

**NCDOR**

**NORTH  
CAROLINA  
DEPARTMENT  
OF REVENUE**

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# **Aging Farm Machinery Property Tax Abatement Study**

**Session Law 2017-108  
Senate Bill 615**

**January 30, 2018**

## Commission's Considerations:

- Whether aging farm machinery should be excluded from property tax.
- If excluded, whether an 80% property tax exclusion is an appropriate amount.
- Fiscal impact on local governments if excluded from property tax.



# Listing and Valuation



# Tax Listings

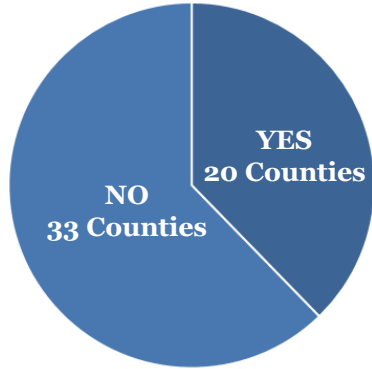
- Property itemized by taxpayer
- Provide detail as prescribed on abstract
- Assessor may require additional information

<b>SCHEDULE E</b>	<b>FARM EQUIPMENT</b>
Does your business own any tractors, implements, bulk barns, and/or other farm equipment? <input checked="" type="radio"/> YES <input type="radio"/> NO <input type="radio"/> Cost on schedule A	
If so, list and attach separate schedule E-1. If listed by cost on Schedule A, indicate above, but still include information on separate schedule E-1.	

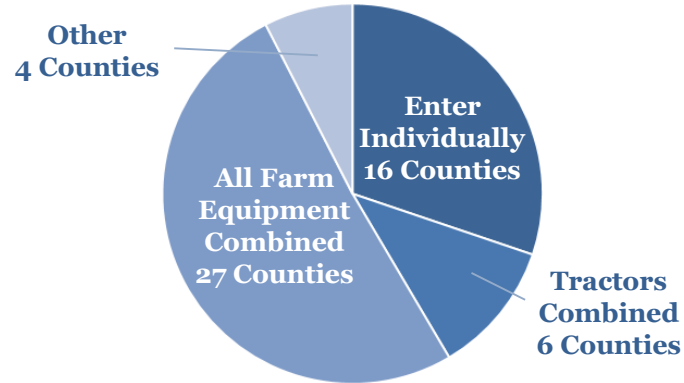
<b>SCHEDULE E-1</b>	<b>FARM EQUIPMENT - TRACTORS, IMPLEMENTS, BULK BARNs, ETC.</b>					
YEAR	DESCRIPTION OR MAKE	MODEL OR SERIES	GAS OR DIESEL	YEAR ACQUIRED	ORIGINAL COST	FOR OFFICE USE ONLY
2017	Case IH Tractor	Puma	Diesel	2017	\$158,212	



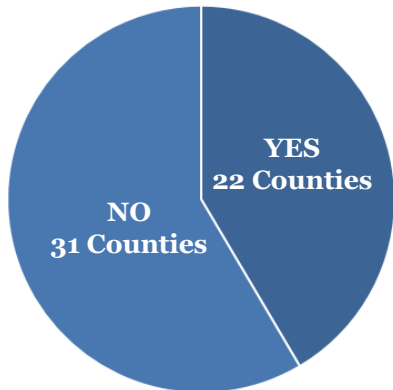
### Listing Form Provides Separate Schedule For Listing Tractors



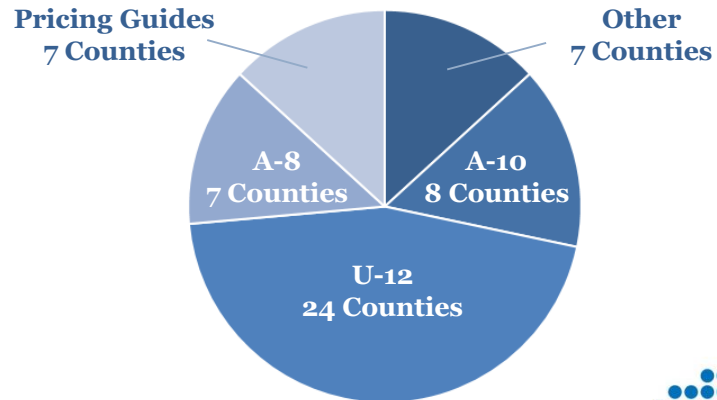
### Data Entry Process Of Counties



### Tax Tractors Separately From Other Farm Equipment



### Schedule Used by County For Taxing Tractors



## Uniform Appraisal Standards

- Appraise at “true value” in money
- True Value = Market Value
- Fundamental rule of valuation is fair cash value
- Reasonable variations from market value are appropriate if uniform.
- Purpose is to ensure distribution of tax burden in proportion to taxpayer’s property holdings



## Personal Property Appraisal Considerations:

- Replacement cost
- Sales prices of similar property
- Age
- Physical condition
- Productivity
- Remaining life
- Obsolescence
- Economic utility
- Any other factor that may affect value



## Additional Considerations for Businesses:

- Taxpayer's records
- Income tax returns (NC & IRS)
- Accuracy of records
- Taxpayer's method of accounting
- Taxpayer's trade level

## Important Note:

- Equipment that is not being used for business purpose is not required to be listed!





2017 Case IH Puma

Purchased in 2017 for \$158,212



Source: NCDOR 2018 Cost Index and Depreciation Schedules

Method: Cost Approach (Replacement Cost New Less Depreciation)

Schedule: U-12

Year		Trend	Life in Years					
Acq'd	Age	Factor	5	6	8	12		
2017	1	1.00	88	60	72	85		
2016	2	0.99	60	51	60	80		
2015	3	0.94	38	35	48	75		
2014	4	0.89	18	18	35	70		
2013	5	0.87	5	11	23	60		
2012	6	0.85	1.00	5	15	55		
2011	7	0.80	1.00			45		
2010	8	0.77	1.00			40		
2009	9	0.73	1.00			35		
2008	10	0.68	1.00			25		

Schedule U Valuation Table  
Historical (Original) Cost  
Percent Good Factors

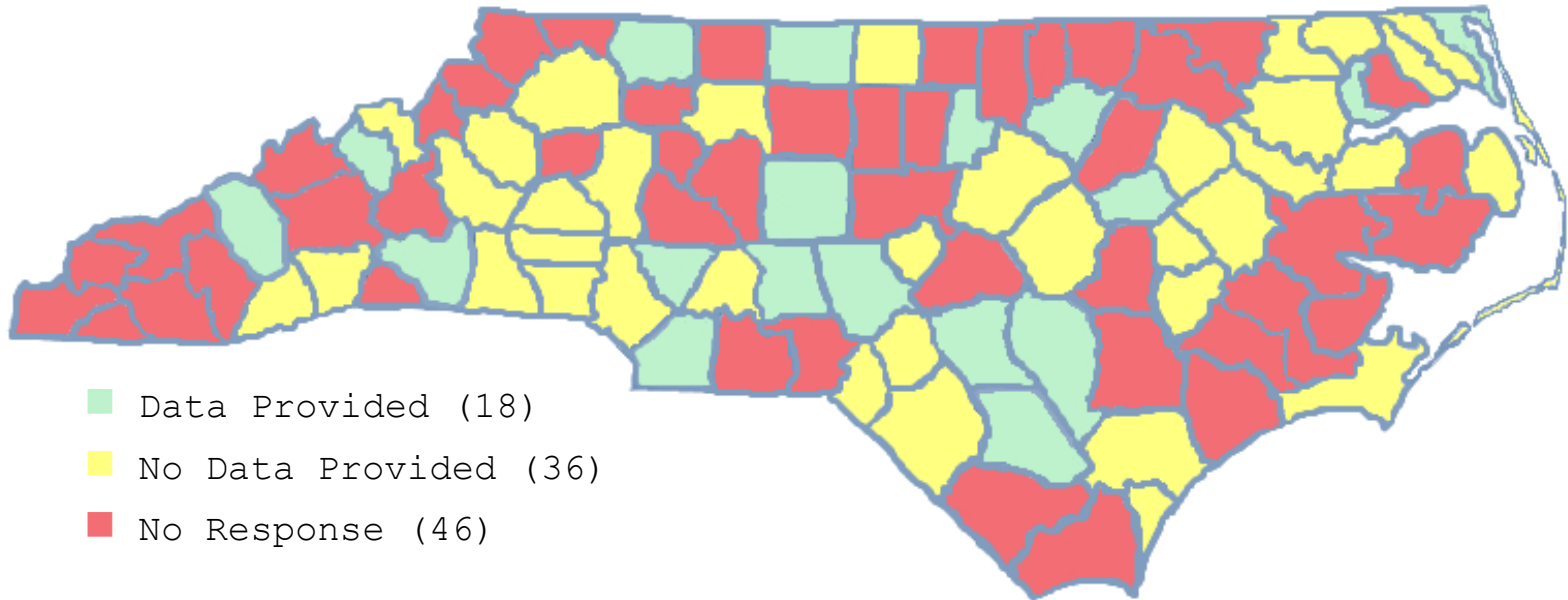
The 25 percent residual is for combines and cotton harvesters.  
Use 35 percent for tractors.

Cost	\$158,212
% Good	x 0.85
2018 Value	<u>\$134,480</u>
Est. Tax	\$903.30





# County Tractor Survey Results



## Sampson County Revenue Impact

TRACTOR AGE	TRACTOR COST	TAX VALUE	TAX	80% EXCLUSION
1951-1960	\$3,500	\$1,225	(\$10)	(\$8)
1961-1970	\$37,930	\$13,276	(\$110)	(\$88)
1971-1980	\$297,700	\$103,360	(\$853)	(\$682)
1981-1990	\$669,340	\$234,130	(\$1,932)	(\$1,545)
1991-2000	\$3,627,746	\$1,270,108	(\$10,478)	(\$8,383)
2001-2010	\$18,857,262	\$7,080,490	(\$58,414)	(\$46,731)
2011-2016	\$39,420,115	\$29,818,164	(\$246,000)	(\$196,800)
<b>TOTAL</b>	<b>\$62,913,593</b>	<b>\$38,520,753</b>	<b>(\$317,797)</b>	<b>(\$254,237)</b>

*Note: Tax estimates based on published 2017-18 county tax rates. Figures represent base county tax only. Figures do not include additional taxes for municipalities, fire districts, special taxing districts, fees, etc.*



## Randolph County Revenue Impact

TRACTOR AGE	TRACTOR COST	TAX VALUE	TAX	80% EXCLUSION
1941-1950	\$17,958	\$17,958	(\$117)	(\$94)
1951-1960	\$74,332	\$74,332	(\$485)	(\$388)
1961-1970	\$170,741	\$170,741	(\$1,114)	(\$891)
1971-1980	\$442,805	\$433,457	(\$2,828)	(\$2,263)
1981-1990	\$1,581,235	\$697,657	(\$4,552)	(\$3,642)
1991-2000	\$5,212,747	\$1,917,409	(\$12,511)	(\$10,009)
2001-2010	\$9,889,074	\$3,698,546	(\$24,133)	(\$19,306)
2011-2016	\$8,103,493	\$5,793,182	(\$37,801)	(\$30,240)
<b>TOTAL</b>	<b>\$25,492,385</b>	<b>\$12,803,282</b>	<b>(\$83,541)</b>	<b>(\$66,833)</b>

Source: Randolph County Tax Department

Note: Figures represent base county tax only. Figures do not include additional taxes for municipalities, fire districts, special taxing districts, fees, etc.



## Bladen County Revenue Impact

TRACTOR AGE	TRACTOR COST	TAX VALUE	TAX	80% EXCLUSION
1951-1960	\$3,000	\$1,050	(\$9)	(\$7)
1961-1970	\$4,200	\$1,470	(\$12)	(\$10)
1971-1980	\$22,530	\$7,886	(\$65)	(\$52)
1981-1990	\$99,845	\$34,946	(\$287)	(\$229)
1991-2000	\$839,243	\$293,735	(\$2,409)	(\$1,927)
2001-2010	\$3,844,108	\$1,403,705	(\$11,510)	(\$9,208)
2011-2016	\$3,877,311	\$2,762,655	(\$22,654)	(\$18,123)
<b>TOTAL</b>	<b>\$8,690,237</b>	<b>\$4,505,447</b>	<b>(\$36,946)</b>	<b>(\$29,556)</b>

*Note: Tax estimates based on published 2017-18 county tax rates. Figures represent base county tax only. Figures do not include additional taxes for municipalities, fire districts, special taxing districts, fees, etc.*



## Cabarrus County Revenue Impact

TRACTOR AGE	TRACTOR COUNT	TAX VALUE	TAX	80% EXCLUSION
1931-1940	1	\$1,000	(\$7)	(\$6)
1941-1950	27	\$58,044	(\$406)	(\$325)
1951-1960	57	\$128,691	(\$901)	(\$721)
1961-1970	77	\$276,790	(\$1,938)	(\$1,550)
1971-1980	119	\$618,208	(\$4,327)	(\$3,462)
1981-1990	71	\$417,645	(\$2,924)	(\$2,339)
1991-2000	77	\$961,497	(\$6,730)	(\$5,384)
2001-2010	143	\$2,290,366	(\$16,033)	(\$12,826)
2011-2017	77	\$2,172,332	(\$15,206)	(\$12,165)
<b>TOTAL</b>	<b>649</b>	<b>\$6,924,574</b>	<b>(\$48,472)</b>	<b>(\$38,778)</b>

Note: Tax estimates based on published 2017-18 county tax rates. Figures represent base county tax only. Figures do not include additional taxes for municipalities, fire districts, special taxing districts, fees, etc.





## Surry County Revenue Impact

TRACTOR AGE	TRACTOR COUNT	TAX VALUE	TAX	80% EXCLUSION
1941-1950	1	\$225	(\$1)	(\$1)
1951-1960	1	\$300	(\$2)	(\$1)
1961-1970	6	\$3,476	(\$20)	(\$16)
1971-1980	20	\$28,770	(\$167)	(\$134)
1981-1990	83	\$264,101	(\$1,537)	(\$1,230)
1991-2000	180	\$819,527	(\$4,770)	(\$3,816)
2001-2010	359	\$2,608,266	(\$15,180)	(\$12,144)
2011-2017	275	\$5,629,894	(\$32,766)	(\$26,213)
<b>TOTAL</b>	<b>925</b>	<b>\$9,354,559</b>	<b>(\$54,443)</b>	<b>(\$43,555)</b>

*Note: Tax estimates based on published 2017-18 county tax rates. Figures represent base county tax only. Figures do not include additional taxes for municipalities, fire districts, special taxing districts, fees, etc.*





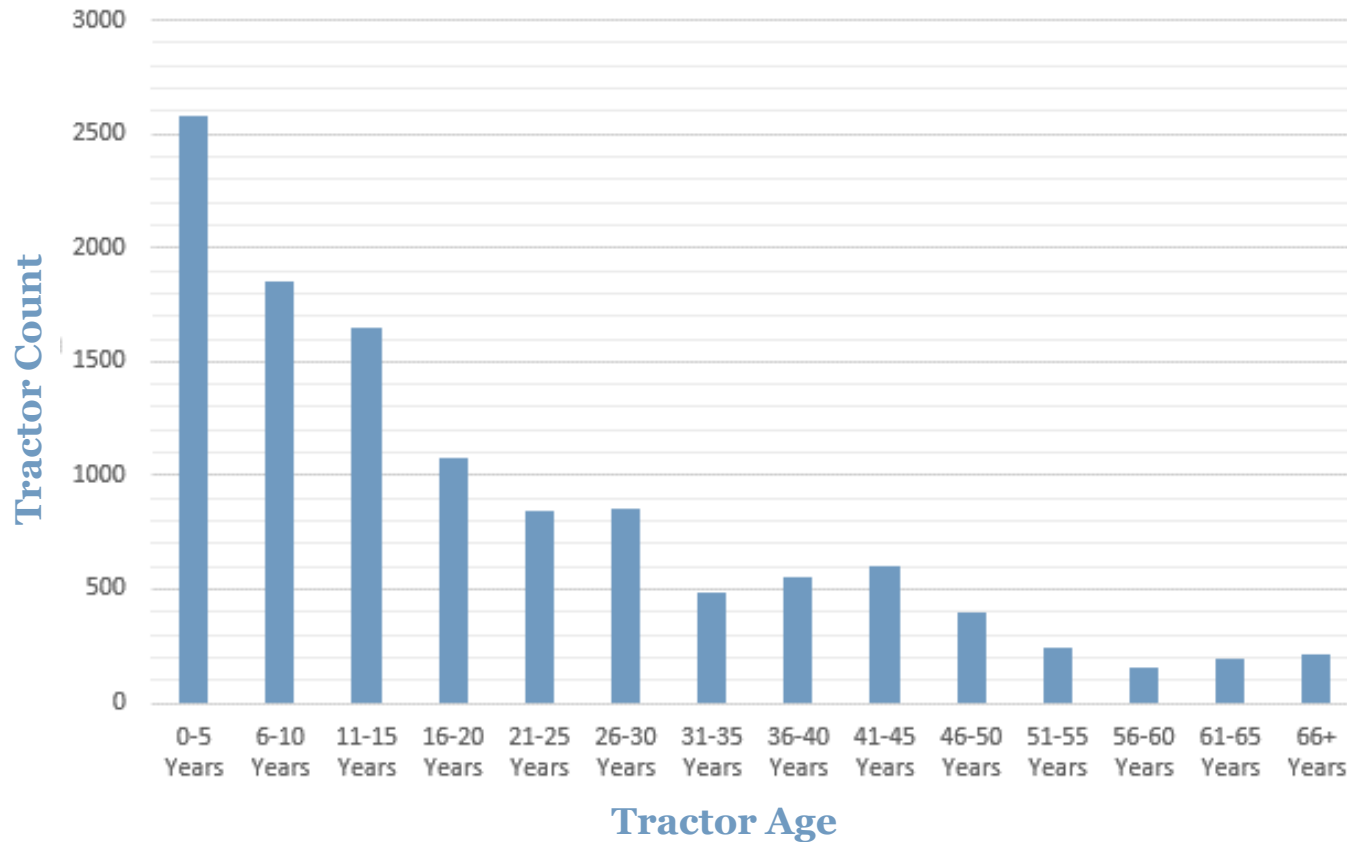
## Union County Revenue Impact

TRACTOR AGE	TRACTOR COUNT	TAX VALUE	TAX	80% EXCLUSION
1931-1940	2	\$4,482	(\$35)	(\$28)
1941-1950	25	\$40,559	(\$317)	(\$253)
1951-1960	38	\$75,141	(\$587)	(\$469)
1961-1970	110	\$473,353	(\$3,697)	(\$2,958)
1971-1980	219	\$1,494,926	(\$11,675)	(\$9,340)
1981-1990	164	\$1,338,844	(\$10,456)	(\$8,365)
1991-2000	257	\$4,451,030	(\$34,763)	(\$27,810)
2001-2010	315	\$9,536,231	(\$74,478)	(\$59,582)
2011-2017	192	\$9,824,289	(\$76,728)	(\$61,382)
<b>TOTAL</b>	<b>1322</b>	<b>\$27,238,855</b>	<b>(\$212,736)</b>	<b>(\$170,187)</b>

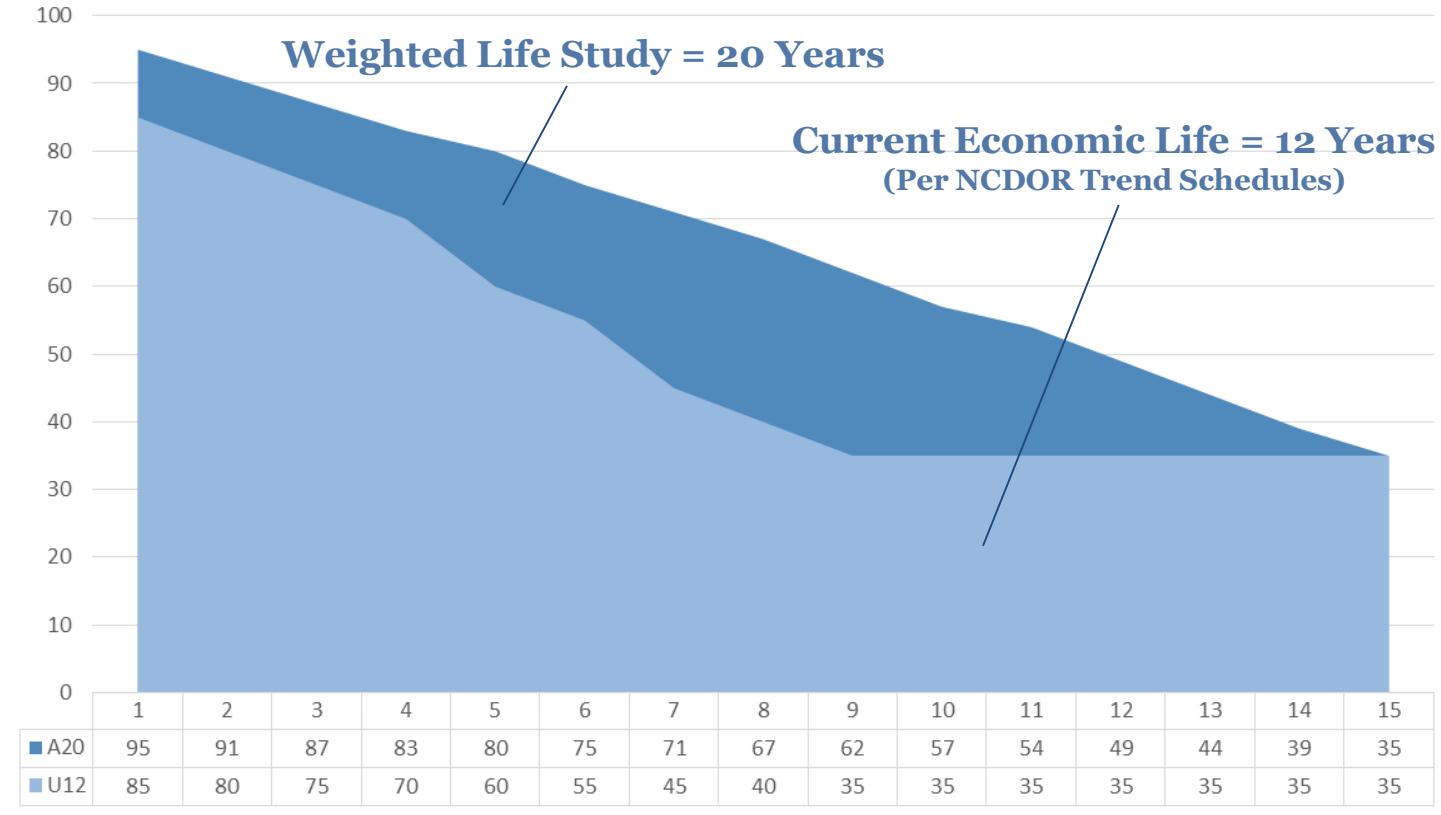
Note: Tax estimates based on published 2017-18 county tax rates. Figures represent base county tax only. Figures do not include additional taxes for municipalities, fire districts, special taxing districts, fees, etc.



### Tractor Age Distribution



### Tractor Depreciation Chart



# **USDA Census of Agriculture Data**



## North Carolina Tractor Inventory

AGE	TRACTOR TYPE			TOTAL
	0-39 HP	40-99 HP	100+ HP	
<b>LT 5 YEARS OLD</b>				
2002 CENSUS	4,225	6,867	2,794	13,886
2007 CENSUS	3,722	7,608	2,626	13,956
2012 CENSUS	2,567	5,634	3,079	11,280
2017 ESTIMATE	1,847 ↓	5,192 ↓	3,180 ↑	10,219
<b>GE 5 YEARS OLD</b>				
2002 CENSUS	36,707	44,271	12,754	93,732
2007 CENSUS	33,056	44,042	12,651	89,749
2012 CENSUS	29,138	44,935	13,644	87,717
2017 ESTIMATE	25,398 ↓	45,093 ↑	13,804 ↑	84,295

Data Source: USDA Census of Agriculture (2002-2012)



## Average Tractor Cost by Age

TRACTOR AGE	TRACTOR TYPE		
	0-39 HP	40-99 HP	100+ HP
LT 5 YEARS OLD	\$21,081	\$51,590	\$239,062
GE 5 YEARS OLD	\$12,902	\$30,170	\$153,753
LT 10 YEARS OLD	\$18,967	\$48,049	\$231,191
GE 10 YEARS OLD	\$10,961	\$24,340	\$95,887
<b>AVERAGE COST</b>	<b>\$13,904</b>	<b>\$32,931</b>	<b>\$170,967</b>

Data Source: 2017 Iron Guides Buyers Guide for Tractors US Edition



## Estimated Statewide Revenue Impact

TRACTOR AGE	TRACTOR TYPE			TOTAL
	0-39 HP	40-99 HP	100+ HP	
<b>LT 5 YEARS OLD</b>				
TRACTOR COST	\$38,936,607	\$267,855,280	\$760,217,160	\$1,067,009,047
TAX VALUE	\$30,175,870	\$207,587,842	\$589,168,299	\$826,932,011
TAX	(\$202,691)	(\$1,394,368)	(\$3,957,443)	(\$5,554,502)
80% EXCLUSION	(\$162,153)	(\$1,115,494)	(\$3,165,955)	(\$4,443,602)
<b>GE 5 YEARS OLD</b>				
TRACTOR COST	\$327,684,996	\$1,360,455,810	\$2,122,406,412	\$3,810,547,218
TAX VALUE	\$154,011,948	\$639,414,231	\$997,531,014	\$1,790,957,192
TAX	(\$1,034,498)	(\$4,294,945)	(\$6,700,416)	(\$12,029,859)
80% EXCLUSION	(\$827,599)	(\$3,435,956)	(\$5,360,333)	(\$9,623,888)

*Note: Cost estimates based on USDA Census of Agriculture tractor inventory statistics from 2002-2012, and industry pricing guide averages. Values based on trend averages. Tax calculated based on average of all 2017-18 published county rates (0.6717).*



## Estimated Statewide Loss

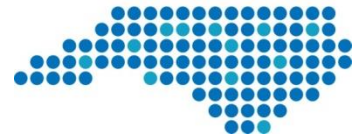
	<b>TOTAL</b>
<b>TRACTOR COST</b>	<b>\$4,877,556,265</b>
<b>TAX VALUE</b>	<b>\$2,617,889,204</b>
<b>TAX</b>	<b>(\$17,584,362)</b>
<b>80% EXCLUSION</b>	<b>(\$14,067,489)</b>

*Note: Cost estimates based on USDA Census of Agriculture tractor inventory statistics from 2002-2012, and industry pricing guide averages. Values based on trend averages. Tax calculated based on average of all 2017-18 published county rates (0.6717).*





# Challenges



## Study Challenges:

- Counties are taxing all farm equipment on an 8-year schedule (A-8) versus separating tractors from equipment and taxing them on the recommended 12-year schedule (U-12).
- County software systems are unable to extract data on specific types of equipment due to mass appraisal.



## Study Challenges:

- County listing forms do not have separate section to list tractors.
- Many citizens list equipment based on year acquired versus equipment age year and original cost.
- Limited Data
  - Counties can't separate tractors from other farm equipment.
  - 54% of counties responded.
  - 18% of counties provided data.



## Administrative Challenges:

### Counties

- Separation of equipment
- System doesn't support individual tractor entries
- Listing forms designed for mass appraisal
- Unable to determine actual age of equipment

### Taxpayers

- Depreciation methods are different for income tax
- Don't list specific pieces of equipment
- Accounting records will need to be more detailed
- Accountants will have to prepare additional records (IRS & County)



# Questions?



## **Local Government Division**

Tony Simpson, Director

Tina Stone, Personal Property Manager

