Legislative Council Staff
Nonpartisan Services for Colorado's Legislature

Memorandum

June 20, 2024

TO: Interested Persons

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SUBJECT: Corrections of Prior-Year Transfers to the State Education Fund

Summary

The June 2024 Legislative Council Staff (LCS) forecast identifies a $1,209.0 million requirement for the FY 2023-24 transfer to the State Education Fund (SEF), including $1,073.9 million, equal to one-third of one percent of Colorado taxable income expected for FY 2023-24, plus $135.1 million in corrections for net under-transfers to the SEF between FY 2004-05 and FY 2022-23. This memorandum explains why and how the net under-transfers occurred, how the correction amount was calculated, and the process in place to avoid necessitating adjustments of this magnitude in future years.

Background

SEF transfers. Article IX, Section 17, of the Colorado Constitution ("Amendment 23") creates the SEF and requires annual transfers of income tax revenue from the General Fund to the SEF in amounts equal to one-third of one percent of Colorado taxable income. Revenue credited to the SEF is exempt from TABOR. Subject to annual appropriation, revenue in the SEF must be spent to comply with the public education funding requirement in Amendment 23 and for other specified public education purposes.

Article 55 of Title 22, Colorado Revised Statutes, establishes processes by which SEF revenues are identified and transferred. Transfers are made on a fiscal year basis in four quarterly amounts following each quarterly LCS revenue forecast.[1] Statute allows that LCS, in consultation with the Governor's Office of State Planning and Budgeting, "may correct any error in the total amount of State Education Fund revenues transferred during any state fiscal year by adjusting the amount of any transfer to be made during the next state fiscal year."[2] While the statutory allowance is

[1] Section 22-55-103 (2)(a) and (2)(b)(i), C.R.S.
[2] Section 22-55-103 (2)(b)(III), C.R.S.

only for corrections that are made in the next state fiscal year, this memorandum discusses corrections of errors in earlier years, and not only the immediately preceding state fiscal year, in order to ensure compliance with the constitutional transfer requirement in Amendment 23.

Methodology for determining the transfer amount. Statute requires that transfers be made on a fiscal year basis. However, transfer amounts are based on taxable income, which is reported by taxpayers on a tax year basis. Accordingly, there is no official report that identifies the amount of taxable income that was earned during a particular state fiscal year.

For example, in FY 2023-24, the state receives cash basis revenue from taxpayers that includes withheld tax and estimated payments for both tax year 2023 and tax year 2024, spring final tax payments (or refunds) for tax year 2023, autumn (extension) final tax payments for tax year 2022, and potentially corrections of prior overpayments or underpayments of tax for earlier tax years. Additionally, the executive branch performs routine accrual adjustments at the end of each state fiscal year to align revenue collections with the fiscal year when the underlying tax year occurred. These factors make it difficult to match tax year basis taxable income with the state fiscal year.

Unlike taxable income, income tax revenue is reported on a fiscal year basis. LCS calculates the SEF transfer as applying to the amount of taxable income on which accrual-basis income tax revenue was collected during the state fiscal year for which the transfer is made. This is longstanding precedent dating to the early years following enactment of Amendment 23, and it is not changed here.

Calculating taxable income. The relationship between tax revenue and taxable income is not constant because state income tax credits reduce tax revenue but do not affect taxable income. This requires income tax credits to be "added back" to income tax revenue when calculating taxable income. Accordingly, LCS calculates the fiscal year basis transfer amount using the formula below:

$$\text{SEF Transfer} = \frac{\text{Income Tax Revenue} + \text{Income Tax Credits}}{\text{Income Tax Rate}} \times \frac{1\%}{3}$$

Adjustments for income tax credits. Like taxable income, income tax credits are not reported on a state fiscal year basis, though the Department of Revenue (DOR) did report them on a fiscal year basis during the 2000s and early 2010s. For calculations for FY 2013-14 and all later fiscal years, LCS uses the amount of tax credits for the tax year that makes up the first half of the fiscal year (e.g. tax year 2013 for FY 2013-14) when performing the transfer calculation. Using tax credits for a single tax year to calculate taxable income for a fiscal year allows for reliable comparison of tax credit amounts over the transfer's long history, as these amounts have long been reported annually by the DOR. This approach introduces a small amount of error in the calculation; however, these errors offset one another over a period of fiscal years because each tax credit amount appears in a single tax year only and is matched to a single fiscal year only.

Sources of Error

This memorandum identifies and corrects three sources of error in prior year transfer calculations: normal June forecast error (for FY 2004-05 through FY 2018-19, as corrections for FY 2019-20 through FY 2022-23 were already in place), underestimates of tax credits (for FY 2004-05 through FY 2018-19), and treatment of refundable income tax credits (for FY 2019-20 through FY 2022-23). These are each discussed below.

Normal June forecast error. Final transfer amounts for a given fiscal year are set to match the June LCS forecast. The June forecast is released on or around June 20, and the state fiscal year ends on June 30. As a result, the June forecast is highly accurate in predicting current fiscal year income tax revenue, but still contains normal forecast error for June income tax withholding and for second quarter estimated income tax payments, which usually arrive in June. Accordingly, a June estimate of the current fiscal year SEF transfer will always include some amount of routine error that should be corrected in the following fiscal year's transfer.

In early years following the enactment of Amendment 23, LCS was especially vigilant in monitoring taxable income and performing annual corrections for over-transfers or under-transfers. For example, the December 2002 LCS forecast includes robust discussion of FY 2001-02 transfers having been too high because they were calculated based on forecasts that did not sufficiently account for the impact of the 2001 recession on taxable income. Accordingly, LCS applied a $59.0 million downward adjustment to the FY 2002-03 transfer to correct for errors that were identified at the time.

However, LCS stopped making annual corrections for forecast error following FY 2003-04. Annual errors were allowed to accumulate through FY 2018-19. Annual corrections were again made beginning in FY 2020-21, for which the SEF transfer corrected the error calculated for FY 2019-20, but not for previous years.

Underestimates of tax credits. Beginning in FY 2004-05, LCS settled into something close to the current transfer calculation methodology, where transfers were calculated from fiscal year basis income tax revenue, adjusted to account for the amount by which income tax credits reduce revenue. A review of LCS forecast files shows that the adjustments to account for tax credits were too small in 13 of 15 fiscal years between FY 2004-05 and FY 2018-19, leading to under-transfers in 11 of those years. Additionally, LCS stopped monitoring and correcting for prior-year errors during this period, though occasional adjustments were made (most notably following FY 2011-12) to attempt to stop the same errors from recurring in succeeding years.

Table 1 presents annual actual income tax credit amounts alongside the implied amount of income tax credits calculated from LCS transfer adjustments over this 15-year period. The fourth column shows how much tax credit estimation errors contributed to errors in the SEF transfer, while the fifth column shows the total error in the SEF transfer for the year, which also includes normal June forecast error. Table 1 shows that frequent under-adjustments of the SEF transfer to account for foregone income tax revenue due to tax credits resulted in $106.3 million in cumulative under-transfers over these 15 years. Normal revenue forecast error partially offset this effect, by $11.2 million, such that the total error was $95.1 million in cumulative under-transfers over the 15 years shown.

Table 1
Effect of Under-Adjustments for Income Tax Credits on Annual SEF Transfers
Nominal Dollars in Millions

	Actual Income Tax Credits	LCS Adjustment for Income Tax Credits	Contribution to Over- (Under-) Transfer to SEF	Total Over- (Under-) Transfer to SEF
FY 2004-05	$230.3	$150.0	($5.8)	$7.3
FY 2005-06	$285.6	$158.3	($9.2)	($10.6)
FY 2006-07	$323.6	$166.7	($11.3)	($14.7)
FY 2007-08	$353.2	$175.0	($12.8)	($12.1)
FY 2008-09	$310.6	$152.8	($11.4)	($15.5)
FY 2009-10	$247.0	$157.0	($6.5)	($9.6)
FY 2010-11	$237.5	$161.1	($5.5)	$1.4
FY 2011-12	$358.0	$263.5	($6.8)	($14.1)
FY 2012-13	$248.7	$263.6	$1.1	$19.7
FY 2013-14	$219.5	$282.0	$4.5	$1.0
FY 2014-15	$251.3	$168.1	($6.0)	($5.3)
FY 2015-16	$327.2	$168.1	($11.5)	($17.8)
FY 2016-17	$378.6	$168.1	($15.2)	($10.7)
FY 2017-18	$398.6	$331.4	($4.8)	($13.5)
FY 2018-19	$463.2	$391.0	($5.2)	($0.5)
15-Year Total	**$4,633.0**	**$3,156.6**	**($106.3)**	**($95.1)**

Treatment of refundable income tax credits. Tax credits differ according to how they are handled if the amount of the credit exceeds a taxpayer's gross tax liability. Nonrefundable credits reduce the taxpayer's tax liability to $0, but not below $0. Refundable credits result in a net "refund" payment to the taxpayer if they exceed the taxpayer's gross tax liability.

When LCS modernized our SEF transfer calculation methodology in FY 2019-20, we created an annual process to calculate prior year errors based on total accrual-basis tax revenue and credits reported by the DOR. At LCS's request, DOR reported only "effective credits," meaning only nonrefundable credits and the portion of refundable credits that reduced tax liability to $0, but not beyond $0. This was a methodological error, since the full amount by which credits reduce state tax revenue (even through net refund payments to taxpayers) must be added back in order to correctly calculate taxable income. Accordingly, the June 2024 forecast recalculates prior year SEF transfer errors using larger total tax credit amounts, rather than the smaller effective credit amounts used previously.

Table 2 shows the amount of total and effective tax credits for FY 2019-20 through FY 2022-23. The fourth column shows how much the use of only effective credits contributed to errors in the SEF transfer, while the fifth column shows the total error in the SEF transfer for the year, which also includes normal June forecast error, particularly for FY 2022-23 (estimated at $21.3 million in the March 2024 LCS forecast). The FY 2019-20 transfer, specifically, includes another error related to the forecast publication schedule during the COVID-19 pandemic; this error was largely corrected in the FY 2020-21 transfer. Table 2 shows that under-adjustments of the SEF transfer to account for foregone income tax revenue due to refundable tax credits resulted in $19.0 million in cumulative under-transfers over these four years. Normal revenue forecast error exacerbated this effect, such that the total error was $40.1 million in cumulative under-transfers over the four years shown.

Table 2
Effects of Incorrect Accounting of Refundable Income Tax Credits on Annual SEF Transfers
Nominal Dollars in Millions

	Total Income Tax Credits	Effective Income Tax Credits	Contribution to Over- (Under-) Transfer to SEF	Total Over- (Under-) Transfer to SEF
FY 2019-20	$470.3	$406.8	($4.6)	($62.0)
FY 2020-21	$494.9	$449.0	($3.4)	$57.3
FY 2021-22	$670.3	$604.7	($4.8)	($29.0)
FY 2022-23	$841.6	$759.2	($6.2)	($6.4)
Four-Year Total	**$2,477.1**	**$2,219.7**	**($19.0)**	**($40.1)**

Corrections in the June 2024 LCS Forecast

The June 2024 LCS forecast for FY 2023-24 SEF transfers includes a positive adjustment of $135.1 million to correct net prior year under-transfers of income tax revenue from the General Fund to the SEF between FY 2004-05 and FY 2022-23. This amount is a $113.9 million upward revision from the $21.3 million positive adjustment in the March 2024 LCS forecast for FY 2023-24 SEF transfers, which had included only corrections for normal June forecast error and effective credit amounts between FY 2019-20 and FY 2022-23. The correction of $135.1 million is attributable to the following components:

- corrections for underestimates of income tax credits between FY 2004-05 and FY 2018-19 ($106.3 million positive adjustment);
- corrections for normal June forecast error between FY 2004-05 and FY 2018-19 ($11.2 million negative adjustment);
- corrections for mishandling of refundable income tax credits between FY 2019-20 and FY 2022-23 ($19.0 million positive adjustment); and
- corrections for normal June forecast error between FY 2019-20 and FY 2022-23 ($21.1 million positive adjustment, slightly less than estimated in March based on final tax credit data for tax year 2022).

Following these corrections, LCS anticipates that no future corrections will be required under Amendment 23 or its implementing statute for over- or under-transfers of SEF revenue between FY 2004-05 and FY 2022-23. Additionally, while the June 2024 LCS forecast does not include adjustments for SEF transfers between FY 2000-01 and FY 2003-04, a review of LCS forecast files shows that LCS was diligent in monitoring and adjusting the transfers during and following these fiscal years, and appears to have incorporated all needed adjustments. LCS anticipates that the corrections in the June 2024 LCS forecast satisfy the requirement for corrections for errors in the transfer amounts identified in all prior years.

Table 3 presents a year-by-year summary of the corrections included in the June 2024 LCS forecast. Note that the “transfer requirement” is the required transfer for each fiscal year only, while the “actual transfer” in some cases intentionally differed in order to correct prior year errors identified at the time, as in FY 2020-21. Where successful, these corrections offset portions of the cumulative error that would otherwise arise. For example, the FY 2020-21 transfer was greater than needed to accommodate the transfer requirement arising in FY 2020-21, but the excess was intended in order to offset the erroneous under-transfer in FY 2019-20 (due to forecast publication timeline changes during the COVID-19 pandemic).

Table 3
Corrections for FY 2004-05 through FY 2022-23 SEF Transfers
Included in the June 2024 LCS Forecast for the FY 2023-24 SEF Transfer

Nominal Dollars in Millions, Except Taxable Income (Fiscal Year Amounts in Billions; 19-Year Total in Trillions)

	Income Tax Revenue (Accrual Basis)	Tax Credits	Tax Rate	Taxable Income (FY Basis)	Transfer Required	Actual Transfer	Correction
FY 04-05	$4,027.7	$230.3	4.63%	$92.0 B	$306.6	$313.9	($7.3)
FY 05-06	$4,823.6	$285.6	4.63%	$110.4 B	$367.8	$357.2	$10.6
FY 06-07	$5,368.8	$323.6	4.63%	$122.9 B	$409.8	$395.1	$14.7
FY 07-08	$5,481.6	$353.2	4.63%	$126.0 B	$420.1	$407.9	$12.1
FY 08-09	$4,625.8	$310.6	4.63%	$106.6 B	$355.4	$339.9	$15.5
FY 09-10	$4,455.9	$247.0	4.63%	$101.6 B	$338.6	$329.0	$9.6
FY 10-11	$4,890.0	$237.5	4.63%	$110.7 B	$369.1	$370.5	($1.4)
FY 11-12	$5,498.1	$358.0	4.63%	$126.5 B	$421.6	$407.5	$14.1
FY 12-13	$6,232.6	$248.7	4.63%	$140.0 B	$466.6	$486.3	($19.7)
FY 13-14	$6,416.8	$219.5	4.63%	$143.3 B	$477.8	$478.8	($1.0)
FY 14-15	$7,043.0	$251.3	4.63%	$157.5 B	$525.1	$519.8	$5.3
FY 15-16	$7,178.8	$327.2	4.63%	$162.1 B	$540.4	$522.6	$17.8
FY 16-17	$7,270.2	$378.6	4.63%	$165.2 B	$550.7	$540.0	$10.7
FY 17-18	$8,359.1	$398.6	4.63%	$189.2 B	$630.5	$617.0	$13.5
FY 18-19	$9,166.8	$463.2	4.63%	$208.0 B	$693.3	$692.8	$0.5
FY 19-20	$9,373.2	$470.3	4.63%*	$212.6 B	$708.7	$646.7	$62.0
FY 20-21	$10,661.7	$494.9	4.55%	$245.2 B	$817.3	$874.6	($57.3)
FY 21-22	$13,286.4	$670.3	4.55%*	$306.7 B	$1,022.5	$993.5	$29.0
FY 22-23	$13,319.5	$841.6	4.40%	$321.8 B	$1,072.8	$1,066.4	$6.4
19-Year Total	**$137,479.5**	**$7,110.1**		**$3.148 T**	**$10,494.7**	**$10,359.6**	**$135.1**

*Propositions 116 (2020) and 121 (2022) reduced the income tax rates for tax years 2020 and 2022, respectively, at the November 2020 and November 2022 General Elections, respectively. Because the income tax rate cuts were not enacted until after the end of FY 2019-20 and FY 2021-22, respectively, all revenue collected during those years was collected at the older, higher tax rate, and the resulting refunds were debited against revenue collected in the immediately succeeding fiscal years.

Budget Impact

The corrections result in a one-time increase in the amount of the SEF transfer. For FY 2023-24 only, $135.1 million will be transferred from the General Fund to the SEF, alongside the $1,073.9 million routine transfer amount forecast to reflect FY 2023-24 taxable income. The transfer amount is exempt from TABOR. From a budget perspective, there will be no impact on the amount of General Fund revenue available for appropriations, and the amount of the General Fund obligation for TABOR refunds to taxpayers will be $135.1 million less than it would be otherwise. The SEF balance will be $135.1 million higher at the end of FY 2023-24, and this amount will be available for appropriation in future fiscal years.

Corrections in Future Fiscal Years

It is very likely that the June LCS forecast for any fiscal year will direct over- or under-transfers of revenue to the SEF for that fiscal year. The statutory authorization allowing for corrections of prior-year errors is important to ensure that the correct amount is transferred over time.

Since FY 2020-21, LCS has maintained a rolling accounting of corrected transfer amounts and included in each forecast an adjustment to the SEF transfer to correct for estimated prior year errors. Prior to June 2024, corrections only looked back to FY 2019-20; the adjustments explained in this memorandum complete corrections back to FY 2004-05, the earliest year for which corrections are required. The rolling accounting will remain in place for errors in all years between FY 2004-05 and the most recent fiscal year preceding each published forecast; however, the adjustments explained in this memorandum are expected to be sufficient to cause the rolling accounting of transfer corrections to net to zero for FY 2022-23 and all prior years. Accordingly, future transfers are anticipated only for normal June revenue forecast error and for incorrect estimations of tax credit amounts – in both cases, corrections are expected to be required for the immediately preceding fiscal year only.