



Award Cash Management Service (ACM\$) Payment Procedures and Calculations

As a part of the National Science Foundation's (NSF) ongoing efforts to better facilitate award stewardship, this guide was created to assist recipients in assessing their federal payment policies and procedures, to identify areas that do not comply with Federal requirements.

NSF recipients receive award payments through reimbursements, advances, or a combination of both. [Per 2 CFR 200.305 \(1\)](#), recipients must maintain or demonstrate “the willingness to maintain both written procedures that minimize the time elapsing between the transfer of funds and disbursement by the [awardee], and financial management systems that meet the standards for fund control and accountability...” Most NSF awardees follow the reimbursement payment method. As a result, this guide focuses on reimbursements (vs. advances). However, advance payments are also addressed. State agencies, foreign awardees, or awardees that have been placed on a reimbursement only basis or that have had their funding restricted by NSF may have additional administrative requirements.

The acceptance of an award from NSF creates a legal duty on the part of the awardee to use the NSF-provided funds only in accordance with the conditions of the award. In fulfilling that duty, awardees are required to maintain accounting records and any other information needed to provide adequate support for the expenditure amounts recorded in award accounts, as well as any other information used to calculate the payment amount(s) submitted through ACM\$. The awardee's financial management system should provide reasonable assurance that expenditures related to Federal awards and used to calculate payments are prepared in accordance with applicable laws and regulations and award terms and conditions. The financial management system should also provide a reasonable degree of certainty that material misstatements will be prevented, or timely detected and corrected.

Federal Payments
“[Awardees] must be paid in advance, provided it maintains or demonstrates the willingness to maintain both written procedures that minimize the time elapsing between the transfer of funds and disbursement by the [awardee], and financial management systems that meet the standards for fund control and accountability... Advance payments to [an awardee] must be limited to the minimum amounts needed and be timed to be in accordance with the actual, immediate cash requirements of the [awardee] in carrying out the purpose of the approved program or project.”
2 CFR 200.305 Federal Payments

Regulations, Helpful Links, and Definitions:

- [2 CFR 200 Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, § 302 Financial Management and § 305 Federal Payment](#)
- NSF PAPPG Chapter VIII.C, “Payment Requirements”
- RTC-NSF (May 2022), Article 21, “Payment”
- CA-FATC, Article 14, “Payments”
- Research.gov [About Award Cash Management Service](#)
- [2 CFR 200.1 Definitions](#) “Advance payment means a payment that a federal awarding agency or [prime awardee] makes... before the [awardee] disburses the funds for program purposes.” The contrary implied definition of a reimbursement payment is a payment that a federal awarding agency or [prime awardee] makes after the [awardee] disburses the funds for valid and allowable program purposes. This is a critical distinction as each method of payment has different calculation requirements.
- Expenditures are, for the most part, expenses that have been paid. [2 CFR 200.1 Definitions](#) “Expenditures means charges made by [an awardee] to a [federally funded] project... (2) For reports prepared on a cash basis, expenditures are the sum of: (i) Cash disbursements for direct charges for property and services; (ii) The amount of indirect expense charged/[incurred]; (iii) The value of third-party in-kind contributions applied; and (iv) The amount of cash advance payments and payments made to subrecipients.” The definition for awardees that report on an accrual basis are slightly different; please consult the definition.

Payment Procedures

Payments to awardees may be made in advance of work performed or as a reimbursement for work performed and/or costs incurred and paid by the awardee. Awardees must decide whether to receive payment on an advance basis, reimbursement basis, or a combination of the two. Awardees should have written guidance that, at a minimum, cover all of the following:

1. Who (what role) calculates payment amounts and prepares, approves, and processes payments. These procedures should provide adequate segregation of responsibilities;
2. How often requests for payment are processed. Any frequency is acceptable (weekly/biweekly, monthly quarterly). Awardees are encouraged to request funds as frequently as administratively needed to show financial activity on their awards;
3. If awardees choose to receive payment(s) via reimbursement and advance, how that decision is made;
4. How payments are calculated and using what tools, e.g., ACM\$ printouts and accounting system reports;
5. How payment calculations are documented and what supporting documentation must be maintained;
6. How payments are approved and processed in both ACM\$ when submitted and the accounting system when the funds are received;
7. If payments are calculated on an advance basis, procedures to limit payments to the minimum amount needed to implement the NSF- funded award(s) and timed by the awardee to be in accordance with the actual, immediate cash requirements of the awardee in carrying out the approved program or project. The timing and amount of the ACM\$ advances must be as close as is administratively feasible to the awardee's actual disbursements for direct program costs and the proportionate share of any allowable indirect costs.

Payment/Reimbursement Request Calculations

Payment calculations are not difficult if the awardee has well-documented procedures as described above, can clearly identify expenditures (which may be different from expenses) in project-related accounting records, and, for those awardees that receive payments on an advance basis, can accurately and consistently identify and quantify imminent disbursements.

Reimbursement Payments: Current period payment = Cumulative expenditures – cumulative prior payments. For awardees with cash basis accounting, cumulative expenditures should equal cumulative expenses recorded in project-related expense accounts and should include indirect cost recovery charges. In this case, calculations are very straightforward. For awardees using accrual accounting, adjustments will likely need to be made to arrive at cumulative expenditures, e.g. cumulative expenditures may equal cumulative expenses minus amounts recorded to accounts payable accounts or other amounts.

Advance Payments: The calculations are not very different from reimbursement calculations except that imminent disbursements are added back in, i.e., current period advance = cumulative expenditures – cumulative prior payments + imminent disbursements. Imminent disbursements could include upcoming payments recorded in accounts payable accounts, equipment purchases, subawardee advances, conference venue deposits, etc. These upcoming disbursements should be quantifiable, supportable by organizational records, and in conformance with the awardee's written policy on minimizing the advance amount to actual immediate cash requirements (See procedure component #7 above).

Best Practice: We recommend, consistent with the guidance above, that awardees base payments on cumulative amounts, (e.g., current payment = cumulative expenditures – prior cumulative payments) rather than on current period amounts, (e.g., current payment = current expenditures). If only current period amounts are used to calculate payments, awardees may not identify prior period calculation errors or data entry miskeys, or payments may not be adjusted for prior period accounting adjustments. When cumulative amounts are used, cumulative payments are self-correcting. At a minimum, awardees should perform periodic reconciliations of cumulative expenditures to cumulative ACM\$ payments.

Example Calculations: Below we have provided an example of how payments might be calculated. The calculations below are based on a cumulative basis (a recommended best-practice). Calculations performed solely on current period expenditures (cash basis) may be prone to cumulative errors because of prior period errors or corrections (accrual basis).

		Cash Basis	Accrual Basis	Source
Federal Information				
A	Prior Cumulative Drawdowns	\$ 4,206,890	\$ 4,206,890	ACM\$ Report: Sum of Previous Cumulative Cash Disbursement + Payment Amount Requested
Awardee Information				
B	Cumulative Expenses	\$ 4,001,087 /1	\$ 4,112,939	General Ledger Report: Total of all expenditures in project-related expense accounts
D	Unpaid Expenses	\$ -	\$ 111,852	Accounting System Report(s): Likely A/P accounts
E	Expenditures Not Recorded in Project Expense Accounts	\$ 242,689 /2	\$ 242,689 /2	Various: May include subaward advances (recorded in A/R accounts - OK) or unrecorded salary or fringe benefits (recorded in nonrelated accounts - not OK)
F	Total Expenditures	B+D+E \$ 4,243,776	\$ 4,243,776	
G	Upcoming/Imminent Expenditures	\$ 26,826 /3	\$ 79,391 /4	Various - These may be commitments/obligations recorded in the accounting system (OK) or tracked in shadow system (may not be OK)
Drawdown Calculations				
H	Current Drawdown (Reimbursement) F-A	\$ 36,886	\$ 36,886	
I	Current Drawdown (Advance) F+G-A	\$ 63,712	\$ 116,277	
*	Note that actual expenditures are the same regardless of the accounting methodology used (Cash or Accrual Basis)			
**	Reminder: awardees drawing down funds on advance basis must have written procedures to limit advances to only the amount needed for actual, immediate cash requirements			
/1	Note that Cash Basis expenses are lower than Accrual Basis because, in cash-basis accounting, expenses are not recorded until paid			
/2	ICR charges that have been earned but not yet recorded (because of timing) are OK in this amount. Not recording ICR charges in project-related general ledger accounts would be a concern			
/3	These amounts should not be a "guess" but highly quantifiable, i.e., a list of transactions			
/4	Notice the accrual basis amount is higher because the organization intends to pay some of line D in the next several days			

Common NSF Concerns

- **Awardee has not documented procedures for calculating and processing payments.** Well-documented procedures are essential for ensuring that payment requests are consistently and accurately calculated and processed, and that NSF funds are safeguarded.
- **Drawdown functions are not segregated to provide for adequate internal control.** The most common example is when one individual, e.g., an accountant, calculates, prepares, submits, and accounts for payments without secondary, documented review and approval. If, due to the limited size of the organization, one person is assigned to prepare and submit the reimbursement request, the person preparing/submitting the request should not (at a minimum) have withdrawal access to the organization's bank account or access to update SAM.gov for banking data. Some small organizations choose to have one person prepare, a second person reviews/approves (should be documented), and the first person submits the reimbursement request.
- **Cumulative ACM\$ payments do not agree/reconcile with the awardee's corresponding project-related accounting records.** This concern is often the result of calculation errors or because awardees do not record all expenses in project-related accounts, e.g., indirect cost recovery charges, salaries, fringe benefits, or consultant expenses. This concern can also arise when awardees base payments on only current period expenditures (rather than cumulative expenditures) and there have been prior period adjustments or calculation errors.
- **Awardees have excess cash-on-hand.** This concern typically arises for awardees that receive payments on an advance basis and that have not established written procedures (as required) to limit the amount of time elapsing between receipt and disbursement of funds to ensure they are fully expended as closely as administratively possible to the actual disbursement of funds for program or project costs. Excess cash should be returned to NSF in cases where no award expenditures are planned in the immediate future.
- **Awardee does not use financial information recorded in the accounting system to calculate payment amounts.** This is not common and occurs when awardees request payment of all funding in advance or periodically in even amounts based on budgeted amounts rather than on actual expenditures.

Disclaimer: This guide provides information about general NSF payment expectations and common issues. The contents of this guide are not intended to replace or modify Federal, NSF, or award-specific terms and conditions. Award recipients are responsible for complying with those terms and conditions in their entirety. In the case of a conflict between the content of this guide and other terms and conditions, the terms and conditions prevail.