

# Improve Your Payroll Budgeting with Real-time Estimation for the Year's Maximum Pensionable Earnings (YMPE)



Earlier and Accurate Estimates for Canada Pension Plan (CPP) Contributions

FINEPOINT SOLUTIONS INC.  
1 May 2023

The Year's Maximum Pensionable Earnings (YMPE) is an important figure that is used for determining contributions to the Canada Pension Plan (CPP). YMPE is meant to represent the average national wage, and year-over-year changes in YMPE represent wage inflation.

When increases for the YMPE are larger than expected, employers may be faced with higher payroll expenses than were budgeted for because YMPE sets the upper limit for the portion of wages that CPP contributions are applied to. Larger than expected YMPE recently happened for the 2021 and 2022 YMPE increases. The potential impact to payroll budgets was widely mentioned in mainstream media.<sup>1,2,3</sup>

Interestingly, reports of abnormally high YMPE occurred *after* the official announcement of the YMPE increases for 2021 and 2022. The official announcement for an upcoming year's YMPE historically happens in November.<sup>4</sup> Arguably, learning this information in November is too late for budgeting.

We propose that a reasonable estimate for the YMPE can be made, and that this Real-time YMPE Estimate can be made prior to the official release in November. Thus, Real-time YMPE Estimation is valuable for individuals who need to make budget decisions earlier than November.

We introduce Real-time YMPE Estimation in our methodology paper, "Real-time Estimation Method for the Year's Maximum Pensionable Earnings (YMPE): This Leading Indicator can Improve Payroll Budgeting and Canada Pension Plan (CPP) Calculations."<sup>5</sup>

**In our judgement, Real-time YMPE Estimation using data from – as early as – May can be used for payroll budgeting.<sup>6</sup>**

---

<sup>1</sup> Press, J. "Middle income Canadians to take bigger hit with CPP premiums go up Friday because of the pandemic, says CFIB." The Canadian Press. 2020. Available at <https://financialpost.com/personal-finance/retirement/planned-increase-in-cpp-premiums-on-jan-1-to-hit-some-workers-more-due-to-pandemic>. Accessed 30 April 2023.

<sup>2</sup> Press, J. "Planned increase in CPP premiums on Jan. 1 to hit some workers due to pandemic." The Canadian Press. 2021. Available at <https://www.bnnbloomberg.ca/planned-increase-in-cpp-premiums-on-jan-1-to-hit-some-workers-more-due-to-pandemic-1.1542352>. Accessed 30 April 2023.

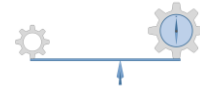
<sup>3</sup> Alini, E. "The CPP earnings cap is increasing at the fastest rate in 30 years. Why and what it means." Global News. 2021. Available at <https://globalnews.ca/news/8374309/cpp-earnings-cap-rises-2022/>. Accessed 30 April 2023.

<sup>4</sup> Author's review of recent announcements and press releases.

<sup>5</sup> Yee, J. "Real-time Estimation Method for the Year's Maximum Pensionable Earnings (YMPE): This Leading Indicator can Improve Payroll Budgeting and Canada Pension Plan (CPP) Calculations." Saskatoon, Saskatchewan: FINEPOINT SOLUTIONS INC., 2023. Available at <https://ympe.ca/>.

<sup>6</sup> Ibid.

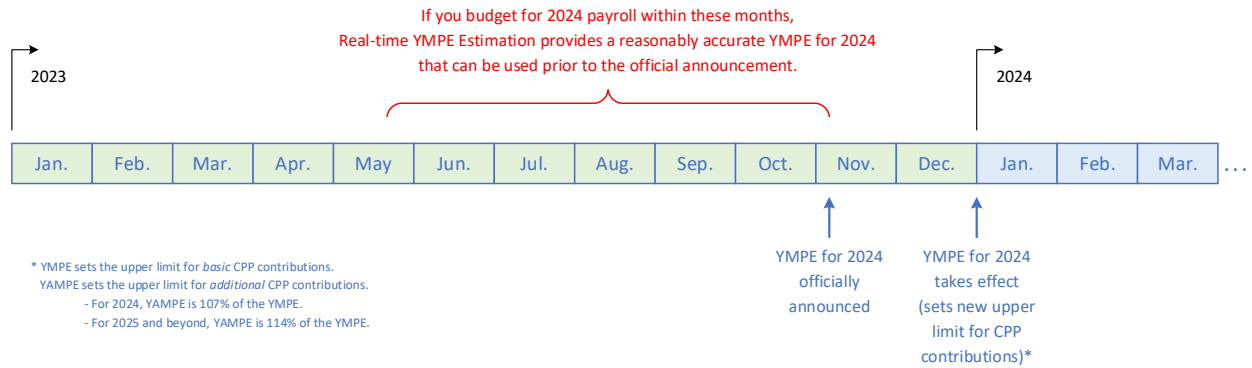
# Improve Your Payroll Budgeting with Real-time Estimation for the Year’s Maximum Pensionable Earnings (YMPE)



Earlier and Accurate Estimates for Canada Pension Plan (CPP) Contributions

FINEPOINT SOLUTIONS INC.  
1 May 2023

As illustrated in Figure 1, Real-time YMPE Estimation provides information useful for budgeting five months before the official release of the upcoming year’s YMPE and over six months before the adjustment to CPP contributions takes effect.



**Figure 1.** Timeline showing how early Real-time YMPE Estimation can provide information for budgeting.

Our methodology paper provides a historical study that describes the accuracy of Real-time YMPE Estimation for each month leading up to official announcement of the YMPE for each respective year in the study period. Individuals who require more certainty are advised to determine their own timeframe for when to apply Real-time YMPE Estimation, according to their own specific circumstances, using Table 1 as a guideline.<sup>7</sup>

**Table 1.** How often Real-time YMPE Estimates matched the official value for YMPE by month.

Release Month for New Data	Exact matches by Release Month		Release Month for New Data	Matched within one \$100-increment of YMPE	
	#	%		#	%
March	0	0%	March	1	13%
April	1	13%	April	5	63%
May	3	38%	May	6	75%
June	5	63%	June	7	88%
July	4	50%	July	8	100%
August	7	88%	August	8	100%
September	8	100%	September	8	100%

(A)
(B)

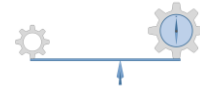
Source: Author's calculations. Table 1 is reproduced from our methodology paper.

You can find our most recent Real-time YMPE Estimate at the following website:

[ympe.ca](http://ympe.ca)

<sup>7</sup> Ibid.

# Improve Your Payroll Budgeting with Real-time Estimation for the Year's Maximum Pensionable Earnings (YMPE)



Earlier and Accurate Estimates for Canada Pension Plan (CPP) Contributions

FINEPOINT SOLUTIONS INC.  
1 May 2023

## Illustration of Unexpected High YMPE Increases

Since the YMPE represents wage inflation, it is expected that YMPE will increase each year. We use wage inflation projections from the triennial Actuarial Report on the CPP, as a baseline for expected YMPE growth.<sup>8</sup> Thus, our current baseline for expected YMPE growth is 2.9% per year.

It should also be noted that the upcoming year, 2024, is unique. Planned enhancements to the CPP will be phased-in beginning in 2024. The enhancements introduce a new wage-level threshold called the Year's Additional Maximum Pensionable Earnings (YAMPE). Additional contributions must be paid into CPP for the portion of an employee's wages between the YAMPE and the YMPE. It is important that the estimate for YMPE be as accurate as possible because YAMPE is calculated based on the value of the YMPE. For 2024, YAMPE is equal to 107% of YMPE; and for 2025 and beyond, YAMPE is 114% of YMPE.

We consider a difference of +/-1.5% from the baseline as unexpected. Thus, an increase for YMPE of at least 4.4% would be considered unexpectedly high. Table 2 shows that, for each employee who earns at least \$69,500 in 2024, CPP contributions will increase to \$4,119 from \$3,754.<sup>9</sup> In other words, an extra \$63.50 would need to be contributed to CPP on top of the expected baseline contribution increase of \$301.05, for each employee who earns at least \$69,500 in 2024, if there is an unexpected high YMPE increase of 4.4%.

In Table 2, we also show the impact of the larger YAMPE threshold rate in 2025, 114% of YMPE, compared to the initial phase-in rate in 2024 (107% of YMPE). In this case, CPP contributions will increase to \$4,509.50 from \$4,119 in 2025, if YMPE were to again be abnormally high. In other words, an extra \$136.95 would need to be contributed to CPP on top of the expected baseline contribution increase of \$317.05, for each employee who earns at least \$72,500 in 2025.

**Table 2.** Illustration of CPP contributions for both expected and unexpected YMPE increases.

Baseline Expected YMPE Increase = 2.9%						Unexpected High YMPE Increase = 4.4%					
Year	YMPE	YAMPE	Total Max. Employer Contrib.	YOY Change in Total Max. Contrib. (\$)	YOY Change in Total Contrib. (%)	YMPE (abnormal HIGH)	YAMPE	Total Max. Employer Contrib.	Difference w Baseline (Total Max. Contrib.)	YOY Change, Total Contrib. (\$)	YOY Change, Total Contrib. (%)
2023	\$66,600	-	\$3,754.45	-	-	\$66,600	-	\$3,754.45	-	-	-
2024	\$68,500	\$73,200	\$4,055.50	\$301.05	8.0%	\$69,500	\$74,300	\$4,119.00	\$63.50	\$364.55	9.7%
2025	\$70,400	\$80,200	\$4,372.55	\$317.05	7.8%	\$72,500	\$82,600	\$4,509.50	\$136.95	\$390.50	9.5%

Source: Author's calculations.

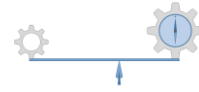
We present Real-time YMPE Estimation not to suggest that an abnormal YMPE increase is imminent, but rather to provide a way to identify an unexpected YMPE increase in advance of the official announcement, when such a situation arises.

<sup>8</sup> Office of the Chief Actuary. "31<sup>st</sup> Actuarial Report on the Canada Pension Plan as at 31 December 2021." Office of the Superintendent of Financial Institutions, 2022.

<sup>9</sup> Employers and employees each contribute this amount (50%-50% split); self-employed individuals must contribute twice this amount.

# Improve Your Payroll Budgeting with Real-time Estimation for the Year's Maximum Pensionable Earnings (YMPE)

Earlier and Accurate Estimates for Canada Pension Plan (CPP) Contributions



FINEPOINT SOLUTIONS INC.  
1 May 2023

## About the Author



**Jason Yee, CFA, P.Eng.**  
Principal Investment Analyst & Financial Planner

FINEPOINT SOLUTIONS INC.  
[www.finepointsolutions.ca](http://www.finepointsolutions.ca)  
greetings@finepointsolutions.ca

Jason Yee is the principal investment analyst and financial planner at FINEPOINT SOLUTIONS INC., an advice-only, fee-for-service financial planning provider.

Prior to this role, Jason had a 16-year career as a Professional Engineer, where he held a number of technical and leadership roles managing operations at a variety of industrial facilities.

This document is published by FINEPOINT SOLUTIONS INC. for informational purposes only. Any financial planning advice and/or recommendations contained herein should be evaluated relative to individual objectives and in consultation with a financial professional.

The opinions presented in this document reflect the author's judgement at the time of publication; these opinions are provided in good faith, but are subject to change without notice and the author holds no responsibility for any errors or omissions contained herein.

This document is provided with the understanding that neither FINEPOINT SOLUTIONS INC. nor its owners, employees, agents or suppliers bear any responsibility or liability whatsoever in respect thereof.

All rights reserved. No part of this document may be reproduced in part or in whole without the prior written approval of the author and/or FINEPOINT SOLUTIONS INC.