

**Indian Point License Renewal Proceeding:**  
**Dr. Tolley's Square Root of Distance Regression Using Assessor Cards Data**  
**as Proposed by NYS Witness Dr. Sheppard in His Rebuttal Testimony**

statalog.SheppardSquareRoot

```

**
. *** REGRESSION: Sheppard Data set *IF*:
. *** * HOUSE AGE LESS THAN 75 YEARS,
. *** * LAST SALE OF PROPERTY IN SAMPLE,
. *** * SALE OCCURED DURING OR AFTER THE FIRST QUARTER OF 1999,
. *** * OBSERVATION FOUND TO BE FREE OF ERRORS AFTER EXAMINING ASSESSOR'S CARDS
. ***
. **
. *

```

```

. gen sqrt_dist = sqrt(ipecmiles_new)

```

```

. reg saleprice1k sqrt_dist med_income1k houseage_new attached distrai1
pilotpay_2011 saleyrqtr if houseage_new<=75 & last_sale==1
> & saleyrqtr>=1999 & bad_newid!=1

```

Source	SS	df	MS	Number of obs =	283
Model	4519218.4	7	645602.628	F( 7, 275) =	112.71
Residual	1575175.19	275	5727.90978	Prob > F =	0.0000
				R-squared =	0.7415
				Adj R-squared =	0.7350
Total	6094393.59	282	21611.3248	Root MSE =	75.683

saleprice1k	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
sqrt_dist	40.07644	32.91293	1.22	0.224	-24.71687	104.8698
med_income1k	2.331061	.3023401	7.71	0.000	1.735866	2.926256
houseage_new	-3.457792	.2992856	-11.55	0.000	-4.046974	-2.86861
attached	-146.7538	10.0997	-14.53	0.000	-166.6364	-126.8713
distraail	-1.82948	11.36787	-0.16	0.872	-24.20859	20.54963
pilotpay_2011	19.40886	8.198286	2.37	0.019	3.269485	35.54823
saleyrqtr	14.78032	2.280066	6.48	0.000	10.29171	19.26892
_cons	-29334.03	4572.71	-6.42	0.000	-38336	-20332.07

```

. outreg using Sheppard_SqRt.xls, replace
(note: file Sheppard_SqRt.xls not found)

```

	saleprice1k
sqrt_dist	40.076 (1.22)
med_income1k	2.331 (7.71)**
houseage_new	-3.458 (11.55)**
attached	-146.754 (14.53)**
distraail	-1.829 (0.16)
pilotpay_2011	19.409 (2.37)*
saleyrqtr	14.780 (6.48)**
_cons	-29,334.034 (6.42)**
R2	0.74
N	283

statalog.SheppardSquareRoot

-----  
\* p<0.05; \*\* p<0.01