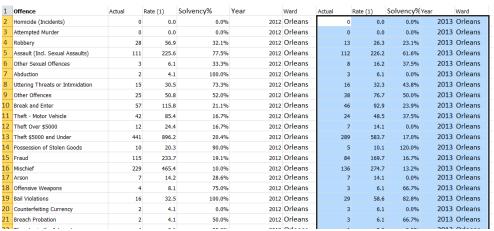
21)

25)

26) Copy them, and paste the contents beginning in A818



- 27)
- 28) You'll notice that there is no need for a label because we already know that this column contains Offences.
- 29) Select the contents in columns G, H, I, J and K, use the "cut" option....



30)

31)scroll down to B818....

812	Cannabis	30	75.3	
813	Ecstasy (Methylenedioxyamphetamine	0	0.0	
814	Crystal Meth (Methamphetamine)	0	0.0	
815	Heroin	0	0.0	
816	Cocaine	7	17.6	
817	Other Controlled Drugs and Substance	2	5.0	
818	Homicide (Incidents)			
819	Attempted Murder			
820	Robbery			
821	Assault (Incl. Sexual Assaults)			
822	Other Sexual Offences			
823	Abduction			
824	Uttering Threats or Intimidation			
825	Other Offences			

32) 825 Other Offence 33)and paste.

816 Coca	aine	7	17.6	57.1%	2012	Knoxdale-	Merivale
	er Controlled Drugs and Substance		5.0	100.0%		Knoxdale-	
818 Hom	nicide (Incidents)	0	0.0	0.0%	2013	Orleans	
819 Atte	mpted Murder	0	0.0	0.0%	2013	Orleans	
820 Robi	bery	13	26.3	23.1%	2013	Orleans	
821 Assa	ault (Incl. Sexual Assaults)	112	226.2	61.6%	2013	Orleans	
822 Othe	er Sexual Offences	8	16.2	37.5%	2013	Orleans	
823 Abd	uction	3	6.1	0.0%	2013	Orleans	
824 Utte	ring Threats or Intimidation	16	32.3	43.8%	2013	Orleans	
825 Othe	er Offences	38	76.7	50.0%	2013	Orleans	
826 Brea	ak and Enter	46	92.9	23.9%	2013	Orleans	
827 The	ft - Motor Vehicle	24	48.5	37.5%	2013	Orleans	
828 The	ft Over \$5000	7	14.1	0.0%	2013	Orleans	
829 The	ft \$5000 and Under	289	583.7	17.0%	2013	Orleans	
830 Poss	session of Stolen Goods	5	10.1	120.0%	2013	Orleans	
831 Frau	ıd	84	169.7	16.7%	2013	Orleans	
832 Misc	chief	136	274.7	13.2%	2013	Orleans	
833 Arso	on	7	14.1	0.0%	2013	Orleans	
834 Offe	ensive Weapons	3	6.1	66.7%	2013	Orleans	
835 Bail	Violations	29	58.6	82.8%	2013	Orleans	
836 Cour	nterfeitina Currencv	3	6.1	0.0%	2013	Orleans	

35) Delete the column labels in G, H, I, J and K.

1	A	В	С	D	Е	F	G	Н	1	J	K
1	Offence	Actual	Rate (1)	Solvency%	Year	Ward	Actual	Rate (1)	Solvency%	Year	Ward
2	Homicide (Incidents)	0	0.0	0.0%	2012	Orleans					
3	Attempted Murder	0	0.0	0.0%	2012	Orleans					
4	Robbery	28	56.9	32.1%	2012	Orleans					
5	Assault (Incl. Sexual Assaults)	111	225.6	77.5%	2012	Orleans					
6	Other Sexual Offences	3	6.1	33.3%	2012	Orleans					
7	Abduction	2	4.1	100.0%	2012	Orleans					
8	Uttering Threats or Intimidation	15	30.5	73.3%	2012	Orleans					
9	Other Offences	25	50.8	52.0%	2012	Orleans					
10	Break and Enter	57	115.8	21 196	2012	Orleans					

34)

36)

37) Now we have <u>a table</u> – or flat file -- that can be converted into a pivot table.

38)