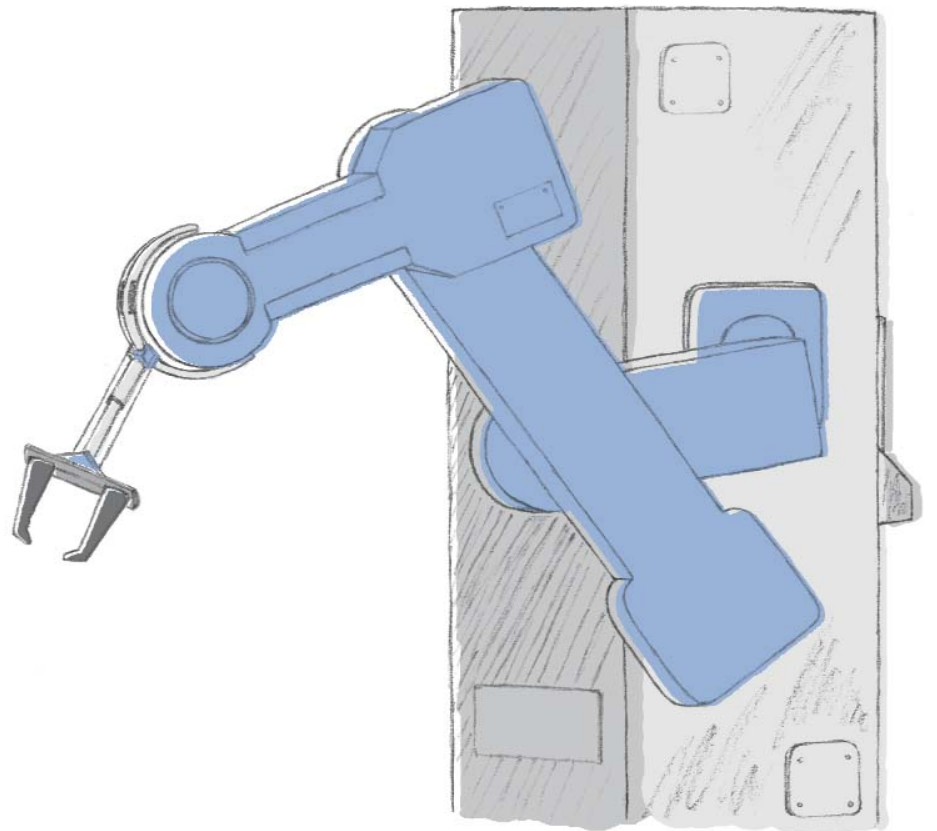


Research & development tax credits: a documentation-based approach



Our documentation-based analysis is an innovative process to help taxpayers substantiate federal and state research and development tax credits.



Our process is designed to first understand the development documents and costing information in place at your company and then use the available documents to build support for your research and development tax credit.

If you are like most of our clients, your research and development activities are front of mind, but documenting these research and development (R&D) activities and associated costs are not. If so, the Grant Thornton methodology was specifically designed for companies like yours.

Even without a specific R&D project accounting system, your company will have useful documentation. Our experienced professionals can help identify the useful documents and build a process to support the R&D tax credits.

Doesn't everyone do this? No. A more common approach to R&D tax credit studies is to compute the credits based only on estimates gathered during interviews. This approach appears to lead the IRS to designate the R&D tax credit a Tier 1 issue. Because Tier 1 issues create the greatest compliance risk, this designation increases the audit scrutiny of the R&D tax credits. You need to work with a tax adviser who keeps current with not only IRS regulations, but also practices.

Why the R&D credit?

Innovation is important to the success and growth of an economy, but there is a cost to R&D. Not all projects result in success. Governments around the world recognize this and provide incentives such as the tax credit to encourage businesses to invest in the R&D intended to drive growth within their borders.

Over 25 countries around the world and, at last count, 35 states in the United States offer some form of tax credit for research and development conducted within their borders. The scope of our discussion here is the U.S. federal R&D tax credit (R&D tax credit).

What's it worth?

The gross R&D tax credit is a 20 percent credit on qualified research expenditures that exceed a base amount (a description of the credit calculation follows). As a rule of thumb, the net tax benefit of the federal credit may be approximately 6.5 percent of qualified research expenditures. State credits are typically less than the federal amount, but can be significant.

The R&D tax credit represents a dollar-for-dollar reduction of your income tax liability and can be claimed in addition to any tax deduction taken for R&D expenses. R&D tax credits offset regular income taxes due. In addition to current-year tax credits, taxpayers can amend any "open" prior year returns (typically the past three years) to claim missed credits. To the extent that an R&D tax credit is not available for use currently or in prior years, the unused credits have a 20-year carry forward.

Sounds easy. Why do I need help?

To understand the complexity of the R&D tax credit, consider that it was enacted in 1981 as a temporary credit. Since that time the credit has expired 13 times and has been extended 13 times. It took Treasury over 23 years to issue final regulations defining qualified research activities. Additionally, there are multiple ways to compute the credit based on a taxpayer's fact pattern and elections made going back as far as 1984.

Ignorance is no defense. The IRS has stated "the taxpayer bears the burden of proving its qualification for the research credit. To meet this burden, the taxpayer must prove it engaged in qualified research" (*IRS Audit Guide*). The IRS expects that taxpayers identify and document qualified research activities and associated costs on an annual basis. To do this, a taxpayer needs to have a current understanding of the relevant code, regulations and administrative pronouncements.

According to a 2008 Grant Thornton-initiated survey of CFOs, tax directors and others,¹ 75 percent of taxpayers who claim R&D tax credits use an outside service provider; only one-third of these rely on a Big Four accounting firm for assistance with the R&D tax credit. Further, in a recent court case (*McFerrin v. US*) the court disallowed the taxpayer's R&D tax credit largely due to the boutique firm's lack of expertise.

Grant Thornton's R&D tax credit professionals have assisted several hundred taxpayers with evaluating and documenting R&D tax credit matters and have also represented taxpayers before the IRS on R&D tax credit issues.

Grant Thornton can help you identify qualified activities and expenditures and manage documentation issues, as well as anticipate and plan for frequent changes in the law, computational complexity and subjective rule interpretation.

Qualified research activities

What is R&D? Research and development is a phrase that means different things to different people. What is your definition of R&D? Does it include the process of creating new products? What about modifying or enhancing existing products? Is market research and pricing included? Perhaps your definition only includes scientific experimentation, while the person sitting next to you would include creating a quality control process in their definition.

The first step in claiming R&D tax credits is to identify qualified research activities. Congress has enacted a very broad definition of qualified research activity. It is much more expansive than the academic definition of research and development, but it has restrictions as well.

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Four-part test for the research and development tax credit

Permitted purpose

Develop a new, or improve an existing, function, performance, reliability, quality or significant cost reduction.

IRC 41(d)(1)(B)(ii)

"We were trying to..."

Technological in nature

Discover information that fundamentally relies on the principles of physical science, biological science, computer science or engineering.

IRC 41(d)(1)(B)(i)

"We use the science of..."

Eliminate uncertainty

Eliminate uncertainty concerning capability, methodology or appropriateness of design.

IRC 41(d)(1)(A)

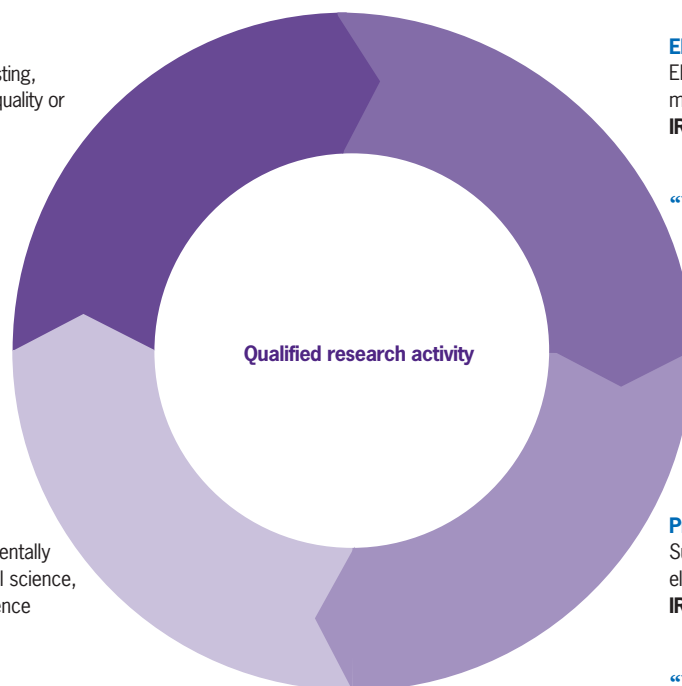
"We didn't know how to..."

Process of experimentation

Substantially all the activity constitutes elements of a process of experimentation.

IRC 41(d)(1)(C)

"We tested..."



How does the calculation work?

Three different methods solve your problems.

R&D tax credit standard or regular calculation method

Step 1:

Identify QREs

	Wages
+	Supplies
+	Contract Research (@65%)
<hr/>	
=	QREs

Step 2:

Calculate Fixed Base Percentage

FB% =	$\frac{\text{Base Year QREs}}{\text{Base Year GRs}}$
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Step 3:

Calculate Base Amount

	Avg GRs (4 prior years)
X	FB%
<hr/>	
=	Base Amount

Step 4:

Compare QREs to Base Amount
The lesser of

	QREs
-	Base Amount
<hr/>	
=	Allowable Costs or QREs x 50%

Step 5:

Compute Credit

	Allowable costs (or 50% of QREs)
X	20%
<hr/>	
=	Gross Credit

Standard or regular method

The R&D tax credit is a credit for increasing research activities. The increase is measured by comparing the current year qualified research expenditures (QREs) to a base amount. There are four potential calculation methods a taxpayer may use depending on the company's fact pattern or elections made. Below are the steps required to calculate the R&D tax credit:

Step 1 – Identify current-year QREs:

Current-year QREs include amounts paid for qualified research. Wages, supplies and contract research (at 65 percent) are included in determining QREs.

Step 2 – Calculate the Fixed Base Percentage (FB%):

The FB% may be computed in one of two ways depending on the company's fact pattern.

Standard method – The FB% is computed by comparing total QREs for the base years (1984-88) to the total gross receipts (GRs) for the same period.

Start-up method – For taxpayers that did not have QREs and/or GR in 1984, the FB% is set at three percent for the first five tax years that the company has GR and QREs. Starting in year six the FB% is computed by comparing the QREs and GR for a selected period prior to the credit year.

Step 3 – Calculate the Base Amount:

The base amount is computed by multiplying the taxpayer's FB% by the average annual gross receipts. The average annual gross receipts are an average of the four prior years' gross receipt amounts.

Step 4 – Compare QREs to the Base Amount: Next, compare current-year QREs to the base amount. The excess QREs over the base amount represent the amount of costs allowable for the credit; however, allowable costs cannot exceed 50 percent of current year QREs.

Under the ASC the allowable costs may exceed 50 percent of current year QREs.

Step 5 – Compute Credit: The amount of available credit is computed by multiplying the allocable costs by 20 percent. This results in the gross credit. The otherwise eligible R&D deductions must be reduced by the gross credit amount resulting in a net credit (typically resulting in a net 13 percent credit on allowable costs).

R&D tax credit Alternative Simplified Credit (ASC) calculation method

Step 1:

Identify QREs

Wages
+ Supplies
+ Contract Research (@65%)
= QREs

Step 2:

Calculate Base Amount

Avg QRE (3 prior years)
X 50%
= Base Amount

Step 3:

Compare QREs to Base Amount

QREs
- Base Amount
= Allowable Costs

Step 4:

Compute Credit

Allowable Costs
X 12%
= Gross Credit

Alternative Simplified Credit (ASC) method

For tax years beginning after 2006 taxpayers may elect to use the ASC method of computing their credit. Under the ASC the FB% is the average prior three years' QREs multiplied by 50 percent. Gross receipts are not a factor in the ASC computation.

Under the ASC the credit percentage is now 14 percent beginning in 2009 following the enactment of The Emergency Economic Stabilization Act of 2008, 12 percent for 2007 and 2008. The lower rate is offset by the fact that the allowable costs are not limited to 50 percent of current-year QREs.

Alternative Incremental Research Credit (AIRC)

A taxpayer may elect to claim the AIRC rather than the R&D tax credit outlined above. Some taxpayers find that their particular fact pattern is such that they receive no benefit from the R&D tax credit due to a high base amount, lack of information for base periods or other reasons. The AIRC was enacted to allow credit to those taxpayers that could not benefit under the R&D tax credit. Under the AIRC a taxpayer has only to gather its QREs for the credit year and its gross receipts for the prior four years. The AIRC is computed by breaking QREs into three defined tiers and applying a statutory rate to each of the three tiers. Once this election is made it applies to all future tax years and can only be revoked with the consent of the IRS.

The AIRC computation method expires after 2008, but is available for open tax years prior to 2009.

Qualified research activities are generally defined by a four-part test. Each element of the test must be met for the activity to qualify.

Permitted purpose. The activity must be intended to be useful in the development of a new or improved business component for the taxpayer. A business component may include a product, process, technique, formula, invention or software.

Eliminate uncertainty. The activity must be intended to eliminate uncertainty concerning the development or improvement of the business component. This uncertainty exists if the information available to the company does not establish: 1) the capability, 2) the method for developing or improving the business component, or 3) the appropriate design of the business component that would achieve the desired result.

Technical in nature. The activity must be undertaken for the purpose of discovering information that is technical in nature. This is achieved when the research fundamentally relies on principles of the hard sciences, defined as physical or biological sciences, engineering or computer science.

The process of experimentation. The activity must include elements of a process of experimentation. To that end, a "process of experimentation" is designed to evaluate one or more alternative solutions.

Your company may have many activities that qualify for the R&D tax credit. Grant Thornton's tax professionals can help you determine which aspects of your company's operations meet the qualification tests.

[Continued >](#)

Qualified research expenditures

The second step in claiming R&D tax credits is to identify and gather qualified research expenditures. There are three specifically defined categories of qualified research expenditures.

Wages. Taxable wages incurred for employees involved in qualified research activities are eligible. This includes direct involvement, direct supervision and direct support of the R&D activities.

Supplies. Qualified supply expenses include tangible supplies used in the R&D activity. Depreciable assets are not qualified supplies.

Contract research. Amounts paid to third parties for direct involvement, direct supervision or direct support of R&D activities are qualified. Qualified contract research costs are included in the R&D credit at 65 percent of eligible expenditures.

Documentation requirements

While Congress has been extending and expanding the R&D tax credit, the IRS is watching closely to ensure that only eligible taxpayers claim the credit. The taxpayer has the burden of proving its qualification for the R&D tax credit. Meeting this burden of proof has been a challenge for the unprepared.

In February 2007, the IRS Office of Appeals issued draft technical guidance titled *Substantiating Research and Experimentation Expenditures* that if finalized would expand the R&D tax credit coordinated issue by naming a coordinator that will be involved in approving all settlements.

In April 2007, the IRS issued an industry directive stating that the R&D tax credit claims have been designated as a large and mid-size business (LMSB) Tier I issue. As a Tier I issue, the R&D tax credit must be raised by the

examination team on audit and be reviewed in consultation with the issue owner executive.

With only two individuals, one on the audit side and one on the appeals side who are calling the shots, taxpayers' hopes of relying on poorly documented or marginal technical positions to substantiate R&D tax credits with the IRS have been greatly diminished.

As a result of these actions, the IRS has issued a number of statements indicating its belief that taxpayers need to substantiate their R&D tax credits with contemporaneous documentation created at the time of the research, potentially as far back as 1984. One outcome of the coordinated efforts is that IRS agents often request that taxpayers produce time sheets for each employee with an hour-by-hour breakdown of each specific research activity conducted during the year.

Grant Thornton uses a documentation-based methodology for conducting R&D tax credit studies.

A Grant Thornton documentation-based analysis

Phase 1

Phase 1 is designed to help your company determine in a short period of time and with minimal cost the range of potential credits available and the current state of contemporaneous documentation. Phase 1 typically includes an information request, discussions with senior management responsible for development activities, a review of available development documents and costing information, and the modeling of approximate federal and state R&D tax credits available to your company.

Based on the results of Phase 1, Grant Thornton will outline suggested value-added services to be delivered in Phase 2.

Phase 2

Phase 2 is designed to provide selected value-added services. Grant Thornton will:

Analyze project and costing data: In most cases it is uncertain what types of development documents are available, the completeness of the documents and the ability to capture complete costing information. Grant Thornton professionals are experienced in finding the needles in the haystacks of documents.

Conduct visits and interviews: Even with the best documentation, valuable information can only be gained through site visits and interviews with company subject matter experts. These meetings are useful to fill gaps in the information contained in documents.

Compute credits: Federal and state credits are computed, reviewed or updated based on the needs of the company.

Prepare deliverable: The deliverable is a report that outlines the methodology followed, provides analysis of the relevant code and regulation sections, and contains the credit computations and other relevant documentation for your review and approval. The deliverable is designed to meet the requirements of the current IRS audit program and may change as the audit programs change.

Phase 3

Phase 3 is designed to provide relevant post-study services needed such as FIN 48 analysis of R&D tax credits, annual documentation updates, training for company employees and audit support services.

Based on the Grant Thornton R&D survey, only five percent of taxpayers are confident that they have a project tracking system that contains this level of detail, while 15 percent are confident they do not. The first step in the Grant Thornton documentation approach is to address this issue and find a workable solution.

Additional issues

In addition to documentation, both audit and appeals are concerned with the following:

Appropriate methodology. There are essentially two approaches taxpayers can choose to substantiate R&D tax credits: the project methodology and the departmental methodology. Both of these methodologies have their strengths and weaknesses. However, the IRS seems to prefer the project methodology.

Suggestion – It may take some extra effort to align documentation processes on a project basis; however, once done the benefits will carry forward into future years.

Choice of adviser. While both groups recognize that taxpayers need help with R&D tax credit issues, both LMSB and appeals are concerned with taxpayers' use of advisers preparing R&D tax credit claims on a contingent fee basis.

Suggestion – Choose your adviser wisely. Select an adviser that will be around if and when the audit rolls around. And think long and hard about contingent fees as they may bias the IRS against your credit claim even before the audit starts.

Do you qualify?

Taxpayers who engage in any of the following activities may qualify for the R&D tax credit:

- Manufacture products
- Develop new products
- Redesign products
- Develop formulas or techniques
- Design new functional packaging
- Develop or improve production processes
- Create or test prototypes
- Use new materials
- Test new concepts or technology
- Apply for patents
- Design tools or molds
- Customize equipment or machinery
- Develop or enhance software (for sale or internal use)
- Employ engineers, scientists or other technical personnel
- Engage outside professionals to do any of the above

The Grant Thornton Corporate Strategic Federal Tax Services team

Grant Thornton has assembled a team of tax professionals to provide you with corporate specialty tax services. These services include R&D tax credit services, capital cost recovery services (such as cost segregation and repair/maintenance cost reviews) and accounting methods and periods services (such as Section 199, Unicap, LIFO, M&E, etc.). By bringing these specialties together into one team, we are better positioned to provide you with efficient, long-term tax consulting assistance.

Helping clients address R&D tax credits is not a sideline for Grant Thornton, but a focused specialty practice. Grant Thornton has offered its clients assistance with the R&D tax credit since its inception in 1981, bringing years of practical experience to help you understand and take advantage of R&D tax credits. Grant Thornton is not just a tax services provider: We are also a thought leader in the area of R&D tax credit law. Our practice leaders have provided written and oral comments to the Treasury Department to help frame the issues and to develop R&D tax credit regulations.

Our goal is to form a long-term relationship with you and your company. The value we deliver extends past the completion of the tax project. Grant Thornton will work with you to help you evaluate and manage changes to tax law, to update studies to comply with the law and to help you sustain the tax credits during an audit.

Grant Thornton LLP is the U.S. member firm of Grant Thornton International, one of the six global accounting, tax and business advisory organizations. Through member firms in 112 countries, including 50 offices in the United States, the partners and employees of Grant Thornton member firms provide personalized attention and the highest quality service to public and private clients around the globe. See our R&D website at www.GrantThornton.com/researchtaxcredit.

¹ Grant Thornton LLP conducted its national R&D tax credit survey from July 10 through Aug. 31, 2008, with 314 CEOs, CFOs, comptrollers, tax executives and other tax staff.

Tax Professional Standard Statement

This document supports Grant Thornton LLP's marketing of professional services and is not written tax advice directed at the particular facts and circumstances of any person. If you are interested in the subject of this document we encourage you to contact us or an independent tax advisor to discuss the potential application to your particular situation. Nothing herein shall be construed as imposing a limitation on any person from disclosing the tax treatment or tax structure of any matter addressed herein. To the extent this document may be considered to contain written tax advice, any written advice contained in, forwarded with, or attached to this document is not intended by Grant Thornton to be used, and cannot be used, by any person for the purpose of avoiding penalties that may be imposed under the Internal Revenue Code.

