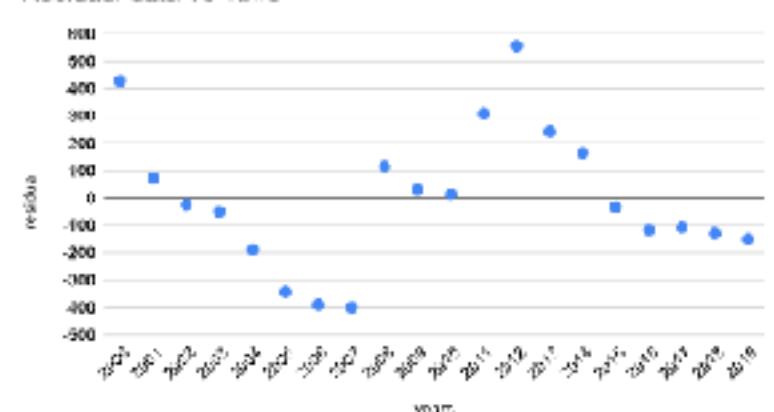


YEAR	Actual	Predicted	Residual	Residual / years	residual
2000	1442	128.535	-1313.465	-437.82	-420
2001	8753	71.658	8031.342	793.82	71.658
2002	9143	91.07	8232.93	8232.93	-28.93
2003	9164	114.815	-8049.185	-4024.93	-4024.93
2004	9207	118.14	-8088.86	-1982.18	-1982.18
2005	8704	141.575	-7292.5	-1458.5	-1458.5
2006	8507	157.21	-6950.79	-1158.46	-1158.46
2007	9040	174.749	-7995.259	-1139.3	-1139.3
2008	8751	198.701	-7752.999	-1106.62	-1106.62
2009	8263	200.316	-7262.686	-806.91	-806.91
2010	8901	216.26	-6794.74	-679.47	-679.47
2011	9091	236.889	-5799.111	-527.19	-527.19
2012	9114	254.42	-5660.58	-471.68	-471.68
2013	9145	272.068	-5478.432	-414.03	-414.03
2014	9210	291.10	-5118.89	-381.58	-381.58
2015	9172	293.226	-5139.774	-341.62	-341.62
2016	9078	299.20	-5079.78	-335.64	-335.64
2017	8945	317.365	-5222.915	-364.07	-364.07
2018	9510	321.27	-5288.63	-332.77	-332.77
2019	9060	330.109	-5368.89	-303.63	-303.63

Residual data vs Time



It appears that residuals make for an accurate measurement of the passage of time.
This is primarily because the residual is the numerical value of your prediction.

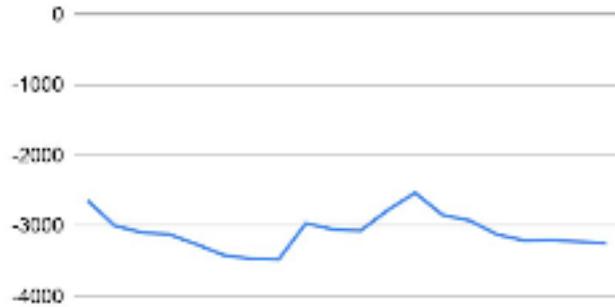
The residual values vary greatly over time and do not seem to be linearly correlated. The shape is more like a wave.

Step 2:

Residual (formula) slope = 24.5

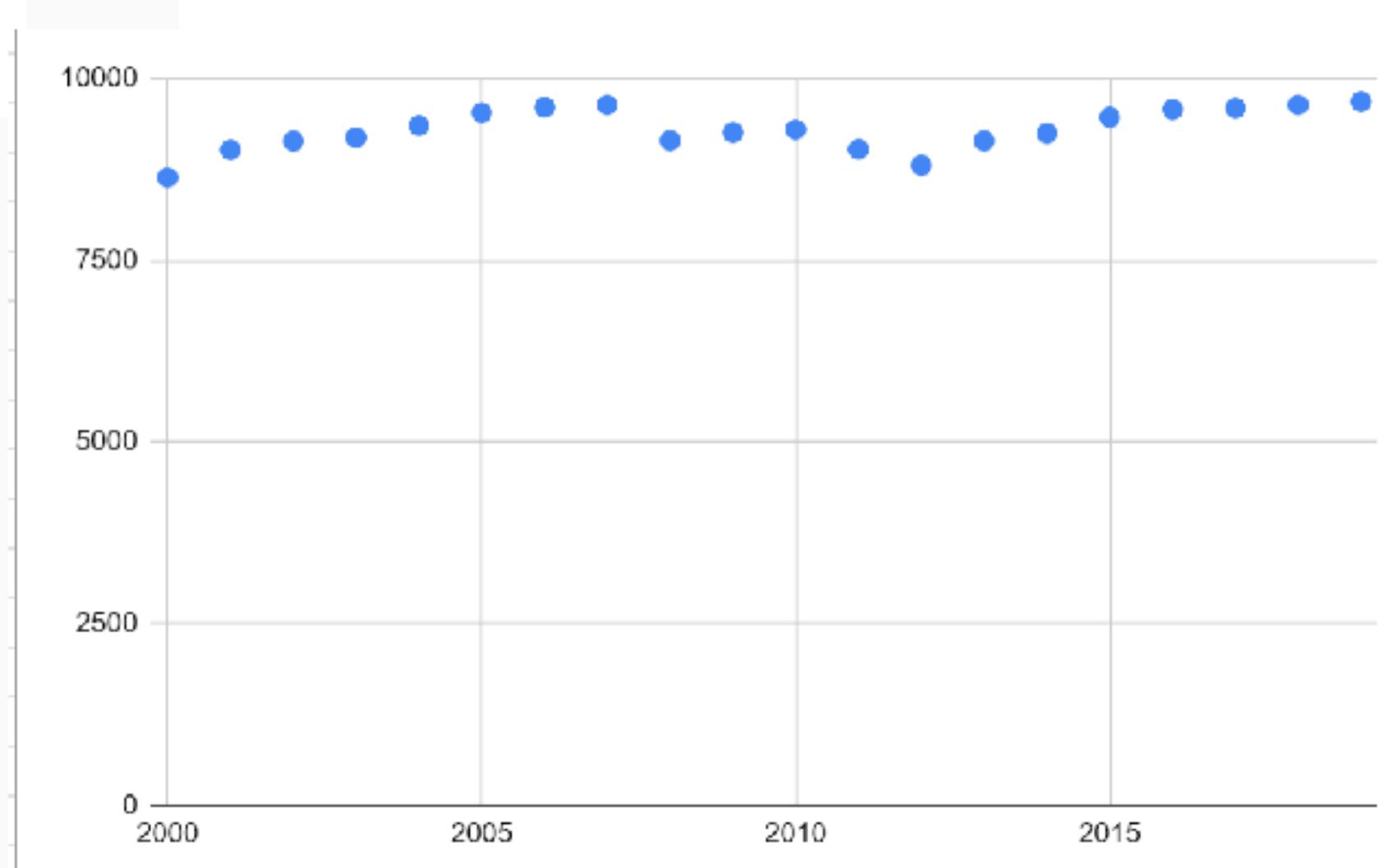


Slope = 23



Step 3:

Increasing the slope made the residuals closer to 0, varying with positive and negative numbers rather than all negative.



gression fit being

Fitted Line Plot

$$\text{Brth15to17} = 4.267 + 1.373 \text{ PovPct}$$

