

**Report to the Pennsylvania General Assembly
on the Research and Development (R&D)
Tax Credit**



The Pennsylvania Department of Revenue
Bureau of Research

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The Pennsylvania R&D Tax Credit Statute

On May 7, 1997, Act 7 of 1997 created the Pennsylvania research and development (R&D) tax credit. The R&D tax credit provision became Article XVII-B of the Tax Reform Code of 1971 (TRC). The intent of the R&D tax credit was to encourage taxpayers to increase R&D expenditures within the Commonwealth in order to enhance economic growth. The terms and concepts used in the calculation of the Commonwealth's R&D tax credit are based on the federal government's R&D tax credit definitions for qualified research expense.¹

For R&D tax credits awarded between December 1997 and December 2003, Act 7 of 1997 authorized the Department of Revenue (Department) to approve up to \$15 million in total tax credits per fiscal year. Additionally, \$3 million of the \$15 million was set aside for "small" businesses, where a "small business" is defined as a "for-profit corporation, limited liability company, partnership or proprietorship with net book value of assets totaling...less than five million dollars (\$5,000,000)."

Over the years, several changes have been made to the R&D tax credit statute. Table 1 lists all of the acts that have changed the R&D tax credit statute, along with the applicable award years, the overall tax credit cap and the "small" business set aside.

**Table 1. Pennsylvania Research & Development Tax Credit Program
History of R&D Tax Credit Legislation**

Legislation	Award Years	Total Tax Credit Cap	Small Business Set Aside
Act 7 of 1997	1997 - 2003	\$15.0 million	\$3.0 million
Act 46 of 2003	2004 - 2005	\$30.0 million	\$6.0 million
Act 116 of 2006	2006 - 2008	\$40.0 million	\$8.0 million
Act 48 of 2009	2009	\$20.0 million	\$4.0 million
Act 48 of 2009	2010	\$18.0 million	\$3.6 million
Act 26 of 2011 ²	2011 - 2016	\$55.0 million	\$11.0 million
Act 85 of 2012 ³	Sunset Date Repealed	Unchanged	Unchanged

One of the more noteworthy features of the R&D tax credit program is the ability for R&D tax credit recipients to sell unused tax credits to other taxpayers. Act 46 of 2003 allowed R&D tax credit recipients to apply to the Department of Community and Economic Development (DCED) to sell or assign an R&D tax credit if there has been no claim for allowance filed within one year from the date that the Department approved the credit. According to Act 48 of 2009, for R&D tax credits awarded in December 2009 and forward, the one year holding period is no longer in effect; credits awarded in 2009 and forward can be sold immediately. The

¹ Public Law 99-514, 26 U.S.C. § 41.

² The prior sunset date was established by Act 116 of 2006.

³ Act 85 of 2012 repealed the sunset date for the R&D tax credit.

purchaser or assignee must still use the newly obtained R&D tax credit in the taxable year in which the purchase or assignment of the credit is made. The purchased or assigned R&D credit cannot be used to offset more than 75 percent of a tax liability for a taxable year. The purchased or assigned credit cannot be carried over, carried back, resold or refunded. The provision to sell or assign unused R&D tax credits applies to credits awarded in December 2003 and forward, but the initial sale or assignment could not take place until at least December 2004.

The R&D tax credit may be claimed against the following taxes: the capital stock and franchise tax (CSFT), the corporate net income tax (CNIT) and the personal income tax (PIT). Taxpayers claiming the credit against any of these taxes may not reduce their tax liability for taxable years 2004 and earlier by more than 50 percent. Act 46 of 2003 eliminated this provision starting with tax year 2005; a taxpayer is able to use the awarded R&D tax credit to reduce a given tax liability by up to 100 percent. Taxpayers awarded R&D tax credits by the Department may carry over and apply any unused tax credit for up to fifteen (15) succeeding taxable years.

The Pennsylvania R&D tax credit, which is calculated using the increase over the taxpayer's base year research expenses for qualified R&D conducted within Pennsylvania, originally generated a tentative credit at the rate of 10 percent. However, Act 116 of 2006 increased the rate at which the tentative R&D tax credit is calculated to 20 percent for small businesses only beginning with the credit awarded in December 2006 and forward.

Taxpayers must submit an application to the Department by September 15th to apply for the R&D tax credit. The credit is for qualified Pennsylvania research expenditures made in the taxable year ending in the prior calendar year. The Department has until December 15th to notify taxpayers of their approved tax credit amount.

Major R&D Tax Credit Provisions in Act 46 of 2003

Act 46 of 2003 mandated that the Department report to the General Assembly the names of all taxpayers awarded R&D tax credits in each year starting in 2004 and for each year thereafter. Appendix A at the end of this report lists the name of each taxpayer receiving the R&D tax credit from the Department in December 2011, 2012 and 2013, along with the amount of credit received and utilized. In an effort to control the size of the document, this report will only list the names of taxpayers who have received the R&D tax credit in the current year and the two preceding years. Reports from earlier years will still be available that retain information on earlier years.

The other major change in the R&D tax credit program made by Act 46 of 2003 was the creation of the R&D Tax Credit Assignment Program. The program, which is primarily administered by DCED, permits taxpayers with unused R&D tax credits to sell them for cash to other taxpayers who can use them. The goal of the program is to "assist the growth and development of technology-oriented businesses, particularly small start-up technology businesses."⁴ These small start-up firms, which often do not have significant tax liabilities in their early years, receive cash for their unused R&D tax credits.⁵ The purchasers of the unused R&D tax credits are then able to partially offset their own tax liabilities with the unused credits.

The earliest that unused R&D tax credits could be sold was December 2004, for credits awarded by the Department in December 2003. Taxpayers can only sell unused amounts of tax credits that exceed any collectible tax liability against which the credit may be offset. S Corporations may not apply to sell or assign any credit that has been passed-through to its shareholders. In order to sell an unused credit, the taxpayer must file an application with DCED. The application identifies the seller and the R&D tax credit that it intends to sell, along with the buyer and the amount for which the credit is being sold or assigned.

⁴ "Research and Development Tax Credit Assignment Program Guidelines," DCED, September 2004.

⁵ "Unused R&D tax credits" means that the taxpayer has not applied the tax credits against a specific tax year liability. Further, the taxpayer cannot sell the tax credit if it has any unpaid liabilities against which the tax credit could be used.

The buyer of the unused R&D tax credit can use it to offset up to 75 percent of a qualified tax liability in a tax year. The buyer cannot carry forward, carry back, get a refund for or reassign the purchased credit. Further, the buyer must use the purchased tax credit against a qualified tax liability in the taxable year in which it was transferred. Lastly, the buyer must identify to the Department the taxpayer from which they bought the unused R&D tax credit.

An R&D tax credit will be considered to be unused and, therefore, available for sale as long as it is not applied against a specific tax year liability and the taxpayer does not have a collectible tax liability. As of February 2014, \$65.0 million of the \$343 million R&D tax credit awarded between December 2003 and December 2012 (i.e., 19 percent of the \$343 million) has been sold or assigned. Purchasers of those unused tax credits have paid \$60.9 million for them in total, or 93.7 percent of the value of the unused tax credits.

Tax credit sales are often arranged by a broker, who provides a service by bringing together sellers and buyers of credits, and in return takes a portion of the tax credit as their fee. The Department does not have complete data about these arrangements. However, DCED staff has stated that the level of broker fees can vary widely, but the average broker fee is in the range of 5 to 6 percent of the value of the credit.

The complete statistics on sold or assigned unused tax credits by award year are shown in Table 2.

**Table 2. Pennsylvania Research & Development Tax Credit Program
Complete Statistics on the Sale or Assignment of Unused R&D Tax Credits**

(\$millions)

Credit Awarded In	R&D Credit Awarded	Unused Tax Credits Sold/Assigned	Number of Taxpayers Sold/Assigned Unused Credit	Unused Tax Credits Sold For	Percent of Value Unused Tax Credits Sold For
Dec 2003	\$15.0	\$ 1.3	18	\$ 1.2	89.6%
Dec 2004	\$30.0	\$ 3.7	44	\$ 3.3	90.1%
Dec 2005	\$30.0	\$ 9.2	50	\$ 8.6	93.3%
Dec 2006	\$40.0	\$ 8.7	72	\$ 8.2	94.0%
Dec 2007	\$40.0	\$ 8.8	84	\$ 8.4	95.8%
Dec 2008	\$40.0	\$ 10.5	114	\$10.0	95.3%
Dec 2009	\$20.0	\$ 4.9	99	\$ 4.6	93.6%
Dec 2010	\$18.0	\$ 2.7	97	\$ 2.5	93.7%
Dec 2011	\$55.0	\$ 12.7	97	\$11.8	93.1%
Dec 2012	\$55.0	\$ 2.5	58	\$ 2.3	91.6%
TOTAL	\$343.0	\$ 65.0		\$ 60.9	93.7%

R&D Tax Credit Claimed and Awarded in Pennsylvania for December 2013

Table 3 shows the amount of R&D tax credit awarded by the Department in 2013 for qualified research expenditures made by taxpayers in Pennsylvania in taxable year 2012. Without the \$55 million cap, \$94.5 million in credit would have been awarded to 631 taxpayers. 75 percent of approved taxpayers received an R&D tax credit of less than \$50,000, receiving 13.2 percent of the total amount of approved credit. Taxpayers with an approved R&D tax credit of \$50,000 or more claimed 86.8 percent of the approved credit amount. The 157 taxpayers receiving \$50,000 or more in credit represented 25 percent of the total number of applicants.

**Table 3. Pennsylvania Research & Development Tax Credit Program
Tentative and Actual Credit for Tax Year 2013⁶**

Actual Credit Range	Number of Applicants	Percent of Applicants	Tentative Credit Amount	Actual Credit Amount	Percent of Actual Credit
\$0 - \$4,999	131	20.8%	\$444,434	\$310,592	0.6%
\$5,000 - \$19,999	202	32.0%	\$3,515,307	\$2,384,118	4.3%
\$20,000 - \$49,999	141	22.3%	\$6,394,013	\$4,557,461	8.3%
\$50,000 - \$99,999	67	10.6%	\$6,712,701	\$4,539,414	8.3%
\$100,000 - \$499,999	75	11.9%	\$25,673,964	\$15,481,631	28.1%
\$500,000 - \$999,999	5	0.8%	\$6,258,427	\$3,354,594	6.1%
\$1,000,000 & greater	10	1.6%	\$45,469,464	\$24,372,191	44.3%
TOTAL	631	100%	\$94,468,310	\$55,000,000	100%

Table 4 details the tentative amount of R&D tax credit awarded by the Department for each year through December 2013.

**Table 4. Pennsylvania Research and Development Tax Credit Program
Total Tentative Tax Credit Awarded By Year, 1997-2013**

Credit Awarded In	Number of Applicants	Tentative Credit Amount	Credit Awarded In	Number of Applicants	Tentative Credit Amount
Dec 1997	292	\$66,371,038	Dec 2006	379	\$78,640,025
Dec 1998	270	\$56,572,339	Dec 2007	439	\$94,732,918
Dec 1999	275	\$53,456,489	Dec 2008	466	\$90,712,865
Dec 2000	284	\$59,207,493	Dec 2009	507	\$80,208,000
Dec 2001	293	\$71,407,604	Dec 2010	488	\$94,419,561
Dec 2002	254	\$74,255,800	Dec 2011	537	\$130,551,357
Dec 2003	242	\$70,191,922	Dec 2012	569	\$106,966,882
Dec 2004	274	\$70,932,913	Dec 2013	631	\$94,468,310
Dec 2005	291	\$65,806,128			

From its inception through December 2013, the R&D tax credit program has awarded a total of \$488 million in tax credit to 2,085 different taxpayers. Without any caps on annual awards, \$1,358.9 million in R&D tax credit would have been awarded to those same 2,085 taxpayers. Over the years, the varying annual credit caps have reduced the amount of R&D tax credit that would have been awarded to 36 percent of what was requested.

Table 5 presents the R&D tax credit awarded in December 2013 by business type.

⁶ Detail may not add up due to rounding; 111 other applicants were rejected and did not receive any credit.

**Table 5. Pennsylvania Research and Development Tax Credit Program
Actual Credits by Business Type in 2013**

Business Type	Number of Taxpayers	Percent of Taxpayers	Actual Credit Amount	Percent of Actual Credit
Manufacturing	349	55.3%	\$38,155,851	69.4%
Services	190	30.1%	\$10,515,155	19.1%
Misc. ⁷	92	14.6%	\$6,328,995	11.5%
TOTAL	631	100%	\$55,000,000	100%

Manufacturers represented 55 percent of the taxpayers receiving the tax credit in 2013, claiming 70 percent of the total amount of approved credit. Pharmaceutical manufacturers claimed the largest single share for manufacturers and the whole group of R&D tax credit recipients; the 17 pharmaceutical manufacturers requesting credit were awarded \$20.3 million in credit. In the Services sector, the largest group of credit recipients was designers of computer system services, with 50 recipients receiving \$1.8 million in credit. In the Misc. sector, there was not one particular type of business among tax credit recipients that was more prevalent.

Table 6 provides a breakdown of the R&D tax credit claimed by “small” and “not small” businesses in December 2013. As noted earlier, “small” businesses are those with net book assets of less than \$5 million.

**Table 6. Pennsylvania Research and Development Tax Credit Program
Small and Not Small Businesses in 2013**

Business Size	Number of Applicants	Percent of Applicants	Tentative Credit Amount	Actual Credit Amount	Percent of Actual Credit
Small	276	43.7%	\$9,405,048	\$9,405,048	17.1%
Not Small	355	56.3%	\$85,063,262	\$45,594,952	82.9%
TOTAL	631	100%	\$94,468,310	\$55,000,000	100%

In December 2013, “small” businesses claimed \$9.4 million of the \$11.0 million in R&D tax credit set aside for them, i.e., “small” businesses received 100 percent of the credit for which they applied. This was the most amount of tax credit ever claimed by “small” businesses in one year in the history of the R&D tax credit program. Last year, “small” businesses received the entire \$7.1 million in R&D tax credit for which they applied. The \$55 million program cap reduced the amount of credit approved for the “not small” businesses to 54 percent of the requested amount in December of 2013. Last year, “not small” businesses received 48 percent of the amount of credit they requested in December 2012.

Table 7 shows the history of the R&D tax credit for the “small” business set aside awarded by the Department for each year through December 2013.

⁷ Misc. business type includes business activities associated with individuals or corporations with North American Industry Classification System (NAICS) codes for the agriculture, construction, mining, wholesale trade, retail trade, and financial sectors.

**Table 7. Pennsylvania Research and Development Tax Credit Program
Small Business Set Aside By Year, 1997-2013**

Credit Awarded In	Number of Applicants	Tentative Credit Amount	Actual Credit Amount
Dec 1997	67	\$889,054	\$889,054
Dec 1998	85	\$1,821,354	\$1,821,354
Dec 1999	82	\$3,001,986	\$3,000,000
Dec 2000	83	\$1,545,359	\$1,545,359
Dec 2001	75	\$1,373,382	\$1,373,382
Dec 2002	79	\$1,615,602	\$1,615,602
Dec 2003	81	\$1,082,263	\$1,082,263
Dec 2004	94	\$1,419,845	\$1,419,845
Dec 2005	108	\$2,268,046	\$2,268,046
Dec 2006	173	\$7,081,079	\$7,081,079
Dec 2007	193	\$6,845,879	\$6,845,879
Dec 2008	205	\$8,052,975	\$8,000,000
Dec 2009	211	\$8,688,383	\$4,000,000
Dec 2010	213	\$8,487,767	\$3,600,000
Dec 2011	217	\$7,632,711	\$7,632,711
Dec 2012	242	\$7,085,229	\$7,085,229
Dec 2013	276	\$9,405,048	\$9,405,048

“Small businesses” have been awarded \$68.7 million of the \$78.3 million in R&D tax credits that they have applied for since the inception of the R&D tax credit program; they have received 88 percent of the total amount of tax credits for which they applied. A total of \$97.6 million in tax credit was set aside for them over this period.

Four times in the history of the R&D tax credit program the “small” business set aside has been awarded in total: 1999, 2008, 2009 and 2010. Most years, the “small businesses” have received the total amount of tax credit for which they applied. When “small” businesses claim less than the R&D credit set aside for them, the “not small” businesses receive a pro-rated amount of the excess R&D tax credit not claimed by the “small” businesses.

Table 8 shows the amount of R&D tax credit that has been applied against the CNIT, CSFT and PIT for taxable years 1997 through 2011. The data in Table 8 are for taxpayers that have directly received the tax credit from the Department, as well as those taxpayers that have purchased unused R&D tax credits.

The first taxable year against which the credit could be used was 1997. For PIT, individuals who received the credit directly are included, as are any individual owners of S corporations or limited liability companies (LLCs) who received the pass-through benefit. All credit amounts are as of February 2014.

Table 8 shows the distribution of the R&D tax credits that have been applied to specific tax years. As of February 2014, 87.3 percent of the \$378 million in R&D tax credit that has been awarded for 1997 through 2011 has been applied to specific tax periods. 45.5 percent of the credit awarded has been applied against the CSFT; 49.7 percent has been applied against the CNIT; 4.8 percent has been applied against the PIT. It is important to note that the amount of tax credit applied to a particular taxable year can vary over time as a taxpayer's taxable year liability may change due to settlement, resettlement or the application of other credits.

**Table 8. Pennsylvania Research and Development Tax Credit Program
Application by Tax Type and Taxable Year, 1997-2011**

Taxable Year	Corporate Net Income Tax	Number of Taxpayers	Capital Stock & Franchise Tax	Number of Taxpayers	Personal Income Tax	Number of Taxpayers
1997	\$4,808,403	93	\$3,654,425	192	\$187,863	91
1998	\$2,669,951	84	\$5,262,915	199	\$791,636	195
1999	\$3,129,320	91	\$6,317,818	233	\$439,671	162
2000	\$4,495,931	77	\$6,465,943	213	\$523,087	201
2001	\$6,364,344	82	\$7,141,332	217	\$534,126	173
2002	\$7,925,753	49	\$5,313,965	220	\$487,586	169
2003	\$8,733,454	62	\$8,086,269	217	\$337,985	154
2004	\$14,874,207	67	\$8,387,866	263	\$713,456	169
2005	\$12,630,586	66	\$13,164,168	291	\$1,389,912	179
2006	\$16,241,888	96	\$15,884,694	328	\$2,679,623	235
2007	\$15,221,106	104	\$12,720,361	356	\$1,799,924	236
2008	\$18,151,421	103	\$11,792,443	407	\$1,327,515	306
2009	\$8,414,374	91	\$12,364,902	480	\$1,460,930	211
2010	\$20,594,531	110	\$12,878,861	505	\$1,334,225	187
2011	\$19,812,175	109	\$20,511,508	537	\$1,819,457	240
TOTAL	\$164,067,442		\$149,947,468		\$15,826,996	

It should be noted that it is possible that some portion of the R&D tax credit awarded by the Department might never be used against a tax year liability, particularly those credits not affected by the provisions of Act 46 of 2003. R&D tax credits awarded in December 1997, the first credits awarded under the program, will expire and cannot be used beyond tax year 2012. As of February 2014, of the \$15.0 million awarded to 292 taxpayers in December 1997, approximately \$276,000 has not yet been used. This amounts to 1.8 percent of the total amount of R&D tax credits awarded. Since tax returns for tax year 2013 have not all been submitted and processed, it is still possible that this amount of tax credit could be used, or that the amount could be used against tax years 1997 through 2012 if certain tax liabilities for those taxpayers were to change.

One possible reason for non-use of the tax credit is a reorganization in which a taxpayer claiming the credit goes out of existence or merges with another business before applying the credit against a tax liability. Another observation about usage of the tax credit is that, for taxable years prior to 2005, the amount of credit a taxpayer could claim against a tax type in one tax year was limited to 50 percent of the tax liability. This provision had ensured that a taxpayer could not totally eliminate a tax liability using only the R&D tax credit. However, Act 46 of 2003 eliminated the 50 percent limit. This fact, combined with the 15-year carryover, should allow taxpayers to receive most, if not all, of the tax benefit of the credit. Further, the provision in Act

46 of 2003 allowing the sale or assignment of any unused R&D tax credit awarded in December 2003 and after should minimize how much R&D tax credit is not utilized.

Current law reduces the CSFT rate each year until the tax is completely eliminated for taxable years beginning on or after January 1, 2016. Once the CSFT is eliminated, the R&D tax credit can no longer be claimed against it for tax year 2016 and forward. This is important for S corporations and LLCs that are primarily subject to the CSFT, not the CNIT. S corporations and LLCs may pass the tax credit through to shareholders who can claim it against their PIT. Therefore, S corporations and LLCs, in order to use the R&D tax credit after 2016, will have to either apply it against PIT or sell their unused tax credits. They will be able to carry it forward for up to 15 taxable years.

Taxes Paid by R&D Tax Credit Recipients

Table 9 shows the CNIT and CSFT liabilities for taxable year 2011 (the latest year for which reports are available for all taxpayers) for taxpayers receiving the R&D tax credit in 2013. Table 9 and Table 5 have a similar structure in order to provide comparability. Please note that taxpayers claiming the credit against the personal income tax are not included in these data. Also, taxpayers who purchased unused R&D tax credit are not included in these data.

**Table 9. Pennsylvania Research and Development Tax Credit Program
Taxable Year 2011 Tax Liabilities by Business Type**

Business Type	2011 CSFT Liability	2011 CNIT Liability
Manufacturing	\$11,817,576	\$36,475,328
Services	\$ 6,768,370	\$7,064,436
Misc.	\$ 3,931,543	\$8,288,933
TOTAL	\$22,517,489	\$51,828,697

In order to provide an idea of the relative value of the R&D tax credit to recipients, an analysis was conducted comparing the R&D tax credit awarded in 2013 to the total tax year 2011 self-assessed CNIT and CSFT liabilities⁸. Of the 631 taxpayers receiving the R&D tax credit in 2012 that are subject to the CNIT or CSFT, their total self-assessed 2011 tax year CNIT and CSFT liabilities totaled \$74.3 million. Though there are obviously varied ratios per individual taxpayer, the \$55 million in tax credit awarded in 2013 represented 74 percent of the total self-assessed tax amount for tax year 2011, while the \$94.5 million in tax credit requested represented 127.1 percent of the total self-assessed tax amount for tax year 2011.

The total 2011 CSFT liability for S corporations and LLCs receiving the R&D tax credit in 2013 was \$2.8 million. Out of the 189 Pennsylvania S corporations or LLCs, 64 had a CSFT liability of zero for 2011. The total 2011 CSFT liability for C corporations receiving the R&D tax credit in 2013 was \$19.7 million. Out of the 431 C corporations, 158 had a CSFT liability of zero for 2011.

The 431 C corporations receiving the tax credit in 2013 and subject to the CNIT had a total taxable year 2011 CNIT liability of \$51.8 million. Of these companies, 324 were C corporations with a taxable year 2011 CNIT liability equal to zero, due to negative net income in taxable year 2011. In most cases, the income of Pennsylvania S corporations and LLCs is passed through to the individual owners and subject to the personal income tax.

⁸ In some cases, the tax liability may have been self-assessed and settled.

Federal R&D Tax Credit Program

The federal government first adopted the R&D tax credit in 1981. The federal government does not cap the total credit amount that can be claimed in a taxable year. Despite the effort of some members of Congress, the R&D tax credit has never been a permanent part of the Internal Revenue Code (IRC). It has been extended fifteen times (most recently in January 2013). The current federal law expired on December 31, 2013.

As long as the federal R&D tax credit is not repealed and removed from the IRC, the definition and terms remain in effect for state level calculations. However, when the federal R&D tax credit is lapsed, it is possible that the Commonwealth could lose applicants that, since they would not be able to file the federal forms, would not go through the trouble of filing the state forms. This would be especially true for companies that qualify for relatively small amounts of state R&D tax credits or for companies that face sizable fees from tax preparers for filing the state R&D tax forms.

The public policy goal of the R&D tax credit is to encourage the private sector to increase R&D spending, which in turn serves as a catalyst to economic growth by increasing productivity through the utilization of new technology. The credit is justified in economic theory on the basis of market failure, which occurs because firms may under-invest in R&D when they tend to not recoup all associated costs of investing in R&D. Hence, less R&D occurs than would be economically optimal for the economy as a whole. The R&D tax credit is a method for lowering the cost of R&D to private firms and increasing the return on investment. By increasing the rate of return on investment, the R&D tax credit encourages more R&D than would occur if the credit did not exist.

R&D Expenditures in Pennsylvania and the United States

In 1995, according to the National Science Foundation (NSF), private industry in Pennsylvania spent \$5,331 million of its own funds on R&D expenditures. This was 4.0 percent of the total R&D expenditures by private industry in 1995 in the United States (\$132,103 million).

By 2011⁹, the total amount of R&D expenditures in Pennsylvania by private industry had risen to \$9,018 million. This was an increase over the 16 year period of 69.2 percent. Over the same period, total R&D expenditures by private industry in the United States had risen by 80.7 percent to a level of \$238,768 million. For 2011, R&D expenditures in Pennsylvania by private industry were 3.8 percent of total R&D expenditures by private industry in the United States. Pennsylvania ranked 10th in the entire US in R&D spending by private industry in 2011.

The Pennsylvania R&D expenditures reported on the 2012 tax credit applications for businesses receiving the R&D tax credit, which were based on research expenditures in 2011, represented 46 percent of the total R&D performed in Pennsylvania by private industry as estimated by the NSF.

For comparison, the 631 R&D tax credit applicants in 2013 had total Pennsylvania R&D expenditures in 2012 of \$3,434.9 million. Not all R&D done by industry in Pennsylvania is performed by R&D tax credit applicants.

The most recent economic recession did have a negative impact on R&D spending by industry, particularly in Pennsylvania. According to NSF data, R&D spending by private industry in Pennsylvania was \$10,113 million in 2007. However, due in large part to the recession, R&D spending by industry in Pennsylvania in 2008 fell by 13.2 percent to \$8,783 million. National level of R&D spending by private industry fell by 4.2 percent in 2008.

According to a November 2009 study released by the Government Accountability Office (GAO), large corporations in 2005 dominated the use of the federal R&D tax credit, similarly mirroring usage of the R&D tax credit here in Pennsylvania. Further, the GAO found that the federal R&D tax credit in 2005 provided an

⁹The most recent year for which estimated state-level R&D spending is available from the National Science Foundation is 2011.

average marginal incentive of between 6.4 to 7.3 percent. In other words, the federal R&D tax credit stimulated an additional amount of research spending in the United States of between 6.4 percent to 7.3 percent at the business level.¹⁰

A study released in September 2011¹¹ by the R&D Credit Coalition, an organization of trade associations and companies dedicated to the permanent establishment of the federal R&D tax credit, examined the economic impact of the existing R&D tax credit and the potential impact of strengthening certain provisions of the R&D tax credit. The study found that the existing federal R&D tax credit “is estimated to have increased annual private research spending by \$10 billion in the short-term and by \$22 billion in the long-term.” It was noted that these annual figures compare very favorably with the \$6 to \$8 billion annual federal revenue loss attributed to the credit.

R&D Tax Credit Programs in Other States

A majority of states that have a corporate net income tax have sought to capture the potential benefits of encouraging R&D within their state by enacting an R&D tax credit. There are 40 other states besides Pennsylvania that provide for R&D tax credits. Most incorporate provisions of current or former R&D credits under the Internal Revenue Code.¹²

New Jersey’s R&D tax credit is like Pennsylvania’s in that it mirrors the federal R&D tax credit. However, New Jersey’s R&D tax credit statute does not cap the total amount of credit that can be awarded in a year. Like the Pennsylvania R&D tax credit prior to Act 46 of 2003, there is a 50 percent cap on the amount of credit that a taxpayer can apply against its tax year liability. In fiscal year 2013, \$65.6 million in R&D tax credit was claimed in New Jersey. Additionally, the New Jersey R&D tax credit statute allows certain biotech and emerging technology companies to sell unused R&D tax credits to any company paying the corporate net income tax.¹³ After Act 46 of 2003, all companies receiving the Pennsylvania R&D tax credit, regardless of their business sector, can sell or assign any unused R&D tax credits awarded beginning in December 2003.

Effectiveness of the Pennsylvania R&D Tax Credit Program

The time frame for R&D projects in the private sector can be lengthy. It is not uncommon for businesses to have R&D projects extend for 10 to 15 years or more. The Pennsylvania R&D tax credit has thus far had a potential impact on increasing research expenses in sixteen years, 1997 through 2012. Although 1996 Pennsylvania research expenses were used to calculate the credit in 1997, the taxpayer’s R&D decisions could not have been affected by the credit prior to enactment of Act 7 in May 1997. Also, the changes made by Act 46 of 2003 altered several parameters of the program that could impact the effectiveness of the R&D tax credit. However, some observations can be made about the effectiveness of the Pennsylvania R&D tax credit in its relatively short existence.

As was noted above, the most recent economic recession did have an impact on R&D spending in Pennsylvania by private industry. Overall, R&D spending in Pennsylvania by industry fell by 13.2 percent in 2008 but recovered modestly in 2009 to grow by 1.9 percent according to NSF data.

Over the lifetime of the R&D tax credit program, 2,085 different taxpayers have been awarded some amount of the total \$488 million in tax credit awarded between 1997 and 2013. The number of taxpayers qualifying for the tax credit due to increased Pennsylvania research expenditures is still expanding, though there is some volatility from year to year regarding Pennsylvania research expenditure amounts.

¹⁰ “The Research Tax Credit’s Design and Administration Can Be Improved”, Prepared by the Government Accountability Office (GAO), GAO-10-136, November 2009.

¹¹ “The R&D Credit: An Effective Policy for Promoting Research Spending,” Prepared by Ernst and Young LLP for the R&D Credit Coalition, September 2011.

¹² CCH Incorporated, Multistate Charts, ¶680-200 Credits for Investment/Research Activities.

¹³ Companies with 225 employees or less may sell unused R&D tax credits in New Jersey.

Of the 631 taxpayers receiving the R&D tax credit in 2013, 200 were either Pennsylvania S corporations, LLCs, LLPs (limited liability partnerships) or individuals and 431 were C corporations. The S corporations, LLCs, LLPs or individuals received \$13.0 million in R&D tax credit, while the C corporations received \$42.0 million.

The 631 taxpayers claiming the R&D tax credit in 2013 had total Pennsylvania research expenditures in taxable year 2012 of \$3,434.9 million. This was an 18.5 percent increase compared to their total Pennsylvania research expenditures in taxable year 2011 of \$2,897.6 million.

Impact on Not Small Businesses

Out of the 631 taxpayers receiving the tax credit in 2013, 355 did not qualify as “small” businesses. Their total Pennsylvania research expenditures in taxable year 2012 were \$3,294.3 million, an 18.1 percent increase over their taxable year 2011 Pennsylvania research expenditures of \$2,790.3 million. They received \$45.6 million in R&D tax credit in December 2013.

Of the 355 “not small” businesses, 298 increased their Pennsylvania research expenditures in taxable year 2012 over taxable year 2011 by 36.5 percent in the aggregate. Their Pennsylvania research expenditures in taxable year 2012 rose to \$2,173.2 million from \$1,591.8 million in taxable year 2011. Only 57 of these businesses reduced their Pennsylvania research expenditures over the same period. Their Pennsylvania research expenditures in taxable year 2012 declined by 6.5 percent to \$1,121.1 million from \$1,198.5 million in taxable year 2011.

Impact on Small Businesses

Out of the 631 taxpayers receiving the tax credit in 2013, 276 were “small” businesses. Their total Pennsylvania research expenditures in taxable year 2012 were \$140.6 million, a 31 percent increase over their taxable year 2011 Pennsylvania research expenditures of \$107.3 million.

The 276 “small” businesses received \$9.4 million in R&D tax credit of the \$11.0 million set aside for them in 2012.

Of the 276 “small” businesses, 230 increased their Pennsylvania research expenditures in taxable year 2012 over taxable year 2011 by 41.2 percent in the aggregate. Their Pennsylvania research expenditures in taxable year 2012 rose to \$123.4 million from \$87.4 million in taxable year 2011. Only 46 “small” businesses reduced their Pennsylvania research expenditures over the same period. Their Pennsylvania research expenditures in taxable year 2012 declined by 13.8 percent to \$17.1 million from \$19.9 million in taxable year 2011.

Impact on First Time Claimants and New Companies

In 2013, 181 taxpayers were awarded the tax credit for the first time, claiming \$8.8 million in credit. Their Pennsylvania research expenditures totaled \$1,030.7 million for taxable year 2012. Conversely, 221 taxpayers that claimed the tax credit in 2012 did not receive any credit in 2013. These 221 taxpayers had Pennsylvania research expenditures in taxable year 2011 of \$1,899.4 million and claimed \$22.2 million in tax credit in 2012.

Of all the taxpayers claiming the R&D tax credit in 2013, 291 were companies incorporated in Pennsylvania after the passage of Act 7 of 1997. It is possible that not all of these newly incorporated companies are start-ups, but may be newly formed subsidiaries of a parent corporation. These companies claimed \$30.0 million in tax credit in 2013 and had total Pennsylvania research expenditures in taxable year 2012 of \$1,906.6 million, a 16.8 percent increase from their Pennsylvania research expenditures in taxable year 2011 of \$1,631.7 million.

The 291 recently incorporated companies had a total taxable year 2011 CSFT liability of \$6.4 million; 144 taxpayers had zero tax liability. The 291 new companies had a total taxable year 2011 CNIT liability of \$10.8 million; 252 taxpayers had zero tax liability.

Impact on Established Companies

In order to provide more insight into the companies that regularly claim the R&D tax credit, this report will examine 132 taxpayers for which the Department has tracked Pennsylvania research expenditures for the last ten taxable years, from 2003 through 2012. This group of credit recipients has received \$64.0 million in total tax credit from 1997 through 2013, or 13.1 percent of the total \$488 million awarded over seventeen years. These 132 companies represent 45.2 percent of the number of companies that received the R&D tax credit in its first year, 1997. As a group, these taxpayers are a representative cross-section of the type of companies that have come to consistently claim the R&D tax credit.

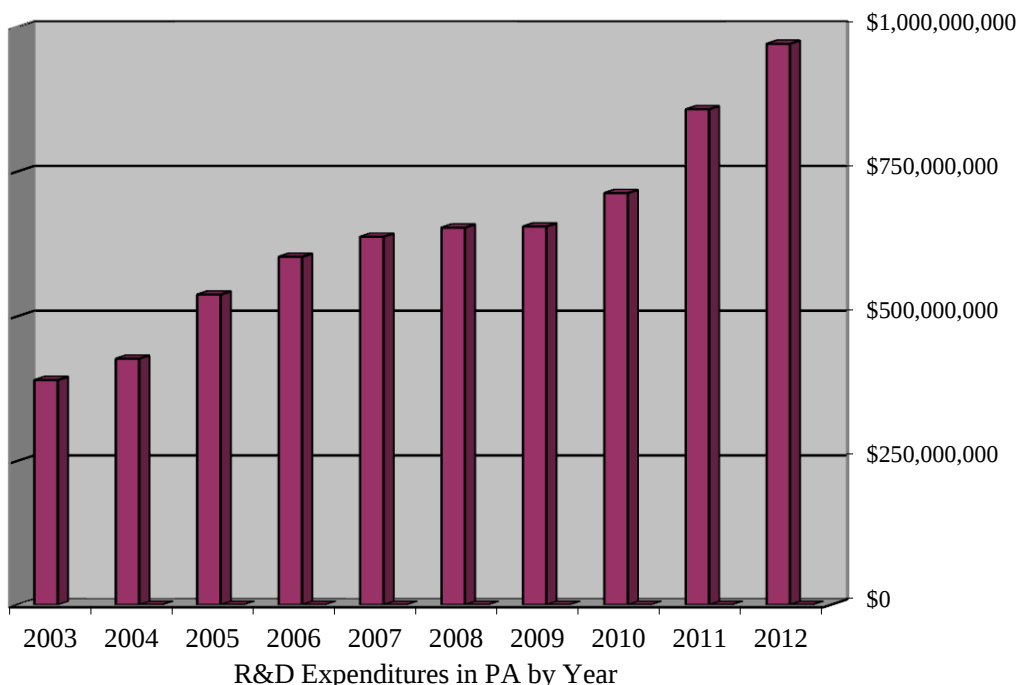
For these 132 taxpayers, their 2012 Pennsylvania R&D expenditures totaled \$970.8 million. This is an aggregate growth rate of 149 percent over their 2003 Pennsylvania R&D expenditures of \$389.9 million; between 2003 and 2012, the Pennsylvania R&D expenditures for these 132 taxpayers grew at a compound annual growth rate of 10.7 percent.

These 132 taxpayers were awarded about \$14.7 million in R&D tax credit in 2013, 26.7 percent of the total amount of R&D tax credit awarded in December 2013. This credit amount was 1.5 percent of their total amount of Pennsylvania research expenditures in taxable year 2012. Overall, it is important to note that the R&D tax credit awarded remains relatively small when compared to the amount of money spent by the taxpayers to conduct their research activities in the Commonwealth.

The 132 established taxpayers had a total CSFT liability for taxable year 2011 of \$6.4 million and a total CNIT liability for taxable year 2011 of \$26.7 million.

Chart 1 graphically shows the Pennsylvania R&D expenditures for the 132 established taxpayers for the last ten taxable years, 2003 through 2012.

Chart 1. Pennsylvania R&D Expenditures by Year for 132 Established Companies With PA Expenditure Data For 2003 through 2012



This chart graphically demonstrates the effect of the most recent economic recession on R&D expenditures in Pennsylvania for the 132 taxpayers included in the data. The R&D expenditures in Pennsylvania for these 132 taxpayers grew by 5.7 percent in 2007, prior to the recession. However, due in part to the recession, the growth in their Pennsylvania R&D expenditures in 2008 slowed to 2.5%, when compared to 2007, and was almost flat in 2009, growing by only 0.3% over 2008. Their Pennsylvania R&D expenditures resumed strong growth in 2010 and 2011, expanding by 8.8 percent and 20.3 percent respectively.

Small versus Not “Small”

Of the 132 taxpayers, 82 did not qualify as “small” businesses. They received about \$55.6 million in tax credit over the seventeen years of the program. Their 2012 Pennsylvania R&D expenditures totaled \$930.3 million. This is an aggregate growth rate of 143.1 percent over their 2003 Pennsylvania R&D expenditures of \$382.7 million; between 2003 and 2012, the Pennsylvania R&D expenditures for these 82 taxpayers grew at a compound annual growth rate of 10.4 percent.

Of the 132 taxpayers, there were 50 “small” businesses that received about \$8.4 million in tax credit over the seventeen years of the program. Their 2012 Pennsylvania R&D expenditures totaled \$40.6 million. This is an aggregate growth rate of 462 percent over their 2003 Pennsylvania R&D expenditures of \$7.2 million; between 2003 and 2012, the Pennsylvania R&D expenditures for these 50 taxpayers grew at a compound annual growth rate of 21.1 percent.

By Industry Type

Of the 132 taxpayers, 88 were classified as manufacturers. They received \$52.3 million in tax credit over the seventeen years of the program. Their 2012 Pennsylvania R&D expenditures totaled \$816.9 million. This is an aggregate growth rate of 130 percent over their 2003 Pennsylvania R&D expenditures of \$354.8 million; between 2003 and 2012, the Pennsylvania R&D expenditures for these 88 taxpayers grew at a compound annual growth rate of 9.7 percent.

Of the 132 taxpayers, there were 44 non-manufacturing businesses that received \$11.7 million in tax credit over the seventeen years of the program. Their 2012 Pennsylvania R&D expenditures totaled \$153.9 million. This is an aggregate growth rate of 338 percent over their 2003 Pennsylvania R&D expenditures of \$35.1 million; between 2003 and 2012, the Pennsylvania R&D expenditures for these 44 taxpayers grew at a compound annual growth rate of 17.8 percent.

Conclusions on the Impact of the R&D Tax Credit in Pennsylvania

When all 631 taxpayers receiving the R&D tax credit in 2013 were examined, “small” businesses increased their Pennsylvania research expenditures in taxable year 2012 more than “not small” businesses. However, the Pennsylvania research expenditures for “small” businesses were only 3.1 percent of the total Pennsylvania research expenditures in taxable year 2012. The overwhelming majority of Pennsylvania research expenditures continue to be made by taxpayers not classified as “small” businesses.

Of the 132 taxpayers examined for whom the Department has tracked Pennsylvania research expenditures for the last ten taxable years, for 2003 through 2012, manufacturers were the primary beneficiaries. Across all of the business types, the R&D tax credit remains a small percentage of Pennsylvania research expenditures. Hence, many other factors are likely to affect a company’s R&D spending decisions.

Report Conclusion

The R&D tax credit has existed in Pennsylvania for seventeen years. Literature evaluating the effectiveness of the federal R&D tax credit and state R&D tax credits has shown mixed results regarding the effectiveness of the programs. Many factors other than the R&D tax credit influence a company’s R&D investment decisions. This report’s other observations can be summarized as:

- In December 2013, 631 companies were awarded credits, receiving the capped amount of \$55 million, or 58.2 percent of the amount requested.
- In the absence of a cap, \$94.5 million in tax credits would have been awarded.
- In tax year 2012, the 631 companies awarded the R&D tax credit in 2013 had total Pennsylvania research expenditures of \$3,434.9 million, an 18.5 percent increase over their tax year 2011 Pennsylvania research expenditures.
- Manufacturing firms, particularly pharmaceutical manufacturers, continue to be the primary beneficiaries of the R&D tax credit.
- “Small” businesses claimed \$9.4 million of the \$11.0 million in R&D tax credit set aside for them in 2013.
- As of February 2014, a total of \$65.0 million in unused R&D tax credits have been sold or assigned from tax credits awarded from December 2003 through December 2012; \$60.9 million was paid for the unused credit, or 93.7 percent of the value of the unused credits.
- The R&D tax credit program has awarded a total of \$488 million in tax credit to 2,085 different taxpayers over the life of the program thus far. Without the caps on annual awards, a total of \$1,358.9 million in requested R&D tax credit would have been awarded. The effect of the annual cap on awards reduced the amount of R&D tax credits awarded to 36 percent of the requested amount.

APPENDIX A

Table 1. Pennsylvania Research & Development Tax Credit Program
Taxpayers Receiving Credit in December 2013, 2012 and 2011 in Dollars
Sorted by 2013 Credit Awarded (Largest to Smallest)

<i>Taxpayer Name</i>	<i>2013 Credit Awarded</i>	<i>2013 Credit Utilized¹</i>	<i>2012 & 2011 Credit Awarded</i>	<i>2012 & 2011 Credit Utilized¹</i>
Teva Branded Pharmaceutical Products R&D, Inc.	\$5,485,485	\$0	\$1,470,814	\$1,470,814
Eli Lilly and Company	\$5,019,493	\$0	\$5,667,341	\$3,066,983
Janssen Research & Development, LLC (f/k/a J&J Pharmaceutical Research & Development LLC)	\$3,468,471	\$0	\$7,656,287	\$704,927
GlaxoSmithKline, LLC (f/k/a SmithKline Beecham Corporation)	\$2,357,066	\$0	\$5,199,276	\$951,581
LSI Corporation	\$1,596,429	\$0	\$3,377,154	\$1,402,210
General Electric Company	\$1,568,021	\$0	\$0	\$0
Google, Inc.	\$1,426,583	\$0	\$409,206	\$409,206
CNH America, LLC	\$1,229,209	\$0	\$770,484	\$770,484
N.A. Water Systems, LLC	\$1,146,495	\$0	\$223,755	\$223,755
Alcoa, Inc.	\$1,074,938	\$0	\$0	\$0
Endo Pharmaceuticals, Inc.	\$973,073	\$0	\$680,466	\$680,466
Sanofi Pasteur, Inc.	\$656,436	\$0	\$440,094	\$440,094
eBay, Inc.	\$622,707	\$0	\$0	\$0
Susquehanna International Group, LLP	\$557,464	\$0	\$0	\$0
PPG Industries, Inc.	\$544,914	\$0	\$238,340	\$238,340
Cyoptics, Inc.	\$471,531	\$0	\$3,784	\$3,784
Auxilium Pharmaceuticals, Inc.	\$465,755	\$0	\$0	\$0
KPGW Holding Company, LLC	\$463,119	\$0	\$67,367	\$0
Process Combustion Corporation	\$417,830	\$0	\$67,505	\$14,591
Seneca Resources Corporation	\$413,193	\$0	\$786,694	\$0
Forest Research Institute, Inc.	\$369,915	\$0	\$1,480,567	\$61,366
Intel Americas, Inc.	\$365,107	\$0	\$162,221	\$106,359
Caterpillar, Inc.	\$359,527	\$0	\$281,997	\$281,997
The Hershey Company	\$353,204	\$0	\$262,587	\$98,934
United States Steel Corporation	\$352,288	\$0	\$427,447	\$427,447
CSL Behring, LLC	\$345,642	\$0	\$413,174	\$70,263
Omnyx, LLC	\$326,702	\$0	\$0	\$0
Immunex Corporation	\$319,819	\$0	\$734,825	\$489,458
Globus Medical, Inc.	\$309,819	\$0	\$351,823	\$351,823
Blue Belt Technologies, Inc.	\$275,605	\$0	\$85,490	\$85,490
Cisco Systems, Inc.	\$272,593	\$0	\$1,477	\$0
Discovery Laboratories, Inc.	\$272,334	\$0	\$0	\$0
Joy Technologies, Inc.	\$272,199	\$0	\$134,232	\$0
Texas Instruments Incorporated	\$269,293	\$0	\$294,287	\$105,046
Respironics, Inc.	\$265,872	\$0	\$158,108	\$0
Shire US Holdings, Inc.	\$255,775	\$0	\$0	\$0
Cognition Therapeutics, Inc.	\$255,549	\$0	\$249,722	\$169,393
Hydro-Pac, Inc.	\$253,345	\$0	\$278,056	\$184,904
Tyco Electronics Corporation	\$231,499	\$0	\$0	\$0
Kennametal, Inc.	\$223,855	\$0	\$173,707	\$0
NextGen Healthcare Information Systems, Inc.	\$223,611	\$0	\$292,800	\$292,800
CE Citycom	\$222,282	\$0	\$550,535	\$549,307
Seegrid Corporation	\$208,944	\$0	\$182,002	\$9,447
AMETEK, Inc.	\$199,985	\$0	\$139,264	\$139,264

<i>Taxpayer Name</i>	<i>2013 Credit Awarded</i>	<i>2013 Credit Utilized¹</i>	<i>2012 & 2011 Credit Awarded</i>	<i>2012 & 2011 Credit Utilized¹</i>
International Business Machines Corporation	\$199,462	\$0	\$0	\$0
Lord Corporation	\$198,134	\$0	\$192,767	\$39,057
ANSYS, Inc.	\$191,177	\$0	\$5,531	\$5,531
Ansaldo STS USA International, Co.	\$190,405	\$0	\$0	\$0
Trevena, Inc. (f/k/a Parallax, Inc.)	\$190,153	\$0	\$329,406	\$314,406
PMC-Sierra US, Inc.	\$188,585	\$0	\$141,429	\$55,223
Johnson Matthey, Inc.	\$185,687	\$0	\$155,257	\$155,257
Grove US, LLC	\$181,761	\$0	\$379,993	\$41,373
West Pharmaceutical Services, Inc. (PA)	\$177,811	\$0	\$67,859	\$23,691
Victaulic Company	\$172,488	\$0	\$331,206	\$331,206
Schramm, Inc.	\$167,359	\$0	\$0	\$0
Auto Soft, Inc.	\$161,793	\$0	\$138,882	\$0
Accu Measurement Testing, Inc.	\$161,478	\$0	\$219,241	\$219,241
Bentley Systems Incorporated	\$157,689	\$0	\$182,541	\$0
Universal Stainless and Alloy Products, Inc.	\$156,734	\$0	\$106,733	\$6,751
Connecticut General Life Insurance Co.	\$155,914	\$0	\$0	\$0
Advanced Research Systems, Inc.	\$150,683	\$0	\$55,097	\$55,097
Novo Nordisk, Inc.	\$147,484	\$0	\$254,354	\$254,354
Apreece Pharmaceuticals Company, Inc.	\$141,091	\$0	\$72,187	\$0
ABB, Inc.	\$137,054	\$0	\$0	\$0
Listrak, Inc. (f/k/a Remark Internet, Inc.)	\$136,621	\$0	\$0	\$0
Caterpillar Global Mining America, LLC (f/k/a Bucyrus America, Inc.)	\$134,351	\$0	\$55,735	\$0
GAI-Tronics Corporation	\$129,845	\$0	\$17,466	\$17,466
Dun and Bradstreet, Inc.	\$126,185	\$0	\$0	\$0
II-VI Incorporated	\$125,832	\$0	\$135,842	\$0
Chant Engineering Co., Inc.	\$125,362	\$0	\$141,749	\$95,271
Union Carbide Corporation	\$123,157	\$0	\$109,206	\$27,839
RB Distribution, Inc.	\$122,193	\$0	\$127,509	\$127,509
Ecotech Marine, LLC	\$121,255	\$0	\$97,114	\$97,114
GES Automation Technology, Inc.	\$120,640	\$0	\$66,418	\$42,720
Ceptaris Therapeutics, Inc.	\$117,630	\$0	\$133,536	\$2,365
Minitab, Inc.	\$117,425	\$0	\$280,777	\$150,439
Think Through Learning, Inc. (f/k/a Apangea Learning, Inc.)	\$117,347	\$0	\$86,668	\$0
Duolingo, Inc.	\$117,304	\$0	\$0	\$0
Tarsa Therapeutics, Inc.	\$113,690	\$0	\$141,919	\$48,526
Avere Systems, Inc.	\$113,022	\$0	\$130,422	\$100
EFCO, Inc.	\$112,574	\$0	\$0	\$0
Progenra, Inc.	\$110,074	\$0	\$67,340	\$67,340
The Valspar Corporation	\$109,673	\$0	\$233,812	\$0
LD Astorino & Associates, Ltd.	\$108,129	\$0	\$0	\$0
Aquion Energy, Inc.	\$107,564	\$0	\$0	\$0
BioSpectra, Inc.	\$107,029	\$0	\$77,711	\$75,711
Puritan Products, Inc.	\$105,090	\$0	\$110,770	\$110,563
Penn Manufacturing Industries, Inc.	\$105,011	\$0	\$124,320	\$66,257
NCC Automated Systems, Inc.	\$104,087	\$0	\$0	\$0
Actel Corporation	\$101,409	\$0	\$0	\$0
AT&T Services, Inc.	\$99,985	\$0	\$60,965	\$9,640
Synchronoss Technologies, Inc.	\$99,887	\$0	\$121,546	\$121,546
Electro-Science Laboratories, Inc.	\$99,772	\$0	\$145,275	\$145,275
eDigital Data Center, Inc.	\$97,103	\$0	\$109,376	\$109,376
GE Betz, Inc.	\$95,949	\$0	\$302,784	\$22,914
VideoRay, LLC	\$95,268	\$0	\$58,884	\$1,322
Akustica, Inc.	\$95,260	\$0	\$35,257	\$0
MEI, Inc.	\$94,996	\$0	\$80,133	\$78,316
Bloom Engineering Company, Inc.	\$93,543	\$0	\$0	\$0

<i>Taxpayer Name</i>	<i>2013 Credit Awarded</i>	<i>2013 Credit Utilized¹</i>	<i>2012 & 2011 Credit Awarded</i>	<i>2012 & 2011 Credit Utilized¹</i>
Synergy Advanced Pharmaceuticals, Inc.	\$91,651	\$0	\$0	\$0
HindlePower, Inc.	\$86,124	\$0	\$1,997	\$1,963
CD Diagnostics, Inc.	\$85,233	\$0	\$0	\$0
Siemens PLM Software II US, Inc.	\$84,767	\$0	\$0	\$0
FirstEnergy Corp.	\$84,048	\$0	\$0	\$0
Industrial Scientific Corporation	\$81,579	\$0	\$119,694	\$119,694
Caliber Therapeutics, Inc.	\$80,654	\$0	\$63,764	\$23,639
Pennoni Associates, Inc.	\$80,466	\$0	\$27,822	\$27,822
FMC Technologies Measurement Solutions	\$78,117	\$0	\$0	\$0
Wavefront Research, Inc.	\$77,525	\$0	\$77,724	\$77,724
Verizon Business Network Services, Inc.	\$75,399	\$0	\$53,082	\$53,082
Lasko Products, Inc.	\$73,233	\$0	\$28,109	\$28,109
C&J Industries, Inc.	\$71,555	\$0	\$0	\$0
K&H Technologies, Inc.	\$70,330	\$0	\$18,759	\$435
Ad Base Group, Inc.	\$70,250	\$0	\$162,973	\$115,029
Raytheon Company	\$67,472	\$0	\$0	\$0
ThingWorx, Inc.	\$66,660	\$0	\$61,541	\$844
Finisar Corporation	\$66,625	\$0	\$190,657	\$54,714
Momentum Dynamics Corporation, Inc.	\$66,526	\$0	\$0	\$0
EMS Charts, Inc.	\$66,181	\$0	\$136,912	\$136,912
Autodesk, Inc.	\$65,921	\$0	\$59,471	\$29,772
GlobalSubmit, Inc.	\$65,887	\$0	\$0	\$0
Coldlight Solutions, LLC	\$65,394	\$0	\$63,802	\$63,802
Aquatech International Corporation	\$64,060	\$0	\$126,159	\$110,070
Tiversa Holding Corp. (f/k/a Tiversa, Inc.)	\$62,667	\$0	\$0	\$0
Aerotech, Inc.	\$62,041	\$0	\$36,654	\$36,654
The Dow Chemical Company	\$61,861	\$0	\$37,856	\$37,856
MPD Holdings, LLC	\$61,156	\$0	\$0	\$0
Document Solutions Group, Inc.	\$60,597	\$0	\$63,948	\$27,139
Wheelhouse Analytics, LLC (f/k/a Coates Solutions, LLC)	\$59,753	\$0	\$51,578	\$51,578
Education Management Solutions, Inc.	\$59,444	\$0	\$0	\$0
Iagnosis, Inc.	\$59,134	\$0	\$0	\$0
Tech Molded Plastics, Inc.	\$59,100	\$0	\$62,004	\$62,004
Carnegie Robotics, LLC	\$58,671	\$0	\$0	\$0
Rajant Corporation	\$58,064	\$0	\$0	\$0
Venture 3 Systems, LLC	\$57,402	\$0	\$69,031	\$69,031
Braskem America, Inc.	\$56,836	\$0	\$0	\$0
Dataforma Incorporated	\$56,623	\$0	\$71,171	\$57,655
Gravic, Inc.	\$55,317	\$0	\$0	\$0
Combined Conditional Access Development	\$54,838	\$0	\$0	\$0
North American Hoganas, Inc.	\$53,659	\$0	\$61,961	\$61,961
Compunetix, Inc.	\$53,438	\$0	\$0	\$0
Charles J. Arsenault, Inc.	\$53,310	\$0	\$0	\$0
Oberg Industries, Inc.	\$52,968	\$0	\$3,918	\$2,098
Optinose US, Inc.	\$52,864	\$0	\$0	\$0
Bridge Semiconductor Corporation	\$52,788	\$0	\$271,166	\$270,677
Renick Brothers Construction Company	\$52,763	\$0	\$0	\$0
Woodward McCoach, Inc.	\$52,455	\$0	\$614,920	\$614,920
Netronome Systems, Inc.	\$52,358	\$0	\$0	\$0
Pikimal, LLC (d/b/a WebKite)	\$52,116	\$0	\$54,847	\$54,847
Knopp Biosciences, LLC	\$52,077	\$0	\$0	\$0
DT Davis Enterprises, Ltd. Hovortech International	\$52,053	\$0	\$0	\$0
NESTEC, Inc.	\$51,660	\$0	\$0	\$0
Reynolds & Reynolds Electronics, Inc.	\$51,280	\$0	\$35,881	\$24,221
Frontline Technologies, Inc.	\$51,194	\$0	\$22,583	\$22,583
Gemini Plastics, Inc.	\$50,917	\$0	\$282,822	\$93,200

<i>Taxpayer Name</i>	<i>2013 Credit Awarded</i>	<i>2013 Credit Utilized¹</i>	<i>2012 & 2011 Credit Awarded</i>	<i>2012 & 2011 Credit Utilized¹</i>
Techniserv, Inc.	\$50,348	\$0	\$27,956	\$27,956
Epiphany Solar Water Systems, LLC	\$50,243	\$0	\$0	\$0
National Medical Services, LLC	\$49,938	\$0	\$41,336	\$41,336
Bitronics, LLC	\$49,659	\$0	\$42,486	\$42,486
Carlisle Construction Materials Incorporated	\$49,570	\$0	\$51,982	\$51,982
Applied Systems Associates, Inc.	\$49,495	\$0	\$10,007	\$10,007
Walking Thumbs, LLC	\$48,949	\$0	\$0	\$0
Control Concepts Corporation	\$48,561	\$0	\$122,329	\$122,329
McKamish, Inc.	\$48,040	\$0	\$414	\$414
Urban Engineers, Inc.	\$48,040	\$0	\$0	\$0
Fleetwood Industries, Inc.	\$47,372	\$0	\$0	\$0
Dynalene, Inc.	\$47,328	\$0	\$34,805	\$34,805
Woodward, Inc.	\$47,215	\$0	\$0	\$0
Salimetrics, LLC	\$47,189	\$0	\$0	\$0
KCF Technologies, Inc.	\$47,088	\$0	\$428	\$428
Shaft Drillers International, LLP	\$46,370	\$0	\$0	\$0
Qortek, Inc.	\$46,051	\$0	\$135,249	\$9,830
Power Industrial Srv Corp. Donora Industrial Park	\$45,913	\$0	\$7,977	\$7,977
NTVI Fed, LLC	\$45,512	\$0	\$0	\$0
VMWARE, Inc.	\$44,899	\$0	\$25,499	\$25,499
Amplifier Research Corp.	\$44,860	\$0	\$0	\$0
Maya Design, Inc.	\$44,815	\$0	\$100,701	\$427
RJMetrics, Inc.	\$44,298	\$0	\$0	\$0
Stoner, Inc.	\$44,170	\$0	\$6,516	\$779
Starlite Diversified, Inc.	\$43,443	\$0	\$0	\$0
Swank Construction Company, LLC	\$43,392	\$0	\$0	\$0
Cellco Partnership	\$43,228	\$0	\$85,157	\$0
Jenrin Discovery, LLC	\$43,188	\$0	\$0	\$0
Certes Networks, Inc. (f/k/a Cipheroptics, Inc.)	\$43,002	\$0	\$67,472	\$67,472
Global Technology Enterprise Corp.	\$42,826	\$0	\$13,373	\$13,373
Schell Games, LLC	\$41,850	\$0	\$0	\$0
Trinity Industries, Inc.	\$40,957	\$0	\$0	\$0
Innovative Sintered Metals, Inc.	\$40,842	\$0	\$81,948	\$81,948
Itarco, LP	\$40,378	\$0	\$32,462	\$32,462
Gelest, Inc.	\$40,367	\$0	\$107,222	\$101,515
Laminated Materials Corporation	\$39,609	\$0	\$0	\$0
SAP America, Inc.	\$39,502	\$0	\$416,532	\$416,532
InvestEdge, Inc.	\$39,363	\$0	\$36,159	\$18,994
InfoMC, Inc.	\$39,104	\$0	\$96,744	\$1,533
Pennsy Corporation	\$39,048	\$0	\$0	\$0
Certainteed Corporation	\$38,925	\$0	\$0	\$0
FS-Elliott Co., LLC	\$38,806	\$0	\$65,918	\$28,243
Astrobotic Technology, Inc.	\$38,600	\$0	\$27,386	\$27,386
Cohera Medical, Inc.	\$38,211	\$0	\$57,722	\$57,722
Tiger Optics, Inc.	\$37,330	\$0	\$132,964	\$35,513
Jordan Acquisition Group, LLC (dba American Auto Matrix)	\$36,981	\$0	\$35,406	\$35,406
Vitae Pharmaceuticals, Inc. (f/k/a Concurrent Pharmaceuticals, Inc.)	\$36,899	\$0	\$180,206	\$10,540
Code Organa, LLC	\$36,527	\$0	\$0	\$0
Team Ten, LLC (American Eagle Paper Mills)	\$36,222	\$0	\$58,806	\$58,806
FedEx Corporate Services, Inc.	\$35,946	\$0	\$20,417	\$20,417
Controlled Molding, Inc.	\$35,885	\$0	\$86,981	\$78,476
Gamry Instruments, Inc.	\$35,870	\$0	\$30,973	\$30,973
Eriez Manufacturing Co.	\$35,833	\$0	\$5,708	\$5,708

<i>Taxpayer Name</i>	<i>2013 Credit Awarded</i>	<i>2013 Credit Utilized¹</i>	<i>2012 & 2011 Credit Awarded</i>	<i>2012 & 2011 Credit Utilized¹</i>
Hybrid Integration, LLC	\$35,299	\$0	\$0	\$0
PhaseBio Pharmaceuticals, Inc.	\$34,743	\$0	\$73,256	\$18,972
Milnes Engineering, Inc.	\$34,406	\$0	\$96,151	\$96,151
Cummins-Allison Corp.	\$34,042	\$0	\$0	\$0
Sungard Data Systems, Inc.	\$33,687	\$0	\$0	\$0
Penn Engineering and Manufacturing Corp.	\$33,527	\$0	\$24,357	\$3,889
Bra-Vor Tool & Die Company, Inc.	\$33,511	\$0	\$6,997	\$6,997
Boehringer Ingelheim Pharmaceuticals, Inc.	\$33,421	\$0	\$141,093	\$141,093
Tipton Medical & Diagnostic Center	\$33,382	\$0	\$27,713	\$21,213
Expert Data Labs, LLC	\$33,284	\$0	\$25,756	\$25,756
LifeSensors, Inc.	\$33,211	\$0	\$34,321	\$34,321
Vesuvius USA Corp.	\$32,804	\$0	\$43,788	\$29,104
Target Precision, LLC	\$32,541	\$0	\$0	\$0
David Horn, LLC	\$32,134	\$0	\$0	\$0
Graybills Tool & Die, Inc.	\$31,885	\$0	\$0	\$0
John Bean Technologies Corporation	\$31,603	\$0	\$0	\$0
ATI Operating Holdings, LLC	\$31,509	\$0	\$0	\$0
Cernostics, Inc.	\$31,335	\$0	\$42,004	\$42,004
Brookville Equipment Corporation	\$31,300	\$0	\$46,552	\$21,765
Magnetic Windings Co., Inc.	\$30,524	\$0	\$36,325	\$36,325
Harsco Corporation	\$30,187	\$0	\$6,114	\$0
Specialty Minerals, Inc.	\$30,147	\$0	\$1,710	\$1,710
Chick Workholding Solutions, Inc.	\$30,117	\$0	\$22,434	\$0
Sealstrip Corporation	\$29,804	\$0	\$0	\$0
Z-Band, Inc.	\$29,476	\$0	\$56,835	\$56,835
Datagrove, Inc.	\$29,050	\$0	\$34,800	\$21,488
Rinovum Womens Health, Inc. (f/k/a Intimate Bridge 2 Conception, Inc.)	\$28,921	\$0	\$18,978	\$1
Psychology Software Tools, Inc.	\$28,445	\$0	\$61,718	\$8,500
KYDEX, LLC	\$28,250	\$0	\$0	\$0
Thermo Fisher Scientific, Inc.	\$28,232	\$0	\$170,272	\$0
Savana, Inc.	\$28,070	\$0	\$0	\$0
Eitel Presses, Inc.	\$27,856	\$0	\$0	\$0
Qmac - Quality Machining, Inc.	\$27,243	\$0	\$53,934	\$53,934
TMG Health, Inc.	\$27,242	\$0	\$0	\$0
Impact Applications, Inc.	\$27,187	\$0	\$7,413	\$7,413
Shoefitr, Inc.	\$27,147	\$0	\$0	\$0
Castle Mold and Tool, Inc.	\$27,051	\$0	\$77,833	\$51,595
Martin Technology, Inc.	\$26,886	\$0	\$0	\$0
Printmail Systems, Inc.	\$26,395	\$0	\$30,418	\$30,418
Fab Tech, Inc. (d/b/a Corle Building Systems)	\$26,328	\$0	\$9,670	\$9,670
Suntex International, Inc.	\$26,254	\$0	\$31,629	\$28,826
Supelco, Inc.	\$25,992	\$0	\$18,828	\$18,828
NoWait, Inc.	\$25,831	\$0	\$11,526	\$11,526
Innovative Control Systems, Inc.	\$25,744	\$0	\$67,458	\$11,075
Lunchtime Software, LLC	\$25,683	\$0	\$12,530	\$12,421
QBC Diagnostics, Inc.	\$25,621	\$0	\$2,637	\$151
Kroff Chemical Company	\$25,465	\$0	\$39,133	\$26,699
MCI Communications Services, Inc.	\$25,157	\$0	\$9,681	\$9,681
Wacker Chemical Corporation	\$25,012	\$0	\$26,410	\$26,410
Ashland, Inc.	\$24,909	\$0	\$5,710	\$0
Huston, Inc.	\$24,877	\$0	\$38,002	\$36,173
New Berry, Inc. Berry Metal Company	\$24,724	\$0	\$0	\$0
KW, Inc.	\$24,595	\$0	\$38,069	\$38,069
Mars Fishcare NA, Inc.	\$24,257	\$0	\$14,541	\$14,541
Hodge Tool Company, Inc.	\$24,162	\$0	\$0	\$0
Hamill Manufacturing Company	\$24,020	\$0	\$0	\$0

<i>Taxpayer Name</i>	<i>2013 Credit Awarded</i>	<i>2013 Credit Utilized¹</i>	<i>2012 & 2011 Credit Awarded</i>	<i>2012 & 2011 Credit Utilized¹</i>
Rent Jungle, LLC	\$23,939	\$0	\$13,828	\$13,828
Zivtech, LLC	\$23,867	\$0	\$0	\$0
Oberon, Inc.	\$23,763	\$0	\$19,041	\$19,041
The Milnes Co., Inc.	\$23,650	\$0	\$64,459	\$0
Richter Precision, Inc.	\$23,566	\$0	\$4,464	\$4,464
Lamtec Corporation	\$23,548	\$0	\$6,454	\$6,454
Universal Electric Corporation	\$23,378	\$0	\$21,311	\$0
Blair Strip Steel Co.	\$23,300	\$0	\$17,467	\$17,467
Leidos, Inc. (f/k/a Science Applications International Corp.)	\$23,218	\$0	\$28,303	\$0
Airolution, LLC	\$23,135	\$0	\$0	\$0
Boulden Energy Systems, Inc.	\$22,975	\$0	\$0	\$0
Maguire Products, Inc.	\$22,876	\$0	\$4,495	\$950
Stack, Garber and Associates, Inc.	\$22,719	\$0	\$19,537	\$19,537
Sicom Systems, Inc.	\$22,561	\$0	\$57,461	\$57,461
K-Fab, Inc.	\$22,485	\$0	\$0	\$0
Centroid Corporation	\$22,461	\$0	\$33,616	\$33,616
Branch Medical Group, Inc.	\$22,435	\$0	\$18,850	\$18,850
QR Pharma, Inc.	\$22,414	\$0	\$42,511	\$42,511
Robert Bosch, LLC	\$22,374	\$0	\$0	\$0
ChromaTan, Inc.	\$22,313	\$0	\$0	\$0
Langan Engineering and Environmental Services, Inc.	\$22,180	\$0	\$0	\$0
Motors Drives & Controls, Inc.	\$22,131	\$0	\$6,757	\$5,929
Manley Holdings, Inc.	\$21,812	\$0	\$74,782	\$74,782
Express Dynamics, LLC	\$21,670	\$0	\$0	\$0
Diversified Machine, Inc.	\$21,544	\$0	\$14,223	\$1,741
Golden Brothers, Inc. (t/a Golden Technologies)	\$21,423	\$0	\$34,348	\$34,348
Collegiate Furnishing, Inc.	\$21,030	\$0	\$11,346	\$0
Streamlight, Inc.	\$20,844	\$0	\$13,306	\$13,306
CIW Enterprises, Inc.	\$20,659	\$0	\$2,473	\$2
Pelletron Corporation	\$20,605	\$0	\$27,778	\$27,778
AH Sportswear Co., Inc.	\$20,262	\$0	\$0	\$0
CM3 Building Solutions, Inc.	\$20,186	\$0	\$0	\$0
Sargent Electric Company	\$20,151	\$0	\$0	\$0
Avianna Molecular Technologies, LLC	\$20,034	\$0	\$24,119	\$24,119
Soft Genetics, LLC	\$19,852	\$0	\$33,884	\$33,884
US Silica Company	\$19,728	\$0	\$0	\$0
Talbar, Inc.	\$19,723	\$0	\$26,816	\$1,223
Kwantera Incorporated	\$19,624	\$0	\$0	\$0
Wampum Hardware Co.	\$19,539	\$0	\$11,939	\$11,939
Packaging Progressions, Inc.	\$19,475	\$0	\$0	\$0
Pivitec, LLC	\$19,413	\$0	\$0	\$0
Voci Technologies Incorporated	\$19,353	\$0	\$40,355	\$40,355
ConAgra Foods Enterprise Services, Inc.	\$19,218	\$0	\$0	\$0
Heyl & Patterson, Inc.	\$19,041	\$0	\$0	\$0
Magnesita Refractories Company	\$18,947	\$0	\$6,080	\$4,168
Co-eXprise, Inc.	\$18,830	\$0	\$1,493	\$1,493
Speciality Tires of America, Inc.	\$18,713	\$0	\$26,235	\$0
Ranbar Electrical Materials, Inc.	\$18,670	\$0	\$50,344	\$50,344
Fluitron, Inc.	\$18,660	\$0	\$0	\$0
JetAir, Inc.	\$18,421	\$0	\$0	\$0
Just Born, Inc.	\$18,341	\$0	\$15,288	\$903
Thompsons Candle Co.	\$18,275	\$0	\$10,882	\$1,684
Michael & Associates, Inc.	\$18,166	\$0	\$21,606	\$21,606
Automated Financial System, Inc.	\$18,151	\$0	\$0	\$0
Apprise Software, Inc.	\$18,083	\$0	\$13,404	\$0
First Insight, Inc.	\$17,992	\$0	\$35,863	\$35,863

<i>Taxpayer Name</i>	<i>2013 Credit Awarded</i>	<i>2013 Credit Utilized¹</i>	<i>2012 & 2011 Credit Awarded</i>	<i>2012 & 2011 Credit Utilized¹</i>
Lehigh Valley Technologies, Inc.	\$17,951	\$0	\$1,415	\$0
Markovitz Enterprises, Inc.	\$17,901	\$0	\$0	\$0
W.L. Gore & Associates, Inc.	\$17,800	\$0	\$39,943	\$33,524
Synopsys, Inc.	\$17,793	\$0	\$13,086	\$0
Boose at Cornwall, Inc.	\$17,677	\$0	\$0	\$0
CloudMine, LLC	\$17,581	\$0	\$0	\$0
Unicast Company	\$17,533	\$0	\$0	\$0
M-Mech Defense, Inc.	\$17,510	\$0	\$12,095	\$12,095
Custom Processing Services, Inc.	\$17,469	\$0	\$0	\$0
Walsh Construction Company	\$17,449	\$0	\$25,532	\$25,532
Jeannette Shade and Novelty Company (dba JSG Oceana)	\$17,253	\$0	\$10,290	\$0
Richardson Cooling Packages, LLC	\$17,002	\$0	\$5,470	\$883
Assistive Technology Products, Inc.	\$16,914	\$0	\$67,606	\$67,606
New Way Machine Components, Inc. (dba New Way Precision)	\$16,842	\$0	\$14,001	\$0
Weir Hazleton, Inc.	\$16,697	\$0	\$26,943	\$6,586
Plextronics, Inc.	\$16,420	\$0	\$71,047	\$71,047
Spectragenetics, LLC	\$16,405	\$0	\$0	\$0
Lake Tool, Inc.	\$16,273	\$0	\$0	\$0
Chemcut Holdings, LLC	\$16,232	\$0	\$42,478	\$42,359
Jarus Technologies Incorporated	\$16,167	\$0	\$0	\$0
Radius Corporation	\$16,031	\$0	\$0	\$0
The Drucker Company, Inc.	\$15,967	\$0	\$0	\$0
Shaw Industries, Inc.	\$15,958	\$0	\$14,759	\$129
Problem Solutions, LLC	\$15,919	\$0	\$7,393	\$7,393
Clarion Sintered Metals, Inc.	\$15,816	\$0	\$0	\$0
ExecutivePulse, Inc.	\$15,681	\$0	\$31,685	\$31,680
Gap Holding Company, Inc.	\$15,629	\$0	\$0	\$0
SKF USA, Inc.	\$15,476	\$0	\$0	\$0
Forms and Surfaces, Inc.	\$15,462	\$0	\$10,744	\$4,825
Big B Manufacturing, Inc.	\$15,334	\$0	\$22,440	\$0
Insinger Machine Company	\$15,316	\$0	\$24,468	\$24,468
Dynamic Materials Corporation	\$15,151	\$0	\$2,461	\$2,461
Infrascan, Inc.	\$15,077	\$0	\$0	\$0
Abbott Furnace Company, Inc.	\$15,071	\$0	\$3,892	\$3,892
Production System Technologies, Inc.	\$15,044	\$0	\$15,005	\$15,005
Flyer City Media, LLC (d/b/a MetroMe)	\$14,639	\$0	\$0	\$0
L.F. Lambert Spawn Company, Inc.	\$14,592	\$0	\$6,781	\$0
Allomet Corporation	\$14,544	\$0	\$49,274	\$0
Kieran Timberlake Associates, LLP	\$14,489	\$0	\$0	\$0
Hernance Strouse, Inc.	\$14,426	\$0	\$4,152	\$4,152
USSC Group, Inc.	\$14,425	\$0	\$0	\$0
Diversified Coatings, Inc.	\$14,424	\$0	\$0	\$0
Sentient Investment Corporation	\$14,418	\$0	\$7,034	\$7,034
Berwind Corporation	\$14,375	\$0	\$8,134	\$8,134
Cloud Computing Technologies, LLC	\$14,370	\$0	\$6,553	\$6,553
Jazz Pharmaceuticals, Inc.	\$14,203	\$0	\$0	\$0
Fogmaker North America, LLC	\$14,186	\$0	\$4,179	\$0
Follett Corporation	\$13,953	\$0	\$17,988	\$6,430
VT Graphics, Inc.	\$13,741	\$0	\$3,265	\$191
Sweet Street Desserts, Inc.	\$13,670	\$0	\$28,583	\$28,583
Jamestown Paint Company	\$13,571	\$0	\$1,796	\$1,796
Raven Industries, Inc.	\$13,565	\$0	\$12,685	\$12,685
PSI Pumping Solutions, Inc.	\$13,522	\$0	\$0	\$0
American Turned Products, Inc.	\$13,414	\$0	\$19,198	\$17,563
Essent Corporation	\$13,252	\$0	\$0	\$0
Ismael J. Hidalgo	\$13,189	\$0	\$16,888	\$16,888
Patrick M. Dentinger	\$13,189	\$0	\$16,892	\$16,892
Advanced Cooling Technologies, Inc.	\$12,948	\$0	\$2,343	\$2,343

<i>Taxpayer Name</i>	<i>2013 Credit Awarded</i>	<i>2013 Credit Utilized¹</i>	<i>2012 & 2011 Credit Awarded</i>	<i>2012 & 2011 Credit Utilized¹</i>
Calumet Specialty Product Partners, LP	\$12,839	\$0	\$0	\$0
Reclamere, Inc.	\$12,823	\$0	\$51,176	\$51,176
LCR Electronics	\$12,697	\$0	\$31,006	\$18,746
Try Tek Machine Works Incorporated	\$12,687	\$0	\$9,953	\$0
Flexicon Corporation	\$12,657	\$0	\$0	\$0
Terra Group Corporation	\$12,649	\$0	\$0	\$0
Diamondback Automotive Accessories	\$12,565	\$0	\$28,866	\$27,098
Ventana USA	\$12,320	\$0	\$84,376	\$55,480
Crestwood Membranes, Inc.	\$12,291	\$0	\$10,821	\$10,821
Dobil Laboratories, Inc.	\$12,170	\$0	\$31,925	\$11,534
Solo Laboratories, Inc.	\$12,153	\$0	\$1,224	\$1,224
Clutch Holdings, LLC	\$12,137	\$0	\$0	\$0
Cavanaugh Marketing Network, Inc. (dba Cavanaugh)	\$12,132	\$0	\$28,540	\$0
ThreeRivers 3D, Inc.	\$11,880	\$0	\$3,448	\$3,448
Lloyd Industries, Inc.	\$11,790	\$0	\$0	\$0
OptiXtal, Inc.	\$11,713	\$0	\$0	\$0
Train Control Systems, Inc.	\$11,713	\$0	\$0	\$0
Actco Tool & Manufacturing Company, Inc	\$11,562	\$0	\$0	\$0
Rebco, Inc.	\$11,544	\$0	\$25,438	\$25,438
Basic Carbide Corporation	\$11,395	\$0	\$5,859	\$570
Flexicath, Inc.	\$11,331	\$0	\$16,111	\$0
Fortna, Inc.	\$11,231	\$0	\$0	\$0
Superior Tire & Rubber Corp.	\$11,160	\$0	\$10,656	\$819
Redpath Integrated Pathology, Inc.	\$10,958	\$0	\$6,641	\$0
Premier Automation, LLC	\$10,926	\$0	\$6,140	\$0
Steven B. Golden Associates, Inc. (t/a Artskills)	\$10,889	\$0	\$98,477	\$41,370
ProMinent Fluid Controls, Inc.	\$10,866	\$0	\$0	\$0
IPEG, Inc.	\$10,825	\$0	\$0	\$0
American Infrastructure, Inc.	\$10,785	\$0	\$13,213	\$0
Plastek Industries, Inc.	\$10,590	\$0	\$0	\$0
Cook Vascular Corporation	\$10,460	\$0	\$13,133	\$13,133
K'Nex Brands, LP	\$10,457	\$0	\$0	\$0
Pilot Air Freight Corp.	\$10,403	\$0	\$0	\$0
Kovatch Mobile Equipment Corp.	\$10,315	\$0	\$10,146	\$583
Power Conversion Technologies, Inc.	\$10,291	\$0	\$10,980	\$10,980
Triumph Controls, LLC	\$10,281	\$0	\$0	\$0
Biocoat, Inc.	\$10,277	\$0	\$17,714	\$17,714
Custom Laminating Corporation	\$10,162	\$0	\$12,681	\$12,681
Beaumont Development, LLC	\$10,157	\$0	\$12,730	\$12,730
Alcoil USA, LLC	\$10,137	\$0	\$0	\$0
Rhodia, Inc.	\$10,069	\$0	\$0	\$0
United Metal Fabricators, Inc.	\$9,907	\$0	\$3,679	\$3,679
Laminar Flow, Inc.	\$9,761	\$0	\$28,383	\$28,383
Aptagen, LLC	\$9,696	\$0	\$9,734	\$9,734
Pennsylvania-American Water Company	\$9,677	\$0	\$6,286	\$6,286
Sentric, Inc.	\$9,649	\$0	\$5,510	\$5,510
AcademyOne, Inc.	\$9,611	\$0	\$64,469	\$64,469
Max Levy Autograph, Inc.	\$9,462	\$0	\$0	\$0
VascularStrategies, LLC	\$9,440	\$0	\$18,922	\$18,922
CTR Systems Parking, Inc.	\$9,347	\$0	\$0	\$0
Markel Corporation	\$9,285	\$0	\$17,762	\$1,340
Shifa Biomedical Corporation	\$9,110	\$0	\$77,285	\$77,285
Epic Web Studios	\$9,063	\$0	\$0	\$0
Effort Enterprises, Inc.	\$9,061	\$0	\$27,519	\$6,903
EKL Machine, Inc.	\$9,016	\$0	\$115,776	\$304
Standing Stone Consulting, Inc.	\$8,937	\$0	\$2,618	\$2,618

<i>Taxpayer Name</i>	<i>2013 Credit Awarded</i>	<i>2013 Credit Utilized¹</i>	<i>2012 & 2011 Credit Awarded</i>	<i>2012 & 2011 Credit Utilized¹</i>
GAI Consultants, Inc.	\$8,853	\$0	\$0	\$0
Circadiance, LLC	\$8,823	\$0	\$0	\$0
Flexible Compensators, Inc. (t/a Flex Com)	\$8,814	\$0	\$53,214	\$20,915
E.A. Fischione Instruments, Inc.	\$8,725	\$0	\$11,449	\$5,413
Community Light and Sound, Inc.	\$8,677	\$0	\$20,430	\$20,430
SKC, Inc.	\$8,622	\$0	\$6,758	\$6,758
Chelsea Building Products, Inc.	\$8,619	\$0	\$4,341	\$4,341
Joseph Barbato Associates, LLC	\$8,615	\$0	\$19,325	\$0
Phonetics, Inc. (d/b/a Sensaphone)	\$8,550	\$0	\$0	\$0
Verizon Data Services, LLC	\$8,517	\$0	\$105,258	\$1,110
Element ID, Inc.	\$8,453	\$0	\$0	\$0
Reaxis, Inc.	\$8,426	\$0	\$5,134	\$696
Superior Plastic Products, Inc.	\$8,341	\$0	\$0	\$0
Bostik, Inc.	\$8,334	\$0	\$14,167	\$14,167
Therm-Omega-Tech, Inc.	\$8,186	\$0	\$0	\$0
Mainstream Swimsuits, Inc.	\$8,145	\$0	\$29,507	\$0
Nazareth Industrial Corporation	\$8,079	\$0	\$43,041	\$43,041
SofterWare, Inc.	\$8,057	\$0	\$10,974	\$10,974
Herkules USA Corporation	\$7,893	\$0	\$0	\$0
Altra Industrial Motion, Inc.	\$7,740	\$0	\$29,758	\$0
Pittsburgh Logistics System, Inc.	\$7,737	\$0	\$0	\$0
Solar Innovations, Inc.	\$7,644	\$0	\$20,428	\$20,428
Intelmarx, Inc.	\$7,379	\$0	\$0	\$0
Medical Products Laboratories, Inc.	\$7,371	\$0	\$0	\$0
EF Precision, Inc.	\$7,343	\$0	\$6,439	\$6,439
Phoenix Contact Development & Manufacturing, Inc.	\$7,292	\$0	\$118,338	\$0
Custom Milling & Consulting, Inc.	\$7,284	\$0	\$10,619	\$10,619
Newman & Company, Inc.	\$7,203	\$0	\$0	\$0
The Warrell Corporation	\$7,170	\$0	\$0	\$0
PTR Group, LP	\$7,097	\$0	\$18,474	\$18,474
Talencea Corporation	\$6,981	\$0	\$0	\$0
Advanced Textile Composites, Inc.	\$6,948	\$0	\$5,499	\$5,499
Pasco Tool & Plastics, Inc.	\$6,925	\$0	\$8,151	\$8,151
Port Erie Plastics, Inc.	\$6,920	\$0	\$0	\$0
Okna Windows Corp.	\$6,918	\$0	\$0	\$0
PDQ Industries, Inc.	\$6,814	\$0	\$16,937	\$2,437
Reading Precast, Inc.	\$6,745	\$0	\$0	\$0
Drakontas, LLC	\$6,737	\$0	\$0	\$0
Erdman Anthony Associates, Inc.	\$6,697	\$0	\$0	\$0
Chromalox, Inc.	\$6,667	\$0	\$0	\$0
Ernst Conservation Seeds, Inc.	\$6,525	\$0	\$8,621	\$4,172
Gonnella Baking Company	\$6,398	\$0	\$0	\$0
Leech Industries, Inc.	\$6,327	\$0	\$3,027	\$3,027
Packworld USA, Ltd.	\$6,286	\$0	\$7,701	\$0
Hosler Corp.	\$6,280	\$0	\$0	\$0
FutureWei Technologies, Inc.	\$6,235	\$0	\$0	\$0
C.U.E., Inc.	\$6,212	\$0	\$6,019	\$1,111
Liquid X Printed Materials, Inc.	\$6,166	\$0	\$0	\$0
Furman Foods, Inc.	\$6,150	\$0	\$0	\$0
Magnatech International, Inc.	\$6,131	\$0	\$2,970	\$2,970
Allpoint Systems, LLC	\$6,124	\$0	\$0	\$0
Whitewater International, LLC	\$6,001	\$0	\$5,683	\$5,683
Spring City Electrical Mfg. Co.	\$5,901	\$0	\$0	\$0
Bulk Chemicals, Inc.	\$5,898	\$0	\$4,450	\$4,450
Tyrone Milling	\$5,859	\$0	\$11,319	\$5,375
Philadelphia Tramrail Enterprises, Inc.	\$5,834	\$0	\$8,659	\$1,104
Thread, LLC	\$5,781	\$0	\$0	\$0
Flexcut Tool Co., Inc.	\$5,715	\$0	\$0	\$0

<i>Taxpayer Name</i>	<i>2013 Credit Awarded</i>	<i>2013 Credit Utilized¹</i>	<i>2012 & 2011 Credit Awarded</i>	<i>2012 & 2011 Credit Utilized¹</i>
Sun Star, Inc.	\$5,651	\$0	\$7,338	\$7,338
Godshalls Quality Meats, Inc.	\$5,630	\$0	\$6,142	\$5,471
Havis, Inc.	\$5,626	\$0	\$0	\$0
AllFill, Inc.	\$5,613	\$0	\$0	\$0
X-F Enterprises, Inc.	\$5,435	\$0	\$4,568	\$533
Cardinal Systems, Inc.	\$5,399	\$0	\$9,927	\$5,317
FLSmith, Inc.	\$5,145	\$0	\$10,380	\$10,380
Skid Pipe Insulation, LLC	\$5,025	\$0	\$0	\$0
Turgeon Engineering, Inc.	\$4,992	\$0	\$0	\$0
Crystalplex Corporation	\$4,942	\$0	\$23,600	\$23,600
Edgemate, Inc.	\$4,929	\$0	\$8,402	\$3,614
Ingmar Medical, Ltd.	\$4,855	\$0	\$29,000	\$29,000
Preferred Security Components, Inc.	\$4,847	\$0	\$0	\$0
Pittsburgh Plastics Mfg, Inc.	\$4,792	\$0	\$10,404	\$7,938
Go Green APU, LLC	\$4,786	\$0	\$10,583	\$4
Lebanon Tool Company, Inc.	\$4,779	\$0	\$10,325	\$1,189
East Coast Erosion Blankets, LLC (dba East Coast Erosion Control)	\$4,715	\$0	\$8,567	\$8,567
Valtech Corporation	\$4,712	\$0	\$51,842	\$35,415
Fairmount Foundry, Inc.	\$4,711	\$0	\$30,064	\$30,064
Sentry Data Systems, Inc.	\$4,681	\$0	\$1,271	\$1,271
NeuroDx Development, LLC	\$4,561	\$0	\$0	\$0
Intertek Tesrting Serv. NA	\$4,551	\$0	\$0	\$0
Premier Dental Products Company	\$4,547	\$0	\$0	\$0
SFS Intec Incorporated	\$4,535	\$0	\$11,067	\$491
Prova Systems and Technologies, Inc.	\$4,473	\$0	\$0	\$0
Hydac Technology Corp.	\$4,465	\$0	\$5,813	\$5,813
Delmont Laboratories, Inc.	\$4,392	\$0	\$4,411	\$3
White Oak Mills, Inc.	\$4,385	\$0	\$3,747	\$0
Highwood USA, LLC	\$4,238	\$0	\$8,454	\$0
Keystone Machinery Corporation	\$4,237	\$0	\$6,419	\$6,419
Viking Tool & Gage, Inc.	\$4,204	\$0	\$5,856	\$37
SAS Institute, Inc.	\$4,171	\$0	\$5,815	\$5,815
Vulcan Spring & Mfg., Co.	\$3,967	\$0	\$0	\$0
Cybergenetics Corp.	\$3,915	\$0	\$2,605	\$2,605
Worldwide Refractories, Inc.	\$3,891	\$0	\$0	\$0
Creative Engineers, Inc.	\$3,878	\$0	\$9,870	\$4,169
Penn-Century, Inc.	\$3,843	\$0	\$0	\$0
SparkNET Technologies, LLC	\$3,800	\$0	\$3,292	\$3,292
Analytical Graphics, Inc.	\$3,763	\$0	\$58,192	\$7,324
Delserro Engineering Solutions, Inc.	\$3,678	\$0	\$4,139	\$0
Genossis, LLC	\$3,670	\$0	\$0	\$0
Powerex, Inc.	\$3,548	\$0	\$0	\$0
Proxicast, LLC	\$3,494	\$0	\$18,782	\$14,263
TLC North, LLC	\$3,431	\$0	\$2,603	\$2,603
Rosenberger of North America, LLC	\$3,389	\$0	\$0	\$0
Levan Machine Co., Inc.	\$3,386	\$0	\$4,915	\$4,915
J Baur Machining, Inc.	\$3,358	\$0	\$6,287	\$6,287
BlueSwarf, LLC	\$3,322	\$0	\$0	\$0
Deasey Machine Tool & Die Works, Inc.	\$3,220	\$0	\$11,316	\$11,316
Crystal, Inc. - PMC	\$3,206	\$0	\$10,073	\$0
Rubitection, Inc.	\$3,180	\$0	\$0	\$0
Beaver Steel Services, Inc.	\$3,137	\$0	\$11,133	\$11,133
Harold Beck & Sons, Inc.	\$3,106	\$0	\$0	\$0
Valley Instrument Co., Inc.	\$3,068	\$0	\$3,756	\$851
ParaCoat Technologies, Inc.	\$3,037	\$0	\$0	\$0
Minteq International, Inc.	\$3,028	\$0	\$0	\$0
Solenoid Solutions, Inc.	\$2,957	\$0	\$0	\$0
Premier Automation Holdings, Inc.	\$2,953	\$0	\$11,005	\$0
Resco Products, Inc.	\$2,876	\$0	\$0	\$0

<i>Taxpayer Name</i>	<i>2013 Credit Awarded</i>	<i>2013 Credit Utilized¹</i>	<i>2012 & 2011 Credit Awarded</i>	<i>2012 & 2011 Credit Utilized¹</i>
David Michael & Co., Inc.	\$2,765	\$0	\$4,791	\$4,791
Intellectual Property Enterprises, LLC (d/b/a Neuralware)	\$2,672	\$0	\$0	\$0
PRL, Inc.	\$2,650	\$0	\$4,952	\$1,494
EAM Mosca Corp.	\$2,615	\$0	\$12,321	\$12,321
Competition Tire East, Inc.	\$2,595	\$0	\$0	\$0
BirdBrain Technologies, LLC	\$2,575	\$0	\$0	\$0
Embedded Energy Technology, LLC	\$2,558	\$0	\$0	\$0
Industrial Vision Systems, Inc.	\$2,553	\$0	\$2,415	\$0
Combined Systems, Inc.	\$2,547	\$0	\$0	\$0
Peacock Laboratories	\$2,473	\$0	\$0	\$0
Easthill Specialty, Inc.	\$2,459	\$0	\$16,759	\$16,759
Materion Brush, Inc. (f/k/a Brush Wellman, Inc.)	\$2,428	\$0	\$2,692	\$1,537
InspiraFS, Inc.	\$2,381	\$0	\$8,378	\$5,060
RJM Manufacturing, Inc.	\$2,369	\$0	\$1,601	\$5
Loridian, LLC	\$2,337	\$0	\$35,431	\$35,431
Boose Aluminum Foundry Co., Inc.	\$2,334	\$0	\$0	\$0
Benjamin Obdyke, Inc.	\$2,173	\$0	\$0	\$0
AFP Advanced Food Products, LLC	\$2,159	\$0	\$0	\$0
S. Vitale Pyrotechnic Industries, Inc.	\$2,147	\$0	\$15,976	\$14,306
O.F. Zurn Company	\$2,085	\$0	\$3,056	\$3,056
Interbots, LLC	\$2,054	\$0	\$11,589	\$11,589
School Gate Guardian, Inc.	\$2,043	\$0	\$0	\$0
PSG Controls, Inc.	\$1,943	\$0	\$0	\$0
Triumph Interiors, LLC	\$1,856	\$0	\$0	\$0
Implementation Consulting Service	\$1,806	\$0	\$0	\$0
Interstate Building Materials, Inc.	\$1,800	\$0	\$16,023	\$16,023
Nielsen-Kellerman, Co.	\$1,800	\$0	\$0	\$0
Alpine Thermal Technologies, Inc.	\$1,751	\$0	\$0	\$0
TekResults, Ltd.	\$1,689	\$0	\$0	\$0
Gautier Steel, Ltd.	\$1,601	\$0	\$5,793	\$5,793
Honeywell Electronic Materials, Inc.	\$1,591	\$0	\$5,487	\$5,487
Minnotte Contracting Corporation	\$1,580	\$0	\$0	\$0
Penn Color, Inc.	\$1,549	\$0	\$0	\$0
Caledonian Dye Works, Inc.	\$1,525	\$0	\$0	\$0
Matreya, LLC	\$1,498	\$0	\$0	\$0
Precision Defense Services, Inc.	\$1,419	\$0	\$0	\$0
Sciquest, Inc.	\$1,393	\$0	\$23,326	\$0
Sussex Wire, Inc.	\$1,367	\$0	\$0	\$0
Sylvin Technologies, Inc.	\$1,305	\$0	\$2,270	\$328
Viridity Energy, Inc.	\$1,289	\$0	\$0	\$0
General Transervice, Inc.	\$1,239	\$0	\$0	\$0
Tri-City Marble, LLC	\$1,236	\$0	\$0	\$0
Dean Technology, Inc.	\$1,219	\$0	\$11,118	\$4,437
KermiTool Acquisition Company, Inc.	\$1,218	\$0	\$0	\$0
Integrated Fabrication & Machine, Inc.	\$1,166	\$0	\$0	\$0
R-V Industries, Inc.	\$1,144	\$0	\$1,738	\$1,738
DynAccess, Ltd.	\$1,114	\$0	\$0	\$0
TIW Technology, Inc.	\$1,061	\$0	\$0	\$0
PRL Industries, Inc.	\$1,051	\$0	\$1,617	\$94
Shanks Extracts, Inc.	\$1,029	\$0	\$0	\$0
Custom Processing Services, LLC	\$1,018	\$0	\$0	\$0
Atlas Minerals & Chemicals, Inc.	\$981	\$0	\$1,163	\$1,163
Griffith, Inc. (t/a Alpha Systems)	\$972	\$0	\$20,787	\$14,503
McAdoo & Allen, Inc.	\$925	\$0	\$3,238	\$0
VaxForm, LLC	\$854	\$0	\$0	\$0
Vista Auctions, LLC	\$850	\$0	\$2,504	\$2,504
Agrofresh, Inc.	\$760	\$0	\$0	\$0
MGS, Inc.	\$714	\$0	\$0	\$0

<i>Taxpayer Name</i>	<i>2013 Credit Awarded</i>	<i>2013 Credit Utilized¹</i>	<i>2012 & 2011 Credit Awarded</i>	<i>2012 & 2011 Credit Utilized¹</i>
S&S X-Ray Products, Inc.	\$656	\$0	\$1,618	\$1,130
Mars Incorporated	\$610	\$0	\$20,821	\$20,821
American Textile Company, Inc.	\$570	\$0	\$3,955	\$0
RD Coatings, Inc.	\$569	\$0	\$57,526	\$57,526
Knoll, Inc.	\$522	\$0	\$36,671	\$36,671
State of the Art, Inc.	\$518	\$0	\$0	\$0
PBM, Inc.	\$470	\$0	\$7,977	\$5,586
Sensible Machines, Inc.	\$422	\$0	\$873	\$873
Glen Carbide, Inc.	\$421	\$0	\$7,973	\$7,973
Adventus Technology, Inc.	\$413	\$0	\$0	\$0
Controls Fusion Group, LP	\$389	\$0	\$11,603	\$11,603
Nitromega Corporation	\$361	\$0	\$0	\$0
Misco Products Corporation	\$287	\$0	\$1,515	\$726
Lazarus Therapeutics, Inc.	\$259	\$0	\$131,217	\$0
Georgia Pacific Corrugated, LLC	\$219	\$0	\$0	\$0
Canto Tool Corporation	\$200	\$0	\$0	\$0
Georgia Pacific Corrugated II, LLC	\$192	\$0	\$0	\$0
Regal Cast, Inc.	\$184	\$0	\$1,006	\$681
TB Woods Incorporated	\$166	\$0	\$6,752	\$376
Wolf Technologies, LLC	\$164	\$0	\$0	\$0
PSB Industries, Inc.	\$75	\$0	\$0	\$0
Lozier Corporation	\$40	\$0	\$123	\$123
ABEC, Inc.	\$0	\$0	\$14,507	\$14,507
Accipiter Systems, Inc.	\$0	\$0	\$79,108	\$79,108
Acopian Technical Company	\$0	\$0	\$6,160	\$6,160
Actuated Medical, Inc. (f/k/a Piezo Resonance Innovations, Inc.	\$0	\$0	\$85,288	\$85,288
Acutec Precision Machining, Inc.	\$0	\$0	\$7,239	\$0
Acutronic USA, Inc.	\$0	\$0	\$20,590	\$2,355
Adaptive Resources, Inc.	\$0	\$0	\$1,887	\$0
Advanced Carbon Technologies, Inc.	\$0	\$0	\$58,499	\$31,901
Advanced Controls & Distribution, LLC	\$0	\$0	\$14,197	\$692
Advanced Manufacturing Technologies	\$0	\$0	\$3,010	\$3,010
Advanced Mobile Solutions Worldwide, Inc.	\$0	\$0	\$4,536	\$4,536
Advanced Technology Solutions, Inc. (d/b/a GeoGraphIt)	\$0	\$0	\$7,841	\$7,841
Agentase, LLC	\$0	\$0	\$213,294	\$213,294
Air Products and Chemicals, Inc.	\$0	\$0	\$40,938	\$0
Alertek, LLC	\$0	\$0	\$473	\$0
Alung Technologies, Inc.	\$0	\$0	\$246,967	\$243,033
American Enterprises MPT Corp.	\$0	\$0	\$20,922	\$20,922
American Reading Company, Inc.	\$0	\$0	\$15,166	\$0
Amgen USA, Inc.	\$0	\$0	\$5,401	\$5,401
Amphenol Intercon Systems, Inc.	\$0	\$0	\$36,842	\$36,842
Amuneal Manufacturing Corp.	\$0	\$0	\$56,565	\$26,843
Angstrom Sciences, Inc.	\$0	\$0	\$1,890	\$74
AntakaMatics, Inc.	\$0	\$0	\$666	\$496
Appcove, Inc.	\$0	\$0	\$2,937	\$2,937
Applied Geology and Environmental Science, Inc.	\$0	\$0	\$19,926	\$4,173
ASI Technologies, Inc.	\$0	\$0	\$13,793	\$0
AT&T Mobility Services, LLC	\$0	\$0	\$95,242	\$0
Ateeco, Inc.	\$0	\$0	\$1,769	\$1,769
Avery Dennison Corporation	\$0	\$0	\$139,456	\$29,587
Avery Dennison Retail Info. Services, LLC	\$0	\$0	\$49,061	\$13,431
Avid Radiopharmaceuticals, Inc.	\$0	\$0	\$159,381	\$159,381

<i>Taxpayer Name</i>	<i>2013 Credit Awarded</i>	<i>2013 Credit Utilized¹</i>	<i>2012 & 2011 Credit Awarded</i>	<i>2012 & 2011 Credit Utilized¹</i>
Axion Power Battery Mfg, Inc.	\$0	\$0	\$224,846	\$224,846
B&G Manufacturing Co., Inc.	\$0	\$0	\$1,126	\$1,126
BAE Systems Land & Armaments, LP (f/k/a United Defense, LP)	\$0	\$0	\$211,028	\$211,028
Beaumaris Networks, Inc. (BNI Video c/o Cisco Systems, Inc.)	\$0	\$0	\$13,333	\$0
Bellefield Systems, LLC	\$0	\$0	\$6,584	\$6,123
Benefit Coordinators Corp.	\$0	\$0	\$4,336	\$3,283
Bergmann Associates, Inc.	\$0	\$0	\$5,723	\$5,723
Betts Industries, Inc.	\$0	\$0	\$7	\$7
Beyer Productions, LLC	\$0	\$0	\$99,418	\$99,418
Bio Rad Laboratories, Inc.	\$0	\$0	\$4,006	\$4,006
BioBuffer Solutions, Inc.	\$0	\$0	\$9,175	\$8,870
BioClinica, Inc.	\$0	\$0	\$33,145	\$33,145
BioNano Genomics, Inc. (f/k/a BioNanoMatrix, Inc.)	\$0	\$0	\$213,534	\$213,059
Blair Companies	\$0	\$0	\$1,753	\$1,753
Bodymedia, Inc.	\$0	\$0	\$77,181	\$19,805
Bosch Rexroth Corporation	\$0	\$0	\$548	\$548
Brandywine Photonics, LLC	\$0	\$0	\$9,750	\$9,750
Breen Energy Solutions, LLC	\$0	\$0	\$43,109	\$300
Bryton Distribution Group, Inc.	\$0	\$0	\$1,521	\$0
BSC Technologies, Inc.	\$0	\$0	\$2,604	\$2,604
C.F. Martin Co., Inc.	\$0	\$0	\$788	\$788
Callidus Biopharma, Inc.	\$0	\$0	\$24,402	\$0
Campus Door Holdings, Inc.	\$0	\$0	\$109,680	\$62,723
Cardiokine Biopharma, LLC	\$0	\$0	\$25,511	\$25,511
Carpenter Powder Products, Inc.	\$0	\$0	\$610	\$0
CDG Environmental, LLC	\$0	\$0	\$15,683	\$15,683
Cellular Tracking Technologies, LLC	\$0	\$0	\$11,462	\$11,462
Cephalon, Inc.	\$0	\$0	\$740,231	\$740,231
Channellock, Inc.	\$0	\$0	\$79,182	\$4,512
Cheetah Technologies, LP	\$0	\$0	\$19,399	\$0
ChemImage Corporation	\$0	\$0	\$143,735	\$143,735
Chester Engineers, Inc.	\$0	\$0	\$20,469	\$20,469
Church & Dwight Co., Inc.	\$0	\$0	\$7,179	\$0
Clair Bros. Audio Systems, Inc.	\$0	\$0	\$5,906	\$5,906
Clark Filter, Inc.	\$0	\$0	\$969	\$0
Classic Industries, Inc.	\$0	\$0	\$66,308	\$58,715
Clearcount Medical Solutions, Inc.	\$0	\$0	\$223,122	\$223,122
Colorcon, Inc. & Division	\$0	\$0	\$64,456	\$64,456
Comcast Corporation	\$0	\$0	\$1,394,262	\$69,732
Communication Automation Corp.	\$0	\$0	\$65,469	\$65,469
Communications Test Design, Inc.	\$0	\$0	\$30,596	\$0
Community Networks, LLC	\$0	\$0	\$73,190	\$73,190
Compu-Craft Fabricator, Inc.	\$0	\$0	\$8,834	\$0
Computer Consultant Team, LLC	\$0	\$0	\$20,293	\$20,293
Consolidated Comm Enterprise Services	\$0	\$0	\$5,373	\$5,373
Control Chief Corporation	\$0	\$0	\$318	\$318
Cook Mysosite Inc.	\$0	\$0	\$81,082	\$4,110
Cook Technologies, Inc.	\$0	\$0	\$11,124	\$207
Cordis Corporation	\$0	\$0	\$423,335	\$192,075
Coskata, Inc.	\$0	\$0	\$85,062	\$8,372
C-P Converters, Inc.	\$0	\$0	\$28,623	\$28,623
Crayola, LLC	\$0	\$0	\$1,509	\$1,509
Crescent Industries, Inc.	\$0	\$0	\$34,581	\$34,581
Croda, Inc.	\$0	\$0	\$3,532	\$3,532
Crown Cork & Seal USA, Inc.	\$0	\$0	\$27,147	\$27,147
CTR Holdings, Inc.	\$0	\$0	\$5,080	\$5,080

<i>Taxpayer Name</i>	<i>2013 Credit Awarded</i>	<i>2013 Credit Utilized¹</i>	<i>2012 & 2011 Credit Awarded</i>	<i>2012 & 2011 Credit Utilized¹</i>
Custom Isotopes, LLC (f/k/a IsoSciences, LLC)	\$0	\$0	\$60,392	\$60,392
CWE, Inc.	\$0	\$0	\$13,814	\$11,842
D E Machining, Ltd.	\$0	\$0	\$3,255	\$0
Dart Container Corporation of PA	\$0	\$0	\$1,953	\$0
Dcroft, Inc.	\$0	\$0	\$213,665	\$213,665
Dental Designs, Inc.	\$0	\$0	\$2,381	\$2,381
Die-Tech, Inc.	\$0	\$0	\$24,952	\$6,230
Dontech, Inc.	\$0	\$0	\$3,855	\$3,855
Dopaco, Inc.	\$0	\$0	\$7,183	\$7,183
Double H Plastics, Inc.	\$0	\$0	\$7,255	\$763
Draeger Medical Systems, Inc.	\$0	\$0	\$42,368	\$17,960
Duquesne Brewing Company, Inc.	\$0	\$0	\$11,404	\$3,424
Dyco, Inc.	\$0	\$0	\$6,148	\$6,148
DynaVox Systems, LLC	\$0	\$0	\$245,290	\$130,000
Eagle Brass Company	\$0	\$0	\$3,910	\$3,910
Eastern Manufacturing, Inc.	\$0	\$0	\$8,060	\$6,062
Eaton Corporation	\$0	\$0	\$119,330	\$119,330
Edge Robotics, Inc.	\$0	\$0	\$855	\$641
Edlon, Inc.	\$0	\$0	\$3,784	\$3,784
Effort Foundry, Inc.	\$0	\$0	\$8,859	\$8,223
Electric Owl Studios, Ltd.	\$0	\$0	\$2,345	\$2,345
Electronic Claims Processing, Inc.	\$0	\$0	\$13,634	\$1,225
Elite Sportswear, LLP	\$0	\$0	\$656	\$656
Elliott Company	\$0	\$0	\$62,747	\$40,587
Ellucian Support, Inc. (f/k/a Sungard Higher Education, Inc.)	\$0	\$0	\$6,822	\$0
EMC Corporation	\$0	\$0	\$13,626	\$0
Emotion Kayaks, Inc.	\$0	\$0	\$101,223	\$101,223
Emphasys Technologies	\$0	\$0	\$54,222	\$54,222
Energy Technology Partnership, LLC	\$0	\$0	\$42,598	\$42,598
EQT Gathering, Inc.	\$0	\$0	\$9,230	\$3,967
EQT Production Company	\$0	\$0	\$58,709	\$58,709
Equipois, Inc.	\$0	\$0	\$46,730	\$44,101
Erie Custom Computer Applications	\$0	\$0	\$3,754	\$3,754
Etcetera Edutainment, Inc.	\$0	\$0	\$47,514	\$47,514
EthosGen, LLC	\$0	\$0	\$54,229	\$54,229
Evaheart Medical USA, Inc.	\$0	\$0	\$24,247	\$10,234
Expansyn Technologies, Inc.	\$0	\$0	\$17,977	\$6,655
Extol International, Inc.	\$0	\$0	\$2,144	\$22
F&P Holding Co., Inc.	\$0	\$0	\$68,985	\$21,078
Fabri-Kal Corporation	\$0	\$0	\$27,375	\$8,758
Fairchild Semiconductor Corporation	\$0	\$0	\$101,043	\$9,270
Fairmount Automation, Inc.	\$0	\$0	\$1,631	\$0
FCI USA, LLC	\$0	\$0	\$133,198	\$15,311
FHM Holding Company, Inc.	\$0	\$0	\$49,273	\$21,157
Fiber-Line Holding Company (f/k/a Fiber-Line, Inc.)	\$0	\$0	\$26,979	\$5,668
Fidelity Flight Simulation	\$0	\$0	\$1,501	\$1,501
Fidelity Information Services, Inc.	\$0	\$0	\$240,877	\$240,877
Finish Thompson, Inc.	\$0	\$0	\$7,077	\$7,077
Foam Fair Industries, Inc.	\$0	\$0	\$18,223	\$18,223
Four Rivers Software Systems, Inc.	\$0	\$0	\$19,471	\$5,451
Fox Chase Chemical Diversity Center	\$0	\$0	\$17,645	\$0
Fraser Volpe, LLC	\$0	\$0	\$15,182	\$15,182
Frontier North, Inc.	\$0	\$0	\$5,497	\$0
Fry Communications, Inc.	\$0	\$0	\$1,582	\$1,582
Future POS, Inc. (f/k/a Cutting Edge Solutions, Inc.)	\$0	\$0	\$112,565	\$112,565

<i>Taxpayer Name</i>	<i>2013 Credit Awarded</i>	<i>2013 Credit Utilized¹</i>	<i>2012 & 2011 Credit Awarded</i>	<i>2012 & 2011 Credit Utilized¹</i>
Galleon Pharmaceuticals, Inc.	\$0	\$0	\$88,281	\$0
GapVax, Inc.	\$0	\$0	\$7,700	\$2,919
Garnet BioTherapeutics, Inc.	\$0	\$0	\$106,414	\$0
Gateway Ticketing Systems, Inc.	\$0	\$0	\$94,699	\$42,285
GE Energy Power Conversion Naval Systems, Inc. (f/k/a Converteam Naval Systems, Inc.)	\$0	\$0	\$32,297	\$145
GE Energy Power Conversion USA, Inc. (f/k/a Converteam, Inc.)	\$0	\$0	\$47,326	\$47,326
Genco 1, Inc.	\$0	\$0	\$12,492	\$0
General Dynamics C4 Systems, Inc.	\$0	\$0	\$35,584	\$35,584
General Dynamics Satcom Technologies, Inc.	\$0	\$0	\$85,994	\$85,994
General Instrument Corporation	\$0	\$0	\$252,267	\$0
General Machine Products Co., Inc.	\$0	\$0	\$3,406	\$3,406
Gentex Corporation	\$0	\$0	\$41,591	\$41,591
Gichner Systems Group, Inc.	\$0	\$0	\$34,199	\$16,550
Global Seating Systems, LLC	\$0	\$0	\$39,599	\$339
Graham Packing Holdings Company, LLP	\$0	\$0	\$137,675	\$57,000
Grant Street Group, Inc.	\$0	\$0	\$23,440	\$20,518
Graybill Machines, Inc.	\$0	\$0	\$49,768	\$26,145
Graymont (PA), Inc.	\$0	\$0	\$18,972	\$18,972
Greene, Tweed & Co., Inc.	\$0	\$0	\$77,016	\$34,443
Griffith Brothers Whitetail Ridge, Inc.	\$0	\$0	\$11,517	\$11,517
GSI Commerce Solutions, Inc.	\$0	\$0	\$193,051	\$193,051
Harry Miller Corporation	\$0	\$0	\$22,827	\$1,000
HCCCKPM, LLC	\$0	\$0	\$84	\$0
Healthcare Lighting, Inc.	\$0	\$0	\$3,781	\$3,781
Heinz Management, LLC	\$0	\$0	\$569,582	\$0
Henry Molded Products, Inc.	\$0	\$0	\$3,801	\$3,801
Henson Company, Inc.	\$0	\$0	\$4,187	\$0
Heraeus Prec Metal Conshohocken, LLC (f/k/a Heraeus Materials Technology, LLC)	\$0	\$0	\$24,853	\$556
Herbert, Rowland & Grubic, Inc.	\$0	\$0	\$13,380	\$0
Holtec International Power Division, Inc.	\$0	\$0	\$355,030	\$355,030
Holtec Manufacturing Division, Inc.	\$0	\$0	\$234,422	\$47,559
Honeywell International, Inc.	\$0	\$0	\$274,489	\$244,510
Huntingdon County Customs, LLC	\$0	\$0	\$2,363	\$2,363
Iberium Communications, Inc.	\$0	\$0	\$3,828	\$0
Illuminex Corporation	\$0	\$0	\$33,986	\$33,986
ImageCube, LLC	\$0	\$0	\$598	\$0
IMC Biotechnology, Inc.	\$0	\$0	\$1,254	\$1,254
Immunotope, Inc.	\$0	\$0	\$77,126	\$77,126
Imperial Carbide, Inc.	\$0	\$0	\$74,891	\$455
Indigo Biosciences, Inc.	\$0	\$0	\$5,481	\$5,481
Industrial Learning Systems	\$0	\$0	\$30,871	\$29,349
Inmedius, Inc.	\$0	\$0	\$161,342	\$69,238
Innovative Pressure Technologies, LLC	\$0	\$0	\$19,164	\$19,164
Instrumentation Industries, Inc.	\$0	\$0	\$10,077	\$9,873
Integrated Microwave Technologies, LLC (f/k/a RF Extreme, LLC)	\$0	\$0	\$239	\$239
Interstate Management Resources, Inc.	\$0	\$0	\$165,248	\$0
Inventox, Inc.	\$0	\$0	\$10,988	\$0
invivodata, Inc.	\$0	\$0	\$2,698	\$2,370
Iron Mountains, LLC	\$0	\$0	\$144,272	\$24,747
ITT Corporation	\$0	\$0	\$3,589	\$3,589
J.L. Clark, Inc.	\$0	\$0	\$205	\$0

<i>Taxpayer Name</i>	<i>2013 Credit Awarded</i>	<i>2013 Credit Utilized¹</i>	<i>2012 & 2011 Credit Awarded</i>	<i>2012 & 2011 Credit Utilized¹</i>
J2 Medical, LP	\$0	\$0	\$8,891	\$2,168
Jarex Enterprises, LLC	\$0	\$0	\$11,312	\$11,312
JCR Sales Mfg, LLC	\$0	\$0	\$11,643	\$11,643
JIT Prototyping, LLC	\$0	\$0	\$135	\$0
Johnstown Machining and Fabrication, Inc.	\$0	\$0	\$2,327	\$0
Juniata Fabrics, Inc.	\$0	\$0	\$5,468	\$5,468
Just Between Friends, Inc.	\$0	\$0	\$59,969	\$59,969
JWF Defense Systems, LLC	\$0	\$0	\$14,862	\$5,526
JW Kitko & Sons Wood Products, Inc.	\$0	\$0	\$235	\$0
Kalas Mfg, Inc.	\$0	\$0	\$13,414	\$145
KD Industries, Inc.	\$0	\$0	\$95,790	\$0
Kenco Corporation	\$0	\$0	\$4,782	\$1,204
Kenexa Technology, Inc.	\$0	\$0	\$60,814	\$35,092
Keystone Food Products, Inc.	\$0	\$0	\$17,642	\$0
Keystone Foods, LLC	\$0	\$0	\$15,198	\$15,198
Knopp Neurosciences, Inc.	\$0	\$0	\$110,044	\$110,044
Komax Solar, Inc.	\$0	\$0	\$99,865	\$59,202
Koryak Consulting, Inc.	\$0	\$0	\$908	\$0
Landslide Technologies, Inc.	\$0	\$0	\$12,169	\$12,169
Latrobe Specialty Metals Company (f/k/a Latrobe Specialty Steel Company)	\$0	\$0	\$9,569	\$5,271
LB Foster Rail Technologies, Inc. (f/k/a Portec Rail Products, Inc.)	\$0	\$0	\$1,033	\$1,033
LeeSimpson Associates, Inc.	\$0	\$0	\$6,516	\$6,516
Lightwire, Inc. (c/o Cisco Systems, Inc.)	\$0	\$0	\$102,054	\$2,958
Lockheed Martin Corporation	\$0	\$0	\$2,124,525	\$2,124,525
Lone Oak Medical Technologies, LLC	\$0	\$0	\$30,162	\$12,095
LPS Mortgage Processing Solutions, Inc.	\$0	\$0	\$18,400	\$18,400
Lucas Systems, Inc.	\$0	\$0	\$21,718	\$21,093
Lutron Electronics Co., Inc.	\$0	\$0	\$714,805	\$73,169
Maloney Plastics, Inc.	\$0	\$0	\$3,072	\$3,072
Maloney Tool & Mold, Inc.	\$0	\$0	\$70,731	\$70,731
MapQuest PA, Inc. (f/k/a Digital City, Inc.)	\$0	\$0	\$61,926	\$0
Matric Limited	\$0	\$0	\$6,229	\$6,229
Matrix Operations, LLC	\$0	\$0	\$14,650	\$14,650
Matson & Associates, Inc.	\$0	\$0	\$8,630	\$8,630
MBF Therapeutics, Inc.	\$0	\$0	\$14,967	\$14,967
McCormick Taylor, Inc.	\$0	\$0	\$6,341	\$6,341
McKesson Automation, Inc.	\$0	\$0	\$131,349	\$0
Medecision, Inc.	\$0	\$0	\$482,344	\$7,736
Melior Pharmaceuticals I, Inc.	\$0	\$0	\$949	\$0
Merck, Sharp & Dohme Corp.	\$0	\$0	\$29,853,933	\$18,853,831
MESH, Inc.	\$0	\$0	\$21,057	\$5,668
Met-Pro Corporation	\$0	\$0	\$6,912	\$6,912
Metronome Labs, LLC	\$0	\$0	\$11,161	\$0
Minnotte Manufacturing Corporation	\$0	\$0	\$4,775	\$3,203
Multimodal Technologies, Inc.	\$0	\$0	\$54,228	\$2,264
NanoHorizons, Inc.	\$0	\$0	\$8,487	\$8,487
NCA Technologies, Inc.	\$0	\$0	\$10,846	\$10,846
NE Foods, Inc.	\$0	\$0	\$10,767	\$4,343
Net Health Systems, Inc.	\$0	\$0	\$248,984	\$248,984
NetApp, Inc. (f/k/a Network Appliance, Inc.)	\$0	\$0	\$706,536	\$0
Neurointerventional Therapeutics, Inc. (dba Neurointerventions, Inc.)	\$0	\$0	\$32,057	\$0
Neutronics, Inc.	\$0	\$0	\$5,263	\$0
Neville Chemical Company	\$0	\$0	\$1,740	\$854

<i>Taxpayer Name</i>	<i>2013 Credit Awarded</i>	<i>2013 Credit Utilized¹</i>	<i>2012 & 2011 Credit Awarded</i>	<i>2012 & 2011 Credit Utilized¹</i>
New Standard Corporation	\$0	\$0	\$8,389	\$573
Newage Testing Instruments, Inc.	\$0	\$0	\$5,643	\$5,643
NewCare Solutions, LLC	\$0	\$0	\$58,893	\$42,026
Nexus Pharma, Inc.	\$0	\$0	\$2,143	\$365
Nitric Biotherapeutics, Inc.	\$0	\$0	\$51,648	\$51,648
Novocell Semiconductor, Inc.	\$0	\$0	\$10,719	\$0
Numoda Technologies, Inc.	\$0	\$0	\$113,216	\$65,799
NuPathe, Inc.	\$0	\$0	\$173,637	\$161,044
NuTec Tooling Systems, Inc.	\$0	\$0	\$36,605	\$263
Nutrisystem, Inc.	\$0	\$0	\$65,643	\$29,917
Ohm-Labs, Inc.	\$0	\$0	\$9,091	\$3,000
Olympic Steel, Inc.	\$0	\$0	\$11,351	\$11,351
Omega Design Corporation	\$0	\$0	\$36,800	\$87
Omega Plastics, LLC	\$0	\$0	\$17,502	\$0
OmniWind Energy Systems, LLC	\$0	\$0	\$41,192	\$41,192
O'Neal Steel, Inc.	\$0	\$0	\$4,700	\$0
Orasure Technologies, Inc.	\$0	\$0	\$52,750	\$3,052
Outsourcing USA	\$0	\$0	\$2,641	\$0
Oven Industries, Inc.	\$0	\$0	\$4,824	\$4,824
Oxford Bio-Imaging Research, Inc.	\$0	\$0	\$32,835	\$32,835
Parker White Metal Company	\$0	\$0	\$13,733	\$0
Patriot Sensors and Controls Corporation	\$0	\$0	\$14,474	\$14,474
PB Heat, LLC	\$0	\$0	\$2,942	\$2,942
Penn Metal Stamping, Inc.	\$0	\$0	\$24,797	\$24,797
PennTecQ, Inc.	\$0	\$0	\$10,625	\$10,625
Pepperidge Farm, Incorporated	\$0	\$0	\$4,053	\$4,053
Pfizer, Inc.	\$0	\$0	\$5,195,497	\$5,195,497
Pharmaceutical Manufacturing Research Services, Inc.	\$0	\$0	\$24,732	\$24,732
Pioneer Hi-Bred International, Inc.	\$0	\$0	\$27,072	\$27,072
Pitney Bowes Software, Inc.	\$0	\$0	\$9,049	\$9,049
Plus Consulting, LLC	\$0	\$0	\$397	\$0
Polymedix Pharmaceuticals, Inc.	\$0	\$0	\$242,536	\$93,957
Polymer Products Company, Inc.	\$0	\$0	\$3,259	\$1,279
Polymeric Systems, Inc.	\$0	\$0	\$5,612	\$2,589
PoolPak Technologies Corporation	\$0	\$0	\$2,253	\$2,253
Portico Systems of Delaware, Inc.	\$0	\$0	\$53,658	\$0
Precision Medical Products, Inc.	\$0	\$0	\$2,637	\$2,637
Precision Therapeutics, Inc.	\$0	\$0	\$133,430	\$133,430
Primus Technologies Corp.	\$0	\$0	\$10,210	\$0
Progeny Systems Corporation	\$0	\$0	\$8,370	\$0
PSI Medical Catheter Care, LLC	\$0	\$0	\$28,682	\$0
PuriCore, Inc.	\$0	\$0	\$11,091	\$11,091
Quality Engineering Solutions, Inc.	\$0	\$0	\$14,108	\$4,943
Quantum Potential Corporation	\$0	\$0	\$3,695	\$3,695
Quantum Software Solutions, Inc.	\$0	\$0	\$2,833	\$2,833
Quintech Electronics Communications, Inc.	\$0	\$0	\$12,620	\$9,886
R.M. Palmer Company	\$0	\$0	\$7,762	\$7,762
Rampart Hydro Services, Inc.	\$0	\$0	\$5,016	\$5,016
Rapid Reaction, Inc.	\$0	\$0	\$775	\$0
Ratex Business Solutions, Inc.	\$0	\$0	\$114,547	\$823
RE2, Inc.	\$0	\$0	\$23,143	\$0
Reading Pretzel Machining Corp.	\$0	\$0	\$23,408	\$10,681
Rearick Tooling, Inc.	\$0	\$0	\$3,545	\$2,754
Recro Pharma, Inc.	\$0	\$0	\$57,321	\$0
Red Valve Company, Inc.	\$0	\$0	\$20,726	\$18,862
Regeneron Pharmaceuticals, Inc.	\$0	\$0	\$4,956	\$4,956

<i>Taxpayer Name</i>	<i>2013 Credit Awarded</i>	<i>2013 Credit Utilized¹</i>	<i>2012 & 2011 Credit Awarded</i>	<i>2012 & 2011 Credit Utilized¹</i>
Renaissance Nutrition, Inc.	\$0	\$0	\$2,979	\$2,979
Renal Solutions, Inc.	\$0	\$0	\$32,950	\$0
Rhiza Labs, LLC	\$0	\$0	\$3,301	\$0
Riggs Industries, Inc.	\$0	\$0	\$59	\$59
Roaring Spring Blank Book Company	\$0	\$0	\$8,461	\$20
Robert Bosch Tool Corporation	\$0	\$0	\$2,541	\$2,541
Robert Bosch, LLC (f/k/a Robert Bosch Corporation)	\$0	\$0	\$3,995	\$0
Rockland Immunochemicals, Inc.	\$0	\$0	\$11,475	\$11,475
Ross Mould Incorporated	\$0	\$0	\$39,330	\$0
Ross Technology Corporation	\$0	\$0	\$26,637	\$26,637
rVibe, LLC (f/k/a Johnson McCormick Technologies, LLC)	\$0	\$0	\$3,206	\$3,206
S&S Processing, Inc.	\$0	\$0	\$86,871	\$48,847
Samtec, Inc.	\$0	\$0	\$14,371	\$5,484
Schmidt Technology Corporation	\$0	\$0	\$5,577	\$1,063
Schott North America, Inc.	\$0	\$0	\$202,476	\$1,438
Schust Development, Inc.	\$0	\$0	\$2,608	\$0
Seneb Biosciences, Inc.	\$0	\$0	\$6,626	\$0
ServiceLink, Inc. (f/k/a ServiceLink Valuation Solutions, LLC)	\$0	\$0	\$257,677	\$257,677
ShowClix, Inc.	\$0	\$0	\$28,360	\$28,360
Siemens Molecular Imaging, Inc.	\$0	\$0	\$33,215	\$0
Signal Technologies, Inc.	\$0	\$0	\$20,309	\$20,309
Silberline Manufacturing Co., Inc.	\$0	\$0	\$27,345	\$27,345
Silverstorm Technologies, Inc.	\$0	\$0	\$89,225	\$0
Smart Structures, Inc.	\$0	\$0	\$435	\$0
Smooth On, Inc.	\$0	\$0	\$5,186	\$5,186
Sonitu, LLC (f/k/a Sonitu Pharmaceuticals, LLC)	\$0	\$0	\$11,570	\$0
SPD Electrical Systems, Inc.	\$0	\$0	\$2,379	\$2,379
SpectrumCo, LLC	\$0	\$0	\$2,577	\$0
Spinworks, LLC	\$0	\$0	\$15,626	\$15,626
SPX Corporation	\$0	\$0	\$64,498	\$42,830
ST Ericsson, Inc.	\$0	\$0	\$2,234	\$0
STC Consulting, LLC	\$0	\$0	\$18,040	\$18,040
Stein Seal Company	\$0	\$0	\$31,875	\$31,875
STMicroelectronics, Inc.	\$0	\$0	\$3,260	\$1,229
Strata Company (f/k/a Strata Graphics, Inc.)	\$0	\$0	\$2,872	\$2,872
Strobic Air Corporation	\$0	\$0	\$8,391	\$6,989
Sungard Public Sector, Inc.	\$0	\$0	\$37,394	\$12,940
Sunny Dell Foods, Inc.	\$0	\$0	\$5,007	\$5,007
Super Abrasive Machine Innovations, LLC	\$0	\$0	\$57,299	\$57,299
Supreme Mid-Atlantic Corp.	\$0	\$0	\$2,042	\$766
Sweet Ovations, LLC	\$0	\$0	\$5,499	\$5,499
Synerge, LLC	\$0	\$0	\$530	\$530
Synergis Technologies, Inc.	\$0	\$0	\$15,597	\$4,783
Tactical Technologies, Inc.	\$0	\$0	\$871	\$0
Tait Farm Foods, Inc.	\$0	\$0	\$47	\$0
Tait Towers, Inc.	\$0	\$0	\$180,563	\$40,657
Taktl, LLC	\$0	\$0	\$106,302	\$0
TCI Ceramics, Inc.	\$0	\$0	\$55,484	\$10,140
TDY Industries, LLC	\$0	\$0	\$4,653	\$4,653
Tetralogic Pharmaceuticals Corporation	\$0	\$0	\$84,809	\$10,629

<i>Taxpayer Name</i>	<i>2013 Credit Awarded</i>	<i>2013 Credit Utilized¹</i>	<i>2012 & 2011 Credit Awarded</i>	<i>2012 & 2011 Credit Utilized¹</i>
Teva Pharmaceuticals USA, Inc.	\$0	\$0	\$140,108	\$140,108
The Beistle Company	\$0	\$0	\$4,126	\$0
The Boeing Company	\$0	\$0	\$1,987,913	\$1,987,913
The Fredericks Company	\$0	\$0	\$429	\$429
The Loomis Company	\$0	\$0	\$357	\$357
The Vanguard Group, Inc.	\$0	\$0	\$1,163,794	\$1,163,794
Third Eye Diagnostics, Inc.	\$0	\$0	\$78,353	\$78,353
Thomas Erie, Inc.	\$0	\$0	\$1,617	\$1,617
Titan International, Inc.	\$0	\$0	\$57,233	\$23,599
TM Industrial Supply, Inc.	\$0	\$0	\$2,158	\$2,158
Touchtown, Inc.	\$0	\$0	\$71,301	\$68,879
Towercare Technologies, Inc.	\$0	\$0	\$6,928	\$6,928
TOXCO, Inc.	\$0	\$0	\$43,854	\$19,631
TPLZ, LLC (f/k/a IGD Systems, LLC)	\$0	\$0	\$26,681	\$26,681
Trimetric Enterprises, Inc.	\$0	\$0	\$2,723	\$2,723
Two Technologies, Inc.	\$0	\$0	\$49,567	\$65
Universal Refractories, Inc.	\$0	\$0	\$3,180	\$459
Verizon Services Organization, Inc.	\$0	\$0	\$5,851	\$1,671
Vertex, Inc.	\$0	\$0	\$38,173	\$38,173
Vertical Screen, Inc.	\$0	\$0	\$15,149	\$0
Video Display Corporation	\$0	\$0	\$5,895	\$4,281
Videon Central, Inc.	\$0	\$0	\$9,732	\$9,732
W.W. Patterson Company	\$0	\$0	\$1,105	\$1,105
Wabtec Corporation	\$0	\$0	\$4,663	\$4,663
Wampole Miller, Inc.	\$0	\$0	\$30,910	\$0
Washington Penn Plastic Co., Inc.	\$0	\$0	\$82,657	\$48,362
Watson Standard Adhesives Company	\$0	\$0	\$13,112	\$0
Watson Standard Company	\$0	\$0	\$2,995	\$2,995
Weaver Industries, Inc.	\$0	\$0	\$2,508	\$2,508
Weiler Corporation Inc.	\$0	\$0	\$4,030	\$3,614
White Engineering Surfaces Corporation	\$0	\$0	\$21,922	\$21,922
Whitford Corporation	\$0	\$0	\$16,900	\$16,900
World Electronics Sales and Service, Inc.	\$0	\$0	\$4,361	\$3,350
Y-Carbon, Inc.	\$0	\$0	\$53,342	\$53,342
York Container Company	\$0	\$0	\$8,810	\$8,810
Z Band Video, Inc.	\$0	\$0	\$11,637	\$11,269
Z-Axis Connector Company	\$0	\$0	\$13,027	\$208
Zulama, LLC	\$0	\$0	\$29,673	\$0
TOTAL	\$55,000,000	\$0	\$110,000,000	\$63,251,786

Footnote:

¹ "Utilized" means that the tax credit has been applied in full or partial payment of a tax liability according to the records of the Department. If no tax liability exists for the tax and period where the credit has been applied or if previous tax credits exceed the tax liability, the utilized amount is shown as zero. Until a tax year has been closed, it is possible that the tax credits indicated as being utilized may still be transferred, sold or assigned at the option of the taxpayer. Pass through credits and unused credits that were sold or assigned are also included as utilized.