

# Public Benefit of Broadband Improvement

Calculation of Property Value Increases

# Why would property values be increased with improved broadband?

- More desirable purchase
  - The Town can attract younger residents
    - Those whose lives are ones of online social connectedness
  - Attract new businesses
    - Businesses increasingly have online aspects, which, to be satisfied, need broadband
  - Business effectiveness/efficiencies increase
    - “Cloud Computing”; Software As A Service (SaaS) – using or offering; Conducting transactions, ...
- More liquidity in real estate
  - While our town is naturally beautiful, lack of connectedness causes properties to sit longer on the market

# How much might property values increase?

- Depends on the potential bandwidth available
- More is better, up to a point

*Ref:*  
*High-Speed Internet Access and Housing Values.*  
Molnar, G., Savage, S, and Sicker, D.  
Applied Economics, Aug 2018.

Currently, if my property is limited to:		With 100Mbps the value would increase by:
0 – 20Mbps		+ 3.3%
25 – 45Mbps	T	+ 1.4%
50 - <100Mbps	H	+ 0.7%
=+100Mbps	E	0.0%
	N	

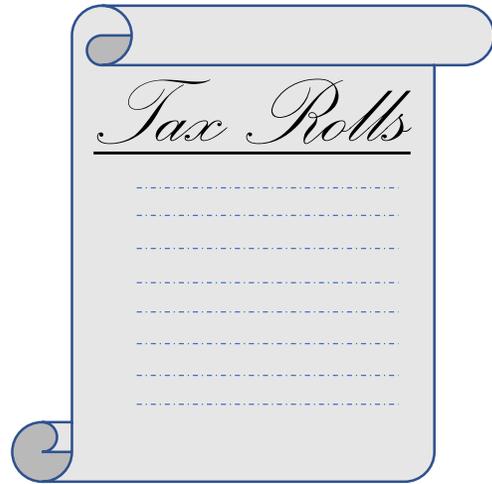
Harrisville's Aggregate Value Increase due to Broadband:  
**\$3,945,786**

# How was the figure \$3,945,786 calculated?

1. Find the average value of a property in Harrisville ( $V_{avg}$ )
2. Count the number of properties in each bandwidth category (Cat1..Cat4)
3. Multiply the number of properties in each bandwidth category by the average property value and then by the % increase for that category
  - This generates the value of the property value increases for that category
4. Finally, sum across the categories

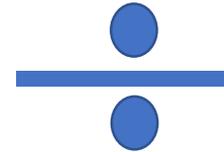
This is how it was calculated – Details follow

# 1. Find the average value of a property in Harrisville



Value\* of residential and business properties

\$210,706,831



Number of residential and business properties

965

**\$218,349 Avg**

\* This used the assessed value, not the value at sale. Therefore this metric underestimates the actual value, thus can be viewed as a very conservative measure.

## 2. Find the number of properties in each bandwidth category

- $N_{\text{Cat1}}$  (0 – 20Mbps) : 383
- $N_{\text{Cat2}}$  (25 – 45Mbps) : 319
- $N_{\text{Cat3}}$  (50 - <100Mbps ) : 138
- $N_{\text{Cat4}}$  (=+100Mbps ) : 0

Ref: Consolidated Communications response to our RFI

3. & 4. Multiply the number of properties in each bandwidth category by the average property value and then by the % increase of that category; finally, sum across the categories

$$\text{Harrisville BBValue} = \sum_{k=1}^4 ( \text{NCat}_k * V_{\text{avg}} * \text{IncCat}_k )$$

**Broadband Improvement Public Benefit**

Broadband Speed Available	Number of Locations	% Effect on Prices	Total Property Value Change	Category %
0 to 20 Mbps	383	3.30%	\$2,759,714	46%
25 to 45 Mbps	319	1.40%	\$975,147	38%
50 to 100 Mbps	138	0.70%	\$210,925	16%
> 100 Mbps	0	0.00%		0%
<b>Total</b>	<b>840</b>		<b>\$3,945,786</b>	

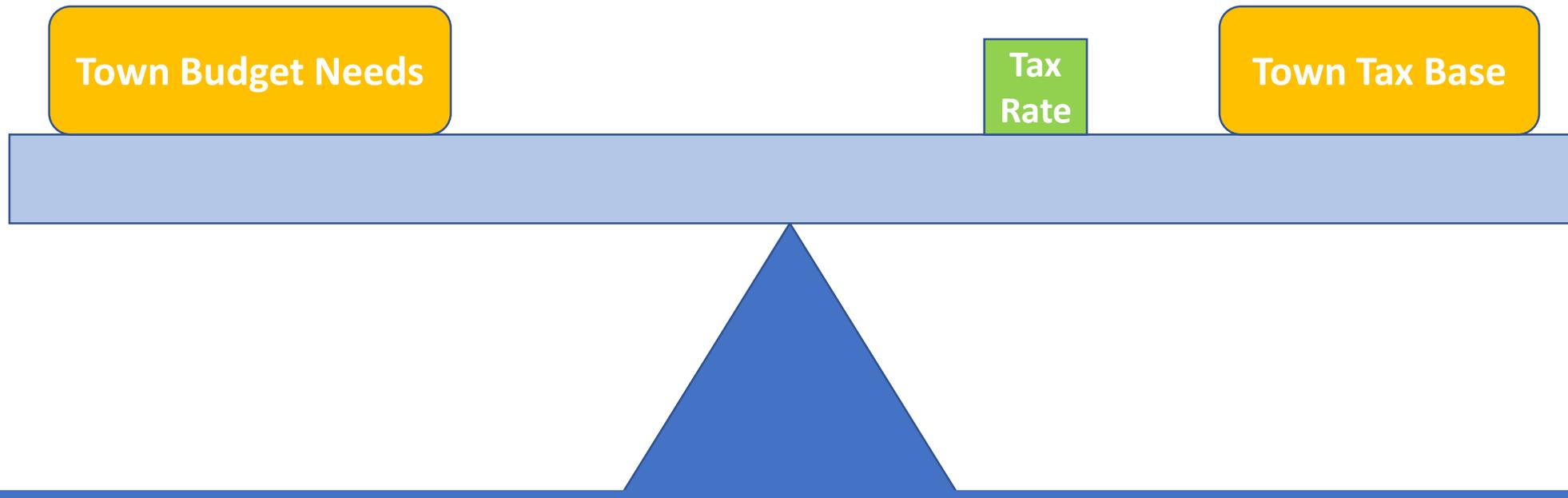
From Assessor's Office:		
	#	
total values:		\$212,533,131
- 00UTIL		\$ 1,826,300
Value for potential subscribers:		\$210,706,831
# potential subscribers:	965	
Avg Value:		\$218,349.05

**\$3,945,786**

As stated earlier, this can be considered a minimal estimate of the actual benefit

Will my taxes increase because of the increased property values?

It's a Balance



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## It's a Balance

