



Tax Bills and Circuit Breakers

Matthew Parkinson
Director of Data Analysis and CFO
October 20, 2015



An Important Disclaimer

The topics we are covering today are very complex. For virtually every rule, there is an exception. This PowerPoint deck and accompanying presentation are designed to be conceptual in nature. They do not cover every possibility. Furthermore, many formulas, explanations, and definitions are simplified for ease of demonstration.



Tax Bills – Overall equation

- Most basic formula:

Net Assessed Value

x Tax Rate

Tax Bill



Assessed Values

- Assessed Value equation:

Gross Assessed Value

- (Deductions + Exemptions + Abatements)

Net Assessed Value



Deductions and Exemptions

- Common Deductions:
 - Standard Deduction
 - Supplemental Homestead Deduction
 - Mortgage Deduction
 - Over 65 Deduction

This is not a comprehensive list.



Deductions and Exemptions

Deduction	Eligibility	Amount
Homestead Standard	<ul style="list-style-type: none">• Principal place of residence• Up to one acre	Lesser of: <ul style="list-style-type: none">• 60% of Gross AV• \$45,000
Supplemental Homestead	Same as Standard Deduction	After Standard Deduction: <ul style="list-style-type: none">• 35% of AV under \$600,000• 25% of AV over \$600,000

This is not a comprehensive list and is shorthand for convenience. Actual eligibility and amounts are more nuanced than what is listed here.



Deductions and Exemptions

Deduction	Eligibility	Amount
Mortgage	<ul style="list-style-type: none">• Owner of mortgaged real property	Lesser of: <ul style="list-style-type: none">• Balance of mortgage• $\frac{1}{2}$ of AV• \$3,000
Over 65	<ul style="list-style-type: none">• At least 65 years old• Gross income < \$25,001• Various others	Lesser of: <ul style="list-style-type: none">• $\frac{1}{2}$ of AV• \$12,480

This is not a comprehensive list and is shorthand for convenience. Actual eligibility and amounts are more nuanced than what is listed here.



Assessed Value Example

The Smith family:

- Family members:
 - John, 31
 - Sally, 29
- Residence:
 - \$100,000 Gross AV house
 - 0.75 acres
 - \$80,000 outstanding on mortgage
 - Columbus, Indiana (Bartholomew County)



Assessed Value Example

- Assessed Value equation:

Gross Assessed Value

- (Deductions + Exemptions + Abatements)

Net Assessed Value



Assessed Value Example

- Assessed Value equation:

Gross Assessed Value	\$100,000
Less Standard Deduction	(\$45,000)
Less Supplemental Deduction	(\$19,250)
Less Mortgage Deduction	(\$3,000)
<hr/>	
Net Assessed Value	\$32,750



Tax Rate

- Sum of tax rates for all funds in the taxing district
- Expressed as a decimal representing tax dollars per \$100 of Assessed Value
- A tax rate of \$1.8751 means a taxpayer will owe \$1.8751 in property taxes for every \$100 of Net Assessed Value.



Tax Bill Example

- Tax bill equation:

Net Assessed Value

x Tax Rate

Gross Tax Bill

- Credits

Net Tax Bill



Tax Bill Example

- Tax Bill equation:

Net Assessed Value	\$32,750
x Tax Rate	\$2.5124*
<hr/>	
Gross Tax Bill	\$822.81
- Credits	(\$0)
<hr/>	
Net Tax Bill	\$822.81

*At this step, there is an implied division by \$100



Full Tax Bill Example

- Full Tax Bill equation:

Gross Assessed Value

- (Deductions + Exemptions + Abatements)

Net Assessed Value

x Tax Rate

Gross Tax Bill

- Credits

Net Tax Bill



Full Tax Bill Example

- Tax Bill equation:

Gross Assessed Value	\$100,000
Less Standard Deduction	(\$45,000)
Less Supplemental Deduction	(\$19,250)
Less Mortgage Deduction	(\$3,000)
<hr/>	
Net Assessed Value	\$32,750
x Tax Rate	\$2.5124*
<hr/>	
Gross Tax Bill	\$822.81
Less Credits	(\$0)
<hr/>	
Net Tax Bill	\$822.81

*At this step, there is an implied division by \$100



Tax Bill Circuit Breaker

Circuit Breaker Type/Cap	Property Type/Eligibility
1% of Gross AV	<ul style="list-style-type: none">• Homestead
2% of Gross AV	<ul style="list-style-type: none">• Residential• Long Term Care• Agricultural
3% of Gross AV	<ul style="list-style-type: none">• Nonresidential real property• Personal property
Over 65	<ul style="list-style-type: none">• Must be Homestead property• Gross AV of Homestead less than \$160,000• At least 65 years old• Income Tax AGI less than \$30,001 (\$40,001 if married)



Full Tax Bill Example

- Tax Bill equation:

Gross Assessed Value	\$100,000
Less Standard Deduction	(\$45,000)
Less Supplemental Deduction	(\$19,250)
Less Mortgage Deduction	(\$3,000)
<hr/>	
Net Assessed Value	\$32,750
x Tax Rate	\$2.5124*
<hr/>	
Gross Tax Bill	\$822.81
Less Credits	(\$0)
<hr/>	
Net Tax Bill	\$822.81

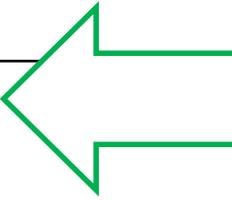
Gross Tax Bill is less than 1% of Gross AV, so no Circuit Breaker.

*At this step, there is an implied division by \$100



Same Tax Bill, Higher Rate

- Tax Bill equation:

Gross Assessed Value	\$100,000	
Less Standard Deduction	(\$45,000)	
Less Supplemental Deduction	(\$19,250)	
Less Mortgage Deduction	(\$3,000)	
<hr/>		
Net Assessed Value	\$32,750	
x Tax Rate	\$3.5000*	
<hr/>		
Gross Tax Bill	\$1,146.25	
Less Credits	(\$146.25)	
<hr/>		
Net Tax Bill	\$1,000.00	

With higher tax rate, gross tax bill now exceeds 1% of Gross AV.

*At this step, there is an implied division by \$100



CB Credit Calculation

- Tax bill will be the lower of:
 - Calculated Tax Bill OR
 - Maximum Tax Bill

Calculated Tax Bill (CTB)

\$1,146.25

Maximum Tax Bill (MTB)

Gross AV \$100,000

Credit Type 1%

Maximum Tax Bill \$1,000



CB Credit Calculation

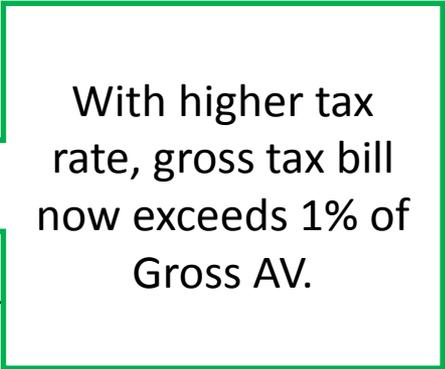
- If $CTB > MTB$ then
 CB Credit = $CTB - MTB$ else
 CB Credit = \$0

Calculated Tax Bill	\$1,146.25
Maximum Tax Bill	(\$1,000.00)
<hr/>	
1% CB Credit	\$146.25



Same Tax Bill, Higher Rate

- Tax Bill equation:

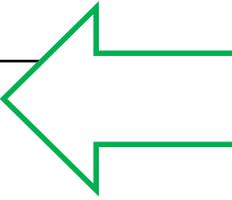
Gross Assessed Value	\$100,000	
Less Standard Deduction	(\$45,000)	
Less Supplemental Deduction	(\$19,250)	
Less Mortgage Deduction	(\$3,000)	
<hr/>		
Net Assessed Value	\$32,750	
x Tax Rate	\$3.5000*	
<hr/>		
Gross Tax Bill	\$1,146.25	
Less Credits	(\$146.25)	
<hr/>		
Net Tax Bill	\$1,000.00	

*At this step, there is an implied division by \$100



Same Tax Bill, Higher AV

- Tax Bill equation:

Gross Assessed Value	\$150,000	
Less Standard Deduction	(\$45,000)	
Less Supplemental Deduction	(\$36,750)	
Less Mortgage Deduction	(\$3,000)	
<hr/>		
Net Assessed Value	\$65,250	
x Tax Rate	\$2.5124*	
<hr/>		
Gross Tax Bill	\$1,639.34	
Less Credits	(\$139.34)	
<hr/>		
Net Tax Bill	\$1,500.00	

With higher AV,
gross tax bill also
exceeds 1% of Gross
AV.

*At this step, there is an implied division by \$100



Tax Bill Circuit Breakers

- Common circuit breaker variables:
 - Tax Rate
 - Assessed Value
 - Property Type



3% Gross AV Example

- Tax Bill equation:

Gross Assessed Value	\$1,000,000
Deductions, Exemptions, and Abatements	(\$0)
<hr/>	
Net Assessed Value	\$1,000,000
x Tax Rate	\$3.5000*
<hr/>	
Gross Tax Bill	\$35,000.00
Less Credits	(\$5,000)
<hr/>	
Net Tax Bill	\$30,000.00

*At this step, there is an implied division by \$100



1% Tax Bill with Exempt Rate

- The school unit in the district has an exempt fund with a maximum \$0.2500 rate.

Net Assessed Value	\$32,750
x Non-exempt Tax Rate	\$3.2500*
<hr/>	
Gross Non-Exempt Tax Bill	\$1,064.38
Net Assessed Value	\$32,750
x Exempt Tax Rate	\$0.2500*
<hr/>	
Exempt Tax Bill	\$81.88

*At this step, there is an implied division by \$100



1% Tax Bill with Exempt Rate

- The school unit in the district has an exempt fund with a maximum \$0.2500 rate.

Net Assessed Value	\$32,750
x Tax Rate	\$3.5000*
<hr/>	
Gross Tax Bill	\$1,146.25
Maximum Non-Exempt Tax Bill	\$1,000
+ Exempt Tax Amount	\$81.88
<hr/>	
Maximum Tax Bill	\$1,081.88

* At this step, there is an implied division by \$100



1% Tax Bill with Exempt Rate

- The school unit in the district has an exempt fund with a maximum \$0.2500 rate.

Gross Tax Bill	\$1,146.25
Maximum Tax Bill	(\$1,081.88)
<hr/>	
1% CB Credit	\$64.37



1% Tax Bill with Exempt Rate

- The school unit in the district has an exempt fund with a maximum \$0.2500 rate.

Gross Assessed Value	\$100,000
Less Standard Deduction	(\$45,000)
Less Supplemental Deduction	(\$19,250)
Less Mortgage Deduction	(\$3,000)
<hr/>	
Net Assessed Value	\$32,750
x Tax Rate	\$3.5000*
<hr/>	
Gross Tax Bill	\$1,146.25
Less Credits	(\$64.37)
<hr/>	
Net Tax Bill	\$1,081.88

*At this step, there is an implied division by \$100



County-wide CB Procedures

- Circuit breaker calculations rely primarily on abstract data.
- The quick summary:
 - Circuit breakers are calculated for individual taxpayers.
 - A taxing district has \geq \$0 in CB credits to spread
 - Circuit breakers are spread to funds and units within districts proportionally, except as otherwise specified in statute.



County-wide CB Procedures

- For explanation, I will leave out discussion of phase-in districts, TIF AV add-in, and certain other details, focusing on the big picture.
- Peabody Library, Whitley County, Indiana



County-wide CB Procedures

1. Identify whether a taxing district has circuit breaker credits. If not, stop.
 - Whitley County TD014 has circuit breaker credits.
 - 1%: \$12,934.74.
 - 2%: \$2,636.24.
 - Over 65: \$268.64.
2. Identify the Tax District's AV.
 - TD014: \$6,041,445.



County-wide CB Procedures

3. Calculate the levy for each fund. Levy based on Abstract AV = AV * Tax Rate.
 - 0101 General: $\$6,041,445 * \$0.1052 = \$6,355.60.$
 - 0180 Debt Service: $\$6,041,445 * \$0.0439 = \$2,652.19.$
4. Identify the total rate for each unit within the district.
 - Peabody Library: $\$0.1052 + \$0.0439 = \$0.1491.$
 - All other units: $\$2.2930.$



County-wide CB Procedures

5. Identify the total rate for each unit for non-exempt and non-protected funds.
 - 0101 General: \$0.1052.
6. Calculate proportional overall rate within the district for each fund for each unit.
 - 0101 General: $\$0.1052 / \$0.1491 = 70.56\%$.
 - 0180 Debt Service: $\$0.0439 / \$0.1491 = 29.44\%$.



County-wide CB Procedures

7. If the taxing district has Over 65 CB credits, allocate them proportionally within the district to each unit.
 - Peabody Library proportion:
 - $\$0.1491 / (\$0.1491 + \$2.2930) = 6.1054\%$
 - $\$268.64 * 6.1054\% = \$16.40.$
8. After allocating Over 65 CB credits to units within taxing districts, allocate to each fund proportionally within that taxing district.
 - 0101 General: $\$16.40 * 70.56\% = \11.57
 - 0180 Debt Service: $\$16.40 * 29.44\% = \$4.83.$



County-wide CB Procedures

9. For funds that are non-exempt and non-protected, calculate the fund's proportion of the total non-exempt and non-protected rate for the unit within a taxing district.
 - 0101 General: $\$0.1052 / \$0.1052 = 100\%$.



County-wide CB Procedures

10. Calculate the non-exempt total rate for every unit within a taxing district.

- Peabody Library: $\$0.1052 + \$0.0439 = \$0.1491$.

11. Calculate the non-exempt total rate for every taxing district.

- All other units: $\$2.2930$.
- Total non-exempt rate: $\$0.1491 + \$2.2930 = \$2.4421$



County-wide CB Procedures

12. Calculate each unit's percentage of the total non-exempt rate for a taxing district.

- Peabody Library: \$0.1491.
- Total district non-exempt rate: \$2.4421.
- Peabody Library's percentage: 6.1054%.

13. Obtain the taxing district's total bucket (1%, 2%, and 3%) circuit breakers.

- TD014: $\$12,934.74 + \$2,636.24 = \$15,570.98$.



County-wide CB Procedures

14. Calculate each taxing unit's total share of bucket circuit breakers within a taxing district by multiplying the unit's total non-exempt proportion by the district's total bucket circuit breakers.

- Peabody Library: $\$15,570.98 * 6.1054\% = \950.67



County-wide CB Procedures

15. Allocate circuit breakers for each unit within each taxing district by each fund's non-exempt, non-protected rate as a proportion of the unit's non-exempt, non-protected rate within that district.

- 0101 General: $\$950.67 * 100\% = \950.67

16. If the total circuit breakers allocated to non-protected funds exceed levies for non-protected funds, the remaining CB credits are allocated to protected funds for that taxing unit within that taxing district.

- $\$950.67 \text{ CBs} < \$6,355.60 \text{ levy, so N/A.}$



County-wide CB Procedures

17. Total circuit breaker credits for a fund for a unit within a taxing district = Bucket CBs + Over 65 CBs
- 0101 General: $\$950.67 + \$11.57 = \$962.24$.
 - 0180 Debt Service: $\$0 + \$4.83 = \$4.83$.



County-wide CB Procedures

18. Total circuit breaker credits for a fund for a unit regardless of taxing district = sum of CB credits for that fund for that unit for all taxing districts.

Peabody Library		
Taxing District	0101 General	0180 Debt Service
003	\$203.45	\$84.90
004	\$18,730.39	\$302.21
011	\$302.21	\$217.97
014	\$962.24	\$4.83
Total	\$20,418.42	\$609.91



Notes about Circuit Breakers

- Exempt funds generally do not receive circuit breaker credits.
 - Exception: Over 65 Circuit Breaker.
- Protected funds generally do not receive circuit breaker credits.
 - Exception 1: Over 65 Circuit Breaker.
 - Exception 2: All non-exempt, non-protected funds are fully exhausted by circuit breakers within a taxing district.



Contact Information

- Matthew Parkinson
 - Director of Data Analysis and CFO
 - mparkinson@dlgf.in.gov
 - 317-232-3759