

## **Crime Analysis**

Skills Check				
Difficulty	2			
Formatting	$\checkmark$			
Functions	$\checkmark$			
Charts	$\checkmark$			
Sorting				
Extrapolating	$\checkmark$			

The information in the table shows the breakdown of crimes that occurred in Hampton.

Crime	1999	2000	2001	2002
Burglary (Residential)	25	24	49	32
Burglary (Commercial)	3	5	3	5
Burglary (Others)	3	2	4	5
Theft of cars	5	1	8	14
Theft of bikes	3	0	10	5
Theft from cars	12	5	12	26
Theft from shops	8	14	19	3
Property damage	2	0	1	2
Minor assault	1	1	2	3
Other crimes	3	2	1	4

## Tasks

- **a. Open** a new spreadsheet and copy the data.
- **b.** Adjust the **width** of the first column to 140 pixels, and the remainder of the columns to 70. Do this by dragging the lines in the grey area at the top of each column.
- c. Leave a space, then add 3 rows that calculate the 'Total Burglary' [=SUM(B2:B4)], 'Total Theft' [=SUM(B5:B8)] and 'Total Crimes' [=SUM(B2:B11)].
- **d.** Select Row 1 (headings) and Row 5 (theft of cars) together. Open the chart wizard and select an '**xy** scatter with data points connected by smoothed lines'. Accept all other default settings and click 'Finish'. Place the graph below the data, across columns A–E.
- e. Add a column calculating the percentage change in each crime from the year 2001 to the year 2002. Call this column '2001/2 Change'. Format as a percentage. The title should overlap the next cell. [=(E2-D2)/D2].
- f. Increase the size of the first row to 40 pixels.
- **g.** Select the first row again. Click on '**Format**' from the main menu then select 'Cells'. Click on the 'Alignment' tab. Choose to 'Wrap text' and change the vertical font alignment to 'Top'.
- **h.** Add another column showing the likely crime figures for the **year 2003**, based on a similar change to the previous year. Call this column '2003 Predicted'. [=E2+E2\*F2]
- i. Add a **pie chart** for the '2003 predicted' data. Make sure that you select the 1<sup>st</sup> column as well as the data so that the titles appear on your chart. Do not select the calculated totals data. Place the pie chart under your 'xy scatter' graph.
- **j.** Add some **formatting** to improve the presentation of your spreadsheet. Make sure that all the labels can be seen in your pie chart.
- k. Save your work as "Crime Analysis".