Comparison Data

Graph Number	Data set 1	Data set 2	Correlation	Explanation	Correlation Coefficient	Explanation	Shropshire's Position
Operational Staff Costs							
1	Wholetime	RDS	-0.6402	There is a reasonable negative relationship between the number of WT and RDS firefighters (As one falls the other rises)	Not applicable to this comparison		SFRS is on the trend line.
2	Wholetime	Area	-0.4270	There is a negative relationship between the area of a FRS and its WT costs i.e. as the size of area increases its WT costs fall (rural aspects)	0.1824	No predication can be made for the number of Ff and the size of a FRS area	SFRS is below the trend line for this measure
3	RDS	Area	0.5319	There is a positive relationship for RDS staff i.e. as the cost of providing RDS cover rise so does the area of the FS (Sparcity)	0.283	No predication can be made for the number of Ff and the size of a FRS area	SFRS is above the trend line for this measure
4	Control	Area	-0.1298	There is no correlation between area and the number of control staff	0.0169	No prediction can be made on this measure.	SFRS is on the trend line.
Officer Costs							
5	Area per Person	Area per Officer	0.9465	There is a very strong positive relationship between the area per person and area per officer	0.8958	An accurate prediction can be made for this indicator	SFRS is on the trend line for population per person but below it for the area covered per officer.
6	Sparcity	Population	0.9238	There is a very strong positive relationship between population and officer provision (as population rises so does the number of officers	0.8534	There is a very strong relationship between population and officer provision and it can be used to predict the number of officers with population increase	Shropshire is just below the trend line
7	Flexible Duty	Population	0.8062	There is a strong relationship between the population and the number of officers employed by each FRS	0.6501	Using the population numbers will give a reasonable degree of estimation of the number of flexible duty officers required but is less clear when broken down to roles (AM the least accurate and SM the most accurate)	SFRS is slightly below the trend line on the measure.
8	A Manager		0.5883		0.5952		
9	G Manger		0.5472		0.7133		
10	S Manger		0.6495		0.7366		
11	Flexible Duty	Area	0.0389	No relationship can be established for the number of officers when comparing the size of brigade areas.	0.0069	No predication can be made for the number of officers and the size of a FRS area	
12	A Manager		0.1170		0.0137		
13	G Manager		0.0196		0.0008		
14	S Manger		-0.1167		0.0136		
15	Area per Person	Area per WM & CM					
16	Watch & Crew Managers	Population	0.9856	There is a very strong positive relationship between population and officer provision (as population rises so does the number of officers	0.9715	There is an exceptionally strong relationship between population and officer provision and it can be used to predict the number of officers with population increase	Shropshire is just below the trend line
17	Watch & Crew Managers	Area	0.0129	There is no correlation between area and the number of Watch and Crew Managers	0.0361	Predicting the number of Watch and Crew managers by area will not give an accurate assessment.	
Firefighter Costs							
18	Area per Person (sparcity)	Area per Ff	0.4836	There is a moderate relationship between sparcity and the number of firefighters.	0.2338		
19	All Firefighters	Population	0.9835	There is an exceptionally strong relationship between population and officer provision (as population rises so does the number of firefighters)	0.9673	There is an exceptionally strong relationship between population and officer provision and it can be used to predict the number of firefighters with population increase	Shropshire is on the trend line

20	Firefighters	Area	-0.0907	There is no correlation between area and the number of firefighters	0.0082	No prediction can be made on this measure.	
21	WT Firefighters	Population	0.9867	There is an exceptionally strong relationship between population and officer provision (as population rises so does the number of firefighters)	0.9736	There is an exceptionally strong relationship between population and officer provision and it can be used to predict the number of firefighters with population increase	Shropshire is on the trend line
22	WT Firefighters	Area	-0.2525	There is no correlation between area and the number of firefighters	0.0638	No prediction can be made on this measure.	
23	RDS Firefighters	Population	-0.2192	There is no correlation between population and the number of RDS firefighters	0.0005	It is not possible to predict by population numbers	This is the reverse situation with WT Firefighters where predictions can be forecast on population.
24	RDS Firefighters	Area	0.6876	There is a reasonably strong relationship between the number of RDS firefighters and the area covered by the FRS	0.4728	An indication can be ascertained as to the number of firefighters required by area but no degree of accuracy can be established	Shropshire is below the trend line.
	Fire Stations						
25 25(a)	Fire Stations	Population	0.8345 0.7215	There is a reasonably strong relationship between the population and area, this decreases slightly when the Met area are removed.	0.6964 0.5206	Predicting the number of Fire Stations by population alone gives a 70% degree of accuracy	Shropshire is on the trend line
26 26a)	Fire Stations	Area	0.2706 0.6112	There is no correlation between the area and the number of fire station in each FRS, however the converse of the above is evident when the Met areas are removed; there is now a reasonably strong relationship between the number of fire stations and an FRA area.	0.0732 0.3735	No prediction can be made on this measure. Even with the removal of the Met FRA's it is still not possible to predict the number of fire stations by area alone.	Shropshire is below the trend line.
27	Fire Stations	Costs		The premises expenditure has been apportioned to each FRA on the number of fire stations as this is the only premises data supplied.			SFRS is well below the average and its premises costs are one of the cheapest for this comparison
	Pumps						
28	Pumps	Population		As the population rises so does the number of pumping appliances			
29	Pumps	Population	0.8413	There is a strong relationship between population numbers and the number of pumps.	0.7077	There is a strong relationship between population and then number of pumping appliances that are provided - as the population increases it is reasonable to expect the number of pumps to increase and vice-versa	Shropshire is above the trend line on direct comparisons, but when the coefficient of determination R2 is taken Shropshire is below the trend line. When the disproportionate effects of the Met's is taken out Shropshire is on the trend line
30	Pumps	Area	0.1879	There is no relationship between area and Pumps. When the Met's are taken out of the comparison there is a very weak (0.207) correlation	0.0353	Predicting the number of pumps by area will not give an accurate assessment.	Shropshire is below the trend line in this comparison.
31	Pumps	Population sparcity		Highlights FRS whose area is disproportiante to the number of appliances when compared with other FRS.			
	CFS/Ops Expenditure	Average	SFRS				
32	Ops	84.79%	88.71%	Some data questionable as to the proportion of budget allocated to cfs activity see chart.			
	CFS	10.34	9.36%				