

# Date Adjustments Guide

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## Purpose

The purpose of this document is to provide guidance to HR Professionals on calculating date adjustments.

## Use

This guide can be used for adjusting dates due to part-time employment, prior state service, or military service. The manual formulas included in this guide should not be used for date adjustments that require counting actual working days or calendar days, due to the varied number of calendar days per month and year. Formulas in software programs, such as Microsoft Excel, can be helpful, but agencies **must** be able to verify that the formulas calculating the date adjustments produce accurate results.

While this document will include some examples of adjusting dates, the Date Adjustments Guide does not provide details on when dates should be adjusted or the specific criteria to include or exclude in calculations.

Refer to [collective bargaining agreements](#) and [WAC 357](#) (or historical documentation as needed) for details on when date adjustments are needed and what criteria to consider.

Refer to the [HRMS Data Definitions Resource Guide](#) for Date Type definitions.

Refer to the [HRMS User Procedures](#) for entering an employee's adjusted dates into HRMS.

## Manually Calculating the Days, Months, and Years for Date Adjustments

There are several ways to determine the number of days, months and years between two dates. One method is to subtract one date from another date, while another method involves counting days using actual calendars.

Date formulas calculate the time *between* two dates. To count the full time from the Start Date *through* the End Date in our number of days, months, and years, we need to add one day to the End Date:

**Example:** The time period of April 4, 2016 through May 20, 2016 is 1 month 17 days. This can be calculated mathematically by subtracting the Start Date from the day after the End Date:

Year	Month	Day	Description
2016	05	21	End Date (May 20, 2016 plus one day)
-2016	-04	-4	Subtract Start Date (April 4, 2016)
00	01	17	Years, Months, Days

This can also be verified by looking at the calendars for April and May 2016:

APRIL 2016						
S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

  

MAY 2016						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

The time *between* April 4, 2016 and May 4, 2016 is one month.

By counting the remaining days, *beginning with May 4*, it can be determined that May 20 is day number 17.

Totalling 1 month 17 days.

## Converting Months-into-Days and Years-into-Months

For mathematical calculations, it is often necessary to adjust the End Date by converting months-into-days or years-into-months in order to achieve positive numbers in the final calculations. This can also be called “borrowing months” and “borrowing years”.

### Borrowing Months

**Example:** The time period of January 31, 2013 through February 25, 2014 is 1 year 26 days. Subtracting the Start Date (31 days) from the End Date (26 days) would result in a negative number of days:

Year	Month	Day	Description
2014	02	26	End Date (February 25, 2014 plus one day)
-2013	-01	-31	Subtract Start Date (January 31, 2013)
	01	01	-05 Years, Months, Days – Incorrect due to negative days

To get a positive number of days, “borrow” one of the End Date months and convert it into days by subtracting a month from the End Date Month and adding the equivalent number of days in that month to the End Date Day:

Year	Month	Day	Description
2014	02	26	End Date (February 25, 2014 plus one day)
	-01	+31	Convert the month of January into 31 days
2014	01	57	New End Date (with converted month-to-days)

The 31 days in January were “borrowed” because it is the first full month prior to our End Date.

**Tip:** When converting the month of February into days, it's good to know when there are Leap Years. Leap Years are years evenly divisible by 4, unless it is a century year; a century year must be evenly divisible by 400. The year 2000 was a Leap Year ( $2000 \div 400 = 5$ ); the year 1900 was not a Leap Year ( $1900 \div 400 = 4.75$ ). 2014 was not a Leap Year ( $2014 \div 4 = 503.5$ ).

Subtract the Start Date from the New End Date (with converted months-to-days) to get a positive number of Years, Months, Days:

Year	Month	Day	Description
2014	01	57	New End Date (with converted month-to-days)
-2013	-01	-31	Subtract Start Date (January 31, 2013)
	01	00	26 Years, Months, Days

The entire process looks like this:

Year	Month	Day	Description
2014	02	26	End Date (February 25, 2014 plus one day)
	-01	+31	Convert the month of January into 31 days
2014	01	57	New End Date (with converted month-to-days)
-2013	-01	-31	Subtract Start Date (January 31, 2013)
	01	00	26 Years, Months, Days

### Borrowing Years

**Example:** The time period of March 1, 2014 through January 15, 2015 is 10 months, 15 days. Subtracting the Start Date (3 months) from the End Date (1 month) would result in a negative number of months:

Year	Month	Day	Description
2015	01	16	End Date (January 15, 2015 plus one day)
-2014	-03	-01	Subtract Start Date (March 01, 2014)
	01	-02	15 Years, Months, Days – Incorrect due to negative months

To get a positive number of months, “borrow” one of the End Date years and convert it into months by subtracting one year from the End Date Year and adding 12 months to the End Date Month:

Year	Month	Day	Description
2015	01	16	End Date (January 15, 2015 plus one day)
	-01	+12	Convert one year into 12 months
2014	13	16	New End Date (with converted year-to-months)

Subtract the Start Date from the New End Date (with converted years-to-months) to get a positive number of months and days:

Year	Month	Day	Description
2014	13	16	New End Date (with converted year-to-months)
-2014	-03	-01	Subtract Start Date (March 01, 2014)
	00	10	15 Correct Years, Months, Days

The entire process looks like this:

Year	Month	Day	Description
2015	01	16	End Date (January 15, 2015 plus one day)
-01	+12		Convert one year into 12 months
2014	13	16	New End Date (with converted year-to-months)
-2014	-03	-01	Subtract Start Date (March 01, 2014)
00	10	15	Correct Years, Months, Days

### Borrowing Months and Years

When it is necessary to convert both years-to-months and months-to-days, it is best to start with the months-to-days conversion first, and then convert the years-to-months.

**Example:** The time period of May 31, 2014 through February 01, 2015 is 8 months, 2 days. Subtracting 31 days from 2 days and subtracting 5 months from 2 months would result in negative months and days:

Year	Month	Day	Description
2015	02	02	End Date (February 01, 2015 plus one day)
-2014	-05	-31	Subtract Start Date (May 31, 2014)
01	-03	-29	Years, Months, Days – Incorrect due to negative months & days

First, convert months-to-days for the End Date by “borrowing” the days in the month of January (the first full month prior to the End Date):

Year	Month	Day	Description
2015	02	02	End Date (February 01, 2015 plus one day)
	-01	+31	Convert the month of January into 31 days
2015	01	33	End Date (with converted month-to-days)

Next, convert years-to-months by “borrowing” the months in a year from the End Date (with converted month-to-days):

Year	Month	Day	Description
2015	01	33	End Date (with converted month-to-days)
-01	+12		Convert one year into 12 months
2014	13	33	New End Date (with converted year-to-months and month-to-days)

Finally, subtract the numerical Start Date from the End Date (with converted years-to-months and months-to-days) to get a positive number of Years, Months, Days:

Year	Month	Day	Description
2014	13	33	New End Date (with converted year-to-months and month-to-days)
-2014	-05	-31	Subtract Start Date (May 31, 2014)
00	08	02	Years, Months, Days

The entire process looks like this:

<b>Year</b>	<b>Month</b>	<b>Day</b>	<b>Description</b>
2015	02	02	End Date (February 01, 2015 plus one day)
	-01	+31	Convert the month of January into 31 days.
2015	01	33	End Date (with converted month-to-days)
	-01	+12	Convert one year into 12 months.
2014	13	33	New End Date (with converted year-to-months and month-to-days)
-2014	-05	-31	Subtract Start Date (May 31, 2014)
00	08	02	Years, Months, Days

Using the same example, May 31, 2014 through February 1, 2015, the Years, Months, Days can also be determined by looking at all the calendars and counting:

MAY 2014

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

OCTOBER 2014

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

JUNE 2014

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

NOVEMBER 2014

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

JULY 2014

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

DECEMBER 2014

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

May 31 is one day,  
 plus one month for June,  
 plus one month for July,  
 plus one month for August,  
 plus one month for September,  
 plus one month for October,  
 plus one month for November,  
 plus one month for December,  
 plus one month for January,  
 plus one day in February.

AUGUST 2014

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

JANUARY 2015

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

September 2014

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

FEBRUARY 2015

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28

The Years, Months, Days of a particular time period are then used to adjust key dates in an employee's personnel records.



## Applying Manual Days, Months, and Years Formulas

The following examples illustrate the practical application of the manual date adjustment process for various employment dates covered under civil service rules and collective bargaining agreements. The samples are for illustrative purposes only and do not address every possible situation, nor are they inclusive of every rule. Prior to adjusting any dates always reference the applicable civil service rules and collective bargaining agreements.

### Military Service Credit

Military Service Years, Months, and Days are listed on the employee's Form DD214 (discharge papers and separation documents) and maintained in HRMS on the Time Specification/Employ Period (0552) infotype.

The screenshot shows the SAP HRMS 'Create Time Specification/Employ. Period (0552)' form. The form is titled 'Create Time Specification/Employ. Period (0552)' and contains the following data:

Personnel No.	40000018	Name	BEEBE PEARL
PersArea	3500	Sup of Pub Instruction	EEGroup 0 Permanent
PSubarea	0001	Non Represented	EESubgroup 01 Monthly(M) OT Exe... Status Active
Start	11/21/1988	To	09/14/1992

Time specifications/employment period

Time spec.	0E08	Military service / non-military service
<input type="checkbox"/>	Do not evaluate	

Duration of validity period		Imputable period	
Years	3	Years	3
Months	9	Months	9
Days	25	Days	24

Save your entries

In HRMS, the *Duration of validity period* is calculated based on the infotype's start and end dates and may not match the Years, Months, Days that the United States has calculated as Military Service. The *Imputable period* is manually keyed into the system and reflects the actual days, months, and years recorded on the employee's Form DD214. To create and maintain employee records, refer to HRMS Online Quick Reference user procedures [Military Service – Create](#) and [Military Service – Maintain](#).

**Example:** In the above screen shot, an employee's DD214 reflects military service from November 21, 1988 through September 14, 1992 and indicates 3 Years, 9 Months, 24 Days of total active service. Agencies should always use the Years, Months, Days listed on the employee's discharged paperwork when determining military service credit and entering *Imputable period*.

There are times, however, when an employee has had more than one period of active military service. When this happens there may be a single DD214 that has the total active service time for all service, a single DD214 that lists active service for the current and a prior period, or there may be multiple separate DD214's, each with a separate active service period. Sometimes there are stop and start dates, and sometimes just the years, months and days for each period. Multiple periods must be manually added together to get a Total Active Service Period. This can present a problem when you don't have a Start Date and End Date.

**Example:** An employee has two periods of active service. This is the only DD214 the employee has:

12. RECORD OF SERVICE	YEAR(s)	MON (s)	DAY (s)
a. Date Entered AD This Period	71	NOV	19
b. Separation Date This Period	91	JUL	31
c. Net Active Service This Period	19	08	12
d. Total Prior Active Service	00	03	29
e. Total Prior Inactive Service	00	10	08
f. Foreign Service	00	00	00
g. Sea Service	03	08	09
h. Effective Date of Pay Grade	80	DEC	01
i. Reserve Oblig. Term. Date	NA	NA	NA

To get a Total Active Service period you must add the two dates together. Adding 12 days to 29 days is 41 days, which is more than one month:

Year	Month	Day	Description
19	08	12	Net Active Service This Period
	+03	+29	Total Prior Active Service
19	11	41	Total Active Service – Incorrect due to 41 days

Without exact dates, we cannot know whether to use a 28, 29, 30 or 31 day month to convert the days into a month. As a consistent standard, a 30 day month should be used when adding active service periods. In this example, we would then have 41 days converting into 1 month plus 11 days. Then we will also have to convert 12 months into 1 year:

Year	Month	Day	Description
19	11	41	Incorrect Total Active Service
	+01	-30	Convert 30 days to 1 month
19	12	11	Total Active Service – Incorrect due to 12 months
+1	-12		Convert 12 months into 1 year
20	00	11	Total Active Service

Once you have the Total Active Service period you can enter that number in the *Imputable Period* as described above. For infotype Start and End Dates use the dates on the most recent DD214, even though they result in a *Duration of validity period* that is far off from the *Imputable Period*.

### Adjusting Seniority for Military Service Credit

During a layoff, an eligible veteran may receive a preference by having his/her seniority increased. Seniority is increased by adding **up to five years** of the eligible veteran’s total active military service. This adjusted seniority date should **not** be added to an employee’s Seniority Date in HRMS; the Seniority w/ Military date type may be used in HRMS or it can be tracked outside of the system. Not all veterans qualify for increased seniority.

To adjust the employee’s seniority for military service credit, subtract the number of years, months and days of the Military Service from the employee’s current Seniority Date.

**Example:** An employee’s Seniority Date is September 09, 2002. The agency is going through a layoff and the employee is eligible for additional 3 years, 9 months, 24 days seniority for her Military Service.

Write down the numerical Year, Month, Day of the current seniority date and the number of years, months, and days to adjust for military service, allowing space between the two dates for any necessary adjustments:

Year	Month	Day	Description
2002	09	09	Seniority Date (September 09, 2002)
	03	09	24 Military Service Years, Months, Days

The 24 days for the Military Service is greater than the 9 days in the Seniority Date, so it is necessary to convert a month into days. Convert the first full month prior to the Seniority Date, in this example that is August:

Year	Month	Day	Description
2002	09	09	Seniority Date (September 09, 2002)
	-01	+31	Convert the month of August into 31 days
2002	08	40	Seniority Date (with converted month-to-days)

The 9 months in the Military Service is greater than the 8 months of the Seniority Date so it is necessary to convert a year into months:

Year	Month	Day	Description
2002	08	40	Seniority Date (with converted month-to-days)
	-01	+12	Convert one year into 12 months
2001	20	40	Seniority Date (with converted year-to-months and month-to-days)

Subtract the Military Service Years, Months, Days from the Seniority Date (with converted year-to-months and month-to-days) to get the Seniority Date adjusted for Military Service:

Year	Month	Day	Description
2001	20	40	Seniority Date (with converted year-to-months and month-to-days)
-03	-09	-24	Subtract Military Service Years, Months, Days
1998	11	16	Seniority with Military Service (November 16, 1998)

The following is a recap of all the steps to credit the number of years, months and days of Military Service to an employee’s Seniority Date:

Year	Month	Day	Description
2002	09	09	Seniority Date (September 09, 2002)
	-01	+31	Convert the month of August into 31 days
2002	08	40	Seniority Date (with converted month-to-days)
-01	+12		Convert one year into 12 months
2001	20	40	Seniority Date (with converted year-to-months and month-to-days)
-03	-09	-24	Subtract Military Service Years, Months, Days
1998	11	16	Seniority with Military Service (November 16, 1998)

### Prior State Service

Prior periods of state service are added to an employee’s current Anniversary Date to reflect accumulative years of service.

**Example:** An employee’s current Anniversary Date is June 09, 2004. The employee previously worked as a full-time employee during two separate periods: February 01, 1993 through December 20, 1993 and April 4, 1994 through February 28, 1995.

Write down the numerical Year, Month, Day of the two dates for the first employment period, with the more recent date “on top”, allowing space between the two dates for any necessary adjustments:

Year	Month	Day	Description
1993	12	21	1 <sup>st</sup> Employment Period End Date (December 20, 1993 plus one day)
1993	02	01	1 <sup>st</sup> Employment Period Start Date (February 01, 1993)

The 01 (day) in the 1<sup>st</sup> Employment Period Start Date is less than the 21 (days) in the 1<sup>st</sup> Employment Period End Date so converting months into days is **not** necessary. The 02 (months) in the 1<sup>st</sup> Employment Period Start Date is less than the 12 (months) in the 1<sup>st</sup> Employment Period End Date so converting years into months is also **not** necessary.

Subtract the 1<sup>st</sup> Employment Period Start Date from the 1<sup>st</sup> Employment Period End Date:

Year	Month	Day	Description
1993	12	21	1 <sup>st</sup> Employment Period End Date (December 20, 1993 plus one day)
-1993	-02	-01	Subtract 1 <sup>st</sup> Employment Period Start Date (February 01, 1993)
00	10	20	1 <sup>st</sup> Employment Period Years, Months, Days

Write down the numerical Year, Month, Day of the two dates for the second employment period, with the more recent date “on top”, allowing space between the two dates for any necessary adjustments:

Year	Month	Day	Description
1995	03	01	2 <sup>nd</sup> Employment Period End Date (February 28, 1995 plus one day)
1994	04	04	2 <sup>nd</sup> Employment Period Start Date (April 04, 1994)

The 04 (days) in the 2<sup>nd</sup> Employment Start Date is more than the 01 (day) in the 2<sup>nd</sup> Employment Period End Date so it is necessary to convert a month into days. Remember, when converting months-to-days, convert the full month prior to the End Date. Because that is February, verify the number of days in February in 1995.

Year	Month	Day	Description
1995	03	01	2 <sup>nd</sup> Employment Period End Date (February 28, 1995 plus one day)
	-01	+28	Convert February into days
1995	02	29	2 <sup>nd</sup> Employment Period End Date (with converted month-to-days)
1994	04	04	2 <sup>nd</sup> Employment Period Start Date (April 4, 1994)

The 04 (months) in the 2<sup>nd</sup> Employment Start Date is greater than the 02 (months) in the 2<sup>nd</sup> Employment Period End Date, so it is necessary to convert a year into months:

Year	Month	Day	Description
1995	02	29	2 <sup>nd</sup> Employment Period End Date (with converted month-to-days)
-01	+12		Convert one year into months
1994	14	29	2 <sup>nd</sup> Employment Period End Date (with converted year-to-months and month-to-days)
1994	04	04	2 <sup>nd</sup> Employment Period Start Date (April 4, 1994)

Subtract the 2<sup>nd</sup> Employment Period Start Date from the 2<sup>nd</sup> Employment Period End Date (with converted month-to-days and year-to-months):

Year	Month	Day	Description
1994	14	29	New 2 <sup>nd</sup> Employment Period End Date (with convert years-to-months and months-to-days)
-1994	-04	-04	Subtract 2 <sup>nd</sup> Employment Period Start Date (April 4, 1994)
00	10	25	2 <sup>nd</sup> Employment Period Years, Months, Days

Add the number of Years, Months, Days for the 1<sup>st</sup> and 2<sup>nd</sup> Employment Periods:

Year	Month	Day	Description
00	10	20	1 <sup>st</sup> Employment Period Years, Months, Days
+00	+10	+25	2 <sup>nd</sup> Employment Period Years, Months, Days
00	20	45	Prior State Service Years, Months, Days

### Adjusting the Anniversary Date for Prior State Service

To give an employee credit for prior state service, subtract the total number of years, months and days of the Prior State Service from the current Anniversary Date.

**Example:** An employee's current Anniversary Date is June 09, 2004. The HR Office has determined that his combined prior period employment equals 20 months and 45 days.

Write down the numerical Year, Month, Day of the current Anniversary Date and the number of years, months, and days to adjust, allowing space between the two dates for any necessary adjustments:

Year	Month	Day	Description
2004	06	09	Current Anniversary Date (June 09, 2004)
00	20	45	Prior State Service Years, Months, Days

The 45 (days) of Prior State Service is greater than the 9 (days) in the Anniversary Date, so it is necessary to convert months into days. Borrowing the month of May (the first full month prior to the Anniversary Date) would only give an additional 31 days, so it is necessary to borrow the month of April, also.

Year	Month	Day	Description
2004	06	09	Current Anniversary Date (June 09, 2004)
	-02	+61	Convert the months of May and April into days (31 days + 30 days)
2004	04	70	Current Anniversary Date (with converted months-to-days)
00	20	45	Prior State Service Years, Months, Days

The 20 (months) Prior State Service is greater than the 04 (months) in the Anniversary Date, so it is necessary to “borrow” years from the Anniversary Date. Since one year only equals 12 months, two years will need to be converted.

Year	Month	Day	Description
2004	04	70	Current Anniversary Date (with converted months-to-days)
-02	+24		Convert two years into 24 months
2002	28	70	Current Anniversary Date (with converted years-to-months and months-to-days)
00	20	45	Prior State Service Years, Months, Days

Subtract the Prior State Service Years, Months, Days from the new Anniversary Date (with converted years-to-months and months-to-days):

Year	Month	Day	Description
2002	28	70	Current Anniversary Date (with converted years-to-months and months-to-days)
-00	-20	-45	Subtract Prior State Service Years, Months, Days
2002	08	25	New Anniversary Date (August 25, 2002)

The following is a recap of the steps to adjust the Anniversary Date for Prior State Service:

Year	Month	Day	Description
2004	06	09	Current Anniversary Date (June 09, 2004)
	-02	+61	Convert the months of May and April into days (31 days + 30 days)
2004	04	70	Current Anniversary Date (with converted months-to-days)
-02	+24		Convert two years into 24 months
2002	28	70	Current Anniversary Date (with converted years-to-months and months-to-days)
-00	-20	-45	Subtract Prior State Service Years, Months, Days
2002	08	25	New Anniversary Date (August 25, 2002)

## Seniority Date Adjustment for Part-Time Employees

For most part-time general government employees, the seniority date is adjusted based on actual hours worked. Refer to collective bargaining agreements or WAC 357 to determine what should be included in “actual hours worked”.

**Example:** In 2013, the payroll records for a part-time employee reflects 1,023.5 total hours that qualify as “actual hours worked”. Full-time employment is the equivalent of 2,088 hours in a calendar year. His current seniority date is April 10, 2008.

Subtract the number of “actual hours worked” from the total hours available:

$$2,088 - 1,023.5 = 1,064.5$$

Then, convert the hours into days by dividing by eight hours:

$$1064.5 \div 8 = 133.0625, \text{ or rounded down to equal } 133 \text{ days.}$$

Because the hours used in our calculations are based on **work days only**, we cannot simply add 133 days to April 10, 2008. Instead, we must use calendars, and some logic, to determine the new Seniority Date. To do this, we'll convert the number of days into work weeks.

First, determine how many weeks are in 133 days by dividing by 5:

$$133 \div 5 = 26.6, \text{ or } 26 \text{ weeks and } 3 \text{ days } (5 \times 0.6 = 3)$$

Looking at calendars, we can count forward 26 weeks and 3 working days from April 10, 2008: to reach October 9, 2008, then count forward three work days to reach October 14, 2008:

APRIL 2008

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

AUGUST 2008

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

MAY 2008

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

SEPTEMBER 2008

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

JUNE 2008

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

OCTOBER 2008

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

JULY 2008

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Count forward 26 weeks from April 10 to reach October 9. Then count forward three work days to October 14. October 14, 2008 is the employee's new Seniority Date adjusted for part-time hours in 2013.



It is an agency's discretion how often part-time employee seniority date adjustments are performed (monthly, quarterly, or annually). However, all adjustments should be completed prior to an employee leaving the agency.

## Appendix A – Examples with Explanation

Additional examples with detailed explanation are included below.

### Example

An employee’s current Anniversary Date is May 15, 2017. The employee previously worked for the state from August 1, 1996 to March 29, 2002.

First we’ll calculate the years, months, and days of the employee’s prior service. Then we’ll adjust the Anniversary Date by that amount.

Subtracting the start date from the end date plus one day would result in a negative number of months:

Year	Month	Day	Description
2002	03	30	End Date (March 29, 2002 plus one day)
-1996	-08	-01	Subtract Start Date
06	-05	29	Years, Month, Days – Incorrect due to negative months

To get a positive number of months, “borrow” one year and convert it into months by subtracting one year from the End Date year and adding the equivalent number of months (12) to the End Date months:

Year	Month	Day	Description
2002	03	30	End Date (March 29, 2002 plus one day)
-01	+12		Convert one year into 12 months
2001	15	30	New End Date (with converted year-to-months)

Subtract the Start Date from the New End Date (with converted year-to-months) to get a positive number of months:

Year	Month	Day	Description
2001	15	30	New End Date (with converted year-to-months)
-1996	-08	-01	Subtract Start Date
05	07	29	Correct Years, Months, Days (prior state service)

The steps for calculating prior service looks like this:

Year	Month	Day	Description
2002	03	30	End Date (March 29, 2002 plus one day)
-01	+12		Convert one year into 12 months
2001	15	30	New End Date (with converted year-to-months)
-1996	-08	-01	Subtract Start Date
05	07	29	Correct Years, Months, Days (prior state service)

Now we will apply the Correct Years, Months, and Days to the employee’s current Anniversary Date. Subtracting the Prior State Service from the Current Anniversary Date would result in a negative number of months and days:

Year	Month	Day	Description
2017	05	15	Current Anniversary Date (May 15, 2017)
-05	-07	-29	Subtract Prior State Service Years, Months, Days
2012	-02	-14	New Anniversary Date – incorrect due to negative months and days

When converting both years-to-months and months-to-days, it is best to start with the months-to-days conversion first. When converting months-to-days, borrow days from the first full month prior to the Anniversary Date. Convert April into 30 days:

Year	Month	Day	Description
2017	05	15	Current Anniversary Date (May 15, 2017)
	-01	+30	Convert April into 30 days
2017	04	45	Current Anniversary Date (with converted month-to-days)

Next, convert year-to-months:

Year	Month	Day	Description
2017	04	45	Current Anniversary Date (with converted month-to-days)
-01	+12		Convert one year into 12 months
2016	16	45	Current Anniversary Date (with converted month-to-days and year-to-months)

Finally, subtract the employee's prior state service from their converted Anniversary Date:

Year	Month	Day	Description
2016	16	45	Current Anniversary Date (with converted month-to-days and year-to-months)
-05	-07	-29	Subtract Prior State Service Years, Months, Days
2011	09	16	New Anniversary Date (adjusted for prior state service)

The steps for applying prior service to the Anniversary Date look like this:

Year	Month	Day	Description
2017	05	15	Current Anniversary Date (May 15, 2017)
	-01	+30	Convert April into 30 days
2017	04	45	Current Anniversary Date (with converted month-to-days)
-01	+12		Convert one year into 12 months
2016	16	45	Current Anniversary Date (with converted month-to-days and year-to-months)
-05	-07	-29	Subtract Prior State Service Years, Months, Days
2011	09	16	New Anniversary Date (adjusted for prior state service)

The entire process of calculating prior service and applying the prior service to the current Anniversary Date look like this:

Year	Month	Day	Description
2002	03	30	End Date (March 29, 2002 plus one day)
-01	+12		Convert one year into 12 months
2001	15	30	New End Date (with converted year-to-months)
-1996	-08	-01	Subtract Start Date
05	07	29	Correct Years, Months, Days (prior state service)
Year	Month	Day	Description
2017	05	15	Current Anniversary Date (May 15, 2017)
	-01	+30	Convert April into 30 days
2017	04	45	Current Anniversary Date (with converted month-to-days)
	-01	+12	Convert one year into 12 months
2016	16	45	Current Anniversary Date (with converted month-to-days and year-to-months)
	-05	-07	Subtract Prior State Service Years, Months, Days
2011	09	16	New Anniversary Date (adjusted for prior state service)

## Example

An employee's current Anniversary Date is March 1, 2016. The employee previously worked for the state from June 10, 1985 to November 20, 2015.

First we'll calculate the years, months, and days of the employee's prior service. Then we'll adjust the Anniversary Date by that amount.

Subtract the Start Date from the End Date plus one day to get the Years, Months, Days of prior state service:

Year	Month	Day	Description
2015	11	21	End Date (November 20, 2015 plus one day)
-1985	-06	-10	Subtract Start Date (June 10, 1985)
30	05	11	Years, Months, Days (prior state service)

Now we will apply the Years, Months, and Days to the employee's current Anniversary Date. Subtracting the Prior State Service from the Current Anniversary Date would result in a negative number of months and days:

Year	Month	Day	Description
2016	03	01	Current Anniversary Date (March 1, 2016)
-30	-05	-11	Subtract Prior State Service Years, Months, Days
1986	-02	-10	New Anniversary Date – incorrect due to negative months and days

When converting both years-to-months and months-to-days, it is best to start with the months-to-days conversion first. When converting months-to-days, borrow days from the first full month prior to the Anniversary Date. Because the first full month prior is February, we need to determine if February 2016 had 28 or 29 days. We can determine that by looking at a calendar

or by dividing 2016 by four (and 400 if a century year). Since 2016 is evenly divisible by four ( $2016 \div 4 = 504$ ) we know that 2016 was a leap year, so February 2016 had 29 days:

Year	Month	Day	Description
2016	03	01	Current Anniversary Date (March 1, 2016)
	-01	+29	Convert February into 29 days
2016	02	30	Current Anniversary Date (with converted month-to-days)

Next, convert year-to-months:

Year	Month	Day	Description
2016	02	30	Current Anniversary Date (with converted month-to-days)
	-01	+12	Convert one year into 12 months
2015	14	30	Current Anniversary Date (with converted month-to-days and year-to-months)

Finally, subtract the employee's prior state service from their converted Anniversary Date:

Year	Month	Day	Description
2015	14	30	Current Anniversary Date (with converted month-to-days and year-to-months)
	-30	-05	-11 Subtract Prior State Service Years, Months, Days
1985	09	19	New Anniversary Date (adjusted for prior state service)

The steps for applying prior service to the Anniversary Date look like this:

Year	Month	Day	Description
2016	03	01	Current Anniversary Date (March 1, 2016)
	-01	+29	Convert February into 29 days
2016	02	30	Current Anniversary Date (with converted month-to-days)
	-01	+12	Convert one year into 12 months
2015	14	30	Current Anniversary Date (with converted month-to-days and year-to-months)
	-30	-05	-11 Subtract Prior State Service Years, Months, Days
1985	09	19	New Anniversary Date (adjusted for prior state service)

The entire process of calculating prior service and applying the prior service to the current Anniversary Date look like this:

Year	Month	Day	Description
2015	11	21	End Date (November 20, 2015 plus one day)
-1985	-06	-10	Subtract Start Date (June 10, 1985)
	30	05	11 Years, Months, Days (prior state service)

Year	Month	Day	Description
2016	03	01	Current Anniversary Date (March 1, 2016)
	-01	+29	Convert February into 29 days
2016	02	30	Current Anniversary Date (with converted month-to-days)
	-01	+12	Convert one year into 12 months
2015	14	30	Current Anniversary Date (with converted month-to-days and year-to-months)
	-30	-05	-11 Subtract Prior State Service Years, Months, Days
1985	09	19	New Anniversary Date (adjusted for prior state service)

## Example

An employee's current Seniority Date is January 13, 2003. The employee is eligible for additional 4 years, 8 months, 18 days seniority for their Military Service.

Subtracting the Military Service Years, Months, Days from the Current Seniority Date would result in a negative number of months and days:

Year	Month	Day	Description
2003	01	13	Current Seniority Date (January 13, 2003)
	-04	-08	-18 Subtract Military Service Years, Months, Days
1999	-09	-05	Seniority with Military Service – incorrect due to negative months and days

When converting both years-to-months and months-to-days, it is best to start with the months-to-days conversion first. When converting months-to-days, borrow days from the first full month prior to the Seniority Date:

Year	Month	Day	Description
2003	01	13	Current Seniority Date (January 13, 2003)
	-01	+31	Convert December into 31 days
2003	00	44	Current Seniority Date (with converted month-to-days) – incorrect due to zero months

Because this is a date, rather than a period of time, we cannot have zero months; so it is necessary to “borrow” a year to get a number of months greater than zero:

Year	Month	Day	Description
2003	00	44	Current Seniority Date (with converted month-to-days) – incorrect due to zero months
	-01	+12	Convert one year into 12 months
2002	12	44	Current Seniority Date (with converted month-to-days and year-to-months)

Finally, subtract the employee's military service from their converted Seniority Date:

Year	Month	Day	Description
2002	12	44	Current Seniority Date (with converted month-to-days and year-to-months)
-04	-08	-18	Subtract Military Service Years, Months, Days
1998	04	26	Seniority with Military Service

The entire process looks like this:

Year	Month	Day	Description
2003	01	13	Current Seniority Date (January 13, 2003)
	-01	+31	Convert December into 31 days
	-01	+12	Convert one year into 12 months
2002	12	44	Current Seniority Date (with converted month-to-days and year-to-months)
-04	-08	-18	Subtract Military Service Years, Months, Days
1998	04	26	Seniority with Military Service

## Appendix B – Examples with Calculations Only

Additional examples with no explanation (calculations only) are included below.

### Example

An employee's current Anniversary Date is October 10, 2010. The employee previously worked as a state employee during two separate periods: January 6, 2001 through May 2, 2001 and December 16, 2002 through January 4, 2005.

Year	Month	Day	Description
2001	05	03	Employment Period #1 End Date (May 2, 2001 plus one day)
	-01	+30	Convert April into 30 days
2001	04	33	New Employment Period #1 End Date (with converted month-to-days)
-2001	-01	-06	Subtract Employment Period #1 Start Date
00	03	27	Employment Period #1 Prior Service (Years, Months, Days)
Year	Month	Day	Description
2005	01	05	Employment Period #2 End Date (January 4, 2005 plus one day)
	-01	+31	Convert December into 31 days
	-01	+12	Convert one year into 12 months
2004	12	36	New Employment Period #2 End Date (with converted year-to-months and month-to-days)
-2002	-12	-16	Subtract Employment Period #2 Start Date
02	00	20	Employment Period #2 Prior Service (Years, Months, Days)
Year	Month	Day	Description
00	03	27	Employment Period #1 Prior Service (Years, Months, Days)
+02	+00	+20	Employment Period #2 Prior Service (Years, Months, Days)
02	03	47	Total Prior Service (Years, Months, Days)
Year	Month	Day	Description
2010	10	10	Current Anniversary Date (October 10, 2010)
	-02	+61	Convert September into 30 days and August into 31 days
2010	08	71	Current Anniversary Date (with converted month-to-days)
	-02	-03	Subtract Total Prior State Service (Years, Months, Days)
2008	05	24	New Anniversary Date (adjusted for prior state service)

### Example

An employee's current Anniversary Date is January 16, 2017. The employee previously worked for the state from September 21, 1982 through March 8, 2015.

Year	Month	Day	Description
2015	03	09	End Date (March 8, 2015 plus one day)
	-01	+28	Convert February into 28 days
	-01	+12	Convert one year into 12 months
2014	14	37	New End Date (with converted year-to-months)
-1982	-09	-21	Subtract Start Date
32	05	16	Correct Years, Months, Days (prior state service)



Year	Month	Day	Description
2017	01	16	Current Anniversary Date (January 16, 2017)
-01	+12		Convert one year into 12 months
2016	13	16	Current Anniversary Date (with converted year-to-months)
-32	-05	-16	Subtract Prior State Service Years, Months, Days
1984	08	00	Incorrect Anniversary Date (adjusted for prior state service) – due to zero days
	-01	+31	Convert July to 31 days
1984	07	31	New Anniversary Date (adjusted for prior state service)

### Example

An employee's current Seniority Date is March 7, 2004. The employee is eligible for additional 4 years, 8 months, 11 days seniority for their Military Service.

Year	Month	Day	Description
2004	03	07	Current Seniority Date (March 7, 2004)
	-01	+29	Convert February to 29 days
-01	+12		Convert one year to 12 months
2003	14	36	Current Seniority Date (with converted month-to-days and year-to-months)
-04	-08	-11	Subtract Military Service Years, Months, Days
1999	06	25	Seniority with Military Service

### Change Log

Change Date	Changed By	Description