

Character Classification (MAX Schedules C, K, and R)

Summary of Changes

- A new crosscutting R&D data requirement for the climate control technology initiative is identified and two others are dropped. Other definitions have been clarified (section 25.4).
- A new exhibit listing entries used to report R&D data is provided (exhibit 25B).

25.1. General.

Character classification is used to report investment activities separately from non-investment. Data are classified as investment when they finance activities yielding benefits largely in the future; investment character classes include those for physical assets, the conduct of research and development (R&D), and the conduct of education and training. The character classification is also used to report data on grants to State and local governments separately from direct Federal programs.

Requirements for additional research and development categories (e.g., conduct of R&D performed by universities, R&D crosscuts, technology transfer, etc.) are integrated into the character classification. R&D data are used in review of agency budget requests, Government-wide resource allocation, and R&D budget presentations.

Budget authority and outlays are reported by character class for all appropriation and fund accounts (except for credit financing accounts) in MAX schedule C; offsetting receipts, which are also identified by character class codes, are reported in MAX receipt data schedules (MAX schedules K and R) (see sections 25.4 and 21.4). Amounts are required to be reported for PY through BY; (See section 25.3(e) for an explanation of automatically-generated outyear projections.)

If the nature of the account changes and requires use of different character classes to report data, agencies may enter budget authority and outlays (lines xxxx-01, xxxx-02) in the appropriate character classes, without requesting changes to the BAT file. The classification of offsetting receipts (lines xxxx-03) in MAX schedules K and R is controlled through the BAT file; changes to the classification of offsetting receipts must be requested from OMB.

25.2. Definitions.

The following definitions will be used for the purposes of reporting character classification data.

State or local governments include:

- 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:
 - (1) the legislation authorizing the payment includes such entities within the definition of eligible State or local units, or
 - (2) the tribal government acts as a nonprofit agency operating under State or local auspices; and
- 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.

Grants to State and local governments.—For character classification purposes, budget authority and outlays are reported as grants to State and local governments if those resources of the Federal Government support State or local programs of government operations or provision of services to the public. Grant data should be reported for:

- 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 (e.g., 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 (e.g., 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;
- Federal 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; and
- 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), or 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).

Excluded under this definition are:

- Federal administrative expenses associated with these programs;
- grants directly to profit-making institutions, individuals, and non-profit institutions not covered above (e.g., payments to Job Corps centers and trainees);
- payments for research and development not directly related to the provision of services to the general public (e.g., basic research awarded via competitive grants);
- payments for services rendered (e.g., 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, the National Science Foundation, the Department of Energy, the National Aeronautics and Space Administration, and the Department of Defense); and
- Federal grants to cover administrative expenses for regional bodies and other funds not redistributed to the States or their subordinate jurisdictions (e.g., the administrative expenses of the Appalachian Regional Commission).

Direct Federal programs.—Programs not classified as grants to State and local governments are classified as “direct Federal programs.”

(See section 25.4 for other definitions.)

25.3. Reporting the data and relationships with other data requirements.

(a) Reporting budget authority and outlay data.—Budget authority and outlay data are reported by subfunction and assigned character classification for PY–BY in MAX schedule C. Grant character class data are also reported by BEA subcategory (e.g., discretionary; mandatory, authorizing; etc.) (see section 21.2).

Data are reported net, except as specified below. For the treatment of grants, which are reported gross, see section 25.3(d). If an account is split between two or more subfunctional classifications, amounts for each subfunction will be reported separately. (Note: Character class data are not required for credit financing accounts.)

As a general rule, if a transaction fits into more than one classification, it should be recorded in the classification with the lowest numerical character classification code. For example, amounts for construction of research and development facilities should be recorded in the appropriate 13xx–xx grouping, not in the 14xx–xx grouping. (See section 25.3(b) and exhibit 25A for treatment of memorandum entries.)

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

Offsetting collections credited to appropriation and fund accounts will be applied as offsets to the gross budget authority and the disbursements that the collections will be used to finance in the calculation of amounts reported in each character class. For example, collections resulting from the sale of commodities will be offset against gross budget authority and disbursements for the purchase of commodities in character classes 1330–01 and 1330–02, respectively; fees collected to cover operating expenses will be offset against gross budget authority and disbursements for operating expenses in character classes 2004–01 and 2004–02, respectively. In credit liquidating accounts, loan repayments will be offset against gross budget authority and disbursements for loan programs in character classes 2004–01 and 2004–02, respectively.

Grants to State and local governments in some cases allow the recipient jurisdiction the option of using funds for current or investment-type purposes, such

as in community development block grant programs. In such instances, all of the budget authority and outlays for grants are to be recorded in the category where the majority of the funds is anticipated to be used.

(b) Research and development data.—Memorandum entries are used to collect certain R&D information (e.g., conduct of R&D performed by universities, R&D crosscuts, technology transfer, etc.). These are non-add entries, i.e., data are in addition to, and a subset of, R&D data already required to be reported in MAX schedule C on lines 1311-xx through 1432-xx.

Crosscutting R&D data.—Agencies are required to report crosscutting R&D data for the specific areas identified by the National Science and Technology Council (NSTC) in MAX schedule C for PY through BY. (See the abbreviated definitions for R&D crosscutting areas (lines 145x-xx) in section 25.4.) Questions concerning crosscuts (e.g., definitions, etc.) should be addressed to the NSTC agency representatives or to the OMB contact. (See the “List of OMB Contacts” at the beginning of Circular No. A–11.)

Technology transfer data.—Data are required to be reported for PY through BY for technology transfer between the Federal labs and other non-Federal entities (e.g., companies, universities, etc.) in eight categories in MAX schedule C. (See lines 146x-xx in section 25.4.) These data are required for agencies that have Offices for Research and Technology Applications (ORTAs), as defined by 15 U.S.C. 3710(b) (the Stevenson-Wydler Act). For questions on this requirement, agencies should consult their OMB contact.

(c) Reporting receipt data.—Offsetting receipt data (i.e., offsetting collections deposited in receipt accounts) are reported in MAX schedules K and R by the line numbers indicated in section 25.4.

(d) Relationships with other data requirements.—For each account, the totals for character class data in MAX schedule C (excluding the memorandum (non-add) entries) must correspond to the total net budget authority and outlays reported in MAX schedule P on lines 8900 and 9000 for PY–BY.

Grant budget authority and outlays should be reported gross (i.e., budget authority and outlays from grants should include grants financed by offsetting collections). Offsetting collections credited to an account that finance grants will offset budget authority and disbursements in character class 2004–01 and 2004–02, respectively. Actual outlays for

the past year for grants and for shared revenue must also be consistent with the respective amounts reported to the Department of Commerce, Bureau of the Census, pursuant to the instructions on the “Federal Aid to States” table.

(e) Outyear projections of character class data.—Based on in-year data entered by agencies, MAX will automatically generate outyear projections of character class data (except for memorandum entries). Outyear projections through BY+9 will be generated automatically for grants to State and local governments; outyear data on direct Federal programs 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 in character code 1511–01 (grants for education and training) in BY, 18 percent of net budget authority will be estimated in character code 1511–01 for each outyear. The outyear projections will be displayed in MAX on-screen, so that agencies can view the estimates; if the projections do not accurately reflect outyear policy, agencies may override the calculated amounts by entering the revised amounts (not percentages) directly into MAX. For revolving-type funds (e.g., the Federal buildings fund and the General supply fund in GSA, Postal Service, TVA, Bonneville, and mass transit formula grants), where the net totals are often close to zero or are negative, the automatic projection will generate unrealistic estimates and will need to be overridden. Character class totals for outyears must correspond to total net budget authority and outlays for those years.

25.4. Character classification.

Character class data reported in MAX schedules C, K, and R are identified by a line number that consists of a four-digit number and a two-digit suffix.

The *four-digit number* identifies data as investment or non-investment and as grants or direct Federal programs. All investment activities are classified in the 1xxx series, while all non-investment activities are classified in the 2xxx series. In credit program accounts, the subsidies for direct loans and loan guarantees, and their administrative expenses, should be classified according to the purpose of the program. For example, credit subsidies for construction should be in the character class for construction and

Code	Definition
<p>Receipts from sales of property or assets</p> <p><i>Other physical assets:</i> 1351-xx Grants to State and local governments 1352-xx* Direct Federal programs</p> <p>Receipts from other physical assets</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> <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 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>14xx Conduct of research and development:</p> <p><i>Basic research:</i> 1411-xx Grants to State and local governments 1412-xx Direct Federal programs</p> <p><i>Applied research:</i> 1421-xx Grants to State and local governments 1422-xx Direct Federal programs</p> <p><i>Development:</i> 1431-xx Grants to State and local governments 1432-xx Direct Federal programs</p> <p>Memorandum (non-add) R&D and technology transfer entries:</p> <p><i>R&D performed by colleges and universities and merit-reviewed research:</i> 1441-xx Conduct of R&D performed by colleges and universities</p> <p>1442-xx Indirect costs related to R&D performed by colleges and universities</p> <p>1443-xx Merit-reviewed scientific research with peer evaluation and competitive selection</p>	<p>Amounts for research and development, including administrative expenses for R&D. Excludes R&D facilities and equipment investments, which are classified under 13xx. Definitions of basic and applied research, and development are provided below. This definition of research and development is the same as that used for the National Science Foundation Annual Survey of Federal Funds for Research, Development, and Other Scientific Activities. Information reported under this section should be reconcilable with the more detailed information subsequently reported in the annual survey. Excluded are 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.</p> <p>Amounts for basic research. Basic research is defined as systematic study directed toward greater knowledge or understanding of the fundamental aspects of phenomena and of observable facts without specific applications towards processes or products in mind.</p> <p>Amounts for applied research. 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>Amounts for development. Development is defined as systematic application of knowledge toward the production of useful materials, devices, and systems or methods, including design, development, and improvement of prototypes and new processes to meet specific requirements.</p> <p>Amounts 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 in engineering and medicine); affiliated hospitals and associated institutes; and agricultural experiment stations (excludes federally-funded research and development centers).</p> <p>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 OMB Circular No. A-21 "Cost Principles for Educational Institutions" for further definition and guidance on indirect costs.</p> <p>Intramural and extramural research programs where funded activities are chosen from a pool of qualified applicants following review by a set of (scientific) peers for merit. To meet the criterion of peer evaluation, the merit-reviewed activities must be reviewed by appropriately qualified scientists and engineers outside the decision-making or supervisory chain. To meet the criterion of competitive selection, applicants must not be prohibited from applying by unduly restrictive criteria. The pool of funds within which the competition takes place may be reasonably broadly defined. Sole source activities are excluded.</p>

Code	Definition
<p>1451-xx</p> <p><i>Conduct of National Science and Technology Council (NSTC) crosscuts:</i> Climate change technology initiative</p>	<p>Research, development and deployment, and technologies related to energy efficiency, renewable energy, and carbon reduction, including more efficient technologies in buildings, industrial processes, vehicles, and power generation. Examples include energy-efficient technologies for commercial buildings and homes; stronger labeling and efficiency requirements for appliances and office equipment; the deployment of new technologies in the industrial sector to capture waste heat and convert it into electricity; advanced automobile and truck technologies, and research and incentives for renewable energy sources, such as wind, biomass, photovoltaics, and fuel cells. Also includes direct support of fundamental research, and R&D on physical or biological sequestration of CO2. Both base program funding and initiatives first proposed in FY 1999 should be included.</p>
<p>1452-xx</p> <p>Partnership for a new generation of vehicles</p>	<p>Research designed to: develop advanced manufacturing techniques that make it easier to get new automobiles and auto components into the marketplace quickly; use new technologies for near-term improvements in auto efficiency, safety, and emissions; and lead to production prototypes of vehicles three times more fuel efficient than today's cars, with no sacrifice in comfort, performance, or price, including exploration in such advanced technologies as fuel cells, advanced clean diesel engine, and energy storage systems.</p>
<p>1453-xx</p> <p>U.S. global change research program</p>	<p>Research focused on observing and documenting global environmental changes and identifying their causes; predicting the responses of the Earth system; determining the ecological, human health, and socioeconomic consequences of these changes; and identifying strategies for adaption and mitigation that will most benefit society and the environment. Collection of this program crosscut is required by P.L. 101-606.</p>
<p>1454-xx</p> <p>High-performance computing and communications</p>	<p><i>Large scale networking:</i> Research and technology development in high performance network components; technologies that enable wireless, optical, mobile, and wireline communications; large-scale network engineering, management, and services; and systems software and program development environments for network-centric computing.</p> <p><i>High-end computing and computation:</i> Research and technology development in high-end computing hardware and software innovations, and in algorithms and software for modeling and simulation needed to address Grand Challenge-class applications, including associated infrastructure.</p> <p><i>High confidence systems:</i> Research and development in information security, information survivability, and assurance technologies to achieve high levels of availability, reliability, and restorability of information systems. Collection of this program crosscut is required by P.L. 101-606.</p>
<p>1461-xx</p> <p><i>Conduct of technology transfer:</i> Administrative support</p>	<p>Amounts for the Federal administrative support of technology transfer efforts, including salaries and travel expenses for ORTA and scientists/engineering staff; technology assessments to evaluate transfer potential; marketing and outreach; invention-related efforts; salaries and expenses for technical assistance and short-term consulting; patents applications, amendments, and maintenance fees; and legal support for technology transfer.</p>
<p>1462-xx</p> <p>Transfer processes</p>	<p>Federal costs (other than administrative) for transferring technology to non-Federal entities, comprised of licensing, technical assistance, reimbursable work for non-Federal partners, and use of facilities.</p>
<p>1463-xx</p> <p>Cooperative R&D instruments</p>	<p>Federal amounts for cooperative R&D agreements (CRADAs) as defined by 10 U.S.C. 2371 and 2358, Space Act Agreements, USDA agreements, and multi-agency agreements.</p>
<p>1464-xx</p> <p>Other technology transfer partnerships</p>	<p>Amounts for other partnerships, collegial interchanges, and exchange programs that join the technical expertise of Federal agencies and non-Federal entities to achieve national or Federal technological goals. Agency definition can be used as appropriate.</p>
<p>1465-09</p> <p>Non-Federal cash support in cooperative R&D instruments</p>	<p>Amounts for actual cash transferred to the Federal Government by non-Federal partners involved in cooperative R&D instruments.</p>
<p>1466-09</p> <p>Non-Federal non-cash support in cooperative R&D instruments</p>	<p>Amounts that represent the value of the non-cash support transferred to the Federal Government by non-Federal partners involved in cooperative R&D instruments.</p>
<p>1467-09</p> <p>Number of continuing active cooperative R&D instruments</p>	<p>Number of instruments that were begun in previous fiscal years and have not yet been terminated.</p>
<p>1468-09</p> <p>Number of new cooperative R&D instruments</p>	<p>Number of instruments whose last signature was made during the current fiscal year (or estimated for a future fiscal year).</p>
<p>15xx</p> <p>Conduct of education and training: 1511-xx Grants to State and local governments 1512-xx* Direct Federal programs</p>	<p>Amounts for programs whose primary purpose is education, training, and vocational rehabilitation. Included are veterans' education and training; operating assistance for elementary, secondary, vocational, adult, and higher education; agricultural extension services; and income support activities directly contingent upon participating in such programs. Excluded are the training of military personnel or other persons in government service.</p>

Code		Definition
Receipts from education and training		Offsetting receipts for loan repayments, negative subsidies, and downward reestimates of loan subsidies that are associated with the conduct of education and training.
2xxx	NON-INVESTMENT ACTIVITIES	Amounts that are not classified as investment activities.
2001-xx	Grants to State and local governments: Other than shared revenues	Grant amounts that are not classified as investment activities.
2003-xx	Shared revenues	
2004-xx *	Direct Federal programs	Amounts for all other non-investment activities.
	All other offsetting receipts	Offsetting receipts collected and deposited in receipt accounts that are not otherwise classified.

Summary of Character Classification Codes (MAX Schedule C)

Code	Description
INVESTMENT ACTIVITIES	
Physical assets:	
Construction and rehabilitation:	
1311-xx	Research and development facilities: Grants
1312-xx	Research and development facilities: Direct Federal programs
1313-xx	Other construction and rehabilitation: Grants
1314-xx	Other construction and rehabilitation: Direct Federal programs
Major equipment:	
1321-xx	Research and development equipment: Grants
1322-xx	Research and development equipment: Direct Federal programs
1323-xx	Other major equipment: Grants
1324-xx	Other major equipment: Direct Federal programs
1330-xx	Commodity inventories: Direct Federal programs
1340-xx	Purchases and sales of land and structures for Federal use: Direct Federal programs
1351-xx	Other physical assets: Grants
1352-xx	Other physical assets: Direct Federal programs
Conduct of research and development:	
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
<i>Memorandum (non-add) R&D entries</i>	
R&D performed by colleges and universities and merit-reviewed research:	
1441-xx	Conduct of research and development performed by colleges and universities
1442-xx	Indirect costs related to R&D performed by colleges and universities
1443-xx	Merit-reviewed scientific research with peer evaluation and competitive selection
Crosscuts:	
1451-xx	Climate change technology initiative
1452-xx	Partnership for a new generation of vehicles
1453-xx	U.S. global change research program
1454-xx	High-performance computing and communications
Technology transfer:	
1461-xx	Administrative support
1462-xx	Transfer processes
1463-xx	Cooperative R&D instruments
1464-xx	Other technology transfer partnerships
1465-09	Non-Federal cash support in cooperative R&D instruments
1466-09	Non-Federal non-cash support in cooperative R&D instruments
1467-09	Number of continuing active cooperative R&D instruments
1468-09	Number of new cooperative R&D instruments
Conduct of education and training:	
1511-xx	Grants
1512-xx	Direct Federal programs
NON INVESTMENT ACTIVITIES	
2001-xx	Grants-other than shared revenues
2003-xx	Grants-shared revenues
2004-xx	Direct Federal programs

Totals for budget authority and outlays reported on lines 1311-xx through 1432-xx, and 1511-xx through 2004-xx must correspond to net budget authority and outlay totals reported in schedule A (e.g., schedule C total outlays must equal schedule A gross outlays minus offsetting collections (cash)).

R&D requirements are included in the character classification.

Memorandum (non-add) entries for Federal programs are a subset of data reported on lines 1311-xx through 1432-xx. Some non-Federal items are also required.

The suffix "09" will be used for these R&D entries.

Research and Development of Character Classification Codes (MAX Schedule C)

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 conduct of R&D performed by universities, R&D crosscuts, and technology transfer activities (See Exhibit 25A for a listing of these entries.)

Code	Description
	Physical assets:
1311-xx	Construction and rehabilitation:
1312-xx	Research and development facilities: Grants
	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
	Conduct of research and development:
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 25A.