TABLE 38. Domestic R&D paid for by the U.S. federal government and performed by the company, by character of work, industry, and company size: 2014 (Millions of U.S. dollars)

Milmudustries   21-23.31-33, 42-81   26.554   2.044   6.445   18,065   18,007   18,005   18	Industry and company size	NAICS code	Total	Basic research	Applied research	Development
Food   311	All industries	21–23, 31–33, 42–81	26,554 i	2,044 i	6,445 i	18,065 i
Food   311	Manufacturing industries	31–33	21,303 i	1,718 i	3,566 i	16,019 i
Texilies, apparel, and leather products		311	*	*	*	*
Wood products	Beverages and tobacco products	312	* i	* i	* i	* i
Printing and related support activities 323 1 i i i i i i i i i i ci i Chemicals 325 404 22 i 114 268 1 Chemicals 325 404 22 i 114 268 1 Chemicals 325 407 212 i 191 168 1 Chemicals 326 326 1 i i i i i i i i i i i i i i i i i i	Textiles, apparel, and leather products	313–16	9 i	* i	1 i	7 i
Chemicals         325         404         22         1         114         268           Pharmaceulicals and medicines         3254         272         12         1         91         168           Other chemicals         0ther 325         132         1         1         1         2         1         10         1	Wood products	321	2 i	* i	* i	2 i
Pharmaceulticals and medicines         3254         272         1         1         91         168           Other chemicals         other 325         132         i         10         i         22         i         10           Plastics and rubber products         326         1         i         1         i         1         i         1	Printing and related support activities	323	* i	* i	* i	* i
Plastics and rubber products	Chemicals	325	404	22 i	114	268
Plastics and rubber products   326   1   1   1   1   1   1   1   1   1	Pharmaceuticals and medicines	3254	272	12 i	91	168
Nonmetallic mineral products         327         4         1         1         2           Primary metals         331         22         1         1         3         1         18         1           Fabricated metal products         332         34         1         12         1         1         1         31         35         4         4         1         3         1         1         1         3         1         1         1         1         4         4         1         3         1         1         1         1         4         4         1         3         1         1         1 <td>Other chemicals</td> <td>other 325</td> <td>132 i</td> <td>10 i</td> <td>22 i</td> <td>100</td>	Other chemicals	other 325	132 i	10 i	22 i	100
Primary metals         331         22         i         1         i         3         i         11         i         13         3         6         4         11         3,599         2         3         8         6         4         471         3,103         3         8         6         4         471         3,103         3         1         1         5         1         460         1         4         4         1         3         1         1         5         1         4         1         1         5         1         4         1         1         1         1 <td>Plastics and rubber products</td> <td>326</td> <td>1 i</td> <td>* i</td> <td>* i</td> <td>1 i</td>	Plastics and rubber products	326	1 i	* i	* i	1 i
Fabricated metal products         332         34         1         12         1         3         1         6         6         7         3         3         2         2         3         6         4         4         7         3         1         1         1         3         1         1         1         1         3         1	Nonmetallic mineral products	327	4	* i	1	2
Machinery         333         78         """         6         71           Computer and electronic products         334         4,456         220         1         637         1         3,599           Semiconductors and other electronic components         3344         4,16         3         1         2         36           Navigational, measuring, electromedical, and control instruments         3345         3,638         64         471         3,103           Other computer and electronic products         other 334         777         i         153         i         460         i         160         i         460         i         160         i         460         i         50<	Primary metals	331	22 i	1 i	3 i	18 i
Computer and electronic products	Fabricated metal products	332	34 i	12 i	11 i	11 i
Semiconductors and other electronic components   3344   41   3   1   2   36	Machinery	333	78	*	6	71
Navigational, measuring, electromedical, and control instruments   3345   3,638   64   471   3,103   1016	Computer and electronic products	334	4,456	220 i	637 i	3,599
and control instruments         3345         3,638         64         471         3,103           Other computer and electronic products         other 334         777         i         153         i         163         i         460         i           Electrical equipment, appliances, and components         335         48         i         *         i         57         i         12,73         i         11,921         i           Aerospace products and parts         336         16,153         i         1,430         i         2,040         i         10,921         i           Other transportation equipment         other 336         1,327         i         1,430         i         2,040         i         10,921         i           Other transportation equipment         other 336         1,327         i         1,430         i         369         i         10,921         i         10,921         i         10,921         i         10,921         i         10,921         i         10,22         i         10,22         i         10,22         i         10,22         i         10,22         i         10,22         i         10,24         i         10,22         i         10,24	Semiconductors and other electronic components	3344	41	3 i	2	36
Other computer and electronic products         other 334         777 i         153 i         163 i         460 i         162 i         142 i         163 i         460 i         163 i         460 i         163 i         164 i <td>S S</td> <td>3345</td> <td>3 638</td> <td>64</td> <td>471</td> <td>3.103</td>	S S	3345	3 638	64	471	3.103
Electrical equipment, appliances, and components   335   48   1	Other computer and electronic products					
Transportation equipment         336         16,153         1         1,459         1         2,773         1         11,921         1           Aerospace products and parts         3364         14,826         i         1,430         i         2,404         i         10,991         i           Other transportation equipment         other 336         1,327         i         29         i         369         i         92         i           Furniture and related products         337         337         i         i         36         i         12         1         2         1         2         1         2         1         3         1         i         1         1         2         1         3         1         2         1         1         2         2         1         3         1         3         1         3         1         3         1         2         2         1         2         2         1         2         2         1         1         2         2         7         1         1         2         2         7         1         1         3         1         2         1         1         3         2	·					
Aerospace products and parts         3364         14,826         i         1,430         i         2,404         i         10,991         i           Other transportation equipment         other 336         1,327         i         29         i         369         i         929         j           Furniture and related products         337         33         i         *         i         1         2         j         2         2         j         j         1         1         i         2         j         j         1         1         i         2         j         j         1         3         i         1         1         2         2         7         j         1         3         2         1         3         1         3         1         3         1         3         2         1         3         2         2         2         9         2         2         2         9         2         1         3         2         7         1         1         3         2         7         1         1         3         2         7         1         1         3         2         7         1         1         <						
Other transportation equipment         other 336         1,327 i         29 i         369 i         929 i         1           Furniture and related products         337         3 i         * i         1 i         2         1         2         1         2         1         1         2         1         1         1         2         1         1         1         2         1         1         1         1         2         1         1         1         1         2         1         1         1         1         2         1         1         1         2         2,045         2         2,045         2         2,045         1         1         1         2,275         2         2,045         1         1         1         1         1         2,045         1         2         2,045         1         1         1         2         2,045         1         1         1         2         2,045         1         1         1         2         1         1         1         2         1         1         1         2         1         1         1         2         1         1         3         2         2,776         1						
Furniture and related products         337         3 i         * i         1 i         2 i         1 c         1 c         2 i         1 c         1 c         2 i         1 c         1 c         2 i         1 c         1 c         2 i         3 c         3 i         3						
Miscellaneous manufacturing         322, 324, 339         90 i         3         13         75 i         15           Nonmanufacturing industries         21–23, 42–81         5,251         327         2,879         2,045           Information         51         162         10         96         56           Publishing         511         99         2         79         17           Telecommunications         517         9         1         2         76         14           Data processing, hosting, and related services         518         53         7         14         32         i           Other information         0ther 51         <					1 i	2 i
Nonmanufacturing industries         21–23, 42–81         5,251         327         2,879         2,045           Information         51         162         10         96         56           Publishing         511         99         2         79         17           Telecommunications         517         9         1         2         79         14           Data processing, hosting, and related services         518         53         7         14         32         6           Other information         other 51         1 <td>·</td> <td>322, 324, 339</td> <td></td> <td>3</td> <td>13</td> <td>75 i</td>	·	322, 324, 339		3	13	75 i
Information         51         162         10         96         56           Publishing         511         99         2         79         17           Telecommunications         517         9         1         2         6           Data processing, hosting, and related services         518         53         7         14         32         i           Other information         other 51         1         i         *         i         1         i         *         i         1         i         *         i         1         i         *         i         1         i         *         i         1         i         *         i         1         i         *         i         1         i         *         i         1         i         *         i         1         i         *         i         1         i         *         i         1         i         *         i         1         i         *         2         2         776         822         399         i         3         General representances         5417         1         1         1         1         1         1         1         1	<del>-</del>		5,251	327	2,879	2,045
Publishing         511         99         2         79         17           Telecommunications         517         9         1         2         6           Data processing, hosting, and related services         518         53         7         14         32         i           Other information         other 51         1         i         *         i         1         i         *         1         i         *         1         i         *         1         i         *         1         i         *         1         i         *         1         i         *         1         i         *         1         i         *         1         i         *         1         i         *         1         i         *         1         i         *         1         i         *         1         i         *         1         i         *         1         1         *         1         1         *         1         1         *         1         1         1         *         1         1         1         1         1         1         1         1         1         1         1         1 <t< td=""><td>_</td><td></td><td></td><td>10</td><td>96</td><td>56</td></t<>	_			10	96	56
Telecommunications         517         9         1         2         6           Data processing, hosting, and related services         518         53         7         14         32         i           Other information         other 51         1         i         * i         1 i         i         1 i         * i         1 i         * i         1 i         * i         1 i         i         * i         1 i         i         * i         1 i         i         * i         1 i         i         * i         1 i         i         * i         1 i         i         * i         1 i         i         * i         1 i         i         * i         1 i         i         * i         1 i         i         * i         1 i         i         1 i         i         1 i         i         1 i         i         1 i         i         1 i         i         1 i         i         1 i         i         1 i         i         1 i         i         1 i         i         1 i         i         1 i         i         1 i         i         1 i         i         1 i         i         1 i         i         1 i         i         1 i         i         1 i	Publishing	511	99	2	79	17
Other information         other 51         1         i         * i         1         i         * i         1         i         * i         1         i         * i         1         i         * i         1         i         * i         1         i         * i         1         i         * i         1         i         * i         1         i         * i         1         i         * i         1         1         i         * i         1         1         i         309         2,776         1,931         1         2         309         i         309         i         309         i         309         i         300         i	Telecommunications	517	9		2	6
Other information         other 51         1         i         * i         1         i         * i         1         i         * i         1         i         * i         1         i         * i         1         i         * i         1         i         * i         1         i         * i         1         i         * i         1         i         * i         1         i         * i         1         1         i         * i         1         1         i         309         2,776         1,931         1         2         309         i         309         i         309         i         309         i         300         i	Data processing, hosting, and related services	518	53	7	14	32 i
Architectural, engineering, and related services 5413 1,298 76 822 399 i Computer systems design and related services 5415 471 i 13 98 360 i Scientific R&D services 5417 2,954 207 i 1,729 i 1,018 Biotechnology R&D 54171 114 1 80 i 34 i Physical, engineering, and life sciences (except biotechnology) R&D 541712 2,270 167 1,261 843		other 51	1 i	* i	1 i	*
Architectural, engineering, and related services 5413 1,298 76 822 399 i Computer systems design and related services 5415 471 i 13 98 360 i Scientific R&D services 5417 2,954 207 i 1,729 i 1,018 Biotechnology R&D 54171 114 1 80 i 34 i Physical, engineering, and life sciences (except biotechnology) R&D 541712 2,270 167 1,261 843	Professional, scientific, and technical services	54	5,016	309	2,776	1,931
Computer systems design and related services         5415         471 i         13         98         360 i           Scientific R&D services         5417         2,954         207 i         1,729 i         1,018           Biotechnology R&D         541711         114         1         80 i         34 i           Physical, engineering, and life sciences (except biotechnology) R&D         541712         2,270         167         1,261         843		5413		76	822	
Scientific R&D services         5417         2,954         207 i         1,729 i         1,018           Biotechnology R&D         541711         114         1         80 i         34 i           Physical, engineering, and life sciences (except biotechnology) R&D         541712         2,270         167         1,261         843	5 5	5415		13		360 i
Physical, engineering, and life sciences (except biotechnology) R&D 541712 2,270 167 1,261 843	. , ,		2,954	207 i	1,729 i	
Physical, engineering, and life sciences (except biotechnology) R&D 541712 2,270 167 1,261 843		541711		1		34 i
	Physical, engineering, and life sciences (except		2 270	167	1 261	813
	Social sciences and humanities R&D	541720	569	39 i	388 i	142 i

TABLE 38. Domestic R&D paid for by the U.S. federal government and performed by the company, by character of work, industry, and company size: 2014 (Millions of U.S. dollars)

Industry and company size	NAICS code	Total	Basic research	Applied research		Development
Other professional, scientific, and technical						
services	other 54	293	13	127		153
Other nonmanufacturing	21-23, 42-49, 52, 53, 55-81	73	7	8		58
All companies (number of domestic employees)	_	26,554 i	2,044	i 6,445	i	18,065
Small companies <sup>a</sup>						
5–499	_	3,399	237	1,031		2,131
5–99	_	1,942 i	120	i 520	i	1,302
5–49	_	1,463 i	97	i 410	i	956
5–9	_	318 i	20	i 65	i	233
10–24	_	617 i	37	i 217	i	363
25–49	_	528	41	127		359
50–99	_	480	23	i 110		346
100–249	_	950	92	269		589
250–499	_	507	25	242		240
Medium and large companies						
500–999	_	247	25	96		126
1,000–4,999	_	1,336	109	i 756	i	471
5,000-9,999	-	992 i	1	57	i	934
10,000–24,999	_	3,724	228	i 755	i	2,740
25,000 or more	_	16,858 i	1,445	i 3,750	i	11,662

<sup>\* =</sup> amount < \$500,000; i = > 50% of the estimate is a combination of imputation and reweighting to account for nonresponse.

NAICS = 2012 North American Industry Classification System.

NOTES: Industry classification is based on the dominant business code for domestic R&D performance, where available. For companies that did not report business codes, the classification used for sampling was assigned.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, and U.S. Census Bureau, Business R&D and Innovation Survey, 2014.

<sup>&</sup>lt;sup>a</sup> Upper bound is based on the U.S. Small Business Administration's definition of a small business; the Business R&D and Innovation Survey does not include companies with fewer than five domestic employees.