



epipeline's Eye on Research and Development in the Physical, Engineering, and Life Sciences, NAICS 541710

As the Business Development Manager responsible for creating the business plan for your company, it can be very challenging to gain a perspective of opportunities over the several years; and from that, determine the specific opportunities to pursue. This week we are going to look at the opportunities for Research and Development in the Physical, Engineering, and Life Sciences (NAICS 541710):

1. Who issues the contracts?
2. Who wins the contracts?
3. Where are these contracts?

NAICS 541710 is used when the requirements of the contract involve conducting research and experimental development in the physical, engineering, and life sciences, such as agriculture, electronics, environmental, biology, botany, biotechnology, computers, chemistry, food, fisheries, forests, geology, health, mathematics, medicine, oceanography, pharmacy, physics, veterinary, and other allied subjects.

The size standard for this NAICS is primarily 500 employees, though there are several exceptions:

- For research and development contracts requiring the delivery of a manufactured product, the appropriate size standard is that of the manufacturing industry.
 - "Research and Development" means laboratory or other physical research and development. It does not include economic, educational, engineering, operations, systems, or other nonphysical research; or computer programming, data processing, commercial and/or medical laboratory testing.
 - For purposes of the Small Business Innovation Research (SBIR) program only, a different definition has been established by law. See section 121.701 of these regulations.
 - "Research and Development" for guided missiles and space vehicles includes evaluations and simulation, and other services requiring thorough knowledge of complete missiles and spacecraft.
- Aircraft has a size standard of 1,500 employees.
- Aircraft Parts, and Auxiliary Equipment, and Aircraft Engine Parts has a size standard of 1,000 employees.
- Space Vehicles and Guided Missiles, their Propulsion Units, their Propulsion Units Parts, and their Auxiliary Equipment and Parts 1,000

This NAICS covers several specific topics:

- Agriculture research and development laboratories or services
- Bacteriological research and development laboratories or services

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- Biology research and development laboratories or services
- Biotechnology research and development laboratories or services
- Botany research and development laboratories or services
- Cancer research laboratories or services
- Cerebral palsy research laboratories or services
- Chemical research and development laboratories or services
- Computer and related hardware research and development laboratories or services
- Dental research and development laboratories or services
- Electronic research and development laboratories or services
- Engineering research and development laboratories or services
- Entomological research and development laboratories or services
- Environmental research and development laboratories or services
- Experimental farms
- Fisheries research and development laboratories or services
- Food research and development laboratories or services
- Forestry research and development laboratories or services
- Genetics research and development laboratories or services
- Geological research and development laboratories or services
- Guided missile and space vehicle engine research and development
- Guided missile and space vehicle parts (except engines) research and development
- Health research and development laboratories or services
- Industrial research and development laboratories or services
- Life sciences research and development laboratories or services
- Mathematics research and development laboratories or services
- Medical research and development laboratories or services
- Observatories, research institutions
- Oceanographic research and development laboratories or services
- Physical science research and development laboratories or services
- Physics research and development laboratories or services
- Veterinary research and development laboratories or services

It was previously represented by the following Standard Industrial Classification (SIC) codes:

- SIC 8731: Commercial Physical and Biological Research
- SIC 8733: Noncommercial Research Organizations (physical, engineering, and life sciences). This SIC is also represented under NAICS 541720, Research and Development in the Social Sciences and Humanities.

Who issues the contracts?

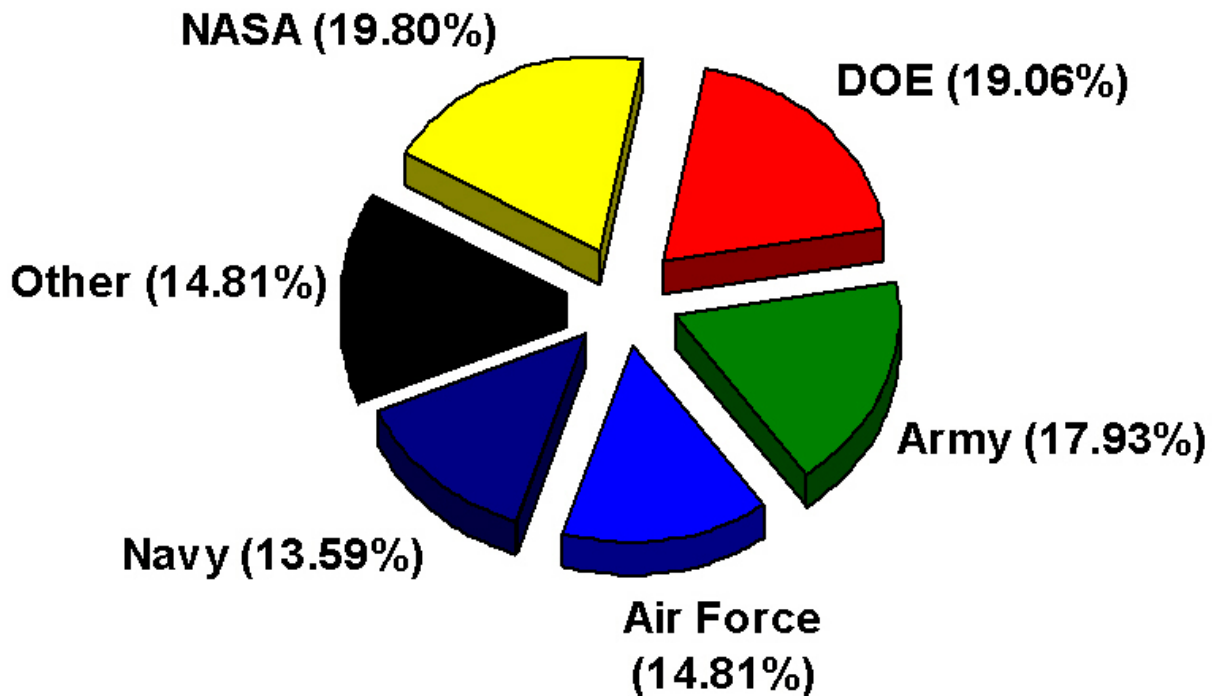
The National Aeronautics and Space Administration (NASA) is the largest buyer of services under NAICS 541710, by a very narrow margin. According to Federal

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Procurement Data System (FPDS - source, epipeline's strategic partner, Eagle Eye), over fiscal years 2001-2003, NASA had a market share of 19.80% under this code. The Department of Energy was close on its heels, with a market share of 19.06% for the same period. In fact, the top five agencies share similar market shares, with a combined market share of over 85%, as illustrated in the pie chart below.

Market Share (FY01-FY03) by Agency



Source: FPDS information from epipeline's strategic partner, Eagle Eye.

Who wins the contracts?

Several companies hold a significant market share of federal spending under NAICS 541710, either on their own or through joint ventures. According to the FPDS data (through Eagle Eye), Boeing had the highest market share for FY01 through FY03, with almost 13%. They are also represented two more times of the top ten contractors, through their joint ventures with United Technologies Corporation (2.63% market share) and Lockheed Martin (6.48% market share). The table below represents the top ten contractors/joint ventures under this NAICS. The

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Top 10 Contractors by Market Share (FY01-03) for NAICS 541710

Rank	Parent Company	FY2003	Market Share FY01 thru FY03
1	Boeing Co.	\$ 3,860,916,673	12.95 %
2	University Of California System	\$ 2,546,425,896	9.56 %
3	Lockheed Martin Corp	\$ 2,530,970,228	8.38 %
4	Lockheed/Boeing JV	\$ 1,760,014,734	6.48 %
5	California Inst Of Technology	\$ 1,536,731,717	5.50 %
6	Northrop Grumman Corp.	\$ 1,166,747,226	3.84 %
7	United Technologies Corp.	\$ 1,340,646,585	3.13 %
8	Boeing/United Technology JV	\$ 931,076,965	2.63 %
9	Bechtel Group, Inc.	\$ 684,641,175	2.22 %
10	Battelle Memorial Institute	\$ 680,881,474	2.16 %

Source: FPDS information from epipeline's strategic partner, Eagle Eye.

Where are these contracts?

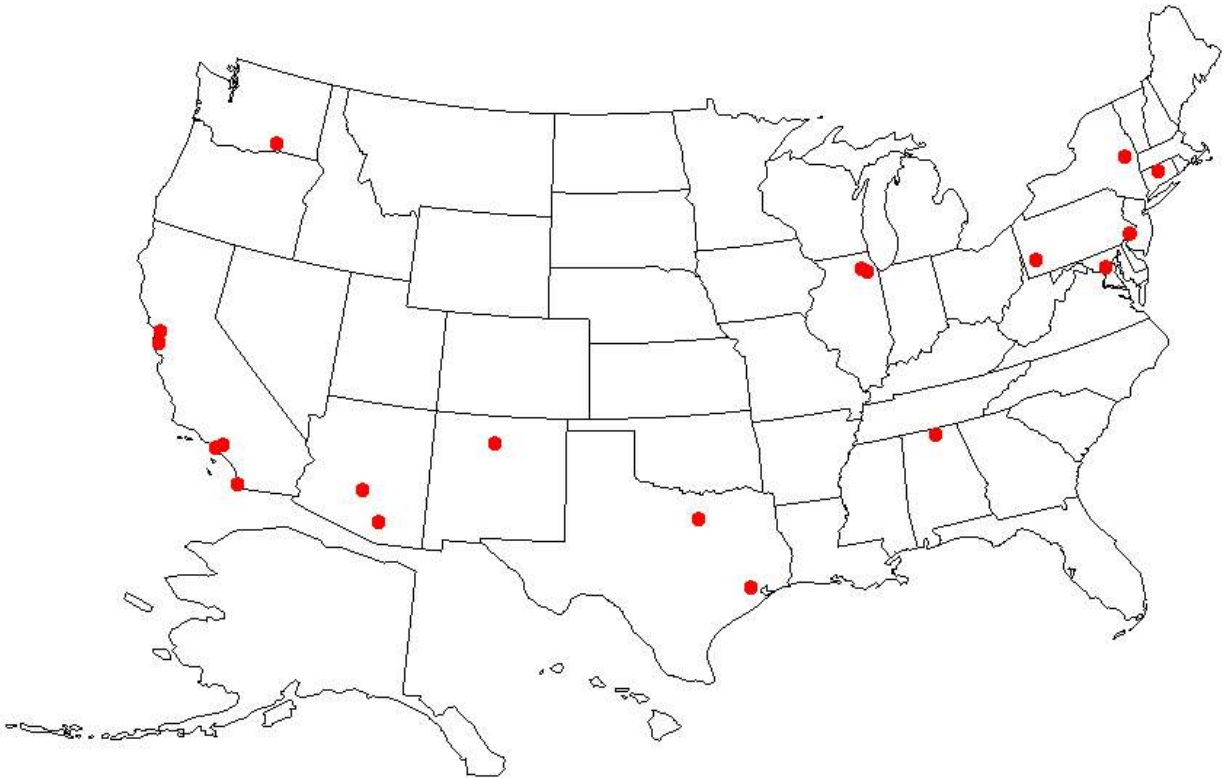
These contracts are being performed across the continental United States. The table and map below illustrates the distribution of the top twenty locations, by total spending over the FY01 through FY03, where work is being performed under NAICS 541710.

Unlike NAICS 541330 (Engineering Services), which had a strong concentration in the Mid-Atlantic, specifically, the Metro Washington, DC area, NAICS 541710 has a strong presence on the West Coast, primarily in California.

Three of the top ten locations and six of the top twenty are located in California. This represents **over \$13B in spending** over FY01, FY02, and FY03.



Contract Place of Performance: NAICS 541710/FY01-FY03



Rank	Place Name	Total (FY01 - FY03)	Market Share (FY01 - FY03)
1	Huntsville, AL	\$ 6,873,756,632	8.54 %
2	Houston, TX	\$ 6,602,811,498	8.20 %
3	Los Alamos, NM	\$ 6,020,542,876	7.48 %
4	Pasadena, CA	\$ 4,453,223,526	5.53 %
5	Sunnyvale, CA	\$ 3,106,711,811	3.86 %
6	Philadelphia, PA	\$ 2,551,583,717	3.17 %
7	West Mifflin, PA	\$ 2,214,332,183	2.75 %
8	El Segundo, CA	\$ 2,072,421,793	2.58 %
9	East Hartford, CT	\$ 1,682,359,747	2.09 %
10	Mesa, AZ	\$ 1,643,379,871	2.04 %
11	Lemont, IL	\$ 1,554,512,187	1.93 %
12	Richland, WA	\$ 1,462,514,706	1.82 %
13	Berkeley, CA	\$ 1,446,622,693	1.80 %

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Rank	Place Name	Total (FY01 - FY03)	Market Share (FY01 - FY03)
14	San Diego, CA	\$ 1,260,664,329	1.57 %
15	Fort Worth, TX	\$ 1,173,695,708	1.46 %
16	Batavia, IL	\$ 919,578,588	1.14 %
17	Laurel, MD	\$ 900,399,278	1.12 %
18	Stanford, CA	\$ 841,091,757	1.05 %
19	Tucson, AZ	\$ 799,282,583	0.99 %
20	Schenectady, NY	\$ 779,139,946	0.97 %

Source: FPDS information from epipeline's strategic partner, Eagle Eye.

epipeline's Information Technology (IT) verticals contain a significant number of opportunities which are identified by this NAICS code, almost 100 Pre-RFP opportunities for FY05 alone (as of 10/31/04).

To learn more about the NAICS 541710 opportunities or other opportunities that epipeline is tracking today; try the following search in the epipeline application:

Find FY05 "NAICS 541710, Research and Development in the Physical, Engineering, and Life Sciences" Opportunities

1. Status - Select **Pre-RFP**;
2. Dates, RFP After - Type **10/01/2004**;
3. Dates, RFP Before - Type **09/30/2005**;
4. NAICS Code(s) - Type **54171** (for best results, drop the last number off a 6-digit code. Ex: 541710 becomes 54171);
5. Click the **Search** Button (or hit the enter key on your keyboard).

**What NAICS Code Do YOU Want To See
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