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# **Philadelphia Property Taxes: Are They Fair?**

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# Property taxes are an important part of state and local government revenues

## Various Local Government Property Tax Revenue, 2017

	Revenue (\$B)	% of general revenue
School districts	212	37%
County	120	29%
Municipality	121	24%
Township	34	62%
Special District	22	11%

Source: [Urban Institute](#)

**Homes in poor neighborhoods are taxed at roughly twice the rate of those in rich areas, study shows**

The methods cities use to assess property values skew the final effective tax rates dramatically, according to a review of 26 million home sales

Source: [Washington Post](#)

**Home ownership can be a way to build wealth through real estate and increase generational wealth.**

# Property taxes are typically based on property value and tax rate

- However, property values do not always align with market value, and they often jump by orders of magnitude
- It is not always clear what drives these changes in assessed property values

News

## 165,000 Philly homeowners may be paying too much in property taxes. Is the city assessing property fairly?

An Inquirer and Daily News analysis of recent assessment and sales data found that assessment inaccuracy for residential properties remains a stubborn problem in Philadelphia.



3 bd | 2 ba | 1,217 sqft  
326 N Sloan St, Philadelphia, PA 19104

● Off market | Zestimate®: **\$833,867** | Rent Zestimate®: **\$1,600/mo**  
Est. refi payment: \$3,806/mo [Refinance your loan](#)

[Home value](#) [Owner tools](#) [Home details](#) [Neighborhood details](#) [Similar h](#)

[See complete price history](#)

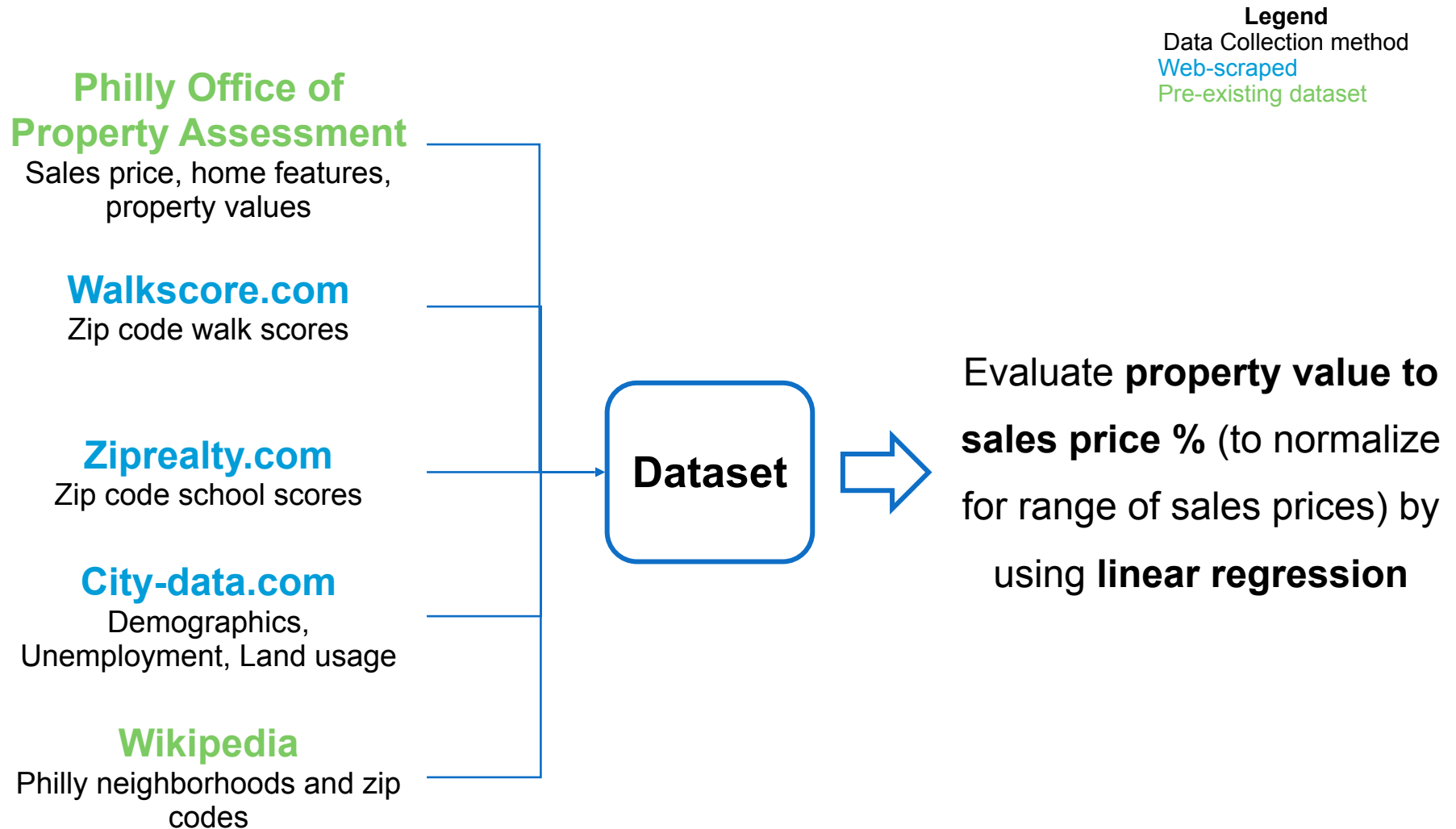
**Public tax history**

Year	Property Taxes	Tax Assessment
2018	\$8,938(+602.4%)	--
2017	\$1,272(+28.5%)	--
2016	\$991	
2015	\$991	
2014	\$991(+245.4%)	\$496,600(+8111%)
2012	\$287	\$6,048
2011	--	\$6,048

*30x increase in 6 years*

Hence, it is important to study what drives the difference between property values and sales prices

# Examined factors driving the ratio of assessed value to sales price by web scraping & running linear regression



# Resulting regression model had $R^2 = 0.50$

## Features include

Number of Rooms

General Condition

Years Since Last Sale<sup>3</sup>

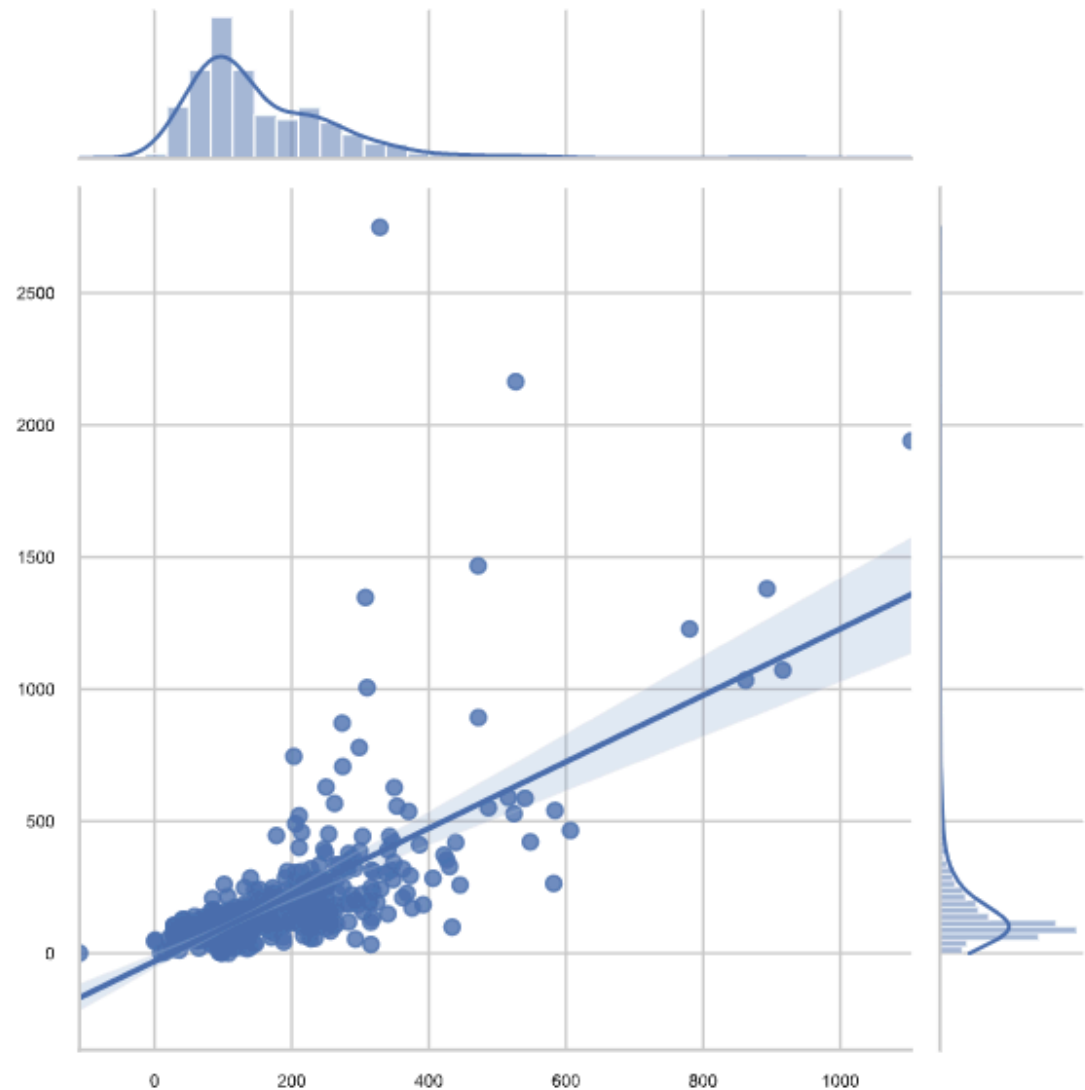
Neighborhoods

House Sales Price Ranges

*Features excluded such as: Walkscore, School Score, Unemployment Rate*

## Error Metrics

Error Metrics	
AME	69.7
RSME	13.0
MSE	169.7



# Home sales prices and neighborhoods are the biggest influencing factors in the value to price %

**More expensive houses have a lower value to price %**

Sales Price \$	coef	std err	t	P> t
10-50k	0	-	-	-
50-100k	-113.37	7.63	-14.86	0.00
100-150k+	-146.45	9.22	-15.88	0.00
150-200k	-169.59	10.31	-16.45	0.00
200k-500k	-201.29	9.56	-21.07	0.00
500k+	-244.04	14.48	-16.85	0.00

**Wide range of value to price % based on neighborhood**

Coefficient relative to Center City	Neighborhoods
0 to -50	Far Northeast Philly, Upper Northwest
-50 to -100	Kensington, Lower North, Near Northeast, West Philly
-100 to -150	Olney-Oak Lane, Southwest
Statistically not significant	Manayunk, South Philly

Source: OLS Model

# Recommendations

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- Re-evaluate criteria set by Philadelphia in 2013
- Factor in neighborhood factors, such as , in assessing property tax values, as they do a better job of predicting actual home values than current approach
- Create more transparencies in exact calculations & easier processes for appeals