



# Calculating reestimates with the CSC2

[CSC2@omb.eop.gov](mailto:CSC2@omb.eop.gov)

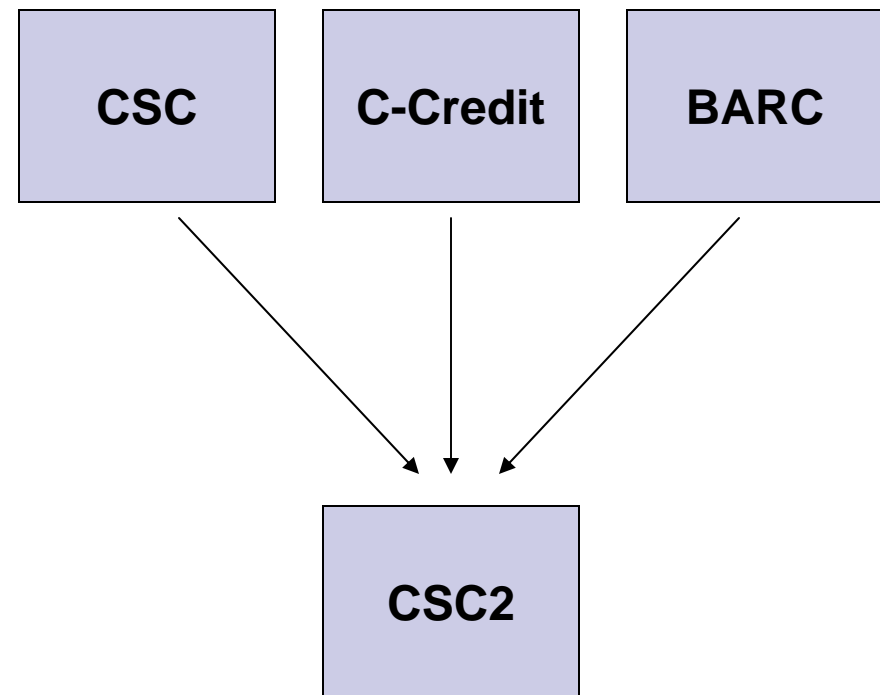


# What we'll cover

- Goals & Challenges of the CSC2
- Key reestimate calculations
  - Interest Rate Reestimate
  - Setting Single Effective Rate
  - Calculating Reestimates
- Input data requirements
- Output overview
- Examples Direct Loan and Loan Guarantee

# Goals: Streamline the process

- Three separate tools combined into one
  - Budget subsidy rates
  - Reestimates
  - Financing Account Interest in C-Credit





# Goals: Better cost estimates

- Consistent data for credit calculations
- Disconnects in financing account balances are transparent
- Accounting differences are transparent
  - Subsidy execution
  - Financing account interest earnings/costs
  - Modifications
- Opportunity to reconcile → Better cost estimates



# Challenges: Reconciliation

- Calculates reestimates using traditional and balances approach
  - Calculated vs reported cohort balances
  - Balances approach (assets = liabilities)
  - Traditional approach (cashflows to/from public)
- Differences will require explanation



# Challenges: Transparency

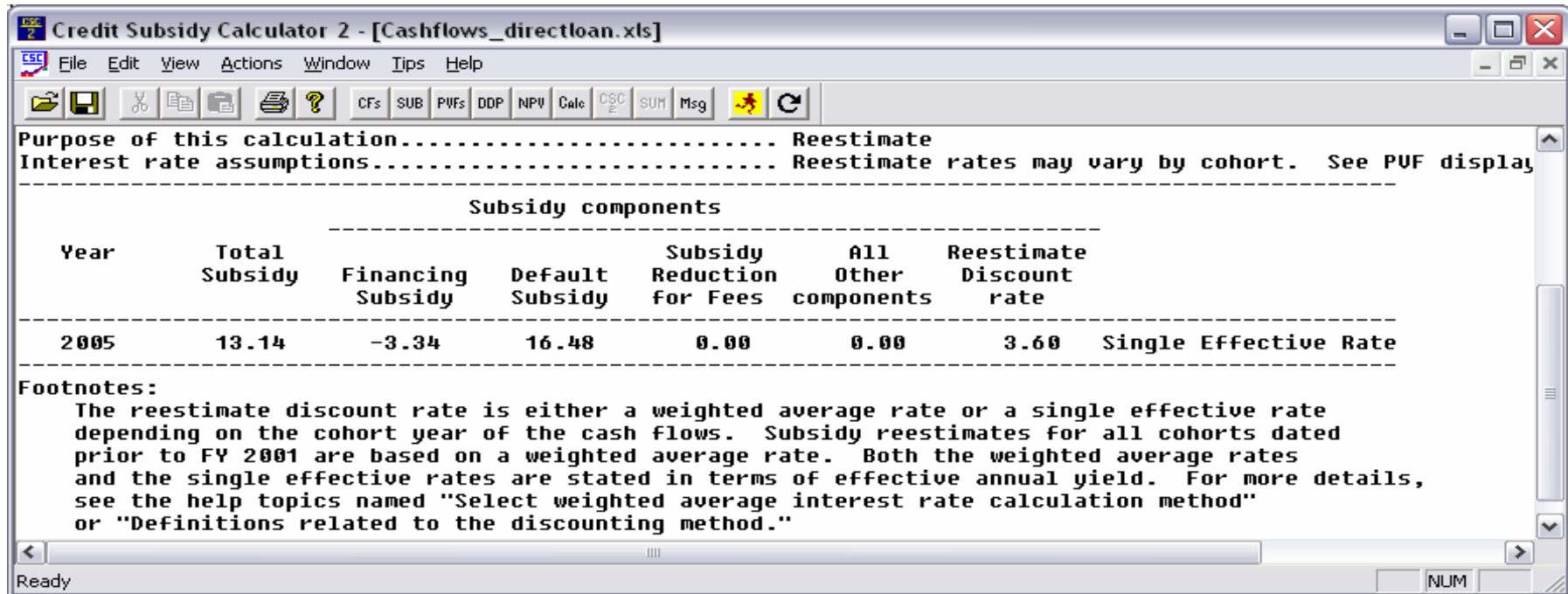
- Accounting mistakes uncovered sooner rather than later
- Auditors will see any differences
  - Will ask questions—require explanations
- Key is to work now to identify and analyze discrepancies
- One time effort for existing cohorts



# Reestimate calculations

- Traditional CSC2 calculations
  - Interest rate reestimate
  - Cohort interest rate—single effective rate
- New CSC2 technical reestimates
  - Data requirements
  - Input format
  - Examples

# CSC2: Traditional CSC reestimate



Credit Subsidy Calculator 2 - [Cashflows\_directloan.xls]

Purpose of this calculation..... Reestimate  
Interest rate assumptions..... Reestimate rates may vary by cohort. See PUF display

Subsidy components

Year	Total Subsidy	Financing Subsidy	Default Subsidy	Subsidy Reduction for Fees	All Other components	Reestimate Discount rate	
2005	13.14	-3.34	16.48	0.00	0.00	3.60	Single Effective Rate

Footnotes:  
The reestimate discount rate is either a weighted average rate or a single effective rate depending on the cohort year of the cash flows. Subsidy reestimates for all cohorts dated prior to FY 2001 are based on a weighted average rate. Both the weighted average rates and the single effective rates are stated in terms of effective annual yield. For more details, see the help topics named "Select weighted average interest rate calculation method" or "Definitions related to the discounting method."

- Same input requirements, and same output as CSC
- Used for interest rate reestimates and single effective rates



# CSC2: Interest rate reestimate input

Name:	Direct Loan Example D-1			
Description:	Interest rate reestimate			
Program Type:	Direct			
Purpose:	Reestimate			
Budget Year:	2006			
Cohort	2005			
Reestimate discount rate	use 90			
	Year 1	Year 2	Year 3	Year 4
Obligations (+) .....	1,000,000			
Timing .....	Annual, Beginning			
Disbursements (+) .....	1,000,000			
Timing .....	Annual, End			
Scheduled Principal Payments (+) .....	232,012	243,612	255,793	268,583
Scheduled Interest Payments (+) .....	50,000	38,399	26,219	13,429
Defaults	-28,201	-28,201	-28,201	-28,201
End				

- No changes
  - Original Budget Cashflows adjusted ONLY for effects of interest
  - Purpose=reestimate; reestimate discount rate (use all or use 90)
- Resulting output will be a required input for the CSC2 reestimate

# CSC2: Interest rate reestimate

The screenshot shows the 'Credit Subsidy Calculator 2' window with the following data table:

Year	Total Subsidy	Financing Subsidy	Default Subsidy	Subsidy Reduction for Fees	All Other components	Reestimate Discount rate	
2005	6.99	-3.34	10.33	0.00	0.00	3.60	Single Effective Rate

The value 6.99 in the 'Total Subsidy' column for the year 2005 is circled in the original image.

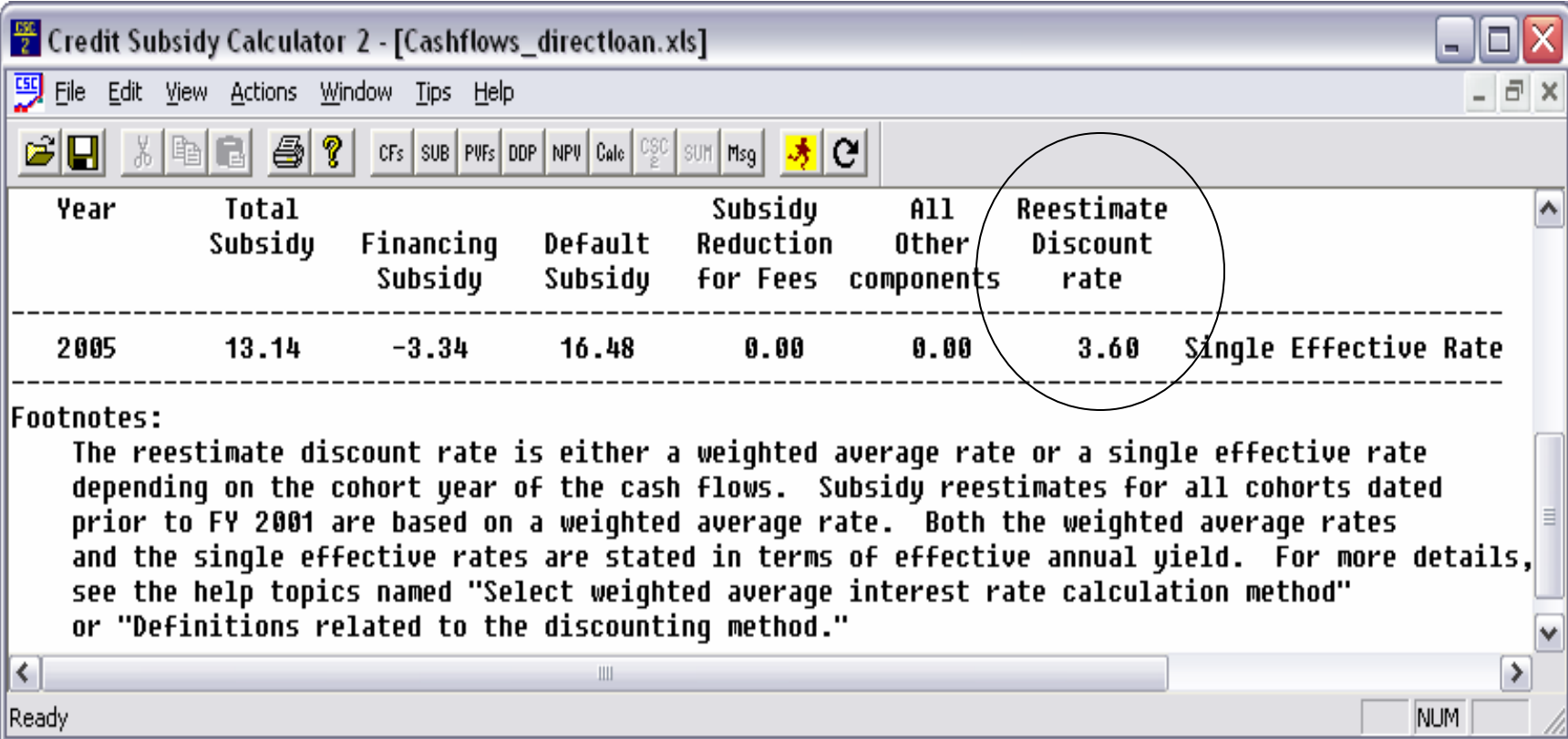
- Change due to interest rates
- Total subsidy rate: 6.99—becomes interest rate reestimated subsidy rate input for CSC2



# CSC2: Single effective rate

- SER is set at the first technical reestimate after the interest rate reestimate
- Use the CSC2 input file
  - Reestimate discount rate “use all” or “use 90”
  - Updated actual and projected borrower cashflows
  - Can use previous CSC format, but MUST update actual and projected cashflows
- Provides traditional CSC output
- Single effective rate method has not changed

# CSC2: Single effective rate output



The screenshot shows the 'Credit Subsidy Calculator 2' application window. The title bar reads 'Credit Subsidy Calculator 2 - [Cashflows\_directloan.xls]'. The menu bar includes 'File', 'Edit', 'View', 'Actions', 'Window', 'Tips', and 'Help'. The toolbar contains various icons for file operations and calculations. The main data table is as follows:

Year	Total Subsidy	Financing Subsidy	Default Subsidy	Subsidy Reduction for Fees	All Other components	Reestimate Discount rate	
2005	13.14	-3.34	16.48	0.00	0.00	3.60	Single Effective Rate

The 'Reestimate Discount rate' cell in the table is circled in black. Below the table, there is a 'Footnotes:' section with the following text:

The reestimate discount rate is either a weighted average rate or a single effective rate depending on the cohort year of the cash flows. Subsidy reestimates for all cohorts dated prior to FY 2001 are based on a weighted average rate. Both the weighted average rates and the single effective rates are stated in terms of effective annual yield. For more details, see the help topics named "Select weighted average interest rate calculation method" or "Definitions related to the discounting method."

The status bar at the bottom left shows 'Ready' and the bottom right shows 'NUM'.



# Calculating a Technical Reestimate

- Input cash flow data for technical reestimates using the CSC2 include:

- Actual borrower cashflows (to or from the public)
- Updated estimated future cashflows

AND

- Financing account balances
  - End of year Debt/Cash balance in the financing account
- Actual intragovernmental transactions
  - Borrowing, repayment, subsidy, financing account interest, and prior reestimates



# CSC2—Reestimate cashflow Inputs

- Latest completed fiscal year, cohort rates
  - LCFY: Reference point--required for financing account interest and reestimate calculations
  - Cohort interest rate as a number, original subsidy rate, interest rate reestimated subsidy rate
- Cohort Balances
  - Debt to Treasury/Cash Balance with Treasury—required for financing account interest and reestimate calculations
  - Ideally—Debt/Cash balances for all prior fiscal years
- Cohort Treasury & Budget Transactions
  - Subsidy transfers, financing account interest, reestimates, and modifications—reconciling balances, financing account interest, and reestimates
- Cashflows with the public
  - Historical used to reconciling financing account balances, interest adj.
  - Updated cashflows to and from the public



## CSC2—Input Cashflows (cont.)

- Input cashflows include data that was previously required in spreadsheet tools
- New keywords for new cash flow items
  - Timing for Balance sheet, borrowings, repayments, financing account interest, and reestimates are FIXED.
  - Debt to Treasury EOY must be entered as a negative
  - Cash Held by Treasury EOY must be positive
  - Subsidy and modifications—must specify timing!
  - Inflows to the financing account are positive
  - Outflows from the financing account are negative
    - (e.g. Upward reestimates—positive, downward—negative)

# CSC2: Input example

Cohort information

Borrower cashflows

Balances with  
Treasury

Treasury  
Transactions

Budgetary  
Transactions

Name:	Direct Loan Example D-1			
Description:	2005 Technical reestimate			
Program Type:	Direct			
Purpose:	Reestimate			
Budget Year:	2007			
Latest completed fiscal year	2005			
Cohort	2005			
Reestimate Discount Rate	3.6			
Original Subsidy Rate	6.23			
Interest Rate Reestimated Sub Rate	6.99			
	Year 1	Year 2	Year 3	Year 4
Obligations (+) .....	1,000,000			
Timing .....	Annual, Beginning			
Disbursements (+) .....	1,000,000			
*Balances with Treasury				
Debt to Treasury EOY	-937,700			
Cash balance EOY	226,914			
*Intragovernmental Transactions				
Borrowings from Treasury SOY	-937,700			
Borrowings from Treasury EOY	0			
Repayments of Treasury Debt MOY	0			
Repayments of Treasury Debt EOY	0			
Financing Account Interest				
Financing Account Interest Adjustments				
Reestimate SOY				
Interest on Reestimate SOY				
Subsidy transfer [annual,beginning]	62,300			
Modification	0			
Modification Adjustment transfer	0			
*Borrower Cashflows	Year 1	Year 2	Year 3	Year 4
Timing .....	Annual, End			
Scheduled Principal Payments (+) .....	232,012	243,612	255,793	268,583
Scheduled Interest Payments (+) .....	50,000	38,399	26,219	13,429
Defaults	-55,098	-41,324	-41,324	-41,324
End				



# CSC2: Output (see handout 1)

The screenshot shows the 'Credit Subsidy Calculator 2' application window. The title bar reads 'Credit Subsidy Calculator 2 - [Cashflows\_directloan.xls]'. The menu bar includes 'File', 'Edit', 'View', 'Actions', 'Window', 'Tips', and 'Help'. The toolbar contains various icons for file operations and calculation functions like 'CFs', 'SUB', 'PVFs', 'DDP', 'NPV', 'Calc', 'CSC', 'SUM', and 'Msg'. The main display area shows two sections of output:

**1) Present Value Calculation**

	2005
	Beg
2005 Annual PV factor.....	1.000000
2006 Annual PV factor.....	1.036000
Converted cashflow.....	-937700.000

**2) Reported Balances Compared to Net Cashflows**

2005 End of year debt (calculated).....	-937700.000
2005 End of year debt (reported).....	-937700.000
Difference .....	0.000
2005 End of year cash (calculated).....	226913.824
2005 End of year cash (reported).....	226913.824
Difference .....	0.000

The status bar at the bottom shows 'Ready' and a 'NUM' button.



# CSC2 Output: CSC2 Tab

- 1) Present Value Calculations
  - PVF relative to the beginning of the cohort
  - PVF relative to the latest completed fiscal year
  - Converted Cashflow—sum of all inflows and outflows to and from the financing account
- 2) Reported balances compared to net Cashflows
  - End of year balance calculated vs. reported
  - Any difference must be explained



# CSC2 Output: CSC2 Tab

- 3) Financing Account Interest Calculation
  - Interest owed—Debt balance SOY, borrowings backdated to 10/1, MOY repayment
  - Interest earned—Cash balance SOY, borrowings backdated to 10/1, MOY repayment, cashflows to and from the account
  - Net financing account interest




# CSC2 Output: CSC2 Tab

- 4) Balances Approach Reestimate
  - Assets vs. Liabilities approach
  - NPV of cashflows *after* LCFY
  - Net EOY debt or cash balance *with interest*
  - Difference=reestimate
  - Financing account interest adjustment included with reestimate



# CSC2 Output: CSC2 Tab

- 5) Traditional reestimate check
  - Same as current reestimate
  - Should generate the same result as BA reestimate
- 6) Financing Account Interest Adjustment
  - Calculates interest that should have been earned/paid on the financing account
  - Compares to the sum of reported interest, plus section 3 net interest
  - Any difference = financing account interest adjustment



# CSC2 Output: Summary Tab

- Financing account interest
- Reestimate summary
  - (Federal credit supplement)
  - Cohort-level reestimate breakout
- Current year reestimate summary
  - MAX data entry
  - Financing account interest adjustment is part of interest on reestimate



# CSC2 Phase 2 this summer

- No change to the input data format
- Added user calculation options
  - Purpose keyword expanded—not data driven
    - Traditional CSC, financing account interest, reestimates without historical data
  - Data-driven spreadsheets will still work
- Clearer output
  - Warning messages clarified or eliminated
  - Descriptive text added
  - Fixed non-critical glitches identified by users—  
THANK YOU!



# Next Steps

- Review and adapt agency process if needed
  - Data gathering, formats
  - Communication between budget and accounting staff
- Use the new tool
  - Reconciliation is required—should not wait
  - Identify data gaps—work with OMB to resolve
  - Identify and resolve reconciliation issues
  - Technical questions—email [csc2@omb.eop.gov](mailto:csc2@omb.eop.gov)
- Not sure—ask questions!