

Redstone Arsenal 2006 & Beyond

Unprecedented Economic Opportunities



A Summary of Current Opportunities for Alabama Industry

The University of Alabama in Huntsville
Center for Management & Economic Research
Office for Economic Development

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An Analysis of Opportunities for Alabama Industry

From Redstone Arsenal-based Entities

by

**Office for Economic Development
Center for Management & Economic Research
University of Alabama in Huntsville**

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EXECUTIVE SUMMARY

PROJECT PURPOSE & SCOPE

The objective of this project is to:

- Identify the level of opportunities for Alabama businesses with the federal organizations located on Redstone Arsenal;
- Quantify the annual expenditures by the federal organizations in Huntsville;
- Highlight areas where the competitive process could be used by Alabama companies to expand current levels or secure new contracts from the entities on Redstone Arsenal.

KEY FINDINGS

Current Situation

- Redstone Arsenal is strategically important to the United States military and space programs, as well as to the economy of Alabama.
- Alabama benefits from Redstone Arsenal through its contribution to Alabama's economy, direct and indirect job creation, and the business opportunities resulting from Redstone Arsenal's diverse roles and missions.
- The combined budgets for entities located on Redstone Arsenal totaled approximately \$15.4 billion in FY2004 and \$25.9 billion in FY2005. By comparison, Alabama's General Fund and Education Trust Fund for FY2005 was a combined total of approximately \$19.5 billion.
- Alabama companies now provide approximately 16% of the total Redstone-based procurement, or about 30% of the competitively procured work. Original Equipment Manufacturers (OEM) -Sourced & Other procurement accounts for about 70% of the competitively bid work.
- Total procurements on Redstone Arsenal in FY2005 for goods and services was approximately \$24 billion. Competitive bid procurements totaled \$12.9 billion. Alabama companies competed for and won \$3.8 billion of this business.
- Business "lost" to companies located outside of Alabama was more than \$9.1 billion in FY2005. Today, the opportunity for Alabama companies is approximately three times the current level, or as much as \$9 billion dollars annually. The resulting impact on Alabama's economy could be significantly larger.

EXECUTIVE SUMMARY

KEY FINDINGS, continued

Future Growth from BRAC

- Business and job creation opportunities are increasing from both existing roles and responsibilities, as well as from new growth resulting from BRAC 2005.
- The Base Realignment and Closure 2005 will result in an estimated 4,700 government and direct contractor jobs and 4,700 support contract jobs with a potential payroll impact of up to \$800 million annually by 2011.
- Contracting opportunities for Alabama businesses will increase in the next 5 years, especially in the support services categories with the new and expanded entities on Redstone Arsenal resulting from BRAC.
- Business opportunities include providing goods, technical services, research & development services, base support services, and construction & maintenance services.
- New construction expenditures for facilities and infrastructure related to BRAC 2005 relocations are estimated to total more than \$600 million. Projects will range from a new headquarters for the U.S. Army Materiel Command to new aviation test center facilities.
- The procurement process used by Redstone-based entities encourages technically qualified companies and teams of companies to compete for contracts. Individual contract awards for goods and services are based on multiple criteria dependent on the entity, area of support, type of procurement, technical complexity, etc.

I. REDSTONE ARSENAL, ALABAMA

Redstone Arsenal, located in North Alabama, is home to the U.S. Army Aviation and Missile Command, NASA's George C. Marshall Space Flight Center, the U.S. Army Space and Missile Defense Command, and numerous other federal entities clustered around the research and development base. The transformation from a munitions plant to a major center for aviation and missilery is a remarkable Alabama success.



'Redstone Arsenal, together with a cadre of private sector support contractors, is the Army's most capable weapon system development center for missiles and helicopters. It encompasses cradle-to-grave capabilities ranging from: futuristic applicable science, research and technology, technical cost, and schedule assessments supporting future weapons requirements definitions; system development, production, and fielding; to logistics support and evolutionary upgrades. This work is accomplished by the U.S. Army Aviation & Missile Command (AMCOM), Aviation and Missile Research, Development, and Engineering Center (AMRDEC), the U.S. Army Space and Missile Defense Command (SMDC), Program Executive Offices, Project Offices, and Testing and Logistics Centers.'¹ NASA's Marshall Space Flight Center launched the U.S. Space program and continues to find innovative solutions to space access and science challenges.

Redstone Arsenal Community

The community defined by Redstone Arsenal currently includes these major entities plus several smaller entities which play major roles for the U.S. military's efforts.

- **Aviation and Missile Research, Development & Engineering Center (AMRDEC)**
- **Fox Army Health Center**
- **Ground-Based Midcourse Defense Joint Project Office (GMDJPO)**
- **Logistics Support Activity (LOGSA)**
- **Marshall Space Flight Center**
- **Ordnance Munitions & Electronics Maintenance School (OMEMS)**
- **Program Executive Office (PEO) Aviation**
- **Program Executive Office (PEO) Missiles and Space**
- **Redstone Technical Test Center (RTTC)**
- **South Central Civilian Personnel Operations Center (SCCPOC)**
- **U.S. Army Aviation and Missile Command (AMCOM)**
- **U.S. Army Engineering & Support Center (COE)**
- **U.S. Army Garrison - Redstone**
- **U.S. Army Space & Missile Defense Command (SMDC)**

¹*Redstone Arsenal, 60 Years of Military, Industrial, and Education Excellence*

Redstone Arsenal Economic Basin

The economic basin of Redstone Arsenal is often defined in terms of a 50-mile or 100-mile geographic radius from Redstone Arsenal. Although the majority of economic impact from entities on Redstone Arsenal in Alabama occurs in this region, there is significant opportunity for Alabama businesses located beyond the 50- or 100-mile range.

Economic Basin of Redstone Arsenal



II. FEDERAL ORGANIZATIONS AT REDSTONE ARSENAL

The number of entities and their roles at Redstone Arsenal are significant to the United States. Knowing the reporting relationships and inter-relationships of the organizations can be challenging. A snapshot taken at October 2005, shows the reporting relationships at that time (Chart 2.1). These relationships lines will continue to change through 2011, and probably beyond.

Major Federal Organizations on Redstone Arsenal FY2005

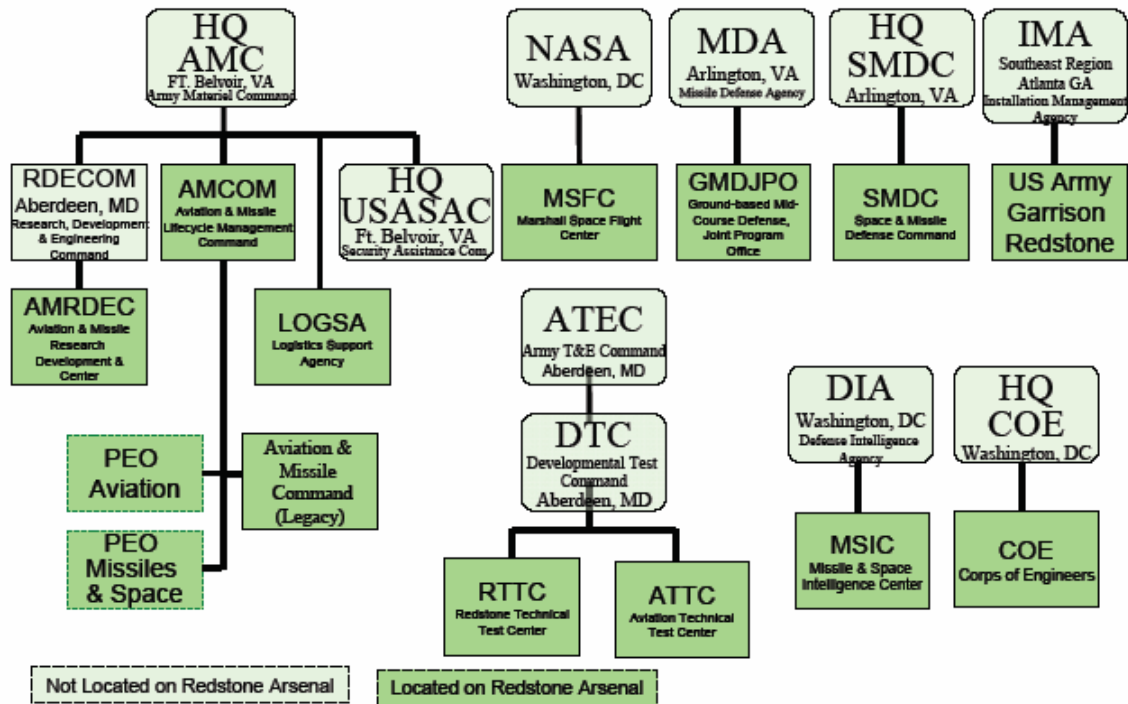


Chart 2.1

The Base Realignment and Closure process completed in 2005 will impact Redstone Arsenal and Alabama significantly between now and 2011. Chart 2.2 depicts the realignments recommended by the BRAC commission to be completed by 2011.

Federal Organization Relationships Redstone Arsenal FY2011 - Post-BRAC

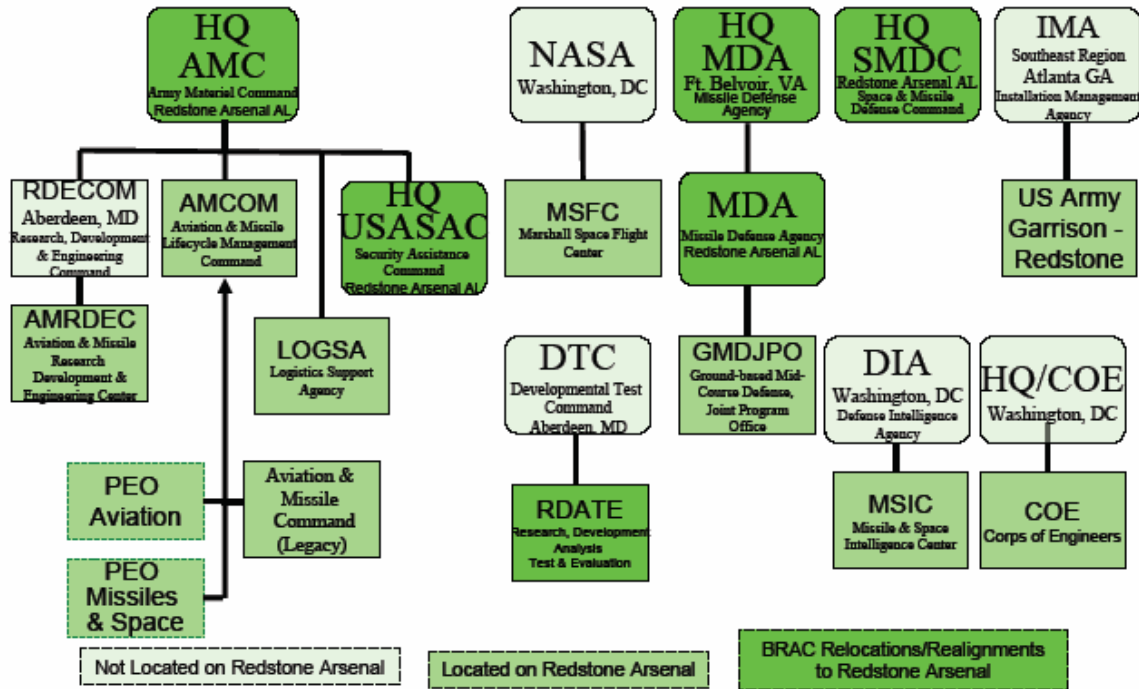


Chart 2.2

III. FINANCIAL BUDGETS

The community defined by Redstone Arsenal is broad in scope and generally well funded by the federal government. For FY2004, the combined estimated budget of these entities totaled more than \$15.4 billion. Payroll was more than \$1.15 billion and procurements with Alabama based companies was estimated to be over \$2 billion, or approximately 14%, of the combined total budget of all the entities. These figures are presented below in Chart 3.1.

Federal Budgets by Entity FY2004*

Agency	Budget	Agency Payroll	AL Contracts
NASA/ Marshall Space Flight Center	\$2,587,000,000	\$247,000,000	\$582,000,000
AMCOM	\$3,896,000,000	\$535,800,000	\$428,500,000
PEO/Tactical Missiles	\$2,743,000,000	\$17,700,000	\$143,400,000
PEO/Missile Defense	\$1,062,000,000	\$25,400,000	\$231,000,000
PEO/Aviation	\$1,754,300,000	\$23,100,000	\$11,500,000
Strategic Defense Command	\$1,343,000,000	\$62,700,000	\$182,200,000
Engineering &Support Center	\$821,000,000	\$46,727,000	\$116,000,000
Redstone Technical Test Center	\$66,800,000	\$10,900,000	\$9,400,000
Logistics Support Agency	\$63,000,000	\$30,420,000	\$9,700,000
Ordinance Missile & Munitions Center & School	\$78,600,000	\$55,700,000	\$2,200,000
National Missile Defense	\$1,000,000,000 (est)	\$100,000,000 (est)	\$400,000,000 (est)
Total	\$15,414,700,000	\$1,155,447,000	\$2,115,900,000 14%

*Budget amounts are rounded and/or estimated.

Chart 3.1

Budget Categories

Of the 14 entities residing on Redstone Arsenal at the end of Fiscal Year 2005, the three largest by size of total budget were the U.S. Army Aviation and Missile Command (AMCOM), NASA Marshall Space Flight Center (MSFC), and the U.S. Space and Missile Defense Command SMDC).

The budget for each entity has many unique components that make comparison and combination difficult at levels below the total budget. There are three general categories that can be used to understand the composition of the budgets; payroll, competitive procurement (Procurement), and OEM-sourced procurement (OEM-Sourced & Other). Chart 3.2 compares these budget categories for the three largest entities on Redstone Arsenal.

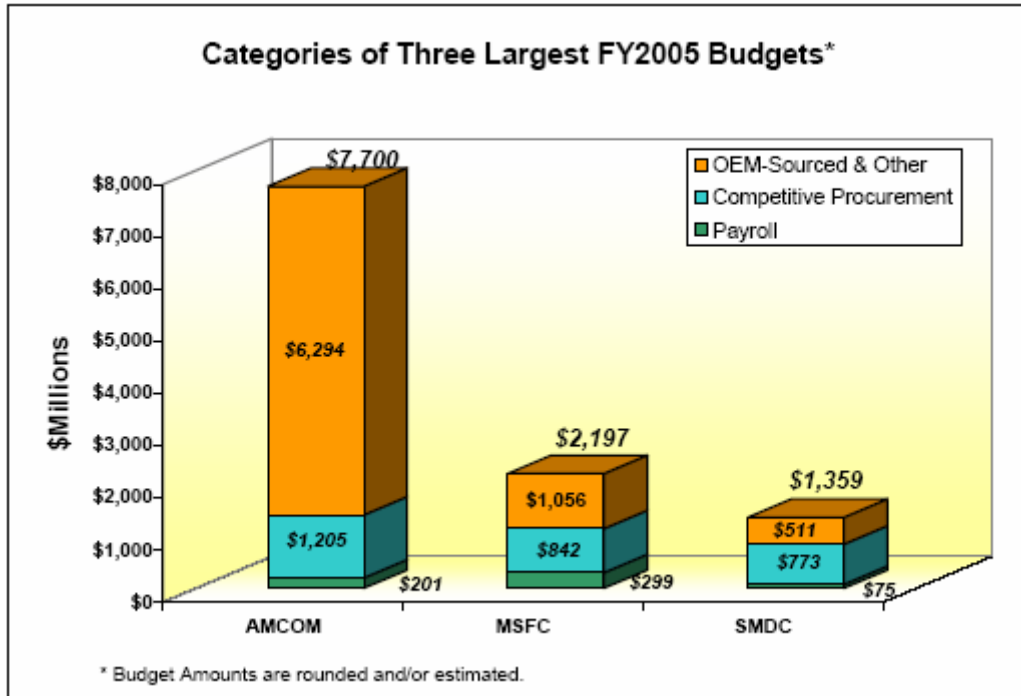


Chart 3.2

AMCOM has the largest total budget (\$7.7 billion in FY2005) of the entities on Redstone Arsenal. However by examining the budget categories for each, it is apparent that there is a comparable level of competitive procurement opportunities across these three entities even with the large difference in total budget. AMCOM had more than \$1.1 billion in competitive procurements in FY2005 followed by MSFC with \$842 million. SMDC reported a level of \$773 million.

The OEM-Sourced & Other category is primarily comprised of expenditures with organizations performing services and/or delivering products for which there is no substitute. These entities are referred to in this report as the original equipment manufacturers (OEMs) as they are at the last link in the supply-chain before the product/service is delivered to the customer. These companies competed for and won the contracts to develop, build, field, and/or maintain major systems used by one or more of the federal government entities, e.g., Apache, Blackhawk, THAAD, Space Shuttle propulsion systems, etc. OEM-type companies compete for contracts, but usually on a schedule much longer than year-to-year.

Budget Change FY2005 to FY2006

Year-to-year, the relative size between entities changes very little unless there is a major new program or challenge, e.g., war, space exploration initiative, etc.. The decline in total budgets from FY2005 to FY2006 shown in Chart 3.3 is not unusual when comparing a completed fiscal year with the budget forecast for a new fiscal year.

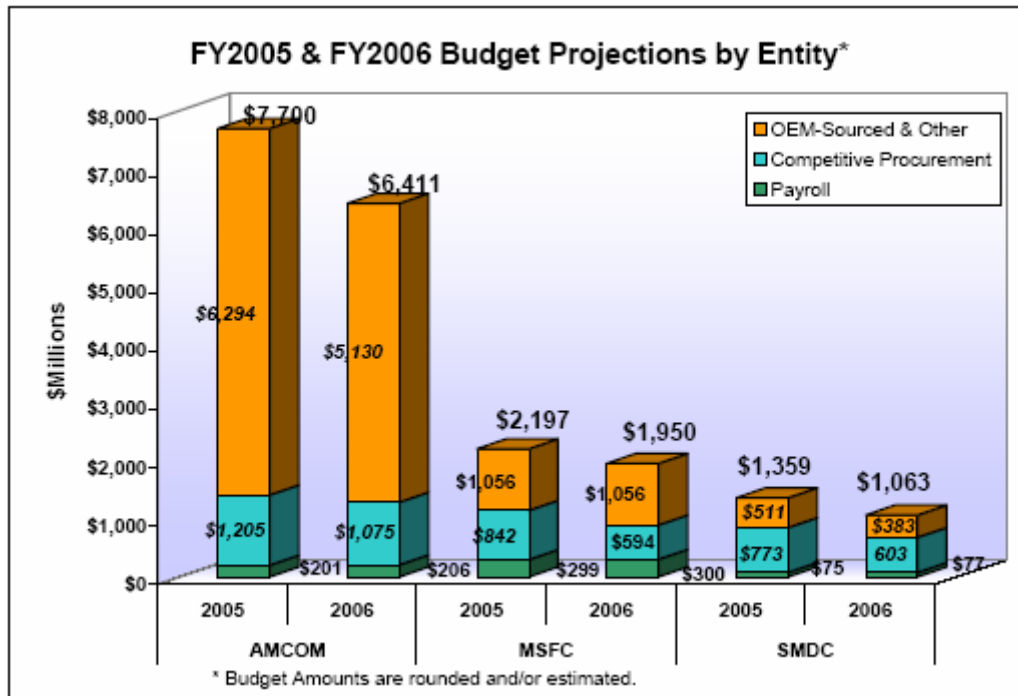


Chart 3.3

Supplemental appropriations and other changes are often made to the initial budget estimates. This can result in a higher level of federal expenditures by one or all entities than originally anticipated in the budget. Of course, a reduction in total budgets and/or categories of budgets can occur if the U.S. Congress, Department of Defense, NASA, etc., reallocate federal dollars, e.g., for national defense, natural disaster response, etc.

IV. REDSTONE ARSENAL PROCUREMENTS

Since Redstone Arsenal is a geographic location rather than a single entity, it is difficult to fully appreciate the economic significance of the total activity of its entities. By combining the budgets of these dissimilar entities located on Redstone Arsenal, the total “Redstone Arsenal” budget for FY2005 would be more than \$25.9 billion, one of the largest entities in Alabama. For size comparison, total appropriations for the Alabama General Fund and the Alabama Education Fund for FY2005 were approximately \$19.5 billion according to the State of Alabama Executive Budget Office.

The categories of the consolidated budgets for Redstone Arsenal entities are: Payroll- \$1.874 billion (7% of the total budget), Competitive Procurement- \$12.928 billion (50%), and OEM-Sourced & Other- \$10.097 billion. These figures are presented in Chart 4.1.

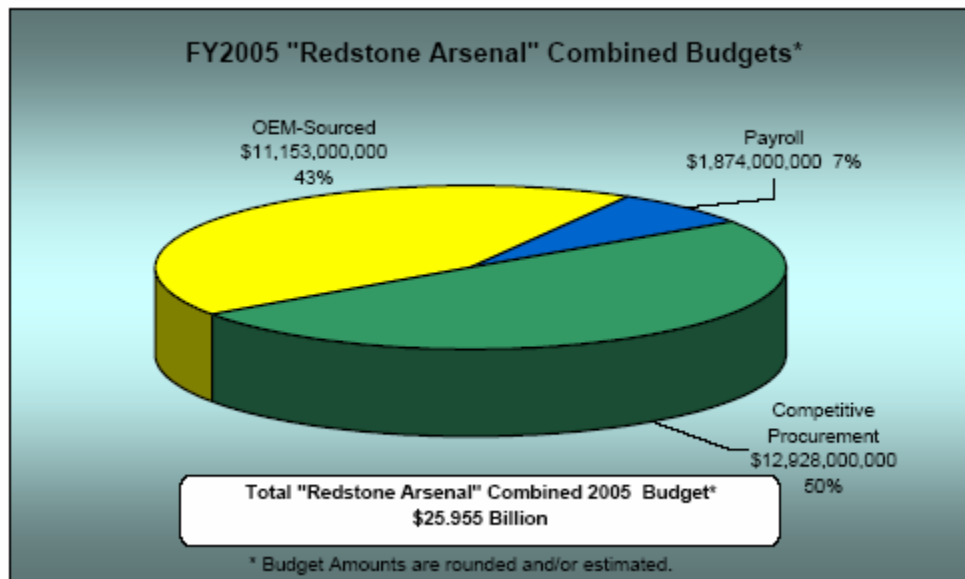


Chart 4.1

Redstone Arsenal Business in Alabama

The entities located on Redstone Arsenal do a significant amount of business with companies located in Alabama. These companies in turn create jobs, put dollars into Alabama’s economy, and support important missions for the national defense and space programs.

Chart 4.2 shows the amount of contracted/procured goods and services by all of the entities on Redstone Arsenal from outside entities (contractors) totaled more than \$24 billion in business (contract) opportunities. For companies to realize any of these opportunities, they must invest in development and demonstrate that they have the capability to deliver the goods or services needed in the time-frame required. This

investment can be substantial, especially considering the high levels of certification required to perform work for aviation, missile, and space systems programs.

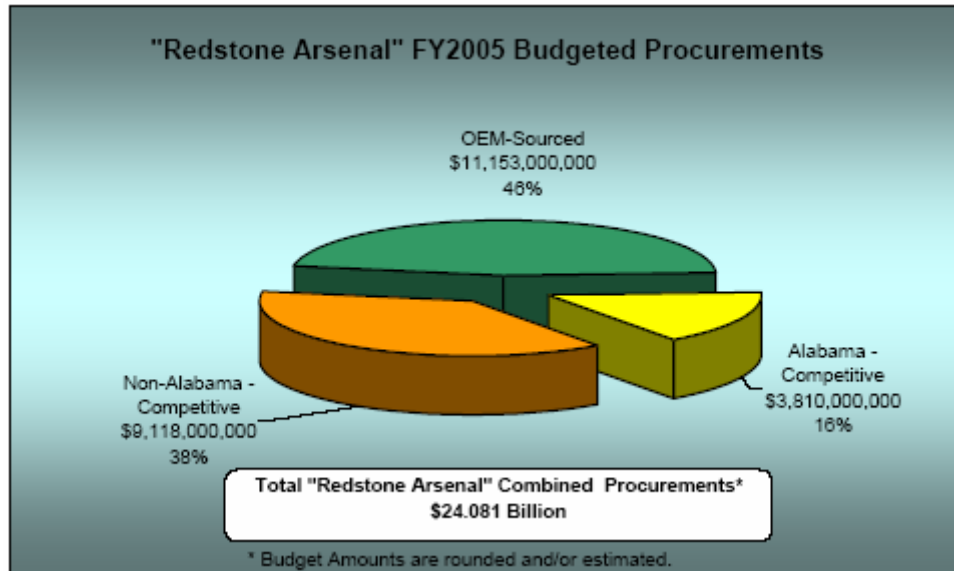


Chart 4.2

Of the \$24 billion in total procurements, \$12.9 billion was secured through competitive (defined as more than one company or team is capable of providing the goods or services procured) bids in FY2005. Alabama companies competed for and won \$3.8 billion of this business. Business "lost" to companies located outside of Alabama was more than \$9.1 billion and was more than twice the amount of business captured by Alabama companies. This presents a significant opportunity for Alabama's continued economic growth.

AMCOM Budget Composition FY2005

The U.S. Army Aviation and Missile Command (AMCOM), the largest entity on Redstone Arsenal, had a total budget of \$7.7 billion in FY2005. Contracts to deliver goods and services won through competitive processes in FY2005 totaled \$1.2 billion, or approximately 16% of AMCOM's total budget.

A significant amount of expenditures (\$6.3 billion) were contracted with major program partners (OEMs). Although an exact amount is not known, it should be noted that much of the goods and services supplied by the OEMs were subcontracted to other companies that may or may not be located in Alabama. These figures are presented in Chart 4.3.

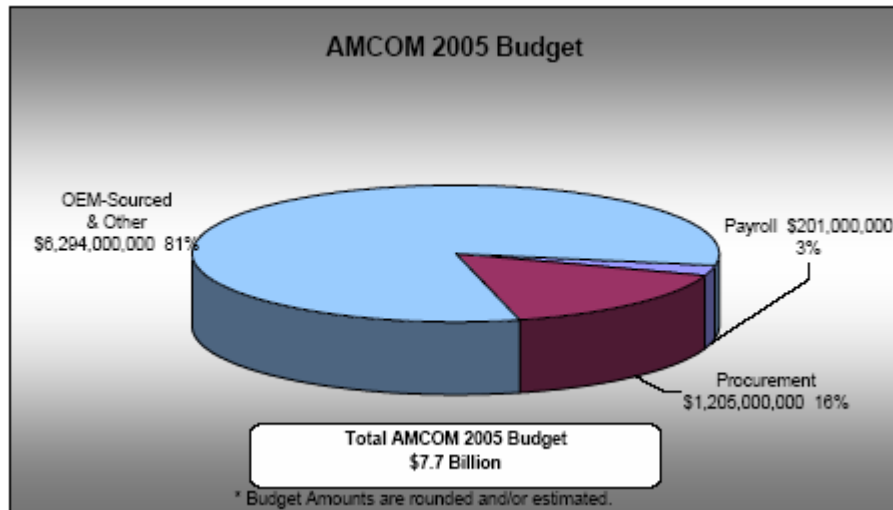


Chart 4.3

AMCOM Competitive Procurements FY2005

Sixteen percent (\$1.205 billion) of the procurements by AMCOM in FY2005 were categorized as competitive. These figures are presented in Chart 4.4.

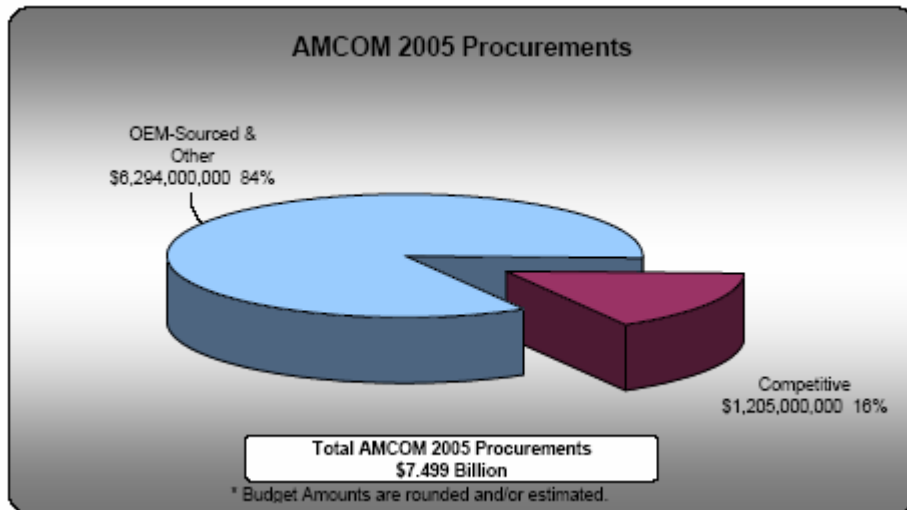


Chart 4.4

AMCOM Business in Alabama

Alabama companies compete successfully to provide goods and services to AMCOM. Companies located in Alabama captured a majority (68%, \$821 million) of AMCOM's competitive procurements in FY2005. Companies located outside of Alabama secured \$384 million in competitive procurement contracts. These figures are presented below in Chart 4.5.

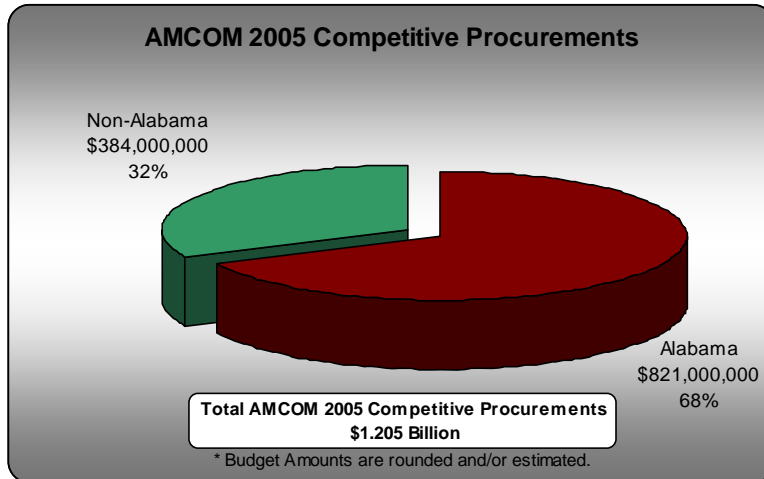


Chart 4.5

Business of the U.S. Army in Alabama

AMCOM is a major command of the U.S. Army but not the only command doing business with Alabama companies. Companies located in Alabama (based on the physical address of the company or division receiving the award) won approximately 4% (\$2.2 billion) of the U.S. Army's competitive contract awards in FY2004. This level was sixth highest in the nation behind Virginia- 11%, Texas- 9%, California- 7%, Pennsylvania- 5%, and Maryland- 5%. These figures are presented in Chart 4.6.

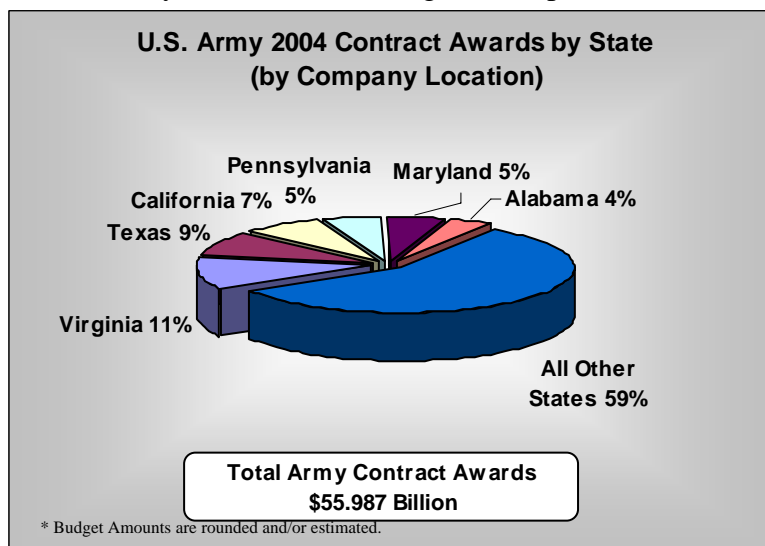


Chart 4.6

MSFC Budget Composition in FY2005

“The NASA George C. Marshall Space Flight Center (MSFC) is one of the largest and most diversified field centers of the National Aeronautics and Space Administration (NASA). The Marshall Center has been a key contributor to significant NASA programs throughout the space agency’s 45-plus-year history – from the 1961 flight of the first U.S. astronaut into space, to the Apollo missions exploring the moon, to the development and operation of America’s space shuttle fleet, to the development of the Hubble Space Telescope, and the construction of the International Space Station.”²

In the FY2005 payroll and procurement expenditures, MSFC purchased services for research and development and ongoing long-term Space Shuttle systems at approximately \$1.8 billion. New programs like the replacement for the Space Shuttle, a crew launch vehicle (CLV), cargo launch vehicle (CaLV), and the new lunar program and launcher project could cause more funds to be allocated to manufactured components in the future. However, due to the nature of the work at MSFC, a significant portion of the budget will continue to be utilized for innovative research and development services. These figures are presented in Chart 4.7.

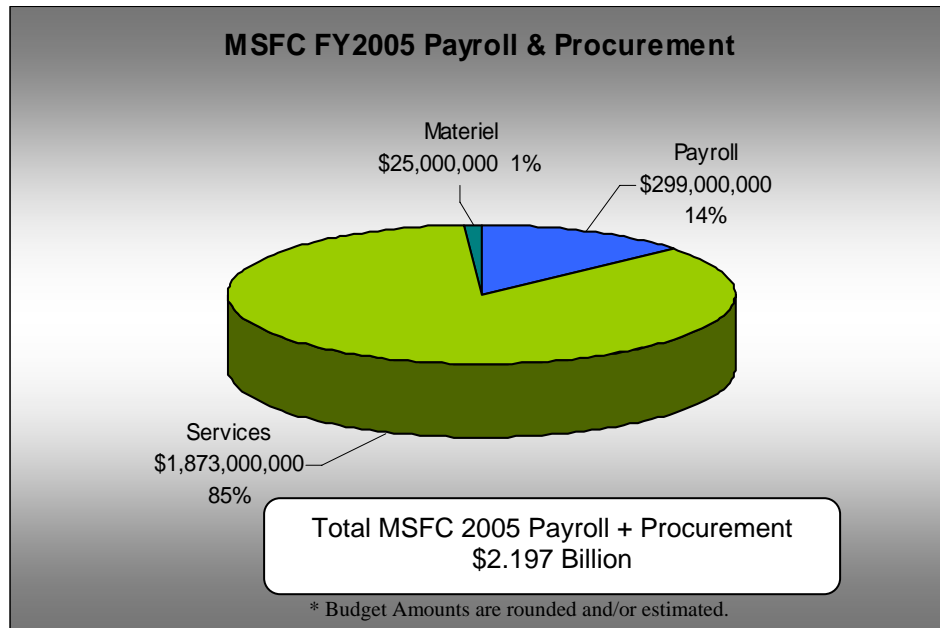


Chart 4.7

² Marshall Space Flight Center Government & Community Relations Office

MSFC Payroll & Procurements FY2004

MSFC FY2004 total for payroll and procurement is higher than the budget for FY2005. Total procurements in both years were more than \$1 billion. Anticipated changes in the space program for the United States is expected to cause an increase in the total budgets and procurements for NASA's centers, including the Marshall Space Flight Center. These figures are presented in Chart 4.8.

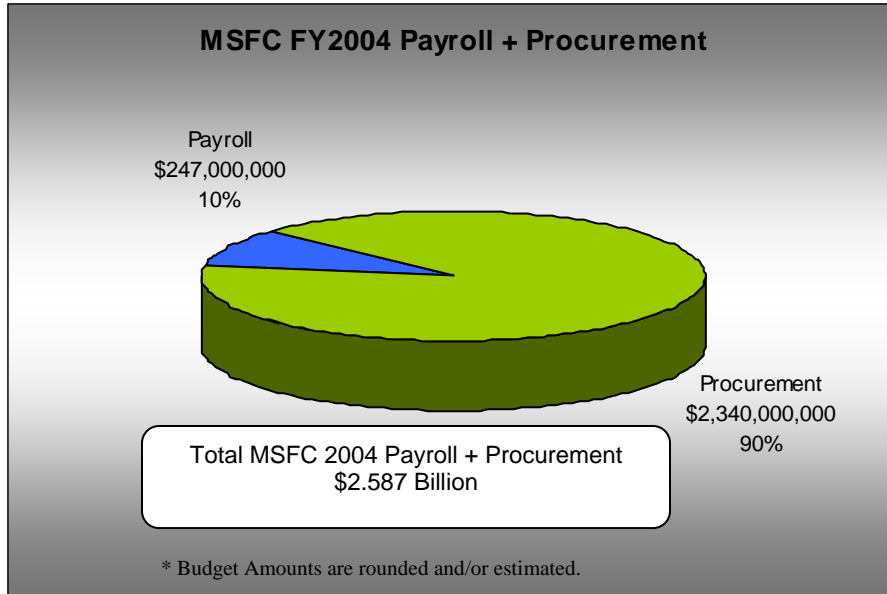


Chart 4.8

MSFC Business in Alabama

Alabama companies provided 43%, just under \$1 billion, of the goods and services purchased by MSFC in FY2004. Companies not located in Alabama provided 57% of the goods and services purchased. These figures are presented in Chart 4.9

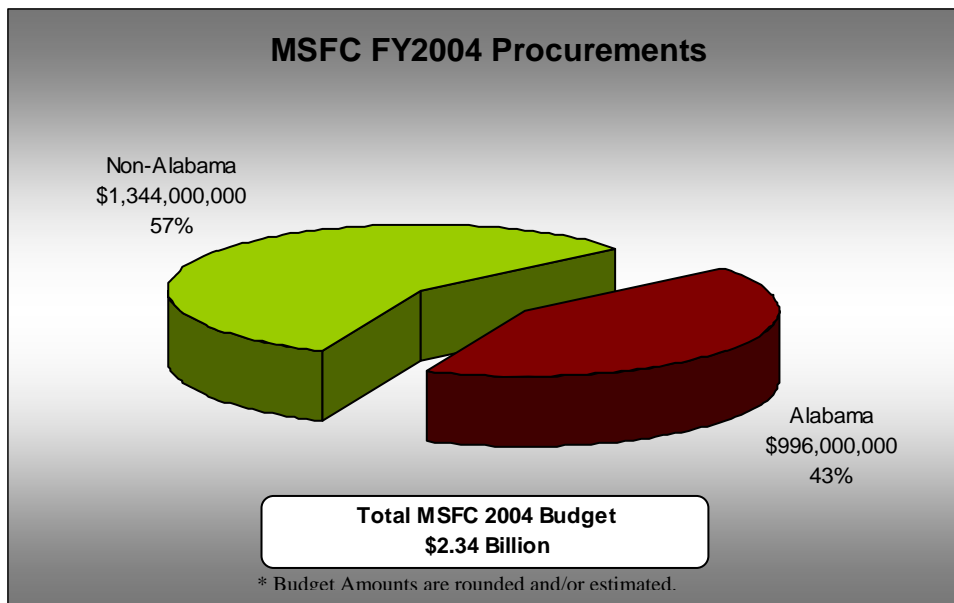


Chart 4.9

MSFC Economic Impact

MSFC's internal analysis (Chart 4.10) shows that Alabama receives the largest economic impact (43%) of all the states in which MSFC does business. Total economic impact includes procurements, payroll and the multiplier impact of the dollars remaining in Alabama's economy.

California's economic impact from MSFC (18%) was less than one-half of Alabama's realized benefit. Utah (13%) and Louisiana (12%) were each approximately one-third as much as Alabama.

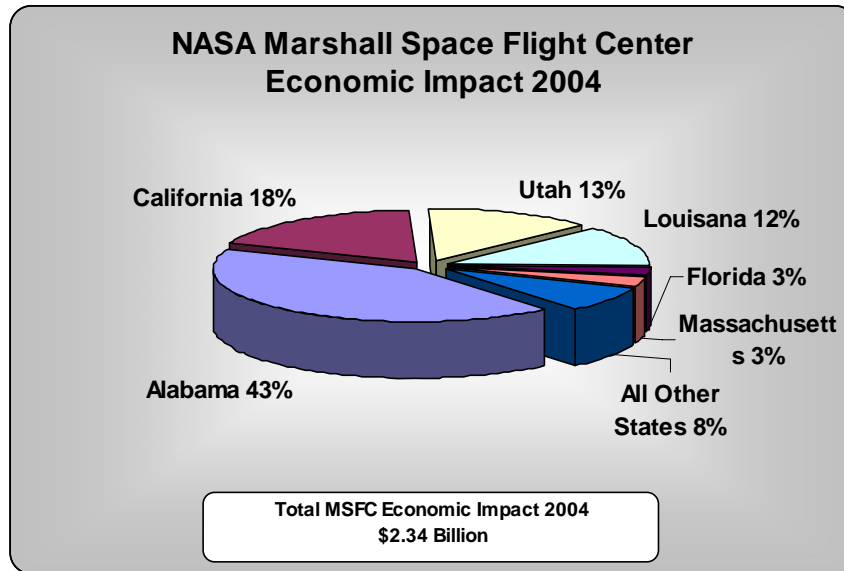


Chart 4.10

SMDC Budget Composition in FY2005

The U.S. Army Strategic Missile Defense Command (SMDC) had a total budget of \$1.359 billion in FY2005. Contracts to deliver goods and services won through competitive processes in FY2005 totaled \$773 million, or approximately 56% of SMDC's total budget. Payroll for SMDC totaled \$75 million, or approximately 6% of the budget.

A smaller amount of expenditures (\$511 million) were contracted with major program partners (OEMs). Although an exact amount is not known, it should be noted that much of the goods and services supplied by the OEMs were subcontracted to other companies that may or may not be located in Alabama. These figures are presented in Chart 4.11.

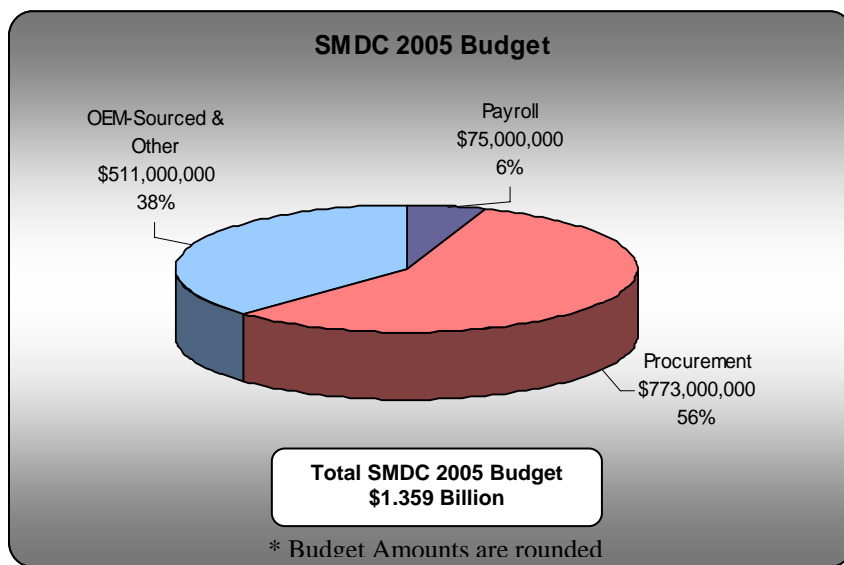


Chart 4.11

SMDC Procurements FY2005

The Space and Missile Defense Command (SMDC), currently headquartered in the Washington D.C. area, funded operations and procurements on Redstone Arsenal at \$1.4 billion in FY2005. SMDC competitive procurements at Redstone Arsenal totaled \$773 million, approximately 56% of the total budget available to SMDC at Redstone. These figures are presented in Chart 4.12.

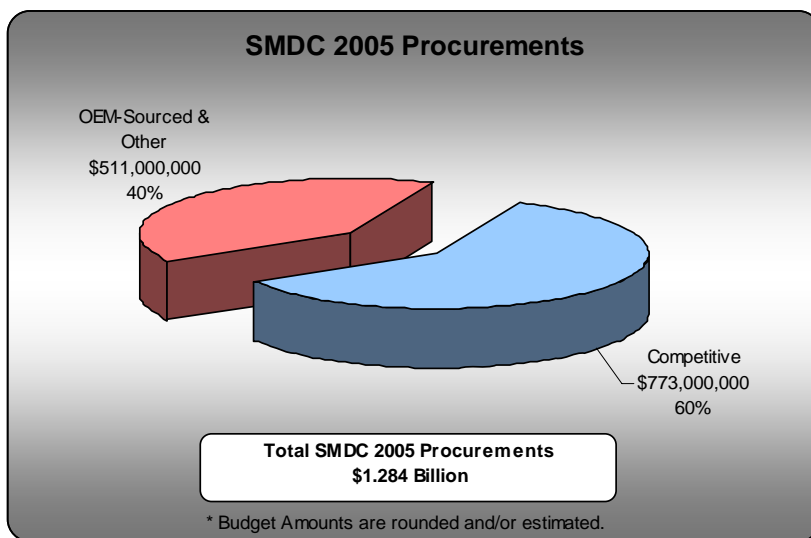


Chart 4.12

SMDC Business in Alabama FY2005

Approximately 40% of the total SMDC procurements was contracted to OEMs for major systems. Goods and services competitively procured were approximately 60% of the procurement budget for FY2005.

Alabama companies won about 32% of the competitively bid procurements for a total of \$248 million in FY2005. More than a half billion dollars (\$525 million) was contracted with companies not located in Alabama. These figures are presented in Chart 4.13.

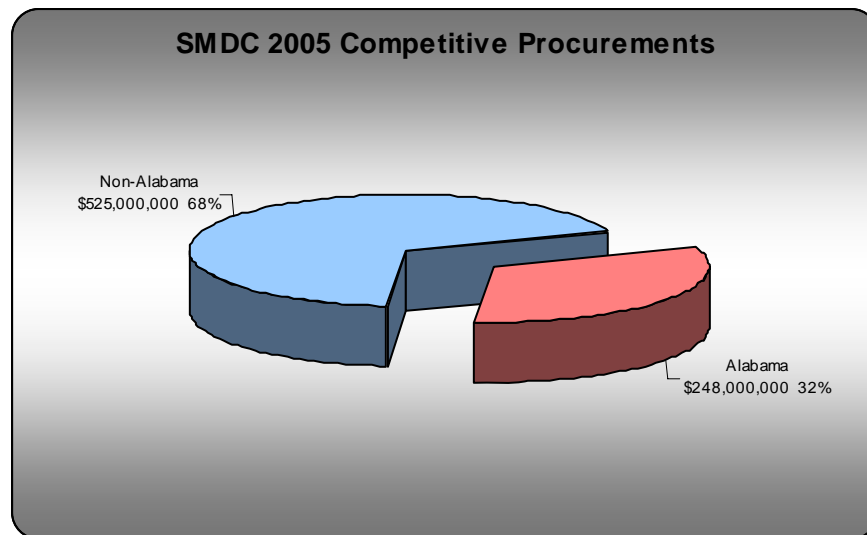


Chart 4.13

Redstone Arsenal Procurements Summary

Redstone Arsenal is home to numerous organizations that purchase significant levels of goods and services. By examining the three largest entities, in budget terms, on Redstone Arsenal (AMCOM, NASA/MSFC, and SMDC), it becomes obvious that there are significant opportunities for Alabama companies to provide additional goods and services. Chart 4.14 reflects the magnitude of annual procurements of these three entities and illustrates that there are differences in the level of procurements captured by Alabama companies among the organizations. Although the effort to become a vendor to any of the companies on Redstone Arsenal can be significant, there are substantial opportunities.

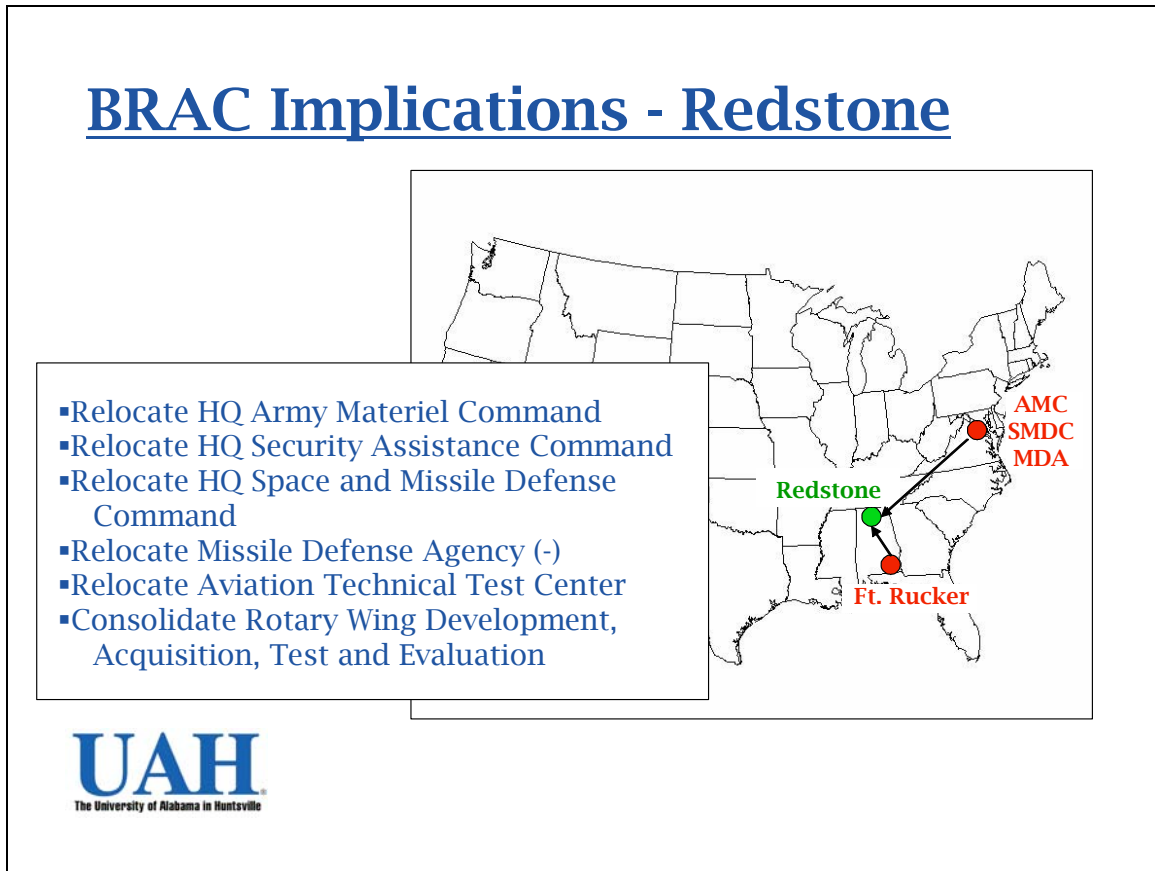
Fiscal Year 2005			
Agency	Payroll	Competitive Procurement Awards	
		Non-Alabama	Alabama
AMCOM	\$201,000,000	\$384,000,000	\$821,000,000
NASA / Marshall Space Flight Center	\$299,000,000	\$1,344,000,000	\$996,000,000
Strategic Missile Defense Command	\$75,000,000	\$525,000,000	\$248,000,000
Total	<u>\$575,000,000</u>	<u>\$2,253,000,000</u>	<u>\$2,065,000,000</u>

Chart 4.14

V. “BRAC BOOST”

The Base Realignment and Closure (BRAC) process was established by the U.S. Congress to “ensure the integrity of the base closure and realignment process. As directed by law, the Commission provides an objective, non-partisan, and independent review and analysis of the list of military installation recommendations issued by the Department of Defense.” (2005 *Defense Base Closure and Realignment Commission Report*)

In 1995, the U.S. Army Aviation and Troop Command, among others, was relocated to Redstone Arsenal, home of the U.S. Army Missile Command, to create the Aviation and Missile Command or AMCOM. In 2005, a separate BRAC commission recommended the relocation of several entities to Redstone Arsenal, once again expanding the roles and responsibilities of entities on Redstone Arsenal. These two rounds of BRAC demonstrate that Redstone Arsenal is a key location with strategic capabilities for the Department of Defense. See Chart 5.1.



BRAC Considerations for Redstone, UAH, and Huntsville-- James Flinn
Chart 5.1

BRAC Expansion of Facilities

Due to the relocation of an estimated 4,700 jobs to Redstone Arsenal, significant facility and infrastructure construction will be required. Although actual funding levels could change before all of the construction is completed, there is expected to be more than \$600 million spent for Redstone Arsenal facilities and infrastructure. These figures are presented in Chart 5.2.

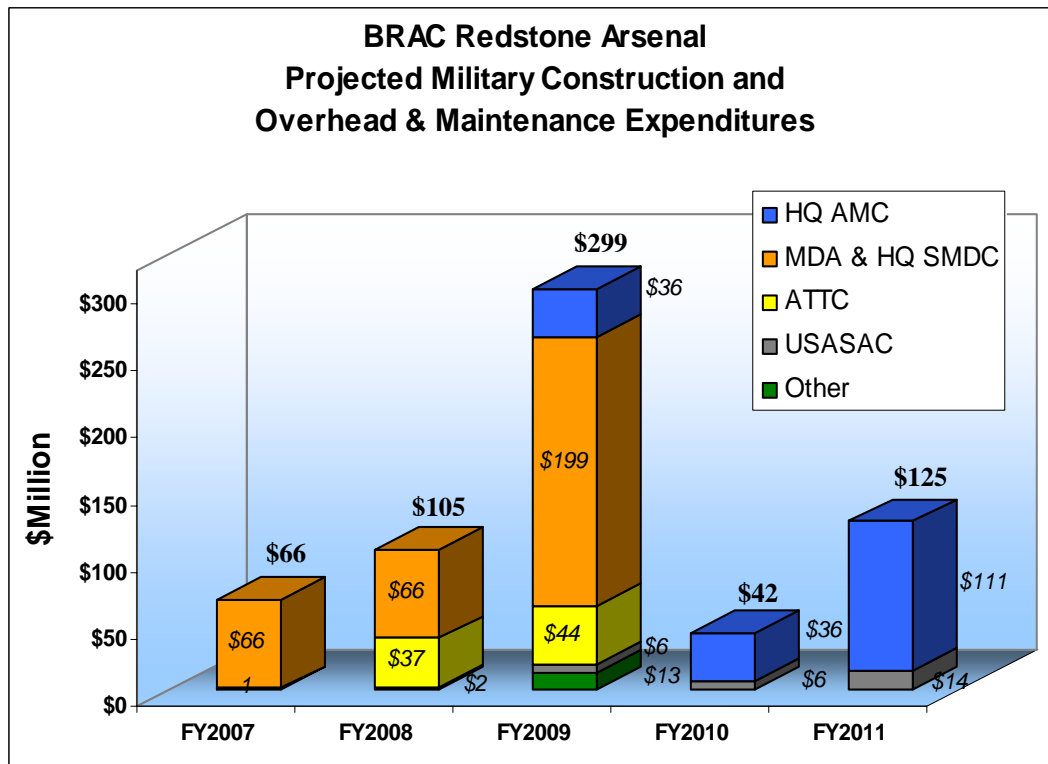


Chart 5.2

Examining the anticipated expenditures by fiscal year, FY2009 will bring approximately \$300 million in construction related opportunities to North Alabama by the government entities. Additionally, the U.S. Army Garrison-Redstone is expected to spend \$39 million on improvements to prepare for accommodating the Redstone Arsenal expansions.

Since these facilities and infrastructure projects will be located on Redstone Arsenal, a significant opportunity exists for the Alabama construction industry. Much, if not most, of the economic impact from this new construction can be expected to stay in Alabama, through prime contractors or subcontractors to the prime contractors.

Capital investment by private companies has begun with several new facilities announced by major support contractors to one or more entities located on Redstone Arsenal.

The direct impact of facilities and infrastructure expansions, as a result of the 2005 BRAC changes, should be well in excess of \$600 million, more than quadruple the construction related expenditures from 2001-2006 combined. With the economic multiplier affect of these expenditures considered, the total opportunity could be considerably greater if Alabama companies and workforce deliver a significant portion of the construction related services. These figures are presented in Chart 5.3.

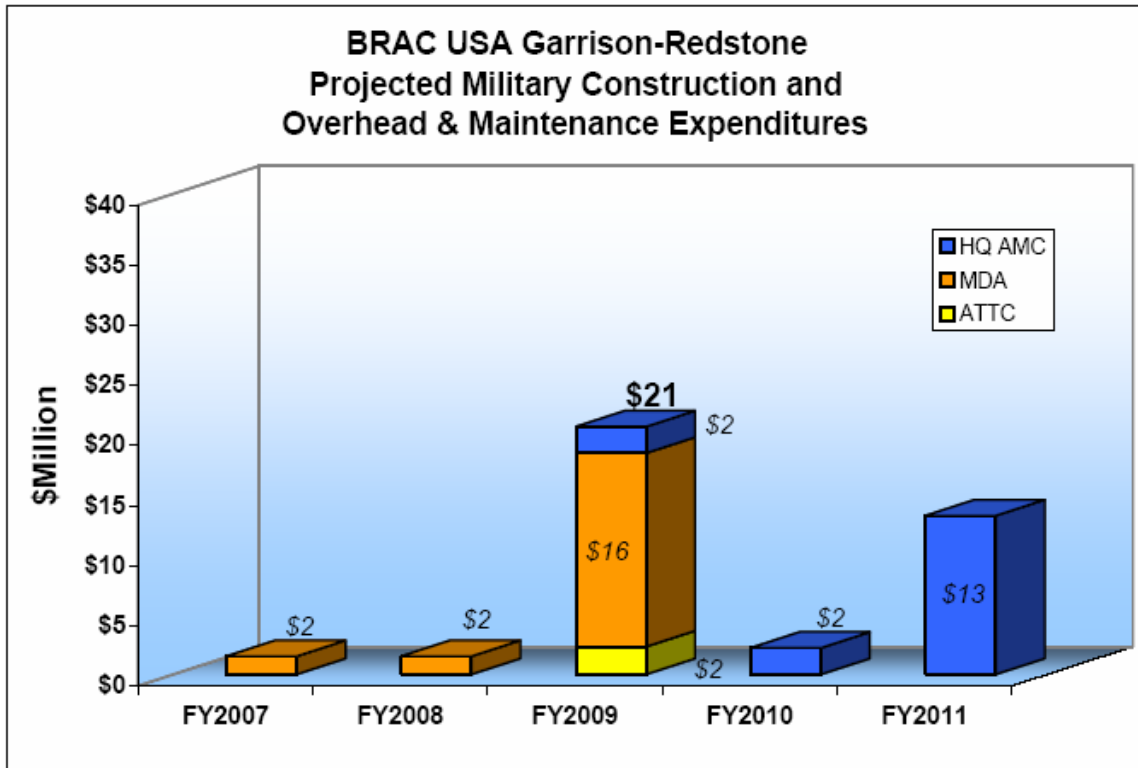


Chart 5.3

Redstone Arsenal Construction Expenditures FY2001-2006

For perspective, the highest level of construction expenditures on Redstone Arsenal since 2001 totaled \$39 million. Total construction procurement for FY2009 alone will be more than double the total construction expenditures on Redstone Arsenal from FY2001 to FY2006 combined (\$129 million). These figures are presented in Chart 5.4.

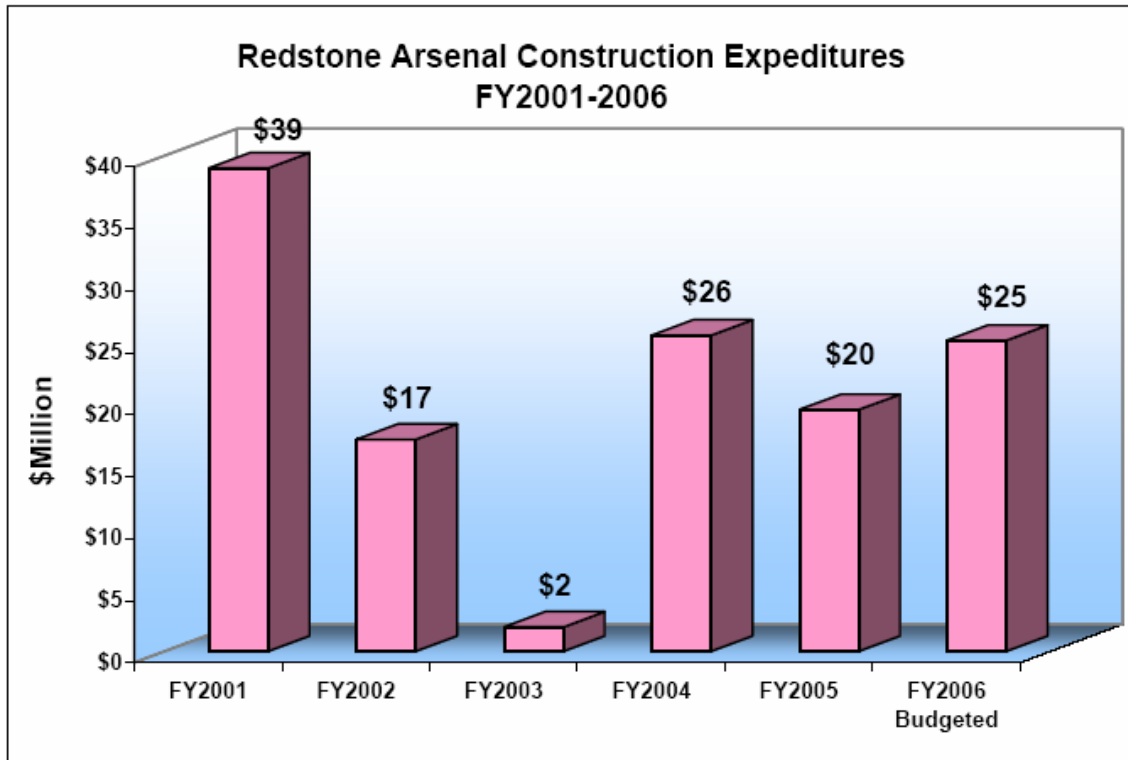


Chart 5.4

BRAC Construction and Relocation Contract Opportunities

For Alabama to realize the maximum benefits of the BRAC 2005 “one-time” construction expenditures, Alabama companies must prepare immediately to successfully compete for the contracts beginning in FY2006. It is anticipated that bids and proposals to provide the construction and relocation services on Redstone Arsenal will be approximately \$200 million in each fiscal year 2006 and 2007. Successful proposals must be made well in advance of the start of the construction work which is expected to reach its peak in FY2009.

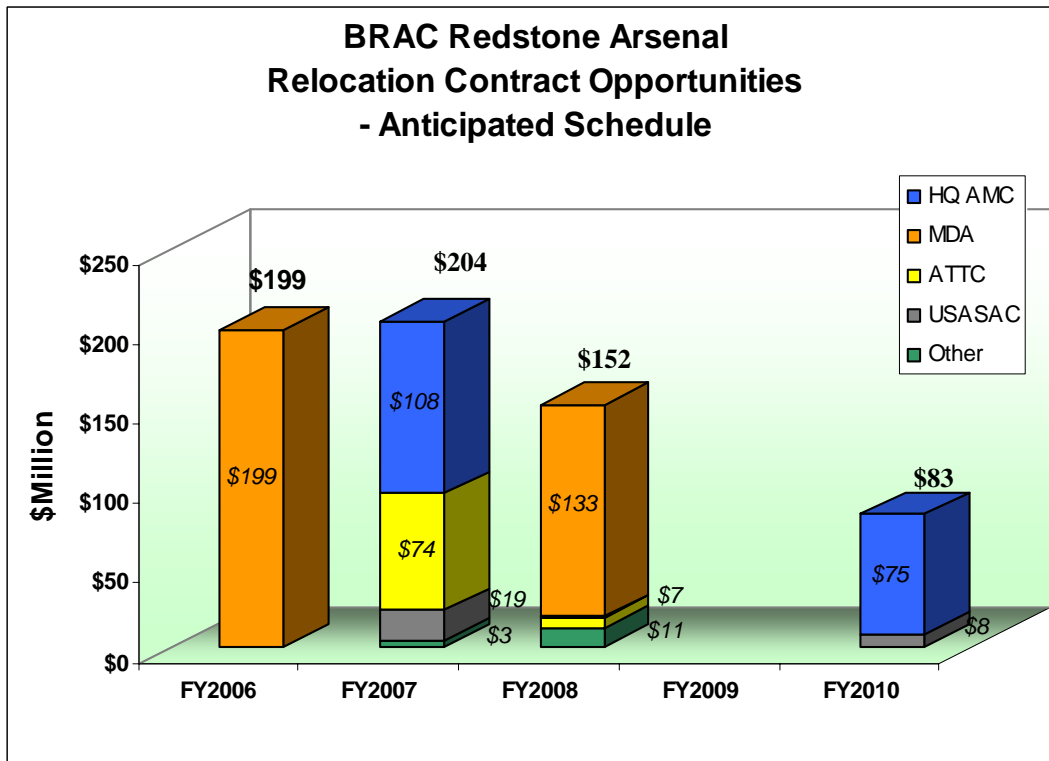


Chart 5-5

BRAC Construction and Relocation Contract Opportunities
for the U.S. Army Garrison-Redstone

The U.S. Army Garrison-Redstone will have need for relocation related goods and services on a smaller, but still significant, scale. Alabama companies should also prepare quickly to bid on approximately \$35 million of work for the Garrison that is to be completed by the end of FY2010. These figures are presented in Chart 5.6.

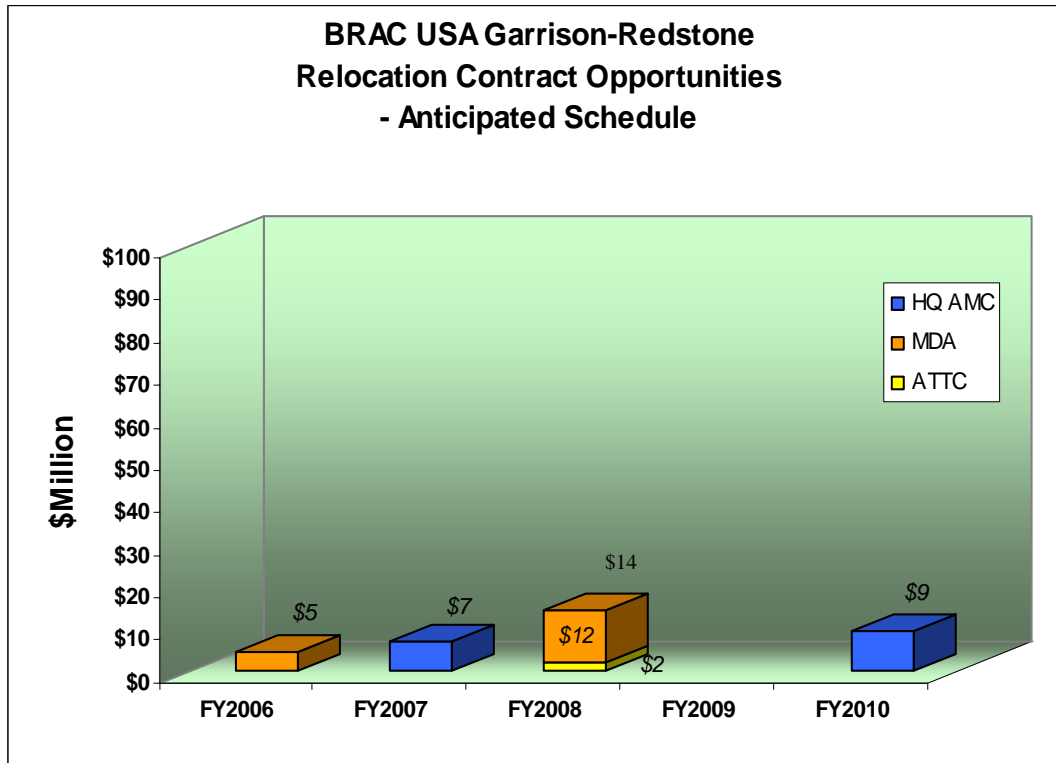


Chart 5.6

The BRAC impacts on Redstone Arsenal for facilities and infrastructure expansion will be tremendous. For Alabama to realize the full potential of these “one-time” construction related opportunities, companies located in Alabama must prepare early to successfully compete for the business.

SUMMARY

This report is only a snapshot of the economic opportunities that exist at Redstone Arsenal. There is reason to believe that opportunities for Alabama created at Redstone Arsenal will grow over the next 5-10 years since Redstone Arsenal is strategically important to the United States military and space programs, as well as to the economy of Alabama.

Alabama benefits from Redstone Arsenal through its contribution to Alabama's economy, direct and indirect job creation, and the business opportunities resulting from Redstone Arsenal's diverse roles and missions. Combined budgets for entities located on Redstone Arsenal totaled approximately \$15.4 billion in FY2004 and \$25.9 billion in FY2005. Alabama companies now provide approximately 16% of the total Redstone-based procurement, or about 30% of the competitively procured work. Original Equipment Manufacturers (OEM) -Sourced & Other procurement accounts for about 70% of the competitively bid work. Total procurements on Redstone Arsenal in FY2005 for goods and services was approximately \$24 billion. Competitive bid procurements totaled \$12.9 billion. Alabama companies competed for and won \$3.8 billion of this business. Business "lost" to companies located outside of Alabama was more than \$9.1 billion in FY2005. Today, the opportunity for Alabama companies is approximately three times the current level, or as much as \$9 billion dollars annually. The resulting impact on Alabama's economy could be significantly larger.

The Base Realignment and Closure 2005 process is adding to the business and job creation opportunities generated by existing roles and responsibilities. BRAC 2005 will add an estimated 4,700 government and direct contractor jobs and 4,700 support contract jobs with a potential payroll impact of up to \$800 million annually by 2011.

Contracting opportunities for Alabama businesses will also increase in the next 5 years, especially in the support services categories with the new and expanded entities on Redstone Arsenal resulting from BRAC. Business opportunities will include providing goods, technical services, research & development services, base support services, and construction & maintenance services. New construction expenditures for facilities and infrastructure related to BRAC 2005 relocations are estimated to total more than \$600 million. Projects will range from a new headquarters for the U.S. Army Materiel Command to new aviation test center facilities.

In conclusion, Redstone Arsenal is a major part of the economy of Alabama and continues Alabama's leadership legacy in aviation and aerospace. Redstone Arsenal is adding to Alabama's aviation history which goes back to early tests made by the Wright Brothers in Alabama, the world known contribution of the Tuskegee Airmen, and development of rockets that successfully carried man to the moon and back.

Redstone Arsenal is creating unprecedented economic opportunities in 2006 and will continue to do so into the future.

VI. INFORMATION SOURCES

Information and data shared by these sources made this project possible and is sincerely appreciated.

- NASA Marshall Space Flight Center, Office of Procurement
- NASA Marshall Space Flight Center, Government & Community Relations Office
- NASA President's FY2006 Budget Request
- Office of the Secretary of Defense – Budget Materials
- *Redstone Arsenal, 60 Years of Military, Industrial, and Education Excellence*
- Tennessee Valley Region Fact Book, *Redstone Delivers for the Nation*
- U.S. Army Aviation & Missile Command, Acquisition Center
- U.S. Army Aviation & Missile Command, Command Ombudsman Office
- U.S. Army Aviation & Missile Command, Public Information Office
- U.S. Army Corps of Engineers, *U.S. Army Engineering and Support Center, Huntsville*
- U.S. Army Garrison – Redstone
- U.S. Army Space & Missile Defense Command, Public Affairs Office
- U.S. Army Space & Missile Defense Command, Small and Disadvantaged Business Utilization Office

VII. ACKNOWLEDGEMENT

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