

## SECTION 84—CHARACTER CLASSIFICATION (SCHEDULE C)

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**Summary of Changes**

Requires agencies to report total budget authority and outlays net of offsetting collections (section 84.3).

Drops the R&D crosscut on partnership for a new generation of vehicles, formerly character classification code 1462 (section 84.4).

**84.1 What is the purpose of the character classification system?**

We use character classification to distinguish between investment and non-investment activities. Investments finance activities that yield benefits largely in the future. We also use character classification to report data on grants to State and local governments separately from direct Federal programs. Character class line numbers include the following:

- Investment activities:
  - ▶ Lines 13xx, physical assets.
  - ▶ Lines 14xx, research and development (R&D).
  - ▶ Lines 15xx, education and training.
- Non-investment activities:
  - ▶ Lines 2xxx.

The classification system also includes additional information on R&D (e.g., R&D performed by colleges and universities, the allocation of R&D funds, and R&D crosscuts) that is used by OMB and others in the review of agency budget requests, Government-wide resource allocation, and R&D budget presentations.

See exhibit [84A](#) for a summary of character classification line numbers. See section [84.4](#) for detailed descriptions of all of the line numbers that you must use to report character classification.

**84.2 What terms do I need to know?**

(a) *State or local governments.*

For preparing character classification data, State or local governments include the following:

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- The 50 States and the District of Columbia.
- Cities, counties, townships, school districts, special districts, and other local governmental units, as defined by the Bureau of the Census.
- Puerto Rico, the Virgin Islands, and other U.S. territories.
- The Federated States of Micronesia, Marshall Islands, and Palau, if the payments are a relatively small part of the accounts that have grants to State or local governments.
- Indian Tribal governments when:
  - ▶ The legislation authorizing the payment includes such entities within the definition of eligible State or local units.
  - ▶ The Tribal government acts as a nonprofit agency operating under State or local auspices.
- Quasi-public nonprofit entities, such as community action agencies, when the boards of such entities must either be elected in State or local elections, or must include significant representation of State or locally-elected officials.

*(b) Grants to State and local governments.*

Report budget authority and outlays as grants to State and local governments if the Federal government's resources support State or local programs of government operations or provision of services to the public. For reporting character classification data, grants include the following:

- Direct cash grants to State or local governmental units, to other public bodies established under State or local law, or to their designee.
- Payments for grants-in-kind, such as purchases of commodities distributed to State or local governmental institutions, for example, school lunch programs.
- Payments to nongovernmental entities when such payments result in cash or in-kind services or products that are passed on to State or local governments, for example, payments to the Corporation for Public Broadcasting, or to the American Printing House for the Blind.
- Payments to regional commissions and organizations that are redistributed at the State or local level to provide public services.
- Payments to State and local governments for research and development that is an integral part of the State and local governments' provision of services to the general public (e.g., research on crime control financed from law enforcement assistance grants, or on mental health associated with the provision of mental rehabilitation services; see discussion below for exclusions related to research and development and payments for services rendered).
- Direct loan or loan guarantee subsidies to State or local governments.
- Shared revenues. These payments to State or local governments are computed as a percentage of the proceeds from the sale of certain Federal property, products, or services (e.g., payments from receipts of Oregon and California grant lands). Also included are tax or other collections by the

Federal Government that are passed on to State or local governments (e.g., internal revenue collections for Puerto Rico).

Exclude the following:

- Federal administrative expenses associated with grant programs.
- Grants directly to profit-making institutions, individuals, and non-profit institutions not covered above, for example, payments to Job Corps centers and trainees.
- Payments for research and development not directly related to the provision of services to the general public, for example, basic research awarded via competitive grants.
- Payments for services rendered, for example, utility services, training programs and expenses for Federal employees, research and development for Federal purposes conducted under contracts, grants, or agreements by such agencies as the National Institutes of Health (NIH), the National Science Foundation (NSF), the Department of Energy (DOE), the National Aeronautics and Space Administration (NASA), and the Department of Defense (DOD).
- Federal grants to cover administrative expenses for regional bodies and other funds not redistributed to the States or their subordinate jurisdictions, for example, the administrative expenses of the Appalachian Regional Commission.

(c) *Direct Federal programs.*

Federal programs that are not classified as grants to State and local governments will be classified as direct Federal programs.

### **84.3 What do I need to know about reporting the data and relationships with other data requirements?**

(a) *Expenditure accounts.*

Report total budget authority and outlays net of offsetting collections. This means that the sum of budget authority and outlay entries in schedule C (excluding memorandum entries) will equal budget authority and outlays net of offsetting collections in schedule A.

You must report offsetting collections from the sale of physical assets (e.g. land, structures, equipment, or commodities) in the corresponding physical asset character classes.

You must report credit reform program accounts related to investments (i.e., for physical assets, the conduct of research and development, or the conduct of education and training) net of offsetting collections.

You must report budget authority and outlays by subfunction.

Do not report character class for credit financing accounts.

OMB does not control the character classification of expenditure accounts. If the nature of an account changes and requires the use of different classes, you may enter budget authority and outlays in MAX under the appropriate character class without advance approval from OMB.

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As a general rule, if a transaction fits into more than one classification, report it in the classification category with the lowest numerical character classification code. For example, record amounts for construction of research and development facilities in the appropriate 13xx grouping, not in the 14xx grouping. (For treatment of memorandum entries, see section [84.3\(c\)](#) and exhibit [84A](#).)

If grants to State or local governments or investments are financed by payments from one Federal account to a second Federal account, you must ensure that the amounts are recorded as grants or investments only once (i.e., ensure that they are not double-counted). As a general rule, the amounts should be recorded as follows:

- For all grants to State or local governments, record the grants in the second account, i.e., the account that actually makes the payment to the State or local government.
- For direct Federal investment (which includes all investments except grants to State or local governments), record the investment in the account that is primarily responsible for funding the investment. (Note that grants to research institutions are classified as direct Federal investment, not as grants to State or local governments (see section [84.2](#) above)). This is usually the initial account. For example, if the Environmental Protection Agency provides funds to the National Science Foundation for research, record the R&D in the EPA account that funds the research, not in NSF. However, in certain cases, primary responsibility might occur in the second account. For example, regarding rental payments to the GSA Federal Buildings Fund, some of the rental receipts may ultimately be used for construction by GSA. In these situations, the investment should be recorded in the second account because primary responsibility for the investment would be in that account.

Where accounts are split between two or more character classifications, omit a classification involving less than \$1 million in each of the three fiscal years, and include the amounts in some larger classification for that particular account.

**Grants:** You must report grants by BEA subcategory (e.g. discretionary or mandatory). (See section [81.3](#) and exhibit [84A](#).) In some cases, grants to State and local governments allow the recipient jurisdiction the option of using funds for current or investment-type purposes, such as in community development block programs. In such instances, record all of the budget authority and outlays for grants in the category where the majority of the funds is anticipated to be used.

**R&D:** Schedule C contains memorandum entries on lines 1441–01 through 1465–xx that supplement, and are a subset of, R&D information reported on lines 1311–xx through 1432–xx. Use these entries to report the following information:

- Direct and indirect costs associated with R&D performed by colleges and universities.
- Allocation of research funds (congressional direction, inherently unique, merit reviewed with limited competitive selection, merit reviewed with competitive selection and internal (program) evaluation, and merit-reviewed with competitive selection and external (peer) evaluation).
- Crosscutting R&D data for specific areas identified by the National Science and Technology Council (NSTC).

### (b) *Receipt accounts.*

You must also report offsetting receipts for PY through BY by character class in schedules K and R (see section [81.4](#)). OMB controls the character classification of offsetting receipts centrally, and you must ask

your OMB representative to change the classification (see section [79.1](#)) before you can enter data under a different code.

Report character class information for collections deposited in offsetting receipt accounts in schedules K (baseline) and R (policy) using the instructions in section 81.4 (e). You must use line 2004–xx for offsetting receipt accounts, with the following two exceptions:

- You must report the proceeds from the sale of physical assets (e.g., land, structures, equipment, or commodities) in the corresponding physical asset character classes; and
- You must report credit reform offsetting receipt accounts for downward reestimates and negative subsidies for investment-related programs (i.e., for physical assets or for the conduct of education and training) on the appropriate investment line number (i.e., 13xx or 1512).

(c) *Relationships with other data requirements.*

For each account, the totals for character class entries in schedule C (excluding the memorandum (non-add) entries) must equal total budget authority and outlays net of offsetting collections reported in schedule A in each year.

You should be able to reconcile information reported in this schedule related to the conduct of research and development with information reported in the National Science Foundation Annual Survey of Federal Funds for Research and Development (see description of line 14xx).

Actual outlays for past year grants and shared revenue must be consistent with the respective amounts reported to the Department of Commerce, Bureau of the Census, pursuant to the instructions regarding its "Federal Aid to States" publication.

(d) *Outyear projections.*

MAX will automatically generate outyear projections of character class data (except memorandum entries) based on in-year data. For grants to State and local governments, outyear projections will be generated through BY+9; and, for direct Federal programs, outyear projections will be generated through BY+4.

Using an algorithm, MAX will assume that the percentage of net budget authority and outlays estimated for a character class for outyears is the same as that reported in the BY. For example, if 18 percent of net budget authority in the account is on line 1511–01 (grants for education and training) in BY, then 18 percent of net budget authority will be estimated on line 1511–01 for each outyear. Agencies may view these outyear projections on-screen. If projections do not accurately reflect outyear policy, you may override the projections by entering the correct amounts (not percentages) directly into MAX.

#### **84.4 How do I report character classification in MAX?**

Character class data in schedules C, K, and R are identified by a line number that consists of a four-digit number and a two-digit suffix (xxxx–xx). The line number identifies data as investment or noninvestment, and as grants or direct Federal programs.

Classify all investment activities in the 1xxx series and all noninvestment activities in the 2xxx series. For credit program accounts, classify subsidies for direct loans and loan guarantees and their administrative expenses according to the purpose of the program. For example, credit subsidies for construction should be in the character class for construction and rehabilitation, and credit subsidies for the conduct of education should be in the character class for the conduct of education and training.

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The two-digit suffix differentiates among budget authority, outlays, and offsetting receipts, as follows:

- 01—Budget authority.
- 02—Outlays.
- 03—Offsetting receipts.

Ensure that data are reported in the correct categories. For example, report data on R&D activities using the appropriate R&D character class entries (see exhibit [84B](#) and the listing of R&D memorandum entries below). Report data on activities other than R&D in non-R&D character classes. Only some of the following codes apply to offsetting receipts; they are specifically noted below with an asterisk (\*). All of the line numbers apply to budget authority and outlays except lines 1441 and 1442, which apply only to budget authority.

The following table indicates the line numbers you use to report character classification. See exhibit [84A](#) for a summary of the coding structure, and exhibit [84B](#) for a summary of the R&D categories.

Entry	Description
<b>1xxx INVESTMENT ACTIVITIES</b>	Budget authority, outlays, or offsetting receipts for programs that yield benefits largely in the future.
<b>13xx Physical assets:</b>	Amounts for the purchase, construction, manufacture, rehabilitation, or major improvement of physical assets regardless of whether the assets are owned or operated by the Federal Government, States, municipalities, or private individuals. Physical assets are land, structures, equipment, and intellectual property (e.g., software) that have an estimated useful life of two years or more; and commodity inventories. The cost of the asset includes both its purchase price and all other costs incurred to bring it to a form and location suitable for its use.
131xx Construction and rehabilitation:	Amounts for construction and rehabilitation, including both grants and direct Federal programs. Construction and rehabilitation means the design and production of fixed works and structures or substantial alterations to such structures or land. Includes new works and major additions, alterations, improvements to and replacements of existing works. Excludes preliminary surveys, maintenance, repair, administration of such facilities and other Federal operating expenses.
Research and development facilities:	Amounts for the construction and rehabilitation of research and development facilities (see category 14xx for the definition of research and development).
1311–xx Grants to State and local governments	
1312–xx Direct Federal programs	Includes the acquisition, design, and construction of, or major repairs or alterations to, all physical facilities for use in R&D activities. Facilities include land, buildings, and fixed capital equipment, regardless of whether the facilities are to be used by the Government or by a private organization, and regardless of where title to the property may rest. Includes the international space station and such fixed facilities as reactors, wind tunnels, and particle accelerators.

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<b>Entry</b>	<b>Description</b>
	<p>Include:</p> <ul style="list-style-type: none"> <li>• Construction of R&amp;D facilities only.</li> </ul> <p>Exclude:</p> <ul style="list-style-type: none"> <li>• Other facility funding (show on line 1313–xx or 1314–xx).</li> <li>• Movable R&amp;D equipment (show on line 132x–xx).</li> </ul>
<p>Other construction and rehabilitation:</p> <p>1313–xx Grants to State and local governments</p> <p>1314–xx Direct Federal programs</p>	<p>Amounts for all other construction and rehabilitation.</p>
<p>132x Major equipment:</p>	<p>Amounts for identifiable items of major equipment, including information technology (see section 53), vehicles, ships, machine tools, aircraft, tanks, satellites and other physical assets in space, and nuclear weapons. Excludes routine purchases of ordinary office equipment or furniture and fixtures. However, where there are major programs for acquisition of equipment, includes all equipment purchases.</p>
<p>Research and development equipment:</p> <p>1321–xx Grants to State and local governments</p> <p>1322–xx Direct Federal programs</p>	<p>Amounts for major equipment for research and development. (See category 14xx for the definition of research and development.) Includes acquisition or design and production of movable equipment, such as spectrometers, research satellites, detectors, and other instruments. At a minimum, this should include programs devoted to the purchase or construction of R&amp;D equipment.</p>
<p>Other major equipment:</p> <p>1323–xx Grants to State and local governments</p> <p>1324–xx Direct Federal programs</p>	<p>Amounts for all other major equipment.</p>
<p>Commodity inventories:</p> <p>1330–xx* Direct Federal programs</p> <p>Proceeds from the sale of commodities</p>	<p>Amounts for federally-owned commodities held for resale or in stockpiles.</p> <p>Offsetting receipts collected from the sale of federally-owned commodities that were previously purchased by the government or from reduction in stockpiles.</p>
<p>Purchases and sales of land and structures for Federal use:</p> <p>1340–xx* Direct Federal programs</p> <p>Receipts from sales of property or assets</p>	<p>Amounts for purchase, including lease-purchases, of land and structures for use by the Federal Government and sales of such land and structures. Includes office buildings and park and forest lands. Does not include land or structures acquired as temporary inventory, such as collateral on defaulted loans.</p> <p>Offsetting receipts collected from sales of federally-owned property or assets used by the Federal Government. Includes office buildings and park and forest lands.</p>

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<b>Entry</b>	<b>Description</b>
<p>Other physical assets:</p> <p>1351–xx Grants to State and local governments</p> <p>1352–xx* Direct Federal programs</p> <p>Receipts from sales of other physical assets</p>	<p>Amounts for all other physical assets, such as conservation, reforestation and range improvements; grants to State or local governments for the purchase of land or structures; and amounts for certain privately-held assets, including improvements to private farms, land and structures acquired as collateral on defaulted loans, and sales of such land and structures. Does not include operation and maintenance of land and structures.</p> <p>Offsetting receipts collected from the sale of physical assets not used by the Federal Government. Includes sales of assets obtained by the Federal Government as collateral on defaulted loans.</p>
<p><b>14xx Conduct of research and development (R&amp;D):</b></p>	<p>Research and development (R&amp;D) activities comprise creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications.</p> <p>Include:</p> <ul style="list-style-type: none"> <li>• Administrative expenses for R&amp;D.</li> </ul> <p>Exclude:</p> <ul style="list-style-type: none"> <li>• Physical assets for R&amp;D such as R&amp;D equipment and facilities (show on line 13xx).</li> <li>• Exclude routine product testing, quality control, mapping, collection of general-purpose statistics, experimental production, routine monitoring and evaluation of an operational program, and the training of scientific and technical personnel.</li> </ul> <p>Definitions of basic and applied research and development are provided below. You should be able to reconcile information reported in this schedule with information subsequently reported in the National Science Foundation Annual Survey of Federal Funds for Research and Development.</p>
<p>Basic research:</p> <p>1411–xx Grants to State and local governments</p> <p>1412–xx Direct Federal programs</p>	<p>Basic research is defined as systematic study directed toward fuller knowledge or understanding of the fundamental aspects of phenomena and of observable facts without specific applications towards processes or products in mind.</p>
<p>Applied research:</p> <p>1421–xx Grants to State and local governments</p> <p>1422–xx Direct Federal programs</p>	<p>Applied research is defined as systematic study to gain knowledge or understanding necessary to determine the means by which a recognized and specific need may be met.</p>
<p>Development:</p> <p>1431–xx Grants to State and local governments</p> <p>1432–xx Direct Federal programs</p>	<p>Development is defined as systematic application of knowledge or understanding, directed toward the production of useful materials, devices, and systems or methods, including design, development, and</p>



Entry	Description
<b>Memorandum R&amp;D entries</b>	improvement of prototypes and new processes to meet specific requirements.
<i>R&amp;D performed by colleges and universities:</i>	Budget authority for R&D performed by institutions engaged primarily in providing instruction for at least a 2-year program above the secondary school level. Includes colleges of liberal arts; schools of arts and sciences; professional schools (such as engineering and medicine); affiliated hospitals and associated institutes; and agricultural experimental stations. Does not include federally-funded R&D centers administered by universities. R&D performed by colleges and universities should equal the sum of the two lines—direct and indirect costs—below. Do not report outlays for lines 1441 or 1442.
1441-01 Direct costs to colleges and universities	Direct costs are those costs that can be identified specifically with a particular sponsored project, an instructional activity, or any other institutional activity or that can be directly assigned to such activities relatively easily with a high degree of accuracy.
1442-01 Indirect costs to colleges and universities	Indirect costs are classified as "administration" or "facilities" costs that are incurred for common or joint objectives, and therefore, cannot be identified with a particular sponsored project. Facilities costs are defined as depreciation and use allowances, interest on debt associated with a certain building, equipment and capital improvements, and operations and maintenance. Administration costs are defined as general administration. See <a href="#">OMB Circular No. A-21</a> "Cost Principles for Educational Institutions" for further definition and guidance on indirect costs. Indirect costs to colleges and universities should be reported based on agency tracking and not using formula-based estimates.
<i>Allocation of research funds:</i>	<p>The total allocation of research funds reported on lines 1451-01 through 1455-01 must equal the total amount reported for the conduct of basic and applied research on lines 1411-xx through 1422-xx. Exclude amounts spent on development.</p> <p>Use these definitions for allocating research funds to the categories listed below:</p> <ul style="list-style-type: none"> <li>• <i>Peer evaluation</i> means merit-reviewed by appropriately qualified scientists, engineers, or other technically qualified individuals who are apart from the people or groups making the award decisions.</li> <li>• <i>Competitive selection</i> means applicants not prohibited from applying by highly restrictive criteria (e.g., by geography, by title, by affiliation with particular institutions, by past associations, by capabilities in unrelated or</li> </ul>

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	Entry	Description
		programmatically non-essential aspects other than long-standing statute or regulation).
1451–xx	Research performed at congressional direction	Intramural and extramural research programs where funded activities are awarded to a single performer or collection of performers with limited or no competitive selection or with competitive selection but outside of the agency’s primary mission, based on direction from the Congress in law, in report language, or by other direction. Funded activities may be merit-reviewed prior to award.
1452–xx	Inherently unique research	Intramural and extramural research programs where funded activities are awarded to a single performer or team of performers without competitive selection. The award may be based on the provision of unique capabilities, concern for timeliness, or prior record of performance (e.g., facility operations support for a unique facility, such as an electron-positron linear collider; research grants for rapid response studies such as <i>Pfisteria</i> , an environmental hazard that arose suddenly).
1453–xx	Merit-reviewed research with limited competitive selection	Intramural and extramural research programs where funded activities are competitively awarded from a pool of qualified applicants that are limited to organizations that were created to largely serve Federal missions and continue to receive most of their annual research revenue from Federal sources. The limited competition may be for reasons of stewardship, agency mission constraints, or retention of unique technical capabilities (e.g., funding set aside for researchers at laboratories or centers of DOD, NASA, Environmental Protection Agency, and National Oceanic and Atmospheric Administration; intramural programs at NIH; Federally-Funded Research and Development Centers; formula funds for the U.S. Department of Agriculture).
1454–xx	Merit-reviewed research with competitive selection and internal (program) evaluation	Intramural and extramural research programs where funded activities are competitively awarded following review for scientific or technical merit. The review is conducted by the program manager or other qualified individuals from within the agency program, without additional independent evaluation (e.g., DOD’s merit-reviewed research; NSF’s small grants for exploratory research).
1455–xx	Merit-reviewed research with competitive selection and external (peer) evaluation	Intramural and extramural research programs where funded activities are competitively awarded following review by a set of external scientific or technical reviewers (often called peers) for merit. The review is conducted by appropriately qualified scientists, engineers, or other technically-qualified individuals who are apart from the people or groups making the award decisions, and serves to inform the program manager or other qualified individual who makes the

Entry	Description
<i>Conduct of National Science and Technology Council (NSTC) crosscuts</i>	award (e.g., NSF's single-investigator research; NASA's research and analysis funds).
1463-xx U.S. global change research program	<p><i>Research focused on:</i></p> <ul style="list-style-type: none"> <li>• Observing and documenting global environmental changes and identifying their causes.</li> <li>• Predicting the responses of the Earth system.</li> <li>• Determining the ecological, human health, and socioeconomic consequences of these changes.</li> <li>• Identifying strategies for adaption and mitigation that will most benefit society and the environment.</li> </ul> <p>P.L. 101-606 requires this program crosscut.</p>
1464-xx Networking and information technology R&D	<p><i>Large scale networking:</i></p> <ul style="list-style-type: none"> <li>• Research and technology development in high performance network components.</li> <li>• Technologies focused on wireless, optical, mobile, and wireline communications.</li> <li>• Large-scale network services, engineering, and management.</li> <li>• Deeply networked systems.</li> <li>• Simulation and modeling.</li> <li>• Systems software and program development environments for network-centric computing.</li> <li>• Next Generation Internet initiative activities.</li> </ul> <p><i>High-end computing:</i></p> <ul style="list-style-type: none"> <li>• Research and technology development to improve the usability and effectiveness of teraflops-scale systems.</li> <li>• Leading-edge research for future generations of computing, petascale computers and exabyte storage systems including system software to improve scalability, throughput, speed, portability, and programmability.</li> <li>• Current and advanced device technologies and subsystem components and innovative advanced architectures.</li> <li>• Prototype demonstration systems.</li> </ul> <p><i>High-end computation and infrastructure:</i></p> <ul style="list-style-type: none"> <li>• Research and development of applications</li> </ul>

Entry	Description
	<p>requiring large scale computation-intensive and/or information-intensive operations.</p> <ul style="list-style-type: none"> <li>• Development of mathematical algorithms and programming environments, and tools for collaboration, visualization, and data management.</li> <li>• Research facilities built on large scale test systems and on large scale, high performance computational grids and networks.</li> </ul> <p><i>High confidence software and systems:</i></p> <ul style="list-style-type: none"> <li>• Research and technology development to achieve security, survivability, availability, reliability, and safety of systems that rely on information technology.</li> <li>• Assurance of software- and information-centric systems through research in theoretical foundations, development of tools and techniques (with linkages to domain-specific languages), engineering and experimentation, and demonstrations and pilots.</li> </ul> <p><i>Human computer interface and information management:</i></p> <ul style="list-style-type: none"> <li>• Research and technology development in human sensory-motor systems, perception, attention, pattern recognition, and decision-making to improve the interaction of people and machines.</li> <li>• Management, exploitation, and visualization of information and knowledge, including large knowledge repositories.</li> <li>• Multilingual document translation and understanding.</li> <li>• Collaboratories.</li> <li>• Digital libraries.</li> </ul> <p><i>Software design and productivity:</i></p> <ul style="list-style-type: none"> <li>• Research and technology development in software design and implementation.</li> <li>• End-user programming, including intelligent templates and domain-specific languages.</li> <li>• Component-based software.</li> <li>• Software for embedded systems.</li> <li>• Autonomous software.</li> </ul> <p><i>Social, economic, and workforce implications of IT and IT workforce development:</i></p>

Entry	Description
1465–xx National nanotechnology initiative	<ul style="list-style-type: none"> <li>• Research in social, economic, and workforce effects of information technology.</li> <li>• Development of model curricula and course materials to promote IT literacy.</li> <li>• Graduate and postdoctoral programs to increase the number of IT professionals.</li> </ul>
1465–xx National nanotechnology initiative	<p>Research and technology development at the atomic, molecular, or macromolecular levels, in the length scale of approximately 1–100 nanometer range, to provide a fundamental understanding of phenomena and materials properties at the nanoscale and to model, create, characterize, manipulate, and use structures, devices, and systems that have novel properties and functions because of their small or intermediate size. The novel and differentiating properties and functions are developed at a critical length scale of matter typically under 100 nanometers. Nanotechnology research and development includes integration of nanoscale structures into larger material components, systems, and architectures. Within these larger scale assemblies, the control and construction of their structures and components devices remains at the nanometer scale.</p>
<b>15xx Conduct of education and training:</b>	<p>Amounts for programs whose primary purpose is education, training, and vocational rehabilitation. Includes veterans' education and training; operating assistance for elementary, secondary, vocational, adult, and higher education; and agricultural extension services; income support activities directly contingent upon participating in such programs. Excludes training of military personnel or other persons in government service. Also excludes amounts for physical assets, which are classified in 13xx, and amounts for the conduct of research and development, which are classified in 14xx.</p>
1511–xx Grants to State and local governments	
1512–xx* Direct Federal programs	
Receipts from education and training	<p>Offsetting receipts for negative subsidies, and downward reestimates of loan subsidies that are associated with the conduct of education and training.</p>
<b>2xxx NON-INVESTMENT ACTIVITIES</b>	Amounts that are not classified as investment activities.
Grants to State and local governments:	Grant amounts that are not classified as investment activities.
2001–xx Other than shared revenues	
2003–xx Shared revenues	
2004–xx* Direct Federal programs	<p>Amounts for all other non-investment activities. Includes transactions related to credit liquidating accounts.</p>
All other offsetting receipts	<p>Offsetting receipts collected and deposited in receipt accounts that are not otherwise classified.</p>

Summary of Character Classification Codes (Schedule C)

4 digit prefix	Standard titles	Schedule C's 6 digit line numbers are comprised of a 4 digit prefix and a 2 digit suffix.
<b>INVESTMENT ACTIVITIES</b>		
	<p><b>Physical assets:</b></p> <p>Construction and rehabilitation:                      Research and development facilities: Grants                      Research and development facilities: Direct Federal programs                      Other construction and rehabilitation: Grants                      Other construction and rehabilitation: Direct Federal program</p> <p>Major equipment:                      Research and development equipment: Grants                      Research and development equipment: Direct Federal programs                      Other major equipment: Grants                      Other major equipment: Direct Federal programs                      Commodity inventories: Direct Federal programs                      Purchases and sales of land and structures for Federal use: Direct Federal programs                      Other physical assets: Grants                      Other physical assets: Direct Federal programs</p> <p><b>Conduct of research and development:</b>                      Basic research: Grants                      Basic research: Direct Federal programs                      Applied research: Grants                      Applied research: Direct Federal programs                      Development: Grants                      Development: Direct Federal programs</p>	<p>2 digit suffix                      xxxx-01 Budget authority                      xxxx-02 Outlays                      xxxx-03 Offsetting receipts</p> <p>Totals for budget authority and outlays reported in schedule C must equal those reported in schedule A net of offsetting collections.</p>
1311-xx <sup>1</sup> 1312-xx 1313-xx <sup>1</sup> 1314-xx		
1321-xx <sup>1</sup> 1322-xx 1323-xx <sup>1</sup> 1324-xx 1330-xx 1340-xx 1351-xx <sup>1</sup> 1352-xx		
1411-xx <sup>1</sup> 1412-xx 1421-xx <sup>1</sup> 1422-xx 1431-xx <sup>1</sup> 1432-xx		Memorandum (non-add) entries for R&D are a subset of data reported on lines 1311-xx through 1432-xx.
1441-01 1442-01	<p><i>Memorandum (non-add) R&amp;D entries</i>                      R&amp;D performed by college and universities:                      Direct costs to colleges and universities                      Indirect costs to colleges and universities</p>	Lines 1441-01 and 1442-01 only pertain to budget authority and sum to total R&D funding to colleges and universities.
1451-xx 1452-xx 1453-xx 1454-xx 1455-xx	<p>Allocation of research funds:                      Research performed at congressional direction                      Inherently unique research                      Merit-reviewed research with limited competitive selection                      Merit-reviewed research with competitive selection and internal (program) evaluation                      Merit-reviewed research with competitive selection and external (peer) evaluation</p>	Lines 1451-xx through 1455-xx must equal the sum of line 1411-xx through 1422-xx.
1463-xx 1464-xx 1465-xx	<p>Crosscuts:                      U.S. global change research program                      Networking and information technology R&amp;D                      National nanotechnology initiative</p>	
1511-xx <sup>1</sup> 1512-xx	<p><b>Conduct of education and training:</b>                      Grants                      Direct Federal programs</p>	
<b>NON-INVESTMENT ACTIVITIES</b>		
2001-xx <sup>1</sup> 2003-xx <sup>1</sup> 2004-xx	<p>Grants-other than shared revenues                      Grants-shared revenues                      Direct Federal programs</p>	<sup>1</sup> You must report budget authority and outlays for grants by BEA subcategory (e.g. discretionary or mandatory).

### Research and Development Character Classification Codes

The character classification includes the following ten categories that are used to report research and development activities. In addition, memorandum (non-add) entries are used to report on R&D performed by universities, the allocation of R&D funds, and R&D crosscuts. (See exhibit 84A for a listing of these entries.)

Code	Description
	<b>Physical assets:</b>
	Construction and rehabilitation:
1311-xx	Research and development facilities: Grants
1312-xx	Research and development facilities: Direct Federal programs
	Major equipment:
1321-xx	Research and development equipment: Grants
1322-xx	Research and development equipment: Direct Federal programs
	<b>Conduct of research and development:</b>
1411-xx	Basic research: Grants
1412-xx	Basic research: Direct Federal programs
1421-xx	Applied research: Grants
1422-xx	Applied research: Direct Federal programs
1431-xx	Development: Grants
1432-xx	Development: Direct Federal programs

Character class categories for activities other than R&D are listed in Exhibit 84A.