

# Tax Credits for Manufacturers

January 10, 2018

**SMARTAX** PRO



**MEP CENTER**  
THE UNIVERSITY OF UTAH

# Presenter

---

## » Shawn Marchant

Shawn has 20 years of experience in identifying and quantifying R&D and manufacturing incentives for companies in over 20 industries. His experience includes initial project scoping through implementation, project management, IRS and state audit support, and finally, evaluation of benefits for financial statement presentation. Shawn spent 16 years in the “Big 4,” most recently with Ernst & Young where he led their Research Credit and Meals and Entertainment practices in the Southeast region. He is a frequent speaker on the research credit and 199 Domestic Production Activities Deduction. Shawn received a JD from BYU J. Reuben Clark Law School, an LLM in Taxation from Georgetown University, and is an attorney licensed in California.



## About SMARTAX Pro

---

- » Specialize in R&D credits, 199 deductions, sales & use tax, and meals & entertainment studies
- » 20 years of experience, primarily with 2 of the Big 4
- » Utilize engineers to ensure higher quality product and less client business disruption
- » Focus on sustaining credits and deductions

# Agenda

---

- » Research Credit Overview . . . . . 6
- » Payroll Tax Credit . . . . . 15
- » Legislative Update . . . . . 18
- » Identifying Opportunities. . . . . 21
- » Contact Information. . . . . 30

## Pick 6 or Key takeaways

---

1. Research credit available for wide variety of businesses
2. Startups and pre-profit companies can monetize the research credit against payroll taxes
3. Utah and 40 other states also offer a credit for R&D activity
4. Combined federal & state credits range from 10-20% of eligible expenses
5. Documentation of qualified research and associated costs is imperative
6. We offer complimentary assessments



**SMARTAX** PRO

# Research Credit Overview

# Background

---

- » Enacted in 1981 to encourage investment in research & development activity and spur the economy – it's a JOBS credit
- » 2-step analysis
  - Step 1. Qualitative:** do the company's R&D / development activities qualify?
  - Step 2. Quantitative:** cost accounting for eligible activities and credit computation
- » Documentation of qualified research activity and associated costs is required
  - Lack of adequate documentation is #1 reason for disallowance
- » 41 states offer a credit for R&D activity
  - Follow federal rules, with exceptions

# What activities qualify?

---

## » Eligible activities (Qualified Research)

### ▪ (must meet all 4)

#### 1. Do the activities relate to a new or improved business component?

- Product, process, computer software, technique, formula, or invention that is sold, leased or licensed or otherwise used in taxpayer's trade or business
- Related to function, performance, reliability or quality

#### 2. Is the activity technological in nature?

- Must rely upon principles of physical or biological sciences, engineering or computer science

#### 3. Does technological uncertainty exist at the outset?

- Capability (can it be done?), or
- Method (how to do it?), or
- Appropriate design (what are the specific design characteristics?)

#### 4. Do the activities follow a process of experimentation?

- Trial and error, modeling, computer simulation, building and testing of prototypes

## » What doesn't qualify?

1. Research related to style, taste, cosmetic or seasonal design factors
2. Research after commercial production
3. Adaptation of existing business components – to meet a particular customer's requirements
4. Duplication of existing business components – reproduction of existing business component from plans, blueprints, specifications, etc.
5. Surveys, studies, etc. – e.g., efficiency, management, market research, routine data collection (quality control)
6. Internal-use software (exceptions apply)
7. Foreign research – research conducted outside the US (or its possessions) or Puerto Rico
8. Social sciences – research into the social sciences, arts or humanities
9. Funded research – research funded by grant, contract, etc.
  - Evaluate risks and rights



# What expenses qualify?

---

## » **Wages** – Form W-2 Box 1

1. Performing qualified research (4-part test)
  2. Directly supporting qualified research, e.g., cleaning lab equipment, typing lab reports
  3. Directly supervising qualified research, i.e., first-line management
- » Substantially all test – if 80% or more of all the services performed by an employee consists of performing, supporting or supervising qualified research, then 100% of wages may be included

## » **Supplies** – non-depreciable materials and supplies used in creating or testing prototypes or pilot models

## » **Computer Rental** – computer must be owned and operated by someone other than the taxpayer, located off the taxpayer's premises, and the taxpayer must not be the primary user of the computer

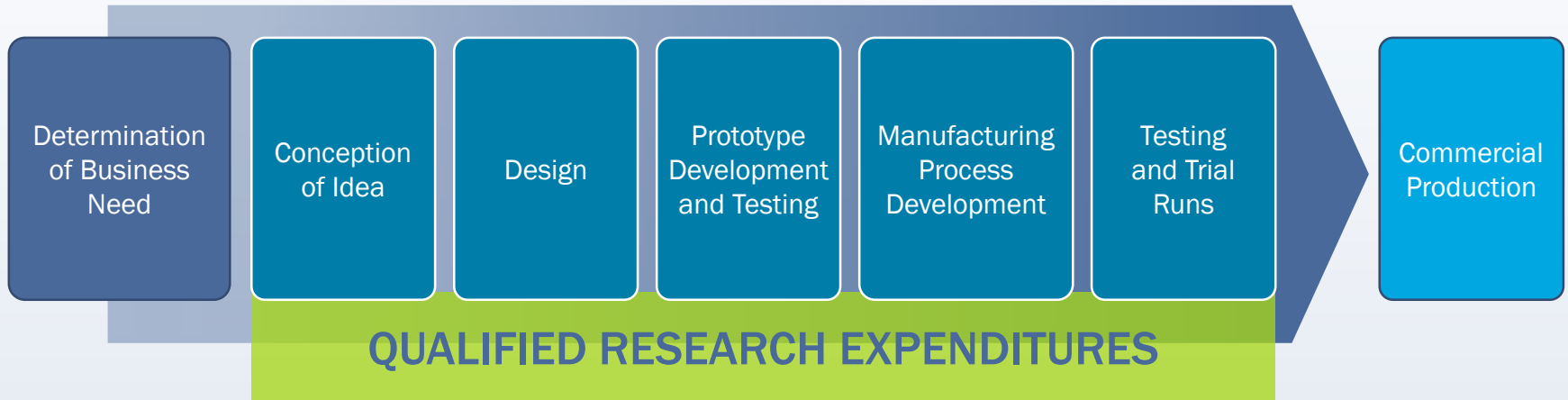
## » **Contract research** – 65% of amounts paid to non-employees for qualified research, support or supervision

## » Collectively known as Qualified Research Expenses (QREs)

# Scope of qualified activities

---

Qualified Research starts at Conception of Idea and ends just prior to Commercial Production



# How is the credit computed?

## Credit Formula

$$\begin{array}{r} \text{Credit Year QREs} \\ \text{_____ (Base Amount)} \\ = \text{Incremental QREs} \\ \text{_____} \\ \text{x Credit \%} \\ \hline = \text{Credit} \end{array}$$

» Credit carryback 1 year,  
carry forward 20 years

» Federal credit ranges  
6.5% - 10% of QREs

» State credits range  
1.5% - 10% of QREs

## » Regular Credit

- Base amount = greater of:
  - ♦ % of historic gross receipts, or
  - ♦ 50% of credit year QREs
- Credit % = 20%

## » Alternative Simplified Credit (ASC)

- Base amount = Avg 3 prior year QREs x 50%
- Credit % = 14% (6% for startups)

## » Section 280C

- Prevents double dipping (claiming a deduction and receiving a credit for same expenses)
- Requires addback of credit to reduce expenses (increase NOL), or
- Apply reduced credit %
  - ♦ 13% for regular credit
  - ♦ 9.1% for ASC
- Must elect on originally filed return

# Regular credit example

Taxable Year	Start-Up Year		5
	Beginning		1/1/2016
	Ended		<u>12/31/2016</u>
QREs	Wages	A	562,673
	Supplies	B	40,984
	Computer Rental	C	0
	Contract Research @ 65%	D	55,253
	Total QREs	$E = \sum A:D$	<u>658,910</u>
Regular Credit	Fixed-Base %	F	3.00%
	Avg Prior 4 Years Gross Receipts	G	<u>826,807</u>
	Calculated Base	$H = F * G$	24,804
	Minimum Base (50% Limit)	$I = E * 50\%$	329,455
	Applicable Base	$J = \text{MAX } H \text{ or } I$	329,455
	Incremental QREs	$K = E - J$	329,455
	Regular Credit %	L	<u>20%</u>
	Regular Credit	$M = K * L$	65,891
	Section 280C(c) Addback	$N = M * 35\%$	<u>(23,062)</u>
	Reduced Credit	$O = M - N$	42,829

## ASC example

	<u>12/31/2016</u>	<u>Prior Year QREs</u>
Wages	562,673	399,547 Year 1
Supplies	40,984	221,703 Year 2
Computer Rental	0	<u>120,040</u> Year 3
Contract Research @ 65%	55,253	247,097 Average
Total QREs	<u>658,910</u>	<u>50%</u>
Avg 3 Prior Year QREs x 50%	<u>(123,548)</u>	← 123,548
Incremental QREs	535,361	
Credit %	<u>14%</u>	
ASC	74,951	
Section 280C(c) Addback	<u>(26,233)</u>	
Reduced Credit	48,718	

# What documentation is required?

---

## 1. Qualitative (most important): describes why research meets applicable tests

- » Failure to adequately document how R&D meets relevant tests #1 reason for IRS disallowance
  - » Project memos describing how research activities meet 4-part test, especially technical uncertainty and process of experimentation tests
  - » Employee memos describing how high-risk employees qualify (e.g., CEO, upper management, etc.)
  - » Company prepared documents supporting technical uncertainty or process of experimentation
  - » Methodology memo – describes approach, key issues and conclusions, basis for determining how QREs were documented and calculated

## 2. Quantitative: credit computation and supporting detail

- » Employee Q% - how much time employees spend on qualified research
  - Nexus between qualified research (4-part test) and QREs
  - Time sheets, project tracking, etc.
  - Time surveys most common – completed by employee or supervisor
- » P&L, W-2 wages, tax returns and (if needed) transaction level detail
- » Credit computation



**SMARTAX** PRO

# Payroll Tax Credit

# What is the payroll tax credit?

---

- » New rules allow research credit to offset payroll tax (6.2% OASDI)
- » Criteria
  1. Less than \$5M of gross receipts in credit year;
  2. No gross receipts except in the 5 years up to and including the credit year; and
    - For 2017, can't have gross receipts prior to 2013
    - For 2018, can't have gross receipts prior to 2014
    - Expansive definition of gross receipts = sales, dividends, grants, interest, rents, royalties
  3. Qualify for the research credit (meet 4-part test)
- » Corporations, partnerships or sole proprietorships eligible. Tax-exempt organizations ineligible.
- » Taxpayers using a Professional Employer Organization (PEO) are eligible to claim payroll credit
  - Input EIN for taxpayer generating research credit on Form 8974



## How do I use the payroll tax credit?

---

- » Must claim research credit on federal return and elect payroll credit
  - Cannot elect on amended return
- » Apply against payroll tax in the quarter immediately following tax return filing
  - File Form 8974 with Form 941
- » Any unused balance carries over to next quarter / year

### Maximum Savings

- » \$250K / year
- » \$1.25M over 5 years



**SMARTAX** PRO

# Legislative Update

# Impact of federal tax reform

---

- » Tax Cuts & Jobs Act (TJCA) signed by President Trump on 12/22/2017
  - most provisions effective for tax years beginning after 12/31/2017
- » No change to research credit or payroll credit. Remains in full effect.
- » Change to expensing of R&D costs
  - Mandatory amortization over 5 years starting in 2022 (15 years for offshore R&D)
    - Includes software development
  - Planning opportunities exist to minimize impact
- » Repeals Domestic Production Activity Deduction (DPAD)
  - Ability to amend returns and claim deduction
    - Must be paying tax to be eligible
- » Reduces corporate tax rate from 35% to 21%
- » Individual rates reduced (rate depends on filing status)

thru 2017	10%	15%	25%	28%	33%	35%	39.6%
2018 - 2025	10%	12%	22%	24%	32%	35%	37.0%

# Utah tax reform

---

## » Utah tax reform

- Analysis of tax incentives and credits to identify those used by and effective in promoting job growth in Utah.
- Proposal to eliminate or modify R&D credit (and other credits) to pay for other tax cuts



**SMARTAX** PRO

# Identifying Opportunities

# Opportunity areas

---

## Industries

- » Aerospace & Defense
- » Agriculture
- » Automotive
- » Banking & Insurance
- » Chemicals
- » Computers
- » Consumer Products
- » Energy
- » Engineering
- » Food & Beverage Mfg
- » Manufacturing – All types
- » Oil & Gas
- » Pharmaceuticals / Life Sciences
- » Retail (software)
- » Semiconductors
- » Software
- » Technology
- » Telecommunications
- » Transportation (software)
- » Utilities

## Departments

- » R&D
- » Engineering
- » Manufacturing Engineering
- » Manufacturing / Production
- » Quality Assurance
- » Marketing
- » Technical Sales
- » Technical Services
- » Environmental, Health, Safety
- » Regulatory Affairs
- » CEO / President / Sr. Management

## Scoping questions

---

- » Do you employ engineers, scientists, or software developers or use such as contractors?
  - If so, how many?
- » Are you developing new or improving existing products, including software, apps, or SaaS?
- » Have you improved your manufacturing process?
- » What is your R&D / development budget?

# Client successes

---

## Consumer Products (S Corp)

- » 2016 gross receipts: \$67 million
- » 2016 R&D spend: \$1.4 million
- » 1-year study for consumer products manufacturer
- » **Federal and state credits: \$210,000**
- » **DPAD: \$460K**

## Medical Device Manufacturer (C Corp)

- » 2016 gross receipts: \$2.6 million
- » 2015 & 2016 R&D spend: \$605K, \$823K
- » 2-year study
- » **Federal and state credits: \$180,000**
- » **Payroll credit: \$82,000**

## Telecommunications Services (S Corp)

- » 2014-2016 gross receipts: \$31M, \$38M, \$49M
- » 2014-2016 R&D spend: \$533K, \$795K, \$961K
- » 3-year study for company developing software for telecommunications industry
- » **Federal and state credits: \$414,000**

## Medical Device Manufacturer (C Corp)

- » 2016 gross receipts: \$19K
- » 2016 R&D spend: \$85K
- » 1-year study
- » **Payroll credit: \$8,500**



## Other federal incentives

---

### » Domestic Production Activity Deduction (DPAD or Sec. 199 deduction)

- Federal incentive to manufacture goods in the US
- Deduction equal to 9% of lesser of taxable income or qualified production activity income (QPAI) (gross receipts minus COGS and allocable SG&A)
- Must be paying tax to be eligible
- Repealed effective 1/1/2018; 2017 tax year last year to claim. Can amend returns to claim in prior years

### » Work Opportunity Tax Credit (WOTC)

- Credit for hiring individuals from 9 designated categories
- Credit ranges from \$1,200 - \$9,600 per employee, depending on category, wage, and length of employment
- Application process. Must gather requisite information from potential employees **on or before** hire date and submit application to state Dept. of Labor within 28 days of hiring
  - Can't submit application retroactively

## Other state incentives

---

### » Utah Credit for Purchases of R&D Machinery and Equipment

- Nonrefundable credit equal to 6% of cost of machinery and equipment purchased for use in R&D activity conducted in Utah
- Relies upon research credit (Sec. 41) definitions
- Expired 12/31/2010; can amend returns as there is 14 year carryforward

### » Recycling Market Development Zones

- Incentive to use recycled materials in manufacturing processes and create new products for sale. Also benefits business or individuals that collect, process, distribute recycled materials.
- Application through GOED
- 5% credit on cost of machinery & equipment
- 20% credit (up to \$2,000) on eligible operating expenses
- <http://business.utah.gov/programs/incentives/recycling-zones/>
- <http://business.utah.gov/wp-content/uploads/Recycling-Zones-Terms-and-Expirations.pdf>

## Other state incentives – sales & use tax exemptions

---

- » Manufacturing equipment
- » Nonreturnable containers
- » Semiconductor materials
- » R&D facility construction
- » R&D equipment

# Our approach – audit drives deliverables

---

## » Phase I – complimentary assessment to estimate credit

- Scope opportunity, identify qualifying activity and potential exposure, and estimate credit;
- Deliverables: estimated credits, work plan and fee for preparing and documenting credit to support tax return filing
  - Required documents: W2 wages, P&L, and tax returns for relevant years
  - 1-hour call with development person to review 4-part test, level of effort and estimate amount time spent by department/job title
  - Does not support tax return filing

## » Phase II – detailed analysis to document qualified research and refine Phase I credit for tax return filing

- Intended to support IRS audit
  - Project interviews
  - Time surveys
  - Memos
  - Detailed QRE and credit computation with supporting cost detail
  - Other supporting documents



**SMARTAX** PRO

Questions?

## Contact information

---

- » Shawn Marchant, President  
[shawn@smartax.pro](mailto:shawn@smartax.pro)  
310.866.1566
- » Manufacturing Extension Partnership Center  
[info@mep.utah.edu](mailto:info@mep.utah.edu)  
801.587.0713