

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



The Pennsylvania Department of Revenue

Bureau of Research

March 13, 2015

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Act 85 of 2012 ³	Sunset Date Repealed	Unchanged	Unchanged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

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.

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 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 2012, 2013 and 2014, 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

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.

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.

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 2015, \$73.1 million of the \$398.0 million R&D tax credit awarded between December 2003 and December 2013 (i.e., 18.4 percent of the \$398.0 million) has been sold or assigned. Purchasers of those unused tax credits have paid \$68.6 million for them in total, or 93.8 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 Selling/Assigning Unused Credit	Unused Tax Credits Sold For	Percent of Value Unused Tax Credits Sold For
Dec 2003	\$15.0	\$ 1.3	18	\$ 1.2	91.4%
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	73	\$ 8.2	94.0%
Dec 2007	\$40.0	\$ 8.9	88	\$ 8.6	95.8%
Dec 2008	\$40.0	\$10.7	119	\$10.2	95.3%
Dec 2009	\$20.0	\$ 4.9	102	\$ 4.6	93.6%
Dec 2010	\$18.0	\$ 2.8	103	\$ 2.6	93.5%
Dec 2011	\$55.0	\$12.9	104	\$12.0	93.0%
Dec 2012	\$55.0	\$ 4.0	104	\$3.7	91.9%
Dec 2013	\$55.0	\$ 6.0	112	\$5.6	92.5%
TOTAL	\$398.0	\$73.1		\$68.6	93.8%

R&D Tax Credit Claimed and Awarded in Pennsylvania for December 2014

Table 3 shows the amount of R&D tax credit awarded by the Department in 2014 for qualified research expenditures made by taxpayers in Pennsylvania in taxable year 2013. Without the \$55 million cap, \$87.5 million in credit would have been awarded to 765 taxpayers. 75.4 percent of approved taxpayers received an R&D tax credit of less than \$50,000, receiving 15.3 percent of the total amount of approved credit. Taxpayers

with an approved R&D tax credit of \$50,000 or more claimed 84.7 percent of the approved credit amount. The 188 taxpayers receiving \$50,000 or more in credit represented 24.6 percent of the total number of applicants.

**Table 3. Pennsylvania Research & Development Tax Credit Program
Tentative and Actual Credit for Tax Year 2014⁶**

Actual Credit Range	Number of Applicants	Percent of Applicants	Tentative Credit Amount	Actual Credit Amount	Percent of Actual Credit
\$0 - \$4,999	147	19.2%	\$468,026	\$332,065	0.6%
\$5,000 - \$19,999	270	35.3%	\$4,175,466	\$2,962,128	5.4%
\$20,000 - \$49,999	160	20.9%	\$6,998,892	\$5,133,726	9.3%
\$50,000 - \$99,999	97	12.7%	\$9,707,322	\$6,810,568	12.4%
\$100,000 - \$499,999	70	9.2%	\$19,361,597	\$12,539,054	22.8%
\$500,000 - \$999,999	14	1.8%	\$16,243,045	\$9,612,489	17.5%
\$1,000,000 & greater	7	0.9%	\$30,557,083	\$17,609,970	32.0%
TOTAL	765	100%	\$87,511,431	\$55,000,000	100%

Table 4 details the tentative amount of R&D tax credit awarded by the Department for each year through December 2014.

**Table 4. Pennsylvania Research and Development Tax Credit Program
Total Tentative Tax Credit Awarded By Year, 1997-2014**

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	Dec 2014	765	\$87,511,431

From its inception through December 2014, the R&D tax credit program has awarded a total of \$543 million in tax credit to 2,263 different taxpayers. In December 2014, 765 taxpayers were awarded the R&D tax credit, the most ever in one year. Without any caps on annual awards, \$1,446.4 million in R&D tax credit would have been awarded to those same 2,263 taxpayers. Over the years, the varying annual credit caps have reduced the amount of R&D tax credit that would have been awarded to 37.5 percent of what was requested.

Table 5 presents the R&D tax credit awarded in December 2014 by business type.

⁶ Detail may not add up due to rounding; 99 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 2014**

Business Type	Number of Taxpayers	Percent of Taxpayers	Actual Credit Amount	Percent of Actual Credit
Manufacturing	410	53.6%	\$35,739,578	65.0%
Services	253	33.1%	\$12,229,081	22.2%
Misc. ⁷	102	13.3%	\$7,031,341	12.8%
TOTAL	765	100%	\$55,000,000	100%

Manufacturers represented 53.6 percent of the taxpayers receiving the tax credit in 2014, claiming 65.0 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; 21 pharmaceutical manufacturers requesting credit were awarded \$17.0 million in credit. In the Services sector, the largest group of credit recipients was designers of computer system services, with 67 recipients receiving \$3.4 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 2014. 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 2014**

Business Size	Number of Applicants	Percent of Applicants	Tentative Credit Amount	Actual Credit Amount	Percent of Actual Credit
Small	332	43.4%	\$10,801,091	\$10,801,091	19.6%
Not Small	433	56.6%	\$76,710,340	\$44,198,909	80.4%
TOTAL	765	100%	\$87,511,431	\$55,000,000	100%

In December 2014, “small” businesses claimed \$10.8 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 \$9.4 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 57.6 percent of the requested amount in December of 2014. Last year, the “not small” businesses received 53.6 percent of the amount of credit they requested in December 2013.

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 2014.

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, 1997-2014**

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
Dec 2014	332	\$10,801,091	\$10,801,091

“Small businesses” have been awarded \$79.5 million of the \$89.1 million in R&D tax credits that they have applied for since the inception of the R&D tax credit program; they have received 89.2 percent of the total amount of tax credits for which they applied. A total of \$108.6 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 2012. 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 2015.

Table 8 shows the distribution of the R&D tax credits that have been applied to specific tax years. As of February 2015, 84.0 percent of the \$433 million in R&D tax credit that has been awarded for 1997 through 2012 has been applied to specific tax periods. 43.0 percent of the credit awarded has been applied against the CSFT; 51.8 percent has been applied against the CNIT; 5.1 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 assessment or the application of other credits.

**Table 8. Pennsylvania Research and Development Tax Credit Program
Application by Tax Type and Taxable Year, 1997-2012**

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	\$8,017,589	62	\$5,389,831	218	\$487,586	169
2003	\$7,749,060	59	\$7,713,787	217	\$337,985	154
2004	\$15,162,068	73	\$7,660,520	243	\$713,456	169
2005	\$11,332,669	65	\$12,462,743	294	\$1,389,912	179
2006	\$16,886,819	83	\$15,402,779	311	\$2,679,623	235
2007	\$15,206,629	103	\$13,475,953	368	\$1,799,924	236
2008	\$14,963,882	111	\$11,868,894	411	\$1,327,515	306
2009	\$18,989,432	91	\$11,899,852	467	\$1,460,930	211
2010	\$22,008,058	110	\$13,881,526	506	\$1,334,225	187
2011	\$21,787,168	127	\$15,270,719	521	\$1,888,433	256
2012	\$14,927,296	140	\$12,596,824	516	\$2,821,960	292
TOTAL	\$188,468,615		\$156,465,859		\$18,717,932	

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 2015, of the \$15.0 million awarded to 292 taxpayers in December 1997, approximately \$250,000 has not yet been used. This amounts to 1.7 percent of the total amount of R&D tax credits awarded. It is still possible that this amount of tax credit 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 2012 (the latest year for which reports are available for all taxpayers) for taxpayers receiving the R&D tax credit in 2014. 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 2012 Tax Liabilities by Business Type**

Business Type	2012 CSFT Liability	2012 CNIT Liability
Manufacturing	\$10,760,782	\$55,782,655
Services	\$ 4,495,143	\$10,808,724
Misc.	\$ 2,565,036	\$11,096,708
TOTAL	\$17,820,961	\$77,688,087

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 2014 to the total tax year 2012 self-assessed CNIT and CSFT liabilities⁸. Of the 765 taxpayers receiving the R&D tax credit in 2014 that are subject to the CNIT or CSFT, their total self-assessed 2012 tax year CNIT and CSFT liabilities totaled \$95.4 million. Though there are obviously varied ratios per individual taxpayer, the \$55 million in tax credit awarded in 2014 represented 57.6 percent of the total self-assessed tax amount for tax year 2012, while the \$87.5 million in tax credit requested represented 91.7 percent of the total self-assessed tax amount for tax year 2012.

The total 2012 CSFT liability for S corporations and LLCs receiving the R&D tax credit in 2014 was \$2.6 million. Out of the 229 Pennsylvania S corporations or LLCs, 80 had a CSFT liability of zero for 2012. The total 2012 CSFT liability for C corporations receiving the R&D tax credit in 2014 was \$15.2 million. Out of the 536 C corporations, 172 had a CSFT liability of zero for 2011.

The 536 C corporations receiving the tax credit in 2014 and subject to the CNIT had a total taxable year 2012 CNIT liability of \$74.0 million. Of these companies, 384 were C corporations with a taxable year 2012 CNIT liability equal to zero, due to negative net income in taxable year 2012. 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, 2014.

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 \$9,718 million. This was an increase over the 17 year period of 82.3 percent. Over the same period, total R&D expenditures by private industry in the United States had risen by 109.9 percent to a level of \$277,243 million. For 2011, R&D expenditures in Pennsylvania by private industry were 3.5 percent of total R&D expenditures by private industry in the United States. Pennsylvania ranked 9th 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 765 R&D tax credit applicants in 2014 had total Pennsylvania R&D expenditures in 2013 of \$3,656.5 million. Not all R&D done by industry in Pennsylvania is performed by R&D tax credit applicants.

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 average marginal incentive of between 6.4 to 7.3 percent. In other words, the federal R&D tax credit stimulated

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

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 2014, \$67.8 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 seventeen years, 1997 through 2013. 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. Some observations can be made about the effectiveness of the Pennsylvania R&D tax credit over the life of its existence.

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 strongly in 2009 to grow by 13.7 percent according to NSF data.

Over the lifetime of the R&D tax credit program, 2,263 different taxpayers have been awarded some amount of the total \$543 million in tax credit awarded between 1997 and 2014. 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 765 taxpayers receiving the R&D tax credit in 2014, 229 were either Pennsylvania S corporations, LLCs, LLPs (limited liability partnerships) or individuals and 536 were C corporations. The S corporations, LLCs, LLPs or individuals received \$12.0 million in R&D tax credit, while the C corporations received \$43.0 million.

The 765 taxpayers claiming the R&D tax credit in 2014 had total Pennsylvania research expenditures in taxable year 2013 of \$3,565.5 million. This was 24.9 percent increase compared to their total Pennsylvania research expenditures in taxable year 2012 of \$2,925.2 million.

Impact on Not Small Businesses

Out of the 765 taxpayers receiving the tax credit in 2014, 433 did not qualify as “small” businesses. Their total Pennsylvania research expenditures in taxable year 2013 were \$3,497.6 million, a 23.3 percent increase over their taxable year 2012 Pennsylvania research expenditures of \$2,836.3 million. They received \$44.2 million in R&D tax credit in December 2014.

Of the 433 “not small” businesses, 404 increased their Pennsylvania research expenditures in taxable year 2013 over taxable year 2012 by 27.5 percent in the aggregate. Their Pennsylvania research expenditures in taxable year 2013 rose to \$3,233.4 million from \$2,535.6 million in taxable year 2012. Only 29 of these businesses reduced their Pennsylvania research expenditures over the same period. Their Pennsylvania research expenditures in taxable year 2013 declined by 12.1 percent to \$264.2 million from \$300.7 million in taxable year 2012.

Impact on Small Businesses

Out of the 765 taxpayers receiving the tax credit in 2014, 332 were “small” businesses. Their total Pennsylvania research expenditures in taxable year 2013 were \$156.9 million, a 76.4 percent increase over their taxable year 2012 Pennsylvania research expenditures of \$88.9 million.

The 332 “small” businesses received \$10.8 million in R&D tax credit of the \$11.0 million set aside for them in December 2014.

Of the 332 “small” businesses, 319 increased their Pennsylvania research expenditures in taxable year 2013 over taxable year 2012 by 88.0 percent in the aggregate. Their Pennsylvania research expenditures in taxable year 2013 rose to \$147.6 million from \$78.5 million in taxable year 2012. Only 13 “small” businesses reduced their Pennsylvania research expenditures over the same period. Their Pennsylvania research expenditures in taxable year 2013 declined by 10.7 percent to \$9.3 million from \$10.4 million in taxable year 2012.

Impact on First Time Claimants and New Companies

In 2014, 184 taxpayers were awarded the tax credit for the first time, claiming \$5.2 million in credit. Their Pennsylvania research expenditures totaled \$222.8 million for taxable year 2013. Conversely, 189 taxpayers that claimed the tax credit in 2013 did not receive any credit in 2014. These 189 taxpayers had Pennsylvania research expenditures in taxable year 2012 of \$989.4 million and claimed \$19.8 million in tax credit in 2013.

Of all the taxpayers claiming the R&D tax credit in 2014, 392 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 \$34.6 million in tax credit in 2014 and had total Pennsylvania research expenditures in taxable year 2013 of \$2,144.8 million, a 20.3 percent increase from their Pennsylvania research expenditures in taxable year 2012 of \$1,782.2 million.

The 392 recently incorporated companies had a total taxable year 2012 CSFT liability of \$7.5 million; 176 taxpayers had zero tax liability. The 392 new companies had a total taxable year 2012 CNIT liability of \$29.4 million; 329 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 185 taxpayers for which the Department has tracked Pennsylvania research expenditures for the last ten taxable years, from 2004 through 2013. This group of credit recipients has received \$79.0 million in total tax credit from 1997 through 2014, or 14.8 percent of the total \$533 million awarded over eighteen years. These 185 companies represent 63.4 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.

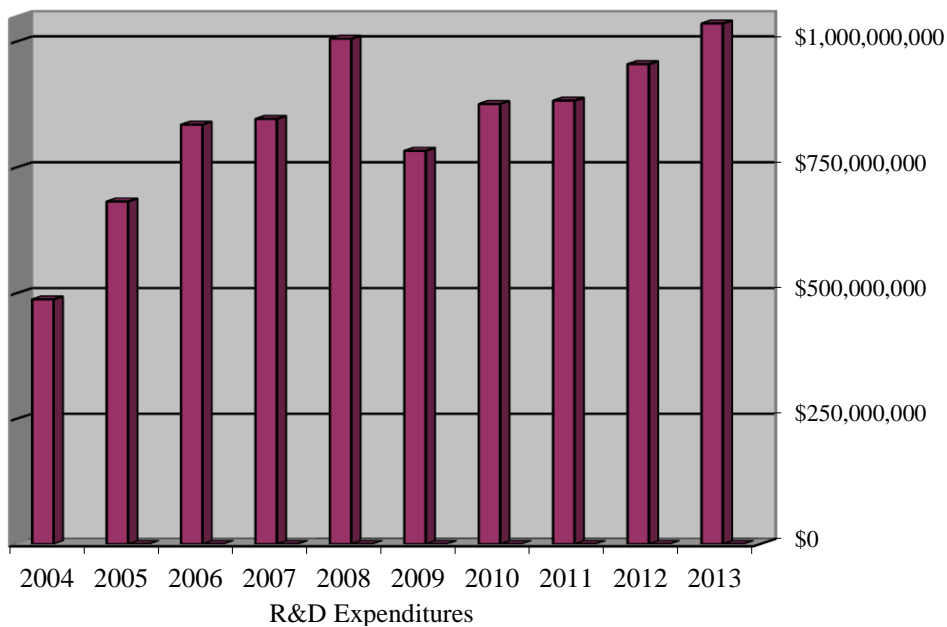
For these 185 taxpayers, their 2013 Pennsylvania R&D expenditures totaled \$1,035.9 million. This is an aggregate growth rate of 112.3 percent over their 2004 Pennsylvania R&D expenditures of \$487.9 million; between 2004 and 2013, the Pennsylvania R&D expenditures for these 185 taxpayers grew at a compound annual growth rate of 8.7 percent.

These 185 taxpayers were awarded about \$14.5 million in R&D tax credit in 2014, 26.3 percent of the total amount of R&D tax credit awarded in December 2014. This credit amount was 1.4 percent of their total amount of Pennsylvania research expenditures in taxable year 2013. 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 185 established taxpayers had a total CSFT liability for taxable year 2012 of \$5.3 million and a total CNIT liability for taxable year 2012 of \$43.8 million.

Chart 1 graphically shows the Pennsylvania R&D expenditures for the 185 established taxpayers for the last ten taxable years, 2004 through 2013.

Chart 1. Pennsylvania R&D Expenditures by Year for 185 Established Companies With PA Expenditure Data Between 2004 and 2013



This chart graphically demonstrates the effect of the most recent economic recession on R&D expenditures in Pennsylvania for the 185 taxpayers included in the data. The R&D expenditures in Pennsylvania for these 185 taxpayers grew by 18.8 percent in 2008. However, due in part to the recession, the growth in their Pennsylvania R&D expenditures in 2009 sharply dropped by 22.1%, when compared to 2008. Their Pennsylvania R&D expenditures bounced back in 2010, growing by 11.9 percent, and resumed steady growth in 2012 and 2013, expanding by 8.2 percent and 8.5 percent respectively.

Small versus Not “Small”

Of the 185 taxpayers, 118 did not qualify as “small” businesses. They received \$68.6 million in tax credit over the eighteen years of the program. Their 2013 Pennsylvania R&D expenditures totaled \$991.4 million. This is an aggregate growth rate of 106.8 percent over their 2004 Pennsylvania R&D expenditures of \$479.4 million; between 2004 and 2013, the Pennsylvania R&D expenditures for these 118 taxpayers grew at a compound annual growth rate of 8.4 percent.

Of the 185 taxpayers, there were 67 “small” businesses that received \$10.4 million in tax credit over the eighteen years of the program. Their 2013 Pennsylvania R&D expenditures totaled \$44.5 million. This is an aggregate growth rate of 422.0 percent over their 2004 Pennsylvania R&D expenditures of \$8.5 million; between 2004 and 2013, the Pennsylvania R&D expenditures for these 67 taxpayers grew at a compound annual growth rate of 20.2 percent.

By Industry Type

Of the 185 taxpayers, 102 were classified as manufacturers. They received \$56.7 million in tax credit over the eighteen years of the program. Their 2013 Pennsylvania R&D expenditures totaled \$821.5 million. This is an aggregate growth rate of 106.5 percent over their 2004 Pennsylvania R&D expenditures of \$397.8 million; between 2004 and 2013, the Pennsylvania R&D expenditures for these 102 taxpayers grew at a compound annual growth rate of 8.4 percent.

Of the 185 taxpayers, there were 83 non-manufacturing businesses that received \$22.3 million in tax credit over the eighteen years of the program. Their 2013 Pennsylvania R&D expenditures totaled \$214.5 million. This is an aggregate growth rate of 138.0 percent over their 2004 Pennsylvania R&D expenditures of \$90.1 million; between 2004 and 2013, the Pennsylvania R&D expenditures for these 83 taxpayers grew at a compound annual growth rate of 10.1 percent.

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

When all 765 taxpayers receiving the R&D tax credit in 2014 were examined, “small” businesses increased their Pennsylvania research expenditures in taxable year 2013 more than “not small” businesses. However, the Pennsylvania research expenditures for “small” businesses were only 4.3 percent of the total Pennsylvania research expenditures in taxable year 2013. The overwhelming majority of Pennsylvania research expenditures continue to be made by taxpayers not classified as “small” businesses.

Of the 185 taxpayers examined for whom the Department has tracked Pennsylvania research expenditures for the last ten taxable years, for 2004 through 2013, 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 eighteen 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 2014, 765 companies were awarded credits, receiving the capped amount of \$55 million, or 62.8 percent of the amount requested.
- In the absence of a cap, \$87.5 million in tax credits would have been awarded.
- In tax year 2013, the 765 companies awarded the R&D tax credit in 2014 had total Pennsylvania research expenditures of \$3,656.5 million.
- Manufacturing firms, particularly pharmaceutical manufacturers, continue to be the primary beneficiaries of the R&D tax credit.
- “Small” businesses claimed \$10.8 million of the \$11.0 million in R&D tax credit set aside for them in December 2014.
- As of February 2014, a total of \$73.1 million in unused R&D tax credits have been sold or assigned from tax credits awarded from December 2003 through December 2013; \$68.6 million was paid for the unused credit, or 93.8 percent of the value of the unused credits.
- The R&D tax credit program has awarded a total of \$533 million in tax credit to 2,263 different taxpayers over the life of the program thus far. Without the caps on annual awards, a total of \$1,494.8 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 36.3 percent of the requested amount.

APPENDIX A

Table 1. Pennsylvania Research & Development Tax Credit Program
Taxpayers Receiving Credit in December 2014, 2013 and 2012 in Dollars
Sorted by 2014 Credit Awarded (Largest to Smallest)

<i>Taxpayer Name</i>	<i>2014 Credit Awarded</i>	<i>2014 Credit Utilized¹</i>	<i>2013 & 2012 Credit Awarded</i>	<i>2013 & 2012 Credit Utilized¹</i>
Teva Branded Pharmaceutical Products R&D, Inc.	\$6,118,950	\$0	\$6,389,351	\$6,124,722
GlaxoSmithKline, LLC (f/k/a SmithKline Beecham Corporation)	\$3,353,317	\$0	\$6,604,762	\$2,588,818
PPG Industries, Inc.	\$2,389,498	\$0	\$783,254	\$444,519
Janssen Research & Development, LLC (f/k/a J&J Pharmaceutical Research & Development LLC)	\$2,207,905	\$0	\$8,929,612	\$101,465
Seneca Resources Corporation	\$1,395,095	\$0	\$1,199,887	\$786,694
Novartis Pharmaceuticals Corporation	\$1,144,884	\$0	\$0	\$0
Mack Trucks, Inc.	\$1,000,321	\$0	\$0	\$0
Sanofi Pasteur, Inc.	\$957,730	\$0	\$819,282	\$819,282
Shire US Holdings, Inc.	\$914,646	\$0	\$255,775	\$0
CNH Industrial America, LLC (f/k/a CNH America, LLC)	\$897,163	\$0	\$1,863,674	\$634,466
Cisco Systems, Inc.	\$722,430	\$0	\$272,593	\$0
United States Steel Corporation	\$697,470	\$0	\$620,203	\$267,914
Cyoptics, Inc.	\$679,133	\$0	\$471,531	\$1,137
International Business Machines Corporation	\$665,218	\$0	\$199,462	\$0
SEI Global Services, Inc.	\$642,392	\$0	\$0	\$0
Amgen, Inc.	\$608,537	\$0	\$0	\$0
Lockheed Martin Corporation	\$600,273	\$0	\$1,153,320	\$1,153,320
Omnyx, LLC	\$593,963	\$0	\$326,702	\$326,702
CSL Behring, LLC	\$574,748	\$0	\$688,553	\$57,102
General Electric Company	\$557,873	\$0	\$1,568,021	\$243,101
Discovery Laboratories, Inc.	\$500,913	\$0	\$272,334	\$272,334
Respironics, Inc.	\$472,488	\$0	\$308,883	\$0
Auxilium Pharmacueticals, Inc.	\$426,723	\$0	\$465,755	\$22,314
JLG Industries, Inc.	\$344,482	\$0	\$0	\$0
SAP America, Inc.	\$342,684	\$0	\$137,688	\$98,186
Greene, Tweed & Co., Inc.	\$341,071	\$0	\$470	\$470
Sanofi US Services, Inc.	\$314,989	\$0	\$0	\$0
Siemens Medical Solutions USA, Inc.	\$304,466	\$0	\$0	\$0
York International Corporation	\$303,643	\$0	\$0	\$0
Kennametal, Inc.	\$285,077	\$0	\$331,665	\$107,810
Trevena, Inc. (f/k/a Parallax, Inc.)	\$266,672	\$0	\$401,423	\$401,423
Coldlight Solutions, LLC	\$263,713	\$0	\$98,444	\$98,444
Adminovate, Inc.	\$257,846	\$0	\$0	\$0
NetApp, Inc. (f/k/a Network Appliance, Inc.)	\$253,927	\$0	\$706,536	\$238,185
Lord Corporation	\$248,050	\$0	\$329,374	\$14,628
Globus Medical, Inc.	\$243,610	\$0	\$519,371	\$406,309
Texas Instruments Incorporated	\$224,019	\$0	\$458,534	\$254,687
GE Betz, Inc.	\$211,849	\$0	\$398,733	\$33,193
Sensor and Antenna Systems, Lansdale, Inc.	\$208,714	\$0	\$0	\$0
The Hershey Company	\$203,158	\$0	\$516,857	\$516,857

<i>Taxpayer Name</i>	<i>2014 Credit Awarded</i>	<i>2014 Credit Utilized¹</i>	<i>2013 & 2012 Credit Awarded</i>	<i>2013 & 2012 Credit Utilized¹</i>
ThingWorx, Inc.	\$198,442	\$0	\$128,201	\$128,201
Comcast Corporation	\$183,052	\$0	\$590,759	\$29,104
Netronome Systems, Inc.	\$180,619	\$0	\$52,358	\$767
Novo Nordisk, Inc.	\$178,257	\$0	\$308,298	\$308,298
Renmatix, Inc.	\$176,495	\$0	\$0	\$0
RB Distribution, Inc.	\$175,062	\$0	\$249,702	\$127,509
Pasco Tool & Plastics, Inc.	\$173,746	\$0	\$15,076	\$15,076
Future POS, Inc. (f/k/a Cutting Edge Solutions, Inc.)	\$168,631	\$0	\$31,530	\$31,530
Industrial Scientific Corporation	\$167,225	\$0	\$135,164	\$135,164
GE Energy Power Conversion USA, Inc. (f/k/a Converteam, Inc.)	\$166,022	\$0	\$0	\$0
Cognition Therapeutics, Inc.	\$165,759	\$0	\$424,940	\$424,900
Solvay USA, Inc. (f/k/a Rhodia, Inc.)	\$165,458	\$0	\$10,069	\$10,069
AMETEK, Inc.	\$159,981	\$0	\$263,876	\$202,373
Accu Measurement Testing, Inc.	\$159,714	\$0	\$281,766	\$281,766
Dick's Sporting Goods, Inc.	\$156,788	\$0	\$0	\$0
CE Citycom	\$156,702	\$0	\$471,410	\$469,590
eDigital Data Center, Inc.	\$156,346	\$0	\$161,963	\$161,963
Braskem America, Inc.	\$155,730	\$0	\$56,836	\$4,230
Applied Geology and Environmental Sciences, Inc.	\$155,153	\$0	\$0	\$0
Joy Global, Inc.	\$151,894	\$0	\$0	\$0
Alcoa, Inc.	\$150,417	\$0	\$1,074,938	\$520,000
NCC Automated Systems, Inc.	\$150,279	\$0	\$104,087	\$104,087
Grove US, LLC	\$146,669	\$0	\$390,315	\$83,561
Aquion Energy, Inc.	\$146,333	\$0	\$107,564	\$107,564
GES Automation Technology, Inc.	\$146,185	\$0	\$133,360	\$98,220
Clutch Holdings, LLC	\$145,141	\$0	\$12,137	\$12,137
Advanced Research Systems, Inc.	\$143,180	\$0	\$180,756	\$165,031
Ecotech Marine, LLC	\$135,293	\$0	\$177,959	\$177,959
GlobalSubmit, Inc.	\$130,747	\$0	\$65,887	\$65,841
Progenra, Inc.	\$129,565	\$0	\$177,414	\$177,414
NuTec Tooling Systems, Inc.	\$123,437	\$0	\$36,605	\$36,605
Avere Systems, Inc.	\$122,948	\$0	\$193,409	\$71
Innovative Solutions & Support, Inc.	\$120,382	\$0	\$0	\$0
Microsemi SOC Corporation (f/k/a Actel Corporation)	\$119,539	\$0	\$101,409	\$0
Gemini Plastics, Inc.	\$118,191	\$0	\$205,868	\$30,489
Knopp Biosciences, LLC	\$116,009	\$0	\$52,077	\$52,077
Tyco Electronics Corporation	\$115,853	\$0	\$231,499	\$0
Momentum Dynamics Corporation, Inc.	\$115,231	\$0	\$66,526	\$66,526
Dun and Bradstreet, Inc.	\$114,532	\$0	\$126,185	\$126,185
ABB, Inc.	\$113,488	\$0	\$137,054	\$137,054
GrafTech International, Ltd.	\$111,779	\$0	\$0	\$0
Blue Belt Technologies, Inc.	\$111,703	\$0	\$275,605	\$275,605
FedEx Corporate Services, Inc.	\$109,259	\$0	\$35,946	\$0
Fleetwood Industries, Inc.	\$106,824	\$0	\$47,372	\$47,372
Snipi, Inc. (d/b/a Sidecar Technologies)	\$106,292	\$0	\$0	\$0
FirstEnergy Corp.	\$105,075	\$0	\$84,048	\$0
ATI Operating Holdings, LLC	\$104,712	\$0	\$31,509	\$31,509

<i>Taxpayer Name</i>	<i>2014 Credit Awarded</i>	<i>2014 Credit Utilized¹</i>	<i>2013 & 2012 Credit Awarded</i>	<i>2013 & 2012 Credit Utilized¹</i>
Listrak, Inc. (f/k/a Remark Internet, Inc.)	\$104,510	\$0	\$136,621	\$7,887
Johnson Matthey, Inc.	\$104,275	\$0	\$321,053	\$86,390
Phoenix Contact Development & Manufacturing, Inc.	\$102,949	\$0	\$90,284	\$0
John Bean Technologies Corporation	\$99,932	\$0	\$31,603	\$24,886
Callidus Biopharma, Inc.	\$98,490	\$0	\$24,402	\$0
Lutron Electronics Co., Inc.	\$97,047	\$0	\$279,898	\$64,483
Ratex Business Solutions, Inc.	\$96,320	\$0	\$70,749	\$556
K'NEX Brands LP	\$94,854	\$0	\$137,675	\$119,000
The Dow Chemical Company	\$92,375	\$0	\$99,717	\$99,717
Walking Thumbs, LLC	\$92,280	\$0	\$48,949	\$3,407
Finisar Corporation	\$92,117	\$0	\$202,568	\$17,204
Heinz Management, LLC	\$90,467	\$0	\$387,544	\$387,544
TicketLeap, Inc.	\$90,364	\$0	\$0	\$0
Claritee Group, LLC	\$89,509	\$0	\$0	\$0
Control Concepts Corporation	\$88,934	\$0	\$102,370	\$101,857
Aero Tech, Inc.	\$87,866	\$0	\$98,695	\$36,654
Pennoni Associates, Inc.	\$87,830	\$0	\$88,431	\$88,431
Vitae Pharmaceuticals, Inc. (f/k/a Concurrent Pharmaceuticals, Inc.)	\$83,843	\$0	\$135,133	\$3,631
Auto Soft, Inc.	\$83,432	\$0	\$300,675	\$1,540
Wheelhouse Analytics, LLC (f/k/a Coates Solutions, LLC)	\$83,417	\$0	\$111,331	\$111,331
Ansaldo STS USA International, Co.	\$83,141	\$0	\$190,405	\$21,504
Savana, Inc.	\$83,014	\$0	\$28,070	\$532
Chant Engineering Co., Inc.	\$81,603	\$0	\$171,840	\$0
Sungard Data Systems, Inc.	\$80,684	\$0	\$33,687	\$0
Wavefront Research, Inc.	\$79,354	\$0	\$155,249	\$155,249
Caterpillar Global Mining America, LLC (f/k/a Bucyrus America, Inc.)	\$79,352	\$0	\$190,086	\$190,086
Warfel Construction Company	\$79,224	\$0	\$0	\$0
Sciquest, Inc.	\$79,137	\$0	\$24,718	\$10,170
Special Pathogens Laboratory, LLC	\$77,865	\$0	\$0	\$0
Akustica, Inc.	\$77,801	\$0	\$130,517	\$65,257
rue21, Inc.	\$75,429	\$0	\$0	\$0
SKF USA, Inc.	\$75,248	\$0	\$15,476	\$0
Education Management Solutions, Inc.	\$75,158	\$0	\$59,444	\$59,444
Caliber Therapeutics, Inc.	\$74,544	\$0	\$121,101	\$121,101
Immunex Corporation	\$74,054	\$0	\$617,332	\$71,108
Combined Conditional Access Development	\$73,768	\$0	\$54,838	\$40
The ExOne Company	\$73,420	\$0	\$0	\$0
Hybrid Integration, LLC	\$73,342	\$0	\$35,299	\$35,229
Synchronoss Technologies, Inc.	\$73,145	\$0	\$211,936	\$211,936
Magnesita Refractories Company	\$71,918	\$0	\$20,859	\$20,859
M-Mech Defense, Inc.	\$71,732	\$0	\$23,842	\$23,842
Intertek USA, Inc.	\$71,602	\$0	\$0	\$0
Trice Orthopedics, Inc. (f/k/a InSyte Medical Technologies, Inc.)	\$71,327	\$0	\$0	\$0
Verizon Data Services, LLC	\$70,754	\$0	\$105,315	\$105,315
Pharmaceutical Manufacturing Research Services, Inc.	\$70,313	\$0	\$0	\$0

<i>Taxpayer Name</i>	<i>2014 Credit Awarded</i>	<i>2014 Credit Utilized¹</i>	<i>2013 & 2012 Credit Awarded</i>	<i>2013 & 2012 Credit Utilized¹</i>
Carnegie Robotics, LLC	\$70,096	\$0	\$58,671	\$30,657
Advanced Cooling Technologies, Inc.	\$69,362	\$0	\$15,291	\$7,731
MEI, Inc.	\$69,164	\$0	\$175,129	\$81,139
Penn Manufacturing Industries, Inc.	\$68,646	\$0	\$191,184	\$191,184
Renick Brothers Construction Company	\$68,201	\$0	\$52,763	\$52,763
K-Fab, Inc.	\$66,830	\$0	\$22,485	\$22,485
CFS Holdings Corp.	\$66,475	\$0	\$0	\$0
Oberg Industries, Inc.	\$66,335	\$0	\$56,886	\$55,065
WebpageFX, Inc.	\$66,022	\$0	\$0	\$0
Verizon Business Network Services, Inc.	\$65,964	\$0	\$128,481	\$128,481
NoWait, Inc.	\$65,919	\$0	\$37,357	\$37,357
Flexicon Corporation	\$65,901	\$0	\$12,657	\$12,657
Shoefitr, Inc.	\$65,211	\$0	\$27,147	\$27,147
Manley Holdings, Inc.	\$65,142	\$0	\$77,768	\$55,956
Shifa Biomedical Corporation	\$65,049	\$0	\$86,395	\$86,395
Woodward, Inc.	\$64,995	\$0	\$47,215	\$0
Global Technology Enterprise Corp.	\$64,908	\$0	\$56,199	\$56,199
Tech Molded Plastics, Inc.	\$64,310	\$0	\$121,104	\$121,104
Saucon Technologies	\$64,157	\$0	\$0	\$0
Astrorobotic Technology, Inc.	\$64,139	\$0	\$53,977	\$53,977
Victaulic Company	\$63,956	\$0	\$372,730	\$372,730
Berry Plastics SP, Inc.	\$63,918	\$0	\$0	\$0
K&H Technologies, Inc.	\$63,243	\$0	\$89,089	\$89,089
NESTEC, Inc.	\$63,085	\$0	\$51,660	\$51,660
Lehigh Valley Technologies, Inc.	\$63,072	\$0	\$17,951	\$17,951
Almac Clinical Technologies, LLC	\$62,985	\$0	\$0	\$0
Cutanea Life Sciences, Inc.	\$62,849	\$0	\$0	\$0
RJMetrics, Inc.	\$62,841	\$0	\$44,298	\$44,298
Gamry Instruments, Inc.	\$62,196	\$0	\$35,870	\$35,870
Iagnosis, Inc.	\$62,161	\$0	\$59,134	\$59,134
Frontline Technologies, Inc.	\$61,357	\$0	\$71,674	\$71,674
Compunetix, Inc.	\$60,597	\$0	\$53,438	\$0
Epiphany Solar Water Systems, LLC	\$60,592	\$0	\$50,243	\$50,243
NUUCO MedTech, LLC	\$60,566	\$0	\$0	\$0
Agrofresh, Inc.	\$59,371	\$0	\$760	\$760
Nalco Company	\$58,932	\$0	\$0	\$0
Duolingo, Inc.	\$58,835	\$0	\$117,304	\$117,304
Wacker Chemical Corporation	\$57,723	\$0	\$51,422	\$51,422
ZSX Medical, LLC	\$57,560	\$0	\$0	\$0
BioConnect Systems, Inc.	\$57,408	\$0	\$0	\$0
CMR USA, Inc.	\$57,311	\$0	\$0	\$0
Airolution, LLC	\$56,285	\$0	\$23,135	\$23,135
Rajant Corporation	\$56,284	\$0	\$58,064	\$58,064
The Valspar Corporation	\$56,073	\$0	\$237,756	\$59,235
Think Through Learning, Inc. (f/k/a Apangea Learning, Inc.)	\$55,903	\$0	\$204,015	\$0
Invisible Sentinel, Inc.	\$54,904	\$0	\$0	\$0
FTS Holding Corporation	\$54,642	\$0	\$0	\$0
Cernostics, Inc.	\$54,263	\$0	\$73,339	\$73,339
TMG Health, Inc.	\$54,239	\$0	\$27,242	\$27,242
Plastek Industries, Inc.	\$53,758	\$0	\$10,590	\$0

<i>Taxpayer Name</i>	<i>2014 Credit Awarded</i>	<i>2014 Credit Utilized¹</i>	<i>2013 & 2012 Credit Awarded</i>	<i>2013 & 2012 Credit Utilized¹</i>
Crayola, LLC	\$53,414	\$0	\$1,509	\$1,509
Holtec Power Plant Components Division	\$52,407	\$0	\$0	\$0
Graybills Tool & Die, Inc.	\$52,359	\$0	\$31,885	\$11
Sargent Electric Company	\$52,242	\$0	\$20,151	\$20,151
MPD Holdings, LLC	\$50,400	\$0	\$61,156	\$61,156
Siemens PLM Software II US, Inc.	\$49,826	\$0	\$84,767	\$0
Cellco Partnership, LLP	\$49,641	\$0	\$86,643	\$67,210
Itrco, LP	\$49,373	\$0	\$72,840	\$72,840
Dynamis Pharmaceuticals, Inc.	\$49,017	\$0	\$0	\$0
Ellwood Investment Corp.	\$48,859	\$0	\$0	\$0
InfoMC, Inc.	\$48,240	\$0	\$82,470	\$373
Gravic, Inc.	\$47,493	\$0	\$55,317	\$219
Dart Container Corporation of Pennsylvania	\$47,283	\$0	\$1,953	\$0
Eaton Corporation	\$47,157	\$0	\$26,078	\$26,078
Lasko Products, Inc.	\$47,060	\$0	\$95,538	\$95,538
Jennison Corporation	\$46,777	\$0	\$0	\$0
Turn 5, Inc. (f/k/a Xoxide, Inc.)	\$46,547	\$0	\$0	\$0
National Medical Services, Inc.	\$46,496	\$0	\$49,938	\$43,797
CD Diagnostics, Inc.	\$45,794	\$0	\$85,233	\$85,233
Webber/Smith Associates, Inc.	\$45,041	\$0	\$0	\$0
Optofluidics, Inc.	\$45,004	\$0	\$0	\$0
BioSpectra, Inc.	\$44,965	\$0	\$184,740	\$182,478
New Business Learning Center, Inc.	\$44,855	\$0	\$0	\$0
Sweet Street Desserts, Inc.	\$44,616	\$0	\$13,670	\$0
ShowClix, Inc.	\$44,517	\$0	\$28,360	\$28,360
Amuneal Manufacturing Corp.	\$43,052	\$0	\$29,723	\$29,723
Autodesk, Inc.	\$43,007	\$0	\$125,393	\$95,693
W.L. Gore & Associates, Inc.	\$42,999	\$0	\$56,506	\$32,288
Reynolds & Reynolds Electronics, Inc.	\$42,787	\$0	\$66,946	\$35,987
Pine Hill Manufacturing, LLC	\$42,508	\$0	\$0	\$0
Amphenol Intercon Systems, Inc.	\$42,448	\$0	\$28,498	\$28,498
Georgeko Industries, Inc.	\$41,774	\$0	\$0	\$0
PJ Dick Incorporated	\$41,714	\$0	\$0	\$0
Radius Corporation	\$41,631	\$0	\$16,031	\$16,031
PSI Pumping Solutions, Inc.	\$41,569	\$0	\$13,522	\$13,522
Boulden Energy Systems, Inc.	\$41,299	\$0	\$22,975	\$22,975
The Proud Company	\$41,238	\$0	\$0	\$0
Cohera Medical, Inc.	\$41,088	\$0	\$67,681	\$67,681
Lamtec Corporation	\$40,593	\$0	\$30,002	\$30,002
Pennsy Corporation	\$40,558	\$0	\$39,048	\$39,048
American International Forwarding, Inc.	\$39,455	\$0	\$0	\$0
Carlisle Construction Materials Incorporated	\$39,436	\$0	\$77,299	\$27,729
NRG Controls, Inc.	\$39,271	\$0	\$0	\$0
USSC, LLC	\$39,113	\$0	\$0	\$0
Minitab, Inc.	\$39,095	\$0	\$255,741	\$20,137
Micromechatronics, Inc.	\$39,050	\$0	\$0	\$0
KCF Technologies, Inc.	\$38,365	\$0	\$47,088	\$0
Havaco Technology Incorporated	\$38,302	\$0	\$0	\$0
Bettwy Systems, Inc.	\$37,944	\$0	\$0	\$0
Rent Jungle, LLC	\$37,596	\$0	\$37,767	\$37,767
Sicom Systems, Inc.	\$37,394	\$0	\$62,184	\$62,184

<i>Taxpayer Name</i>	<i>2014 Credit Awarded</i>	<i>2014 Credit Utilized¹</i>	<i>2013 & 2012 Credit Awarded</i>	<i>2013 & 2012 Credit Utilized¹</i>
Scientific Systems, Inc.	\$37,390	\$0	\$0	\$0
Dataforma Incorporated	\$37,001	\$0	\$104,687	\$104,687
Printmail Systems, Inc.	\$36,735	\$0	\$56,814	\$36,502
Document Solutions Group, Inc.	\$36,490	\$0	\$82,089	\$18,212
Optinose US, Inc.	\$36,046	\$0	\$52,864	\$0
KW, Inc.	\$36,025	\$0	\$46,432	\$46,432
Swank Construction Company, LLC	\$35,793	\$0	\$43,392	\$2,146
Warners Innovations Solutions	\$35,750	\$0	\$0	\$0
Caterpillar, Inc.	\$35,677	\$0	\$516,458	\$156,931
Channellock, Inc.	\$35,619	\$0	\$39,352	\$1,669
Follett Corporation	\$35,608	\$0	\$31,214	\$8,577
Streamlight, Inc.	\$35,522	\$0	\$20,844	\$20,844
Express Dynamics, LLC	\$35,517	\$0	\$21,670	\$21,670
InvestEdge, Inc.	\$35,471	\$0	\$64,427	\$27,626
Tipton Medical & Diagnostic Center	\$35,161	\$0	\$51,630	\$51,630
Brookville Equipment Corporation	\$35,155	\$0	\$55,741	\$23,688
Jazz Pharmaceuticals, Inc.	\$34,743	\$0	\$14,203	\$14,203
Miller Welding and Machine Company, Inc.	\$34,681	\$0	\$0	\$0
Stock, Garber and Associates, Inc.	\$34,652	\$0	\$42,256	\$40,743
First Insight, Inc.	\$34,594	\$0	\$53,855	\$53,855
Triumph Controls, LLC	\$34,354	\$0	\$10,281	\$0
Relay Network, LLC	\$33,644	\$0	\$0	\$0
Stantec Consulting Services, Inc.	\$33,642	\$0	\$0	\$0
American Infrastructure, Inc.	\$33,119	\$0	\$23,998	\$0
Gelest, Inc.	\$33,037	\$0	\$102,562	\$93,799
Toll Bros., Inc.	\$32,958	\$0	\$0	\$0
New Way Machine Components, Inc. (dba New Way Precision)	\$32,474	\$0	\$30,843	\$30,843
Redpath Integrated Pathology, Inc.	\$32,287	\$0	\$17,599	\$17,599
Essent Corporation	\$32,264	\$0	\$13,252	\$0
Dobil Laboratories, Inc.	\$32,230	\$0	\$44,095	\$44,095
NewCare Solutions, LLC	\$31,907	\$0	\$0	\$0
Electronics for Imaging, Inc.	\$31,840	\$0	\$0	\$0
Clear-Coat, LLC	\$31,807	\$0	\$0	\$0
FS-Elliott Co., LLC	\$31,500	\$0	\$76,481	\$55,420
Team Ten, LLC (American Eagle Paper Mills)	\$31,222	\$0	\$71,568	\$70,847
Ad Base Group, Inc.	\$30,910	\$0	\$142,342	\$95,148
Qortek, Inc.	\$30,823	\$0	\$108,878	\$39,406
Psychology Software Tools, Inc.	\$30,777	\$0	\$66,958	\$66,958
Diamondback Automotive Accessories	\$30,532	\$0	\$29,469	\$29,469
Shorts Tool and Manufacturing, Inc.	\$29,883	\$0	\$0	\$0
Impact Applications, Inc.	\$29,498	\$0	\$27,187	\$27,187
Combined Systems, Inc.	\$29,038	\$0	\$2,547	\$0
Centroid Corporation	\$28,879	\$0	\$41,650	\$41,650
Anholt Technologies, Inc.	\$28,670	\$0	\$0	\$0
Saladax Biomedical, Inc	\$28,620	\$0	\$0	\$0
PoolPak International, LLC	\$28,542	\$0	\$0	\$0
Richter Precision, Inc.	\$28,538	\$0	\$28,030	\$28,030
Quantum Vortex, Inc.	\$28,310	\$0	\$0	\$0
Union Carbide Corporation	\$28,089	\$0	\$232,364	\$204,524
Metaphase Technology, Inc.	\$27,926	\$0	\$0	\$0

<i>Taxpayer Name</i>	<i>2014 Credit Awarded</i>	<i>2014 Credit Utilized¹</i>	<i>2013 & 2012 Credit Awarded</i>	<i>2013 & 2012 Credit Utilized¹</i>
Chemcut Holdings, LLC	\$27,541	\$0	\$38,277	\$38,158
General Carbide Corporation	\$27,526	\$0	\$0	\$0
LifeSensors, Inc.	\$27,362	\$0	\$67,532	\$67,532
Specialty Minerals, Inc.	\$27,207	\$0	\$31,857	\$1,710
JetAir, Inc.	\$27,116	\$0	\$18,421	\$7,210
Starlite Diversified, Inc.	\$27,008	\$0	\$43,443	\$35,777
Oberon, Inc.	\$26,937	\$0	\$35,213	\$35,213
Rinovum Womens Health, Inc. (f/k/a Intimate Bridge 2 Conception, Inc.)	\$26,712	\$0	\$47,899	\$19,458
Vertical Screen, Inc.	\$26,354	\$0	\$15,149	\$2,427
Milnes Engineering, Inc.	\$26,243	\$0	\$98,136	\$98,136
Michael & Associates, Inc.	\$26,024	\$0	\$31,505	\$31,505
Wagman Companies, Inc.	\$25,959	\$0	\$0	\$0
Thompsons Candle Co.	\$25,768	\$0	\$27,592	\$27,592
Kroff Chemical Company	\$25,706	\$0	\$42,323	\$8,988
Conduit Technology, LLC	\$25,578	\$0	\$0	\$0
Bore Tech, Inc.	\$25,399	\$0	\$0	\$0
Primbio Research Institute, LLC	\$25,271	\$0	\$0	\$0
Premier Automation, LLC	\$25,135	\$0	\$17,066	\$17,066
Kiewit Power Constructors Co.	\$24,901	\$0	\$0	\$0
Salimetrics, LLC	\$24,876	\$0	\$47,189	\$47,189
Golden Brothers, Inc. (t/a Golden Technologies)	\$24,861	\$0	\$39,508	\$39,508
Fluitron, Inc.	\$24,823	\$0	\$18,660	\$18,660
USA Technologies, Inc.	\$24,685	\$0	\$0	\$0
Assistive Technology Products, Inc.	\$24,141	\$0	\$49,351	\$49,351
Innovative Sintered Metals, Inc.	\$24,078	\$0	\$82,313	\$82,313
ProMinent Fluid Controls, Inc.	\$23,943	\$0	\$10,866	\$10,866
Pilot Air Freight Corp.	\$23,819	\$0	\$10,403	\$10,403
Blair Roofing, Inc.	\$23,792	\$0	\$0	\$0
Bettwy Electric, Inc.	\$23,790	\$0	\$0	\$0
SofterWare, Inc.	\$23,644	\$0	\$11,590	\$11,590
Collegiate Furnishing, Inc.	\$23,520	\$0	\$32,376	\$32,376
Huston, Inc.	\$23,127	\$0	\$45,705	\$44,848
Koppers, Inc.	\$23,053	\$0	\$0	\$0
Liquid X Printed Metals, Inc.	\$23,044	\$0	\$6,166	\$0
Phonetics, Inc. (d/b/a Sensaphone)	\$22,914	\$0	\$8,550	\$1,877
HindlePower, Inc.	\$22,696	\$0	\$88,121	\$88,067
Teletracking Technologies, Inc.	\$22,632	\$0	\$0	\$0
Sabic Innovative Plastics US, LLC	\$22,497	\$0	\$0	\$0
Effort Enterprises, Inc.	\$22,422	\$0	\$28,948	\$28,948
Just Born, Inc.	\$22,404	\$0	\$30,734	\$54
Soft Genetics, LLC	\$22,266	\$0	\$37,682	\$37,682
Imperial Carbide, Inc.	\$22,246	\$0	\$74,891	\$30,455
Vertex, Inc.	\$22,238	\$0	\$0	\$0
PDC Machines, Inc.	\$22,087	\$0	\$0	\$0
Chick Workholding Solutions, Inc.	\$21,908	\$0	\$52,551	\$15,000
Try Tek Machine Works Incorporated	\$21,592	\$0	\$22,640	\$0
Institute for Musculoskeletal Science and Education, LLC	\$21,502	\$0	\$0	\$0
API Technologies Corp.	\$21,484	\$0	\$0	\$0

<i>Taxpayer Name</i>	<i>2014 Credit Awarded</i>	<i>2014 Credit Utilized¹</i>	<i>2013 & 2012 Credit Awarded</i>	<i>2013 & 2012 Credit Utilized¹</i>
Beaver Steel Services, Inc.	\$21,482	\$0	\$14,270	\$14,270
Universal Electric Corporation	\$21,122	\$0	\$44,689	\$0
Knoll, Inc.	\$20,997	\$0	\$19,006	\$19,006
North American Hoganas, Inc.	\$20,909	\$0	\$115,619	\$115,619
Branch Medical Group, Inc.	\$20,875	\$0	\$41,286	\$41,286
Effort Foundry, Inc.	\$20,775	\$0	\$0	\$0
Qmac - Quality Machining, Inc.	\$20,736	\$0	\$61,531	\$34,308
SpiralGen, Inc.	\$20,631	\$0	\$0	\$0
Raven Industries, Inc.	\$20,587	\$0	\$26,251	\$26,251
Techniserv, Inc.	\$20,576	\$0	\$78,304	\$51,850
ChromaTan, Inc.	\$20,519	\$0	\$22,313	\$22,313
SPD Electrical Systems, Inc.	\$20,476	\$0	\$2,379	\$2,379
Cummins-Allison Corp.	\$20,469	\$0	\$34,042	\$34,042
Intel Mobile Communications North America, Inc.	\$20,445	\$0	\$0	\$0
Lake Tool, Inc.	\$20,249	\$0	\$16,273	\$16,273
Aclaris Therapeutics, Inc.	\$20,248	\$0	\$0	\$0
Steven B. Golden Associates, Inc. (t/a Artskills)	\$19,999	\$0	\$60,216	\$7,212
Clarion Sintered Metals, Inc.	\$19,920	\$0	\$15,816	\$0
Kovatch Mobile Equipment Corp.	\$19,888	\$0	\$20,461	\$674
Parametric Dining, LLC	\$19,858	\$0	\$0	\$0
Fab Tech, Inc. (d/b/a Corle Building Systems)	\$19,811	\$0	\$35,998	\$35,998
AssetWorks, Inc.	\$19,761	\$0	\$0	\$0
Advanced Controls & Distribution, LLC	\$19,727	\$0	\$14,197	\$14,197
Seegrid Corporation	\$19,716	\$0	\$381,499	\$381,499
Allomet Corporation	\$19,690	\$0	\$43,201	\$43,201
GAI-Tronics Corporation	\$19,332	\$0	\$142,870	\$85,756
Gautier Steel, Ltd.	\$19,300	\$0	\$7,394	\$7,394
Carlisle Engineered Products, Inc.	\$19,297	\$0	\$0	\$0
Ernst Biomass, LLC	\$19,116	\$0	\$0	\$0
A&A Construction Co., Inc.	\$19,072	\$0	\$0	\$0
Advanced Fabrication Services, Inc.	\$18,963	\$0	\$0	\$0
Third Eye Diagnostics, Inc.	\$18,910	\$0	\$50,420	\$50,420
Standard Precision Manufacturing Incorporated	\$18,906	\$0	\$0	\$0
Rosenberger of North America, LLC	\$18,857	\$0	\$3,389	\$3,389
MoJo Active, Inc.	\$18,815	\$0	\$0	\$0
Inolux Chemical Company	\$18,742	\$0	\$0	\$0
Evolution Products, LLC	\$18,742	\$0	\$0	\$0
Precision Medical Products, Inc.	\$18,545	\$0	\$2,637	\$2,637
McKamish, Inc.	\$18,322	\$0	\$48,454	\$23,291
Aquatech International Corporation	\$18,126	\$0	\$121,648	\$106,979
Pellegrino Food Products Co., Inc.	\$17,923	\$0	\$0	\$0
Cavanaugh Marketing Network, Inc. (dba Cavanaugh)	\$17,829	\$0	\$27,372	\$12,132
Apprise Software, Inc.	\$17,821	\$0	\$31,487	\$6,845
Suntex International, Inc.	\$17,775	\$0	\$42,766	\$40,527
Therm-Omega-Tech, Inc.	\$17,718	\$0	\$8,186	\$8,186
Martin Technology, Inc.	\$17,618	\$0	\$26,886	\$26,886
Matric Limited	\$17,523	\$0	\$6,229	\$6,229

<i>Taxpayer Name</i>	<i>2014 Credit Awarded</i>	<i>2014 Credit Utilized¹</i>	<i>2013 & 2012 Credit Awarded</i>	<i>2013 & 2012 Credit Utilized¹</i>
Intact Vascular, Inc.	\$17,464	\$0	\$0	\$0
Philadelphia Tramrail Enterprises, Inc.	\$17,421	\$0	\$5,834	\$5,834
Go Green APU, LLC	\$17,379	\$0	\$15,369	\$15,369
Community Light and Sound, Inc.	\$17,370	\$0	\$14,431	\$14,431
Kaolin Mushroom Farms, Inc.	\$17,348	\$0	\$0	\$0
Vamco International, Inc.	\$17,328	\$0	\$0	\$0
Bra-Vor Tool & Die Company, Inc.	\$17,216	\$0	\$40,508	\$6,997
Superior Plastic Products, Inc.	\$16,802	\$0	\$8,341	\$8,341
PTR Group, LP	\$16,390	\$0	\$7,097	\$7,097
Sentient Investment Corporation	\$16,341	\$0	\$21,452	\$20,314
Premier Dental Products Company	\$16,249	\$0	\$4,547	\$0
Premier Automation Holdings, Inc.	\$16,232	\$0	\$13,958	\$13,019
Keystone Machinery Corporation	\$16,118	\$0	\$10,656	\$10,656
Reclamere, Inc.	\$16,114	\$0	\$42,627	\$42,627
Z-Axis Connector Company	\$16,111	\$0	\$13,027	\$9,123
Laminar Flow, Inc.	\$15,958	\$0	\$25,123	\$25,123
Competition Tire East, Inc.	\$15,955	\$0	\$2,595	\$1,176
Adobe Systems Incorporated	\$15,807	\$0	\$0	\$0
C.U.E., Inc.	\$15,793	\$0	\$12,232	\$7,783
PhaseBio Pharmaceuticals, Inc.	\$15,786	\$0	\$73,745	\$73,745
Turning Edge Solutions, LLC	\$15,525	\$0	\$0	\$0
Solenoid Solutions, Inc.	\$15,447	\$0	\$2,957	\$47
Crown Cork & Seal USA, Inc.	\$15,379	\$0	\$4,999	\$4,999
Basic Carbide Corporation	\$15,343	\$0	\$16,684	\$5,289
Stein Seal Company	\$15,166	\$0	\$0	\$0
Crestwood Membranes, Inc.	\$15,116	\$0	\$18,723	\$18,723
Institute of Consultative Bioethics	\$14,989	\$0	\$0	\$0
VT Graphics, Inc.	\$14,950	\$0	\$13,741	\$13,741
Maya Design, Inc.	\$14,699	\$0	\$102,486	\$122
Custom Processing Services, Inc.	\$14,613	\$0	\$17,469	\$17,469
Castle Mold and Tool, Inc.	\$14,504	\$0	\$50,959	\$46,739
ExecutivePulse, Inc.	\$14,443	\$0	\$34,616	\$34,616
Bio-Pharm Incorporated	\$14,412	\$0	\$0	\$0
Powerlytics, Inc.	\$14,389	\$0	\$0	\$0
Gap Holding Company, Inc.	\$14,294	\$0	\$0	\$0
Harold Beck & Sons, Inc.	\$14,243	\$0	\$3,106	\$0
Eitel Presses, Inc.	\$13,976	\$0	\$27,856	\$39
Epic Web Studios	\$13,889	\$0	\$9,063	\$9,063
Zausner Food Corp and Subsidiaries, Inc.	\$13,855	\$0	\$0	\$0
Train Control Systems, Inc.	\$13,751	\$0	\$11,713	\$11,713
Piezo Energy, Inc.	\$13,750	\$0	\$0	\$0
Liberty Electronics, Inc.	\$13,742	\$0	\$0	\$0
Bliley Technologies Incorporated (Bliley Electric Corporation)	\$13,733	\$0	\$0	\$0
Blair Strip Steel Co.	\$13,699	\$0	\$35,753	\$24,302
Treehouse Foods, Inc.	\$13,627	\$0	\$0	\$0
Norquay Technologies Incorporated	\$13,519	\$0	\$0	\$0
Diversified Coatings, Inc.	\$13,408	\$0	\$14,424	\$14,422
Whitford Corporation	\$13,393	\$0	\$0	\$0
Reading Precast, Inc.	\$13,372	\$0	\$6,745	\$209
Bellefield Systems, LLC	\$13,237	\$0	\$6,584	\$6,123

<i>Taxpayer Name</i>	<i>2014 Credit Awarded</i>	<i>2014 Credit Utilized¹</i>	<i>2013 & 2012 Credit Awarded</i>	<i>2013 & 2012 Credit Utilized¹</i>
Innovative Control Systems, Inc.	\$13,193	\$0	\$81,206	\$10,704
Superior Tire & Rubber Corp.	\$13,176	\$0	\$18,085	\$23
R.G. Steel Corp.	\$12,808	\$0	\$0	\$0
ProSoft Technologies, Inc.	\$12,731	\$0	\$0	\$0
Eriez Manufacturing Co.	\$12,600	\$0	\$35,833	\$0
Kieran Timberlake Associates, LLP	\$12,591	\$0	\$14,489	\$14,489
Heyl & Patterson, Inc.	\$12,515	\$0	\$19,041	\$1,809
Whitewater International, LLC	\$12,506	\$0	\$11,684	\$11,684
Koryak Consulting, Inc.	\$12,413	\$0	\$908	\$526
Power Conversion Technologies, Inc.	\$12,369	\$0	\$10,291	\$4,309
Griffith, Inc. (t/a Alpha Systems)	\$12,325	\$0	\$7,256	\$5,144
Hydro-Spray Wash Systems, Inc.	\$12,183	\$0	\$0	\$0
Standing Stone Consulting, Inc.	\$12,141	\$0	\$11,555	\$11,555
Jay Fulkroad Sons, Inc.	\$12,064	\$0	\$0	\$0
Metalor Electrotechnics USA Corp.	\$12,000	\$0	\$0	\$0
Cook Vascular Corporation	\$11,982	\$0	\$10,460	\$6,860
Richardson Cooling Packages, LLC	\$11,913	\$0	\$17,002	\$4,211
Great Lakes Automation Services, LLC	\$11,863	\$0	\$0	\$0
Proxicast, LLC	\$11,810	\$0	\$10,217	\$10,217
Weir Hazleton, Inc.	\$11,747	\$0	\$37,054	\$37,054
Center Hardwood, LLC	\$11,666	\$0	\$0	\$0
Aero Tech Designs, Inc.	\$11,652	\$0	\$0	\$0
Health Sciences Construction Group, Ltd. (d/b/a HSC Builders & Construction Managers)	\$11,636	\$0	\$0	\$0
Penn Engineering and Manufacturing Corp.	\$11,588	\$0	\$57,884	\$6,030
Fortna, Inc.	\$11,584	\$0	\$11,231	\$11,231
Novotech Construction, Inc.	\$11,552	\$0	\$0	\$0
Greenleaf Corporation	\$11,535	\$0	\$0	\$0
Joseph Barbato Associates, LLC	\$11,498	\$0	\$27,940	\$0
ARCCA Incorporated	\$11,488	\$0	\$0	\$0
Custom Laminating Corporation	\$11,440	\$0	\$22,843	\$22,843
Chromalox, Inc.	\$11,401	\$0	\$6,667	\$0
Quintech Electronics Communications, Inc.	\$11,391	\$0	\$4,115	\$4,115
The Drucker Company, Inc.	\$11,370	\$0	\$15,967	\$6,268
L.F. Lambert Spawn Company, Inc.	\$11,282	\$0	\$21,374	\$21,374
SJ Consulting Group, Inc.	\$11,269	\$0	\$0	\$0
NABCO, Inc	\$11,201	\$0	\$0	\$0
OptiXtal, Inc.	\$11,162	\$0	\$11,713	\$0
Galera Therapeutics, Inc.	\$11,148	\$0	\$0	\$0
Nielsen-Kellerman, Co.	\$11,034	\$0	\$1,800	\$364
Bulk Chemicals, Inc.	\$10,961	\$0	\$10,349	\$10,349
Applied Clinical Intelligence, LLC	\$10,781	\$0	\$0	\$0
Alertek, LLC	\$10,713	\$0	\$473	\$68
The Efficiency Network, Inc.	\$10,712	\$0	\$0	\$0
VaxForm, LLC	\$10,708	\$0	\$854	\$0
Flexcut Tool Co., Inc.	\$10,696	\$0	\$5,715	\$5,715
Rearick Tooling, Inc.	\$10,673	\$0	\$0	\$0
AllFill, Inc.	\$10,634	\$0	\$5,613	\$5,613
The APAK Group	\$10,558	\$0	\$0	\$0
Intelmarx, LLC	\$10,501	\$0	\$7,379	\$7,379
Maxim Integrated Products, Inc.	\$10,399	\$0	\$0	\$0

<i>Taxpayer Name</i>	<i>2014 Credit Awarded</i>	<i>2014 Credit Utilized¹</i>	<i>2013 & 2012 Credit Awarded</i>	<i>2013 & 2012 Credit Utilized¹</i>
Alcoil USA, LLC	\$10,361	\$0	\$10,137	\$10,137
Crescent Industries, Inc.	\$10,361	\$0	\$34,581	\$34,581
C&J Industries, Inc.	\$10,342	\$0	\$71,555	\$0
LaBarge Electronics, Inc.	\$10,300	\$0	\$0	\$0
Coating and Converting Technologies Corporation	\$10,260	\$0	\$0	\$0
FutureWei Technologies, Inc.	\$10,243	\$0	\$6,235	\$122
Vulcan Spring & Mfg., Co.	\$10,237	\$0	\$3,967	\$3,967
Universal Stainless and Alloy Products, Inc.	\$10,187	\$0	\$263,468	\$8,285
Wampum Hardware Co.	\$10,102	\$0	\$28,330	\$28,330
All-American Hose, LLC	\$10,049	\$0	\$0	\$0
Predictive Solutions Corporation	\$9,956	\$0	\$0	\$0
Lee Industries, Inc.	\$9,930	\$0	\$0	\$0
Tiversa Holding Corp. (f/k/a Tiversa, Inc.)	\$9,924	\$0	\$62,667	\$62,667
Learning Sciences International, LLC	\$9,852	\$0	\$0	\$0
Certes Networks, Inc. (f/k/a Cipheroptics, Inc.)	\$9,794	\$0	\$76,073	\$76,073
Lunchtime Software, LLC	\$9,755	\$0	\$28,446	\$22,363
Appcove, Inc.	\$9,651	\$0	\$1,683	\$1,683
Dyco, Inc.	\$9,555	\$0	\$0	\$0
Kwantera Incorporated	\$9,546	\$0	\$19,624	\$0
Instrumentation Industries, Inc.	\$9,516	\$0	\$204	\$204
Motors Drives & Controls, Inc.	\$9,492	\$0	\$26,047	\$26,047
Hermance Strouse, Inc.	\$9,459	\$0	\$18,578	\$18,578
Datacap Systems, Inc.	\$9,445	\$0	\$0	\$0
Packaging Progressions, Inc.	\$9,427	\$0	\$19,475	\$13,337
Luxtech, LLC	\$9,386	\$0	\$0	\$0
Pelletron Corporation	\$9,247	\$0	\$33,383	\$33,383
Rebco, Inc.	\$9,190	\$0	\$11,544	\$11,544
Atrin Pharmaceuticals, LLC	\$9,145	\$0	\$0	\$0
Schulmerich Carillons, LLC	\$9,078	\$0	\$0	\$0
Aptagen, LLC	\$9,035	\$0	\$9,696	\$9,696
C-Levelled Associates Holdings, Inc.	\$9,017	\$0	\$0	\$0
Dynalene, Inc.	\$8,993	\$0	\$82,133	\$82,133
Robert Bosch, LLC	\$8,906	\$0	\$26,369	\$26,251
Minteq International, Inc.	\$8,861	\$0	\$3,028	\$0
Jordan Acquisition Group, LLC (dba American Auto Matrix)	\$8,859	\$0	\$72,387	\$72,387
United Bank Card, Inc. (d/b/a Harbortouch)	\$8,834	\$0	\$0	\$0
Thread, LLC	\$8,820	\$0	\$5,781	\$5,781
Sussex Wire, Inc.	\$8,797	\$0	\$1,367	\$1,367
Ingmar Medical, Ltd.	\$8,774	\$0	\$17,404	\$17,404
BioMagnetic Solutions, LLC	\$8,694	\$0	\$0	\$0
Social Media Information, LLC CO CGR Holdings	\$8,644	\$0	\$0	\$0
ChemImage Corporation	\$8,642	\$0	\$0	\$0
JIT Prototyping, LLC	\$8,615	\$0	\$0	\$0
Seco/Warwick Corporation	\$8,468	\$0	\$0	\$0
Jarus Technologies Incorporated	\$8,394	\$0	\$16,167	\$4,389
Beaumont Development, LLC	\$8,273	\$0	\$18,591	\$18,591
R.M. Palmer Company	\$8,158	\$0	\$1,874	\$1,874
Doutt Tool, Inc.	\$8,152	\$0	\$0	\$0

<i>Taxpayer Name</i>	<i>2014 Credit Awarded</i>	<i>2014 Credit Utilized¹</i>	<i>2013 & 2012 Credit Awarded</i>	<i>2013 & 2012 Credit Utilized¹</i>
Campus Door Holdings, Inc.	\$8,121	\$0	\$0	\$0
Polytek Development Corp.	\$8,019	\$0	\$0	\$0
Gonnella Baking Company	\$7,982	\$0	\$6,398	\$0
Forge Life Sciences, LLC	\$7,959	\$0	\$0	\$0
PhotoMedex, Inc.	\$7,916	\$0	\$0	\$0
Biocoat, Inc.	\$7,906	\$0	\$27,991	\$27,991
Penn State Construction J&D, LLC	\$7,881	\$0	\$0	\$0
Solo Laboratories, Inc.	\$7,869	\$0	\$13,377	\$13,377
General Transervice, Inc.	\$7,832	\$0	\$1,239	\$1,239
Rubitection, Inc.	\$7,731	\$0	\$3,180	\$3,180
SAS Institute, Inc.	\$7,707	\$0	\$5,337	\$5,337
Drakontas, LLC	\$7,694	\$0	\$6,737	\$6,737
Godshalls Quality Meats, Inc.	\$7,528	\$0	\$9,876	\$9,876
Talencea Corporation	\$7,460	\$0	\$6,981	\$6,981
Encentiv Energy, LLC (p/k/a All Facilities Energy Corp.)	\$7,409	\$0	\$0	\$0
ASC Group, Inc.	\$7,397	\$0	\$0	\$0
Die-Tech, Inc.	\$7,363	\$0	\$16,277	\$75
Cent, LLC	\$7,341	\$0	\$0	\$0
Cover Crop Solutions, LLC	\$7,277	\$0	\$0	\$0
PoweredAnalytics, Inc.	\$7,239	\$0	\$0	\$0
Macron Dynamics, LLC	\$7,214	\$0	\$0	\$0
Pivitec, LLC	\$7,162	\$0	\$19,413	\$19,413
Linear Acoustic, Inc.	\$7,158	\$0	\$0	\$0
Talbar, Inc.	\$7,058	\$0	\$45,316	\$0
Hamilton Precision Metals, Inc.	\$7,010	\$0	\$0	\$0
PDQ Industries, Inc.	\$7,001	\$0	\$23,751	\$3,794
Medical Products Laboratories, Inc.	\$6,956	\$0	\$7,371	\$83
Montgomery Bros. Plumbing & Heating, LLC	\$6,921	\$0	\$0	\$0
Chelsea Building Products, Inc.	\$6,902	\$0	\$12,961	\$12,961
Cellular Tracking Technologies, LLC	\$6,869	\$0	\$10,029	\$10,029
CM3 Building Solutions, Inc.	\$6,864	\$0	\$20,186	\$20,186
E.A. Fischione Instruments, Inc.	\$6,837	\$0	\$13,862	\$13,862
Glen Carbide, Inc.	\$6,802	\$0	\$8,394	\$8,394
Professional Staffing Solutions, LLC	\$6,722	\$0	\$0	\$0
Custom Processing Services, LLC	\$6,712	\$0	\$1,018	\$0
National Magnetics Group, Inc.	\$6,701	\$0	\$0	\$0
Leidos, Inc. (f/k/a Science Applications International Corp.)	\$6,684	\$0	\$51,521	\$28,303
Big B Manufacturing, Inc.	\$6,657	\$0	\$34,872	\$0
Fabri-Kal Corporation	\$6,656	\$0	\$0	\$0
Lancaster Oil Company	\$6,648	\$0	\$0	\$0
Scheerer Bearing Corporation	\$6,648	\$0	\$0	\$0
Rushabh Instruments, LLC	\$6,616	\$0	\$0	\$0
Eastern Manufacturing, Inc.	\$6,549	\$0	\$2,610	\$2,610
Dental Design Labs, Inc.	\$6,536	\$0	\$0	\$0
New Standard Corporation	\$6,489	\$0	\$5,298	\$573
Triumph Interiors, LLC	\$6,474	\$0	\$1,856	\$0
Matrix Operations, LLC	\$6,419	\$0	\$0	\$0
Controls Fusion Group, LP	\$6,396	\$0	\$11,992	\$11,603
VolPstreet, Inc.	\$6,362	\$0	\$0	\$0

<i>Taxpayer Name</i>	<i>2014 Credit Awarded</i>	<i>2014 Credit Utilized¹</i>	<i>2013 & 2012 Credit Awarded</i>	<i>2013 & 2012 Credit Utilized¹</i>
Havis, Inc.	\$6,336	\$0	\$5,626	\$0
Adelphi Kitchens, Inc.	\$6,203	\$0	\$0	\$0
Integration Technology Systems, Inc.	\$6,192	\$0	\$0	\$0
Climatech Holding Companies, Inc.	\$6,144	\$0	\$0	\$0
Pittsburgh Logistics System, Inc.	\$6,113	\$0	\$7,737	\$0
Shanks Extracts, Inc.	\$6,033	\$0	\$1,029	\$350
Crestline Software, LLC	\$6,025	\$0	\$0	\$0
Panelshop.com, LLC	\$6,001	\$0	\$0	\$0
Weld Tooling Corporation	\$5,999	\$0	\$0	\$0
Abbott Furnace Company, Inc.	\$5,942	\$0	\$18,963	\$18,963
David Michael & Co., Inc.	\$5,906	\$0	\$4,385	\$4,214
Hodge Tool Company, Inc.	\$5,883	\$0	\$24,162	\$0
Neuro Kinetics, Inc.	\$5,878	\$0	\$0	\$0
Ernst Conservation Seeds, Inc.	\$5,873	\$0	\$10,974	\$4,449
Pure Fishing, Inc.	\$5,872	\$0	\$0	\$0
Herkules USA Corporation	\$5,827	\$0	\$7,893	\$653
Aberdeen Road Company	\$5,822	\$0	\$0	\$0
AT&T Services, Inc.	\$5,766	\$0	\$141,454	\$4,957
Embedded Energy Technology, LLC	\$5,752	\$0	\$2,558	\$2,558
Newman & Company, Inc.	\$5,743	\$0	\$7,203	\$0
Blue Ridge Pressure Castings, Inc.	\$5,720	\$0	\$0	\$0
Savage Visual Effects	\$5,719	\$0	\$0	\$0
O.F. Zurn Company	\$5,651	\$0	\$5,141	\$5,141
Viking Tool & Gage, Inc.	\$5,644	\$0	\$10,061	\$5,860
Ranbar Electrical Materials, Inc.	\$5,636	\$0	\$69,014	\$69,014
Circadiance, LLC	\$5,529	\$0	\$8,823	\$0
Hunsicker Emissions Services, LLC	\$5,492	\$0	\$0	\$0
Dontech, Inc.	\$5,485	\$0	\$1,847	\$1,847
Prescient Weather, Ltd.	\$5,402	\$0	\$0	\$0
Easthill Specialty, Inc.	\$5,344	\$0	\$19,218	\$19,218
Bitronics, LLC	\$5,330	\$0	\$92,145	\$92,145
TIW Technology, Inc.	\$5,325	\$0	\$1,061	\$0
Henry Molded Products, Inc.	\$5,298	\$0	\$0	\$0
Runabout Media Group, LLC	\$5,276	\$0	\$0	\$0
Port Erie Plastics, Inc.	\$5,217	\$0	\$6,920	\$6,920
The Milnes Co., Inc.	\$5,205	\$0	\$88,109	\$64,265
Pittsburgh Plastics Mfg, Inc.	\$5,205	\$0	\$10,851	\$10,370
SupplyOne, Inc.	\$5,180	\$0	\$0	\$0
Markovitz Enterprises, Inc.	\$5,173	\$0	\$17,901	\$17,901
Hosler Corp.	\$5,126	\$0	\$6,280	\$6,280
J Baur Machining, Inc.	\$5,025	\$0	\$6,167	\$6,167
Fitbit, Inc.	\$5,019	\$0	\$0	\$0
Shaw Industries, Inc.	\$4,921	\$0	\$30,717	\$5,794
Ecore International, Inc.	\$4,915	\$0	\$0	\$0
AH Sportswear Co., Inc.	\$4,828	\$0	\$20,262	\$0
Boehringer Ingelheim Pharmaceuticals, Inc.	\$4,825	\$0	\$33,421	\$13,670
Lignolink, Inc.	\$4,824	\$0	\$0	\$0
Omega Flex, Inc.	\$4,812	\$0	\$0	\$0
Schramm, Inc.	\$4,685	\$0	\$167,359	\$1,121
Wolf Technologies, LLC	\$4,683	\$0	\$164	\$75
BirdBrain Technologies, LLC	\$4,673	\$0	\$2,575	\$2,575

<i>Taxpayer Name</i>	<i>2014 Credit Awarded</i>	<i>2014 Credit Utilized¹</i>	<i>2013 & 2012 Credit Awarded</i>	<i>2013 & 2012 Credit Utilized¹</i>
Minnotte Contracting Corporation	\$4,666	\$0	\$1,580	\$1,580
Genossis, LLC	\$4,611	\$0	\$3,670	\$0
CSE Corporation	\$4,609	\$0	\$0	\$0
Solar Innovations, Inc.	\$4,601	\$0	\$22,322	\$22,316
Compu-Craft Fabricator, Inc.	\$4,563	\$0	\$8,834	\$8,834
Spring City Electrical Mfg. Co.	\$4,560	\$0	\$5,902	\$5,902
Amplifier Research Corp.	\$4,546	\$0	\$44,860	\$0
TLC North, LLC	\$4,429	\$0	\$6,034	\$6,034
Crystal, Inc. - PMC	\$4,235	\$0	\$8,459	\$4,020
Delmont Laboratories, Inc.	\$4,221	\$0	\$8,803	\$7
SKC, Inc.	\$4,213	\$0	\$15,381	\$8,982
VascularStrategies, LLC	\$4,186	\$0	\$17,130	\$17,130
Clinical Financial Services, LLC	\$4,175	\$0	\$0	\$0
Reaxis, Inc.	\$4,135	\$0	\$13,561	\$12,948
Creative Bending Systems, Inc.	\$4,108	\$0	\$0	\$0
Fairmount Foundry, Inc.	\$4,102	\$0	\$34,775	\$34,775
Devine Brothers, Inc.	\$4,094	\$0	\$0	\$0
Ascent Bio-Nano Technologies, Inc.	\$4,073	\$0	\$0	\$0
Resonate, LLC	\$3,894	\$0	\$0	\$0
Packworld USA, Ltd.	\$3,801	\$0	\$12,122	\$28
American Turned Products, Inc.	\$3,715	\$0	\$30,634	\$30,634
Misco Products Corporation	\$3,715	\$0	\$1,192	\$1,192
MGS, Inc.	\$3,690	\$0	\$714	\$714
Harry Miller Corporation	\$3,680	\$0	\$17,285	\$265
Briar Valley Vineyards and Winery, Inc.	\$3,672	\$0	\$0	\$0
LCR Electronics	\$3,649	\$0	\$24,956	\$2,032
Mapquest PA, Inc.	\$3,604	\$0	\$0	\$0
Nazareth Industrial Corporation	\$3,599	\$0	\$40,025	\$40,025
Martins Famous Pastry Shoppe, Inc.	\$3,581	\$0	\$0	\$0
Amgen USA, Inc.	\$3,556	\$0	\$0	\$0
Rockland, Inc.	\$3,523	\$0	\$0	\$0
Tetralogic Pharmaceuticals Corporation	\$3,426	\$0	\$13,307	\$2,937
Kenco Corporation	\$3,361	\$0	\$3,809	\$385
Ezeflow USA, Inc.	\$3,328	\$0	\$0	\$0
Eagle Spinco, Inc.	\$3,265	\$0	\$0	\$0
Advanced Textile Composites, Inc.	\$3,249	\$0	\$12,447	\$12,447
Erdman Anthony Associates, Inc.	\$3,248	\$0	\$6,697	\$6,697
Kermitool Acquisition Company, Inc.	\$3,157	\$0	\$1,218	\$0
Vitrius Technology, LLC	\$3,157	\$0	\$0	\$0
Tyrone Milling	\$3,155	\$0	\$11,921	\$11,921
R-V Industries, Inc.	\$3,105	\$0	\$2,881	\$2,881
Georgia Pacific Consumer Products, LP	\$3,024	\$0	\$0	\$0
Laminated Materials Corporation	\$2,843	\$0	\$39,609	\$0
School Gate Guardian, Inc.	\$2,800	\$0	\$2,043	\$2,043
Highwood USA, LLC	\$2,789	\$0	\$12,692	\$39
American Hydro Corporation	\$2,723	\$0	\$0	\$0
Atlas Minerals & Chemicals, Inc.	\$2,628	\$0	\$1,291	\$1,291
Forms and Surfaces, Inc.	\$2,580	\$0	\$22,398	\$22,398
Industrial Vision Systems, Inc.	\$2,571	\$0	\$2,553	\$156
Sealstrip Corporation	\$2,553	\$0	\$29,804	\$29,804
LWI & Associates, Inc.	\$2,553	\$0	\$0	\$0

<i>Taxpayer Name</i>	<i>2014 Credit Awarded</i>	<i>2014 Credit Utilized¹</i>	<i>2013 & 2012 Credit Awarded</i>	<i>2013 & 2012 Credit Utilized¹</i>
Lebanon Tool Company, Inc.	\$2,550	\$0	\$11,183	\$2,938
AFP Advanced Food Products, LLC	\$2,522	\$0	\$2,159	\$2,159
SDLC Management, Inc.	\$2,445	\$0	\$0	\$0
Schlouch Incorporated	\$2,380	\$0	\$0	\$0
ActivAided Orthotics, LLC	\$2,371	\$0	\$0	\$0
Royal Window & Door Profiles Plant 13, Inc.	\$2,294	\$0	\$0	\$0
GasBreakers, Inc.	\$2,253	\$0	\$0	\$0
Omega Design Corporation	\$2,229	\$0	\$36,800	\$87
Insinger Machine Company	\$2,222	\$0	\$15,316	\$15,296
Tekgard, Inc.	\$2,140	\$0	\$0	\$0
Hydac Technology Corp.	\$2,099	\$0	\$4,465	\$4,465
Georgia Pacific Corrugated II, LLC	\$2,063	\$0	\$192	\$192
M.H. Eby, Inc.	\$2,042	\$0	\$0	\$0
Frewmill Die Crafts, Inc.	\$2,040	\$0	\$0	\$0
Rapid Reaction, Inc.	\$2,003	\$0	\$775	\$775
Magnatech International, Inc.	\$1,960	\$0	\$9,101	\$9,101
Noble MD, Inc.	\$1,947	\$0	\$0	\$0
PressTech Enterprises, Inc.	\$1,935	\$0	\$0	\$0
Greenwich Terminals, LLC	\$1,897	\$0	\$0	\$0
DME Alliance, Inc.	\$1,880	\$0	\$0	\$0
McAdoo & Allen, Inc.	\$1,827	\$0	\$4,163	\$2,588
Beiler Hydraulics, Inc.	\$1,819	\$0	\$0	\$0
Adaptive Resources, Inc.	\$1,784	\$0	\$1,887	\$147
Minus 100, LLC	\$1,766	\$0	\$0	\$0
Keystone Manufacturing, Inc.	\$1,740	\$0	\$0	\$0
Regal Cast, Inc.	\$1,714	\$0	\$339	\$155
Resco Products, Inc.	\$1,692	\$0	\$2,876	\$2,876
Acopian Technical Company	\$1,679	\$0	\$6,160	\$6,160
PennTecQ, Inc.	\$1,640	\$0	\$10,625	\$10,625
Backflips, Inc.	\$1,581	\$0	\$0	\$0
Diversified Machine, Inc.	\$1,549	\$0	\$27,982	\$0
S&S X-Ray Products, Inc.	\$1,512	\$0	\$656	\$99
Thomas Erie, Inc.	\$1,491	\$0	\$1,617	\$1,617
TB Woods Incorporated	\$1,482	\$0	\$6,917	\$542
Axalta Coating Systems, LLC	\$1,422	\$0	\$0	\$0
Blair Companies	\$1,418	\$0	\$0	\$0
Z3 Concepts	\$1,342	\$0	\$0	\$0
PSG Controls, Inc.	\$1,248	\$0	\$1,943	\$1,943
Supreme Mid-Atlantic Corp.	\$1,245	\$0	\$2,042	\$593
RichardsApex, Inc.	\$1,238	\$0	\$0	\$0
Worldwide Refractories, Inc.	\$1,236	\$0	\$3,891	\$90
Caledonian Dye Works, Inc.	\$1,197	\$0	\$1,525	\$0
American Textile Company, Inc.	\$1,189	\$0	\$4,525	\$4,516
Rexmet Corporation	\$1,188	\$0	\$0	\$0
Agricultural Systems International	\$1,184	\$0	\$0	\$0
Max Levy Autograph, Inc.	\$1,138	\$0	\$9,462	\$0
Tri-City Marble, LLC	\$1,115	\$0	\$1,236	\$1,236
Peacock Laboratories	\$1,092	\$0	\$2,473	\$2,473
Preferred Security Components, Inc.	\$1,060	\$0	\$4,847	\$0
RD Coatings, Inc.	\$1,041	\$0	\$30,102	\$30,102
Delserro Engineering Solutions, Inc.	\$1,013	\$0	\$7,817	\$3,678

<i>Taxpayer Name</i>	<i>2014 Credit Awarded</i>	<i>2014 Credit Utilized¹</i>	<i>2013 & 2012 Credit Awarded</i>	<i>2013 & 2012 Credit Utilized¹</i>
CDG Environmental, LLC	\$1,008	\$0	\$8,686	\$8,686
AMETEK Technical & Industrial Products, Inc.	\$1,000	\$0	\$0	\$0
Levan Machine Co., Inc.	\$979	\$0	\$3,386	\$3,386
Polymer Molding, Inc.	\$968	\$0	\$0	\$0
Amity Industries, Inc.	\$951	\$0	\$0	\$0
Map Decisions, LLC	\$930	\$0	\$0	\$0
X-F Enterprises, Inc.	\$928	\$0	\$8,611	\$3,176
W.W. Patterson Company	\$909	\$0	\$0	\$0
LRT Sensors, LLC	\$889	\$0	\$0	\$0
Boose at Cornwall, Inc.	\$766	\$0	\$17,677	\$0
Nitromega Corporation	\$756	\$0	\$361	\$0
Polymer Products Company, Inc.	\$724	\$0	\$1,981	\$1,981
Dynamic Materials Corporation	\$674	\$0	\$17,613	\$2,461
Target Precision, LLC	\$545	\$0	\$32,541	\$9,097
Hydro-Pac, Inc.	\$494	\$0	\$512,741	\$382,904
EMD Serono, Inc.	\$380	\$0	\$0	\$0
Materion Brush, Inc. (f/k/a Brush Wellman, Inc.)	\$361	\$0	\$2,428	\$282
Implementation Consulting Service	\$346	\$0	\$1,806	\$1,806
Videomining Corporation	\$322	\$0	\$0	\$0
Lozier Corporation	\$319	\$0	\$163	\$163
DecisionPro, Inc.	\$298	\$0	\$0	\$0
TekResults, Ltd.	\$295	\$0	\$1,689	\$1,689
Adventus Technology, Inc.	\$292	\$0	\$413	\$0
Columbia Research Laboratories, Inc.	\$218	\$0	\$0	\$0
GanaLila, LLC	\$201	\$0	\$0	\$0
PBM, Inc.	\$187	\$0	\$2,860	\$2,860
Northpoint Distribution, LLC	\$165	\$0	\$0	\$0
Jetbolt Games, Inc.	\$155	\$0	\$0	\$0
Vista Auctions, LLC	\$152	\$0	\$3,354	\$3,354
EF Precision, Inc.	\$122	\$0	\$7,343	\$4,503
Eagle Brass Company	\$108	\$0	\$0	\$0
Georgia Pacific Corrugated, LLC	\$75	\$0	\$219	\$219
Neville Chemical Company	\$62	\$0	\$793	\$363
Honeywell Electronic Materials, Inc.	\$43	\$0	\$7,078	\$7,078
Leech Industries, Inc.	\$27	\$0	\$9,353	\$9,353
Emphasys Technologies	\$14	\$0	\$54,222	\$54,222
AcademyOne, Inc.	\$0	\$0	\$30,602	\$30,602
Actco Tool & Manufacturing Company, Inc.	\$0	\$0	\$11,562	\$11,562
Actuated Medical, Inc. (f/k/a Piezo Resonance Innovations, Inc.	\$0	\$0	\$34,183	\$34,183
Aesynt Incorporated (f/k/a McKesson Automation, Inc.)	\$0	\$0	\$131,349	\$34,221
Air Products and Chemicals, Inc.	\$0	\$0	\$40,938	\$0
Allpoint Systems, LLC	\$0	\$0	\$6,124	\$3,664
Alpine Thermal Technologies, Inc.	\$0	\$0	\$1,751	\$0
Altra Power Transmission, Inc. (f/k/a Altra Industrial Motion, Inc.)	\$0	\$0	\$37,498	\$0
Alung Technologies, Inc.	\$0	\$0	\$4,885	\$4,885
American Reading Company, Inc.	\$0	\$0	\$7,723	\$7,723
Analytical Graphics, Inc.	\$0	\$0	\$32,911	\$6,280
ANSYS, Inc.	\$0	\$0	\$191,177	\$0

<i>Taxpayer Name</i>	<i>2014 Credit Awarded</i>	<i>2014 Credit Utilized¹</i>	<i>2013 & 2012 Credit Awarded</i>	<i>2013 & 2012 Credit Utilized¹</i>
AntakaMatics, Inc.	\$0	\$0	\$170	\$0
Applied Systems Associates, Inc.	\$0	\$0	\$59,502	\$59,502
Aprecia Pharmaceuticals Company, Inc.	\$0	\$0	\$183,638	\$0
Arsenault Associates, Inc. (f/k/a Charles J. Arsenault, Inc.)	\$0	\$0	\$53,310	\$18,287
Ashland, Inc.	\$0	\$0	\$24,909	\$0
AT&T Mobility Services, LLC	\$0	\$0	\$95,242	\$0
Automated Financial Systems, Inc.	\$0	\$0	\$18,151	\$18,151
Avery Dennison Corporation	\$0	\$0	\$72,642	\$10,401
Avery Dennison Retail Info. Services, LLC	\$0	\$0	\$24,808	\$24,808
Avianna Molecular Technologies, LLC	\$0	\$0	\$33,985	\$33,985
Axion Power Battery Mfg, Inc.	\$0	\$0	\$51,512	\$51,512
B&G Manufacturing Co., Inc.	\$0	\$0	\$1,126	\$1,126
Benjamin Obdyke, Inc.	\$0	\$0	\$2,173	\$0
Bentley Systems Incorporated	\$0	\$0	\$311,746	\$0
Berwind Corporation	\$0	\$0	\$22,509	\$19,330
Beyer Productions, LLC	\$0	\$0	\$12,002	\$12,002
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	\$25,158	\$25,158
Bloom Engineering Company, Inc.	\$0	\$0	\$93,543	\$0
BlueSwarf, LLC	\$0	\$0	\$3,322	\$0
Bodymedia, Inc.	\$0	\$0	\$59,747	\$59,747
Boose Aluminum Foundry Co., Inc.	\$0	\$0	\$2,334	\$0
Bostik, Inc.	\$0	\$0	\$15,112	\$15,112
Brandywine Photonics, LLC	\$0	\$0	\$9,750	\$9,750
Breen Energy Solutions, LLC	\$0	\$0	\$42,850	\$324
Bridge Semiconductor Corporation	\$0	\$0	\$151,995	\$151,995
Bryton Distribution Group, Inc.	\$0	\$0	\$719	\$719
BSC Technologies, Inc.	\$0	\$0	\$1,280	\$1,280
C.F. Martin Co., Inc.	\$0	\$0	\$788	\$788
Calumet Specialty Product Partners, LP	\$0	\$0	\$12,839	\$0
Canto Tool Corporation	\$0	\$0	\$200	\$100
Cardinal Systems, Inc.	\$0	\$0	\$9,336	\$9,336
Carpenter Powder Products, Inc.	\$0	\$0	\$610	\$610
Ceptaris Therapeutics, Inc.	\$0	\$0	\$218,212	\$13,336
Certainteed Corporation	\$0	\$0	\$38,925	\$0
Cheetah Technologies, LP	\$0	\$0	\$19,399	\$0
Church & Dwight Co., Inc.	\$0	\$0	\$7,179	\$7,179
CIW Enterprises, Inc.	\$0	\$0	\$23,132	\$13
Clair Bros. Audio Systems, Inc.	\$0	\$0	\$5,906	\$5,906
Clearcount Medical Solutions, Inc.	\$0	\$0	\$91,774	\$91,774
Cloud Computing Technologies, LLC	\$0	\$0	\$20,923	\$20,923
CloudMine, LLC	\$0	\$0	\$17,581	\$17,581
Code Organa, LLC	\$0	\$0	\$36,527	\$34,558
Co-eXprise, Inc.	\$0	\$0	\$18,830	\$0
Communications Test Design, Inc.	\$0	\$0	\$30,596	\$217
Community Networks, LLC	\$0	\$0	\$73,190	\$73,190
Computer Consultant Team, LLC	\$0	\$0	\$19,886	\$19,886

<i>Taxpayer Name</i>	<i>2014 Credit Awarded</i>	<i>2014 Credit Utilized¹</i>	<i>2013 & 2012 Credit Awarded</i>	<i>2013 & 2012 Credit Utilized¹</i>
ConAgra Foods Enterprise Services, Inc.	\$0	\$0	\$19,218	\$0
Connecticut General Life Insurance Co.	\$0	\$0	\$155,914	\$155,914
Controlled Molding, Inc.	\$0	\$0	\$78,898	\$73,954
Cook Myosite, Inc.	\$0	\$0	\$34,819	\$2,090
Cook Technologies, Inc.	\$0	\$0	\$10,929	\$28
Cordis Corporation	\$0	\$0	\$231,261	\$222,258
Coskata, Inc.	\$0	\$0	\$37,179	\$775
C-P Converters, Inc. (d/b/a C-P Flexible Packaging)	\$0	\$0	\$15,801	\$15,801
Creative Engineers, Inc.	\$0	\$0	\$9,793	\$2,099
Crystalplex Corporation	\$0	\$0	\$28,542	\$23,600
CTR Systems Parking, Inc.	\$0	\$0	\$9,347	\$9,347
Custom Isotopes, LLC (f/k/a IsoSciences, LLC)	\$0	\$0	\$26,968	\$26,968
Custom Milling & Consulting, Inc.	\$0	\$0	\$17,701	\$17,701
Cybergenetics Corp.	\$0	\$0	\$3,915	\$193
D and E Machining, Ltd.	\$0	\$0	\$3,255	\$0
Datagrove, Inc.	\$0	\$0	\$50,350	\$20,992
David Horn, LLC	\$0	\$0	\$32,134	\$32,134
Dcroft, Inc.	\$0	\$0	\$99,927	\$99,927
Dean Technology, Inc.	\$0	\$0	\$10,218	\$9,930
Deasey Machine Tool & Die Works, Inc.	\$0	\$0	\$10,020	\$10,020
Dopaco, Inc.	\$0	\$0	\$7,183	\$7,183
Double H Plastics, Inc.	\$0	\$0	\$7,255	\$1,023
Draeger Medical Systems, Inc.	\$0	\$0	\$24,408	\$24,408
DT Davis Enterprises, Ltd. Hovertech International	\$0	\$0	\$52,053	\$52,053
Duquesne Brewing Company, Inc.	\$0	\$0	\$5,773	\$0
DynAccess, Ltd.	\$0	\$0	\$1,114	\$1,114
DynaVox Systems, LLC	\$0	\$0	\$89,760	\$84,000
EAM Mosca Corp.	\$0	\$0	\$9,843	\$9,843
East Coast Erosion Blankets, LLC (dba East Coast Erosion Control)	\$0	\$0	\$12,960	\$12,950
eBay, Inc.	\$0	\$0	\$622,707	\$208
Edge Robotics, Inc.	\$0	\$0	\$855	\$855
Edgemate, Inc.	\$0	\$0	\$9,718	\$9,718
EFCO, Inc.	\$0	\$0	\$112,574	\$0
EKL Machine, Inc.	\$0	\$0	\$124,792	\$27,218
Electronic Claims Processing, Inc.	\$0	\$0	\$13,634	\$13,634
Electro-Science Laboratories, Inc.	\$0	\$0	\$189,362	\$187,088
Element ID, Inc.	\$0	\$0	\$8,453	\$8,453
Eli Lilly and Company	\$0	\$0	\$8,572,260	\$2,560,957
Elliott Company	\$0	\$0	\$22,160	\$22,160
Ellucian Support, Inc. (f/k/a Sungard Higher Education, Inc.)	\$0	\$0	\$6,822	\$6,822
EMC Corporation	\$0	\$0	\$13,626	\$13,626
Emotion Kayaks, Inc.	\$0	\$0	\$48,415	\$48,415
EMS Charts, Inc.	\$0	\$0	\$117,658	\$117,658
Endo Pharmaceuticals, Inc.	\$0	\$0	\$1,427,585	\$1,427,585
Energy Technology Partners, LLC	\$0	\$0	\$42,598	\$42,598
EQT Gathering, Inc.	\$0	\$0	\$9,230	\$9,230
EQT Production Company	\$0	\$0	\$58,709	\$58,709

<i>Taxpayer Name</i>	<i>2014 Credit Awarded</i>	<i>2014 Credit Utilized¹</i>	<i>2013 & 2012 Credit Awarded</i>	<i>2013 & 2012 Credit Utilized¹</i>
Equipois, Inc.	\$0	\$0	\$2,632	\$2,632
Expansyn Technologies, Inc.	\$0	\$0	\$11,322	\$0
Expert Data Labs, LLC	\$0	\$0	\$59,040	\$59,040
Fairchild Semiconductor Corporation	\$0	\$0	\$41,643	\$0
FCI USA, LLC	\$0	\$0	\$133,198	\$28,231
FHM Holding Company, Inc.	\$0	\$0	\$5,697	\$5,697
Fiber-Line Holding Company (f/k/a Fiber-Line, Inc.)	\$0	\$0	\$21,758	\$21,758
Fidelity Information Services, Inc.	\$0	\$0	\$106,512	\$0
Finish Thompson, Inc.	\$0	\$0	\$3,630	\$3,630
Flexible Compensators, Inc. (t/a Flex Com)	\$0	\$0	\$36,387	\$18,788
Flexicath, Inc.	\$0	\$0	\$27,442	\$0
FLSmith, Inc.	\$0	\$0	\$15,524	\$15,524
Flyer City Media, LLC (d/b/a MetroMe)	\$0	\$0	\$14,639	\$0
FMC Technologies Measurement Solutions	\$0	\$0	\$78,117	\$0
Foam Fair Industries, Inc.	\$0	\$0	\$18,223	\$18,223
Fogmaker North America, LLC	\$0	\$0	\$18,365	\$18,365
Forest Research Institute, Inc.	\$0	\$0	\$1,368,993	\$54,269
Four Rivers Software Systems, Inc.	\$0	\$0	\$8,703	\$1,178
Fox Chase Chemical Diversity Center	\$0	\$0	\$17,645	\$0
Furman Foods, Inc.	\$0	\$0	\$6,150	\$0
GAI Consultants, Inc.	\$0	\$0	\$8,853	\$8,853
Galleon Pharmaceuticals, Inc.	\$0	\$0	\$37,919	\$0
Gap Holding Company, Inc.	\$0	\$0	\$15,629	\$327
GapVax, Inc.	\$0	\$0	\$4,782	\$0
Gateway Ticketing Systems, Inc.	\$0	\$0	\$25,879	\$25,879
General Dynamics C4 Systems, Inc.	\$0	\$0	\$17,854	\$17,854
General Dynamics Satcom Technologies, Inc.	\$0	\$0	\$54,779	\$54,779
General Instrument Corporation	\$0	\$0	\$252,267	\$252,267
General Machine Products Co., Inc.	\$0	\$0	\$1,773	\$1,773
Gichner Systems Group, Inc.	\$0	\$0	\$17,649	\$17,649
Global Seating Systems, LLC	\$0	\$0	\$39,599	\$339
Google, Inc.	\$0	\$0	\$1,426,583	\$1,426,583
Grant Street Group, Inc.	\$0	\$0	\$12,264	\$12,264
Graymont (PA), Inc.	\$0	\$0	\$18,972	\$18,972
GSI Commerce Solutions, Inc.	\$0	\$0	\$193,051	\$193,051
Hamill Manufacturing Company	\$0	\$0	\$24,020	\$13,738
Harsco Corporation	\$0	\$0	\$36,301	\$34,872
Holtec Manufacturing Division, Inc.	\$0	\$0	\$188,740	\$188,740
Honeywell International, Inc.	\$0	\$0	\$29,979	\$29,979
Iberium Communications, Inc.	\$0	\$0	\$3,828	\$0
II-VI Incorporated	\$0	\$0	\$261,674	\$135,842
ImageCube, LLC	\$0	\$0	\$598	\$0
Immunotope, Inc.	\$0	\$0	\$21,716	\$21,716
Indigo Biosciences, Inc.	\$0	\$0	\$5,481	\$5,481
Industrial Learning Systems	\$0	\$0	\$1,522	\$1,522
Infrascan, Inc.	\$0	\$0	\$15,077	\$15,077
Inmedius, Inc.	\$0	\$0	\$30,803	\$7,360
InspiraFS, Inc.	\$0	\$0	\$5,699	\$0
Integrated Fabrication & Machine, Inc.	\$0	\$0	\$1,166	\$20
Intel Americas, Inc.	\$0	\$0	\$420,969	\$55,862

<i>Taxpayer Name</i>	<i>2014 Credit Awarded</i>	<i>2014 Credit Utilized¹</i>	<i>2013 & 2012 Credit Awarded</i>	<i>2013 & 2012 Credit Utilized¹</i>
Intellectual Property Enterprises, LLC (d/b/a Neuralware)	\$0	\$0	\$2,672	\$2,672
Interbots, LLC	\$0	\$0	\$8,704	\$8,704
Interstate Building Materials, Inc.	\$0	\$0	\$13,839	\$12,267
Interstate Management Resources, Inc.	\$0	\$0	\$58,815	\$0
Intertek Testing Serv. NA	\$0	\$0	\$4,551	\$4,551
Inventox, Inc.	\$0	\$0	\$10,988	\$0
invivodata, Inc.	\$0	\$0	\$2,370	\$2,370
IPEG, Inc.	\$0	\$0	\$10,825	\$253
Ismael J. Hidalgo	\$0	\$0	\$25,198	\$25,198
Jamestown Paint Company	\$0	\$0	\$13,571	\$13,571
Jarex Enterprises, LLC	\$0	\$0	\$961	\$961
JCR Sales Mfg, LLC	\$0	\$0	\$11,643	\$11,643
Jeannette Shade and Novelty Company (dba JSG Oceana)	\$0	\$0	\$27,543	\$17,139
Jenrin Discovery, LLC	\$0	\$0	\$43,188	\$43,188
Johnstown Machining and Fabrication, Inc.	\$0	\$0	\$2,327	\$2,327
Joy Technologies, Inc.	\$0	\$0	\$406,431	\$0
Just Between Friends, Inc.	\$0	\$0	\$29,014	\$29,014
JWF Defense Systems, LLC	\$0	\$0	\$9,548	\$9,548
Kenexa Technology, Inc.	\$0	\$0	\$60,814	\$60,814
Keystone Food Products, Inc.	\$0	\$0	\$17,642	\$17,642
Graham Packing Holdings Company, LLP	\$0	\$0	\$10,457	\$5,726
KPGW Holding Company, LLC	\$0	\$0	\$530,486	\$0
KYDEX, LLC	\$0	\$0	\$28,250	\$0
Langan Engineering and Environmental Services, Inc.	\$0	\$0	\$22,180	\$0
Lazarus Therapeutics, Inc.	\$0	\$0	\$93,365	\$0
LD Astorino & Associates, Ltd.	\$0	\$0	\$108,129	\$108,129
Lloyd Industries, Inc.	\$0	\$0	\$11,790	\$11,790
Lone Oak Medical Technologies, LLC	\$0	\$0	\$4,875	\$4,875
Loridian, LLC	\$0	\$0	\$19,691	\$17,354
LPS Mortgage Processing Solutions, Inc.	\$0	\$0	\$18,400	\$18,400
LSI Corporation	\$0	\$0	\$3,523,960	\$189,781
Lucas Systems, Inc.	\$0	\$0	\$13,016	\$12,390
Magnetic Windings Co., Inc.	\$0	\$0	\$64,349	\$64,349
Maguire Products, Inc.	\$0	\$0	\$27,371	\$4,495
Mainstream Swimsuits, Inc.	\$0	\$0	\$30,238	\$1,661
Markel Corporation	\$0	\$0	\$19,915	\$19,915
Mars Fishcare NA, Inc.	\$0	\$0	\$38,081	\$23,798
Mars Incorporated	\$0	\$0	\$21,431	\$21,431
Matreya, LLC	\$0	\$0	\$1,498	\$0
Matson & Associates, Inc.	\$0	\$0	\$8,630	\$8,630
MCI Communications Services, Inc.	\$0	\$0	\$25,157	\$14,704
Medecision, Inc.	\$0	\$0	\$224,510	\$7,736
Melior Pharmaceuticals I, Inc.	\$0	\$0	\$949	\$0
Merck, Sharp & Dohme Corp.	\$0	\$0	\$10,263,039	\$5,342,230
Minnotte Manufacturing Corporation	\$0	\$0	\$1,131	\$1,109
N.A. Water Systems, LLC	\$0	\$0	\$1,282,907	\$136,411
NE Foods, Inc.	\$0	\$0	\$6,424	\$6,424
Net Health Systems, Inc.	\$0	\$0	\$125,687	\$125,687

<i>Taxpayer Name</i>	<i>2014 Credit Awarded</i>	<i>2014 Credit Utilized¹</i>	<i>2013 & 2012 Credit Awarded</i>	<i>2013 & 2012 Credit Utilized¹</i>
NeuroDx Development, LLC	\$0	\$0	\$4,561	\$4,561
Neutronics, Inc.	\$0	\$0	\$5,263	\$0
New Berry, Inc. Berry Metal Company	\$0	\$0	\$24,724	\$359
NextGen Healthcare Information Systems, Inc.	\$0	\$0	\$387,517	\$163,906
Nitric Biotherapeutics, Inc.	\$0	\$0	\$13,488	\$13,488
North American Drillers, LLC (f/k/a Shaft Drillers International, LLP)	\$0	\$0	\$46,370	\$0
Novocell Semiconductor, Inc.	\$0	\$0	\$4,789	\$0
NTVI Fed, LLC	\$0	\$0	\$45,512	\$2,477
Numoda Technologies, Inc.	\$0	\$0	\$47,417	\$0
NuPathe, Inc.	\$0	\$0	\$12,593	\$0
Nutrisystem, Inc.	\$0	\$0	\$35,726	\$0
Ohm-Labs, Inc.	\$0	\$0	\$9,091	\$9,091
Okna Windows Corp.	\$0	\$0	\$6,918	\$6,918
Olympic Steel, Inc.	\$0	\$0	\$10,260	\$10,260
Omega Plastics, LLC	\$0	\$0	\$17,502	\$17,502
O'Neal Steel, Inc.	\$0	\$0	\$4,700	\$4,700
Orasure Technologies, Inc.	\$0	\$0	\$1,683	\$1,603
ParaCoat Technologies, Inc.	\$0	\$0	\$3,037	\$0
Patrick M. Dentinger	\$0	\$0	\$25,199	\$25,199
Patriot Sensors and Controls Corporation	\$0	\$0	\$12,495	\$12,495
PB Heat, LLC	\$0	\$0	\$2,942	\$2,942
Penn Color, Inc.	\$0	\$0	\$1,549	\$1,549
Penn-Century, Inc.	\$0	\$0	\$3,843	\$41
Pennsylvania-American Water Company	\$0	\$0	\$9,677	\$9,677
Pikimal, LLC (d/b/a WebKite)	\$0	\$0	\$106,963	\$106,963
Pitney Bowes Software, Inc.	\$0	\$0	\$385	\$385
Plextronics, Inc.	\$0	\$0	\$28,897	\$12,476
Plus Consulting, LLC	\$0	\$0	\$397	\$397
PMC-Sierra US, Inc.	\$0	\$0	\$308,587	\$33,797
Polymedix Pharmaceuticals, Inc.	\$0	\$0	\$148,579	\$0
PoolPak Technologies Corporation	\$0	\$0	\$2,253	\$2,253
Power & Industrial Srv Corp. Donora Industrial Park	\$0	\$0	\$45,913	\$45,913
Powerex, Inc.	\$0	\$0	\$3,548	\$3,548
Precision Defense Services, Inc.	\$0	\$0	\$1,419	\$0
Precision Therapeutics, Inc.	\$0	\$0	\$66,344	\$66,344
Primus Technologies Corp.	\$0	\$0	\$10,210	\$0
PRL Industries, Inc.	\$0	\$0	\$2,263	\$32
PRL, Inc.	\$0	\$0	\$5,405	\$2,755
Problem Solutions, LLC	\$0	\$0	\$23,312	\$23,312
Process Combustion Corporation	\$0	\$0	\$417,830	\$414,720
Production System Technologies, Inc.	\$0	\$0	\$30,049	\$22,156
Progeny Systems Corporation	\$0	\$0	\$8,370	\$0
Prova Systems and Technologies, Inc.	\$0	\$0	\$4,473	\$4,473
PSB Industries, Inc.	\$0	\$0	\$75	\$75
PSI Medical Catheter Care, LLC	\$0	\$0	\$28,682	\$28,682
Puritan Products, Inc.	\$0	\$0	\$215,860	\$126,614
QBC Diagnostics, Inc.	\$0	\$0	\$28,258	\$25,900
QR Pharma, Inc.	\$0	\$0	\$22,414	\$22,414
Quantum Potential Corporation	\$0	\$0	\$3,695	\$3,695

<i>Taxpayer Name</i>	<i>2014 Credit Awarded</i>	<i>2014 Credit Utilized¹</i>	<i>2013 & 2012 Credit Awarded</i>	<i>2013 & 2012 Credit Utilized¹</i>
Quantum Software Solutions, Inc.	\$0	\$0	\$337	\$337
Raytheon Company	\$0	\$0	\$67,472	\$67,472
RE2, Inc.	\$0	\$0	\$23,143	\$0
Red Valve Company, Inc.	\$0	\$0	\$3,934	\$3,934
Renal Solutions, Inc.	\$0	\$0	\$32,950	\$0
Rhiza Labs, LLC	\$0	\$0	\$3,301	\$735
RJM Manufacturing, Inc.	\$0	\$0	\$3,970	\$3,970
Roaring Spring Blank Book Company	\$0	\$0	\$8,441	\$1,701
S&S Processing, Inc.	\$0	\$0	\$47,403	\$20,865
S. Vitale Pyrotechnic Industries, Inc.	\$0	\$0	\$18,123	\$16,990
Schell Games, LLC	\$0	\$0	\$41,850	\$41,850
Schmidt Technology Corporation	\$0	\$0	\$5,577	\$1,063
Schott North America, Inc.	\$0	\$0	\$64,980	\$1,258
Schust Development Corp. (f/k/a Schust Development, Inc.)	\$0	\$0	\$2,608	\$900
Seneb Biosciences, Inc.	\$0	\$0	\$6,626	\$0
Sensible Machines, Inc.	\$0	\$0	\$1,295	\$873
Sentric, Inc.	\$0	\$0	\$15,159	\$15,159
Sentry Data Systems, Inc.	\$0	\$0	\$4,681	\$69
ServiceLink, Inc. (f/k/a ServiceLink Valuation Solutions, LLC)	\$0	\$0	\$47,728	\$47,728
SFS Intec Incorporated	\$0	\$0	\$10,400	\$237
Siemens Molecular Imaging, Inc.	\$0	\$0	\$33,215	\$0
Signal Technologies, Inc.	\$0	\$0	\$20,309	\$20,309
Silberline Manufacturing Co., Inc.	\$0	\$0	\$350	\$350
Skid Pipe Insulation, LLC	\$0	\$0	\$5,025	\$0
Sonitu, LLC (f/k/a Sonitu Pharmaceuticals, LLC)	\$0	\$0	\$11,570	\$0
SparkNET Technologies, LLC	\$0	\$0	\$7,092	\$6,488
Speciality Tires of America, Inc.	\$0	\$0	\$34,674	\$17,027
Spectragenetics, LLC	\$0	\$0	\$16,405	\$0
SpectrumCo, LLC	\$0	\$0	\$2,577	\$2,577
SPX Corporation	\$0	\$0	\$49,786	\$28,119
State of the Art, Inc.	\$0	\$0	\$518	\$518
STMicroelectronics, Inc.	\$0	\$0	\$3,260	\$1,229
Stoner, Inc.	\$0	\$0	\$50,686	\$44,949
Strobic Air Corporation	\$0	\$0	\$6,300	\$6,300
Sun Star, Inc.	\$0	\$0	\$5,651	\$463
Sungard Public Sector, Inc.	\$0	\$0	\$24,453	\$24,453
Sunny Dell Foods, Inc.	\$0	\$0	\$5,007	\$5,007
Supelco, Inc.	\$0	\$0	\$25,992	\$0
Susquehanna International Group, LLP	\$0	\$0	\$557,464	\$557,464
Sweet Ovations, LLC	\$0	\$0	\$2,862	\$2,862
Sylvin Technologies, Inc.	\$0	\$0	\$3,248	\$1,943
Synergis Technologies, Inc.	\$0	\$0	\$15,597	\$6,635
Synergy Advanced Pharmaceuticals, Inc.	\$0	\$0	\$91,651	\$91,651
Synopsys, Inc.	\$0	\$0	\$26,768	\$7,496
Tait Farm Foods, Inc.	\$0	\$0	\$47	\$0
Tait Towers, Inc.	\$0	\$0	\$114,348	\$114,348
Taktl, LLC	\$0	\$0	\$106,302	\$0
Tarsa Therapeutics, Inc.	\$0	\$0	\$209,065	\$209,065
TCI Ceramics, Inc.	\$0	\$0	\$47,148	\$31,164

<i>Taxpayer Name</i>	<i>2014 Credit Awarded</i>	<i>2014 Credit Utilized¹</i>	<i>2013 & 2012 Credit Awarded</i>	<i>2013 & 2012 Credit Utilized¹</i>
Terra Group Corporation	\$0	\$0	\$12,649	\$10,659
Teva Pharmaceuticals USA, Inc.	\$0	\$0	\$129,362	\$129,362
The Beistle Company	\$0	\$0	\$4,126	\$4,126
The Boeing Company	\$0	\$0	\$1,987,913	\$1,987,913
The Vanguard Group, Inc.	\$0	\$0	\$819,690	\$819,690
The Warrell Corporation	\$0	\$0	\$7,170	\$0
Thermo Fisher Scientific, Inc.	\$0	\$0	\$87,307	\$0
ThreeRivers 3D, Inc.	\$0	\$0	\$11,880	\$11,880
Tiger Optics, Inc.	\$0	\$0	\$99,563	\$0
Titan International, Inc.	\$0	\$0	\$11,267	\$6,734
Touchtown, Inc.	\$0	\$0	\$56,555	\$56,555
TOXCO, Inc.	\$0	\$0	\$30,597	\$13,843
Trimetric Enterprises, Inc.	\$0	\$0	\$292	\$292
Trinity Industries, Inc.	\$0	\$0	\$40,957	\$0
Turgeon Engineering, Inc.	\$0	\$0	\$4,992	\$4,992
Two Technologies, Inc.	\$0	\$0	\$49,567	\$49,567
Unicast Company	\$0	\$0	\$17,534	\$8,774
United Metal Fabricators, Inc.	\$0	\$0	\$13,586	\$3,679
Universal Refractories, Inc.	\$0	\$0	\$2,721	\$0
Urban Engineers, Inc.	\$0	\$0	\$48,040	\$7,340
US Silica Company	\$0	\$0	\$19,728	\$19,728
USSC Group, Inc.	\$0	\$0	\$14,425	\$12
Valley Instrument Co., Inc.	\$0	\$0	\$3,068	\$0
Valtech Corporation	\$0	\$0	\$19,513	\$19,513
Ventana USA	\$0	\$0	\$41,216	\$41,216
Venture 3 Systems, LLC	\$0	\$0	\$126,433	\$126,433
Verizon Services Organization, Inc.	\$0	\$0	\$5,851	\$2,057
Vesuvius USA Corp.	\$0	\$0	\$62,731	\$24,634
VideoRay, LLC	\$0	\$0	\$154,152	\$59,632
Viridity Energy, Inc.	\$0	\$0	\$1,289	\$1,289
VMware, Inc.	\$0	\$0	\$59,715	\$59,715
Voci Technologies Incorporated	\$0	\$0	\$36,872	\$17,619
Walsh Construction Company	\$0	\$0	\$20,764	\$19,376
Wampole Miller, Inc.	\$0	\$0	\$30,910	\$18,712
West Pharmaceutical Services, Inc. (PA)	\$0	\$0	\$177,811	\$0
White Oak Mills, Inc.	\$0	\$0	\$8,132	\$5,743
Woodward McCoach, Inc.	\$0	\$0	\$90,323	\$45,969
Z Band Video, Inc.	\$0	\$0	\$3,995	\$3,995
Z-Band, Inc.	\$0	\$0	\$71,198	\$71,198
Zivtech, LLC	\$0	\$0	\$23,867	\$23,867
TOTAL	\$55,000,000	\$0	\$110,000,000	\$54,744,435

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.