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ILLINOIS STATE COMPTROLLER

# PAYROLL BULLETIN

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To: All State Agencies, Boards and Commissions  
From: Ellen Andres, Assistant Comptroller – Operations  
Date: March 10, 2020  
Subject: 2020 Federal Withholding Tax Tables and W-4 Form - Updates  
Number: 3-20

The purpose of this payroll bulletin is to provide additional information to payroll officers and processors in regard to the changes that were made to the 2020 federal tax withholding tables and the new W-4 form. See [Payroll Bulleting 2-20](#) for information on the new W-4 form and [Payroll Bulletin 1-20](#) for the information on the tax tables.

**Payroll officers** may refer to pages two and three of this bulletin for additional reference material that may assist with calculating employee federal tax withholding in accordance with the 2020 W-4 form. As a reminder, new employees and current employees electing to make withholding changes after December 31, 2019 are required to complete the new 2020 W-4 form. Federal tax withholding must be withheld for the employee based upon which W-4 form is on file for the employee and the elections the employee has made on the form. Payroll officers need to reach out to their payroll processor for instructions on how to enter the correct withholding until automated calculation changes are made to their payroll system.

**Payroll processors** should refer to page four of this bulletin for information regarding the new federal tax withholding fields that should be added to the payroll voucher files submitted to the IOC for pay periods beginning June 1, 2020.

Agencies may access this and other Payroll, SAMS, and Accounting Bulletins on the IOC's website at [www.illinoiscomptroller.gov/agencies](http://www.illinoiscomptroller.gov/agencies). If you have questions regarding this bulletin, please contact the IOC payroll office at (217) 782-4758.

## **Federal Tax Withholding Calculations for Agency Payroll Officers**

(You may find it helpful to refer to the [2020 W-4](#) and the [2020 withholding tax tables](#) while reading the example.)

### Taxable Wages

To calculate an employee's federal tax withholding you must first determine the employee's taxable wages for the pay period. Subtract all non-taxable deductions from the employee's gross pay; deferred compensation, tax sheltered annuities, non-taxable benefits, flexible spending, deducted retirement, tax deferral retirement service purchases, and any other non-taxable income. Then add any other compensation subject to withholding. In the sample below the employee's gross wages for the pay period are \$2,000 but the employee's taxable wages for the pay period are \$1,907.

### Sample Calculation

This sample is for an employee that completed a 2020 W-4 form. The employee checked "Married Filing Jointly" in Step 1 on the W-4 form. The employee did not check the box in Step 2. The employee made entries in Steps 3 and 4. In Step 3 the employee entered an amount of \$500 to claim a dependent. In Step 4 the employee entered \$24,000 on Line 4a for additional income, \$6,000 on Line 4b to claim deductions, and \$50 on Line 4c for additional tax withholding. The employer should calculate the amount to be withheld from the **left side** of the withholding tables for the 2020 W-4 form because the employee did not check the box in Step 2. The employer should then reference the tax table applicable for an employee who is married filing jointly and has a semi-monthly payroll period.

Gross pay, semi-monthly	\$2,000.00
Less: Non-taxable deductions described above	- 125.00
Add: Any other compensation subject to withholding	+32.00
<b>Taxable wages for this pay period</b>	<b>\$1,907.00</b>
<i>From employee's W-4 form:</i>	
Add :Line 4a divided by the number of pay periods (\$24,000/24)	+1,000.00
Less: Line 4b divided by the number of pay periods (\$6,000/24)	-250.00
<b>Adjusted taxable amount for this pay period</b>	<b>\$2,657.00</b>
<i>From 2020 federal tax tables for 2020 W-4 forms:</i>	
Less: Tax on \$2,657.00 from <b>left</b> tax table, semi-monthly, married filing jointly	-1,856.00
Amount that the wage exceeds tax	\$801.00
Percent to apply to wage exceeding tax	*12%
	\$96.12
Add: tentative amount to withhold from tax table	+82.30
<b>Tentative withholding amount for this pay period</b>	<b>\$178.42</b>
<i>From employee's W-4 form:</i>	
Less: Line 3 divided by the number of pay periods (\$500/24)	-20.83
	\$157.59
<i>From employee's W-4 form</i>	
Add: Line 4c, do not divide this line by the number of pay periods (\$50)	+50.00
<b>Withholding amount for this pay period</b>	<b>\$207.59</b>

## **Additional References for Payroll Officers and Employees**

### **Employer Federal Tax Withholding Assistance**

The IRS has provided an application to assist employers with calculating the amount of federal tax to withhold per pay period based on the employee's W-4 form. This application can be found at <https://www.irs.gov/businesses/small-businesses-self-employed/income-tax-withholding-assistant-for-employers>. An employee's taxable wages for the pay period must be calculated before using this application. The employer may then enter the employee's W-4 form information and the amount to be withheld will be calculated automatically. The employee's federal tax withholding will need to be recalculated if their wages or deductions change in a future pay period.

### **Employee Federal Tax Withholding Estimator**

The IRS has provided an application to assist employees with completing a new 2020 W-4 form. The application can be found at <https://www.irs.gov/individuals/tax-withholding-estimator> employees can complete this application by answering a few questions and referring to their most recent earnings statements. Once the employee is satisfied with the results the application provides a pre-filled W-4 form. The employee can print and sign this completed form and turn it into the employer.

## **Payroll Voucher File Layout Changes for Agency Payroll Processors Only**

The IOC is adding three new fields to the payroll voucher file layout to accommodate the federal tax withholding changes. The new file layout will be used for pay periods beginning June 1, 2020. A test file containing the new fields must be submitted to the IOC prior to implementation, and no later than May 15, 2020. Please contact Katie Guy prior to submitting a test file and for any additional questions regarding these changes. The new fields are defined below.

- **Tax Table Indicator**

*Byte Range 183-184, Byte Length 2*

This field requires specific, valid values that indicate the applicable W-4 form, tax table, and withholding status of an employee. The valid values are listed below.

P1 – 2019 or earlier W-4 form, Single

P2 – 2019 or earlier W-4 form, Married

S1 – 2020 W-4 form, Standard Withholding Rate, Single

S2 – 2020 W-4 form, Standard Withholding Rate, Married Filing Jointly

S3 – 2020 W-4 form, Standard Withholding Rate, Head of Household

X1 – 2020 W-4 form, Step 2 Checkbox, Single

X2 – 2020 W-4 form, Step 2 Checkbox, Married Filing Jointly

X3 – 2020 W-4 form, Step 2 Checkbox, Head of Household

- **Taxable Income Adjustment**

*Byte Range 403-410, Byte Length 8*

This field should be utilized for employees that completed a 2020 W-4 form and entered amounts in Step 4 on Lines 4a and/or 4b. This field should contain a total of Lines 4a and 4b and should allow for a positive or negative amount. The field should be zero filled for employees that have a 2019 or earlier W-4 form on file or did not make entries in Step 4 on Lines 4a or 4b on the 2020 W-4 form. \*

- **Tax Withholding Adjustment**

*Byte Range 228-235, Byte Length 8*

This field should be utilized for employees that completed a 2020 W-4 form and entered amounts in Step 3 and/or Step 4/Line 4c. This field should contain a total from Step 3 and Step 4/Line 4c and should allow for a positive and negative amount. The field should be zero filled for employees that have a 2019 or earlier W-4 form on file or did not make entries in Step 3 or Step 4/Line 4c on the 2020 W-4 form. \*

\* Please note that entries made by an employee in Step 3, Step 4/Line 4a, and Step 4/Line 4b on a 2020 W-4 should be divided by the number of pay periods the employee has in a year. Step 4/Line 4c is for additional withholding per pay period so it should not be divided by the number of pay periods.