## North Dakota Bill No.

$\qquad$ Individual income tax simplification

Summary: One simple linear (slope) formula and one existing formula are used to match ND tax systems fairly and efficiently for replacing existing 5 tax brackets (Problem \#1: too many tax brackets with different range numbers), $40(5 \times 8)$ withholding formulas (Problem \#2: too many formulas and too complex), 52-page Withholding Tables (Problem \#3: too many pages and too complex), 11-page Tax Table, and two tax systems for withholding taxes and tax return taxes (Problem \#4: too complex).
www.tax.nd.gov/sites/www/files/documents/forms/income-tax-withholding-rates-and-instructions-booklet-2022.pdf

1. AN ACT concerning income taxation; relating to tax rates and repealing the existing section.
2. Be it enacted by the Legislature.
3. Section 1. A tax is hereby imposed upon taxable income of every resident individual, which tax rate
4. and tax shall be computed in accordance with the following Tax Rate Schedule:
5. Yearly Wage (after subtracting withholding allowances): Tax withheld:
6. (a) SINGLE person (ineluding head of household)
7. $\$ 0$ O6,475 $0 \%$
8. $\$ 6,475$ \$48,250 $1.1 \%$ of yearly wage
9. $\$ 48,250-\$ 107,525-459.53+2.04 \%$ (YW 48,250 )
10. $\$ 107,525-\$ 217,300$ 1,668.74+2.27\% (YW-107,525)
11. $\$ 217,300-\$ 464,825 — 4,160.63+2.64 \%$ (YW-217,300)
12. Over $\$ 464,8250$ 10,695.29+2.9\% (YW-464,825)
13. (b) MARRIED person
14. $\$ 0$ \$12,950 $0 \%$
15. $\$ 12,950$ \$47,800 $1.1 \%$ of yearly wage
16. $\$ 47,800-\$ 97,175$ 383.35+2.04\% (YW 47,800)
17. $\$ 97,175$ \$141,275 $\quad 1,390.6+2.27 \%$ (YW 97,175)
18. \$141,275 \$242,125 2,391.67+2.64\% (YW 141,275)
19. Over \$242,125 $5,054.11+2.9 \%$ (YW 242,125)
20. 
21. The above non-smooth tax rate changes can be matched and simplified to their smooth tax rate changes.
22. For yearly wage $(\mathrm{YW})$ is: The tax rate and tax are: Tax rate range:
23. Not over $\$ 240,000 \times \mathrm{S} \quad(\mathrm{YW} \div \mathrm{S} \div \mathrm{C}+\mathrm{B}) \times \mathrm{W} \quad 1.1 \%-2.1 \%$
24. Over $\$ 240,000 \times S$
$(\mathrm{T}-(\mathrm{D} \times \mathrm{S} \div \mathrm{YW})) \times \mathrm{W}$
2.1\%-2.9\%
25. 
26. YW is yearly wage after subtracting withholding allowances. $S$ is tax status ( 1 for MARRIED
27. Person or 1.4 for SINGLE person (including head of household). B is bottom tax rate $1.1 \%$. T is top
28. tax rate $2.9 \%$.
29. C is $24,000,000$ from 120,000 to divide ( $\div$ ) the 1 -st tax rate range difference ( $0.021-0.011$ ). D is 1,920
30. from 120,000 to multiply $(x)$ the 2 -rd tax rate difference ( $0.029-0.021$ ). The 6 tax brackets are matched
31. and reduced to 2 tax rate ranges of $1.1 \%-2.1 \%-2.9 \%$ for taxable income ranges not over and over
32. $\$ 120,000 . \mathrm{YW}=\mathrm{W} \times \mathrm{F}$. W is wage after subtracting withholding allowances. F is filing period $(1,2,4$,
33. 12, 24, 26, 52 or 365 on yearly, semi-yearly, quarterly, monthly, semi-monthly, bi-weekly, weekly or
34. daily basis).
35. 
36. When yearly wage after subtracting withholding allowances (YW) for SINGLE person (including
37. head of household) is not over $\$ 6,475$, tax is to 0 (free) and do not need to calculate tax.
38. 
39. When yearly wage after subtracting withholding allowances (YW) for MARRIED person is not
40. over $\$ 12,950$, tax is to 0 (free) and do not need to calculate tax.
41. 
42. There is another tax system for tax returns.
43. www.tax.nd.gov/sites/www/files/documents/forms/2022-individual-income-tax-booklet.pdf
44. Yearly taxable income: Your tax is:
45. (a) Married filing separately
46. $\$ 0$ 0 $\$ 34,850 \ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .1 .10 \% ~ o f ~ t a x a b l e ~ i n c o m e ~$
47. $34,850 \quad 84,225 \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots . . . \begin{aligned} & \text {................. } 383.35+2.04 \% \text { of amount over } \$ 34,850\end{aligned}$
48. 84,225 128,325................................... $1,390.60+2.27 \%$ of amount over 84,225
49. 128,325 229,175.................................... 2, 391.67+2.64\% of amount over 128,325
50. Over 229,175................................................ 5,054.11 + 2.90\% of amount over 229, 175
51. (b) Married Filing Joint and Qualifying Surviving Spouse
52. $\$ 0$ 0 $\$ 69,700$.................................... $1.10 \%$ of Taxable Income
53. $69,700-168,450 \ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~ \$ 766.70+2.04 \%$ of amount over $\$ 69,700$
54. $168,450-256,650 \ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~ 2,781.20+2.27 \%$ of amount over 168,450
55. $256,650-458,350 \ldots \ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .7,783.34+2.64 \%$ of amount over 256,650
56. Over 458,350 ............................................... $10,108.22+2.90 \%$ of amount over 458,350
57. (c) Single

58. $41,775101,050 \ldots \ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~ \$ ~ 459.53+2.04 \% ~ o f ~ a m o u n t ~ o v e r ~ \$ ~ 41,775 ~$
59. $101,050210,825 \ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~ 1,668.74+2.27 \%$ of amount over 101,050
60. $210,825-458,350 \ldots \ldots . . . . . . . . . . . . . . . . . . . . . . . .160 .63+2.64 \%$ of amount over 210,825
61. 458,350 ....................................................... $10,695.29+2.90 \%$ of amount over 458,350
62. (d) For Head of Heusehold
63. $\$ 0 \$ 55,900$................................................ $1.10 \%$ of taxable income
64. $55,900-144,400 \ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~ \$ ~ 614.90 ~+~ 2.04 \% ~ o f ~ a m o u n t ~ o v e r ~ \$ ~ 55,900 ~$
65. $144,400233,750 \ldots \ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~ 2, ~ 420.30+2.27 \% ~ o f ~ a m o u n t ~ o v e r ~ 144,400 ~$
66. $233,750-458,350 \ldots \ldots \ldots \ldots \ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .4,448.55+2.64 \%$ of amount over 233,750
67. Over $458,350 \ldots \ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .377 .99+2.90 \% ~ o f ~ a m o u n t ~ o v e r ~ 458,350 ~$
68. 
69. The above non-smooth tax rate changes can be matched and simplified to their smooth tax rate changes.
70. For yearly taxable income (YTI) is: The tax rate and tax are: Tax rate range:
71. Not over $\$ 120,000 \times \mathrm{S} \quad(\mathrm{YTI} \div \mathrm{S} \div \mathrm{C}+\mathrm{B}) \times \mathrm{TI} \quad 1.1 \%-1.8 \%$
72. Over $\$ 120,000 \times S$
$(\mathrm{T}-(\mathrm{D} \times \mathrm{S} \div \mathrm{YTI})) \times \mathrm{TI}$
$1.8 \%-2.9 \%$
73. 
74. YTI is yearly taxable income. S is tax status ( 1 for MARRIED filing separately, 2 for MARRIED filing
75. Jointly, 1.2 for Single or 1.5 for Head of Household. B is bottom tax rate $1.1 \%$. T is top tax rate $2.9 \%$.
76. C is $17,142,857$ from 120,000 to divide $(\div)$ the 1 -st tax rate range difference $(0.018-0.011)$. D is 1,320
77. from 120,000 to multiply $(x)$ the 2 -rd tax rate difference ( $0.029-0.018$ ).
78. The 6 tax brackets are matched and reduced to 2 tax rate ranges of $1.1 \%-1.8 \%-2.9 \%$ for taxable income
79. ranges not over and over $\$ 120,000$.
80. $\mathrm{YW}=\mathrm{W} \times \mathrm{F}$. W is wage after subtracting withholding allowances. F is filing period (1, 2, 4, 12, 24, 26,
81. 52 or 365 on yearly, semi-yearly, quarterly, monthly, semi-monthly, bi-weekly, weekly or daily basis).

Examples with Taxable Income:
Tax rate and tax are:

1. $\mathrm{YW}=\$ 78,000(\mathrm{~S}=1)$ :
$(78,000 \div 17,142,857 \div 1+0.011) \times 78,000=0.01555 \times 78,000=1,212.90$
2. Bi-weekly Wage is $\$ 8,000(\mathrm{~S}=1.5)$ : $\quad(0.029-1,320 \times 1.5 \div 8,000 \div 26) \times 8,000=0.019481 \times 8,000=155.85$
3. Monthly Wage is $\$ 6,500(\mathrm{~S}=2): \quad(6,500 \times 12 \div 17,142,857 \div 2+0.011) \times 6,500=0.013275 \times 6,500=86.29$

## *Notes:

1. With this simplification, the existing 6 tax brackets, $48(6 \times 8)$ withholding formulas, and 52 -page Withholding Tables can be matched and simplified with 2 brackets and formulas ( $1.1 \%-1.8 \%-2.9 \%$ ) fairly with $96 \%$ reduction $1-2 \div 48$. Tax status number can be adjusted reasonably. Normal number is 2 for Married filing jointly or qualifying widow(er), 1 for Single ( 1.2 for some states), 1 for married filing separately or 1.5 for Head of Household.

Total Tax $(\mathrm{S}=1)=\operatorname{Sum}((\mathrm{YTIa} \div 17,142,857+0.011)$ YTIa $)+\operatorname{Sum}(0.029$ YTIb-1,320)
2. Standard deductions, exemptions, and tax credits are used for withholding tax calculations. Different F number may be used for withholding taxes. $\mathrm{F}=1$ is for tax returns. 52-page Withholding Tables are very complex.

Withholding/Income Tax=(Incomes $\pm$ Adjustments-(Deductions+Exemptions) $\div \mathrm{F}) \times$ Tax rate-Tax credits $\div \mathrm{F}$
www.tax.nd.gov/sites/www/files/documents/forms/income-tax-withholding-rates-and-instructions-booklet-2022.pdf
www.tax.nd.gov/sites/www/files/documents/forms/2022-individual-income-tax-booklet.pdf
3. The above two tax systems for withholding taxes and tax return taxes can be combined simply. Yearly wage after subtracting withholding allowances (YW) can be converted into taxable income (TI), which is adjustable gross income (AGI) to subtract standard deduction, standard exemptions, and standard tax credits.
4. For existing tax reforms, tax brackets, tax rates, taxable income ranges, tax computations, and tax goal are considered at the same time, which are affected each other and complex. Tax Table ( 11 pages) or its formula is used as one option. With this tax simplification, only 3 tax rates at bottom, 18,000 and top are adjusted to meet a tax goal. The factors are explained by our 2021 research paper (Page 508*).
(*) Fair tax rate changes: www.scitcentral.com/documents/be5648da4795008d9893b752b9226c8f.pdf

## Bill Summary

Bill xxx - This bill can match and simplify existing 6 tax brackets, 48 ( $6 \times 8$ ) formulas, and 52 -page Withholding Tables with 2 brackets and formulas. Withholding taxes, payrolls, withholding reports, income taxes, tax returns, tax analyses, fiscal notes, tax projections, and tax reforms can be simplified with the 2 brackets. A checking tool is provided to check and reduce calculation mistakes. Tax Table ( 11 pages) or its formula is used as one option. For future tax reforms, only 3 tax rates at bottom, $\$ 120,000$, and top are adjusted by lawmakers.

For more information or questions, visit our web or contact johnlee@taxsimplecenter.net or 913-710-0957

